

2019

- 1 B. F. Zhu, Q. J. Wang, and Y. D. Chong, "Laser-mode bifurcations induced by PT-breaking exceptional points," *Physical Review A*, vol. 99, no. 3, Mar 2019, Art no. 033829.
- 2 X. X. Zhou, L. G. Xie, X. H. Ling, S. J. Cheng, Z. Y. Zhang, H. L. Luo, and H. D. Sun, "Large inplane asymmetric spin angular shifts of a light beam near the critical angle," *Optics Letters*, vol. 44, no. 2, pp. 207-210, Jan 2019.
- 3 X. X. Zhou, X. Lin, Z. C. Xiao, T. Low, A. Alu, B. L. Zhang, and H. D. Sun, "Controlling photonic spin Hall effect via exceptional points," *Physical Review B*, vol. 100, no. 11, Sep 2019, Art no. 115429.
- 4 N. I. Zheludev, "Seeing the future from the past," *Nature Photonics*, vol. 13, no. 4, pp. 221222, Apr 2019.
- 5 D. M. Zhao, H. W. Hu, R. Haselsberger, R. A. Marcus, M. E. Michel-Beyerle, Y. M. Lam, J. X. Zhu, C. La-o-vorakiat, M. C. Beard, and E. E. M. Chia, "Monitoring Electron-Phonon Interactions in Lead Halide Perovskites Using Time-Resolved THz Spectroscopy," *Acs Nano*, vol. 13, no. 8, pp. 8826-8835, Aug 2019.
- 6 Z. W. Zhang, J. Z. Shang, C. Y. Jiang, A. Rasmita, W. B. Gao, and T. Yu, "Direct Photoluminescence Probing of Ferromagnetism in Monolayer Two-Dimensional CrBr₃," *Nano Letters*, vol. 19, no. 5, pp. 3138-3142, May 2019.
- 7 Y. M. Zhang, Y. Luo, J. B. Pendry, and B. L. Zhang, "Transformation-Invariant Metamaterials," *Physical Review Letters*, vol. 123, no. 6, Aug 2019, Art no. 067701.
- 8 Q. N. Zhang, A. Solanki, K. Parida, D. Giovanni, M. J. Li, T. L. C. Jansen, M. S. Pshenichnikov, and T. C. Sum, "Tunable Ferroelectricity in Ruddlesden-Popper Halide Perovskites," *Acs Applied Materials & Interfaces*, vol. 11, no. 14, pp. 13523-13532, Apr 2019.
- 9 L. Zhang, Y. H. Yang, M. J. He, H. X. Wang, Z. J. Yang, E. P. Li, F. Gao, B. L. Zhang, R. Singh, J. H. Jiang, and H. S. Chen, "Valley Kink States and Topological Channel Intersections in SubstrateIntegrated Photonic Circuitry," *Laser & Photonics Reviews*, vol. 13, no. 11, Nov 2019, Art no. 1900159.
- 10 J. Zhang, L. J. Du, S. Feng, R. W. Zhang, B. C. Cao, C. J. Zou, Y. Chen, M. Z. Liao, B. L. Zhang, S. Y. A. Yang, G. Y. Zhang, and T. Yu, "Enhancing and controlling valley magnetic response in MoS₂/WS₂ heterostructures by all-optical route," *Nature Communications*, vol. 10, Sep 2019, Art no. 4226.
- 11 G. H. Yuan and N. I. Zheludev, "Detecting nanometric displacements with optical ruler metrology," *Science*, vol. 364, no. 6442, pp. 771-+, May 2019.
- 12 G. H. Yuan, K. S. Rogers, E. T. F. Rogers, and N. I. Zheludev, "Far-Field Superoscillatory Metamaterial Superlens," *Physical Review Applied*, vol. 11, no. 6, Jun 2019, Art no. 064016.
- 13 G. H. Yuan, E. T. F. Rogers, and N. I. Zheludev, ""Plasmonics" in free space: observation of giant wavevectors, vortices, and energy backflow in superoscillatory optical fields," *LightScience & Applications*, vol. 8, Jan 2019, Art no. 2.
- 14 D. S. Yu and R. Dumke, "Open Ising model perturbed by classical colored noise," *Physical Review A*, vol. 100, no. 2, Aug 2019, Art no. 022124.
- 15 T. T. Yin, B. Liu, J. X. Yan, Y. A. Fang, M. H. Chen, W. K. Chong, S. J. Jiang, J. L. Kuo, J. Y. Fang, P. Liang, S. H. Wei, K. P. Loh, T. C. Sum, T. J. White, and Z. X. Shen, "Pressure-Engineered Structural and Optical Properties of Two Dimensional (C₄H₉NH₃)₂PbI₄ Perovskite Exfoliated nm-Thin Flakes," *Journal of the American Chemical Society*, vol. 141, no. 3, pp. 1235-1241, Jan 2019.
- 16 C. J. Yao, K. X. Zhao, G. K. Long, X. X. Li, Z. L. Gong, Y. W. Zhong, W. B. Gao, Y. X. Li, R. Ganguly, G. Li, and Q. C. Zhang, "Synthesis, characterization and photophysical studies of a novel polycyclic diborane," *New Journal of Chemistry*, vol. 43, no. 2, pp. 564-568, Jan 2019.
- 17 Y. H. Yang, H. X. Sun, J. P. Xia, H. R. Xue, Z. Gao, Y. Ge, D. Jia, S. Q. Yuan, Y. D. Chong, and B. L. Zhang, "Topological triply degenerate point with double Fermi arcs," *Nature Physics*, vol. 15, no. 7, pp. 645-+, Jul 2019.
- 18 Y. H. Yang, P. F. Qin, X. Lin, E. P. Li, Z. J. Wang, B. L. Zhang, and H. S. Chen, "Type-I hyperbolic metasurfaces for highly-squeezed designer polaritons with negative group velocity," *Nature Communications*, vol. 10, May 2019, Art no. 2002.
- 19 Y. H. Yang, Z. Gao, H. R. Xue, L. Zhang, M. J. He, Z. J. Yang, R. Singh, Y. D. Chong, B. L. Zhang, and H. S. Chen, "Realization of a three-dimensional photonic topological insulator," *Nature*, vol. 565, no. 7741, pp. 622-+, Jan 2019.
- 20 W. D. Xu, L. J. Xie, J. F. Zhu, L. H. Tang, R. Singh, C. Wang, Y. G. Ma, H. T. Chen, and Y. B. Ying, "Terahertz biosensing with a graphene-metamaterial heterostructure platform," *Carbon*, vol. 141, pp. 247-252, Jan 2019.

- 21 A. Xomalis, Y. M. Jung, I. Demirtzioglou, C. Lacava, E. Plum, D. J. Richardson, P. Petropoulos, and N. I. Zheludev, "Nonlinear control of coherent absorption and its optical signal processing applications," *Apl Photonics*, vol. 4, no. 10, Oct 2019, Art no. 106109.
- 22 A. Xomalis, I. Demirtzioglou, Y. M. Jung, E. Plum, C. Lacava, P. Petropoulos, D. J. Richardson, and N. I. Zheludev, "Cryptography in coherent optical information networks using dissipative metamaterial gates," *Apl Photonics*, vol. 4, no. 4, Apr 2019, Art no. 046102.
- 23 Q. H. Xiong, "Two-dimensional materials: new opportunities for electronics, photonics and optoelectronics," *Science Bulletin*, vol. 64, no. 15, pp. 1031-1032, Aug 2019.
- 24 M. J. Xin, W. S. Leong, Z. L. Chen, and S. Y. Lan, "Transporting Long-Lived Quantum Spin Coherence in a Photonic Crystal Fiber," *Physical Review Letters*, vol. 122, no. 16, Apr 2019, Art no. 163901.
- 25 L. Xiao, Q. C. Du, Y. Huang, L. Wang, S. J. Cheng, Z. Wang, T. N. Wong, E. K. L. Yeow, and H. D. Sun, "Rapid Synthesis of Sulfur Nanodots by One-Step Hydrothermal Reaction for Luminescence-Based Applications," *Acs Applied Nano Materials*, vol. 2, no. 10, pp. 66226628, Oct 2019.
- 26 T. T. Wu, K. W. Li, N. Zhang, J. Xia, Q. S. Zeng, X. L. Wen, U. S. Dinish, M. Olivo, Z. X. Shen, Z. Liu, Q. H. Xiong, Y. Luo, S. A. Maier, and L. Wei, "Ultrawideband Surface Enhanced Raman Scattering in Hybrid Graphene Fragmented-Gold Substrates via Cold-Etching," *Advanced Optical Materials*, vol. 7, no. 21, Nov 2019, Art no. 1900905.
- 27 B. Wu, H. F. Yuan, Q. Xu, J. A. Steele, D. Giovanni, P. Puech, J. H. Fu, Y. F. Ng, N. F. Jamaludin, A. Solanki, S. Mhaisalkar, N. Mathews, M. B. J. Roeffaers, M. Gratzel, J. Hofkens, and T. C. Sum, "Indirect tail states formation by thermal-induced polar fluctuations in halide perovskites," *Nature Communications*, vol. 10, Jan 2019, Art no. 484.
- 28 Z. R. Wei, J. L. Li, H. M. Zhang, Y. P. Lu, M. H. Yang, and Z. H. Loh, "Ultrafast dissociative ionization and large-amplitude vibrational wave packet dynamics of strong-field-ionized diiodomethane," *Journal of Chemical Physics*, vol. 151, no. 21, Dec 2019, Art no. 214308.
- 29 Z. M. Wang, Y. J. Ren, Y. Wang, Z. Y. Cu, X. M. Li, and H. D. Sun, "Lateral cavity enabled FabryPerot microlasers from all-inorganic perovskites," *Applied Physics Letters*, vol. 115, no. 11, Sep 2019, Art no. 111103.
- 30 Z. Wang, Y. Wang, G. Adamo, J. H. Teng, and H. D. Sun, "Induced Optical Chirality and Circularly Polarized Emission from Achiral CdSe/ZnS Quantum Dots via Resonantly Coupling with Plasmonic Chiral Metasurfaces," *Laser & Photonics Reviews*, vol. 13, no. 3, Mar 2019, Art no. 1800276.
- 31 Y. Y. Wang, J. D. Zhou, J. Jiang, T. T. Yin, Z. X. Yin, Z. Liu, and Z. X. Shen, "In-plane optical anisotropy in ReS₂ flakes determined by angle-resolved polarized optical contrast spectroscopy," *Nanoscale*, vol. 11, no. 42, pp. 20199-20205, Nov 2019.
- 32 Y. Wang, L. J. Lang, C. H. Lee, B. L. Zhang, and Y. D. Chong, "Topologically enhanced harmonic generation in a nonlinear transmission line metamaterial," *Nature Communications*, vol. 10, Mar 2019, Art no. 1102.
- 33 Y. Wang, Z. Y. Gu, Y. J. Ren, Z. M. Wang, B. Q. Yao, Z. L. Dong, G. Adamo, H. B. Zeng, and H. D. Sun, "Perovskite-Ion Beam Interactions: Toward Controllable Light Emission and Lasing," *Acs Applied Materials & Interfaces*, vol. 11, no. 17, pp. 15756-15763, May 2019.
- 34 X. K. Wang, W. L. Wu, Y. P. Lun, H. K. Yu, Q. H. Xiong, and Z. Y. Li, "Polarization-Dependent Lateral Optical Force of Subwavelength-Diameter Optical Fibers," *Micromachines*, vol. 10, no. 10, Oct 2019, Art no. 630.
- 35 L. Wang, L. Xiao, H. S. Gu, and H. D. Sun, "Advances in Alternating Current Electroluminescent Devices," *Advanced Optical Materials*, vol. 7, no. 7, Apr 2019, Art no. 1801154.
- 36 J. Wang, J. Z. Li, S. G. Lan, C. Fang, H. Z. Shen, Q. H. Xiong, and D. H. Li, "Controllable Growth of Centimeter-Sized 2D Perovskite Heterostructures for Highly Narrow Dual-Band Photodetectors," *Acs Nano*, vol. 13, no. 5, pp. 5473-5484, May 2019.
- 37 H. J. von Bardeleben, S. A. Zargaleh, J. L. Cantin, W. B. Gao, T. Biktagirov, and U. Gerstmann, "Transition metal qubits in 4H-silicon carbide: A correlated EPR and DFT study of the spin S=1 vanadium V3+ center," *Physical Review Materials*, vol. 3, no. 12, Dec 2019, Art no. 124605.
- 38 A. N. Vetrugan, R. X. Guo, A. Xomalis, S. Yanikgonul, G. Adamo, C. Soci, and N. I. Zheludev, "Coherent perfect absorption of single photons in a fiber network," *Applied Physics Letters*, vol. 115, no. 19, Nov 2019, Art no. 191101.
- 39 P. Vashishtha, G. V. Nutan, B. E. Griffith, Y. A. Fang, D. Giovanni, M. Jagadeeswararao, T. C. Sum, N. Mathews, S. G. Mhaisalkar, J. V. Hanna, and T. White, "Cesium Copper Iodide Tailored Nanoplates and Nanorods for Blue, Yellow, and White Emission," *Chemistry of Materials*, vol. 31, no. 21, pp. 9003-9011, Nov 2019.

- 40 V. A. Vasanth, W. Rusli, J. H. Chen, W. G. Zhao, K. V. Sreekanth, R. Singh, and A. Parthiban, "Highly monodisperse zwitterion functionalized non-spherical polymer particles with tunable iridescence," *Rsc Advances*, vol. 9, no. 47, pp. 27199-27207, Sep 2019.
- 41 I. Tsukerman, S. Mansha, Y. D. Chong, and V. A. Markel, "Treffitz approximations in complex media: Accuracy and applications," *Computers & Mathematics with Applications*, vol. 77, no. 6, pp. 1770-1785, Mar 2019.
- 42 F. Tosto, P. B. Swe, N. T. Nguyen, C. Hufnagel, M. M. Valado, L. Prigozhin, V. Sokolovsky, and R. Dumke, "Optically tailored trapping geometries for ultracold atoms on a type-II superconducting chip," *Applied Physics Letters*, vol. 114, no. 22, Jun 2019, Art no. 222601.
- 43 G. M. Tino, A. Bassi, G. Bianco, K. Bongs, P. Bouyer, L. Cacciapuoti, S. Capozziello, X. Z. Chen, M. L. Chiofalo, A. Derevianko, W. Ertmer, N. Gaaloul, P. Gill, P. W. Graham, J. M. Hogan, L. Iess, M. A. Kasevich, H. Katori, C. Klemp, X. H. Lu, L. S. Ma, H. Muller, N. R. Newbury, C. W. Oates, A. Peters, N. Poli, E. M. Rasel, G. Rosi, A. Roura, C. Salomon, S. Schiller, W. Schleich, D. Schlippert, F. Schreck, C. Schubert, F. Sorrentino, U. Sterr, J. W. Thomsen, G. Vallone, F. Vetrano, P. Villaresi, W. von Klitzing, D. Wilkowski, P. Wolf, J. Ye, N. Yu, and M. S. Zhan, "SAGE: A proposal for a space atomic gravity explorer," *European Physical Journal D*, vol. 73, no. 11, Nov 2019, Art no. 228.
- 44 X. S. Tang, J. Yang, S. Q. Li, Z. Z. Liu, Z. P. Hu, J. Y. Hao, J. Du, Y. X. Leng, H. Y. Qin, X. Lin, Y. Lin, Y. X. Tian, M. Zhou, and Q. H. Xiong, "Single Halide Perovskite/Semiconductor Core/Shell Quantum Dots with Ultrastability and Nonblinking Properties," *Advanced Science*, vol. 6, no. 18, Sep 2019, Art no. 1900412.
- 45 T. C. Tan, E. Plum, and R. Singh, "Surface Lattice Resonances in THz Metamaterials," *Photonics*, vol. 6, no. 3, Sep 2019, Art no. 75.
- 46 E. Talker, P. Arora, Y. Barash, D. Wilkowski, and U. Levy, "Efficient optical pumping of alkaline atoms for evanescent fields at dielectric-vapor interfaces," *Optics Express*, vol. 27, no. 23, pp. 33445-33458, Nov 2019.
- 47 V. D. Ta, Y. Wang, and H. D. Sun, "Microlasers Enabled by Soft-Matter Technology," *Advanced Optical Materials*, vol. 7, no. 17, Sep 2019, Art no. 1900057.
- 48 V. D. Ta, R. Chen, and H. D. Sun, "Controllable Polarization of Lasing Emission From a Polymer Microfiber Laser," *Scientific Reports*, vol. 9, Nov 2019, Art no. 17017.
- 49 Y. K. Srivastava, R. T. Ako, M. Gupta, M. Bhaskaran, S. Sriram, and R. Singh, "Terahertz sensing of 7 nm dielectric film with bound states in the continuum metasurfaces," *Applied Physics Letters*, vol. 115, no. 15, Oct 2019, Art no. 151105.
- 50 K. V. Sreekanth, S. Sreejith, Y. Alapan, M. Sitti, C. T. Lim, and R. Singh, "Microfluidics Integrated Lithography-Free Nanophotonic Biosensor for the Detection of Small Molecules," *Advanced Optical Materials*, vol. 7, no. 7, Apr 2019, Art no. 1801313.
- 51 K. V. Sreekanth, Q. L. Ouyang, S. Sreejith, S. W. Zeng, W. Lishu, E. Ilker, W. L. Dong, M. ElKabbash, Y. Ting, C. T. Lim, M. Hinczewski, G. Strangi, K. T. Yong, R. E. Simpson, and R. Singh, "Phase-Change-Material-Based Low-Loss Visible-Frequency Hyperbolic Metamaterials for Ultrasensitive Label-Free Biosensing," *Advanced Optical Materials*, vol. 7, no. 12, Jun 2019, Art no. 1900081.
- 52 K. V. Sreekanth, P. Mahalakshmi, S. Han, M. S. M. Rajan, P. K. Choudhury, and R. Singh, "Brewster Mode-Enhanced Sensing with Hyperbolic Metamaterial," *Advanced Optical Materials*, vol. 7, no. 21, Nov 2019, Art no. 1900680.
- 53 K. V. Sreekanth, M. ElKabbash, R. Medwal, J. H. Zhang, T. Letsou, G. Strangi, M. Hinczewski, R. S. Rawat, C. L. Guo, and R. Singh, "Generalized Brewster Angle Effect in Thin-Film Optical Absorbers and Its Application for Graphene Hydrogen Sensing," *Acs Photonics*, vol. 6, no. 7, pp. 1610-1617, Jul 2019.
- 54 A. Solanki, P. Yadav, S. H. Turren-Cruz, S. S. Lim, M. Saliba, and T. C. Sum, "Cation influence on carrier dynamics in perovskite solar cells," *Nano Energy*, vol. 58, pp. 604-611, Apr 2019.
- 55 A. Solanki, S. S. Lim, S. Mhaisalkar, and T. C. Sum, "Role of Water in Suppressing Recombination Pathways in CH₃NH₃PbI₃ Perovskite Solar Cells," *Acs Applied Materials & Interfaces*, vol. 11, no. 28, pp. 25474-25482, Jul 2019.
- 56 S. Shendre, S. Delikanli, M. J. Li, D. Dede, Z. Y. Pan, S. T. Ha, Y. H. Fu, P. L. HernandezMartinez, J. H. Yu, O. Erdem, A. I. Kuznetsov, C. Dang, T. C. Sum, and H. V. Demir, "Ultrahigh- efficiency aqueous flat nanocrystals of CdSe/CdS@ Cd_{1-x}Zn_xS colloidal core/crown@ alloyed- shell quantum wells dagger," *Nanoscale*, vol. 11, no. 1, pp. 301-310, Jan 2019.
- 57 F. Shao, P. Qin, D. Wang, G. Q. Zhang, B. Wu, J. Q. He, W. Peng, T. C. Sum, D. L. Wang, and F. Q. Huang, "Enhanced Photovoltaic Performance and Thermal Stability of CH(3)NH(3)PbI(3) Perovskite through Lattice Symmetrization," *Acs Applied Materials & Interfaces*, vol. 11, no. 1, pp. 740-746, Jan 2019.

- 58 D. B. Shaikh, A. A. Said, Z. R. Wang, P. S. Rao, R. S. Bhosale, A. M. Mak, K. X. Zhao, Y. Zhou, W. B. Liu, W. B. Gao, J. Xie, S. V. Bhosale, S. V. Bhosale, and Q. C. Zhang, "Influences of Structural Modification of Naphthalenediimides with Benzothiazole on Organic Field-Effect Transistor and Non-Fullerene Perovskite Solar Cell Characteristics," *Acs Applied Materials & Interfaces*, vol. 11, no. 47, pp. 44487-44500, Nov 2019.
- 59 A. A. Said, J. Xie, Y. Wang, Z. R. Wang, Y. Zhou, K. X. Zhao, W. B. Gao, T. Michinobu, and Q. C. Zhang, "Efficient Inverted Perovskite Solar Cells by Employing N-Type (D-A(1)-D-A(2)) Polymers as Electron Transporting Layer," *Small*, vol. 15, no. 29, Jul 2019, Art no. 1803339.
- 60 S. Saeed, J. Yin, M. A. Khalid, P. A. Channar, G. Shabir, A. Saeed, M. A. Nadeem, C. Soci, and A. Iqbal, "Photoresponsive azobenzene ligand as an efficient electron acceptor for luminous CdTe quantum dots," *Journal of Photochemistry and Photobiology a-Chemistry*, vol. 375, pp. 48-53, Apr 2019.
- 61 J. Qin, F. Huang, X. Y. Li, L. J. Deng, T. T. Kang, A. Markov, F. Y. Yue, Y. Q. Chen, X. L. Wen, S. Liu, Q. H. Xiong, S. Semin, T. Rasing, D. Modotto, R. Morandotti, J. L. Xu, H. G. Duan, and L. Bi, "Enhanced Second Harmonic Generation from Ferroelectric HfO₂-Based Hybrid Metasurfaces," *Acs Nano*, vol. 13, no. 2, pp. 1213-1222, Feb 2019.
- 62 C. Qian, X. Lin, Y. Yang, X. Y. Xiong, H. P. Wang, E. P. Li, I. Kaminer, B. L. Zhang, and H. S. Chen, "Experimental Observation of Superscattering," *Physical Review Letters*, vol. 122, no. 6, Feb 2019, Art no. 063901.
- 63 D. Prochowicz, M. M. Tavakoli, A. Solanki, T. W. Goh, T. C. Sum, and P. Yadav, "Correlation of recombination and open circuit voltage in planar heterojunction perovskite solar cells," *Journal of Materials Chemistry C*, vol. 7, no. 5, pp. 1273-1279, Feb 2019.
- 64 P. Pitchappa, A. Kumar, S. Prakash, H. Jani, T. Venkatesan, and R. Singh, "Chalcogenide Phase Change Material for Active Terahertz Photonics," *Advanced Materials*, vol. 31, no. 12, Mar 2019, Art no. 1808157.
- 65 D. Piccinotti, B. Gholipour, J. Yao, K. F. MacDonald, B. E. Hayden, and N. I. Zheludev, "Stoichiometric Engineering of Chalcogenide Semiconductor Alloys for Nanophotonic Applications," *Advanced Materials*, vol. 31, no. 14, Apr 2019, Art no. 1807083.
- 66 N. Papasimakis, S. D. Jenkins, S. Savo, N. I. Zheludev, and J. Ruostekoski, "Cooperative field localization and excitation eigenmodes in disordered metamaterials," *Physical Review B*, vol. 99, no. 1, Jan 2019, Art no. 014210.
- 67 C. Ott, L. Aufleger, T. Ding, M. Rebholz, A. Magunia, M. Hartmann, V. Stooss, D. Wachs, P. Birk, G. D. Borisova, K. Meyer, P. Rupprecht, C. D. Castanheira, R. Moshammer, A. R. Attar, T. Gaumnitz, Z. H. Loh, S. Duterer, R. Treusch, J. Ullrich, Y. H. Jiang, M. Meyer, P. Lambopoulos, and T. Pfeifer, "Strong-Field Extreme-Ultraviolet Dressing of Atomic Double Excitation," *Physical Review Letters*, vol. 123, no. 16, Oct 2019, Art no. 163201.
- 68 L. K. S. Ng, E. J. C. Tan, T. W. Goh, X. Zhao, Z. Chen, T. C. Sum, and H. S. Soo, "Mesoporous SiO₂/BiVO₄/CuOx nanospheres for Z-scheme, visible light aerobic C-N coupling and dehydrogenation," *Applied Materials Today*, vol. 15, pp. 192-202, Jun 2019.
- 69 G. H. Nam, Q. Y. He, X. Z. Wang, Y. F. Yu, J. Z. Chen, K. Zhang, Z. Z. Yang, D. Y. Hu, Z. C. Lai, B. Li, Q. H. Xiong, Q. Zhang, L. Gu, and H. Zhang, "In-Plane Anisotropic Properties of 1T'-MoS₂ Layers," *Advanced Materials*, vol. 31, no. 21, May 2019, Art no. 1807764.
- 70 S. Mittal, V. V. Orre, D. Leykam, Y. D. Chong, and M. Hafezi, "Photonic Anomalous Quantum Hall Effect," *Physical Review Letters*, vol. 123, no. 4, Jul 2019, Art no. 043201.
- 71 M. Manjappa, A. Solanki, A. Kumar, T. C. Sum, and R. Singh, "Solution-Processed Lead Iodide for Ultrafast All-Optical Switching of Terahertz Photonic Devices," *Advanced Materials*, vol. 31, no. 32, Aug 2019, Art no. 1901455.
- 72 A. Lyons, D. Oren, T. Roger, V. Savinov, J. Valente, S. Vezzoli, N. I. Zheludev, M. Segev, and D. Faccio, "Coherent metamaterial absorption of two-photon states with 40% efficiency," *Physical Review A*, vol. 99, no. 1, Jan 2019, Art no. 011801.
- 73 L. Luo, L. G. Xie, J. D. Qiu, X. X. Zhou, X. Liu, Z. X. Li, Y. He, Z. Y. Zhang, and H. D. Sun, "Simultaneously precise estimations of phase and amplitude variations based on weak-value amplification," *Applied Physics Letters*, vol. 114, no. 11, Mar 2019, Art no. 111104.
- 74 Y. Lu, D. R. N. Zhao, L. Yulia, H. Chen, X. L. Chen, Y. N. Liang, S. K. J. Lim, E. E. M. Chia, Z. X. Shen, and X. Hu, "Remarkable dielectric breakdown strength enhancement of a PVDF terpolymer using a 2D hybrid organic inorganic perovskite as a functional additive," *Journal of Materials Chemistry C*, vol. 7, no. 43, pp. 13390-13395, Nov 2019.

- 75 X. Lu, X. T. Chen, S. Dubey, Q. Yao, W. J. Li, X. Z. Wang, Q. H. Xiong, and A. Srivastava, "Optical initialization of a single spin-valley in charged WSe₂ quantum dots," *Nature Nanotechnology*, vol. 14, no. 5, pp. 426-+, May 2019.
- 76 P. Lova, P. Giusto, F. Di Stasio, G. Manfredi, G. M. Paterno, D. Cortecchia, C. Soci, and D. Comoretto, "All-polymer methylammonium lead iodide perovskite microcavities," *Nanoscale*, vol. 11, no. 18, pp. 8978-8983, May 2019.
- 77 P. Lova, D. Cortecchia, C. Soci, and D. Comoretto, "Solution Processed Polymer-ABX(4) Perovskite-Like Microcavities," *Applied Sciences-Basel*, vol. 9, no. 23, Dec 2019, Art no. 5203.
- 78 G. K. Long, Y. C. Zhou, M. T. Zhang, R. Sabatini, A. Rasmita, L. Huang, G. Lakhwani, and W. B. Gao, "Theoretical Prediction of Chiral 3D Hybrid Organic-Inorganic Perovskites," *Advanced Materials*, vol. 31, no. 17, Apr 2019, Art no. 1807628.
- 79 Z. X. Liu, Y. H. Li, X. W. Guan, Y. Mi, A. Al-Hussain, S. T. Ha, M. H. Chiu, C. Ma, M. R. Amer, L. J. Li, J. Liu, Q. H. Xiong, J. L. Wang, X. F. Liu, and T. Wu, "One-Step Vapor-Phase Synthesis and Quantum-Confinement Exciton in Single-Crystal Platelets of Hybrid Halide Perovskites," *Journal of Physical Chemistry Letters*, vol. 10, no. 10, pp. 2363-2371, May 2019.
- 80 Y. D. Liu, H. L. Fang, A. Rasmita, Y. Zhou, J. T. Li, T. Yu, Q. H. Xiong, N. Zheludev, J. Liu, and W. B. Gao, "Room temperature nanocavity laser with interlayer excitons in 2D heterostructures," *Science Advances*, vol. 5, no. 4, Apr 2019, Art no. eaav4506.
- 81 S. Liu, S. S. Sun, C. K. Gan, A. G. del Aguila, Y. N. Fang, J. Xing, T. T. H. Do, T. J. White, H. G. Li, W. Huang, and Q. H. Xiong, "Manipulating efficient light emission in two-dimensional perovskite crystals by pressure-induced anisotropic deformation," *Science Advances*, vol. 5, no. 7, Jul 2019, Art no. eaav9445.
- 82 L. L. Liu, Y. H. Sun, X. Q. Cui, K. Qi, X. He, Q. L. Bao, W. L. Ma, J. Lu, H. Y. Fang, P. Zhang, L. R. Zheng, L. P. Yu, D. J. Singh, Q. H. Xiong, L. J. Zhang, and W. T. Zheng, "Bottom-up growth of homogeneous Moire superlattices in bismuth oxychloride spiral nanosheets," *Nature Communications*, vol. 10, Oct 2019, Art no. 4472.
- 83 B. Q. Liu, M. Sharma, J. H. Yu, S. Shendre, C. Hettiarachchi, A. Sharma, A. Yeltik, L. Wang, H. D. Sun, C. Dang, and H. V. Demir, "Light-Emitting Diodes with Cu-Doped Colloidal Quantum Wells: From Ultrapure Green, Tunable Dual-Emission to White Light," *Small*, vol. 15, no. 38, Sep 2019, Art no. 1901983.
- 84 X. Lin and B. L. Zhang, "Normal Doppler Frequency Shift in Negative Refractive-Index Systems," *Laser & Photonics Reviews*, vol. 13, no. 12, Dec 2019, Art no. 1900081.
- 85 S. S. Lim, D. Giovanni, Q. N. Zhang, A. Solanki, N. F. Jamaludin, J. W. M. Lim, N. Mathews, S. Mhaisalkar, M. S. Pshenichnikov, and T. C. Sum, "Hot carrier extraction in CH₃NH₃PbI₃ unveiled by pump-push-probe spectroscopy," *Science Advances*, vol. 5, no. 11, Nov 2019, Art no. eaax3620.
- 86 J. Lim, Y. D. Chong, and L. J. Wong, "Terahertz-optical intensity grating for creating highcharge, attosecond electron bunches," *New Journal of Physics*, vol. 21, Mar 2019, Art no. 033020.
- 87 Y. F. Liang, X. L. Huang, Y. P. Huang, X. Wang, F. F. Li, Y. C. Wang, F. B. Tian, B. B. Liu, Z. X. Shen, and T. Cui, "New Metallic Ordered Phase of Perovskite CsPbI₃ under Pressure," *Advanced Science*, vol. 6, no. 14, Jul 2019, Art no. 1900399.
- 88 L. L. Liang, D. B. L. Teh, Dinh, W. D. Chen, Q. S. Chen, Y. M. Wu, S. Chowdhury, A. Yamanaka, T. C. Sum, C. H. Chen, N. V. Thakor, A. H. Ali, and X. G. Liu, "Upconversion amplification through dielectric superlensing modulation," *Nature Communications*, vol. 10, Mar 2019, Art no. 1391.
- 89 C. Liang, D. D. Zhao, P. W. Li, B. Wu, H. Gu, J. C. Zhang, T. W. Goh, S. Chen, Y. H. Chen, Z. D. Sha, G. S. Shao, T. C. Sum, and G. C. Xing, "Simultaneously boost diffusion length and stability of perovskite for high performance solar cells," *Nano Energy*, vol. 59, pp. 721-729, May 2019.
- 90 X. L. Li, Z. W. Wang, C. K. Tan, Z. X. Shen, and A. I. Y. Tok, "Ordered Array of Metal Particles on Semishell Separated with Ultrathin Oxide: Fabrication and SERS Properties," *Coatings*, vol. 9, no. 1, Jan 2019, Art no. 20.
- 91 M. J. Li, J. H. Fu, Q. Xu, and T. C. Sum, "Slow Hot-Carrier Cooling in Halide Perovskites: Prospects for Hot-Carrier Solar Cells," *Advanced Materials*, vol. 31, no. 47, Nov 2019.
- 92 G. Li, S. H. Wang, S. F. Yang, G. F. Liu, P. Hao, Y. S. Zheng, G. K. Long, D. D. Li, Y. Zhang, W. B. Yang, L. Xu, W. B. Gao, Q. C. Zhang, G. W. Cui, and B. Tang, "Synthesis, Photophysical Properties and Two-Photon Absorption Study of Tetraazachrysene-based N-Heteroacenes," *Chemistry-an Asian Journal*, vol. 14, no. 10, pp. 1807-1813, May 2019.
- 93 Y. Lekina and Z. X. Shen, "Excitonic states and structural stability in two-dimensional hybrid organic-inorganic perovskites," *Journal of Science-Advanced Materials and Devices*, vol. 4, no. 2, pp. 189-200, Jun 2019.

- 94 K. Lee, J. Li, L. Cheng, J. Wang, D. Kumar, Q. S. Wang, M. J. Chen, Y. Wu, G. Eda, E. E. M. Chia, H. X. Chang, and H. Yang, "Sub-Picosecond Carrier Dynamics Induced by Efficient Charge Transfer in MoTe₂/WTe₂ van der Waals Heterostructures," *Acs Nano*, vol. 13, no. 8, pp. 9587-9594, Aug 2019.
- 95 A. Landra, C. Hufnagel, L. C. Chean, T. Weigner, Y. S. Yap, L. H. Nguyen, and R. Dumke, "Design of an experimental platform for hybridization of atomic and superconducting quantum systems," *Physical Review A*, vol. 99, no. 5, May 2019, Art no. 053421.
- 96 C. C. Kwong, D. Wilkowski, D. Delande, and R. Pierrat, "Coherent light propagation through cold atomic clouds beyond the independent scattering approximation," *Physical Review A*, vol. 99, no. 4, Apr 2019, Art no. 043806.
- 97 C. C. Kwong, E. A. Chan, S. A. Aljunid, R. Shakhmuratov, and D. Wilkowski, "Large optical depth frequency modulation spectroscopy," *Optics Express*, vol. 27, no. 22, pp. 3232332336, Oct 2019.
- 98 A. A. Kirpichnikova, O. N. Prudnikov, and D. Wilkowski, "Investigation of the possibility of ultra-deep laser cooling using a quadrupole transition," *Quantum Electronics*, vol. 49, no. 5, pp. 443-448, 2019.
- 99 M. F. Khyasudeen, P. J. Nowakowski, and H. S. Tan, "Measuring the Ultrafast Correlation Dynamics between the Q(x) and Q(y) Bands in Chlorophyll Molecules," *Journal of Physical Chemistry B*, vol. 123, no. 6, pp. 1359-1364, Feb 2019.
- 100 M. F. Khyasudeen, P. J. Nowakowski, H. L. Nguyen, J. H. N. Sim, T. N. Do, and H. S. Tan, "Studying the spectral diffusion dynamics of chlorophyll a and chlorophyll b using twodimensional electronic spectroscopy," *Chemical Physics*, vol. 527, Nov 2019, Art no. Unsp 110480.
- 101 Y. J. Ke, Y. Yin, Q. T. Zhang, Y. T. Tan, P. Hu, S. C. Wang, Y. C. Tang, Y. Zhou, X. L. Wen, S. F. Wu, T. J. White, J. Yin, J. Q. Peng, Q. H. Xiong, D. Y. Zhao, and Y. Long, "Adaptive Thermochromic Windows from Active Plasmonic Elastomers," *Joule*, vol. 3, no. 3, pp. 858871, Mar 2019.
- 102 A. Karvounis, B. Gholipour, K. F. MacDonald, and N. I. Zheludev, "Giant Electro-Optical Effect through Electrostriction in a Nanomechanical Metamaterial," *Advanced Materials*, vol. 31, no. 1, Jan 2019, Art no. 1804801.
- 103 L. Y. Jiang, T. T. Yin, A. M. Dubrovkin, Z. G. Dong, Y. T. Chen, W. J. Chen, J. K. W. Yang, and Z. X. Shen, "In-plane coherent control of plasmon resonances for plasmonic switching and encoding," *Light-Science & Applications*, vol. 8, Feb 2019, Art no. 21.
- 104 H. W. Hu, D. M. Zhao, Y. Gao, X. F. Qiao, T. Salim, B. B. Chen, E. E. M. Chia, A. C. Grimsdale, and Y. M. Lam, "Harvesting Triplet Excitons in Lead-Halide Perovskites for Room-Temperature Phosphorescence," *Chemistry of Materials*, vol. 31, no. 7, pp. 2597-2602, Apr 2019.
- 105 Z. H. Hong, W. K. Chong, A. Y. R. Ng, M. J. Li, R. Ganguly, T. C. Sum, and H. S. Soo, "Hydrophobic Metal Halide Perovskites for Visible-Light Photoredox C-C Bond Cleavage and Dehydrogenation Catalysis," *Angewandte Chemie-International Edition*, vol. 58, no. 11, pp. 3456-3460, Mar 2019.
- 106 Y. H. He, R. Su, Y. Y. Huang, Y. X. Zhou, Q. Y. Zhao, J. B. Khurgin, Q. H. Xiong, and X. L. Xu, "High-Order Shift Current Induced Terahertz Emission from Inorganic Cesium Bromine Lead Perovskite Engendered by Two-Photon Absorption," *Advanced Functional Materials*, vol. 29, no. 40, Oct 2019, Art no. 1904694.
- 107 T. Haug, H. Heimonen, R. Dumke, L. C. Kwek, and L. Amico, "Aharonov-Bohm effect in mesoscopic Bose-Einstein condensates," *Physical Review A*, vol. 100, no. 4, Oct 2019, Art no. 041601.
- 108 T. Haug, R. Dumke, L. C. Kwek, and L. Amico, "Andreev-reflection and Aharonov-Bohm dynamics in atomtronic circuits," *Quantum Science and Technology*, vol. 4, no. 4, Oct 2019, Art no. 045001.
- 109 T. Haug, R. Dumke, L. C. Kwek, and L. Amico, "Topological pumping in Aharonov-Bohm rings," *Communications Physics*, vol. 2, Oct 2019, Art no. 127.
- 110 S. Han, L. Q. Cong, Y. K. Srivastava, B. Qiang, M. V. Rybin, A. Kumar, R. Jain, W. X. Lim, V. C. Achanta, S. S. Prabhu, Q. J. Wang, Y. S. Kivshar, and R. Singh, "All-Dielectric Active Terahertz Photonics Driven by Bound States in the Continuum," *Advanced Materials*, vol. 31, no. 37, Sep 2019, Art no. 1901921.
- 111 A. Han, A. Aljarb, S. Liu, P. Li, C. Ma, F. Xue, S. Lopatin, C. W. Yang, J. K. Huang, Y. Wan, X. X. Zhang, Q. H. Xiong, K. W. Huang, V. Tung, T. D. Anthopoulos, and L. J. Li, "Growth of 2H stacked WSe₂ bilayers on sapphire," *Nanoscale Horizons*, vol. 4, no. 6, pp. 1434-1442, Nov 2019.
- 112 B. Gholipour, D. Piccinotti, A. Karvounis, K. F. MacDonald, and N. I. Zheludev, "Reconfigurable Ultraviolet and High-Energy Visible Dielectric Metamaterials," *Nano Letters*, vol. 19, no. 3, pp. 1643-1648, Mar 2019.
- 113 J. H. Fu, N. F. Jamaludin, B. Wu, M. J. Li, A. Solanki, Y. F. Ng, S. Mhaisalkar, C. H. A. Huan, and T. C. Sum, "Localized Traps Limited Recombination in Lead Bromide Perovskites," *Advanced Energy Materials*, vol. 9, no. 12, Mar 2019, Art no. 1803119.

- 114 L. A. Frolova, Q. Chang, S. Y. Luchkin, D. M. Zhao, A. F. Akbulatov, N. N. Dremova, A. V. Ivanov, E. E. M. Chia, K. J. Stevenson, and P. A. Troshin, "Efficient and stable all-inorganic perovskite solar cells based on nonstoichiometric $\text{Cs}_x\text{PbI}_2\text{Br}_x$ ($x > 1$) alloys," *Journal of Materials Chemistry C*, vol. 7, no. 18, pp. 5314-5323, May 2019.
- 115 C. F. Fong, Y. Yin, Y. Y. Chen, D. Rosser, J. Xing, A. Majunidar, and Q. H. Xiong, "Silicon nitride nanobeam enhanced emission from all-inorganic perovskite nanocrystals," *Optics Express*, vol. 27, no. 13, pp. 18673-18682, Jun 2019.
- 116 S. Feng, C. X. Cong, S. Konabe, D. Zhang, J. Z. Shang, Y. Chen, C. J. Zou, B. C. Cao, L. S. Wu, N. Peimyoo, B. L. Zhang, and T. Yu, "Engineering Valley Polarization of Monolayer WS₂: A Physical Doping Approach," *Small*, vol. 15, no. 12, Mar 2019, Art no. 1805503.
- 117 B. Febriansyah, T. M. Koh, Y. Lekina, N. F. Jamaludin, A. Bruno, R. Ganguly, Z. X. Shen, S. G. Mhaisalkar, and J. England, "Improved Photovoltaic Efficiency and Amplified Photocurrent Generation in Mesoporous n=1 Two-Dimensional Lead-Iodide Perovskite Solar Cells," *Chemistry of Materials*, vol. 31, no. 3, pp. 890-898, Feb 2019.
- 118 W. Du, J. X. Zhao, W. J. Zhao, S. P. Zhang, H. X. Xu, and Q. H. Xiong, "Ultrafast Modulation of Exciton-Plasmon Coupling in a Monolayer WS₂-Ag Nanodisk Hybrid System," *Acs Photonics*, vol. 6, no. 11, pp. 2832-2840, Nov 2019.
- 119 T. N. Do, C. Zhang, X. W. Ong, J. Lian, Y. Chan, and H. S. Tan, "Measuring the Ultrafast Spectral Diffusion Dynamics of Colloidal CdSe Nanomaterials," *Mrs Advances*, vol. 4, no. 1, pp. 1-7, 2019.
- 120 T. N. Do, M. F. Khyasudeen, P. J. Nowakowski, Z. Y. Zhang, and H. S. Tan, "Measuring Ultrafast Spectral Diffusion and Correlation Dynamics by Two-Dimensional Electronic Spectroscopy," *Chemistry-an Asian Journal*, vol. 14, no. 22, pp. 3992-4000, Nov 2019.
- 121 T. N. Do, A. Huerta-Viga, P. Akhtar, H. L. Nguyen, P. J. Nowakowski, M. F. Khyasudeen, P. H. Lambrev, and H. S. Tan, "Revealing the excitation energy transfer network of Light-Harvesting Complex II by a phenomenological analysis of two-dimensional electronic spectra at 77 K," *Journal of Chemical Physics*, vol. 151, no. 20, Nov 2019, Art no. 205101.
- 122 T. Ding, M. Rebholz, L. Aufleger, M. Hartmann, K. Meyer, V. Stooss, A. Magunia, D. Wachs, P. Birk, Y. H. Mi, G. D. Borisova, C. D. Castanheira, P. Rupprecht, Z. H. Loh, A. R. Attar, T. Gaumnitz, S. Roling, M. Butz, H. Zacharias, S. Dusterer, R. Treusch, S. M. Cavaletto, C. Ott, and T. Pfeifer, "Nonlinear Coherence Effects in Transient-Absorption Ion Spectroscopy with Stochastic Extreme-Ultraviolet Free-Electron Laser Pulses," *Physical Review Letters*, vol. 123, no. 10, Sep 2019, Art no. 103001.
- 123 A. G. del Aguila, S. Liu, T. T. H. Do, Z. C. Lai, T. H. Tran, S. R. Krupp, Z. R. Gong, H. Zhang, W. Yao, and Q. H. Xiong, "Linearly Polarized Luminescence of Atomically Thin MoS₂ Semiconductor Nanocrystals," *Acs Nano*, vol. 13, no. 11, pp. 13006-13014, Nov 2019.
- 124 T. Debnath, M. S. B. Yusof, P. J. Low, and Z. H. Loh, "Ultrafast structural rearrangement dynamics induced by the photodetachment of phenoxide in aqueous solution," *Nature Communications*, vol. 10, Jul 2019, Art no. 2944.
- 125 M. de la Mata, R. R. Zamani, S. Marti-Sanchez, M. Eickhoff, Q. H. Xiong, A. F. I. Morral, P. Caroff, and J. Arbiol, "The Role of Polarity in Nonplanar Semiconductor Nanostructures," *Nano Letters*, vol. 19, no. 6, pp. 3396-3408, Jun 2019.
- 126 D. Cortecchia, J. Yin, A. Petrozza, and C. Soci, "White light emission in low-dimensional perovskites," *Journal of Materials Chemistry C*, vol. 7, no. 17, pp. 4956-4969, May 2019.
- 127 L. Q. Cong and R. Singh, "Symmetry-Protected Dual Bound States in the Continuum in Metamaterials," *Advanced Optical Materials*, vol. 7, no. 13, Jul 2019, Art no. 1900383.
- 128 L. Q. Cong, P. Pitchappa, N. Wang, and R. Singh, "Electrically Programmable Terahertz Diatomic Metamolecules for Chiral Optical Control," *Research*, vol. 2019, 2019, Art no. Unsp 7084251.
- 129 S. A. Chernyak, A. S. Ivanov, D. N. Stolbov, T. B. Egorova, K. I. Maslakov, Z. X. Shen, V. V. Lunin, and S. V. Savilov, "N-doping and oxidation of carbon nanotubes and jellyfish-like graphene nanoflakes through the prism of Raman spectroscopy," *Applied Surface Science*, vol. 488, pp. 51-60, Sep 2019.
- 130 L. Cheng, X. B. Wang, W. F. Yang, J. W. Chai, M. Yang, M. J. Chen, Y. Wu, X. X. Chen, D. Z. Chi, K. E. J. Goh, J. X. Zhu, H. D. Sun, S. J. Wang, J. C. W. Song, M. Battiato, H. Yang, and E. E. M. Chia, "Far out-of-equilibrium spin populations trigger giant spin injection into atomically thin MoS₂," *Nature Physics*, vol. 15, no. 4, pp. 347+, Apr 2019.

- 131 Y. Chen, B. Peng, C. X. Cong, J. Z. Shang, L. S. Wu, W. H. Yang, J. D. Zhou, P. Yu, H. B. Zhang, Y. L. Wang, C. J. Zou, J. Zhang, S. Liu, Q. H. Xiong, H. Z. Shao, Z. Liu, H. Zhang, W. Huang, and T. Yu, "In-Plane Anisotropic Thermal Conductivity of Few-Layered Transition Metal Dichalcogenide Td-WTe₂," *Advanced Materials*, vol. 31, no. 7, Feb 2019, Art no. 1804979.
- 132 X. X. Chen, Y. Wang, J. Z. Song, X. M. Li, J. Y. Xu, H. B. Zeng, and H. D. Sun, "Temperature Dependent Reflectance and Ellipsometry Studies on a CsPbBr₃ Single Crystal," *Journal of Physical Chemistry C*, vol. 123, no. 16, pp. 10564-10570, Apr 2019.
- 133 X. T. Chen, X. Lu, S. Dubey, Q. Yao, S. Liu, X. Z. Wang, Q. H. Xiong, L. F. Zhang, and A. Srivastava, "Entanglement of single-photons and chiral phonons in atomically thin WSe₂," *Nature Physics*, vol. 15, no. 3, pp. 221-+, Mar 2019.
- 134 W. Q. Chen, A. A. Said, Z. R. Wang, Y. Zhou, W. B. Liu, W. B. Gao, M. Liu, and Q. C. Zhang, "Sulfur Position in Pyrene-Based PTTIs Plays a Key Role To Determine the Performance of Perovskite Solar Cells When PTTIs Were Employed as Electron Transport Layers," *Acs Applied Energy Materials*, vol. 2, no. 8, pp. 5716-5723, Aug 2019.
- 135 Q. L. Chen, L. Zhang, M. J. He, Z. J. Wang, X. Lin, F. Gao, Y. H. Yang, B. L. Zhang, and H. S. Chen, "Valley-Hall Photonic Topological Insulators with Dual-Band Kink States," *Advanced Optical Materials*, vol. 7, no. 15, Aug 2019, Art no. 1900036.
- 136 H. R. Chen, Y. D. Xia, B. Wu, F. Liu, T. T. Niu, L. F. Chao, G. C. Xing, T. Sum, Y. H. Chen, and W. Huang, "Critical role of chloride in organic ammonium spacer on the performance of Lowdimensional Ruddlesden-Popper perovskite solar cells," *Nano Energy*, vol. 56, pp. 373-381, Feb 2019.
- 137 D. S. Chen, Z. Mu, Y. Zhou, J. E. Froch, A. Rasmit, C. Diederichs, N. Theludev, I. Aharonovich, and W. B. Gao, "Optical Gating of Resonance Fluorescence from a Single Germanium Vacancy Color Center in Diamond," *Physical Review Letters*, vol. 123, no. 3, Jul 2019, Art no. 033602.
- 138 U. Chattopadhyay, L. K. Shi, B. L. Zhang, J. C. W. Song, and Y. D. Chong, "Fermi-Arc-Induced Vortex Structure in Weyl Beam Shifts," *Physical Review Letters*, vol. 122, no. 6, Feb 2019, Art no. 066602.
- 139 E. A. Chan, S. A. Aljunid, G. Adamo, N. I. Zheludev, M. Ducloy, and D. Wilkowski, "Coupling of atomic quadrupole transitions with resonant surface plasmons," *Physical Review A*, vol. 99, no. 6, Jun 2019, Art no. 063801.
- 140 A. Cerjan, S. Huang, M. Wang, K. P. Chen, Y. D. Chong, and M. C. Rechtsman, "Experimental realization of a Weyl exceptional ring," *Nature Photonics*, vol. 13, no. 9, pp. 623-+, Sep 2019.
- 141 C. Bradac, W. B. Gao, J. Forneris, M. E. Trusheim, and I. Aharonovich, "Quantum nanophotonics with group IV defects in diamond," *Nature Communications*, vol. 10, Dec 2019, Art no. 5625.
- 142 M. Berry, N. Zheludev, Y. Aharonov, F. Colombo, I. Sabadini, D. C. Struppa, J. Tollaksen, E. T. F. Rogers, F. Qin, M. H. Hong, X. G. Luo, R. Remez, A. Arie, J. B. Gotte, M. R. Dennis, A. M. H. Wong, G. V. Eleftheriades, Y. Eliezer, A. Bahabad, G. Chen, Z. Q. Wen, G. F. Liang, C. L. Hao, C. W. Qiu, A. Kempf, E. Katzav, and M. Schwartz, "Roadmap on superoscillations," *Journal of Optics*, vol. 21, no. 5, May 2019, Art no. 053002.
- 143 R. Begum, X. Y. Chin, M. J. Li, B. Damodaran, T. C. Sum, S. Mhaisalkar, and N. Mathews, "Stable Sn₂-doped FAPbI₃ nanocrystals for near- infrared LEDs," *Chemical Communications*, vol. 55, no. 38, pp. 5451-5454, May 2019.
- 144 I. Bargigia, E. Zucchetti, A. R. S. Kandada, M. Moreira, C. Bossio, W. P. D. Wong, P. B. Miranda, P. Decuzzi, C. Soci, C. D'Andrea, and G. Lanzani, "The Photophysics of Polythiophene Nanoparticles for Biological Applications," *Chembiochem*, vol. 20, no. 4, pp. 532-536, Feb 2019.
- 145 M. Alonso, C. Soci, M. Chauvet, and E. Fazio, "Solitonic waveguide reflection at an electric interface," *Optics Express*, vol. 27, no. 15, pp. 20273-20281, Jul 2019.
- 146 R. Ahmad, A. Surendran, P. C. Harikesh, R. Haselsberger, N. F. Jamaludin, R. A. John, T. M. Koh, A. Bruno, W. L. Leong, N. Mathews, M. E. Michel-Beyerle, and S. G. Mhaisalkar, "Perturbation-Induced Seeding and Crystallization of Hybrid Perovskites over SurfaceModified Substrates for Optoelectronic Devices," *Acs Applied Materials & Interfaces*, vol. 11, no. 31, pp. 27727-27734, Aug 2019.
- 147 Prof Yang Yaowen, Dr Swee Chuan Tjin, Dr Muneesh Maheshwari, Mr Tanmay Chaturvedi, "Chirped fiber Bragg grating coupled with a light emitting diode as FBG interrogator", Submitted to Optics and Lasers in Engineering, 24 May 2019
- 148 Wenjie Lai,Lin Cao, Rex Xiao Tan, Yung Chuen Tan, Xiaoguo Li, Phuoc Thien Phan, Anthony Meng Huat Tiong, Swee Chuan Tjin and Soo Jay Phee, "An Integrated Sensor-Model Approach for Haptic Feedback of Flexible Endoscopic Robots", Accepted by Annals of Biomedical Engineering, 27 August 2019
- 149 Hasan MI, Akhmediev N, Chang W, Midinfrared pulse generation by pumping in the normal-dispersion regime of a gas-filled hollow-core fiber, *Phys. Rev. Applied* 12, 014050 (2019)

- 150 P. Man, B. He, Q. Zhang, Z. Zhou, C. Li, Q. Li, L. Wei, and Y. Yao, A one-dimensional channel self-standing MOF cathode for ultrahigh-energy-density flexible Ni-Zn batteries, *Journal of Materials Chemistry A* 7, 27217-27224 (2019).
- 151 J. Zhang, Z. Wang, Z. Wang, T. Zhang, and L. Wei, In-fiber production of laser-structured stress-mediated semiconductor particles, *ACS Applied Materials & Interfaces* 11, 45330-45337 (2019).
- 152 J. Zhang, Z. Wang, Z. Wang, T. Zhang, and L. Wei, In-fibre particle manipulation and device assembly via laser induced thermocapillary convection, *Nature Communications* 10, 5206 (2019).
- 153 B. He, P. Man, Q. Zhang, H. Fu, Z. Zhou, C. Li, Q. Li, L. Wei, and Y. Yao, All binder-free electrodes for high-performance wearable aqueous rechargeable sodium-ion batteries, *Nano-Micro Letters* 11, 101 (2019).
- 154 B. He, P. Man, Q. Zhang, C. Wang, Z. Zhou, C. Li, L. Wei, and Y. Yao, Conversion synthesis of self-standing potassium zinc hexacyanoferrate arrays as cathodes for high-voltage flexible aqueous rechargeable sodium-ion batteries, *Small* 15, 1905115 (2019).
- 155 W. Li, L. Xiong, N. Li, S. Pang, G. Xu, C. Yi, Z. Wang, G. Gu, K. Li, W. Li, L. Wei, G. Li, C. Yang, and M. Chen, Tunable 3D light trapping architectures based on self-assembled SnSe₂ nanoplate arrays for ultrasensitive SERS detection, *Journal of Materials Chemistry C* 7, 10179-10186 (2019).
- 156 T. Wu, K. Li, N. Zhang, J. Xia, Q. Zeng, X. Wen, U. Dinish, M. Olivo, Z. Shen, Z. Liu, Q. Xiong, Y. Luo, S. A. Maier, and L. Wei, Ultra-wideband surface enhanced Raman scattering in hybrid graphene fragmented-gold substrates via cold-etching, *Advanced Optical Materials* 7, 1900905 (2019).
- 157 Q. Zhang, C. Li, Q. Li, Z. Pan, J. Sun, Z. Zhou, B. He, P. Man, L. Xie, L. Kang, X. Wang, J. Yang, T. Zhang, P. Shum, Q. Li, Y. Yao, and L. Wei, Flexible and high-voltage coaxial-fiber aqueous rechargeable zinc-ion battery, *Nano Letters* 19, 4035-4042 (2019).
- 158 M. Chen, W. Li, K. He, D. Zhang, N. Li, Y. Hou, G. Cheng, W. Li, F. Sui, Y. Dai, H. Luo, Y. Feng, L. Wei, W. Li, G. Zhong, and C. Yang, Flexible and high performance piezoresistive pressure sensors based on hierarchical flower-shaped SnSe₂ nanoplates, *ACS Applied Energy Materials* 2, 2803-2809 (2019).
- 159 Q. Zhang, L. Li, H. Li, L. Tang, B. He, C. Li, Z. Pan, Z. Zhou, Q. Lia, J. Sun, X. Fan, T. Zhang, Y. Yao, and L. Wei, Ultra-endurance coaxial-fiber stretchable sensing systems fully powered by sunlight, *Nano Energy* 60, 267-274 (2019).
- 160 M. Zhang, M. Qi, Z. Wang, Z. Wang, M. Chen, K. Li, P. Shum, and L. Wei, One-step synthesis of cyclodextrin-capped gold nanoparticles for ultra-sensitive and highly-integrated plasmonic biosensors, *Sensors & Actuators: B. Chemical* 286, 429-436 (2019).
- 161 Q. Zhang, B. He, L. Tang, Z. Zhou, L. Kang, J. Sun, T. Zhang, Q. Li, C. Li, J. Zhao, Z. Zhang, L. Wei, and Y. Yao, Fully solar-powered uninterrupted overall water-splitting systems, *Advanced Functional Materials* 29, 1808889 (2019).
- 162 T. Wu, Y. Luo, S. A. Maier, and L. Wei, Phase-matching and peak nonlinearity enhanced third-harmonic generation in graphene plasmonic coupler, *Physical Review Applied* 11, 014049 (2019).
- 163 T. Zhang, Z. Wang, B. Srinivasan, Z. Wang, J. Zhang, K. Li, C. Boussard-Pledel, J. Troles, B. Bureau, and L. Wei, Ultra-flexible glassy semiconductor fibers for thermal sensing and positioning, *ACS Applied Materials & Interfaces* 11, 2441-2447 (2019).
- 164 M. Chen, K. Li, G. Cheng, K. He, W. Li, D. Zhang, W. Li, Y. Feng, L. Wei, W. Li, G. Zhong, and C. Yang, Touchpoint-tailored ultra-sensitive piezoresistive pressure sensors with a broad dynamic response range and low detection limit, *ACS Applied Materials & Interfaces* 11, 2551-2558 (2019).
- 165 S. Ma, T. Ye, T. Wu, Z. Wang, Z. Wang, S. Ramakrishna, C. Vijila, and L. Wei, Hollow rice grain-shaped TiO₂ nanostructures for high-efficiency and large-area perovskite solar cells, *Solar Energy Materials and Solar Cells* 191, 389-398 (2019).
- 166 W. Yan, A. Page, T. Nguyen, Y. Qu, F. Sordo, L. Wei, and F. Sorin, Advanced multi-material electronic and optoelectronic fibers and textiles, *Advanced Materials* 31, 1802348 (2019). *Review paper
- 167 Xin Ge, Hongying Tang[†], Xianghong Wang[†], Xinyu Liu, Si Che1n, Nanshuo Wang, Guangming Ni, Xiaojun Yu, Shufen Chen, Haitao Liang, En Bo, Lulu Wang, Cilwyn Shalitha Braganza, Chenjie Xu, Steven M. Rowe, Guillermo J. Tearney, and Linbo Liu (2019). Geometry-dependent spectroscopic contrast in deep tissues, *iScience*, 19, 965-975.
- 168 Qiaozhou Xiong, Nanshuo Wang, Xinyu Liu, Si Chen, Cilwyn S. Braganza, Brett E. Bouma, Linbo Liu, and Martin Villiger (2019). Constrained polarization evolution simplifies depth-resolved retardation measurements with polarization-sensitive optical coherence tomography, *Biomed. Opt. Express* 10, 5207-5222. ([†]co-corresponding authors, IF = 3.910)

- 169 Jun Xie, Tian Hao, Chengxin Li, Xianghong Wang, Xiaojun Yu, Linbo Liu (2019). Automatic evaluation of stratum basale and dermal papillae using ultrahigh resolution optical coherence tomography, *Biomedical Signal Processing and Control*, 53, 101527.
- 170 Si Chen, Xin Ge, Xinyu Liu, Qianshan Ding, Nanshuo Wang, Xianghong Wang, Shufen Chen, Haitao Liang, Yunchao Deng, Qiaozhou Xiong, Guangming Ni, En Bo, Chenjie Xu Honggang Yu and Linbo Liu (2019), Understanding optical reflectance contrast for real-time characterization of epithelial precursor lesions, *Bioengineering & Translational Medicine*, 4, e10137.
- 171 Si Chen, Xinyu Liu, Nanshuo Wang, Qianshan Ding, Xianghong Wang, Xin Ge, Xiaojun Yu, Honggang Yu, Chenjie Xu, and Linbo Liu (2019). Contrast of nuclei in stratified squamous epithelium in optical coherence tomography images at 800 nm, *Journal of Biophotonics*, 12(9):e201900073. (IF= 4.328)
- 172 Qiaozhou Xiong, Nanshuo Wang, Xinyu Liu, Si Chen, Haitao Liang, Shufen Chen, and Linbo Liu (2019). Single input state polarization-sensitive optical coherence tomography with high resolution and polarization distortion correction, *Optics Express*, 27(5), 6910-6924.
- 173 Qianshan Ding, Yunchao Deng, Xiaojun Yu, Jingping Yuan, Zhi Zeng, Ganggang Mu, Mingkai Chen, Xinyue Wan, Xianghong Wang, Qiaozhou Xiong, Dexin Gong, Xu Zhu, Linbo Liu, Honggang Yu(2019). Rapid, high-resolution, label-free and 3D imaging to differentiate colorectal adenomas and non-neoplastic polyps with micro-optical coherence tomography, *Clinical and Translational Gastroenterology*, 10(6):e00049. (IF = 4.621)
- 174 Nanshuo Wang, Xinyu Liu, Xiaojun Yu, Si Chen, Shi, Chen, Linbo Liu (2019). Optical coherence tomography with gapped spectrum, *IEEE Photonics Journal*, 11(2), 1-9. (IF = 2.177)
- 175 Lulu Wang, Xiaojun Yu, Xin Ge, Xuan Wu, Xianghong Wang, En Bo, Nanshuo Wang, Xinyu Liu, Guangming Ni, and Linbo Liu (2019). Design and Optimization of a Spectrometer for High-Resolution SD-OCT, *Laser Physics Letters*, 16, 045603.
- 176 Xiao Shao, Xinjian Chen, Xiaojun Yu, Ya Hu, Linbo Liu, Fei Shi, Wei Shao, Jianhua Mo (2019). Nondestructive Measurement of Conformal Coating Thickness on Printed Circuit Board with Ultra-high Resolution Optical Coherence Tomography, *IEEE Access*, 7(1), 18138-18145 (IF=3.557).
- 177 Lulu Wang, Qiaozhou Xiong, Xin Ge, En Bo, Jun Xie, Xinyu Liu, Xiaojun Yu, Xianghong Wang, Nanshuo Wang, Si Chen, Xuan Wu, and Linbo Liu (2019). Cellular resolution corneal imaging with extended imaging range", *Optics Express*, 27(2), 1298-1308.
- 178 Hongying Tang, Xinyu Liu, Si Chen, Xiaojun Yu, Yuemei Luo, Junying Wu, Xianghong Wang, and Linbo Liu (2019). Estimation of refractive index for biological tissue using micro-optical coherence tomography, *IEEE Transactions on Biomedical Engineering*, 66(6), 1803-1809. (IF= 4.288)
- 179 "Orientation-Controlled Nonradiative Energy Transfer to Colloidal Nanoplatelets: Engineering Dipole Orientation Factor", O. Erdem, K. Gungor, B. Guzelturk, I. Tanriover, M. Sak, M. Olutas, D. Dede, Y. Kelestemur and H. V. Demir, *Nano Letters*, 19, 4297 (2019).
- 180 "Giant Modal Gain Coefficients in Colloidal II-VI Nanoplatelets", B. Guzelturk, M. Pelton, M. Olutas, and H. V. Demir, *Nano Letters*, 19, 277 (2019).
- 181 "Ultrathin Highly Luminescent Two-Monolayer Colloidal CdSe Nanoplatelets", S. Delikanli, G. Yu, A. Yeltik, S. Bose, T. Erdem, J. Yu, O. Erdem, M. Sharma, V. K. Sharma, U. Quliyeva, S. Shendre, C. Dang, D. H. Zhang, T. C. Sum, W. Fan and H. V. Demir, *Advanced Functional Materials*, 29, 1901028 (2019).
- 182 "Giant Alloyed Hot Injection Shells Enable Ultra-Low Optical Gain Threshold in Colloidal Quantum Wells", Y. Altintas, K. Gungor, Y. Gao, M. Sak, U. Quliyeva, G. Bappi, E. Mutlugun, E. H. Sargent, H. V. Demir, *ACS Nano*, 13, 10662 (2019).
- 183 "Electrically control amplified spontaneous emission in colloidal quantum dots", J. Yu, S. Shendre, W.-K. Koh, B. Liu, M. Li, S. Hou, C. Hettiarachchi, S. Delikanli, P. L. Hernández-Martínez, M. D. Birowosuto, T. C. Sum, H. V. Demir and C. Dang, *Science Advances*, 5, eaav3140 (2019).
- 184 "Highly Stable Multi-Crown Heterostructures of Type-II Nanoplatelets for Ultra-Low Threshold Optical Gain", D. Dede, N. Taghipour, U. Quliyeva, M. Sak, Y. Kelestemur, K. Gungor, and H. V. Demir, *Chemistry of Materials*, 31, 1818 (2019).
- 185 "Light-Emitting Diodes with Cu-Doped Colloidal Quantum Wells: From Ultrapure Green, Tunable Dual-Emission to White Light", B. Liu, M. Sharma, J. Yu, S. Shendre, C. Hettiarachchi, A. Sharma, A. Yeltik, L. Wang, H. Sun, C. Dang, and H. V. Demir, *Small*, 15, 1901983 (2019).
- 186 "Light Generation in Lead Halide Perovskite Nanocrystals: LEDs, Color Converters, Lasers, and Other Applications", F. Yan, S. T. Tan, X. Li, H. V. Demir, *Small*, 15, 1902079 (2019).
- 187 "Near-Infrared-Emitting Five-Monolayer Thick Copper-Doped CdSe Nanoplatelets", A. Sharma, M. Sharma, K. Gungor, M. Olutas, D. Dede, and H. V. Demir, *Advanced Optical Materials*, 7, 1900831 (2019).

- 188 "Mutual Energy Transfer in a Binary Colloidal Quantum Well Complex", J. Yu, M. Sharma, S. Delikanli, M. D. Birowosuto, H. V. Demir, and C. Dang, *J. Phys. Chem. Lett.*, 10, 5193 (2019).
- 189 "LEDs Using Halide Perovskite Nanocrystal Emitters", F. Yan and H. V. Demir, *Nanoscale*, 11, 11402 (2019).
- 190 "Ultrahigh-efficiency Aqueous Flat Nanocrystals of CdSe/CdS@Cd_{1-x}Zn_xS Colloidal Core/Crown@Alloyed-Shell Quantum Wells", S. Shendre, S. Delikanli, M. Li, D. Dede, Z. Pan, S. T. Ha, Y. H. Fu, P. L. Hernández Martínez, J. Yu, O. Erdem, A. I. Kuznetsov, C. Dang, T. C. Sum and H. V. Demir, *Nanoscale*, 11, 301 (2019).
- 191 "Plasmon-exciton systems with high quantum yield using deterministic aluminium nanostructures with rotational symmetries", L. Y. M. Tobing, M. D. Birowosuto, K. E. Fong, Y. Gao, J. Tong, F. Suo, C. Dang, H. V. Demir and D. H. Zhang, *Nanoscale*, 11, 20315 (2019).
- 192 "Nonradiative Energy Transfer between Doped and Undoped Flat Semiconductor Nanocrystals of Colloidal Quasi-2D Nanoplatelets", A. Yeltik, M. Olutas, M. Sharma, K. Gungor, and H. V. Demir, *J. Phys. Chem. C*, 123, 1470 (2019).
- 193 Broad-band polarization-insensitive all-dielectric metalens enabled by intentional offresonance waveguiding at mid-wave infrared", I. Tanriover and H. V. Demir, *Appl. Phys. Lett.*, 114, 043105 (2019).
- 194 "Brightly Luminescent Cu-Zn-In-S/ZnS Core/Shell Quantum Dots in Salt Matrices", J. F. L. Lox, F. Eichler, T. Erdem, M. Adam, N. Gaponik, H. V. Demir, V. Lesnyak, A. Eychmüller Zeitschrift für Physikalische Chemie (Special Issue: Dedicated to Alexander Eychmüller on the occasion of his 60th birthday), 233, 23 (2019).
- 195 J. Lee, K. Lee, J. Yang, Y.J. Kim, S.W. Kim, Comb segmentation spectroscopy for rapid detection of molecular absorption lines, *Optics Express*, 27 (2019) 9088-9096.
- 196 T.S.D. Le, S. Park, J. An, P.S. Lee, Y.J. Kim, Ultrafast Laser Pulses Enable One-Step Graphene Patterning on Woods and Leaves for Green Electronics, *Advanced Functional Materials*, 29 (2019).
- 197 H.J. Kang, J. Yang, B.J. Chun, H. Jang, B.S. Kim, Y.J. Kim, S.W. Kim, Free-space transfer of comb-rooted optical frequencies over an 18 km open-air link, *Nature Communications*, 10 (2019).
- 198 J. Jiao, Y. Gao, S. Li, N.D. Anh, P.C. Su, S.W. Kim, C.S.S. Sandeep, Y.J. Kim, Surface third-harmonic generation at a two-photon-polymerized micro-interferometer for real-time on-chip refractive index monitoring, *Optics Express*, 27 (2019) 29196-29206.
- 199 H. Jang, B.S. Kim, B.J. Chun, H.J. Kang, Y.S. Jang, Y.W. Kim, Y.J. Kim, S.W. Kim, Comb-rooted multi-channel synthesis of ultra-narrow optical frequencies of few Hz linewidth, *Scientific Reports*, 9 (2019).
- 200 Y. Gao, H. Lee, W. Xu, J. Jiao, P. Chen, D.H. Kim, Y.J. Kim, Coherent power amplification of third-order harmonic femtosecond pulses at thin-film up-conversion nanoparticles, *Scientific Reports*, 9 (2019).
- 201 Y. Gao, H. Lee, J. Jiao, B. Jae Chun, S. Kim, D.H. Kim, Y.J. Kim, Erratum: Surface third and fifth harmonic generation at crystalline Si for non-invasive inspection of Si wafer's inter-layer defects (*Opt. Express* (2018) 26, 25 (32812) DOI: 10.1364/OE.26.032812), *Optics Express*, 27 (2019) 38028.
- 202 T.S. Dinh Le, J. An, Y. Huang, Q. Vo, J. Boonruangkan, T. Tran, S.W. Kim, G. Sun, Y.J. Kim, Ultrasensitive Anti-Interference Voice Recognition by Bio-Inspired Skin-Attachable Self-Cleaning Acoustic Sensors, *ACS Nano*, 13 (2019) 13293-13303.
- 203 N.D. Anh, B.J. Chun, S. Choi, D.E. Kim, S. Kim, Y.J. Kim, Plasmonic dynamics measured with frequency-comb-referenced phase spectroscopy, *Nature Physics*, 15 (2019) 132-137.
- 204 S. Agarwala, G.L. Goh, T.S. Dinh Le, J. An, Z.K. Peh, W.Y. Yeong, Y.J. Kim, Wearable Bandage-Based Strain Sensor for Home Healthcare: Combining 3D Aerosol Jet Printing and Laser Sintering, *ACS Sensors*, 4 (2019) 218-226.
- 205 Y. Xia, P. Padmanabhan, S. Sarangapani, B. Gulyás, M. Vadakke Matham, Bifunctional Fluorescent/Raman Nanoprobe for the Early Detection of Amyloid, *Scientific Reports*, (2019).
- 206 N.C.Y. Tham, P.K. Sahoo, Y.J. Kim, V.M. Murukeshan, Ultrafast volume holography for stretchable photonic structures, *Optics Express*, 27 (2019) 12196-12212.
- 207 C.S. Suchand Sandeep, S. Sarangapani, X.J.J. Hong, T. Aung, M. Baskaran, V.M. Murukeshan, Optical sectioning and high resolution visualization of trabecular meshwork using Bessel beam assisted light sheet fluorescence microscopy, in: *Journal of Biophotonics*, 2019.
- 208 P.K. Sahoo, J.Y.I. Pae, V.M. Murukeshan, Enhanced absorption in a graphene embedded 1D guided-mode-resonance structure without back-reflector and interferometrically written gratings, *Optics Letters*, 44 (2019) 3661-3664.
- 209 S.M. Perinchery, A. Haridas, A. Shinde, O. Buchnev, V.M. Murukeshan, Breaking diffraction limit of far-field imaging via structured illumination Bessel beam microscope (SIBM), *Optics Express*, 27 (2019) 6068-6082.
- 210 J.Y. Pae, P.K. Sahoo, M.V. Matham, Grating-Coupled Plasmonic Sensor for Sucrose Sensing Fabricated Using Optical Fiber-Based Interference Lithography (OFIL) System, *IEEE Sensors Journal*, (2019).

- 211 H. Lee, M.J. Low, C.H. Joel Lim, J. An, C.S.S. Sandeep, T.M. Rohith, H.G. Rhee, V.M. Murukeshan, Y.J. Kim, Transferable ultra-thin multi-level micro-optics patterned by tunable photoreduction and photoablation for hybrid optics, *Carbon*, 149 (2019) 572-581.
- 212 W. Yin, Q. Chen, S. Feng, T. Tao, L. Huang, M. Trusiak, A. Asundi, C. Zuo, Temporal phase unwrapping using deep learning, *Scientific Reports*, 9 (2019).
- 213 K. Yan, Y. Yu, C. Huang, L. Sui, K. Qian, A. Asundi, Fringe pattern denoising based on deep learning, *Optics Communications*, 437 (2019) 148-152.
- 214 Y. Wen, H. Wang, A. Anand, W. Qu, H. Cheng, Z. Dong, Y. Wu, A fast autofocus method based on virtual differential optical path in digital holography: Theory and applications, *Optics and Lasers in Engineering*, 121 (2019) 133-142.
- 215 Y. Wen, A. Asundi, 3D profile measurement for stepped microstructures using region-based transport of intensity equation, *Measurement Science and Technology*, 30 (2019).
- 216 H. Wang, S. Zhu, A. Asundi, Y. Xu, Experimental characterization of laser trepanning performance enhanced by water-based ultrasonic assistance, *Optics and Laser Technology*, 109 (2019) 547-560.
- 217 C. Wang, Y. Zhang, J. Sun, J. Li, X. Luan, A. Asundi, High-efficiency coupling method of the gradient-index fiber probe and hollow-core photonic crystal fiber, *Applied Sciences (Switzerland)*, 9 (2019).
- 218 C. Wang, J. Sun, C. Yang, B. Kuang, D. Fang, A. Asundi, Research on a novel fabry-perot interferometer model based on the ultra-small gradient-index fiber probe, *Sensors (Switzerland)*, 19 (2019).
- 219 C. Wang, B. Kuang, Z. Wen, J. Sun, Y. Xu, A. Asundi, Further study of coupling efficiency of ultra-small gradient-index fiber probe, *Optik*, 184 (2019) 304-312.
- 220 T. Sun, W. Zheng, Y. Yu, K. Yan, A. Asundi, S. Valukh, Algorithm for surfaces profiles and thickness variation measurement of a transparent plate using a Fizeau interferometer with wavelength tuning, *Applied Sciences (Switzerland)*, 9 (2019).
- 221 T. Sun, W. Zheng, Y. Yu, A.K. Asundi, S. Valyukh, Determination of surface profiles of transparent plates by means of laser interferometry with wavelength tuning, *Optics and Lasers in Engineering*, 115 (2019) 59-66.
- 222 L. Sui, X. Zhao, C. Huang, A. Tian, A. Anand, An optical multiple-image authentication based on transport of intensity equation, *Optics and Lasers in Engineering*, 116 (2019) 116-124.
- 223 G. Lichao, J. Ding, H. Li, L. Du, A.K. Asundi, Attempt to Detect Nano Oil Film on the Surface of Polished KDP Crystal, *Russian Journal of Nondestructive Testing*, 55 (2019) 393-406.
- 224 S. Liansheng, Z. Xiao, H. Chongtian, T. Ailing, A. Krishna Asundi, Silhouette-free interference-based multiple-image encryption using cascaded fractional Fourier transforms, *Optics and Lasers in Engineering*, 113 (2019) 29-37.
- 225 S. Liansheng, W. Jiahao, T. Ailing, A. Asundi, Optical image hiding under framework of computational ghost imaging based on an expansion strategy, *Optics Express*, 27 (2019) 7213-7225.
- 226 Y. Hu, Q. Chen, S. Feng, T. Tao, A. Asundi, C. Zuo, A new microscopic telecentric stereo vision system - Calibration, rectification, and three-dimensional reconstruction, *Optics and Lasers in Engineering*, 113 (2019) 14-22.
- 227 Y. Hao, C. Liu, J. long, P. Cai, Q. Kemao, A. Asundi, Investigation of the systematic axial measurement error caused by the space variance effect in digital holography, *Optics and Lasers in Engineering*, 112 (2019) 16-25.

2018

- 1 Yap, S.H.K., Chien, Y.-H., Tan, R., Bin Shaik Alauddin, A.R., Ji, W.B., Tjin, S.C., Yong, K.-T. "An Advanced Hand-Held Microfiber-Based Sensor for Ultrasensitive Lead Ion Detection", *ACS Sensors*, 3(12), 2506 – 2512, 28 December 2018
- 2 Lin, G., Li, L., Panwar N., Wang, J., Tjin, S.C., Wang, X., Yong, K.T. "Non-viral gene therapy using multifunctional nanoparticles: Status, challenges, and opportunities", *Coordination Chemistry Reviews*, 374, pg. 133-152, 1 November 2018
- 3 Lipi Mphanty, Yaowen Yang and Swee Chuan Tjin "Passively Conducted Vibration Sensing with Fiber Bragg Gratings", *Applied Science*, 8(9), 1599, 10 September 2018
- 4 Panwar, N., Song, P., Tjin, S.C., Yong, K.T. "Sheath-assisted hydrodynamics particles focusing in higher Reynolds number flows", *Journal of Micromechanics and Microengineering*, 28(10), 105018, 2 August 2018
- 5 Liang, S., Tjin, S.C., Lin, B., Sheng, X., Lou, S., Zhang, Y., Wang, X., " Novel Fiber Bragg Grating Sensing Method Based on the Sidelobe-Modulation for Ultrasound Detection", *Journal of Lightwave Technology*, 1 August 2018
- 6 Tan, Rex X.; Yap, Stephanie H.K.; Tan, Yung C.; Tjin, Swee C.; Ibsen, Morten; Yong, Ken T.; Lai, Wenn J. 2018. "Functionalized Fiber End Superstructure Fiber Bragg Grating Refractive Index Sensor for Heavy Metal Ion Detection" *Sensors* 18, no. 6: 1821, 5 June 2018
- 7 Tan, Rex X.; Ho, Daryl; Tse, Chun H.; Tan, Yung C.; Yoo, Seong W.; Tjin, Swee C.; Ibsen, Morten. 2018. "Birefringent Bragg Grating in C-Shaped Optical Fiber as a Temperature-Insensitive Refractometer" *Sensors* 18, no. 10: 3285, 29 September 2018
- 8 Q. Z. Sun, F. Ai, D. M. Liu, J. W. Cheng, H. B. Luo, K. Peng, Y. Y. Luo, Z. J. Yan, P. P. Shum, "M-OTDR sensing system based on 3D encoded microstructures", *Scientific Reports*, 01-Jan-2017.Nanshuo Wang, "Polarization management to mitigate misalignment-induced fringe fading in fiber-based optical coherence tomography", *Optics Letters*, 01-Jan-2018.
- 9 M. Zhang, K. Li, T. Zhang, P. Shum, Z. Wang, Z. Wang, N. Zhang, J. Zhang, T. Wu, and L. Wei, "Electron-rich two-dimensional molybdenum trioxides for highly integrated plasmonic biosensing", *ACS Photonics*, 5, 347–352, 01-Jan-2018.
- 10 B. Zhu, D. Li, T. Zhang, Y. Luo, R. Donelson, T. Zhang, Y. Zheng, C. Du, L. Wei, and H. H. Hng, "The improvement of thermoelectric property of bulk ZnO via ZnS addition: influence of intrinsic defects", *Ceramics International*, 44, 6, 6461-6465, 01-Jan-2018.
- 11 En Bo, Xin Ge, Lulu Wang, Xuan Wu, Yuemei Luo, Shufen Chen, Si Chen, Haitao Liang, Guangming Ni, Xiaojun Yu, Linbo Liu, "Multiple aperture synthetic optical coherence tomography for biological tissue imaging", *Optics Express*, 01-Jan-2018.
- 12 Nan Zhang, Kaiwei Li, Ying Cui, Zhifang Wu, Perry Ping Shum, Jean-Louis Auguste, Xuan Quyen Dinh, Georges Humbert, Lei Wei, "Ultra-sensitive chemical and biological analysis via specialty fibers with built-in microstructured optofluidic channel", *Lab on a Chip*, 18, 4, 655, 01-Jan-2018.
- 13 Zhilin Xu, Qizhen Sun, Yiyang Luo, Perry Ping Shum, and Deming Liu, "Switchable single longitudinal-mode fiber laser based on reflective θ-shaped microfiber filter, *IEEE Photonics Technology Letters*, 30, 479-482, 01-Jan-2018.
- 14 Z. Li, Y. Sun, K. Wang, J. Song, J. Shi, C. Gu, L. Liu, Y. Luo, "Tuning the dispersion of effective surface plasmon polaritons with multilayer systems", *Optics Express*, 26, 4, 4686-4697, 01-Feb-2018.
- 15 K. Li, N. Zhang, M. Zhang, G. Liu, T. Zhang, and L. Wei, "Ultra-sensitive measurement of gas refractive index using an optical nanofiber coupler", *Optics Letters*, 43, 679-682, 01-Feb-2018.
- 16 K. Li, M. Zhang, N. Zhang, T. Zhang, G. Liu, and L. Wei, "Spectral characteristics and ultrahigh sensitivity near the dispersion turning point of optical microfiber couplers", *Journal of Lightwave Technology* , In press, doi: 10.1109/JLT.2018.2815558, 01-Mar-2018.
- 17 Xianghong Wang, Xiaojun Yu, Xinyu Liu, Si Chen, Shufen Chen, Nanshuo Wang, Linbo Liu, "A two-step iteration mechanism for speckle reduction in optical coherence tomography", *Biomedical Signal Processing and Control*, 01-Mar-2018.
- 18 K. Li, N. Zhang, T. Zhang, Z. Wang, M. Chen, T. Wu, S. Ma, M. Zhang, J. Zhang, Dinish U. S, P. Shum, M. Olivo, and L. Wei, "Ultra-flexible, conformal, and nano-patterned photonic surfaces via polymer cold-drawing", *Journal of Materials Chemistry C*, In press, doi:10.1039/C8TC00884A, 01-Mar-2018.
- 19 En Bo, Lulu Wang, Jun Xie, Xin Ge, and Linbo Liu, "Pixel-reassigned spectral domain optical coherence tomography", *IEEE Photonics Journal*, 01-Mar-2018.

- 20 Zhang X, Song W, Wang H, Zhuang Z, Surman P, Sun XW, Zheng Y, "A Spatio-temporal Multiplexing Multi-View Display Using a Lenticular Lens and a Beam Steering Screen", *Optics Communications*, 420, 168-173, 01-Apr-2018.
- 21 Song, W,Liu X, Lu P, Huang Y, Weng D, Zheng Y,Liu Y, Wang Y, "Design and assessment of a 360° panoramic and high-performance capture system with two tiled catadioptric imaging channels", *Applied Optics*, 57, 13, 3429-3437, 01-May-2018.
- 22 Chowdury A, Ankiewicz A, Akhmediev N, Chang W, Modulation instability in higher-order nonlinear Schrödinger equations, *Chaos* 28, 123116 (2018).
- 23 Hasan MI, Akhmediev N, Chang W, Empirical formulae for dispersion and effective mode area in hollow-core antiresonant fibers, *J. Light. Technol.* 36, 4060–4065 (2018)
- 24 Akhmediev N, Soto-Crespo JM, Vouzas P, Devine N, Chang W, Dissipative solitons with extreme spikes in the normal and anomalous dispersion regimes, *Philos. Trans. Royal Soc. A* 376, 20180023 (2018)
- 25 P. C. Zou, J. Li, Y. Q. Zhang, C. W. Liang, C. Yang, and H. J. Fan, "Magnetic-field-induced rapid synthesis of defect-enriched Ni-Co nanowire membrane as highly efficient hydrogen evolution electrocatalyst," *Nano Energy*, vol. 51, pp. 349-357, Sep 2018.
- 26 C. Zhu, Y. Chen, F. C. Liu, S. J. Zheng, X. B. Li, A. Chaturvedi, J. D. Zhou, Q. D. Fu, Y. M. He, Q. S. Zeng, H. J. Fan, H. Zhang, W. J. Liu, T. Yu, and Z. Liu, "Light-Tunable 1T-TaS₂ ChargeDensity-Wave Oscillators," *Acs Nano*, vol. 12, no. 11, pp. 11203-11210, Nov 2018.
- 27 Y. Zhou, Z. Y. Wang, A. Rasmita, S. Kim, A. Berhane, Z. Bodrog, G. Adamo, A. Gali, I. Aharonovich, and W. B. Gao, "Room temperature solid-state quantum emitters in the telecom range," *Science Advances*, vol. 4, no. 3, Mar 2018, Art no. eaar3580.
- 28 Y. Zhou, Z. Mu, G. Adamo, S. Bauerdrick, A. Rudzinski, I. Aharonovich, and W. B. Gao, "Direct writing of single germanium vacancy center arrays in diamond," *New Journal of Physics*, vol. 20, Dec 2018, Art no. 125004.
- 29 X. Zhou, D. Leykam, U. Chattopadhyay, A. B. Khanikaev, and Y. D. Chong, "Realization of a magneto-optical near-zero index medium by an unpaired Dirac point," *Physical Review B*, vol. 98, no. 20, Nov 2018, Art no. 205115.
- 30 J. D. Zhou, J. H. Lin, X. W. Huang, Y. Zhou, Y. Chen, J. Xia, H. Wang, Y. Xie, H. M. Yu, J. C. Lei, D. Wu, F. C. Liu, Q. D. Fu, Q. S. Zeng, C. H. Hsu, C. L. Yang, L. Lu, T. Yu, Z. X. Shen, H. Lin, B. I. Yakobson, Q. Liu, K. Suenaga, G. T. Liu, and Z. Liu, "A library of atomically thin metal chalcogenides," *Nature*, vol. 556, no. 7701, pp. 355-, Apr 2018.
- 31 X. Zhao, J. Hu, B. Wu, A. Banerjee, S. Chakraborty, J. Y. Feng, Z. Y. Zhao, S. Chen, R. Ahuja, T. C. Sum, and Z. Chen, "Simultaneous enhancement in charge separation and onset potential for water oxidation in a BiVO₄ photoanode by W-Ti codoping," *Journal of Materials Chemistry A*, vol. 6, no. 35, pp. 16965-16974, Sep 2018.
- 32 W. J. Zhao and Q. H. Xiong, "MATERIALS SCIENCE Nanoscale interfaces made easily," *Nature*, vol. 553, no. 7686, pp. 32-34, Jan 2018.
- 33 Z. Y. Zhang, A. Huerta-Viga, and H. S. Tan, "Two-dimensional electronic-Raman spectroscopy," *Optics Letters*, vol. 43, no. 4, pp. 939-942, Feb 2018.
- 34 Y. P. Zhang, G. Demesy, M. Haggui, D. Gerard, J. Beal, S. Dodson, Q. H. Xiong, J. Plain, N. Bonod, and R. Bachelot, "Nanoscale Switching of Near-Infrared Hot Spots in Plasmonic Oligomers Probed by Two-Photon Absorption in Photopolymers," *Acs Photonics*, vol. 5, no. 3, pp. 918-928, Mar 2018.
- 35 Y. M. Zhang and B. L. Zhang, "Bending, splitting, compressing and expanding of electromagnetic waves in infinitely anisotropic media," *Journal of Optics*, vol. 20, no. 1, Jan 2018, Art no. 014001.
- 36 K. Zhang, J. J. Ma, X. Zhang, J. Thompson, V. Vedral, K. Kim, and M. L. Gu, "Operational effects of the UNOT gate on classical and quantum correlations," *Science Bulletin*, vol. 63, no. 12, pp. 765-770, Jun 2018.
- 37 B. L. Zhang, "Negative refraction without reflection," *Nature*, vol. 560, no. 7716, pp. 37-38, Aug 2018.
- 38 Y. Q. Zeng, G. Z. Liang, B. Qiang, K. D. Wu, J. Tao, X. N. Hu, L. H. Li, A. G. Davies, E. H. Linfield, H. K. Liang, Y. Zhang, Y. D. Chong, and Q. J. Wang, "Two-Dimensional Multimode Terahertz Random Lasing with Metal Pillars," *Acs Photonics*, vol. 5, no. 7, pp. 2928-2935, Jul 2018.
- 39 Y. Q. Zeng, G. Z. Liang, B. Qiang, B. Meng, H. K. Liang, S. Mansha, J. P. Li, Z. H. Li, L. H. Li, A. G. Davies, E. H. Linfield, Y. Zhang, Y. D. Chong, and Q. J. Wang, "Terahertz emission from localized modes in one-dimensional disordered systems," *Photonics Research*, vol. 6, no. 2, pp. 117-122, Feb 2018.
- 40 S. A. Zargaleh, H. J. von Bardeleben, J. L. Cantin, U. Gerstmänn, S. Hameau, B. Eble, and W. B. Gao, "Electron paramagnetic resonance tagged high-resolution excitation spectroscopy of NV-centers in 4H-SiC," *Physical Review B*, vol. 98, no. 21, Dec 2018, Art no. 214113.

- 41 S. A. Zargaleh, S. Hameau, B. Eble, F. Margaillan, H. J. von Bardeleben, J. L. Cantin, and W. B. Gao, "Nitrogen vacancy center in cubic silicon carbide: A promising qubit in the 1.5 μ m spectral range for photonic quantum networks," *Physical Review B*, vol. 98, no. 16, Oct 2018, Art no. 165203.
- 42 X. Yuan, H. Y. Zhou, M. L. Gu, and X. F. Ma, "Unification of nonclassicality measures in interferometry," *Physical Review A*, vol. 97, no. 1, Jan 2018, Art no. 012331.
- 43 Y. F. Yu, G. H. Nam, Q. Y. He, X. J. Wu, K. Zhang, Z. Z. Yang, J. Z. Chen, Q. L. Ma, M. T. Zhao, Z. Q. Liu, F. R. Ran, X. Z. Wang, H. Li, X. Huang, B. Li, Q. H. Xiong, Q. Zhang, Z. Liu, L. Gu, Y. H. Du, W. Huang, and H. Zhang, "High phase-purity 1T'-MoS₂- and 1T'-MoSe₂- layered crystals," *Nature Chemistry*, vol. 10, no. 6, pp. 638-643, Jun 2018.
- 44 D. S. Yu, A. Landra, L. C. Kwek, L. Amico, and R. Dumke, "Stabilizing Rabi oscillation of a charge qubit via the atomic clock technique," *New Journal of Physics*, vol. 20, Feb 2018, Art no. 023031.
- 45 D. S. Yu, L. C. Kwek, and R. Dumke, "Relaxation of Rabi dynamics in a superconducting multiple-qubit circuit," *Journal of Physics Communications*, vol. 2, no. 9, Sep 2018, Art no. Unsp 095001.
- 46 D. S. Yu, L. C. Kwek, L. Amico, and R. Dumke, "Nonlinear circuit quantum electrodynamics based on the charge-qubit-resonator interface," *Physical Review A*, vol. 98, no. 3, Sep 2018, Art no. 033833.
- 47 D. S. Yu and R. Dumke, "Feedback control of persistent-current oscillation based on the atomic-clock technique," *Physical Review A*, vol. 97, no. 5, May 2018, Art no. 053813.
- 48 L. You, F. C. Liu, H. S. Li, Y. Z. Hu, S. Zhou, L. Chang, Y. Zhou, Q. D. Fu, G. L. Yuan, S. Dong, H. J. Fan, A. Gruverman, Z. Liu, and J. L. Wang, "In-Plane Ferroelectricity in Thin Flakes of Van der Waals Hybrid Perovskite," *Advanced Materials*, vol. 30, no. 51, Dec 2018, Art no. 1803249.
- 49 T. T. Yin, L. Y. Jiang, and Z. X. Shen, "Recent progress on photoluminescence from plasmonic nanostructures: Phenomenon, mechanism, and application," *Chinese Physics B*, vol. 27, no. 9, Sep 2018, Art no. 097803.
- 50 T. T. Yin, Y. N. Fang, W. K. Chong, K. T. Ming, S. J. Jiang, X. L. Li, J. L. Kuo, J. Y. Fang, T. C. Sum, T. J. White, J. X. Yan, and Z. X. Shen, "High-Pressure-Induced Comminution and Recrystallization of CH₃NH₃PbBr₃ Nanocrystals as Large Thin Nanoplates," *Advanced Materials*, vol. 30, no. 2, Jan 2018, Art no. 1705017.
- 51 T. Ye, A. Bruno, G. F. Han, T. M. Koh, J. Li, N. F. Jamaludin, C. Soci, S. G. Mhaisalkar, and W. L. Leong, "Efficient and Ambient-Air-Stable Solar Cell with Highly Oriented 2D@3D Perovskites," *Advanced Functional Materials*, vol. 28, no. 30, Jul 2018, Art no. 1801654.
- 52 H. Q. Ye, G. F. Liu, S. Liu, D. Casanova, X. Ye, X. T. Tao, Q. C. Zhang, and Q. H. Xiong, "Molecular-Barrier-Enhanced Aromatic Fluorophores in Cocrystals with Unity Quantum Efficiency," *Angewandte Chemie-International Edition*, vol. 57, no. 7, pp. 1928-1932, Feb 2018.
- 53 N. Yantara, A. Bruno, A. Iqbal, N. F. Jamaludin, C. Soci, S. Mhaisalkar, and N. Mathews, "Designing Efficient Energy Funneling Kinetics in Ruddlesden-Popper Perovskites for HighPerformance Light-Emitting Diodes," *Advanced Materials*, vol. 30, no. 33, Aug 2018, Art no. 1800818.
- 54 Y. H. Yang, P. F. Qin, B. Zheng, L. Shen, H. P. Wang, Z. J. Wang, E. P. Li, R. Singh, and H. S. Chen, "Magnetic Hyperbolic Metasurface: Concept, Design, and Applications," *Advanced Science*, vol. 5, no. 12, Dec 2018, Art no. 1801495.
- 55 C. R. Yang, F. C. Binder, V. Narasimhachar, and M. L. Gu, "Matrix Product States for Quantum Stochastic Modeling," *Physical Review Letters*, vol. 121, no. 26, Dec 2018, Art no. 260602.
- 56 F. Yan, J. Xing, G. C. Xing, L. Quan, S. T. Tan, J. X. Zhao, R. Su, L. L. Zhang, S. Chen, Y. W. Zhao, A. Huan, E. H. Sargent, Q. H. Xiong, and H. V. Demir, "Highly Efficient Visible Colloidal LeadHalide Perovskite Nanocrystal Light-Emitting Diodes," *Nano Letters*, vol. 18, no. 5, pp. 31573164, May 2018.
- 57 A. Xomalis, I. Demirtzioglou, E. Plum, Y. M. Jung, V. Nalla, C. Lacava, K. F. MacDonald, P. Petropoulos, D. J. Richardson, and N. I. Zheludev, "Fibre-optic metadevice for all-optical signal modulation based on coherent absorption," *Nature Communications*, vol. 9, Jan 2018, Art no. 182.
- 58 A. Xomalis, I. Demirtzioglou, Y. M. Jung, E. Plum, C. Lacava, P. Petropoulos, D. J. Richardson, and N. I. Zheludev, "Picosecond all-optical switching and dark pulse generation in a fibreoptic network using a plasmonic metamaterial absorber," *Applied Physics Letters*, vol. 113, no. 5, Jul 2018, Art no. 051103.
- 59 J. Xing, Y. B. Zhao, M. Askerka, L. N. Quan, X. W. Gong, W. J. Zhao, J. X. Zhao, H. R. Tan, G. K. Long, L. Gao, Z. Y. Yang, O. Voznyy, J. Tang, Z. H. Lu, Q. H. Xiong, and E. H. Sargent, "Color-stable highly luminescent sky-blue perovskite light-emitting diodes," *Nature Communications*, vol. 9, Aug 2018, Art no. 3541.
- 60 M. J. Xin, W. S. Leong, Z. L. Chen, and S. Y. Lan, "An atom interferometer inside a hollow-core photonic crystal fiber," *Science Advances*, vol. 4, no. 1, Jan 2018, Art no. e1701723.

- 61 Z. H. Xiao, X. Y. Sun, X. Y. Li, Y. Q. Wang, Z. Q. Wang, B. W. Zhang, X. L. Li, Z. X. Shen, L. B. Kong, and Y. Z. Huang, "Phase Transformation of GeO₂ Glass to Nanocrystals under Ambient Conditions," *Nano Letters*, vol. 18, no. 5, pp. 3290-3296, May 2018.
- 62 L. Xiao and H. D. Sun, "Novel properties and applications of carbon nanodots," *Nanoscale Horizons*, vol. 3, no. 6, pp. 565-597, Nov 2018.
- 63 P. C. Wu, C. Y. Liao, V. Savinov, T. L. Chung, W. T. Chen, Y. W. Huang, P. R. Wu, Y. H. Chen, A. Q. Liu, N. I. Zheludev, and D. P. Tsai, "Optical Anapole Metamaterial," *Acs Nano*, vol. 12, no. 2, pp. 1920-1927, Feb 2018.
- 64 K. D. Wu, Z. B. Hou, Y. Y. Zhao, G. Y. Xiang, C. F. Li, G. C. Guo, J. J. Ma, Q. Y. He, J. Thompson, and M. L. Gu, "Experimental Cyclic Interconversion between Coherence and Quantum Correlations," *Physical Review Letters*, vol. 121, no. 5, Aug 2018, Art no. 050401.
- 65 G. T. Wu, F. Cao, P. F. Zhao, X. Y. Zhang, Z. Y. Li, N. A. Yu, Z. Wang, Y. M. Hu, H. D. Sun, and H. S. Gu, "Novel Periodic Bilayer Au Nanostructures for Ultrasensitive Surface-Enhanced Raman Spectroscopy," *Advanced Materials Interfaces*, vol. 5, no. 20, Oct 2018, Art no. 1800820.
- 66 T. P. White, E. Deleporte, and T. C. Sum, "Feature issue introduction: halide perovskites for optoelectronics," *Optical Materials Express*, vol. 8, no. 2, pp. 231-234, Feb 2018.
- 67 T. J. Whitcher, J. X. Zhu, X. Chi, H. Hu, D. M. Zhao, T. C. Asmara, X. Yu, M. B. H. Breese, A. H. C. Neto, Y. M. Lam, A. T. S. Wee, E. E. M. Chia, and A. Rusydi, "Importance of Electronic Correlations and Unusual Excitonic Effects in Formamidinium Lead Halide Perovskites," *Physical Review X*, vol. 8, no. 2, May 2018, Art no. 021034.
- 68 X. L. Wen, W. G. Xu, W. J. Zhao, J. B. Khurgin, and Q. H. Xiong, "Plasmonic Hot Carriers Controlled Second Harmonic Generation in WSe₂ Bilayers," *Nano Letters*, vol. 18, no. 3, pp. 1686-1692, Mar 2018.
- 69 X. L. Wen, G. Y. Li, C. Y. Gu, J. X. Zhao, S. J. Wang, C. P. Jiang, S. Palomba, C. M. de Sterke, and Q. H. Xiong, "Doubly Enhanced Second Harmonic Generation through Structural and Epsilonnear-Zero Resonances in TiN Nanostructures," *Acs Photonics*, vol. 5, no. 6, pp. 2087-2093, Jun 2018.
- 70 Z. R. Wei, L. Tian, J. L. Li, Y. P. Lu, M. H. Yang, and Z. H. Loh, "Tracking Ultrafast Bond Dissociation Dynamics at 0.1 angstrom Resolution by Femtosecond Extreme Ultraviolet Absorption Spectroscopy," *Journal of Physical Chemistry Letters*, vol. 9, no. 19, pp. 5742-5747, Oct 2018.
- 71 Q. Wei, M. J. Li, Z. P. Zhang, J. Guo, G. C. Xing, T. C. Sum, and W. Huang, "Efficient recycling of trapped energies for dual-emission in Mn-doped perovskite nanocrystals," *Nano Energy*, vol. 51, pp. 704-710, Sep 2018.
- 72 Y. Wang and H. D. Sun, "All-Inorganic Metal Halide Perovskite Nanostructures: From Photophysics to Light-Emitting Applications," *Small Methods*, vol. 2, no. 1, Jan 2018, Art no. Unsp 1700252.
- 73 Y. Wang and H. D. Sun, "Tackling the hurdles of electrically pumped colloidal quantum dot lasers," *Science China-Materials*, vol. 61, no. 5, pp. 765-766, May 2018.
- 74 Y. Wang and H. D. Sun, "Advances and prospects of lasers developed from colloidal semiconductor nanostructures," *Progress in Quantum Electronics*, vol. 60, pp. 1-29, Aug 2018.
- 75 Y. Wang, Y. J. Ren, S. L. Zhang, J. F. Wu, J. Z. Song, X. M. Li, J. Y. Xu, C. H. Sow, H. B. Zeng, and H. D. Sun, "Switching excitonic recombination and carrier trapping in cesium lead halide perovskites by air," *Communications Physics*, vol. 1, Dec 2018, Art no. 96.
- 76 X. B. Wang, L. Cheng, D. P. Zhu, Y. Wu, M. J. Chen, Y. Wang, D. M. Zhao, C. B. Boothroyd, Y. M. Lam, J. X. Zhu, M. Battiatto, J. C. W. Song, H. Yang, and E. E. M. Chia, "Ultrafast Spin-to-Charge Conversion at the Surface of Topological Insulator Thin Films," *Advanced Materials*, vol. 30, no. 52, Dec 2018, Art no. 1802356.
- 77 L. Wang, C. Xu, M. Y. Li, L. J. Li, and Z. H. Loh, "Unraveling Spatially Heterogeneous Ultrafast Carrier Dynamics of Single-Layer WSe₂ by Femtosecond Time-Resolved Photoemission Electron Microscopy," *Nano Letters*, vol. 18, no. 8, pp. 5172-5178, Aug 2018.
- 78 L. Wang, B. Q. Liu, X. Zhao, H. V. Demir, H. S. Gu, and H. D. Sun, "Solvent-Assisted Surface Engineering for High-Performance All-Inorganic Perovskite Nanocrystal Light-Emitting Diodes," *Acs Applied Materials & Interfaces*, vol. 10, no. 23, pp. 19828-19835, Jun 2018.
- 79 J. F. Wang, Y. Zhou, Z. Y. Wang, A. Rasmita, J. Q. Yang, X. J. Li, H. J. von Bardeleben, and W. B. Gao, "Bright room temperature single photon source at telecom range in cubic silicon carbide," *Nature Communications*, vol. 9, Oct 2018, Art no. 4106.
- 80 J. Wang, R. Su, J. Xing, D. Bao, C. Diederichs, S. Liu, T. C. H. Liew, Z. H. Chen, and Q. H. Xiong, "Room Temperature Coherently Coupled Exciton-Polaritons in Two-Dimensional-Organic Inorganic Perovskite," *Acs Nano*, vol. 12, no. 8, pp. 8382-8389, Aug 2018.

- 81 H. L. Wang, L. J. Lang, and Y. D. Chong, "Non-Hermitian dynamics of slowly varying Hamiltonians," *Physical Review A*, vol. 98, no. 1, Jul 2018, Art no. 012119.
- 82 M. R. Vazquez, V. Bharadwaj, B. Sotillo, S. Z. A. Lo, R. Ramponi, N. I. Zheludev, G. Lanzani, S. M. Eaton, and C. Soci, "Optical NP problem solver on laser-written waveguide platform," *Optics Express*, vol. 26, no. 2, pp. 702-710, Jan 2018.
- 83 R. Ulbricht and Z. H. Loh, "Excited-state lifetime of the NV- infrared transition in diamond," *Physical Review B*, vol. 98, no. 9, Sep 2018, Art no. 094309.
- 84 R. Ulbricht, S. Dong, A. Gali, S. Meng, and Z. H. Loh, "Vibrational relaxation dynamics of the nitrogen-vacancy center in diamond," *Physical Review B*, vol. 97, no. 22, Jun 2018, Art no. 220302.
- 85 F. Thouin, S. Neutzner, D. Cortecchia, V. A. Dragomir, C. Soci, T. Salim, Y. M. Lam, R. Leonelli, A. Petrozza, A. R. S. Kandada, and C. Silva, "Stable biexcitons in two-dimensional metalhalide perovskites with strong dynamic lattice disorder," *Physical Review Materials*, vol. 2, no. 3, Mar 2018, Art no. 034001.
- 86 Y. F. Tay, H. Kaneko, S. Y. Chiam, S. Lie, Q. S. Zheng, B. Wu, S. S. Hadke, Z. H. Su, P. S. Bassi, D. Bishop, T. C. Sum, T. Minegishi, J. Barber, K. Domen, and L. H. Wong, "Solution-Processed CdSubstituted CZTS Photocathode for Efficient Solar Hydrogen Evolution from Neutral Water," *Joule*, vol. 2, no. 3, pp. 537-548, Mar 2018.
- 87 J. Tang, S. B. Ni, B. Zhou, D. L. Chao, T. Li, and X. L. Yang, "Theoretical calculation and experimental verification of Zn₃V₂O₈ as an insertion type anode for LIBs," *Journal of Alloys and Compounds*, vol. 730, pp. 228-233, Jan 2018.
- 88 T. C. Tan, Y. K. Srivastava, M. Manjappa, E. Plum, and R. Singh, "Lattice induced strong coupling and line narrowing of split resonances in metamaterials," *Applied Physics Letters*, vol. 112, no. 20, May 2018, Art no. 201111.
- 89 Y. Q. Sun, K. Xu, Z. X. Wei, H. L. Li, T. Zhang, X. Y. Li, W. P. Cai, J. M. Ma, H. J. Fan, and Y. Li, "Strong Electronic Interaction in Dual-Cation-Incorporated NiSe₂ Nanosheets with Lattice Distortion for Highly Efficient Overall Water Splitting," *Advanced Materials*, vol. 30, no. 35, Aug 2018, Art no. 1802121.
- 90 Y. Sun, D. Leykam, S. Nenni, D. H. Song, H. Chen, Y. D. Chong, and Z. G. Chen, "Observation of Valley Landau-Zener-Bloch Oscillations and Pseudospin Imbalance in Photonic Graphene," *Physical Review Letters*, vol. 121, no. 3, Jul 2018, Art no. 033904.
- 91 R. Su, J. Wang, J. X. Zhao, J. Xing, W. J. Zhao, C. Diederichs, T. C. H. Liew, and Q. H. Xiong, "Room temperature long-range coherent exciton polariton condensate flow in lead halide perovskites," *Science Advances*, vol. 4, no. 10, Oct 2018, Art no. eaau0244.
- 92 M. I. Stockman, K. Kneipp, S. I. Bozhevolnyi, S. Saha, A. Dutta, J. Ndukaife, N. Kinsey, H. Reddy, U. Guler, V. M. Shalaev, A. Boltasseva, B. Gholipour, H. N. S. Krishnamoorthy, K. F. MacDonald, C. Soci, N. I. Zheludev, V. Savinov, R. Singh, P. Gross, C. Lienau, M. Vadai, M. L. Solomon, D. R. Barton, M. Lawrence, J. A. Dionne, S. V. Boriskina, R. Esteban, J. Aizpurua, X. Zhang, S. Yang, D. Q. Wang, W. J. Wang, T. W. Odom, N. Accanto, P. M. de Roque, I. M. Hancu, L. Piatkowski, N. F. van Hulst, and M. F. Kling, "Roadmap on plasmonics," *Journal of Optics*, vol. 20, no. 4, Apr 2018, Art no. 043001.
- 93 Y. K. Srivastava, M. Manjappa, L. Q. Cong, H. N. S. Krishnamoorthy, V. Savinov, P. Pitchappa, and R. Singh, "A Superconducting Dual-Channel Photonic Switch," *Advanced Materials*, vol. 30, no. 29, Jul 2018, Art no. 1801257.
- 94 K. V. Sreekanth, S. Sreejith, S. Han, A. Mishra, X. X. Chen, H. D. Sun, C. T. Lim, and R. Singh, "Biosensing with the singular phase of an ultrathin metal-dielectric nanophotonic cavity," *Nature Communications*, vol. 9, Jan 2018, Art no. 369.
- 95 K. V. Sreekanth, Q. L. Ouyang, S. Han, K. T. Yong, and R. Singh, "Giant enhancement in GoosHanchen shift at the singular phase of a nanophotonic cavity," *Applied Physics Letters*, vol. 112, no. 16, Apr 2018, Art no. 161109.
- 96 K. V. Sreekanth, S. Han, and R. Singh, "Ge₂Sb₂Te₅-Based Tunable Perfect Absorber Cavity with Phase Singularity at Visible Frequencies," *Advanced Materials*, vol. 30, no. 21, May 2018, Art no. 1706696.
- 97 K. V. Sreekanth, W. L. Dong, Q. L. Ouyang, S. Sreejith, M. ElKabbash, C. T. Lim, G. Strangi, K. T. Yong, R. E. Simpson, and R. Singh, "Large-Area Silver-Stibnite Nanoporous Plasmonic Films for Label-Free Biosensing," *Acs Applied Materials & Interfaces*, vol. 10, no. 41, pp. 34991-34999, Oct 2018.
- 98 S. Shukla, J. W. Ager, Q. H. Xiong, and T. Sritharan, "Scientific and Technological Assessment of Iron Pyrite for Use in Solar Devices," *Energy Technology*, vol. 6, no. 1, pp. 8-20, Jan 2018.
- 99 K. L. Shih, P. Pitchappa, L. Jin, C. H. Chen, R. Singh, and C. Lee, "Nanofluidic terahertz metasensor for sensing in aqueous environment," *Applied Physics Letters*, vol. 113, no. 7, Aug 2018, Art no. 071105.

- 100 X. H. Shi, X. Lin, I. Kaminer, F. Gao, Z. J. Yang, J. D. Joannopoulos, M. Soljacic, and B. L. Zhang, "Superlight inverse Doppler effect," *Nature Physics*, vol. 14, no. 10, pp. 1001-+, Oct 2018.
- 101 Q. Y. Shang, S. Zhang, Z. Liu, J. Chen, P. F. Yang, C. Li, W. Li, Y. F. Zhang, Q. H. Xiong, X. F. Liu, and Q. Zhang, "Surface Plasmon Enhanced Strong Exciton-Photon Coupling in Hybrid Inorganic-Organic Perovskite Nanowires," *Nano Letters*, vol. 18, no. 6, pp. 3335-3343, Jun 2018.
- 102 S. Shah, X. Lin, L. Shen, M. Renuka, B. L. Zhang, and H. S. Chen, "Interferenceless Polarization Splitting Through Nanoscale van der Waals Heterostructures," *Physical Review Applied*, vol. 10, no. 3, Sep 2018, Art no. 034025.
- 103 R. Sandstrom, L. Ke, A. Martin, Z. Y. Wang, M. Kianinia, B. Green, W. B. Gao, and I. Aharonovich, "Optical properties of implanted Xe color centers in diamond," *Optics Communications*, vol. 411, pp. 182-186, Mar 2018.
- 104 J. Qing, X. K. Liu, M. J. Li, F. Liu, Z. C. Yuan, E. Tiukalova, Z. B. Yan, M. Duchamp, S. Chen, Y. M. Wang, S. Bai, J. M. Liu, H. J. Snaith, C. S. Lee, T. C. Sum, and F. Gao, "Aligned and Graded Type-II Ruddlesden-Popper Perovskite Films for Efficient Solar Cells," *Advanced Energy Materials*, vol. 8, no. 21, Jul 2018, Art no. 1800185.
- 105 X. Qian, B. Cao, Z. Wang, X. Shen, C. Soci, M. Eginligil, and T. Yu, "Carrier density and light helicity dependence of photocurrent in mono- and bilayer graphene," *Semiconductor Science and Technology*, vol. 33, no. 11, Nov 2018, Art no. 114008.
- 106 C. Qian, X. Lin, Y. Yang, F. Gao, Y. C. Shen, J. Lopez, I. Kaminer, B. L. Zhang, E. P. Li, M. Soljacic, and H. S. Chen, "Multifrequency Superscattering from Subwavelength Hyperbolic Structures," *Acs Photonics*, vol. 5, no. 4, pp. 1506-1511, Apr 2018.
- 107 X. Qi, Y. P. Zhang, Q. D. Ou, S. T. Ha, C. W. Qiu, H. Zhang, Y. B. Cheng, Q. H. Xiong, and Q. L. Bao, "Photonics and Optoelectronics of 2D Metal-Halide Perovskites," *Small*, vol. 14, no. 31, Aug 2018, Art no. 1800682.
- 108 D. Prochowicz, M. M. Tavakoli, A. Solanki, T. W. Goh, K. Pandey, T. C. Sum, M. Saliba, and P. Yadav, "Understanding the effect of chlorobenzene and isopropanol anti-solvent treatments on the recombination and interfacial charge accumulation in efficient planar perovskite solar cells," *Journal of Materials Chemistry A*, vol. 6, no. 29, pp. 14307-14314, Aug 2018.
- 109 A. B. Prakoso, C. J. Lu, Rusli, D. Cortecchia, C. Soci, M. Berthe, D. Deresmes, B. Ayachi, J. P. Vilcot, and H. Diesinger, "Voltage transient analysis as a generic tool for solar junction characterization," *Journal of Physics D-Applied Physics*, vol. 51, no. 34, Aug 2018, Art no. 345501.
- 110 D. Piccinotti, B. Gholipour, J. Yao, K. F. Macdonald, B. E. Hayden, and N. I. Zheludev, "Compositionally controlled plasmonics in amorphous semiconductor metasurfaces," *Optics Express*, vol. 26, no. 16, pp. 20861-20867, Aug 2018.
- 111 D. Piccinotti, B. Gholipour, J. Yao, K. F. MacDonald, B. E. Hayden, and N. I. Zheludev, "Optical Response of Nanohole Arrays Filled with Chalcogenide Low-Epsilon Media," *Advanced Optical Materials*, vol. 6, no. 22, Nov 2018, Art no. 1800395.
- 112 L. Peng, K. W. Wang, Y. H. Yang, Y. T. Chen, G. F. Wang, B. L. Zhang, and H. S. Chen, "Giant Asymmetric Radiation from an Ultrathin Biaxial Metamaterial," *Advanced Science*, vol. 5, no. 7, Jul 2018, Art no. 1700922.
- 113 L. Peng, Y. T. Chen, Y. H. Yang, Z. Y. Wang, F. X. Yu, G. F. Wang, N. H. Shen, B. L. Zhang, C. M. Soukoulis, and H. S. Chen, "Spin Momentum-Locked Surface States in Metamaterials without Topological Transition," *Laser & Photonics Reviews*, vol. 12, no. 8, Aug 2018, Art no. 1800002.
- 114 N. Papasimakis, T. Raybould, V. A. Fedotov, D. P. Tsai, I. Youngs, and N. I. Zheludev, "Pulse generation scheme for flying electromagnetic doughnuts," *Physical Review B*, vol. 97, no. 20, May 2018, Art no. 201409.
- 115 M. Papaioannou, E. Plum, E. T. F. Rogers, and N. I. Zheludev, "All-optical dynamic focusing of light via coherent absorption in a plasmonic metasurface," *Light-Science & Applications*, vol. 7, Mar 2018, Art no. 17157.
- 116 J. Y. Ou, E. Plum, and N. I. Zheludev, ".Optical addressing of nanomechanical metamaterials with subwavelength resolution," *Applied Physics Letters*, vol. 113, no. 8, Aug 2018, Art no. 081104.
- 117 P. J. Nowakowski, M. F. Khyasudeen, and H. S. Tan, "The effect of laser pulse bandwidth on the measurement of the frequency fluctuation correlation functions in 2D electronic spectroscopy," *Chemical Physics*, vol. 515, pp. 214-220, Nov 2018.
- 118 W. H. Ning, F. Wang, B. Wu, J. Lu, Z. B. Yan, X. J. Liu, Y. T. Tao, J. M. Liu, W. Huang, M. Fahlman, L. Hultman, T. C. Sum, and F. Gao, "Long Electron-Hole Diffusion Length in HighQuality Lead-Free Double Perovskite Films," *Advanced Materials*, vol. 30, no. 20, May 2018, Art no. 1706246.

- 119 X. Ni, D. Smirnova, A. Poddubny, D. Leykam, Y. D. Chong, and A. B. Khanikaev, "PT phase transitions of edge states at PT symmetric interfaces in non-Hermitian topological insulators," *Physical Review B*, vol. 98, no. 16, Oct 2018, Art no. 165129.
- 120 W. J. Ni, P. Lu, X. Fu, W. Zhang, P. P. Shum, H. D. Sun, C. Y. Yang, D. M. Liu, and J. S. Zhang, "Ultrathin graphene diaphragm-based extrinsic Fabry-Perot interferometer for ultrawideband fiber optic acoustic sensing," *Optics Express*, vol. 26, no. 16, pp. 20758-20767, Aug 2018.
- 121 W. J. Ni, P. Lu, X. Fu, H. D. Sun, P. P. Shum, H. Liao, X. Y. Jiang, D. M. Liu, C. Y. Yang, J. S. Zhang, and Z. G. Lian, "Simultaneous implementation of enhanced resolution and large dynamic range for fiber temperature sensing based on different optical transmission mechanisms," *Optics Express*, vol. 26, no. 14, pp. 18341-18350, Jul 2018.
- 122 S. M. Ng, X. Y. Wu, M. F. Khyasudeen, P. J. Nowakowski, H. S. Tang, B. G. Xing, and E. K. L. Yeow, "Vancomycin Determination by Disrupting Electron-Transfer in a Fluorescence TurnOn Squaraine-Anthraquinone Triad," *Acs Sensors*, vol. 3, no. 6, pp. 1156-1163, Jun 2018.
- 123 Y. Nagasaki, B. Gholipour, J. Y. Ou, M. Tsuruta, E. Plum, K. F. MacDonald, J. Takahara, and N. I. Zheludev, "Optical bistability in shape-memory nanowire metamaterial array," *Applied Physics Letters*, vol. 113, no. 2, Jul 2018, Art no. 021105.
- 124 M. Y. Musa, M. Renuka, X. Lin, R. J. Li, H. P. Wang, E. P. Li, B. L. Zhang, and H. S. Chen, "Confined transverse electric phonon polaritons in hexagonal boron nitrides," *2d Materials*, vol. 5, no. 1, Jan 2018, Art no. 015018.
- 125 S. Mitra, A. P. Petrovic, D. Salloum, P. Gougeon, M. Potel, J. X. Zhu, C. Panagopoulos, and E. E. M. Chia, "Dimensional crossover in the quasi-one-dimensional superconductor Ti₂Mo₆Se₆," *Physical Review B*, vol. 98, no. 5, Aug 2018, Art no. 054507.
- 126 A. Mezzetti, M. Balandeh, J. S. Luo, S. Bellani, A. Tacca, G. Divitini, C. W. Cheng, C. Ducati, L. Meda, H. J. Fang, and F. Di Fonzo, "Hyperbranched TiO₂-CdS nano-heterostructures for highly efficient photoelectrochemical photoanodes," *Nanotechnology*, vol. 29, no. 33, Aug 2018, Art no. 335404.
- 127 M. Manjappa, P. Pitchappa, N. Wang, C. Lee, and R. Singh, "Active Control of Resonant Cloaking in a Terahertz MEMS Metamaterial," *Advanced Optical Materials*, vol. 6, no. 16, Aug 2018, Art no. 1800141.
- 128 M. Manjappa, P. Pitchappa, N. Singh, N. Wang, N. I. Zheludev, C. Lee, and R. Singh, "Reconfigurable MEMS Fano metasurfaces with multiple-input-output states for logic operations at terahertz frequencies," *Nature Communications*, vol. 9, Oct 2018, Art no. 4056.
- 129 V. Mancois, B. Marcos, P. Viot, and D. Wilkowski, "Two-temperature Brownian dynamics of a particle in a confining potential," *Physical Review E*, vol. 97, no. 5, May 2018, Art no. 052121.
- 130 X. L. Man, P. Liang, H. B. Shu, L. Zhang, D. Wang, D. L. Chao, Z. G. Liu, X. Q. Du, H. Z. Wan, and H. Wang, "Interface Synergistic Effect from Layered Metal Sulfides of MoS₂/SnS₂ van der Waals Heterojunction with Enhanced Li-Ion Storage Performance," *Journal of Physical Chemistry C*, vol. 122, no. 43, pp. 24600-24608, Nov 2018.
- 131 F. Maddalena, X. Y. Chin, D. Cortecchia, A. Bruno, and C. Soci, "Brightness Enhancement in Pulsed-Operated Perovskite Light-Emitting Transistors," *Acs Applied Materials & Interfaces*, vol. 10, no. 43, pp. 37316-37325, Oct 2018.
- 132 J. Q. Luo, J. Z. Chen, B. Wu, T. W. Goh, W. Qiao, Z. L. Ku, H. B. Yang, L. P. Zhang, T. C. Sum, and B. Liu, "Surface Rutilization of Anatase TiO₂ for Efficient Electron Extraction and Stable P-max Output of Perovskite Solar Cells," *Chem*, vol. 4, no. 4, pp. 911-923, Apr 2018.
- 133 A. V. Lunchev, V. C. Hendrata, A. Jaggi, S. A. Morris, R. Ganguly, X. X. Chen, H. D. Sun, and A. C. Grimsdale, "A Friedlander route to 5,7-diazapentacenes," *Journal of Materials Chemistry C*, vol. 6, no. 14, pp. 3715-3721, Apr 2018.
- 134 P. Lova, V. Robbiano, F. Cacialli, D. Comoretto, and C. Soci, "Black GaAs by Metal-Assisted Chemical Etching," *Acs Applied Materials & Interfaces*, vol. 10, no. 39, pp. 33434-33440, Oct 2018.
- 135 P. Lova, D. Cortecchia, H. N. S. Krishnamoorthy, P. Giusto, C. Bastianini, A. Bruno, D. Comoretto, and C. Soci, "Engineering the Emission of Broadband 2D Perovskites by Polymer Distributed Bragg Reflectors," *Acs Photonics*, vol. 5, no. 3, pp. 867-+, Mar 2018.
- 136 G. K. Long, C. Y. Jiang, R. Sabatini, Z. Y. Yang, M. Y. Wei, L. N. Quan, Q. M. Liang, A. Rasmita, M. Askerka, G. Walters, X. W. Gong, J. Xing, X. L. Wen, R. Quintero-Bermudez, H. F. Yuan, G. C. Xing, X. R. Wang, D. T. Song, O. Voznyy, M. T. Zhang, S. Hoogland, W. B. Gao, Q. H. Xiong, and E. H. Sargent, "Spin control in reduced-dimensional chiral perovskites," *Nature Photonics*, vol. 12, no. 9, pp. 528-+, Sep 2018.

- 137 S. Z. A. Lo, L. Wang, and Z. H. Loh, "Pulse propagation in hollow-core fiber at high-pressure regime: application to compression of tens of mu J pulses and determination of nonlinear refractive index of xenon at 1.03 mu m," *Applied Optics*, vol. 57, no. 16, pp. 4659-4664, Jun 2018.
- 138 S. Z. A. Lo, L. Wang, and Z. H. Loh, "Pulse propagation in hollow-core fiber at high-pressure regime: application to compression of tens of mu J pulses and determination of nonlinear refractive index of xenon at 1.03 mu m: publisher's note (vol 57, pg 4659, 2018)," *Applied Optics*, vol. 57, no. 22, pp. 6496-6496, Aug 2018.
- 139 S. H. Liu, C. F. Zhang, Q. Deng, H. H. Wen, J. X. Li, E. E. M. Chia, X. Y. Wang, and M. Xiao, "Transient electronic anisotropy in overdoped NaFe_{1-x}CoxAs superconductors," *Physical Review B*, vol. 97, no. 2, Jan 2018, Art no. 020505.
- 140 L. L. Liu, L. Wu, J. J. Zhang, Z. Li, B. L. Zhang, and Y. Luo, "Backward Phase Matching for Second Harmonic Generation in Negative-Index Conformal Surface Plasmonic Metamaterials," *Advanced Science*, vol. 5, no. 11, Nov 2018, Art no. 1800661.
- 141 B. Q. Liu, L. Wang, H. S. Gu, H. D. Sun, and H. V. Demir, "Highly Efficient Green Light-Emitting Diodes from All-Inorganic Perovskite Nanocrystals Enabled by a New Electron Transport Layer," *Advanced Optical Materials*, vol. 6, no. 11, Jun 2018, Art no. 1800220.
- 142 X. Lin, S. Easo, Y. C. Shen, H. S. Chen, B. L. Zhang, J. D. Joannopoulos, M. Soljacic, and I. Kaminer, "Controlling Cherenkov angles with resonance transition radiation," *Nature Physics*, vol. 14, no. 8, pp. 816+, Aug 2018.
- 143 K. B. Lin, J. Xing, L. N. Quan, F. P. G. de Arquer, X. W. Gong, J. X. Lu, L. Q. Xie, W. J. Zhao, D. Zhang, C. Z. Yan, W. Q. Li, X. Y. Liu, Y. Lu, J. Kirman, E. H. Sargent, Q. H. Xiong, and Z. H. Wei, "Perovskite light-emitting diodes with external quantum efficiency exceeding 20 per cent," *Nature*, vol. 562, no. 7726, pp. 245+, Oct 2018.
- 144 W. X. Lim and R. Singh, "Universal behaviour of high-Q Fano resonances in metamaterials: terahertz to near-infrared regime," *Nano Convergence*, vol. 5, Feb 2018, Art no. Unsp 5.
- 145 W. X. Lim, M. Manjappa, Y. K. Srivastava, L. Q. Cong, A. Kumar, K. F. MacDonald, and R. Singh, "Ultrafast All-Optical Switching of Germanium-Based Flexible Metaphotonic Devices," *Advanced Materials*, vol. 30, no. 9, Mar 2018, Art no. 1705331.
- 146 W. X. Lim, M. Manjappa, P. Pitchappa, and R. Singh, "Shaping High-Q Planar Fano Resonant Metamaterials toward Futuristic Technologies," *Advanced Optical Materials*, vol. 6, no. 19, Oct 2018, Art no. 1800502.
- 147 X. X. Li, T. T. H. Do, A. G. del Aguila, Y. L. Huang, W. Q. Chen, Y. X. Li, R. Ganguly, S. Morris, Q. H. Xiong, D. S. Li, and Q. C. Zhang, "Two-Dimensional and Emission-Tunable: An Unusual Perovskite Constructed from Lindqvist-Type Pb₆Br₁₉ (7-) Nanoclusters," *Inorganic Chemistry*, vol. 57, no. 22, pp. 14035-14038, Nov 2018.
- 148 X. X. Li, T. T. H. Do, A. G. del Aguila, Y. J. Huang, W. Q. Chen, Q. H. Xiong, and Q. C. Zhang, "A 3D Haloplumbate Framework Constructed From Unprecedented Lindqvist-like Highly Coordinated Pb₆Br₂₅ (13-) Nanoclusters with Temperature-Dependent Emission," *Chemistry-an Asian Journal*, vol. 13, no. 21, pp. 3185-3189, Nov 2018.
- 149 M. J. Li, Q. Wei, S. K. Muduli, N. Yantara, Q. Xu, N. Mathews, S. G. Mhaisalkar, G. C. Xing, and T. C. Sum, "Enhanced Exciton and Photon Confinement in Ruddlesden-Popper Perovskite Microplatelets for Highly Stable Low-Threshold Polarized Lasing," *Advanced Materials*, vol. 30, no. 23, Jun 2018, Art no. 1707235.
- 150 M. J. Li, R. Begum, J. H. Fu, Q. Xu, T. M. Koh, S. A. Veldhuis, M. Gratzel, N. Mathews, S. Mhaisalkar, and T. C. Sum, "Low threshold and efficient multiple exciton generation in halide perovskite nanocrystals," *Nature Communications*, vol. 9, Oct 2018, Art no. 4197.
- 151 D. Leykam, S. Mittal, M. Hafezi, and Y. D. Chong, "Reconfigurable Topological Phases in NextNearest-Neighbor Coupled Resonator Lattices," *Physical Review Letters*, vol. 121, no. 2, Jul 2018, Art no. 023901.
- 152 F. Leroux, K. Pandey, R. Rehbi, F. Chevy, C. Miniatura, B. Gremaud, and D. Wilkowski, "NonAbelian adiabatic geometric transformations in a cold strontium gas," *Nature Communications*, vol. 9, Sep 2018, Art no. 3580.
- 153 L. J. Lang, Y. Wang, H. L. Wang, and Y. D. Chong, "Effects of non-Hermiticity on Su-SchriefferHeeger defect states," *Physical Review B*, vol. 98, no. 9, Sep 2018, Art no. 094307.
- 154 A. Kumar, Y. K. Srivastava, M. Manjappa, and R. Singh, "Color-Sensitive Ultrafast Optical Modulation and Switching of Terahertz Plasmonic Devices," *Advanced Optical Materials*, vol. 6, no. 15, Aug 2018, Art no. 1800030.

- 155 A. Kumar, A. Priyadarshi, S. Shukla, M. Manjappa, L. J. Haur, S. G. Mhaisalkar, and R. Singh, "Ultrafast THz photophysics of solvent engineered triple-cation halide perovskites," *Journal of Applied Physics*, vol. 124, no. 21, Dec 2018, Art no. 215106.
- 156 H. N. S. Krishnamoorthy, B. Gholipour, N. I. Zheludev, and C. Soci, "A Non-Volatile Chalcogenide Switchable Hyperbolic Metamaterial," *Advanced Optical Materials*, vol. 6, no. 19, Oct 2018, Art no. 1800332.
- 157 T. M. Koh, V. Shanmugam, X. T. Guo, S. S. Lim, O. Filonik, E. M. Herzig, P. Muller-Buschbaum, V. Swamy, S. T. Chien, S. G. Mhaisalkar, and N. Mathews, "Enhancing moisture tolerance in efficient hybrid 3D/2D perovskite photovoltaics," *Journal of Materials Chemistry A*, vol. 6, no. 5, pp. 2122-2128, Feb 2018.
- 158 A. Karvounis, V. Nalla, K. F. MacDonald, and N. I. Zheludev, "Ultrafast Coherent Absorption in Diamond Metamaterials," *Advanced Materials*, vol. 30, no. 14, Apr 2018, Art no. 1707354.
- 159 Y. Y. Jiang, X. Lin, T. Low, B. L. Zhang, and H. S. Chen, "Group-Velocity-Controlled and GateTunable Directional Excitation of Polaritons in Graphene-Boron Nitride Heterostructures," *Laser & Photonics Reviews*, vol. 12, no. 5, May 2018, Art no. 1800049.
- 160 C. Y. Jiang, W. G. Xu, A. Rasmita, Z. M. Huang, K. Li, Q. H. Xiong, and W. B. Gao, "Microsecond dark-exciton valley polarization memory in two-dimensional heterostructures," *Nature Communications*, vol. 9, Feb 2018, Art no. 753.
- 161 C. Y. Jiang, A. Rasmita, W. G. Xu, A. Imamoglu, Q. H. Xiong, and W. B. Gao, "Optical spin pumping induced pseudomagnetic field in two-dimensional heterostructures," *Physical Review B*, vol. 98, no. 24, Dec 2018, Art no. 241410.
- 162 S. D. Jenkins, N. Papasimakis, S. Savo, N. I. Zheludev, and J. Ruostekoski, "Strong interactions and subradiance in disordered metamaterials," *Physical Review B*, vol. 98, no. 24, Dec 2018, Art no. 245136.
- 163 N. F. Jamaludin, N. Yantara, Y. F. Ng, M. J. Li, T. W. Goh, K. Thirumal, T. C. Sum, N. Mathews, C. Soci, and S. Mhaisalkar, "Grain Size Modulation and Interfacial Engineering of CH₃NH₃PbBr₃ Emitter Films through Incorporation of Tetraethylammonium Bromide," *Chemphyschem*, vol. 19, no. 9, pp. 1075-1080, May 2018.
- 164 N. F. Jamaludin, N. Yantara, Y. F. Ng, A. Bruno, B. K. Chandran, X. Y. Chin, K. Thirumal, N. Mathews, C. Soci, and S. Mhaisalkar, "Perovskite templating via a bathophenanthroline additive for efficient light-emitting devices," *Journal of Materials Chemistry C*, vol. 6, no. 9, pp. 2295-2302, Mar 2018.
- 165 A. Huerta-Viga, L. L. Nguyen, S. Amirjalayer, J. H. N. Sim, Z. Y. Zhang, and H. S. Tan, "Glass formation of a DMSO-water mixture probed with a photosynthetic pigment," *Physical Chemistry Chemical Physics*, vol. 20, no. 26, pp. 17552-17556, Jul 2018.
- 166 C. Huang, P. C. Kuan, and S. Y. Lan, "Laser cooling of Rb-85 atoms to the recoil-temperature limit," *Physical Review A*, vol. 97, no. 2, Feb 2018, Art no. 023403.
- 167 Z. H. Hu, Q. Li, B. Lei, J. Wu, Q. H. Zhou, C. D. Gu, X. L. Wen, J. Y. Wang, Y. P. Liu, S. S. Li, Y. Zheng, J. P. Lu, J. He, L. Wang, Q. H. Xiong, J. L. Wang, and W. Chen, "Abnormal Near-Infrared Absorption in 2D Black Phosphorus Induced by Ag Nanoclusters Surface Functionalization," *Advanced Materials*, vol. 30, no. 43, Oct 2018, Art no. 1801931.
- 168 Y. Z. Hu, H. B. Zhang, W. K. Chong, Y. X. Li, Y. J. Ke, R. Ganguly, S. A. Morris, L. You, T. Yu, T. C. Sum, Y. Long, and H. J. Fan, "Molecular Engineering toward Coexistence of Dielectric and Optical Switch Behavior in Hybrid Perovskite Phase Transition Material," *Journal of Physical Chemistry A*, vol. 122, no. 31, pp. 6416-6423, Aug 2018.
- 169 H. W. Hu, F. Meier, D. M. Zhao, Y. Abe, Y. Gao, B. B. Chen, T. Salim, E. E. M. Chia, X. F. Qiao, C. Deibel, and Y. M. Lam, "Efficient Room-Temperature Phosphorescence from Organic-Inorganic Hybrid Perovskites by Molecular Engineering," *Advanced Materials*, vol. 30, no. 36, Sep 2018, Art no. 1707621.
- 170 T. Haug, J. Tan, M. Theng, R. Dumke, L. C. Kwek, and L. Amico, "Readout of the atomtronic quantum interference device," *Physical Review A*, vol. 97, no. 1, Jan 2018, Art no. 013633.
- 171 T. Haug, L. Amico, R. Dumke, and L. C. Kwek, "Mesoscopic Vortex-Meissner currents in ring ladders," *Quantum Science and Technology*, vol. 3, no. 3, Jul 2018, Art no. Unsp 035006.
- 172 P. C. Harikesh, B. Wu, B. Ghosh, R. A. John, S. Lie, K. Thirumal, L. H. Wong, T. C. Sum, S. Mhaisalkar, and N. Mathews, "Doping and Switchable Photovoltaic Effect in Lead-Free Perovskites Enabled by Metal Cation Transmutation," *Advanced Materials*, vol. 30, no. 34, Aug 2018, Art no. 1802080.
- 173 G. Harari, M. A. Bandres, Y. Lumer, M. C. Rechtsman, Y. D. Chong, M. Khajavikhan, D. N. Christodoulides, and M. Segev, "Topological insulator laser: Theory," *Science*, vol. 359, no. 6381, Mar 2018, Art no. eaar4003.

- 174 G. F. Han, H. D. Hadi, A. Bruno, S. A. Kulkarni, T. M. Koh, L. H. Wong, C. Soci, N. Mathews, S. Zhang, and S. G. Mhaisalkar, "Additive Selection Strategy for High Performance Perovskite Photovoltaics," *Journal of Physical Chemistry C*, vol. 122, no. 25, pp. 13884-13893, Jun 2018.
- 175 G. F. Han, W. H. Du, B. L. An, A. Bruno, S. W. Leow, C. Soci, S. Zhang, S. G. Mhaisalkar, and N. Mathews, "Nitrogen doped cuprous oxide as low cost hole-transporting material for perovskite solar cells," *Scripta Materialia*, vol. 153, pp. 104-108, Aug 2018.
- 176 M. Gupta, Y. K. Srivastava, and R. Singh, "A Toroidal Metamaterial Switch," *Advanced Materials*, vol. 30, no. 4, Jan 2018.
- 177 D. Giovanni, W. K. Chong, Y. Y. F. Liu, H. A. Dewi, T. T. Yin, Y. Lekina, Z. X. Shen, N. Mathews, C. K. Gan, and T. C. Sum, "Coherent Spin and Quasiparticle Dynamics in Solution-Processed Layered 2D Lead Halide Perovskites," *Advanced Science*, vol. 5, no. 10, Oct 2018, Art no. 1800664.
- 178 B. Ghosh, B. Wu, H. K. Mulmudi, C. Guet, K. Weber, T. C. Sum, S. Mhaisalkar, and N. Mathews, "Limitations of Cs₃Bi₂I₉ as Lead-Free Photovoltaic Absorber Materials," *Acs Applied Materials & Interfaces*, vol. 10, no. 41, pp. 35000-35007, Oct 2018.
- 179 B. Ghosh, B. Wu, X. T. Guo, P. C. Harikesh, R. A. John, T. Baikie, Arramel, A. T. S. Wee, C. Guet, T. C. Sum, S. Mhaisalkar, and N. Mathews, "Superior Performance of Silver Bismuth Iodide Photovoltaics Fabricated via Dynamic Hot-Casting Method under Ambient Conditions," *Advanced Energy Materials*, vol. 8, no. 33, Nov 2018, Art no. 1802051.
- 180 B. Gholipour, A. Karvounis, J. Yin, C. Soci, K. F. MacDonald, and N. I. Zheludev, "Phasechange-driven dielectric-plasmonic transitions in chalcogenide metasurfaces," *Npg Asia Materials*, vol. 10, pp. 533-539, Jun 2018.
- 181 P. Gautam, Y. Wang, G. X. Zhang, H. D. Sun, and J. M. W. Chan, "Using the Negative Hyperconjugation Effect of Pentafluorosulfanyl Acceptors to Enhance Two-Photon Absorption in Push-Pull Chromophores," *Chemistry of Materials*, vol. 30, no. 20, pp. 70557066, Oct 2018.
- 182 Z. Gao, H. Xu, F. Gao, Y. Zhang, Y. Luo, and B. Zhang, "Surface-Wave Pulse Routing around Sharp Right Angles," *Physical Review Applied*, vol. 9, no. 4, Apr 2018, Art no. 044019.
- 183 Z. Gao, L. Wu, F. Gao, Y. Luo, and B. L. Zhang, "Spoof Plasmonics: From Metamaterial Concept to Topological Description," *Advanced Materials*, vol. 30, no. 31, Aug 2018, Art no. 1706683.
- 184 Z. Gao, Z. Y. Wang, and B. L. Zhang, "Subwavelength wave manipulation in a thin surfacewave bandgap crystal," *Optics Letters*, vol. 43, no. 1, pp. 50-53, Jan 2018.
- 185 Z. Gao, F. Gao, Y. M. Zhang, Y. Luo, and B. L. Zhang, "Flexible Photonic Topological Insulator," *Advanced Optical Materials*, vol. 6, no. 17, Sep 2018, Art no. 1800532.
- 186 Y. Gao, M. J. Li, S. Delikanli, H. Y. Zheng, B. Q. Liu, C. Dang, T. C. Sum, and H. V. Demir, "Lowthreshold lasing from colloidal CdSe/CdSeTe core/alloyed-crown type-II heteronanoplatelets," *Nanoscale*, vol. 10, no. 20, pp. 9466-9475, May 2018.
- 187 F. Gao, H. R. Xue, Z. J. Yang, K. F. Lai, Y. Yu, X. Lin, Y. D. Chong, G. Shvets, and B. L. Zhang, "Topologically protected refraction of robust kink states in valley photonic crystals," *Nature Physics*, vol. 14, no. 2, pp. 140+, Feb 2018.
- 188 Q. D. Fu, X. W. Wang, J. D. Zhou, J. Xia, Q. S. Zeng, D. H. Lv, C. Zhu, X. L. Wang, Y. Shen, X. M. Li, Y. N. Hua, F. C. Liu, Z. X. Shen, C. H. Jin, and Z. Liu, "One-Step Synthesis of Metal/Semiconductor Heterostructure NbS₂/MoS₂," *Chemistry of Materials*, vol. 30, no. 12, pp. 4001-4007, Jun 2018.
- 189 S. Feng, C. X. Cong, N. Peimyoo, Y. Chen, J. Z. Shang, C. J. Zou, B. C. Cao, L. S. Wu, J. Zhang, M. Eginligil, X. Z. Wang, Q. H. Xiong, A. Ananthanarayanan, P. Chen, B. L. Zhang, and T. Yu, "Tunable excitonic emission of monolayer WS₂ for the optical detection of DNA nucleobases," *Nano Research*, vol. 11, no. 3, pp. 1744-1754, Mar 2018.
- 190 J. X. Fang, L. L. Zhang, J. Li, L. Lu, C. S. Ma, S. D. Cheng, Z. Y. Li, Q. H. Xiong, and H. J. You, "A general soft-enveloping strategy in the templating synthesis of mesoporous metal nanostructures," *Nature Communications*, vol. 9, Feb 2018, Art no. 521.
- 191 Q. P. Fan, Y. Wang, M. J. Zhang, B. Wu, X. Guo, Y. F. Jiang, W. B. Li, B. Guo, C. N. Ye, W. Y. Su, J. Fang, X. M. Ou, F. Liu, Z. X. Wei, T. C. Sum, T. P. Russell, and Y. F. Li, "High-Performance AsCast Nonfullerene Polymer Solar Cells with Thicker Active Layer and Large Area Exceeding 11% Power Conversion Efficiency," *Advanced Materials*, vol. 30, no. 6, Feb 2018, Art no. 1704546.
- 192 A. M. Dubrovkin, B. Qiang, H. N. S. Krishnamoorthy, N. I. Zheludev, and Q. J. Wang, "Ultraconfined surface phonon polaritons in molecular layers of van der Waals dielectrics," *Nature Communications*, vol. 9, May 2018, Art no. 1762.

- 193 T. N. Do, L. P. Chen, A. K. Belyaev, H. S. Tan, and M. F. Gelin, "Pulse-shape effects in fifthorder multidimensional optical spectroscopy," *Chemical Physics*, vol. 515, pp. 119-128, Nov 2018.
- 194 L. Ding, X. S. Luo, L. Cheng, M. Thway, J. F. Song, S. J. Chua, E. E. M. Chia, and J. H. Teng, "Electrically and Thermally Tunable Smooth Silicon Metasurfaces for Broadband Terahertz Antireflection," *Advanced Optical Materials*, vol. 6, no. 23, Dec 2018, Art no. 1800928.
- 195 D. Cortecchia, S. Neutzner, J. Yin, T. Salim, A. R. S. Kandada, A. Bruno, Y. M. Lam, J. MartiRujas, A. Petrozza, and C. Soci, "Structure-controlled optical thermoresponse in RuddlesdenPopper layered perovskites," *Apl Materials*, vol. 6, no. 11, Nov 2018, Art no. 114207.
- 196 L. Q. Cong, Y. K. Srivastava, H. F. Zhang, X. Q. Zhang, J. G. Han, and R. Singh, "All-optical active THz metasurfaces for ultrafast polarization switching and dynamic beam splitting," *Light-Science & Applications*, vol. 7, Jul 2018.
- 197 L. Q. Cong, V. Savinov, Y. K. Srivastava, S. Han, and R. Singh, "A Metamaterial Analog of the Ising Model," *Advanced Materials*, vol. 30, no. 40, Oct 2018, Art no. 1804210.
- 198 B. P. Clarke, K. F. MacDonald, and N. I. Zheludev, "Direction-division multiplexed holographic free-electron-driven light sources," *Applied Physics Letters*, vol. 112, no. 2, Jan 2018, Art no. 021109.
- 199 B. P. Clarke, B. Gholipour, K. F. MacDonald, and N. I. Zheludev, "All-dielectric free-electrondriven holographic light sources," *Applied Physics Letters*, vol. 113, no. 24, Dec 2018, Art no. 241902.
- 200 X. Y. Chin, A. Perumal, A. Bruno, N. Yantara, S. A. Veldhuis, L. Martinez-Sarti, B. Chandran, V. Chirvony, A. S. Z. Lo, J. So, C. Soci, M. Gratzel, H. J. Bolink, N. Mathews, and S. G. Mhaisalkar, "Self-assembled hierarchical nanostructured perovskites enable highly efficient LEDs via an energy cascade," *Energy & Environmental Science*, vol. 11, no. 7, pp. 1770-1778, Jul 2018.
- 201 X. Chi, K. Leng, B. Wu, D. Shi, Y. F. Choy, Z. X. Chen, Z. H. Chen, X. J. Yu, P. Yang, Q. H. Xu, T. C. Sum, A. Rusydi, and K. P. Loh, "Elucidating Surface and Bulk Emission in 3D Hybrid OrganicInorganic Lead Bromide Perovskites," *Advanced Optical Materials*, vol. 6, no. 15, Aug 2018, Art no. 1800470.
- 202 W. J. Chen, D. Leykam, Y. D. Chong, and L. Yang, "Nonreciprocity in synthetic photonic materials with nonlinearity," *Mrs Bulletin*, vol. 43, no. 6, pp. 443-451, Jun 2018.
- 203 K. Chen, W. H. Su, Y. Wang, H. Ge, K. Zhang, Y. B. Wang, X. J. Xie, V. G. Gomes, H. D. Sun, and L. Huang, "Nanocomposites of carbon nanotubes and photon upconversion nanoparticles for enhanced optical limiting performance," *Journal of Materials Chemistry C*, vol. 6, no. 27, pp. 7311-7316, Jul 2018.
- 204 B. Chen, X. Z. Wang, J. Q. Li, Q. H. Xiong, and C. H. Zhang, "Synthesis, structure and nonlinear optical properties of solution-processed Bi₂TeO₅ nanocrystals," *Journal of Materials Chemistry C*, vol. 6, no. 39, pp. 10435-10440, Oct 2018.
- 205 E. A. Chan, S. A. Aljunid, G. Adamo, A. Laliotis, M. Ducloy, and D. Wilkowski, "Tailoring optical metamaterials to tune the atom-surface Casimir-Polder interaction," *Science Advances*, vol. 4, no. 2, Feb 2018, Art no. eaao4223.
- 206 E. A. Chan, S. A. Aljunid, G. Adamo, A. Laliotis, M. Ducloy, and D. Wilkowski, "Tailoring optical metamaterials to tune the atom-surface Casimir-Polder interaction (vol 4, eaao4223, 2018)," *Science Advances*, vol. 4, no. 9, Sep 2018, Art no. eaav2463.
- 207 A. Cabello, M. L. Gu, O. Guhne, and Z. P. Xu, "Optimal Classical Simulation of StateIndependent Quantum Contextuality," *Physical Review Letters*, vol. 120, no. 13, Mar 2018, Art no. 130401.
- 208 E. Bochkova, S. Han, A. de Lustrac, R. Singh, S. N. Burokur, and A. Lupu, "High-Q Fano resonances via direct excitation of an antisymmetric dark mode," *Optics Letters*, vol. 43, no. 16, pp. 3818-3821, Aug 2018.
- 209 S. Bhaumik, S. A. Veldhuis, S. K. Muduli, M. J. Li, R. Begum, T. C. Sum, S. Mhaisalkar, and N. Mathews, "Inducing Isotropic Growth in Multidimensional Cesium Lead Halide Perovskite Nanocrystals," *Chempluschem*, vol. 83, no. 6, pp. 514-520, Jun 2018.
- 210 E. Atmatzakis, N. Papasimakis, V. Fedotov, G. Vienne, and N. I. Zheludev, "Magneto-optical response in bimetallic metamaterials," *Nanophotonics*, vol. 7, no. 1, pp. 199-206, Jan 2018.
- 211 M. Alonso, D. Moscatelli, L. Bastiani, A. Belardini, C. Soci, and E. Fazio, "All-Optical Reinforcement Learning In Solitonic X-Junctions," *Scientific Reports*, vol. 8, Apr 2018, Art no. 5716.
- 212 P. Akhtar, C. Zhang, Z. T. Liu, H. S. Tan, and P. H. Lambrev, "Excitation transfer and trapping kinetics in plant photosystem I probed by two-dimensional electronic spectroscopy," *Photosynthesis Research*, vol. 135, no. 1-3, pp. 239-250, Mar 2018.

- 213 G. Agarwal, R. E. Allen, I. Bezdekova, R. W. Boyd, G. Chen, R. Hanson, D. L. Hawthorne, P. Hemmer, M. B. Kim, O. Kocharovskaya, D. M. Lee, S. K. Lidstrom, S. Lidstrom, H. Losert, H. Maier, J. W. Neuberger, M. J. Padgett, M. Raizen, S. Rajendran, E. Rasel, W. P. Schleich, M. O. Scully, G. Shchedrin, G. Shvets, A. V. Sokolov, A. Svidzinsky, R. L. Walsworth, R. Weiss, F. Wilczek, A. E. Willner, E. Yablonovitch, and N. Zheludev, "Light, the universe and everything12 Herculean tasks for quantum cowboys and black diamond skiers," *Journal of Modern Optics*, vol. 65, no. 11, pp. 1261-1308, 2018.
- 214 "Near-Unity efficiency energy transfer from colloidal quantum wells of CdSe/CdS nanoplatelets to a monolayer of MoS₂", N. Taghipour, P. L. Hernández-Martínez, A. Ozden, M. Olutas , D. Dede, K. Gungor, O. Erdem, N. K. Perkgoz, and H. V. Demir, *ACS Nano*, 12, 8547 (2018).
- 215 "Highly efficient visible colloidal lead-halide perovskite nanocrystal light-emitting diodes", Y. Fei, J. Xing, G. Xing, L. Quan, S. T. Tan, J. Zhao, R. Su, L. Zhang, S. Chen, Y. Zhao, A. Huan, E. H. Sargent, Q. Xiong, and H. V. Demir, *Nano Letters*, 18, 3157 (2018).
- 216 "Nanocrystal Light-Emitting Diodes Based on Type II Nanoplatelets", B. Liu, S. Delikanli, Y. Gao, D. Dede, K. Gungor and H. V. Demir, *Nano Energy*, 47, 115 (2018).
- 217 "High-efficiency all-inorganic full-colour quantum dot light-emitting diodes", X. Yang, Z.-H. Zhang, T. Ding, N. Wang, G. Chen, C. Dang, H. V. Demir, X. W. Sun, *Nano Energy*, 46, 229 (2018).
- 218 "Solvent-Assisted Surface Engineering for High-Performance All-Inorganic Perovskite Nanocrystal Light-Emitting Diodes", L. Wang, B. Liu, X. Zhao, H. V. Demir, H. Gu, and H. Sun, *ACS Appl. Mater. Interfaces*, 10, 19828 (2018).
- 219 "Low-threshold lasing from colloidal CdSe/CdSeTe core/alloyed-crown type-II heteronanoplatelets", Y. Gao , M. Li , S. Delikanli , H. Zheng , B. Liu , C. Dang , T. C. Sum and H. V. Demir, *Nanoscale*, 10, 9466 (2018).
- 220 "Highly Efficient Green Light-Emitting Diodes from All-Inorganic Perovskite Nanocrystals Enabled by a New Electron Transport Layer", B. Liu, L. Wang, H. Gu, H. Sun, H. V. Demir, *Advanced Optical Materials*, 6, 1800220 (2018).
- 221 "Exciton Dynamics in Colloidal Quantum-Dot LEDs under Active Device Operations", S. Shendre, V. K. Sharma, C. Dang, and H. V. Demir, *ACS Photonics*, 5, 480 (2018).
- 222 "Polarization-resolved plasmon-modulated emissions of quantum dots coupled to aluminum dimers with sub-20-nm gaps", L. Tobing, D. H. Zhang, K. E Fong, M. D. Birowosuto, Y. Gao, C. Dang and H. V. Demir, *ACS Photonics*, 5, 1566 (2018).
- 223 "High-performance AlGaN/P light-emitting diodes integrated on silicon through a superior quality germanium-on-insulator", Y. Wang, B. Wang, W. A. Sasangka, S. Bao, Y. Zhang, H. V. Demir, J. Michel, K. E. K. Lee, S. F. Yoon, E. A. Fitzgerald, C. S. Tan, and K. H. Lee, *Photonics Research*, 6, 290 (2018).
- 224 "Effect of Mg-doped quantum barriers on the electrical performance of InGaN/GaNbased light-emitting diodes", B. Zhu, Z.-H. Zhang, S. T. Tan, S. Lu, Y. Zhang, X. Kang, N. Wang, N. Hasanov, and H. V. Demir, *Physica E: Low-dimensional systems and Nanostructures*, 98, 29 (2018).
- 225 "Possible Plasmonic Acceleration of LED Modulation for Li-Fi Applications", D. V. Guzatov, S. V. Gaponenko, H. V. Demir, *Plasmonics*, 13, 2133 (2018).
- 226 "Plasmonic enhancement of electroluminescence", D. V. Guzatov, S. V. Gaponenko, H. V. Demir, *AIP Advances*, 8, 015324 (2018).
- 227 "Color-enrichment semiconductor nanocrystals for biorhythm-friendly backlighting", T. Erdem and H. V. Demir, *Zeitschrift für Physikalische Chemie* (Special Issue: Dedicated to Alexander Eychmüller on the occasion of his 60th birthday), 232, 1457 (2018).
- 228 "Colloidal Photoluminescent Refractive Index Nanosensor Using Plasmonic Effects", D. V. Guzatov, S. V. Gaponenko, H. V. Demir, *Zeitschrift für Physikalische Chemie* (Special Issue: Dedicated to Alexander Eychmüller on the occasion of his 60th birthday), 232, 1431 (2018).
- 229 "Polarization Properties of Photoluminescence of Anisotropic Polymer Films Containing Aligned Au Nanorods and Semiconductor Nanoparticles of Various Shape", L. I. Gurinovich, L. L. Trotsiuk, O. S. Kulakovitch, N. I. Sushko, H. V. Demir, and S. V. Gaponenko, *Semiconductors*, 52, 2054 (2018).
- 230 C. Zuo, T. Tao, S. Feng, L. Huang, A. Asundi, Q. Chen, Micro Fourier Transform Profilometry (μ FTP): 3D shape measurement at 10,000 frames per second, *Optics and Lasers in Engineering*, 102 (2018) 70-91.
- 231 Z. Zhang, W.N. Li, A. Asundi, G. Barbastathis, Simultaneous measurement and reconstruction tailoring for quantitative phase imaging, *Optics Express*, 26 (2018) 32532-32553.
- 232 Y. Yu, J. Di, W. Qu, A. Asundi, Measurement of thermal effects of diode-pumped solid-state laser by using digital holography, *Applied Optics*, 57 (2018) 5385-5391.
- 233 P. Yang, Z. Wang, W. Zhang, H. Zhao, W. Qu, H. Zhao, A. Asundi, L. Yan, Depth profile measurement with lenslet images of the plenoptic camera, *Optical Engineering*, 57 (2018).

- 234 Y. Yan, P. Yang, L. Yan, J. Wan, Y. Sun, K. Tansey, A. Asundi, H. Zhao, Automatic checkerboard detection for camera calibration using self-correlation, *Journal of Electronic Imaging*, 27 (2018).
- 235 M. Shrestha, A. Asundi, G.K. Lau, Smart Window Based on Electric Unfolding of Microwrinkled TiO₂ Nanometric Films, *ACS Photonics*, 5 (2018) 3255-3262.
- 236 S. Sarangapani, A. Patil, Y.K. Ngeow, R. Elsa Mohan, A. Asundi, M.J. Lang, Chitosan nanoparticles' functionality as redox active drugs through cytotoxicity, radical scavenging and cellular behaviour, *Integrative Biology (United Kingdom)*, 10 (2018) 313-324.
- 237 S. Liansheng, C. Yin, W. Zhanmin, T. Ailing, A.K. Asundi, Single-pixel correlated imaging with high-quality reconstruction using iterative phase retrieval algorithm, *Optics and Lasers in Engineering*, 111 (2018) 108-113.
- 238 S. Liansheng, C. Yin, L. Bing, T. Ailing, A.K. Asundi, Optical image encryption via high-quality computational ghost imaging using iterative phase retrieval, *Laser Physics Letters*, 15 (2018).
- 239 S. Liansheng, C. Yin, T. Ailing, A.K. Asundi, An optical watermarking scheme with two-layer framework based on computational ghost imaging, *Optics and Lasers in Engineering*, 107 (2018) 38-45.
- 240 L. Huang, M. Idir, C. Zuo, A. Asundi, Review of phase measuring deflectometry, *Optics and Lasers in Engineering*, 107 (2018) 247-257.
- 241 D. Chen, J. Peng, S. Valyukh, A. Asundi, Y. Yu, Measurement of high numerical aperture cylindrical surface with iterative stitching algorithm, *Applied Sciences (Switzerland)*, 8 (2018).
- 242 S. Bi, C. Wang, J. Zhu, Z. Yuan, Y. Yu, S. Valyukh, A. Asundi, Influence of no-core fiber on the focusing performance of an ultra-small gradient-index fiber probe, *Optics and Lasers in Engineering*, 107 (2018) 46-53.
- 243 S. Raveendran, H.T. Lim, T. Maekawa, M. Vadakke Matham, D. Sakthi Kumar, Gold nanocages entering into the realm of high-contrast photoacoustic ocular imaging, *Nanoscale*, (2018).
- 244 Y. Huang, V.K. Shinoj, T. Wong, M.V. Matham, Particle free optical imaging of flow field by liquid crystal polarization, *Optics Express*, (2018).
- 245 A. Haridas, M. Vadakke Matham, A. Crivoi, P. Patinharekandy, T.M. Jen, K. Chan, Surface roughness evaluation of additive manufactured metallic components from white light images captured using a flexible fiberscope, *Optics and Lasers in Engineering*, (2018).
- 246 C.K. Chua, M.V. Matham, Y.J. Kim, Lasers in 3D printing and manufacturing, *Lasers in 3D Printing and Manufacturing*, (2018).
- 247 G. Yi, B.S. Moon, X. Wen, Y.J. Kim, D.H. Kim, Systematic Investigation of the Wavelength-Dependent Upconversion Enhancement Induced by Single Plasmonic Nanoparticles, *Journal of Physical Chemistry C*, 122 (2018) 13047-13053.
- 248 W. Xu, T.K. Lee, B.S. Moon, H. Song, X. Chen, B. Chun, Y.J. Kim, S.K. Kwak, P. Chen, D.H. Kim, Broadband Plasmonic Antenna Enhanced Upconversion and Its Application in Flexible Fingerprint Identification, *Advanced Optical Materials*, 6 (2018).
- 249 W.S. Won, L.G. Tran, W.T. Park, K.K. Kim, C.S. Shin, N. Kim, Y.J. Kim, Y.J. Yoon, UV-LEDs for the Disinfection and Bio-Sensing Applications, *International Journal of Precision Engineering and Manufacturing*, 19 (2018) 1901-1915.
- 250 S. Park, H. Lee, Y.J. Kim, P.S. Lee, Fully laser-patterned stretchable microsupercapacitors integrated with soft electronic circuit components, *NPG Asia Materials*, 10 (2018) 959-969.
- 251 Y. Gao, H. Lee, J. Jiao, B.J. Chun, S. Kim, D.H. Kim, Y.J. Kim, Surface third and fifth harmonic generation at crystalline Si for non-invasive inspection of Si wafer's inter-layer defects, *Optics Express*, 26 (2018) 32812-32823.
- 252 Z. Gao, H. Xu, F. Gao, Y. Zhang, Y. Luo, and B. Zhang, "Surface-Wave Pulse Routing around Sharp Right Angles", *Physical Review Applied*, 9(4), 044019, 2018.
- 253 H. Hu, J. Zhang, S. A. Maier, and Y. Luo, "Enhancing Third-Harmonic Generation with Spatial Nonlocality", *ACS Photonics*, 5(2), 592-598, 2018
- 254 S. Gupta, D. Nam, J. Vuckovic and K. Saraswat, "Room Temperature Lasing Unraveled by a Strong Resonance between Gain and Parasitic Absorption in Uniaxially Strained Germanium", *Physical Review B (Condensed Matter and Materials Physics)*, 97, 155127, 2018.
- 255 Y.Z. Shi, S. Xiong, Y. Zhang, L.K. Chin, Y.-Y. Chen, J.B. Zhang, T.H. Zhang, W. Ser, A. Larson, L.S. Hoi, J.H. Wu, T.N. Chen, Z.C. Yang, Y.L. Hao, B. Liedberg, P.H. Yap, D.P. Tsai, C.-W. Qiu & A.Q. Liu, " Sculpting nanoparticle dynamics for singlebacteria-level screening and direct bindingefficiency measurement", *Nature Communications*, 9, DOI: 10.1038/s41467-018-03156-5, 2018.

2017

- 1 Zhou Jie, Cao Zhonglin, Panwar Nishtha, Hu Rui, Wang Xiaomei, Qu Junle, Tjin Swee Chuan, Xu Gaixia, Yong Ken Tye, "Functionalized gold nanorods for nanomedicine: Past, present and future", *Coordination Chemistry Reviews*, Volume 352, 1 December 2017, Pages 15 - 66
- 2 Maheshwari, Muneeesh, Tjin Swee Chuan, Yang Yaowen, Asundi Anand, "Wavelength-shifted chirped FBGs for temperature compensated strain measurement", *Sensors & Actuators: A. Physical*, Volume 265, 1 October 2017, Pages 231-235
- 3 Yin Feng, Gu Bobo, Lin Yining, Panwar Nishtha, Tjin Swee Chuan, Qu Junle, Lau Shu Ping, Yong Ken Tye, "Review: Functionalized 2D nanomaterials for gene delivery applications", *Coordination Chemistry Reviews*, Volume 347, 15 September 2017, Pages 77 - 98
- 4 Yuan Yufeng, Lin Yining, Gu Bobo, Panwar Nishtha, Tjin Swee Chuan, Song Jun, Qu Junle, Yong Ken Tye, "Optical trapping-assisted SERS platform for chemical and biosensing applications: Design perspectives", *Coordination Chemistry Reviews*, Volume 339, 15 May 2017, Pages 138 - 152
- 5 Yuan, Y., Panwar, N., Yap, S.H.K., Wu, Q., Zeng, S., Xu, J., Tjin, S.C., Song, J., Qu, J., Yong, K.-T., "SERS-based ultrasensitive sensing platform: An insight into design and practical applications", *Coordination Chemistry Reviews*, Volume 337, 15 April 2017, Pages 1-33
- 6 Maheshwari, M., Annamdas, V.G.M., Pang, J.H.L., Asundi, A., Tjin, S., "Crack monitoring using multiple smart materials; fiber-optic sensors & piezo sensors", *International Journal of Smart and Nano Materials*, 4 March 2017, Pages 1-15
- 7 Song, P., Kuang, S., Panwar, N., Yang, G., Tng, D.J.H., Tjin, S.C., Ng, W.J., Majid, M.B.A., Zhu, G., Yong, K.-T., Wang, Z.L. "A Self-Powered Implantable Drug-Delivery System Using Biokinetic Energy", *Advanced Materials*, 2017.
- 8 Ahmed, A, Hassan, I, Song, PY, Gamaleldin, M, Radhi, A, Panwar, N, Tjin, SC, Desoky, AY, Sinton, D, Yong, KT, "Self-adaptive Bioinspired Hummingbird-wing Stimulated Triboelectric Nanogenerators", *Scientific Reports*, Volume 7, Articles 17143, 7 December 2017.
- 9 Q. Z. Sun, F. Ai, D. M. Liu, J. W. Cheng, H. B. Luo, K. Peng, Y. Y. Luo, Z. J. Yan, P. P. Shum, "M-OTDR sensing system based on 3D encoded microstructures", *Scientific Reports*, 01-Jan-2017.
- 10 Z. Y. Zhao, Y. L. Dang, M. Tang, L. Duan, M. Wang, H. Wu, S. N. Fu, W. J. Tong, P. P. Shum, D. M. Liu, "Spatial-division multiplexed hybrid Raman and Brillouin optical time-domain reflectometry based on multi-core fiber", *Optics Express*, 01-Jan-2017.
- 11 D. Y. Cui, E. Bo, Y. M. Luo, X. Y. Liu, X. H. Wang, S. Chen, X. J. Yu, S. Chen, P. Shum, L. B. Liu, "Multifiber angular compounding optical coherence tomography for speckle reduction", *Optics Letters*, 01-Jan-2017.
- 12 Xiaojun Yu, Qiaozhou Xiong, Yuemei Luo, Nanshuo Wang, Lulu Wang, Hong Liang Tey, Linbo Liu, "Contrast Enhanced Subsurface Fingerprint Detection Using High-Speed Optical Coherence Tomography", *IEEE Photonics Technology Letters*, 29, 1, 70-73, 01-Jan-2017.
- 13 En Bo, Si Chen, Dongyao Cui, Shi Chen, Xiaojun Yu, Yuemei Luo, and Linbo Liu, "Single-camera full-range high-resolution spectral domain optical coherence tomography", *Applied Optics*, 56, 3, 470-475, 01-Jan-2017.
- 14 Peiyi Song, Shuangyang Kuang, Nishtha Panwar, Guang Yang, Danny Jian Hang Tng, Swee Chuan Tjin, Wun Jern Ng, Maszenan Bin Abdul Majid, Guang Zhu*, Ken-Tye Yong* and Zhong Lin Wang*, "A Self-Powered Implantable Drug Delivery System Using Bio-kinetic Energy", *Advanced Materials*, 29, 11, 1605668, 01-Jan-2017.
- 15 M. Zhang, K. Li, P. Shum, X. Yu, S. Zeng, Z. Wu, Q. Wang, K. Yong, and L. Wei, "Hybrid graphene/gold plasmonic fiber-optic biosensor", *Advanced Materials Technologies*, 2, 2, 1600185, 01-Jan-2017.
- 16 ZHANG Hailiang, WU Zhifang, SHUM Perry Ping, DINH Xuan Quyen, LOW Chun Wah, XU Zhilin, WANG Ruoxu, SHAO Xuguang, FU Songnian, TONG Weijun and TANG Ming, "Highly sensitive strain sensor based on helical structure combined with Mach-Zehnder interferometer in multicore fiber", *Scientific Reports*, 7, 46633, 01-Jan-2017.
- 17 Yongmin Jung, Qiongyue Kang, Raghuraman Sidharthan, Daryl Ho, Seongwoo Yoo, Patrick Gregg, Siddharth Ramachandran, Shaif-Ul Alam, and David J. Richardson, "Optical Orbital Angular Momentum Amplifier Based on an Air-Hole Erbium-Doped Fiber", *Journal of Lightwave Technology*, 35, 3, 430-436, 01-Jan-2017.
- 18 P. Song, S. Kuang, N. Panwar, G. Yang, D. J. H. Tng, S. C. Tjin, W. J. Ng, M. B. A. Majid, G. Zhu, K.-T. Yong, Z. L. Wang, "A Self Powered Implantable Drug Delivery System Using Biokinetic Energy", *Advanced Materials*, 29, 11, 1605668, 01-Jan-2017.

- 19 Yufeng Yuan, Nishtha Panwar, Stephanie Hui Kit Yap, Qiang Wu, Shuwen Zeng, Jianhua Xu, Swee Chuan Tjin, Jun Song, Junle Qu, Ken-Tye Yong, "SERS-based ultrasensitive sensing platform: an insight into design and practical applications", Coordination Chemistry Reviews, 337, 1-92 (Journal Impact Factor = 12.994), 01-Feb-2017.
- 20 Liangliang Liu, Zhuo Li, Bingzheng Xu, Changqing Gu, Xinlei Chen, Hengyi Sun, Yongjin Zhou, Quan Qing, Ping Shum, Yu Luo, "Ultra-Low-Loss High-Contrast Gratings Based Spoof Surface Plasmonic Waveguide", IEEE Transactions on Microwave Theory and Techniques, 65, 6, 2008 - 2018, 01-Feb-2017.
- 21 Ting Zhang, Xue Xiong, Meng Liu, Guoan Cheng, Ruiting Zheng, Ju Xu and Lei Wei, "Ulralow thermal conductivity of silicon nanowire arrays by molecular dynamics simulation", Materials Research Express, 4, 2, 025029, 01-Feb-2017.
- 22 Huizi Li, Liling Zhang, Raghuraman Sidharthan, Daryl Ho, Xuan Wu, Venkatram Nalla, Handong Sun, Tianye Huang, Seongwoo Yoo, "Pump Wavelength Dependence of Photodarkening in Yb-doped Fibers", Journal of Lightwave Technology, 35, 13, 2535 - 2540, 01-Mar-2017.
- 23 Ting Zhang, Kaiwei Li, Chengchao Li, Shaoyang Ma, Huey Hoon Hng, Lei Wei, "Mechanically Durable and Flexible Thermoelectric Films from PEDOT: PSS/PVA/Bi0.5Sb1.5Te3 Nanocomposites", Advanced Electronic Materials, 3, 4, 1600554, 01-Mar-2017.
- 24 Shun Wang, Ting Zhang, Kaiwei Li, Shaoyang Ma, Ming Chen, Ping Lu, Lei Wei, "Flexible Piezoelectric Fibers for Acoustic Sensing and Positioning", Advanced Electronic Materials, 3, 3, 1600449, 01-Mar-2017.
- 25 En Bo, Yuemei Luo, Si Chen, Xinyu Liu, Nanshuo Wang, Xin Ge, Xianghong Wang, Shufen Chen, Shi Chen, Jinhan Li, and Linbo Liu, "Depth of focus extension in optical coherence tomography via multiple aperture synthesis", Optica, 01-Mar-2017.
- 26 Zhuo Li, Liangliang Liu, Hengyi Sun, Yunhe Sun, Changqing Gu, Xinlei Chen, Yun Liu, Yu Luo, "Effective Surface Plasmon Polaritons Induced by Modal Dispersion in a Waveguide", Physical Review Applied, 7, 4, 044028, 01-Apr-2017.
- 27 Tingting Wu, Yu Luo, Lei Wei, "Mid-infrared sensing of molecular vibrational modes with tunable graphene plasmons", Optics Letters, 42, 11, 2066-2069, 01-May-2017.
- 28 Y. Yuan, Y. Lin, B. Gu, N. Panwar, S. C. Tjin, J. Song, J. Qu, K.-T. Yong, "Optical trapping-assisted SERS platform for chemical and biosensing applications: Design perspectives", Coordination Chemistry Reviews, 339, 138-152, 01-May-2017.
- 29 En Bo*, Yuemei Luo, Si Chen, Xinyu Liu, Nanshuo Wang, Xin Ge, Xianghong Wang, Shufen Chen, Shi Chen, Jinhan Li, and Linbo Liu, "Depth of focus extension in optical coherence tomography via multiple aperture synthesis", Optica, 01-Jun-2017.
- 30 Amdad Chowdury and Wieslaw Krolikowski, "Breather-to-soliton transformation rules in the hierarchy of nonlinear Schrödinger equations", Physical Review E (Statistical, Nonlinear, and Soft Matter Physics), 95, 6, 062226, 01-Jun-2017.
- 31 M. Chen, J. Xia, J. Zhou, Q. Zeng, K. Li, K. Fujisawa, W. Fu, T. Zhang, J. Zhang, Z. Wang, Z. Wang, X. Jia, M. Terrones, Z. Shen, Z. Liu, and L. Wei, "Ordered and atomically perfect fragmentation of layered transition metal dichalcogenides via mechanical instabilities", ACS Nano, 11, 9191-9199, 01-Jul-2017.
- 32 J. Zhang, K. Li, T. Zhang, P. J. Buenconsejo, M. Chen, Z. Wang, M. Zhang, Z. Wang, and L. Wei, "Laser induced in-fiber fluid dynamical instabilities for precise and scalable fabrication of spherical particles", Advanced Functional Materials, 27, 1703245, 01-Aug-2017.
- 33 Zhilin Xu, Yiyang Luo, Deming Liu, Perry Ping Shum, and Qizhen Sun, "Sensitivity-controllable refractive index sensor based on reflective θ-shaped microfiber resonator cooperated with Vernier effect", Scientific Reports, 7, 9620, 01-Aug-2017.
- 34 Yuemei Luo, Dongyao Cui, Xiaojun Yu, En Bo, Xianghong Wang, Nanshuo Wang, Cilwyn Shalitha Braganza, Shufen Chen, Xinyu Liu, Qiaozhou Xiong, Si Chen, Shi Chen, Linbo Liu, "Endomicroscopic optical coherence tomography for cellular resolution imaging of gastrointestinal tracts", Journal of Biophotonics, 01-Aug-2017.
- 35 Zhilin Xu, Yiyang Luo, Qizhen Sun, Chengbo Mou, Yue Li, Perry Ping Shum, and Deming Liu, "Light velocity control in monolithic microfiber bridged ring resonator", Optica, 4, 945-950, 01-Aug-2017.
- 36 T. Zhang, K. Li, J. Zhang, M. Chen, Z. Wang, S. Ma, N. Zhang, and L. Wei, "High-performance, flexible, and ultralong crystalline thermoelectric fibers", Nano Energy, 41, 35-42, 01-Sep-2017.
- 37 Y. Zhou, J. F. Wang, X. M. Zhang, K. Li, J. M. Cai, and W. B. Gao, "Self-Protected Thermometry with Infrared Photons and Defect Spins in Silicon Carbide," Physical Review Applied, vol. 8, no. 4, Oct 2017, Art no. 044015.

- 38 Y. Zhou, A. Rasmida, K. Li, Q. H. Xiong, I. Aharonovich, and W. B. Gao, "Coherent control of a strongly driven silicon vacancy optical transition in diamond," *Nature Communications*, vol. 8, Feb 2017, Art no. 14451.
- 39 X. Zhou, Y. Wang, D. Leykam, and Y. D. Chong, "Optical isolation with nonlinear topological photonics," *New Journal of Physics*, vol. 19, Sep 2017, Art no. 095002.
- 40 J. D. Zhou, F. C. Liu, J. H. Lin, X. W. Huang, J. Xia, B. W. Zhang, Q. S. Zeng, H. Wang, C. Zhu, L. Niu, X. W. Wang, W. Fu, P. Yu, T. R. Chang, C. H. Hsu, D. Wu, H. T. Jeng, Y. Z. Huang, H. Lin, Z. X. Shen, C. L. Yang, L. Lu, K. Suenaga, W. Zhou, S. T. Pantelides, G. T. Liu, and Z. Liu, "Large-Area and High-Quality 2D Transition Metal Telluride," *Advanced Materials*, vol. 29, no. 3, Jan 2017, Art no. 1603471.
- 41 S. J. Zheng, J. K. So, F. C. Liu, Z. Liu, N. Zheludev, and H. J. Fan, "Giant Enhancement of Cathodoluminescence of Monolayer Transitional Metal Dichalcogenides Semiconductors," *Nano Letters*, vol. 17, no. 10, pp. 6475-6480, Oct 2017.
- 42 N. I. Zheludev, "Metamaterials at the University of Southampton and beyond," *Journal of Optics*, vol. 19, no. 8, Aug 2017, Art no. 084009.
- 43 X. Zhao, J. Y. Feng, S. Chen, Y. Z. Huang, T. C. Sum, and Z. Chen, "New insight into the roles of oxygen vacancies in hematite for solar water splitting," *Physical Chemistry Chemical Physics*, vol. 19, no. 2, pp. 1074-1082, Jan 2017.
- 44 D. M. Zhao, J. M. Skelton, H. W. Hu, C. La-o-Vorakiat, J. X. Zhu, R. A. Marcus, M. E. MichelBeyerle, Y. M. Lam, A. Walsh, and E. E. M. Chia, "Low-frequency optical phonon modes and carrier mobility in the halide perovskite CH₃NH₃PbBr₃ using terahertz time-domain spectroscopy," *Applied Physics Letters*, vol. 111, no. 20, Nov 2017, Art no. 201903.
- 45 Q. Zhang, R. Su, W. N. Du, X. F. Liu, L. Y. Zhao, S. T. Ha, and Q. H. Xiong, "Advances in Small Perovskite-Based Lasers," *Small Methods*, vol. 1, no. 9, Sep 2017, Art no. Unsp 1700163.
- 46 Q. Zhang, Q. Y. Shang, J. Shi, J. Chen, R. Wang, Y. Mi, W. N. Du, C. Shen, R. M. Ma, X. H. Qiu, X. F. Liu, and T. C. Sum, "Wavelength Tunable Plasmonic Lasers Based on Intrinsic SelfAbsorption of Gain Material," *Acs Photonics*, vol. 4, no. 11, pp. 2789-2796, Nov 2017.
- 47 N. Zhang, M. J. Li, C. F. Tan, C. K. N. Peh, T. C. Sum, and G. W. Ho, "Plasmonic enhanced photoelectrochemical and photocatalytic performances of 1D coaxial Ag@Ag₂S hybrids," *Journal of Materials Chemistry A*, vol. 5, no. 40, pp. 21570-21578, Oct 2017.
- 48 L. L. Zhang, J. Xing, X. L. Wen, J. W. Chai, S. J. Wang, and Q. H. Xiong, "Plasmonic heating from indium nanoparticles on a floating microporous membrane for enhanced solar seawater desalination," *Nanoscale*, vol. 9, no. 35, pp. 12843-12849, Sep 2017.
- 49 C. H. Zhang, H. Ng, Z. Li, K. A. Khor, and Q. H. Xiong, "Minority Carrier Blocking to Enhance the Thermoelectric Performance of Solution-Processed Bi_xSb_{2-x}Te₃ Nanocomposites via a Liquid-Phase Sintering Process," *Acs Applied Materials & Interfaces*, vol. 9, no. 14, pp. 1250112510, Apr 2017.
- 50 G. H. Yuan, E. T. F. Rogers, and N. I. Zheludev, "Achromatic super-oscillatory lenses with subwavelength focusing," *Light-Science & Applications*, vol. 6, Sep 2017, Art no. e17036.
- 51 P. Yu, J. H. Lin, L. F. Sun, Q. L. Le, X. C. Yu, G. H. Gao, C. H. Hsu, D. Wu, T. R. Chang, Q. S. Zeng, F. C. Liu, Q. J. Wang, H. T. Jeng, H. Lin, A. Trampert, Z. X. Shen, K. Suenaga, and Z. Liu, "MetalSemiconductor Phase-Transition in WSe₂(1-x)Te_{2x} Monolayer," *Advanced Materials*, vol. 29, no. 4, Jan 2017, Art no. 1603991.
- 52 D. S. Yu, L. C. Kwek, L. Amico, and R. Dumke, "Theoretical description of a micromaser in the ultrastrong-coupling regime," *Physical Review A*, vol. 95, no. 5, May 2017, Art no. 053811.
- 53 D. S. Yu, L. C. Kwek, L. Amico, and R. Dumke, "Superconducting qubit-resonator-atom hybrid system," *Quantum Science and Technology*, vol. 2, no. 3, Sep 2017, Art no. Unsp 035005.
- 54 T. T. Yin, L. Y. Jiang, Z. G. Dong, J. K. W. Yang, and Z. X. Shen, "Energy transfer and depolarization in the photoluminescence of a plasmonic molecule," *Nanoscale*, vol. 9, no. 5, pp. 2082-2087, Feb 2017.
- 55 T. T. Yin, Y. N. Fang, X. F. Fan, B. M. Zhang, J. L. Kuo, T. J. White, G. M. Chow, J. X. Yan, and Z. X. Shen, "Hydrogen-Bonding Evolution during the Polymorphic Transformations in CH₃NH₃PbBr₃: Experiment and Theory," *Chemistry of Materials*, vol. 29, no. 14, pp. 59745981, Jul 2017.
- 56 J. Yin, Y. H. Zhang, A. Bruno, C. Soci, O. M. Bakr, J. L. Bredas, and O. F. Mohammed, "Intrinsic Lead Ion Emissions in Zero-Dimensional Cs₄PbBr₆ Nanocrystals," *Acs Energy Letters*, vol. 2, no. 12, pp. 2805-2811, Dec 2017.
- 57 J. Yin, H. Li, D. Cortecchia, C. Soci, and J. L. Bredas, "Excitonic and Polaronic Properties of 2D Hybrid Organic-Inorganic Perovskites," *Acs Energy Letters*, vol. 2, no. 2, pp. 417-423, Feb 2017.

- 58 J. Yin, H. N. S. Krishnamoorthy, G. Adamo, A. M. Dubrovkin, Y. D. Chong, N. I. Zheludev, and C. Soci, "Plasmonics of topological insulators at optical frequencies," *Npg Asia Materials*, vol. 9, Aug 2017, Art no. e425.
- 59 T. Ye, J. Xing, M. Petrovic, S. Chen, V. Chellappan, G. S. Subramanian, T. C. Sum, B. Liu, Q. H. Xiong, and S. Ramakrishna, "Temperature effect of the compact TiO₂ layer in planar perovskite solar cells: An interfacial electrical, optical and carrier mobility study," *Solar Energy Materials and Solar Cells*, vol. 163, pp. 242-249, Apr 2017.
- 60 H. Q. Ye, V. Bogdanov, S. Liu, S. Vajandar, T. Osipowicz, I. Hernandez, and Q. H. Xiong, "Bright Photon Upconversion on Composite Organic Lanthanide Molecules through Localized Thermal Radiation," *Journal of Physical Chemistry Letters*, vol. 8, no. 23, pp. 5695-5699, Dec 2017.
- 61 Z. J. Yang, M. Xiao, F. Gao, L. Lu, Y. D. Chong, and B. L. Zhang, "Weyl points in a magnetic tetrahedral photonic crystal," *Optics Express*, vol. 25, no. 14, pp. 15772-15777, Jul 2017.
- 62 Z. J. Yang, M. Xiao, F. Gao, L. Lu, Y. D. Chong, and B. L. Zhang, "Weyl points in a magnetic tetrahedral photonic crystal (vol 25, pg 15772, 2017)," *Optics Express*, vol. 25, no. 20, pp. 23725-23725, Oct 2017.
- 63 X. Y. Yang, F. Q. Ren, Y. Wang, T. Ding, H. D. Sun, D. L. Ma, and X. W. Sun, "Iodide capped PbS/CdS core-shell quantum dots for efficient long-wavelength near-infrared light-emitting diodes," *Scientific Reports*, vol. 7, Nov 2017, Art no. 14741.
- 64 S. C. Yang, T. Y. K. Eugene, Y. Wang, X. Zhao, H. V. Demir, and H. D. Sun, "Wavelength tuning of the spirally drawn whispering gallery mode microfiber lasers and the perspectives for sensing applications," *Optics Express*, vol. 25, no. 3, pp. 2618-2626, Feb 2017.
- 65 M. Q. Yang, J. D. Dan, S. J. Pennycook, X. Lu, H. Zhu, Q. H. Xu, H. J. Fan, and G. W. Ho, "Ultrathin nickel boron oxide nanosheets assembled vertically on graphene: a new hybrid 2D material for enhanced photo/electro-catalysis," *Materials Horizons*, vol. 4, no. 5, pp. 885894, Sep 2017.
- 66 L. B. Yan, W. M. Zhu, P. C. Wu, H. Cai, D. Gu, L. K. Chin, Z. X. Shen, P. H. J. Chong, Z. C. Yang, W. Ser, D. P. Tsai, and A. Q. Liu, "Adaptable metasurface for dynamic anomalous reflection," *Applied Physics Letters*, vol. 110, no. 20, May 2017, Art no. 201904.
- 67 R. Yahiaoui, M. Manjappa, Y. K. Srivastava, and R. Singh, "Active control and switching of broadband electromagnetically induced transparency in symmetric metadevices," *Applied Physics Letters*, vol. 111, no. 2, Jul 2017, Art no. 021101.
- 68 W. G. Xu, W. W. Liu, J. F. Schmidt, W. J. Zhao, X. Lu, T. Raab, C. Diederichs, W. B. Gao, D. V. Seletskiy, and Q. H. Xiong, "Correlated fluorescence blinking in two-dimensional semiconductor heterostructures," *Nature*, vol. 541, no. 7635, pp. 62-+, Jan 2017.
- 69 G. C. Xing, B. Wu, X. Y. Wu, M. J. Li, B. Du, Q. Wei, J. Guo, E. K. L. Yeow, T. C. Sum, and W. Huang, "Transcending the slow bimolecular recombination in lead-halide perovskites for electroluminescence," *Nature Communications*, vol. 8, Feb 2017, Art no. 14558.
- 70 L. Xiao, Y. Wang, Y. Huang, T. Wong, and H. D. Sun, "Self-trapped exciton emission from carbon dots investigated by polarization anisotropy of photoluminescence and photoexcitation," *Nanoscale*, vol. 9, no. 34, pp. 12637-12646, Sep 2017.
- 71 J. Xia, Q. S. Zeng, J. D. Zhou, W. Zhou, Q. Zhang, J. X. Yan, Z. Liu, and Z. X. Shen, "Current rectification and asymmetric photoresponse in MoS₂ stacking-induced homojunctions," *2d Materials*, vol. 4, no. 3, Sep 2017, Art no. 035011.
- 72 J. Xia, J. X. Yan, and Z. X. Shen, "Transition metal dichalcogenides: structural, optical and electronic property tuning via thickness and stacking," *Flatchem*, vol. 4, pp. 1-19, Aug 2017.
- 73 J. Xia, X. L. Wang, B. K. Tay, S. S. Chen, Z. Liu, J. X. Yan, and Z. X. Shen, "Valley polarization in stacked MoS₂ induced by circularly polarized light," *Nano Research*, vol. 10, no. 5, pp. 16181626, May 2017.
- 74 J. Xia, J. Wang, D. L. Chao, Z. Chen, Z. Liu, J. L. Kuo, J. X. Yan, and Z. X. Shen, "Phase evolution of lithium intercalation dynamics in 2H-MoS₂," *Nanoscale*, vol. 9, no. 22, pp. 7533-7540, Jun 2017.
- 75 J. Xia, D. F. Li, J. D. Zhou, P. Yu, J. H. Lin, J. L. Kuo, H. B. Li, Z. Liu, J. X. Yan, and Z. X. Shen, "Pressure-Induced Phase Transition in Weyl Semimetallic WTe₂," *Small*, vol. 13, no. 40, Oct 2017, Art no. Unsp 1701887.
- 76 B. Wu, Y. Y. Zhou, G. C. Xing, Q. Xu, H. F. Garces, A. Solanki, T. W. Goh, N. P. Padture, and T. C. Sum, "Long Minority-Carrier Diffusion Length and Low Surface-Recombination Velocity in Inorganic Lead-Free CsSnI₃ Perovskite Crystal for Solar Cells," *Advanced Functional Materials*, vol. 27, no. 7, Feb 2017, Art no. Unsp 1604818.
- 77 C. E. Wilhelm, M. I. B. Utama, G. Lehoucq, Q. H. Xiong, C. Soci, D. Dolfi, A. De Rossi, and S. Combrie, "Broadband Tunable Hybrid Photonic Crystal-Nanowire Light Emitter," *Ieee Journal of Selected Topics in Quantum Electronics*, vol. 23, no. 5, Sep-Oct 2017, Art no. 4900308.

- 78 Z. R. Wei, J. L. Li, L. Wang, S. T. See, M. H. Jhon, Y. F. Zhang, F. Shi, M. H. Yang, and Z. H. Loh, "Elucidating the origins of multimode vibrational coherences of polyatomic molecules induced by intense laser fields," *Nature Communications*, vol. 8, Sep 2017, Art no. 735.
- 79 Z. R. Wei, J. L. Li, S. T. See, and Z. H. Loh, "Spin-Orbit State-Selective C-I Dissociation Dynamics of the CH₃I+(X)over-tilde Electronic State Induced by Intense Few-Cycle Laser Fields," *Journal of Physical Chemistry Letters*, vol. 8, no. 24, pp. 6067-6072, Dec 2017.
- 80 Q. Wei, B. Du, B. Wu, J. Guo, M. J. Li, J. H. Fu, Z. P. Zhang, J. W. Yu, T. Y. Hou, G. C. Xing, T. C. Sum, and W. Huang, "Two-Photon Optical Properties in Individual Organic-Inorganic Perovskite Microplates," *Advanced Optical Materials*, vol. 5, no. 24, Dec 2017, Art no. 1700809.
- 81 Z. Wang, B. H. Teh, Y. Wang, G. Adamo, J. H. Teng, and H. D. Sun, "Enhancing circular dichroism by super chiral hot spots from a chiral metasurface with apexes," *Applied Physics Letters*, vol. 110, no. 22, May 2017, Art no. 221108.
- 82 Y. Wang, D. J. Yu, Z. Wang, X. M. Li, X. X. Chen, V. Nalla, H. B. Zeng, and H. D. Sun, "Solution-Grown CsPbBr₃/Cs₄PbBr₆ Perovskite Nanocomposites: Toward Temperature-Insensitive Optical Gain," *Small*, vol. 13, no. 34, Sep 2017, Art no. Unsp 1701587.
- 83 Y. Wang, V. D. Ta, K. S. Leck, B. H. I. Tan, Z. Wang, T. C. He, C. D. Ohl, H. V. Demir, and H. D. Sun, "Robust Whispering-Gallery-Mode Microbubble Lasers from Colloidal Quantum Dots," *Nano Letters*, vol. 17, no. 4, pp. 2640-2646, Apr 2017.
- 84 Y. Wang, X. M. Li, V. Nalla, H. B. Zeng, and H. D. Sun, "Solution-Processed Low Threshold Vertical Cavity Surface-Emitting Lasers from All-Inorganic Perovskite Nanocrystals," *Advanced Functional Materials*, vol. 27, no. 13, Apr 2017, Art no. 1605088.
- 85 Y. Wang, W. H. Lai, N. Wang, Z. Jiang, X. Y. Wang, P. C. Zou, Z. Y. Lin, H. J. Fan, F. Y. Kang, C. P. Wong, and C. Yang, "A reduced graphene oxide/mixed-valence manganese oxide composite electrode for tailorable and surface mountable supercapacitors with high capacitance and super-long life," *Energy & Environmental Science*, vol. 10, no. 4, pp. 941-949, Apr 2017. [388]
- 86 X. B. Wang, L. Cheng, Y. Wu, D. P. Zhu, L. Wang, J. X. Zhu, H. Yang, and E. E. M. Chia, "Topological-insulator-based terahertz modulator," *Scientific Reports*, vol. 7, Oct 2017, Art no. 13486.
- 87 Q. Wang, G. H. Yuan, K. S. Kiang, K. Sun, B. Gholipour, E. T. F. Rogers, K. Huang, S. S. Ang, N. I. Zheludev, and J. H. Teng, "Reconfigurable phase-change photomask for grayscale photolithography," *Applied Physics Letters*, vol. 110, no. 20, May 2017, Art no. 201110.
- 88 J. F. Wang, Y. Zhou, X. M. Zhang, F. C. Liu, Y. Li, K. Li, Z. Liu, G. Z. Wang, and W. B. Gao, "Efficient Generation of an Array of Single Silicon-Vacancy Defects in Silicon Carbide," *Physical Review Applied*, vol. 7, no. 6, Jun 2017, Art no. 064021.
- 89 J. F. Wang, X. M. Zhang, Y. Zhou, K. Li, Z. Y. Wang, P. Peddibhoda, F. C. Liu, S. Bauerwick, A. Rudzinski, Z. Liu, and W. B. Gao, "Scalable Fabrication of Single Silicon Vacancy Defect Arrays in Silicon Carbide Using Focused Ion Beam," *Acs Photonics*, vol. 4, no. 5, pp. 1054-1059, May 2017.
- 90 H. Wang, X. W. Huang, J. H. Lin, J. Cui, Y. Chen, C. Zhu, F. C. Liu, Q. S. Zeng, J. D. Zhou, P. Yu, X. W. Wang, H. Y. He, S. H. Tsang, W. B. Gao, K. Suenaga, F. C. Ma, C. L. Yang, L. Lu, T. Yu, E. H. T. Teo, G. T. Liu, and Z. Liu, "High-quality monolayer superconductor NbSe₂ grown by chemical vapour deposition," *Nature Communications*, vol. 8, Aug 2017, Art no. 394.
- 91 S. A. Veldhuis, Y. K. E. Tay, A. Bruno, S. S. H. Dintakurti, S. Bhaumik, S. K. Muduli, M. J. Li, N. Mathews, T. C. Sum, and S. G. Mhaisalkar, "Benzyl Alcohol-Treated CH₃NH₃PbBr₃ Nanocrystals Exhibiting High Luminescence, Stability, and Ultralow Amplified Spontaneous Emission Thresholds," *Nano Letters*, vol. 17, no. 12, pp. 7424-7432, Dec 2017.
- 92 B. A. van Tiggelen and D. Wilkowski, "Photon Hall scattering from alkaline-earth-like atoms and alkali-like ions," *European Physical Journal-Special Topics*, vol. 226, no. 7, pp. 1515-1523, May 2017.
- 93 J. Valente, J. Y. Ou, E. Plum, I. J. Youngs, and N. I. Zheludev, "A magneto-electro-optical effect in a plasmonic nanowire material (vol 6, 7021, 2015)," *Nature Communications*, vol. 8, Feb 2017, Art no. 14497.
- 94 M. L. Tseng, X. Fang, V. Savinov, P. C. Wu, J. Y. Ou, N. I. Zheludev, and D. P. Tsai, "Coherent selection of invisible high-order electromagnetic excitations," *Scientific Reports*, vol. 7, Mar 2017, Art no. 44488.
- 95 S. Tretyakov, A. Urbas, and N. Zheludev, "The century of metamaterials," *Journal of Optics*, vol. 19, no. 8, Aug 2017, Art no. 080404.

- 96 K. Thirumal, W. K. Chong, W. Xie, R. Ganguly, S. K. Muduli, M. Sherburne, M. Asta, S. Mhaisalkar, T. C. Sum, H. S. Soo, and N. Mathews, "Morphology-Independent Stable WhiteLight Emission from Self-Assembled Two-Dimensional Perovskites Driven by Strong ExcitonPhonon Coupling to the Organic Framework," *Chemistry of Materials*, vol. 29, no. 9, pp. 3947-3953, May 2017.
- 97 Q. H. Tan, Y. J. Sun, X. L. Liu, Y. Y. Zhao, Q. H. Xiong, P. H. Tan, and J. Zhang, "Observation of forbidden phonons, Fano resonance and dark excitons by resonance Raman scattering in few-layer WS₂," *2d Materials*, vol. 4, no. 3, Sep 2017, Art no. 031007.
- 98 M. H. Tahersima, M. D. Birowosuto, Z. Z. Ma, W. C. Coley, M. D. Valentin, S. N. Alvillar, I. H. Lu, Y. Zhou, I. Sarpkaya, A. Martinez, I. Liao, B. N. Davis, J. Martinez, D. Martinez-Ta, A. Guan, A. E. Nguyen, K. Liu, C. Soci, E. Reed, L. Bartels, and V. J. Sorger, "Testbeds for Transition Metal Dichalcogenide Photonics: Efficacy of Light Emission Enhancement in Monomer vs Dimer Nanoscale Antennae," *Acs Photonics*, vol. 4, no. 7, pp. 1713-1721, Jul 2017.
- 99 R. Su, C. Diederichs, J. Wang, T. C. H. Liew, J. X. Zhao, S. Liu, W. G. Xu, Z. H. Chen, and Q. H. Xiong, "Room-Temperature Polariton Lasing in All-Inorganic Perovskite Nanoplatelets," *Nano Letters*, vol. 17, no. 6, pp. 3982-3988, Jun 2017.
- 100 Y. K. Srivastava and R. Singh, "Impact of conductivity on Lorentzian and Fano resonant highQ THz metamaterials: Superconductor, metal and perfect electric conductor," *Journal of Applied Physics*, vol. 122, no. 18, Nov 2017, Art no. 183104.
- 101 Y. K. Srivastava, L. Q. Cong, and R. Singh, "Dual-surface flexible THz Fano metasensor," *Applied Physics Letters*, vol. 111, no. 20, Nov 2017, Art no. 201101.
- 102 Y. K. Srivastava, A. Chaturvedi, M. Manjappa, A. Kumar, G. Dayal, C. Kloc, and R. Singh, "MoS₂ for Ultrafast All-Optical Switching and Modulation of THz Fano Metaphotonic Devices," *Advanced Optical Materials*, vol. 5, no. 23, Dec 2017, Art no. 1700762.
- 103 S. Sreejith, N. V. Menon, Y. Wang, H. Joshi, S. Y. Liu, K. C. Chong, Y. Kang, H. D. Sun, and M. C. Stuparu, "All-organic luminescent nanodots from corannulene and cyclodextrin nanoassembly: continuous-flow synthesis, non-linear optical properties, and bio-imaging applications," *Materials Chemistry Frontiers*, vol. 1, no. 5, pp. 831-837, May 2017.
- 104 B. Sotillo, A. Chiappini, V. Bharadwaj, M. Ramos, T. T. Fernandez, S. Rampini, M. Ferrari, R. Ramponi, P. Fernandez, B. Gholipour, C. Soci, and S. M. Eaton, "Raman spectroscopy of femtosecond laser written low propagation loss optical waveguides in Schott N-SF8 glass," *Optical Materials*, vol. 72, pp. 626-631, Oct 2017.
- 105 M. Soskin, S. V. Boriskina, Y. D. Chong, M. R. Dennis, and A. Desyatnikov, "Singular optics and topological photonics," *Journal of Optics*, vol. 19, no. 1, Jan 2017, Art no. 010401.
- 106 J. Z. Song, Q. Z. Cui, J. H. Li, J. Y. Xu, Y. Wang, L. M. Xu, J. Xue, Y. H. Dong, T. Tian, H. D. Sun, and H. B. Zeng, "Ultralarge All-Inorganic Perovskite Bulk Single Crystal for High-Performance Visible-Infrared Dual-Modal Photodetectors," *Advanced Optical Materials*, vol. 5, no. 12, Jun 2017, Art no. 1700157.
- 107 L. Singh, R. Singh, and W. L. Zhang, "Ultra-high terahertz index in deep subwavelength coupled bi-layer free-standing flexible metamaterials," *Journal of Applied Physics*, vol. 121, no. 23, Jun 2017, Art no. 233103.
- 108 K. L. Shih, P. Pitchappa, M. Manjappa, C. P. Ho, R. Singh, B. Yang, N. Singh, and C. Lee, "Active MEMS metamaterials for THz bandwidth control," *Applied Physics Letters*, vol. 110, no. 16, Apr 2017, Art no. 161108.
- 109 K. Shih, P. Pitchappa, M. Manjappa, C. P. Ho, R. Singh, and C. Lee, "Microfluidic metamaterial sensor: Selective trapping and remote sensing of microparticles," *Journal of Applied Physics*, vol. 121, no. 2, Jan 2017.
- 110 J. Shi, P. Yu, F. C. Liu, P. He, R. Wang, L. Qin, J. B. Zhou, X. Li, J. D. Zhou, X. Y. Sui, S. Zhang, Y. F. Zhang, Q. Zhang, T. C. Sum, X. H. Qiu, Z. Liu, and X. F. Liu, "3R MoS₂ with Broken Inversion Symmetry: A Promising Ultrathin Nonlinear Optical Device," *Advanced Materials*, vol. 29, no. 30, Aug 2017, Art no. 1701486.
- 111 C. Shen, W. N. Du, Z. Y. Wu, J. Xing, S. T. Ha, Q. Y. Shang, W. G. Xu, Q. H. Xiong, X. F. Liu, and Q. Zhang, "Thermal conductivity of suspended single crystal CH₃NH₃PbI₃ platelets at room temperature," *Nanoscale*, vol. 9, no. 24, pp. 8281-8287, Jun 2017.
- 112 K. Shastri, Z. J. Yang, and B. L. Zhang, "Realizing type-II Weyl points in an optical lattice," *Physical Review B*, vol. 95, no. 1, Jan 2017, Art no. 014306.
- 113 J. Z. Shang, C. X. Cong, Z. L. Wang, N. Peimyoo, L. S. Wu, C. J. Zou, Y. Chen, X. Y. Chin, J. P. Wang, C. Soci, W. Huang, and T. Yu, "Room-temperature 2D semiconductor activated vertical-cavity surface-emitting lasers," *Nature Communications*, vol. 8, Sep 2017, Art no. 543.

- 114 V. Savinov and N. I. Zheludev, "High-quality metamaterial dispersive grating on the facet of an optical fiber," *Applied Physics Letters*, vol. 111, no. 9, Aug 2017, Art no. 091106.
- 115 A. V. Salvekar, W. M. Huang, R. Xiao, Y. S. Wong, S. S. Venkatrarnan, K. H. Tay, and Z. X. Shen, "Water-Responsive Shape Recovery Induced Buckling in Biodegradable Photo-Cross-Linked Poly(ethylene glycol) (PEG) Hydrogel," *Accounts of Chemical Research*, vol. 50, no. 2, pp. 141-150, Feb 2017.
- 116 M. Sabbar, H. Timmers, Y. J. Chen, A. K. Pymer, Z. H. Loh, S. G. Sayres, S. Pabst, R. Santra, and S. R. Leone, "State-resolved attosecond reversible and irreversible dynamics in strong optical fields," *Nature Physics*, vol. 13, no. 5, pp. 472-478, May 2017.
- 117 E. T. F. Rogers, S. Quraisque, J. E. Chad, T. A. Newman, N. I. Zheludev, and P. J. S. Smith, "New Super-Oscillatory Technology for Unlabelled Super-Resolution Cellular Imaging with Polarisation Contrast," *Biophysical Journal*, vol. 112, no. 3, pp. 186A-186A, Feb 2017.
- 118 E. T. Rogers, S. Quraisque, T. A. Newman, J. E. Chad, N. I. Zheludev, and P. J. Smith, "Unlabelled super-resolution imaging using polarisation-contrast super-oscillatory microscopy," *European Biophysics Journal with Biophysics Letters*, vol. 46, pp. S296-S296, Jul 2017.
- 119 T. Raybould, V. A. Fedotov, N. Papasimakis, I. Youngs, and N. I. Zheludev, "Exciting dynamic anapoles with electromagnetic doughnut pulses," *Applied Physics Letters*, vol. 111, no. 8, Aug 2017, Art no. 081104.
- 120 L. Ravikiran, K. Radhakrishnan, N. Dharmarasu, M. Agrawal, Z. L. Wang, A. Bruno, C. Soci, T. Lihuang, and K. S. Ang, "GaN Schottky Metal-Semiconductor-Metal UV Photodetectors on Si(111) Grown by Ammonia-MBE," *Ieee Sensors Journal*, vol. 17, no. 1, pp. 72-77, Jan 2017.
- 121 E. Plum, K. F. MacDonald, X. Fang, D. Faccio, and N. I. Zheludev, "Controlling the Optical Response of 2D Matter in Standing Waves," *Acs Photonics*, vol. 4, no. 12, pp. 3000-3011, Dec 2017.
- 122 P. Pitchappa, M. Manjappa, H. N. S. Krishnamoorthy, Y. H. Chang, C. Lee, and R. Singh, "Bidirectional reconfiguration and thermal tuning of microcantilever metamaterial device operating from 77K to 400K," *Applied Physics Letters*, vol. 111, no. 26, Dec 2017, Art no. 261101.
- 123 F. A. Pinheiro, V. A. Fedotov, N. Papasimakis, and N. I. Zheludev, "Spontaneous natural optical activity in disordered media," *Physical Review B*, vol. 95, no. 22, Jun 2017, Art no. 220201.
- 124 M. Papaioannou, E. Plum, and N. I. Zheludev, "All-Optical Pattern Recognition and Image Processing on a Metamaterial Beam Splitter," *Acs Photonics*, vol. 4, no. 2, pp. 217-222, Feb 2017.
- 125 J. Noh, S. Huang, D. Leykam, Y. D. Chong, K. P. Chen, and M. C. Rechtsman, "Experimental observation of optical Weyl points and Fermi arc-like surface states," *Nature Physics*, vol. 13, no. 6, pp. 611-617, Jun 2017.
- 126 Y. F. Ng, S. A. Kulkarni, S. Parida, N. F. Jamaludin, N. Yantara, A. Bruno, C. Soci, S. Mhaisalkar, and N. Mathews, "Highly efficient Cs-based perovskite light-emitting diodes enabled by energy funnelling," *Chemical Communications*, vol. 53, no. 88, pp. 12004-12007, Nov 2017. [429]
- 127 Y. F. Ng, N. F. Jamaludin, N. Yantara, M. J. Li, V. K. R. Irukuvarjula, H. V. Demir, T. C. Sum, S. Mhaisalkar, and N. Mathews, "Rapid Crystallization of All-Inorganic CsPbBr₃ Perovskite for High-Brightness Light-Emitting Diodes," *Acs Omega*, vol. 2, no. 6, pp. 2757-2764, Jun 2017.
- 128 I. Neogi, A. Bruno, D. Bahulayan, T. W. Goh, B. Ghosh, R. Ganguly, D. Cortecchia, T. C. Sum, C. Soci, N. Mathews, and S. G. Mhaisalkar, "Broadband-Emitting 2D Hybrid Organic-Inorganic Perovskite Based on Cyclohexane-bis(methylammonium) Cation," *Chemsuschem*, vol. 10, no. 19, pp. 3765-3772, Oct 2017.
- 129 V. Nalla, J. Valente, H. D. Sun, and N. I. Zheludev, "11-fs dark pulses generated via coherent absorption in plasmonic metamaterial," *Optics Express*, vol. 25, no. 19, pp. 22620-22625, Sep 2017.
- 130 S. K. Muduli, E. Varrla, Y. Xu, S. A. Kulkarni, A. Katre, S. Chakraborty, S. Chen, T. C. Sum, R. Xu, and N. Mathews, "Evolution of hydrogen by few-layered black phosphorus under visible illumination," *Journal of Materials Chemistry A*, vol. 5, no. 47, pp. 24874-24879, Dec 2017.
- 131 S. Mitra, K. Okawa, S. K. Sudheesh, T. Sasagawa, J. X. Zhu, and E. E. M. Chia, "Probing the superconducting gap symmetry of alpha-PdBi₂: A penetration depth study," *Physical Review B*, vol. 95, no. 13, Apr 2017, Art no. 134519.
- 132 R. Medishetty, V. Nalla, L. Nemec, S. Henke, D. Mayer, H. D. Sun, K. Reuter, and R. A. Fischer, "A New Class of Lasing Materials: Intrinsic Stimulated Emission from Nonlinear Optically Active Metal-Organic Frameworks," *Advanced Materials*, vol. 29, no. 17, May 2017, Art no. 1605637.
- 133 S. Mansha, I. Tsukerman, and Y. D. Chong, "The FLAME-slab method for electromagnetic wave scattering in aperiodic slabs," *Optics Express*, vol. 25, no. 26, pp. 32602-32617, Dec 2017.
- 134 S. Mansha and Y. D. Chong, "Robust edge states in amorphous gyromagnetic photonic lattices," *Physical Review B*, vol. 96, no. 12, Sep 2017, Art no. 121405.

- 135 M. Manjappa, S. P. Turaga, Y. K. Srivastava, A. A. Bettoli, and R. Singh, "Magnetic annihilation of the dark mode in a strongly coupled bright-dark terahertz metamaterial," *Optics Letters*, vol. 42, no. 11, pp. 2106-2109, Jun 2017.
- 136 M. Manjappa, Y. K. Srivastava, A. Solanki, A. Kumar, T. C. Sum, and R. Singh, "Hybrid Lead Halide Perovskites for Ultrasensitive Photoactive Switching in Terahertz Metamaterial Devices," *Advanced Materials*, vol. 29, no. 32, Aug 2017, Art no. 1605881.
- 137 M. Manjappa, Y. K. Srivastava, L. Q. Cong, I. Al-Naib, and R. Singh, "Active Photoswitching of Sharp Fano Resonances in THz Metadevices," *Advanced Materials*, vol. 29, no. 3, Jan 2017, Art no. 1603355.
- 138 Z. Z. Luo, Y. Zhang, C. H. Zhang, H. T. Tan, Z. Li, A. Abutaha, X. L. Wu, Q. H. Xiong, K. A. Khor, K. Hippalgaonkar, J. W. Xu, H. H. Hng, and Q. Y. Yan, "Multifunctional 0D-2D Ni₂P Nanocrystals-Black Phosphorus Heterostructure," *Advanced Energy Materials*, vol. 7, no. 2, Jan 2017, Art no. 1601285.
- 139 X. Lu, M. I. B. Utama, X. Z. Wang, W. G. Xu, W. J. Zhao, M. H. S. Owen, and Q. H. Xiong, "Gate-Tunable Resonant Raman Spectroscopy of Bilayer MoS₂," *Small*, vol. 13, no. 35, Sep 2017, Art no. Unsp 1701039.
- 140 W. W. Liu, J. Xing, J. X. Zhao, X. L. Wen, K. Wang, P. X. Lu, and Q. H. Xiong, "Giant TwoPhoton Absorption and Its Saturation in 2D Organic-Inorganic Perovskite," *Advanced Optical Materials*, vol. 5, no. 7, Apr 2017, Art no. 1601045.
- 141 T. Liu, H. D. Qiu, T. T. Yin, C. C. Huang, G. Z. Liang, B. Qiang, Y. D. Shen, H. K. Liang, Y. Zhang, H. Wang, Z. X. Shen, D. W. Hewak, and Q. J. Wang, "Enhanced light-matter interaction in atomically thin MoS₂ coupled with 1D photonic crystal nanocavity," *Optics Express*, vol. 25, no. 13, pp. 14691-14696, Jun 2017.
- 142 X. Lin, Y. Yang, N. Rivera, J. J. Lopez, Y. C. Shen, I. Kaminer, H. S. Chen, B. L. Zhang, J. D. Joannopoulos, and M. Soljacic, "All-angle negative refraction of highly squeezed plasmon and phonon polaritons in graphene-boron nitride heterostructures," *Proceedings of the National Academy of Sciences of the United States of America*, vol. 114, no. 26, pp. 67176721, Jun 2017.
- 143 X. Lin, I. Kaminer, X. H. Shi, F. Gao, Z. J. Yang, Z. Gao, H. Buljan, J. D. Joannopoulos, M. Soljacic, H. S. Chen, and B. L. Zhang, "Splashing transients of 2D plasmons launched by swift electrons," *Science Advances*, vol. 3, no. 1, Jan 2017, Art no. e1601192.
- 144 W. X. Lim, S. Han, M. Gupta, K. F. MacDonald, and R. Singh, "Near-infrared linewidth narrowing in plasmonic Fano-resonant metamaterials via tuning of multipole contributions," *Applied Physics Letters*, vol. 111, no. 6, Aug 2017, Art no. 061104.
- 145 X. M. Li, D. J. Yu, J. Chen, Y. Wang, F. Cao, Y. Wei, Y. Wu, L. Wang, Y. Zhu, Z. G. Sun, J. P. Ji, Y. L. Shen, H. D. Sun, and H. B. Zeng, "Constructing Fast Carrier Tracks into Flexible Perovskite Photodetectors To Greatly Improve Responsivity," *Acs Nano*, vol. 11, no. 2, pp. 2015-2023, Feb 2017.
- 146 X. M. Li, Y. Wang, H. D. Sun, and H. B. Zeng, "Amino-Mediated Anchoring Perovskite Quantum Dots for Stable and Low-Threshold Random Lasing," *Advanced Materials*, vol. 29, no. 36, Sep 2017, Art no. 1701185.
- 147 M. J. Li, S. Bhaumik, T. W. Goh, M. S. Kumar, N. Yantara, M. Gratzel, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Slow cooling and highly efficient extraction of hot carriers in colloidal perovskite nanocrystals," *Nature Communications*, vol. 8, Feb 2017, Art no. 14350.
- 148 J. Li, A. Terec, Y. Wang, H. Joshi, Y. P. Lu, H. D. Sun, and M. C. Stuparu, "pi-Conjugated Discrete Oligomers Containing Planar and Nonplanar Aromatic Motifs," *Journal of the American Chemical Society*, vol. 139, no. 8, pp. 3089-3094, Mar 2017.
- 149 H. Z. Li, L. L. Zhang, R. Sidharthan, D. Ho, X. Wu, N. Venkatram, H. D. Sun, T. Y. Huang, and S. Yoo, "Pump Wavelength Dependence of Photodarkening in Yb-Doped Fibers," *Journal of Lightwave Technology*, vol. 35, no. 13, pp. 2535-2540, Jul 2017.
- 150 H. Li, J. B. Wu, F. R. Ran, M. L. Lin, X. L. Liu, Y. Y. Zhao, X. Lu, Q. H. Xiong, J. Zhang, W. Huang, H. Zhang, and P. H. Tan, "Interfacial Interactions in van der Waals Heterostructures of MoS₂ and Graphene," *Acs Nano*, vol. 11, no. 11, pp. 11714-11723, Nov 2017.
- 151 D. Leykam, S. Flach, and Y. D. Chong, "Flat bands in lattices with non-Hermitian coupling," *Physical Review B*, vol. 96, no. 6, Aug 2017, Art no. 064305.
- 152 D. Leykam, K. Y. Bliokh, C. L. Huang, Y. D. Chong, and F. Nori, "Edge Modes, Degeneracies, and Topological Numbers in Non-Hermitian Systems," *Physical Review Letters*, vol. 118, no. 4, Jan 2017, Art no. 040401.
- 153 W. R. Leow, W. K. H. Ng, T. Peng, X. F. Liu, B. Li, W. X. Shi, Y. Lum, X. T. Wang, X. J. Lang, S. Z. Li, N. Mathews, J. W. Ager, T. C. Sum, H. Hirao, and X. D. Chen, "Al₂O₃ Surface Complexation for Photocatalytic Organic Transformations," *Journal of the American Chemical Society*, vol. 139, no. 1, pp. 269-276, Jan 2017.

- 154 C. La-o-Vorakiat, L. Cheng, T. Salim, R. A. Marcus, M. E. Michel-Beyerle, Y. M. Lam, and E. E. M. Chia, "Phonon features in terahertz photoconductivity spectra due to data analysis artifact: A case study on organometallic halide perovskites," *Applied Physics Letters*, vol. 110, no. 12, Mar 2017, Art no. 123901.
- 155 S. A. Kulkarni, S. Muduli, G. Xing, N. Yantara, M. J. Li, S. Chen, T. C. Sum, N. Mathews, T. J. White, and S. G. Mhaisalkar, "Modulating Excitonic Recombination Effects through One-Step Synthesis of Perovskite Nanoparticles for Light-Emitting Diodes," *Chemsuschem*, vol. 10, no. 19, pp. 3818-3824, Oct 2017.
- 156 S. A. Kulkarni, T. Baikie, S. Muduli, R. Potter, S. Chen, F. Yanan, P. Bishop, S. S. Lim, T. C. Sum, N. Mathews, and T. J. White, "Investigating the feasibility of symmetric guanidinium based plumbate perovskites in prototype solar cell devices," *Japanese Journal of Applied Physics*, vol. 56, no. 8, Aug 2017, Art no. 08mc05.
- 157 Y. S. Kivshar, W. L. Barnes, O. Hess, and N. Zheludev, "New horizons for nanophotonics," *Philosophical Transactions of the Royal Society a-Mathematical Physical and Engineering Sciences*, vol. 375, no. 2090, Mar 2017, Art no. 20160380.
- 158 Y. J. Ke, X. L. Wen, D. Y. Zhao, R. C. Che, Q. H. Xiong, and Y. Long, "Controllable Fabrication of Two-Dimensional Patterned VO₂ Nanoparticle, Nanodome, and Nanonet Arrays with Tunable Temperature-Dependent Localized Surface Plasmon Resonance," *Acs Nano*, vol. 11, no. 7, pp. 7542-7551, Jul 2017.
- 159 Y. Y. Jiang, P. K. Upputuri, C. Xie, Y. Lyu, L. L. Zhang, Q. H. Xiong, M. Pramanik, and K. Y. Pu, "Broadband Absorbing Semiconducting Polymer Nanoparticles for Photoacoustic Imaging in Second Near-Infrared Window," *Nano Letters*, vol. 17, no. 8, pp. 4964-4969, Aug 2017.
- 160 J. Jiang, D. H. Zhang, B. L. Zhang, and Y. Luo, "Interaction between graphene-coated nanowires revisited with transformation optics," *Optics Letters*, vol. 42, no. 15, pp. 28902893, Aug 2017.
- 161 C. Y. Jiang, F. C. Liu, J. Cuadra, Z. M. Huang, K. Li, A. Rasmita, A. Srivastava, Z. Liu, and W. B. Gao, "Zeeman splitting via spin-valley-layer coupling in bilayer MoTe₂," *Nature Communications*, vol. 8, Oct 2017, Art no. 802.
- 162 S. D. Jenkins, J. Ruostekoski, N. Papasimakis, S. Savo, and N. I. Zheludev, "Many-Body Subradiant Excitations in Metamaterial Arrays: Experiment and Theory," *Physical Review Letters*, vol. 119, no. 5, Aug 2017, Art no. 053901.
- 163 Y. Huang, L. Xiao, T. T. An, W. X. Lim, T. N. Wong, and H. D. Sun, "Fast Dynamic Visualizations in Microfluidics Enabled by Fluorescent Carbon Nanodots," *Small*, vol. 13, no. 34, Sep 2017, Art no. Unsp 1700869.
- 164 C. L. Huang, Y. D. Chong, and M. A. Cazalilla, "Anomalous Nonlocal Resistance and SpinCharge Conversion Mechanisms in Two-Dimensional Metals," *Physical Review Letters*, vol. 119, no. 13, Sep 2017, Art no. 136804.
- 165 W. C. Hu, H. L. Wang, P. P. Shum, and Y. D. Chong, "Exceptional points in a non-Hermitian topological pump," *Physical Review B*, vol. 95, no. 18, May 2017, Art no. 184306.
- 166 W. B. Hu, T. C. He, R. C. Jiang, J. Yin, L. Li, X. M. Lu, H. Zhao, L. Zhang, L. Huang, H. D. Sun, W. Huang, and Q. L. Fan, "Inner salt-shaped small molecular photosensitizer with extremely enhanced two-photon absorption for mitochondrial-targeted photodynamic therapy," *Chemical Communications*, vol. 53, no. 10, pp. 1680-1683, Feb 2017.
- 167 S. Han, M. Gupta, L. Q. Cong, Y. K. Srivastava, and R. Singh, "Toroidal and magnetic Fano resonances in planar THz metamaterials," *Journal of Applied Physics*, vol. 122, no. 11, Sep 2017, Art no. 113105.
- 168 G. F. Han, T. M. Koh, S. S. Lim, T. W. Goh, X. T. Guo, S. W. Leow, R. Begum, T. C. Sum, N. Mathews, and S. Mhaisalkar, "Facile Method to Reduce Surface Defects and Trap Densities in Perovskite Photovoltaics," *Acs Applied Materials & Interfaces*, vol. 9, no. 25, pp. 2129221297, Jun 2017.
- 169 S. T. Ha, R. Su, J. Xing, Q. Zhang, and Q. H. Xiong, "Metal halide perovskite nanomaterials: synthesis and applications," *Chemical Science*, vol. 8, no. 4, pp. 2522-2536, Apr 2017.
- 170 M. Gupta, Y. K. Srivastava, M. Manjappa, and R. Singh, "Sensing with toroidal metamaterial," *Applied Physics Letters*, vol. 110, no. 12, Mar 2017, Art no. 121108.
- 171 M. Glaeske, M. Kumar, T. Bisswanger, S. Vaitiekėnas, C. Soci, R. Narula, A. Bruno, and A. Setaro, "Relaxation lifetimes of plasmonically enhanced hybrid gold-carbon nanotubes systems," *Nanotechnology*, vol. 28, no. 25, Jun 2017, Art no. 255202.
- 172 B. Gholipour, G. Adamo, D. Cortecchia, H. N. S. Krishnamoorthy, M. D. Birowosuto, N. I. Zheludev, and C. Soci, "Organometallic Perovskite Metasurfaces," *Advanced Materials*, vol. 29, no. 9, Mar 2017, Art no. Unsp 1604268.
- 173 Z. Gao, Z. J. Yang, F. Gao, H. R. Xue, Y. H. Yang, J. W. Dong, and B. L. Zhang, "Valley surfacewave photonic crystal and its bulk/edge transport," *Physical Review B*, vol. 96, no. 20, Nov 2017, Art no. 201402.

- 174 Z. Gao, F. Gao, Y. M. Zhang, H. Y. Xu, Y. Luo, and B. L. Zhang, "Forward/Backward Switching of Plasmonic Wave Propagation Using Sign-Reversal Coupling," *Advanced Materials*, vol. 29, no. 26, Jul 2017, Art no. 1700018.
- 175 Z. Gao, F. Gao, H. Y. Xu, Y. M. Zhang, and B. L. Zhang, "Experimental demonstration of FabryPerot open resonators in a surface-wave bandgap crystal," *Applied Physics Letters*, vol. 111, no. 12, Sep 2017, Art no. 121102.
- 176 J. H. Fu, Q. Xu, G. F. Han, B. Wu, C. H. A. Huan, M. L. Leek, and T. C. Sum, "Hot carrier cooling mechanisms in halide perovskites," *Nature Communications*, vol. 8, Nov 2017, Art no. 1300.
- 177 A. M. Dubrovkin, G. Adamo, J. Yin, L. Wang, C. Soci, Q. J. Wang, and N. I. Zheludev, "Visible Range Plasmonic Modes on Topological Insulator Nanostructures," *Advanced Optical Materials*, vol. 5, no. 3, Feb 2017, Art no. Unsp 1600768.
- 178 K. Z. Du, X. Z. Wang, J. Zhang, X. F. Liu, C. Kloc, and Q. H. Xiong, "CdS bulk crystal growth by optical floating zone method: strong photoluminescence upconversion and minimum trapped state emission," *Optical Engineering*, vol. 56, no. 1, Jan 2017, Art no. 011109.
- 179 S. Dong, J. Lian, M. H. Jhon, Y. Chan, and Z. H. Loh, "Pump-Power Dependence of Coherent Acoustic Phonon Frequencies in Colloidal CdSe/CdS Core/Shell Nanoplatelets," *Nano Letters*, vol. 17, no. 5, pp. 3312-3319, May 2017.
- 180 T. T. H. Do, A. G. del Aguila, C. Cui, J. Xing, Z. J. Ning, and Q. H. Xiong, "Optical study on intrinsic exciton states in high-quality CH₃NH₃PbBr₃ single crystals," *Physical Review B*, vol. 96, no. 7, Aug 2017, Art no. 075308.
- 181 T. N. Do, M. F. Gelin, and H. S. Tan, "Simplified expressions that incorporate finite pulse effects into coherent two-dimensional optical spectra," *Journal of Chemical Physics*, vol. 147, no. 14, Oct 2017, Art no. 144103.
- 182 G. Dayal, A. Solanki, X. Y. Chin, T. C. Sum, C. Soci, and R. Singh, "High-Q plasmonic infrared absorber for sensing of molecular resonances in hybrid lead halide perovskites," *Journal of Applied Physics*, vol. 122, no. 7, Aug 2017, Art no. 073101.
- 183 G. Dayal, X. Y. Chin, C. Soci, and R. Singh, "High-Q Plasmonic Fano Resonance for Multiband Surface-Enhanced Infrared Absorption of Molecular Vibrational Sensing," *Advanced Optical Materials*, vol. 5, no. 2, Jan 2017, Art no. Unsp 1600559.
- 184 D. Cortecchia, J. Yin, A. Bruno, S. Z. A. Lo, G. G. Gurzadyan, S. Mhaisalkar, J. L. Bredas, and C. Soci, "Polaron self-localization in white-light emitting hybrid perovskites," *Journal of Materials Chemistry C*, vol. 5, no. 11, pp. 2771-2780, Mar 2017.
- 185 D. Cortecchia, C. Soci, M. Cametti, A. Petrozza, and J. Marti-Rujas, "Crystal Engineering of a Two-Dimensional Lead-Free Perovskite with Functional Organic Cations by Second-Sphere Coordination," *Chempluschem*, vol. 82, no. 5, pp. 681-685, May 2017.
- 186 D. Cortecchia, S. Neutzner, A. R. S. Kandada, E. Mosconi, D. Meggiolaro, F. De Angelis, C. Soci, and A. Petrozza, "Broadband Emission in Two-Dimensional Hybrid Perovskites: The Role of Structural Deformation," *Journal of the American Chemical Society*, vol. 139, no. 1, pp. 3942, Jan 2017.
- 187 D. Cortecchia, K. C. Lew, J. K. So, A. Bruno, and C. Soci, "Cathodoluminescence of SelfOrganized Heterogeneous Phases in Multidimensional Perovskite Thin Films," *Chemistry of Materials*, vol. 29, no. 23, pp. 10088-10094, Dec 2017.
- 188 L. Q. Cong, Y. K. Srivastava, A. Solanki, T. C. Sum, and R. Singh, "Perovskite as a Platform for Active Flexible Metaphotonic Devices," *Acs Photonics*, vol. 4, no. 7, pp. 1595-1601, Jul 2017.
- 189 L. Q. Cong, Y. K. Srivastava, and R. Singh, "Tailoring the multipoles in THz toroidal metamaterials," *Applied Physics Letters*, vol. 111, no. 8, Aug 2017, Art no. 081108.
- 190 L. Q. Cong, P. Pitchappa, Y. Wu, L. Ke, C. Lee, N. Singh, H. Yang, and R. Singh, "Active Multifunctional Microelectromechanical System Metadevices: Applications in Polarization Control, Wavefront Deflection, and Holograms," *Advanced Optical Materials*, vol. 5, no. 2, Jan 2017, Art no. Unsp 1600716.
- 191 L. Q. Cong, P. Pitchappa, C. Lee, and R. Singh, "Active Phase Transition via Loss Engineering in a Terahertz MEMS Metamaterial," *Advanced Materials*, vol. 29, no. 26, Jul 2017, Art no. 1700733.
- 192 H. Choi, M. Neupane, T. Sasagawa, E. E. M. Chia, and J. X. Zhu, "Low-energy surface states in the normal state of alpha-PdBi₂ superconductor," *Physical Review Materials*, vol. 1, no. 3, Aug 2017, Art no. 034201.
- 193 X. Y. Chin, G. Pace, C. Soci, and M. Caironi, "Ambipolar charge distribution in donor-acceptor polymer field-effect transistors," *Journal of Materials Chemistry C*, vol. 5, no. 3, pp. 754-762, Jan 2017.

- 194 S. A. Chernyak, A. S. Ivanov, K. I. Maslakov, A. V. Egorov, Z. X. Shen, S. S. Savilov, and V. V. Lunin, "Oxidation, defunctionalization and catalyst life cycle of carbon nanotubes: a Raman spectroscopy view," *Physical Chemistry Chemical Physics*, vol. 19, no. 3, pp. 2276-2285, Jan 2017.
- 195 W. Chen, S. Bhaumik, S. A. Veldhuis, G. Xing, Q. Xu, M. Gratzel, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Giant five-photon absorption from multidimensional core-shell halide perovskite colloidal nanocrystals," *Nature Communications*, vol. 8, May 2017, Art no. 15198.
- 196 P. H. Chen and Y. D. Chong, "Pseudo-Hermitian Hamiltonians generating waveguide mode evolution," *Physical Review A*, vol. 95, no. 6, Jun 2017, Art no. 062113.
- 197 P. Chen, N. T. Tran, X. L. Wen, Q. H. Xiong, and B. Liedberg, "Inflection Point of the Localized Surface Plasmon Resonance Peak: A General Method to Improve the Sensitivity," *Acs Sensors*, vol. 2, no. 2, pp. 235-242, Feb 2017.
- 198 M. Chen, J. Xia, J. D. Zhou, Q. S. Zeng, K. W. Li, K. Fujisawa, W. Fu, T. Zhang, J. Zhang, Z. Wang, Z. X. Wang, X. T. Jia, M. Terrones, Z. X. Shen, Z. Liu, and L. Wei, "Ordered and Atomically Perfect Fragmentation of Layered Transition Metal Dichalcogenides via Mechanical Instabilities," *Acs Nano*, vol. 11, no. 9, pp. 9191-9199, Sep 2017.
- 199 M. Chen, L. Singh, N. N. Xu, R. Singh, W. L. Zhang, and L. J. Xie, "Terahertz sensing of highly absorptive water-methanol mixtures with multiple resonances in metamaterials," *Optics Express*, vol. 25, no. 13, pp. 14089-14097, Jun 2017.
- 200 L. Chen, N. N. Xu, L. Singh, T. J. Cui, R. Singh, Y. M. Zhu, and W. L. Zhang, "Defect-Induced Fano Resonances in Corrugated Plasmonic Metamaterials," *Advanced Optical Materials*, vol. 5, no. 8, Apr 2017, Art no. Unsp 1600960.
- 201 P. Cencillo-Abad, J. Y. Ou, E. Plum, and N. I. Zheludev, "Electro-mechanical light modulator based on controlling the interaction of light with a metasurface," *Scientific Reports*, vol. 7, Jul 2017, Art no. 5405.
- 202 A. Bruno, D. Cortecchia, X. Y. Chin, K. W. Fu, P. P. Boix, S. Mhaisalkar, and C. Soci, "Temperature and Electrical Poling Effects on Ionic Motion in MAPbI₃ Photovoltaic Cells," *Advanced Energy Materials*, vol. 7, no. 18, Sep 2017, Art no. 1700265.
- 203 M. Bradshaw, S. M. Assad, J. Y. Haw, S. H. Tan, P. K. Lam, and M. Gu, "Overarching framework between Gaussian quantum discord and Gaussian quantum illumination," *Physical Review A*, vol. 95, no. 2, Feb 2017, Art no. 022333.
- 204 D. G. Baranov, A. Krasnok, T. Shegai, A. Alu, and Y. D. Chong, "Coherent perfect absorbers: linear control of light with light," *Nature Reviews Materials*, vol. 2, no. 12, Dec 2017, Art no. 17064.
- 205 E. Atmatzakis, N. Papasimakis, and N. I. Zheludev, "Plasmonic absorption properties of bimetallic metamaterials," *Microelectronic Engineering*, vol. 172, pp. 30-34, Mar 2017.
- 206 C. Altuzarra, S. Vezzoli, J. Valente, W. B. Gao, C. Soci, D. Faccio, and C. Couteau, "Coherent Perfect Absorption in Metamaterials with Entangled Photons," *Acs Photonics*, vol. 4, no. 9, pp. 2124-2128, Sep 2017.
- 207 P. Akhtar, C. Zhang, T. N. Do, G. Garab, P. H. Lambrev, and H. S. Tan, "Two-Dimensional Spectroscopy of Chlorophyll a Excited-State Equilibration in Light-Harvesting Complex II," *Journal of Physical Chemistry Letters*, vol. 8, no. 1, pp. 257-263, Jan 2017.
- 208 Y. Abe, V. Savikhin, J. Yin, A. C. Grimsdale, C. Soci, M. F. Toney, and Y. M. Lam, "Unique Reversible Crystal-to-Crystal Phase Transition-Structural and Functional Properties of Fused Ladder Thienoarenes," *Chemistry of Materials*, vol. 29, no. 18, pp. 7686-7696, Sep 2017.
- 209 "Near-Unity Emitting Copper-Doped Colloidal Semiconductor Quantum Wells for Luminescent Solar Concentrators", M. Sharma, K. Gungor, A. Yeltik, M. Olutas, B. Guzelturk, Y. Kelestemur, T. Erdem, S. Delikanli, J. R. McBride and H. V. Demir, *Advanced Materials*, 29, 1700821 (2017).
- 210 "High-efficiency low-crosstalk dielectric metasurfaces of mid-wave infrared focal plane arrays", O. Akin, and H. V. Demir, *Applied Physics Letters*, 110, 143106 (2017).
- 211 "Plasmon-Enhanced Energy Transfer in Photosensitive Nanocrystal Device', S. Akhavan, M. Z. Akgul, P. L.Hernandez-Martinez, and H. V. Demir, *ACS Nano*, 11, 5430 (2017).
- 212 "Alloyed Heterostructures of CdSexS1-x Nanoplatelets with Highly Tunable Optical Gain Performance", Y. Kelestemur, D. Dede, K. Gungor, C. Usanmaz, O. Erdem and H. V. Demir *Chemistry of Materials*, 29, 4857 (2017).
- 213 "High-Efficiency Optical Gain in Type-II Semiconductor Nanocrystals of Alloyed Colloidal Quantum Wells", B. Guzelturk, Y. Kelestemur, M. Olutas, Q. Li, T. Lian and H. V. Demir, *J. Phys. Chem. Lett.*, 8, 5317 (2017).
- 214 "Robust whispering-gallery-mode microbubble lasers from colloidal quantum dots", Y. Wang, V. D. Ta, S. K. Leck, B. H. Tan, Z. Wang, T. He, C.-D. Ohl, H. V. Demir, H. Sun, *Nano Letters*, 17, 2640 (2017).

- 215 "Light Trapping in Inverted Organic Photovoltaics With Nanoimprinted ZnO Photonic Crystals", A. Nirmal, A. K. K. Kyaw, W. Jianxiong, K. Dev, X. W. Sun, H. V. Demir, IEEE Journal of Photovoltaics, 7, 545 (2017).
- 216 "High-efficiency and low-loss gallium nitride dielectric metasurfaces for nanophotonics at visible wavelengths", N. K. Emani, E. Khaidarov, R. Paniagua Dominguez, Y. H. Fu, V. Valuckas, S. Lu, X. Zhang, S. T. Tan, H. V. Demir, and A. I. Kuznetsov, Applied Physics Letters, 111, 221101 (2017).
- 217 "Investigation of p-type depletion doping for InGaN/GaN-based light-emitting diodes", Y. Zhang, Z.-H. Zhang, S. T. Tan, P. L. Hernandez-Martinez, B. Zhu, S. Lu, X. J. Kang, X. W. Sun, and H. V. Demir, Applied Physics Letters, 110, 033506 (2017).
- 218 "Wavelength tuning of the spirally drawn whispering gallery mode microfiber lasers and the perspectives for sensing applications", S. Yang, T. Y. K. Eugene, Y. Wang, X. Zhao, H. V. Demir, and H. Sun, Optics Express, 25, 2618 (2017).
- 219 "Rapid Crystallization of All-Inorganic CsPbBr₃ Perovskite for High-Brightness Light-Emitting Diodes", Y. F. Ng, N. F. Jamaludin, N. Yantara, M. Li, V. K. R. Irukuvarjula, H. V. Demir, T. C. Sum, S. Mhaisalkar, N. Mathews, ACS Omega, 2, 2757 (2017).
- 220 "High performance infrared photodetectors up to 2.8 μm wavelength based on lead selenide colloidal quantum dots", M. Thambidurai, Y. Jang, A. Shapiro, Y. Gao, H. Xiaonan, Y. Xuechao, Q. J. Wang, E. Lifshitz, H. V. Demir, and C. Dang, Optical Materials Express, 7, 2326 (2017).
- 221 J. An, T.S.D. Le, C.H.J. Lim, V.T. Tran, Z. Zhan, Y. Gao, L. Zheng, G. Sun, Y.J. Kim, Single-Step Selective Laser Writing of Flexible Photodetectors for Wearable Optoelectronics, Advanced Science, 5 (2018).
- 222 H. Yu, H. Fan, J. Wang, Y. Zheng, Z. Dai, Y. Lu, J. Kong, X. Wang, Y.J. Kim, Q. Yan, J.M. Lee, 3D ordered porous MoxC (x = 1 or 2) for advanced hydrogen evolution and Li storage, Nanoscale, 9 (2017) 7260-7267.
- 223 G. Yi, H. Lee, J. Jiannan, B.J. Chun, S. Han, H. Kim, Y.W. Kim, D. Kim, S.W. Kim, Y.J. Kim, Nonlinear third harmonic generation at crystalline sapphires, Optics Express, 25 (2017) 26002-26010.
- 224 W. Xu, T.K. Lee, B.S. Moon, D. Zhou, H. Song, Y.J. Kim, S.K. Kwak, P. Chen, D.H. Kim, Spectral and spatial characterization of upconversion luminescent nanocrystals as nanowaveguides, Nanoscale, 9 (2017) 9238-9245.
- 225 J. Park, S. Kim, B.S. Kim, Y.J. Kim, S.W. Kim, Tuning range extension of pulse repetition rate using chirped fiber Bragg gratings, Optics Express, 25 (2017) 1413-1420.
- 226 C.M.B. Ho, A. Mishra, P.T.P. Lin, S.H. Ng, W.Y. Yeong, Y.J. Kim, Y.J. Yoon, 3D Printed Polycaprolactone Carbon Nanotube Composite Scaffolds for Cardiac Tissue Engineering, Macromolecular Bioscience, 17 (2017).
- 227 C.M.B. Ho, A. Mishra, K. Hu, J. An, Y.J. Kim, Y.J. Yoon, Femtosecond-Laser-Based 3D Printing for Tissue Engineering and Cell Biology Applications, ACS Biomaterials Science and Engineering, 3 (2017) 2198-2214.
- 228 S. Han, H. Jang, S. Kim, Y.J. Kim, S.W. Kim, MW peak power Er/Yb-doped fiber femtosecond laser amplifier at 1.5 μm center wavelength, Laser Physics Letters, 14 (2017).
- 229 H. Farrokhi, T.M. Rohith, J. Boonruangkan, S. Han, H. Kim, S.W. Kim, Y.J. Kim, High-brightness laser imaging with tunable speckle reduction enabled by electroactive micro-optic diffusers, Scientific Reports, 7 (2017).
- 230 H. Farrokhi, J. Boonruangkan, B.J. Chun, T.M. Rohith, A. Mishra, H.T. Toh, H.S. Yoon, Y.J. Kim, Speckle reduction in quantitative phase imaging by generating spatially incoherent laser field at electroactive optical diffusers, Optics Express, 25 (2017) 10791-10800.
- 231 J. An, T.S.D. Le, Y. Huang, Z. Zhan, Y. Li, L. Zheng, W. Huang, G. Sun, Y.J. Kim, All-Graphene-Based Highly Flexible Noncontact Electronic Skin, ACS Applied Materials and Interfaces, 9 (2017) 44593-44601.
- 232 A. Shinde, S.M. Perinchery, V.M. Murukeshan, A targeted illumination optical fiber probe for high resolution fluorescence imaging and optical switching, Scientific Reports, 7 (2017).
- 233 H.T. Lim, V.M. Murukeshan, Hyperspectral photoacoustic spectroscopy of highly-absorbing samples for diagnostic ocular imaging applications, International Journal of Optomechatronics, 11 (2017) 36-46.
- 234 H.T. Lim, V.M. Murukeshan, Note: Design considerations and characterization of a flexible snapshot hyperspectral probe, Review of Scientific Instruments, 88 (2017).
- 235 H.T. Lim, V.M. Murukeshan, Hyperspectral imaging of polymer banknotes for building and analysis of spectral library, Optics and Lasers in Engineering, 98 (2017) 168-175.
- 236 H. Lee, C.H.J. Lim, M.J. Low, N. Tham, V.M. Murukeshan, Y.J. Kim, Lasers in additive manufacturing: A review, International Journal of Precision Engineering and Manufacturing - Green Technology, 4 (2017) 307-322.
- 237 X.J.J. Hong, V.K. Shinoj, V.M. Murukeshan, M. Baskaran, T. Aung, Imaging of trabecular meshwork using Bessel-Gauss light sheet with fluorescence, Laser Physics Letters, 14 (2017).

- 238 X.J.J. Hong, V.K. Shinoj, V.M. Murukeshan, M. Baskaran, T. Aung, Preclinical imaging of iridocorneal angle and fundus using a modified integrated flexible handheld probe, *Journal of Medical Imaging*, 4 (2017).
- 239 A. Haridas, C. Song, K. Chan, V.M. Murukeshan, Nondestructive characterization of thermal damages and its interactions in carbon fibre composite panels, *Fatigue and Fracture of Engineering Materials and Structures*, 40 (2017) 1562-1580.
- 240 J. Bingi, V.M. Murukeshan, Speckle lithography for fabricating biomimetic spindle structures of desert beetle skin, *Biomedical Physics & Engineering Express*, (2017).
- 241 C. Zuo, J. Sun, J. Li, J. Zhang, A. Asundi, Q. Chen, High-resolution transport-of-intensity quantitative phase microscopy with annular illumination, *Scientific Reports*, 7 (2017).
- 242 Z. Zhang, S. Chen, H. Zheng, Z. Zeng, H. Gao, Y. Yu, A.K. Asundi, Full-color holographic 3D display using slicebased fractional Fourier transform combined with free-space Fresnel diffraction, *Applied Optics*, 56 (2017) 5668-5675.
- 243 Z. Zhang, S. Chen, H. Zheng, Z. Zeng, H. Gao, Y. Yu, A.K. Asundi, Full-color holographic 3D display using slice-based fractional Fourier transform combined with free-space Fresnel diffraction: Erratum (Applied Optics (2017) 56 (5668-5675) DOI: 10.1364/AO.56.005668), *Applied Optics*, 56 (2017) 7656.
- 244 Z. Zeng, H. Zheng, Y. Yu, A.K. Asundi, S. Valyukh, Full-color holographic display with increased-viewing-angle [Invited], *Applied Optics*, 56 (2017) F112-F120.
- 245 Z. Zeng, H. Zheng, Y. Yu, A.K. Asundi, Off-axis phase-only holograms of 3D objects using accelerated point-based Fresnel diffraction algorithm, *Optics and Lasers in Engineering*, 93 (2017) 47-54.
- 246 Z. Wang, W. Qu, F. Yang, A. Tian, A. Asundi, Absolute measurement of aspheric lens with electrically tunable lens in digital holography, *Optics and Lasers in Engineering*, 88 (2017) 313-318.
- 247 Z. Wang, W. Qu, A. Asundi, A simplified expression for aspheric surface fitting, *Optik*, 140 (2017) 291-298.
- 248 Z. Wang, J. Jiao, W. Qu, F. Yang, H. Li, A. Tian, A. Asundi, Linear programming phase unwrapping for dual-wavelength digital holography, *Applied Optics*, 56 (2017) 424-433.
- 249 C. Wang, J. Sun, F. Sun, J. Zhu, Z. Yuan, A. Asundi, Coupling efficiency of ultra-small gradient-index fiber probe, *Optics Communications*, 389 (2017) 265-269.
- 250 M. Maheshwari, S.C. Tjin, Y. Yang, A. Asundi, Wavelength-shifted chirped FBGs for temperature compensated strain measurement, *Sensors and Actuators, A: Physical*, 265 (2017) 231-235.
- 251 S. Feng, Q. Chen, C. Zuo, T. Tao, Y. Hu, A. Asundi, Motion-oriented high speed 3-D measurements by binocular fringe projection using binary aperiodic patterns, *Optics Express*, 25 (2017) 540-559.
- 252 S. Feng, Q. Chen, C. Zuo, A. Asundi, Fast three-dimensional measurements for dynamic scenes with shiny surfaces, *Optics Communications*, 382 (2017) 18-27.
- 253 Yu, P.; Lin, J.; Sun, L.; Le, Q. L.; Yu, X.; Gao, G.; Hsu, C.-H.; Wu, D.; Chang, T.-R.; Zeng, Q.; Liu, F.; Wang, Q. J.; Jeng, H.-T.; Lin, H.; Trampert, A.; Shen, Z.; Suenaga, K.; Liu, "Metal-Semiconductor Phase-Transition in WSe₂(1-x)Te₂x Monolayer", *Advanced Materials*, vol 29, no. 4, p1603991, 1/1/2017.
- 254 P. Balasubramanian, "Asynchronous Carry Select Adders", *Engineering Science and Technology, an International Journal*, vol 20, no.3. pp1066-1074, 1/2/2017.
- 255 Guang-Can Li, Yong-Liang Zhang, Jing Jiang, Yu Luo, Dang Yuan Lei, "Metal-Substrate-Mediated Plasmon Hybridization in a Nanoparticle Dimer for Photoluminescence Line-Width Shrinking and Intensity Enhancement", *ACS Nano*, vol 11, no.3, pp3067-3080, 1/3/2017.
- 256 Pei-Nan Ni, Jin-Chao Tong, Landobasa YM Tobing, Shu-Peng Qiu, Zheng-Ji Xu, Xiao-Hong Tang, Dao-Hua Zhang, "A Simple Method for the Growth of Very Smooth and Ultra-Thin GaSb Films on GaAs (111) Substrate by MOCVD", *Journal of Electronic Materials*, 1/2/2017.
- 257 Chengbin Yang, Kok Ken Chan, Wen-Jen Lin, Alana Mauluidy Soehartono, Guimiao Lin, Huiting Toh, Ho Sup Yoon, Chih-Kuang Chen, Ken-Tye Yong, "Biodegradable nanocarriers for small interfering ribonucleic acid (siRNA) co-delivery strategy increase the chemosensitivity of pancreatic cancer cells to gemcitabine", *Nano Research*, DOI 10.1007/s12, 1/5/2017.
- 258 P. Balasubramanian, K. Prasad, "Asynchronous Early Output Dual-Bit Full Adders Based on Homogeneous and Heterogeneous Delay-Insensitive Data Encoding", *WSEAS Transactions on Circuits and Systems*, vol 16, pp64-73, 1/4/2017.
- 259 B. Meng, B. Qiang, E. Rodriguez, X. N. Hu, G. Liang, and Q. J. Wang, "Coherent emission from integrated Talbot-cavity quantum cascade lasers", *Optics Express*, vol 25. no.4, pp3077-3082, 1/2/2017.
- 260 J. Zhang, Z. Liao, Yu Luo, X. Shen, S. A. Maier, T. J. Cui, "Spoof Plasmon Hybridization", *Laser & Photonics Reviews*, vol 11, no 1, p1600191, 1/1/2017.

- 261 Guimiao Lin, Chih-Kuang Chen, Feng Yin, Chengbin Yang, Jinglin Tian, Ting Chen, Gaixia Xu, Chunxiao He, Marie Chia-Mi Lin, Jie Wang, Fei Lu, Xiaomei Wang and Ken-Tye Yong, "Biodegradable nanoparticles as siRNA carriers for in vivo gene silencing and pancreatic cancer therapy", *Journal of Materials Chemistry B*, DOI: 10.1039/C6, 1/4/2017.
- 262 ZHANG Hailiang, WU Zhifang, SHUM Perry Ping, DINH Xuan Quyen, LOW Chun Wah, XU Zhilin, WANG Ruoxu, SHAO Xuguang, FU Songnian, TONG Weijun and TANG Ming, "Highly sensitive strain sensor based on helical structure combined with Mach-Zehnder interferometer in multicore fiber", *Scientific Reports*, vol 7, p46633, 1/1/2017.
- 263 Zhang, Butian, Chengbin Yang, Yuan Gao, Yue Wang, Chengfei Bu, Siyi Hu, Liwei Liu, Hilmi Volkan Demir, Junle Qu, and Ken-Tye Yong, "Engineering Quantum Dots with Different Emission Wavelengths and Specific Fluorescence Lifetimes for Spectrally and Temporally Multiplexed Imaging of Cells", *Nanotheranostics*, vol 1, no.1, pp131-140, 1/3/2017.
- 264 ZHANG Nancy Meng Ying, LI Kaiwei, SHUM Perry Ping, YU Xuechao, ZENG Shuwen, WU Zhifang, WANG Qi Jie, YONG Ken Tye and WEI Lei, "Hybrid Graphene/Gold Plasmonic Fiber-Optic Biosensor", *Advanced Materials Technologies*, vol 2, no.2, p1600185, 1/1/2017.
- 265 Jianwei Liu, Chengbin Yang, Jing Liu, Rui Hu, Yazhuo Hu, Hongyan Chen, Wing-Cheung Law, Mark T. Swihart, Ling Ye, Kuan Wang, Ken-Tye Yong, "Effects of Cd-based Quantum Dot Exposure on the Reproduction and Offspring of Kunming Mice over Multiple Generations", *Nanotheranostics*, vol 1, no.1, pp23-37, 1/1/2017.
- 266 G. Liang, X. Hu, X. Yu, Y. Shen, L. H. Li, A. G. Davies, E. H. Lin, H. K. Liang, Y. Zhang, S. F. Yu, and Q. J. Wang, "Integrated terahertz Graphene modulator with 100% modulation depth", *ACS Photonics*, vol 2, pp1559-1566, 1/1/2017.
- 267 G.Liang, Y. Zeng, X. Hu, H. Yu, H. Liang, Y. Zhang, L. Li, A. G. Davies, E. H. Linfield, and Q. J. Wang, "Monolithic Semiconductor Lasers with Dynamically Tunable Linear-to-Circular Polarization", *ACS Photonics*, vol 4, pp517-524, 1/2/2017.
- 268 Zhao, M.; Yuan, W.,* Li, C. M., "Controlled self-assembly of Ni foam supported poly(ethyleneimine)/reduced graphene oxide three-dimensional composite electrodes with remarkable synergistic effects for efficient oxygen evolution", *Journal of Materials Chemistry A*, vol 5, pp1201-1210, 1/1/2017.
- 269 S.G.Hu, Y.Liu, H.K.Li, T.P.Chen, Q.Yu, and L.J.Deng, "A MoS₂-based coplanar neuron transistor for logic applications", *Nanotechnology*, vol 28, p214001, 1/5/2017.
- 270 K.Qian, Y.J. Tay, M.-F.Lin, J.W.Chen, H.K.Li, J.J.Lin, J.X.Wang, G.F.Cai, V.C.Nguyen, H.T.Teo, T.P.Chen, and P.S.Lee, "Direct Observation of Indium Conductive Filaments in Transparent, Flexible, and Transferable Resistive Switching Memory", *ACS Nano*, vol 11, no.2, pp1712-1718, 1/1/2017.
- 271 P. Balasubramanian, K. Prasad, "Latency Optimized Asynchronous Early Output Ripple Carry Adder based on Delay-Insensitive Dual-Rail Data Encoding", *International Journal of Circuits, Systems and Signal Processing*, vol 11, pp65-74, 1/6/2017.
- 272 Zhen Gao, Fei Gao, Youming Zhang, Hongyi Xu, Yu Luo, Baile Zhang, "Forward/Backward Switching of Plasmonic Wave Propagation Using Sign-Reversal Coupling", *Advanced Materials*, 1/4/2017.
- 273 Dr. Chen Xu, Dr. Hui Teng Tan, Mani Ulaganathan, Prof. Qingyu Yan, "FeS–ZnS Composite Nanosheets for Enhanced Lithium Storage Properties", *ChemNanoMat*, 1/4/2017.
- 274 Xiaoyan Wang, Weiyong Yuan,* Yanan Yu, and Chang Ming Li, "Synthesis of Cobalt Phosphide Nanoparticles Supported on Pristine Graphene by Dynamically Self-Assembled Graphene Quantum Dots for Hydrogen Evolution", *ChemSusChem*, vol 10, pp1014-1021, 1/1/2017.

2016

- 1 Z. Wu, P. P. Shum, X. Shao, H. Zhang, N. Zhang, T. Huang, G. Humbert, J.-L. Auguste, F. Gérôme, J.-M. Blondy, and X. Q. Dinh,"Temperature- and strain-insensitive curvature sensor based on ring-core modes in dual-concentric-core fiber",*Optics Letters*,vol 41,No.2,pp380-383,01-Jan-2016.
- 2 B. R. Li, L. Gan, S. N. Fu, Z. L. Xu, M. Tang, W. J. Tong, P. P. Shum,"The Role of Effective Area in the Design of Weakly Coupled MCF: Optimization Guidance and OSNR Improvement",*IEEE Journal of Selected Topics in Quantum Electronics*,vol ,No.,pp,01-Jan-2016.
- 3 Z. Y. Zhao, Y. L. Dang, M. Tang, B. R. Li, L. Gan, S. N. Fu, H. F. Wei, W. J. Tong, P. Shum, D. M. Liu,"Spatial-division multiplexed Brillouin distributed sensing based on a heterogeneous multicore fiber",*Optics Letters*,vol ,No.,pp,01-Jan-2016.
- 4 Z. Y. Yan, B. A. Sun, X. H. Li, J. Q. Luo, P. P. Shum, X. Yu, Y. Zhang, Q. J. Wang,"Widely tunable Tm-doped mode-locked all-fiber laser",*Scientific Reports*,vol ,No.,pp,01-Jan-2016.
- 5 L. Xu, J. C. Cheng, M. Tang, J. D. Wu, S. N. A. Fu, P. P. Shum, D. M. Liu,"Experimental Verification of Relative Phase Noise in Raman Amplified Coherent Optical Communication System",*Journal of Lightwave Technology* ,vol ,No.,pp,01-Jan-2016.
- 6 Z. P. Xiao, S. N. Fu, S. C. Yao, M. Tang, P. Shum, D. M. Liu,"ICI Mitigation for Dual-Carrier Superchannel Transmission Based on m-PSK and m-QAM Formats",*Journal of Lightwave Technology* ,vol ,No.,pp,01-Jan-2016.
- 7 Z. C. Wu, S. N. Fu, K. Jiang, J. Song, H. Z. Li, M. Tang, P. Shum, D. M. Liu,"Switchable thulium-doped fiber laser from polarization rotation vector to scalar soliton",*Scientific Reports*,vol ,No.,pp,01-Jan-2016.
- 8 G. H. Wang, W. X. Jiao, Y. M. Dong, L. Wei, D. J. J. Hu, P. Shum, X. P. Zhang,"The Numerical Modeling of 3D Microfiber Couplers and Resonators",*IEEE Photonics Technology Letters*,vol ,No.,pp,01-Jan-2016.
- 9 T. T. Wu, P. P. Shum, Y. X. Sun, T. Y. Huang, L. Wei,"Third Harmonic Generation With the Effect of Nonlinear Loss",*Journal of Lightwave Technology* ,vol ,No.,pp,01-Jan-2016.
- 10 H. Wu, R. X. Wang, D. M. Liu, S. N. Fu, C. Zhao, H. F. Wei, W. J. Tong, P. P. Shum, M. Tang,"Few-mode fiber based distributed curvature sensor through quasi-single-mode Brillouin frequency shift",*Optics Letters*,vol ,No.,pp,01-Jan-2016.
- 11 H. Y. Tang, S. N. Fu, H. Liu, M. Tang, P. Shum, D. M. Liu,"Low-Complexity Carrier Phase Recovery Based on Constellation Classification for M-ary Offset-QAM Signal",*Journal of Lightwave Technology* ,vol ,No.,pp,01-Jan-2016.
- 12 L. Shi, D. Li, J. L. He, L. Deng, M. F. Cheng, M. Tang, S. N. Fu, M. M. Zhang, P. P. Shum, D. M. Liu,"Experimental demonstration of a 10 Gb/s non-orthogonal multi-dimensional CAP-PON system based on the ISI and CCI cancellation algorithm",*Optics Letters*,vol ,No.,pp,01-Jan-2016.
- 13 Y. Y. Liu, X. Y. Dong, M. Jiang, X. Yu, P. Shum,"Multi-wavelength erbium-doped fiber laser based on random distributed feedback",*Applied Physics B*,vol ,No.,pp,01-Jan-2016.
- 14 M. Liu, B. M. Zhang, P. P. Shum, X. P. Cheng,"Nanosecond Pulse Fiber Laser Blackening of Aluminum Alloy With Alumina Surface",*IEEE Photonics Technology Letters*,vol ,No.,pp,01-Jan-2016.
- 15 M. Liu, B. M. Zhang, P. P. Shum, X. P. Cheng,"Pulsed Pumping for Pulsewidth Tunable Nanosecond Ytterbium-Doped Fiber Laser",*IEEE Photonics Technology Letters*,vol ,No.,pp,01-Jan-2016.
- 16 R. Lin, Z. Feng, M. Tang, R. Wang, S. Fu, P. Shum, D. Liu, J. Chen,"Palm-shaped spectrum generation for dual-band millimeter wave and baseband signals over fiber",*Optics Communications*,vol ,No.,pp,01-Jan-2016.
- 17 J. P. Liang, Q. Mo, S. N. Fu, M. Tang, P. Shum, D. M. Liu,"Design and fabrication of elliptical-core few-mode fiber for MIMO-less data transmission",*Optics Letters*,vol ,No.,pp,01-Jan-2016.
- 18 X. H. Li, K. Wu, Z. P. Sun, B. Meng, Y. G. Wang, Y. S. Wang, X. C. Yu, X. Yu, Y. Zhang, P. P. Shum, Q. J. Wang,"Single-wall carbon nanotubes and graphene oxide-based saturable absorbers for low phase noise mode-locked fiber lasers",*Scientific Reports*,vol ,No.,pp,01-Jan-2016.
- 19 X. X. Jiang, D. M. Liu, M. F. Cheng, L. Deng, S. N. Fu, M. M. Zhang, M. Tang, P. Shum,"High-frequency reverse-time chaos generation using an optical matched filter",*Optics Letters*,vol ,No.,pp,01-Jan-2016.
- 20 X. X. Jiang, M. F. Cheng, F. G. Luo, L. Deng, S. N. Fu, C. J. Ke, M. M. Zhang, M. Tang, P. Shum, D. M. Liu,"Electro-optic chaotic system based on the reverse-time chaos theory and a nonlinear hybrid feedback loop",*Optics Express*,vol ,No.,pp,01-Jan-2016.
- 21 K. Jiang, Z. C. Wu, S. N. Fu, J. Song, H. Z. Li, M. Tang, P. Shum, D. M. Liu,"Switchable Dual-Wavelength Mode-Locking of Thulium-Doped Fiber Laser Based on SWNTs",*IEEE Photonics Technology Letters*,vol ,No.,pp,01-Jan-2016.

- 22 J. L. He, B. R. Li, L. Deng, M. Tang, L. Gan, S. N. Fu, P. P. Shum, D. M. Liu,"Experimental investigation of inter-core crosstalk tolerance of MIMO-OFDM/OQAM radio over multicore fiber system",Optics Express,vol ,No.,pp,01-Jan-2016.
- 23 J. L. He, B. R. Li, L. Deng, M. Tang, L. Gan, S. N. Fu, P. P. Shum, D. M. Liu,"Experimental Demonstration of Bidirectional OFDM/OQAM-MIMO Signal Over a Multicore Fiber System",IEEE Photonics Journal,vol ,No.,pp,01-Jan-2016.
- 24 L. Gan, R. X. Wang, D. M. Liu, L. Duan, S. Liu, S. N. A. Fu, B. R. Li, Z. H. Feng, H. F. Wei, W. J. Tong, P. Shum, M. Tang,"Spatial-Division Multiplexed Mach-Zehnder Interferometers in Heterogeneous Multicore Fiber for Multiparameter Measurement",IEEE Photonics Journal,vol ,No.,pp,01-Jan-2016.
- 25 Z. H. Feng, Q. Wu, M. Tang, R. Lin, R. X. Wang, L. Deng, S. N. Fu, P. P. Shum, D. M. Liu,"Dispersion-Tolerant DDO-OFDM System and Simplified Adaptive Modulation Scheme Using CAZAC Precoding",Journal of Lightwave Technology ,vol ,No.,pp,01-Jan-2016.
- 26 J. Song, S. N. Fu, B. Liu, M. Tang, P. Shum, and D. M. Liu,"Impact of Sampling Source Repetition Frequency in Linear Optical Sampling",IEEE Photonics Technology Letters,vol 28,No.,pp15-18,01-Jan-2016.
- 27 Zhifeng Zhang, Yilei Zhang,"Finite element simulation of extrusion of optical fiber preforms: Effects of wall slip",Optical Fiber Technology,vol 28,No.,pp,01-Jan-2016.
- 28 T. Gong, N. Zhang, K. V. Kong, D. Goh, C. Ying, J. Auguste, P. Shum, L. Wei, G. Humbert, K. Yong, and M. Olivo,"Rapid SERS monitoring of lipid-peroxidation-derived protein modifications in cells using photonic crystal fiber sensor",Journal of Biophotonics,vol 9,No.,pp32-37,01-Jan-2016.
- 29 PV Sudeep, S Issac Niwas, P Palanisamy, Jeny Rajan, Y. Xiaojun, X. Wang, Y. Luo, Linbo Liu,"Enhancement and Bias Removal of Optical Coherence Tomography Images: an Iterative Approach with Adaptive Bilateral Filtering",Computers in Biology and Medicine,vol ,No.,pp,01-Feb-2016.
- 30 W. H. Wee, Y. J. Ye, Yu Luo,"Towards a practical compact magnifying superlens—a simple simplicial design",Journal of Optics,vol 18,No.,pp044011,01-Apr-2016.
- 31 Xiaosheng Huang, Wenliang Qi, Daryl Ho, Ken-Tye Yong, Feng Luan, and Seongwoo Yoo,"Hollow core anti-resonant fiber with split cladding",Optics Express,vol 24,No.7,pp7670-7678,01-Apr-2016.
- 32 M. Kraft, A. Braun, Y. Luo, S. A. Maier, and J. B. Pendry,"Bianisotropy and Magnetism in Plasmonic Gratings",ACS Photonics,vol 3,No.5,pp764–769,01-May-2016.
- 33 B. Zhu, S.T. Tan, W. Liu, S. Lu, Y.P. Zhang, S. Chen, N. Hasanov, X. Kang, and H. V. Demir,"Modulating ohmic contact through InGaNyOz interfacial layer for high-performance InGaN/GaN-based light-emitting diodes",IEEE Photonics Journal,vol ,No.,pp,01-May-2016.
- 34 Yuemei Luo*, Dongyao Cui, Xiaojun Yu, Si Chen, Xinyu Liu, Hongying Tang, Xianghong Wang, Linbo Liu,"Modeling of Mechanical Stress Exerted by Cholesterol Crystallization on Atherosclerotic Plaques",PLoS ONE,vol ,No.,pp,01-May-2016.
- 35 V. Pacheco-Peña, M. Beruete, A. I. Fernandez-Dominguez, Y. Luo, M. Navarro-Cia,"Description of Bow-Tie Nanoantennas Excited by Localized Emitters Using Conformal Transformation",ACS Photonics,vol 3,No.7,pp1223–1232,01-Jun-2016.
- 36 W.Qi, X.Huang, D.Ho, S.Yoo, K.T.Yong, F.Luan,"Micro-structured Inline Optical Fiber Structure for Dispersion Control and Coherent Supercontinuum Generation",IEEE Photonics Journal,vol 8,No.3,pp,01-Jun-2016.
- 37 J. Tao, Y. Luo, L. Wang, H. Cai, T. Sun, J. Song, H. Liu, and Y. Gu,"An ultrahigh-accuracy Miniature Dew Point Sensor based on an Integrated Photonics Platform",Scientific Reports,vol 6,No.,pp29672,01-Jul-2016.
- 38 ZHANG Hailiang, WU Zhifang, SHUM Perry Ping, WANG Ruoxu, DINH Xuan Quyen, FU Songnian, TONG Weijun and TANG Ming,"Fiber Bragg gratings in heterogeneous multicore fiber for directional bending sensing",Journal of Optics,vol 18,No.8,pp085705,01-Jul-2016.
- 39 Zhenfeng Zhuang, Phil Surman, Lei Zhang, Rahul Rawat, Shizheng Wang, Yuanjin Zheng, Xiao Wei Sun,"Moiré-reduction method for slanted-lenticular-based quasi-three-dimensional displays",Optics Communications,vol 381,No.,pp314–322,01-Jul-2016.
- 40 Raghuraman Sidharthan, Seongwoo Yoo, Daryl Ho, Liling Zhang, Wenliang Qi, Men Seng Yue, Lei Zhu, Xinyong Dong, Swee Chuan Tjin,"Stress-Loss Correlation and Dispersion Control in Highly GeO₂-doped Fibers",IEEE Photonics Technology Letters,vol 28,No.14,pp1521-1524,01-Jul-2016.
- 41 Matthias Kraft, Yu Luo, and J. B. Pendry,"Transformation Optics: A Time- and Frequency-Domain Analysis of Electron-Energy Loss Spectroscopy",Nano Letters,vol 16,No.8,pp5156–5162,01-Aug-2016.
- 42 Xiaojun Yu, Yuemei Luo, Xinyu Liu, Si Chen, Xianghong Wang, Shi Chen, Linbo Liu,"Towards High speed imaging of cellular structures in rat colon using micro-optical coherence tomography",IEEE Photonics Journal,vol 8,No.4,pp1-8,01-Aug-2016.

- 43 Hongjuan Wang, Oleg Yaroshchuk, Xiangyu Zhang, Zhenfeng Zhuang, Phil Surman, Xiao Wei Sun, and Yuanjin Zheng,"Large-aperture transparent beam-steering screen based on LCMPA",Applied Optics,vol ,No.,pp,01-Sep-2016.
- 44 Zhuang, Zhenfeng, Lei Zhang, Phil Surman, Song Guo, Bin Cao, Yuanjin Zheng, and Xiao Wei Sun,"Directional view method for a time-sequential autostereoscopic display with full resolution",Applied Optics,vol 55,No.28,pp7847-7854,01-Sep-2016.
- 45 Kaiwei Li, Ting Zhang, Nan Zhang, Mengying Zhang, Jing Zhang, Tingting Wu, Shaoyang Ma, Junying Wu, Ming Chen, Yi He, Lei Wei,"Integrated liquid crystal photonic bandgap fiber devices",Frontiers of Optoelectronics,vol 9,No.3,pp466-482,01-Oct-2016.
- 46 Kaiwei Li, Ting Zhang, Guigen Liu, Nan Zhang, Mengying Zhang, Lei Wei,"Ultrasensitive optical microfiber coupler based sensors operating near the turning point of effective group index difference",Applied Physics Letters,vol 109,No.10,pp101101,01-Oct-2016.
- 47 Yue Li, Qizhen Sun, Zhilin Xu, Yiyang Luo, and Deming Liu,"A Single Longitudinal Mode Fiber Ring Laser Based on Cascaded Microfiber Knots Filter",IEEE Photonics Technology Letters,vol 28,No.20,pp2172-2175,01-Oct-2016.
- 48 ZHANG Nan, HUMBERT Georges, WU Zhifang, LI Kaiwei, SHUM Perry Ping, ZHANG Nancy Meng Ying, CUI Ying, AUGUSTE Jean-Louis, DINH Xuan Quyen and WEI Lei,"In-line optofluidic refractive index sensing in a side-channel photonic crystal fiber,",Optics Express,vol 24,No.24,pp27674-27682,01-Nov-2016.
- 49 CHEN MING, GU GUOQIANG, ZHANG BAOPING, CAI ZHIPING, WEI LEI.,"Self-assembled on-chip spherical-cap-shaped microresonators for high sensitivity temperature sensing",Optics Express,vol 24,No.23,pp26948,01-Nov-2016.
- 50 D. Jain, R. Sidharthan, P. Moselund, S. Yoo, D. Ho, and O. Bang,"Record power, ultra-broadband supercontinuum source based on highly GeO₂ doped silica fiber",Optics Express,vol 24,No.23,pp26667-26677,01-Nov-2016.
- 51 N. Zhang, H. Liu, A. M. Stolyarov, T. Zhang, K. W. Li, P. P. Shum, Y. Fink, X. W. Sun, L. Wei,,"Azimuthally Polarized Radial Emission from a Quantum Dot Fiber Laser,",ACS Photonics,vol 3,No.12,pp2275-2279,01-Dec-2016.
- 52 Youming Zhang, Zhen Gao, Fei Gao, Xihang Shi, Hongyi Xu, Yu Luo, Baile Zhang,"Experimental demonstration of broadband reflectionless diffraction-free electromagnetic wave routing",Physical Review B (Condensed Matter and Materials Physics),vol 94,No.22,pp220304,01-Dec-2016.
- 53 Y. Zhou, L. You, S. W. Wang, Z. L. Ku, H. J. Fan, D. Schmidt, A. Rusydi, L. Chang, L. Wang, P. Ren, L. F. Chen, G. L. Yuan, L. Chen, and J. L. Wang, "Giant photostriction in organic-inorganic lead halide perovskites," Nature Communications, vol. 7, Apr 2016, Art no. 11193.
- 54 X. Zhou and Y. D. Chong, "PT symmetry breaking and nonlinear optical isolation in coupled microcavities," Optics Express, vol. 24, no. 7, pp. 6916-6930, Apr 2016.
- 55 N. I. Zheludev and E. Plum, "Reconfigurable nanomechanical photonic metamaterials," Nature Nanotechnology, vol. 11, no. 1, pp. 16-22, Jan 2016.
- 56 N. I. Zheludev, "Introducing the metamaterial roadmap," Journal of Optics, vol. 18, no. 9, Sep 2016, Art no. 090201.
- 57 X. Zhao, W. Z. Liu, R. Chen, Y. Gao, B. B. Zhu, H. V. Demir, S. J. Wange, and H. D. Sun, "Exciton energy recycling from ZnO defect levels: towards electrically driven hybrid quantum-dot white light-emitting-diodes," Nanoscale, vol. 8, no. 11, pp. 5835-5841, 2016.
- 58 Y. Y. Zhang, B. Wu, Y. X. Tang, D. P. Qi, N. Wang, X. T. Wang, X. L. Ma, T. C. Sum, and X. D. Chen, "Prolonged Electron Lifetime in Ordered TiO₂ Mesophyll Cell-Like Microspheres for Efficient Photocatalytic Water Reduction and Oxidation," Small, vol. 12, no. 17, pp. 22912299, May 2016.
- 59 Y. M. Zhang, Z. Gao, F. Gao, X. H. Shi, H. Y. Xu, Y. Luo, and B. L. Zhang, "Experimental demonstration of broadband reflectionless diffraction-free electromagnetic wave routing," Physical Review B, vol. 94, no. 22, Dec 2016, Art no. 220304.
- 60 Q. Zhang, R. Su, X. F. Liu, J. Xing, T. C. Sum, and Q. H. Xiong, "High-Quality WhisperingGallery-Mode Lasing from Cesium Lead Halide Perovskite Nanoplatelets," Advanced Functional Materials, vol. 26, no. 34, pp. 6238-6245, Sep 2016.
- 61 Q. Zhang, X. F. Liu, M. I. B. Utama, G. C. Xing, T. C. Sum, and Q. H. Xiong, "Phonon-Assisted Anti-Stokes Lasing in ZnTe Nanoribbons," Advanced Materials, vol. 28, no. 2, pp. 276-283, Jan 2016.

- 62 K. A. Zhang, T. N. Zhang, G. H. Cheng, T. X. Li, S. X. Wang, W. Wei, X. H. Zhou, W. W. Yu, Y. Sun, P. Wang, D. Zhang, C. G. Zeng, X. J. Wang, W. D. Hu, H. J. Fan, G. Z. Shen, X. Chen, X. F. Duan, K. Chang, and N. Dai, "Interlayer Transition and Infrared Photodetection in Atomically Thin Type-II MoTe₂/MoS₂ van der Waals Heterostructures," *Acs Nano*, vol. 10, no. 3, pp. 3852-3858, Mar 2016.
- 63 J. Zhang, Q. Zhang, X. Z. Wang, L. C. Kwek, and Q. H. Xiong, "Resolved-sideband Raman cooling of an optical phonon in semiconductor materials," *Nature Photonics*, vol. 10, no. 9, pp. 600-605, Sep 2016.
- 64 C. Zhang, T. N. Do, X. W. Ong, Y. T. Chan, and H. S. Tan, "Understanding the features in the ultrafast transient absorption spectra of CdSe quantum dots," *Chemical Physics*, vol. 481, pp. 157-164, Dec 2016.
- 65 Y. Q. Zeng, G. Z. Liang, H. K. Liang, S. Mansha, B. Meng, T. Liu, X. N. Hu, J. Tao, L. H. Li, A. G. Davies, E. H. Linfield, Y. Zhang, Y. D. Chong, and Q. J. Wang, "Designer Multimode Localized Random Lasing in Amorphous Lattices at Terahertz Frequencies," *Acs Photonics*, vol. 3, no. 12, pp. 2453-2460, Dec 2016.
- 66 G. H. Yuan, S. Vezzoli, C. Altuzarra, E. T. F. Rogers, C. Couteau, C. Soci, and N. I. Zheludev, "Quantum super-oscillation of a single photon," *Light-Science & Applications*, vol. 5, Aug 2016, Art no. e16127.
- 67 P. Yu, X. C. Yu, W. L. Lu, H. Lin, L. F. Sun, K. Z. Du, F. C. Liu, W. Fu, Q. S. Zeng, Z. X. Shen, C. H. Jin, Q. J. Wang, and Z. Liu, "Fast Photoresponse from 1T Tin Diselenide Atomic Layers," *Advanced Functional Materials*, vol. 26, no. 1, pp. 137-145, Jan 2016.
- 68 D. S. Yu, M. M. Valado, C. Hufnagel, L. C. Kwek, L. Amico, and R. Dumke, "Charge-qubit-atom hybrid," *Physical Review A*, vol. 93, no. 4, Apr 2016, Art no. 042329.
- 69 D. S. Yu, M. M. Valado, C. Hufnagel, L. C. Kwek, L. Amico, and R. Dumke, "Quantum State Transmission in a Superconducting Charge Qubit-Atom Hybrid," *Scientific Reports*, vol. 6, Dec 2016, Art no. 38356.
- 70 D. Yu, A. Landra, M. M. Valado, C. Hufnagel, L. C. Kwek, L. Amico, and R. Dumke, "Superconducting resonator and Rydberg atom hybrid system in the strong coupling regime," *Physical Review A*, vol. 94, no. 6, Dec 2016.
- 71 S. T. You, C. F. Kuang, and B. L. Zhang, "Resolution criteria in double-slit microscopic imaging experiments," *Scientific Reports*, vol. 6, Sep 2016, Art no. 33764.
- 72 T. T. Yin, Z. G. Dong, L. Y. Jiang, L. Zhang, H. L. Hu, C. W. Qiu, J. K. W. Yang, and Z. X. Shen, "Anomalous Shift Behaviors in the Photoluminescence of Dolmen-Like Plasmonic Nanostructures," *Acs Photonics*, vol. 3, no. 6, pp. 979-984, Jun 2016.
- 73 J. Yin, Z. L. Wang, D. Fazzi, Z. X. Shen, and C. Soci, "First-Principles Study of the Nuclear Dynamics of Doped Conjugated Polymers," *Journal of Physical Chemistry C*, vol. 120, no. 3, pp. 1994-2001, Jan 2016.
- 74 T. Ye, X. Jiang, D. Y. Wan, X. Z. Wang, J. Xing, T. Venkatesan, Q. H. Xiong, and S. Ramakrishna, "Ultrafast Photogenerated Hole Extraction/Transport Behavior in a CH₃NH₃PbI₃/Carbon Nanocomposite and Its Application in a Metal-Electrode-Free Solar Cell," *Chemphyschem*, vol. 17, no. 24, pp. 4102-4109, Dec 2016.
- 75 Z. J. Yang, F. Gao, and B. L. Zhang, "Topological water wave states in a one-dimensional structure," *Scientific Reports*, vol. 6, Jul 2016, Art no. 29202.
- 76 Z. J. Yang, F. Gao, X. H. Shi, and B. L. Zhang, "Synthetic-gauge-field-induced Dirac semimetal state in an acoustic resonator system," *New Journal of Physics*, vol. 18, Dec 2016, Art no. 125003.
- 77 Z. G. Yang, L. L. Wang, Z. J. Rong, B. Wang, and B. L. Zhang, "Seamless integration of global Dirichlet-to-Neumann boundary condition and spectral elements for transformation electromagnetics," *Computer Methods in Applied Mechanics and Engineering*, vol. 301, pp. 137-163, Apr 2016.
- 78 S. C. Yang, V. D. Ta, Y. Wang, R. Chen, T. C. He, H. V. Demir, and H. D. Sun, "Reconfigurable Liquid Whispering Gallery Mode Microlasers," *Scientific Reports*, vol. 6, Jun 2016, Art no. 27200.
- 79 Q. L. Yang, X. Q. Zhang, S. X. Li, Q. Xu, R. Singh, Y. M. Liu, Y. F. Li, S. S. Kruk, J. Q. Gu, J. G. Han, and W. L. Zhang, "Near-field surface plasmons on quasicrystal metasurfaces," *Scientific Reports*, vol. 6, Dec 2016, Art no. 26.
- 80 N. N. Xu, R. Singh, and W. L. Zhang, "High-Q lattice mode matched structural resonances in terahertz metasurfaces," *Applied Physics Letters*, vol. 109, no. 2, Jul 2016, Art no. 021108.
- 81 N. N. Xu, M. Manjappa, R. Singh, and W. L. Zhang, "Tailoring the Electromagnetically Induced Transparency and Absorbance in Coupled Fano-Lorentzian Metasurfaces: A Classical Analog of a Four-Level Tripod Quantum System," *Advanced Optical Materials*, vol. 4, no. 8, pp. 11791185, Aug 2016.
- 82 J. Xu, Z. L. Ku, Y. Q. Zhang, D. L. Chao, and H. J. Fan, "Integrated Photo-Supercapacitor Based on PEDOT Modified Printable Perovskite Solar Cell," *Advanced Materials Technologies*, vol. 1, no. 5, Aug 2016, Art no. 1600074.

- 83 J. Xing, F. Yan, Y. W. Zhao, S. Chen, H. K. Yu, Q. Zhang, R. G. Zeng, H. V. Demir, X. W. Sun, A. Huan, and Q. H. Xiong, "High-Efficiency Light-Emitting Diodes of Organometal Halide Perovskite Amorphous Nanoparticles," *Acs Nano*, vol. 10, no. 7, pp. 6623-6630, Jul 2016.
- 84 G. C. Xing, M. H. Kumar, W. K. Chong, X. F. Liu, Y. Cai, H. Ding, M. Asta, M. Gratzel, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Solution-Processed Tin-Based Perovskite for NearInfrared Lasing," *Advanced Materials*, vol. 28, no. 37, pp. 8191-8196, Oct 2016.
- 85 X. H. Xia, Z. L. Ku, D. Zhou, Y. Zhong, Y. Q. Zhang, Y. D. Wang, M. J. Huang, J. P. Tu, and H. J. Fan, "Perovskite solar cell powered electrochromic batteries for smart windows," *Materials Horizons*, vol. 3, no. 6, pp. 588-595, Nov 2016.
- 86 Q. N. Wu, F. Gao, Z. Y. Song, X. Lin, Y. M. Zhang, H. Y. Chen, and B. L. Zhang, "Experimental verification of free-space singular boundary conditions in an invisibility cloak," *Journal of Optics*, vol. 18, no. 4, Apr 2016, Art no. 044008.
- 87 B. Wu, H. T. Nguyen, Z. L. Ku, G. Han, D. Giovanni, N. Mathews, H. J. Fan, and T. C. Sum, "Discerning the Surface and Bulk Recombination Kinetics of Organic-Inorganic Halide Perovskite Single Crystals," *Advanced Energy Materials*, vol. 6, no. 14, Jul 2016, Art no. 1600551.
- 88 X. L. Wen and Q. H. Xiong, "A large scale perfect absorber and optical switch based on phase change material (Ge₂Sb₂Te₅) thin film," *Science China-Materials*, vol. 59, no. 3, pp. 165-172, Mar 2016.
- 89 Z. H. Wei, A. Perumal, R. Su, S. Sushant, J. Xing, Q. Zhang, S. T. Tan, H. V. Demir, and Q. H. Xiong, "Solution-processed highly bright and durable cesium lead halide perovskite lightemitting diodes," *Nanoscale*, vol. 8, no. 42, pp. 18021-18026, Nov 2016.
- 90 C. Weedbrook, S. Pirandola, J. Thompson, V. Vedral, and M. L. Gu, "How discord underlies the noise resilience of quantum illumination," *New Journal of Physics*, vol. 18, Apr 2016, Art no. 043027.
- 91 D. W. Watson, S. D. Jenkins, J. Ruostekoski, V. A. Fedotov, and N. I. Zheludev, "Toroidal dipole excitations in metamolecules formed by interacting plasmonic nanorods," *Physical Review B*, vol. 93, no. 12, Mar 2016, Art no. 125420.
- 92 R. F. Waters, A. Ohtsu, M. Naya, P. A. Hobson, K. F. Macdonald, and N. I. Zheludev, "Templated assembly of metal nanoparticle films on polymer substrates," *Applied Physics Letters*, vol. 109, no. 26, Dec 2016, Art no. 263105.
- 93 Z. Wang, Y. Wang, G. Adamo, B. H. Teh, Q. Y. S. Wu, J. H. Teng, and H. D. Sun, "A Novel Chiral Metasurface with Controllable Circular Dichroism Induced by Coupling Localized and Propagating Modes," *Advanced Optical Materials*, vol. 4, no. 6, pp. 883-888, Jun 2016.
- 94 Y. C. Wang, B. Wu, C. B. Yang, M. X. Liu, T. C. Sum, and K. T. Yong, "Synthesis and Characterization of Mn: ZnSe/ZnS/ZnMnS Sandwiched QDs for Multimodal Imaging and Theranostic Applications," *Small*, vol. 12, no. 4, pp. 534-546, Jan 2016.
- 95 Y. Wang, X. M. Li, X. Zhao, L. Xiao, H. B. Zeng, and H. D. Sun, "Nonlinear Absorption and LowThreshold Multiphoton Pumped Stimulated Emission from All-Inorganic Perovskite Nanocrystals," *Nano Letters*, vol. 16, no. 1, pp. 448-453, Jan 2016.
- 96 Y. Wang, X. M. Li, S. Sreejith, F. Cao, Z. Wang, M. C. Stuparu, H. B. Zeng, and H. D. Sun, "Photon Driven Transformation of Cesium Lead Halide Perovskites from Few-Monolayer Nanoplatelets to Bulk Phase," *Advanced Materials*, vol. 28, no. 48, pp. 10637-+, Dec 2016.
- 97 X. Z. Wang, K. Z. Du, Y. Y. F. Liu, P. Hu, J. Zhang, Q. Zhang, M. H. S. Owen, X. Lu, C. K. Gan, P. Sengupta, C. Kloc, and Q. H. Xiong, "Raman spectroscopy of atomically thin two-dimensional magnetic iron phosphorus trisulfide (FePS₃) crystals," *2d Materials*, vol. 3, no. 3, Sep 2016, Art no. 031009.
- 98 X. Z. Wang, K. Z. Du, W. W. Liu, P. Hu, X. Lu, W. G. Xu, C. Kloc, and Q. H. Xiong, "Secondharmonic generation in quaternary atomically thin layered AgInP₂S₆ crystals," *Applied Physics Letters*, vol. 109, no. 12, Sep 2016, Art no. 123103.
- 99 X. W. Wang, X. X. He, H. F. Zhu, L. F. Sun, W. Fu, X. L. Wang, L. C. Hoong, H. Wang, Q. S. Zeng, W. Zhao, J. Wei, Z. Jin, Z. X. Shen, J. Liu, T. Zhang, and Z. Liu, "Subatomic deformation driven by vertical piezoelectricity from CdS ultrathin films," *Science Advances*, vol. 2, no. 7, Jul 2016, Art no. UNSP e1600209.
- 100 W. Wang, W. K. Loke, T. T. Yin, Z. Zhang, V. R. D'Costa, Y. Dong, G. C. Liang, J. S. Pan, Z. X. Shen, S. F. Yoon, E. S. Tok, and Y. C. Yeo, "Growth and characterization of highly tensile strained Ge_{1-x}Sn_x formed on relaxed InyGa_{1-y}P buffer layers," *Journal of Applied Physics*, vol. 119, no. 12, Mar 2016, Art no. 125303.
- 101 Q. Wang, X. Q. Zhang, Y. H. Xu, J. Q. Gu, Y. F. Li, Z. Tian, R. Singh, S. Zhang, J. G. Han, and W. L. Zhang, "Broadband metasurface holograms: toward complete phase and amplitude engineering," *Scientific Reports*, vol. 6, Sep 2016, Art no. 32867.

- 102 Q. Wang, E. T. F. Rogers, B. Gholipour, C. M. Wang, G. H. Yuan, J. H. Teng, and N. I. Zheludev, "Optically reconfigurable metasurfaces and photonic devices based on phase change materials," *Nature Photonics*, vol. 10, no. 1, pp. 60-U75, Jan 2016.
- 103 H. Y. Wang, S. F. Hung, Y. Y. Hsu, L. L. Zhang, J. W. Miao, T. S. Chan, Q. H. Xiong, and B. Liu, "In Situ Spectroscopic Identification of mu-OO Bridging on Spinel Co₃O₄ Water Oxidation Electrocatalyst," *Journal of Physical Chemistry Letters*, vol. 7, no. 23, pp. 4847-4853, Dec 2016.
- 104 H. L. Wang, L. W. Zhou, and Y. D. Chong, "Floquet Weyl phases in a three-dimensional network model," *Physical Review B*, vol. 93, no. 14, Apr 2016, Art no. 144114.
- 105 S. A. Veldhuis, P. P. Boix, N. Yantara, M. J. Li, T. C. Sum, N. Mathews, and S. G. Mhaisalkar, "Perovskite Materials for Light-Emitting Diodes and Lasers," *Advanced Materials*, vol. 28, no. 32, pp. 6804-6834, Aug 2016.
- 106 J. Valente, E. Plum, I. J. Youngs, and N. I. Zheludev, "Nano- and Micro-Auxetic Plasmonic Materials," *Advanced Materials*, vol. 28, no. 26, pp. 5176-+, Jul 2016.
- 107 R. Ulbricht, S. Dong, I. Y. Chang, B. M. K. Mariserla, K. M. Dani, K. Hyeon-Deuk, and Z. H. Loh, "Jahn-Teller-induced femtosecond electronic depolarization dynamics of the nitrogenvacancy defect in diamond," *Nature Communications*, vol. 7, Nov 2016, Art no. 13510.
- 108 N. H. Tiep, Z. L. Ku, and H. J. Fan, "Recent Advances in Improving the Stability of Perovskite Solar Cells," *Advanced Energy Materials*, vol. 6, no. 3, Feb 2016, Art no. 1501420.
- 109 T. C. Sum, N. Mathews, G. C. Xing, S. S. Lim, W. K. Chong, D. Giovanni, and H. A. Dewi, "Spectral Features and Charge Dynamics of Lead Halide Perovskites: Origins and Interpretations," *Accounts of Chemical Research*, vol. 49, no. 2, pp. 294-302, Feb 2016.
- 110 Y. K. Srivastava, M. Manjappa, H. N. S. Krishnamoorthy, and R. Singh, "Accessing the High-Q Dark Plasmonic Fano Resonances in Superconductor Metasurfaces," *Advanced Optical Materials*, vol. 4, no. 11, pp. 1875-1881, Nov 2016.
- 111 Y. K. Srivastava, M. Manjappa, L. Q. Cong, W. Cao, I. Al-Naib, W. L. Zhang, and R. Singh, "Ultrahigh-Q Fano Resonances in Terahertz Metasurfaces: Strong Influence of Metallic Conductivity at Extremely Low Asymmetry," *Advanced Optical Materials*, vol. 4, no. 3, pp. 457-463, Mar 2016.
- 112 D. Springer, S. K. Nair, M. He, C. L. Lu, S. A. Cheong, T. Wu, C. Panagopoulos, E. E. M. Chia, and J. X. Zhu, "Interfacial effects revealed by ultrafast relaxation dynamics in BiFeO₃/YBa₂Cu₃O₇ bilayers," *Physical Review B*, vol. 93, no. 6, Feb 2016, Art no. 064510.
- 113 A. Solanki, A. Bagui, G. K. Long, B. Wu, T. Salim, Y. S. Chen, Y. M. Lam, and T. C. Sum, "Effectiveness of External Electric Field Treatment of Conjugated Polymers in BulkHeterojunction Solar Cells," *Acs Applied Materials & Interfaces*, vol. 8, no. 47, pp. 3228232291, Nov 2016.
- 114 R. S. Singh, D. H. Li, Q. H. Xiong, I. Santoso, X. J. Yu, W. Chen, A. Rusydi, and A. T. S. Wee, "Anomalous photoresponse in the deep-ultraviolet due to resonant excitonic effects in oxygen plasma treated few-layer graphene," *Carbon*, vol. 106, pp. 330-335, Sep 2016.
- 115 S. Shukla, G. C. Xing, H. Ge, R. R. Prabhakar, S. Mathew, Z. H. Su, V. Nalla, T. Venkatesan, N. Mathews, T. Sritharan, T. C. Sum, and Q. H. Xiong, "Origin of Photocarrier Losses in Iron Pyrite (FeS₂) Nanocubes," *Acs Nano*, vol. 10, no. 4, pp. 4431-4440, Apr 2016.
- 116 H. F. Shi, Z. F. An, P. Z. Li, J. Yin, G. C. Xing, T. C. He, H. Z. Chen, J. G. Wang, H. D. Sun, W. Huang, and Y. L. Zhao, "Enhancing Organic Phosphorescence by Manipulating Heavy-Atom Interaction," *Crystal Growth & Design*, vol. 16, no. 2, pp. 808-813, Feb 2016.
- 117 V. Savinov, K. Delfanazari, V. A. Fedotov, and N. I. Zheludev, "Giant nonlinearity in a superconducting sub-terahertz metamaterial," *Applied Physics Letters*, vol. 108, no. 10, Mar 2016, Art no. 101107.
- 118 M. Ren, H. Cai, Y. D. Gu, L. K. Chin, K. Radhakrishnan, W. Ser, H. D. Sun, Q. X. Liang, D. L. Kwong, and A. Q. Liu, "Integrated closed-loop cavity of a tunable laser," *Applied Physics Letters*, vol. 109, no. 15, Oct 2016, Art no. 151105.
- 119 T. A. Raybould, V. A. Fedotov, N. Papasimakis, I. Kuprov, I. J. Youngs, W. T. Chen, D. P. Tsai, and N. I. Zheludev, "Toroidal circular dichroism," *Physical Review B*, vol. 94, no. 3, Jul 2016, Art no. 035119.
- 120 T. Raybould, V. Fedotov, N. Papasimakis, I. Youngs, and N. Zheludev, "Focused electromagnetic doughnut pulses and their interaction with interfaces and nanostructures," *Optics Express*, vol. 24, no. 4, pp. 3150-3161, Feb 2016.
- 121 L. Ravikiran, K. Radhakrishnan, N. Dharmarasu, M. Agrawal, Z. L. Wang, A. Bruno, C. Soci, L. H. Tng, and A. K. Siong, "Responsivity drop due to conductance modulation in GaN metalsemiconductor-metal Schottky based UV photodetectors on Si(111)," *Semiconductor Science and Technology*, vol. 31, no. 9, Sep 2016, Art no. 095003.

- 122 A. Priyadarshi, L. J. Haur, P. Murray, D. C. Fu, S. Kulkarni, G. C. Xing, T. C. Sum, N. Mathews, and S. G. Mhaisalkar, "A large area (70 cm²) monolithic perovskite solar module with a high efficiency and stability," *Energy & Environmental Science*, vol. 9, no. 12, pp. 3687-3692, 2016.
- 123 E. Plum, V. A. Fedotov, and N. I. Zheludev, "Specular optical activity of achiral metasurfaces," *Applied Physics Letters*, vol. 108, no. 14, Apr 2016, Art no. 141905.
- 124 P. Pitchappa, M. Manjappa, C. P. Ho, R. Singh, N. Singh, and C. Lee, "Active Control of Electromagnetically Induced Transparency Analog in Terahertz MEMS Metamaterial," *Advanced Optical Materials*, vol. 4, no. 4, pp. 541-547, Apr 2016.
- 125 P. Pitchappa, M. Manjappa, C. P. Ho, R. Singh, N. Singh, and C. Lee, "Active control of electromagnetically induced transparency with dual dark mode excitation pathways using MEMS based tri-atomic metamolecules," *Applied Physics Letters*, vol. 109, no. 21, Nov 2016, Art no. 211103.
- 126 P. Pitchappa, M. Manjappa, C. P. Ho, Y. Qian, R. Singh, N. Singh, and C. Lee, "Active control of near-field coupling in conductively coupled microelectromechanical system metamaterial devices," *Applied Physics Letters*, vol. 108, no. 11, Mar 2016, Art no. 111102.
- 127 P. Pitchappa, C. P. Ho, L. Q. Cong, R. Singh, N. Singh, and C. Lee, "Reconfigurable Digital Metamaterial for Dynamic Switching of Terahertz Anisotropy," *Advanced Optical Materials*, vol. 4, no. 3, pp. 391-398, Mar 2016.
- 128 D. S. Philips, S. Sreejith, T. C. He, N. V. Menon, P. Anees, J. Mathew, S. Sajikumar, Y. J. Kang, M. C. Stuparu, H. D. Sun, Y. L. Zhao, and A. Ajayaghosh, "A Three-Photon Active Organic Fluorophore for Deep Tissue Ratiometric Imaging of Intracellular Divalent Zinc," *Chemistryan Asian Journal*, vol. 11, no. 10, pp. 1523-1527, May 2016.
- 129 A. Perumal, S. Shendre, M. J. Li, Y. K. E. Tay, V. K. Sharma, S. Chen, Z. H. Wei, Q. Liu, Y. Gao, P. J. S. Buenconsejo, S. T. Tan, C. L. Gan, Q. Xiong, T. C. Sum, and H. V. Demir, "High brightness formamidinium lead bromide perovskite nanocrystal light emitting devices," *Scientific Reports*, vol. 6, Nov 2016, Art no. 36733.
- 130 B. Peng, G. N. Yu, Y. W. Zhao, Q. Xu, G. C. Xing, X. F. Liu, D. Y. Fu, B. Liu, J. R. S. Tan, W. Tang, H. P. Lu, J. L. Xie, L. J. Deng, T. C. Sum, and K. P. Loh, "Achieving Ultrafast Hole Transfer at the Monolayer MoS₂ and CH₃NH₃PbI₃ Perovskite Interface by Defect Engineering," *Acs Nano*, vol. 10, no. 6, pp. 6383-6391, Jun 2016.
- 131 B. Peng, G. N. Yu, X. F. Liu, B. Liu, X. Liang, L. Bi, L. J. Deng, T. C. Sum, and K. P. Loh, "Ultrafast charge transfer in MoS₂/WSe₂ p-n Heterojunction," *2d Materials*, vol. 3, no. 2, Jun 2016, Art no. 025020.
- 132 B. Peng, X. Lu, S. Chen, C. H. A. Huan, Q. H. Xiong, E. Mutlugun, H. V. Demir, and S. F. Yu, "Exciton dynamics in luminescent carbon nanodots: Electron-hole exchange interaction," *Nano Research*, vol. 9, no. 2, pp. 549-559, Feb 2016.
- 133 N. Papasimakis, V. A. Fedotov, V. Savinov, T. A. Raybould, and N. I. Zheludev, "Electromagnetic toroidal excitations in matter and free space," *Nature Materials*, vol. 15, no. 3, pp. 263-271, Mar 2016.
- 134 M. Papaioannou, E. Plum, J. Valente, E. T. F. Rogers, and N. I. Zheludev, "Two-dimensional control of light with light on metasurfaces," *Light-Science & Applications*, vol. 5, Apr 2016, Art no. e16070.
- 135 M. Papaioannou, E. Plum, J. Valente, E. T. F. Rogers, and N. I. Zheludev, "Invited Article: Alloptical multichannel logic based on coherent perfect absorption in a plasmonic metamaterial," *Apl Photonics*, vol. 1, no. 9, Dec 2016, Art no. 090801.
- 136 K. Pandey, C. C. Kwong, M. S. Pramod, and D. Wilkowski, "Linear and nonlinear magneto-optical rotation on the narrow strontium intercombination line," *Physical Review A*, vol. 93, no. 5, May 2016, Art no. 053428.
- 137 J. Y. Ou, E. Plum, J. F. Zhang, and N. I. Zheludev, "Giant Nonlinearity of an Optically Reconfigurable Plasmonic Metamaterial," *Advanced Materials*, vol. 28, no. 4, pp. 729-733, Jan 2016.
- 138 D. M. Nguyen, C. Soci, and C. H. R. Ooi, "Coherently Tunable Triangular Trefoil Phaseonium Metamaterial," *Scientific Reports*, vol. 6, Feb 2016, Art no. 21083.
- 139 S. Mansha, Y. Zeng, Q. J. Wang, and Y. D. Chong, "Optimization of TM modes for amorphous slab lasers," *Optics Express*, vol. 24, no. 5, pp. 4890-4898, Mar 2016.
- 140 M. Manjappa, Y. K. Srivastava, and R. Singh, "Lattice-induced transparency in planar metamaterials," *Physical Review B*, vol. 94, no. 16, Oct 2016, Art no. 161103.
- 141 L. Ma, P. Hu, H. Jiang, C. Kloc, H. D. Sun, C. Soci, A. A. Voityuk, M. E. Michel-Beyerle, and G. G. Gurzadyan, "Single photon triggered dianion formation in TCNQ and F(4)TCNQ crystals," *Scientific Reports*, vol. 6, Jun 2016, Art no. 28510.
- 142 J. J. Ma, B. Yadin, D. Girolami, V. Vedral, and M. Gu, "Converting Coherence to Quantum Correlations," *Physical Review Letters*, vol. 116, no. 16, Apr 2016, Art no. 160407.

- 143 X. Lu, X. Luo, J. Zhang, S. Y. Quek, and Q. H. Xiong, "Lattice vibrations and Raman scattering in two-dimensional layered materials beyond graphene," *Nano Research*, vol. 9, no. 12, pp. 3559-3597, Dec 2016.
- 144 P. Lova, C. Bastianini, P. Giusto, M. Patrini, P. Rizzo, G. Guerra, M. Iodice, C. Soci, and D. Comoretto, "Label-Free Vapor Selectivity in Poly(p-Phenylene Oxide) Photonic Crystal Sensors," *Acs Applied Materials & Interfaces*, vol. 8, no. 46, pp. 31941-31950, Nov 2016.
- 145 J. Lourembam, A. Srivastava, C. La-o-Vorakiat, L. Cheng, T. Venkatesan, and E. E. M. Chia, "Evidence for Photoinduced Insulator-to-Metal transition in B-phase vanadium dioxide," *Scientific Reports*, vol. 6, May 2016, Art no. 25538.
- 146 G. K. Long, B. Wu, A. Solanki, X. Yang, B. Kan, X. F. Liu, D. C. Wu, Z. Xu, W. R. Wu, U. S. Jeng, J. Y. Lin, M. M. Li, Y. C. Wang, X. J. Wan, T. C. Sum, and Y. S. Chen, "New Insights into the Correlation between Morphology, Excited State Dynamics, and Device Performance of Small Molecule Organic Solar Cells," *Advanced Energy Materials*, vol. 6, no. 22, Nov 2016, Art no. 1600961.
- 147 X. F. Liu, L. Niu, C. Y. Wu, C. X. Cong, H. Wang, Q. S. Zeng, H. Y. He, Q. D. Fu, W. Fu, T. Yu, C. H. Jin, Z. Liu, and T. C. Sum, "Periodic Organic-Inorganic Halide Perovskite Microplatelet Arrays on Silicon Substrates for Room-Temperature Lasing," *Advanced Science*, vol. 3, no. 11, Nov 2016, Art no. 1600137.
- 148 F. C. Liu, C. Zhu, L. You, S. J. Liang, S. J. Zheng, J. D. Zhou, Q. D. Fu, Y. M. He, Q. S. Zeng, H. J. Fan, L. K. Ang, J. L. Wang, and Z. Liu, "2D Black Phosphorus/SrTiO₃-Based Programmable Photoconductive Switch," *Advanced Materials*, vol. 28, no. 35, pp. 7768-+, Sep 2016.
- 149 F. C. Liu, S. J. Zheng, X. X. He, A. Chaturvedi, J. F. He, W. L. Chow, T. R. Mion, X. L. Wang, J. D. Zhou, Q. D. Fu, H. J. Fan, B. K. Tay, L. Song, R. H. He, C. Kloc, P. M. Ajayan, and Z. Liu, "Highly Sensitive Detection of Polarized Light Using Anisotropic 2D ReS₂," *Advanced Functional Materials*, vol. 26, no. 8, pp. 1169-1177, Feb 2016.
- 150 F. C. Liu, S. J. Zheng, A. Chaturvedi, V. Zolyomi, J. D. Zhou, Q. D. Fu, C. Zhu, P. Yu, Q. S. Zeng, N. D. Drummond, H. J. Fan, C. Kloc, V. I. Fal'ko, X. X. He, and Z. Liu, "Optoelectronic properties of atomically thin ReSSe with weak interlayer coupling," *Nanoscale*, vol. 8, no. 11, pp. 5826-5834, 2016.
- 151 X. Lin, R. J. Li, F. Gao, E. P. Li, X. M. Zhang, B. L. Zhang, and H. S. Chen, "Loss induced amplification of graphene plasmons," *Optics Letters*, vol. 41, no. 4, pp. 681-684, Feb 2016.
- 152 S. S. Lim, W. K. Chong, A. Solanki, H. A. Dewi, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Modulating carrier dynamics through perovskite film engineering," *Physical Chemistry Chemical Physics*, vol. 18, no. 39, pp. 27119-27123, Oct 2016.
- 153 Z. Li, P. P. Boix, G. C. Xing, K. W. Fu, S. A. Kulkarni, S. K. Batabyal, W. J. Xu, A. Y. Cao, T. C. Sum, N. Mathews, and L. H. Wong, "Carbon nanotubes as an efficient hole collector for high voltage methylammonium lead bromide perovskite solar cells," *Nanoscale*, vol. 8, no. 12, pp. 6352-6360, 2016.
- 154 Y. G. Li, X. L. Wei, B. W. Zhu, H. Wang, Y. X. Tang, T. C. Sum, and X. D. Chen, "Hierarchically branched Fe₂O₃@TiO₂ nanorod arrays for photoelectrochemical water splitting: facile synthesis and enhanced photoelectrochemical performance," *Nanoscale*, vol. 8, no. 21, pp. 11284-11290, 2016.
- 155 Q. Li, L. Q. Cong, R. J. Singh, N. N. Xu, W. Cao, X. Q. Zhang, Z. Tian, L. L. Du, J. G. Han, and W. L. Zhang, "Monolayer graphene sensing enabled by the strong Fano-resonant metasurface," *Nanoscale*, vol. 8, no. 39, pp. 17278-17284, 2016.
- 156 K. Li, Y. Zhou, A. Rasmita, I. Aharonovich, and W. B. Gao, "Nonblinking Emitters with Nearly Lifetime-Limited Linewidths in CVD Nanodiamonds," *Physical Review Applied*, vol. 6, no. 2, Aug 2016, Art no. 024010.
- 157 G. H. Li, B. P. Clarke, J. K. So, K. F. MacDonald, and N. I. Zheludev, "Holographic free-electron light source," *Nature Communications*, vol. 7, Dec 2016, Art no. 13705.
- 158 B. L. Li, T. Liu, D. W. Hewak, Z. X. Shen, and Q. J. Wang, "Ultrastrong light-matter coupling of cyclotron transition in monolayer MoS₂," *Physical Review B*, vol. 93, no. 4, Jan 2016, Art no. 045420.
- 159 D. Leykam, M. C. Rechtsman, and Y. D. Chong, "Anomalous Topological Phases and Unpaired Dirac Cones in Photonic Floquet Topological Insulators," *Physical Review Letters*, vol. 117, no. 1, Jun 2016, Art no. 013902.
- 160 D. Leykam and Y. D. Chong, "Edge Solitons in Nonlinear-Photonic Topological Insulators," *Physical Review Letters*, vol. 117, no. 14, Sep 2016, Art no. 143901.
- 161 C. La-o-vorakiat, H. X. Xia, J. Kadro, T. Salim, D. M. Zhao, T. Ahmed, Y. M. Lam, J. X. Zhu, R. A. Marcus, M. E. Michel-Beyerle, and E. E. M. Chia, "Phonon Mode Transformation Across the Orthohombic-Tetragonal Phase Transition in a Lead Iodide Perovskite CH(3)NH(3)PbI(3): A Terahertz Time-Domain Spectroscopy Approach," *Journal of Physical Chemistry Letters*, vol. 7, no. 1, pp. 1-6, Jan 2016.

- 162 M. Kumar, S. Vezzoli, Z. Wang, V. Chaudhary, R. V. Ramanujan, G. G. Gurzadyan, B. F. Annalisa, and C. Soci, "Hot exciton cooling and multiple exciton generation in PbSe quantum dots," *Physical Chemistry Chemical Physics*, vol. 18, no. 45, pp. 31107-31114, 2016.
- 163 P. C. Kuan, C. Huang, W. S. Chan, S. Kosen, and S. Y. Lan, "Large Fizeau's light-dragging effect in a moving electromagnetically induced transparent medium," *Nature Communications*, vol. 7, Oct 2016, Art no. 13030.
- 164 Z. L. Ku, N. H. Tiep, B. Wu, T. C. Sum, D. Fichou, and H. J. Fan, "Solvent engineering for fast growth of centimetric high-quality CH₃NH₃PbI₃ perovskite single crystals," *New Journal of Chemistry*, vol. 40, no. 9, pp. 7261-7264, 2016.
- 165 A. Krishna, D. Sabba, J. Yin, A. Bruno, L. J. Antila, C. Soci, S. Mhaisalkar, and A. C. Grimsdale, "Facile synthesis of a hole transporting material with a silafluorene core for efficient mesoscopic CH₃NH₃PbI₃ perovskite solar cells," *Journal of Materials Chemistry A*, vol. 4, no. 22, pp. 8750-8754, Jun 2016.
- 166 F. N. Kholid, H. Huang, Y. Q. Zhang, and H. J. Fan, "Multiple electrical breakdowns and electrical annealing using high current approximating breakdown current of silver nanowire network," *Nanotechnology*, vol. 27, no. 2, Jan 2016, Art no. 025703.
- 167 A. Karvounis, B. Gholipour, K. F. MacDonald, and N. I. Zheludev, "All-dielectric phase-change reconfigurable metasurface," *Applied Physics Letters*, vol. 109, no. 5, Aug 2016, Art no. 051103.
- 168 S. Karamat, R. S. Rawat, P. Lee, T. L. Tan, C. Ke, R. Chen, and H. D. Sun, "Ferromagnetic signature in vanadium doped ZnO thin films grown by pulsed laser deposition," *Journal of Materials Research*, vol. 31, no. 20, pp. 3223-3229, Oct 2016.
- 169 M. Kang, J. Chen, and Y. D. Chong, "Chiral exceptional points in metasurfaces," *Physical Review A*, vol. 94, no. 3, Sep 2016, Art no. 033834.
- 170 U. Ilyas, P. Lee, T. L. Tan, R. Chen, A. W. Anwar, S. Zhang, H. D. Sun, and R. S. Rawat, "Temperature-dependent stoichiometric alteration in ZnO:Mn nanostructured thin films for enhanced ferromagnetic response," *Applied Surface Science*, vol. 387, pp. 461-468, Nov 2016.
- 171 C. L. Huang, Y. D. Chong, G. Vignale, and M. A. Cazalilla, "Graphene electrodynamics in the presence of the extrinsic spin Hall effect," *Physical Review B*, vol. 93, no. 16, Apr 2016, Art no. 165429.
- 172 C. Huang, Y. D. Chong, and M. A. Cazalilla, "Direct coupling between charge current and spin polarization by extrinsic mechanisms in graphene," *Physical Review B*, vol. 94, no. 8, Aug 2016, Art no. 085414.
- 173 W. C. Hu, K. Wu, P. P. Shum, N. I. Zheludev, and C. Soci, "All-Optical Implementation of the Ant Colony Optimization Algorithm," *Scientific Reports*, vol. 6, May 2016, Art no. 26283.
- 174 P. Hu, J. Ye, X. X. He, K. Z. Du, K. K. Zhang, X. Z. Wang, Q. H. Xiong, Z. Liu, H. Jiang, and C. Kloc, "Control of Radiative Exciton Recombination by Charge Transfer Induced Surface Dipoles in MoS₂ and WS₂ Monolayers," *Scientific Reports*, vol. 6, Apr 2016, Art no. 24105.
- 175 T. C. He, Y. Wang, X. Q. Tian, Y. Gao, X. Zhao, A. C. Grimsdale, X. D. Lin, and H. D. Sun, "An organic dye with very large Stokes-shift and broad tunability of fluorescence: Potential twophoton probe for bioimaging and ultra-sensitive solid-state gas sensor," *Applied Physics Letters*, vol. 108, no. 1, Jan 2016, Art no. 011901.
- 176 T. C. He, Y. Gao, S. Sreejith, X. Tian, L. Liu, Y. Wang, H. Joshi, S. Z. F. Phua, S. Yao, X. D. Lin, Y. Zhao, A. C. Grimsdale, and H. D. Sun, "Biocompatible Two-Photon Absorbing Dipyridyldiketopyrrolopyrroles for Metal-Ion-Mediated Self-Assembly Modulation and Fluorescence Imaging," *Advanced Optical Materials*, vol. 4, no. 5, pp. 746-755, May 2016.
- 177 T. C. He, Y. Gao, Y. Gao, X. D. Lin, R. Chen, W. B. Hu, X. Zhao, Y. Wang, H. V. Demir, Q. L. Fan, A. C. Grimsdale, and H. D. Sun, "Unusual Fluorescent Properties of Stilbene Units and CdZnS/ZnS Quantum Dots Nanocomposites: White-Light Emission in Solution versus LightHarvesting in Films," *Macromolecular Chemistry and Physics*, vol. 217, no. 1, pp. 24-31, Jan 2016.
- 178 L. He, T. E. Wood, B. Wu, Y. C. Dong, L. B. Hoch, L. M. Reyes, D. Wang, C. Kubel, C. X. Qian, J. Jia, K. Liao, P. G. O'Brien, A. Sandhel, J. Y. Y. Loh, P. Szymanski, N. P. Kherani, T. C. Sum, C. A. Mims, and G. A. Ozin, "Spatial Separation of Charge Carriers in In₂O_{3-x}(OH)_y Nanocrystal Superstructures for Enhanced Gas-Phase Photocatalytic Activity," *Acs Nano*, vol. 10, no. 5, pp. 5578-5586, May 2016.
- 179 S. Han, L. Q. Cong, H. Lin, B. X. Xiao, H. L. Yang, and R. Singh, "Tunable electromagnetically induced transparency in coupled three-dimensional split-ring-resonator metamaterials," *Scientific Reports*, vol. 6, Feb 2016, Art no. 20801.
- 180 S. Han, L. Q. Cong, F. Gao, R. Singh, and H. L. Yang, "Observation of Fano resonance and classical analog of electromagnetically induced transparency in toroidal metamaterials," *Annalen Der Physik*, vol. 528, no. 5, pp. 352-357, May 2016.

- 181 S. T. Ha, C. Shen, J. Zhang, and Q. H. Xiong, "Laser cooling of organic-inorganic lead halide perovskites," *Nature Photonics*, vol. 10, no. 2, pp. 115+, Feb 2016.
- 182 M. Gupta and R. Singh, "Toroidal versus Fano Resonances in High Q planar THz Metamaterials," *Advanced Optical Materials*, vol. 4, no. 12, pp. 2119-2125, Dec 2016.
- 183 M. Gupta, V. Savinov, N. N. Xu, L. Q. Cong, G. Dayal, S. Wang, W. L. Zhang, N. I. Zheludev, and R. Singh, "Sharp Toroidal Resonances in Planar Terahertz Metasurfaces," *Advanced Materials*, vol. 28, no. 37, pp. 8206-8211, Oct 2016.
- 184 W. Guerin, Y. D. Chong, Q. Baudouin, M. Lierter, S. Rotter, and R. Kaiser, "Diffusive to quasiballistic random laser: incoherent and coherent models," *Journal of the Optical Society of America B-Optical Physics*, vol. 33, no. 9, pp. 1888-1896, Sep 2016.
- 185 D. Giovanni, W. K. Chong, H. A. Dewi, K. Thirumal, I. Neogi, R. Ramesh, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Tunable room-temperature spin-selective optical Stark effect in solution-processed layered halide perovskites," *Science Advances*, vol. 2, no. 6, Jun 2016, Art no. UNSP e1600477.
- 186 S. N. Ghosh and Y. D. Chong, "Exceptional points and asymmetric mode conversion in quasiguided dual-mode optical waveguides," *Scientific Reports*, vol. 6, Apr 2016, Art no. 19837.
- 187 B. Gholipour, P. Bastock, L. Cui, C. Craig, K. Khan, D. W. Hewak, and C. Soci, "Lithography Assisted Fiber-Drawing Nanomanufacturing," *Scientific Reports*, vol. 6, Oct 2016, Art no. 35409.
- 188 Z. Gao, F. Gao, Y. M. Zhang, and B. L. Zhang, "Deep-subwavelength magnetic-couplingdominant interaction among magnetic localized surface plasmons," *Physical Review B*, vol. 93, no. 19, May 2016, Art no. 195410.
- 189 Z. Gao, F. Gao, and B. L. Zhang, "Guiding, bending, and splitting of coupled defect surface modes in a surface-wave photonic crystal," *Applied Physics Letters*, vol. 108, no. 4, Jan 2016, Art no. 041105.
- 190 Z. Gao, F. Gao, and B. L. Zhang, "Multi-directional plasmonic surface-wave splitters with full bandwidth isolation," *Applied Physics Letters*, vol. 108, no. 11, Mar 2016, Art no. 111107.
- 191 Z. Gao, F. Gao, and B. L. Zhang, "High-order spoof localized surface plasmons supported on a complementary metallic spiral structure," *Scientific Reports*, vol. 6, Apr 2016, Art no. 24447.
- 192 Z. Gao, F. Gao, H. Y. Xu, Y. M. Zhang, and B. L. Zhang, "Localized spoof surface plasmons in textured open metal surfaces," *Optics Letters*, vol. 41, no. 10, pp. 2181-2184, May 2016.
- 193 Z. Gao, F. Gao, H. Y. Xu, Y. M. Zhang, and B. L. Zhang, "Experimental demonstration of a band-notched line-defect waveguide in a surface-wave photonic crystal," *Applied Physics Letters*, vol. 109, no. 13, Sep 2016, Art no. 131103.
- 194 Z. Gao, F. Gao, K. K. Shastri, and B. L. Zhang, "Frequency-selective propagation of localized spoof surface plasmons in a graded plasmonic resonator chain," *Scientific Reports*, vol. 6, May 2016, Art no. 25576.
- 195 Y. Gao, G. N. Yu, Y. Wang, C. Dang, T. C. Sum, H. D. Sun, and H. V. Demir, "Green Stimulated Emission Boosted by Nonradiative Resonant Energy Transfer from Blue Quantum Dots," *Journal of Physical Chemistry Letters*, vol. 7, no. 14, pp. 2772-2778, Jul 2016.
- 196 F. Gao, X. H. Shi, X. Lin, H. Y. Xu, and B. L. Zhang, "Translation and Rotation of Transformation Media under Electromagnetic Pulse," *Scientific Reports*, vol. 6, Jun 2016, Art no. 28346.
- 197 F. Gao, Z. Gao, X. H. Shi, Z. J. Yang, X. Lin, H. Y. Xu, J. D. Joannopoulos, M. Soljacic, H. S. Chen, L. Lu, Y. D. Chong, and B. L. Zhang, "Probing topological protection using a designer surface plasmon structure," *Nature Communications*, vol. 7, May 2016, Art no. 11619.
- 198 F. Gao, Z. Gao, Y. Luo, and B. L. Zhang, "Invisibility Dips of Near-Field Energy Transport in a Spoof Plasmonic Metadimer," *Advanced Functional Materials*, vol. 26, no. 45, pp. 8307-8312, Dec 2016.
- 199 X. Fang, M. L. Tseng, D. P. Tsai, and N. I. Zheludev, "Coherent Excitation-Selective Spectroscopy of Multipole Resonances," *Physical Review Applied*, vol. 5, no. 1, Jan 2016, Art no. 014010.
- 200 X. Fang, K. F. MacDonald, E. Plum, and N. I. Zheludev, "Coherent control of light-matter interactions in polarization standing waves," *Scientific Reports*, vol. 6, Aug 2016, Art no. 31141.
- 201 J. X. Fang, J. Li, C. F. Tian, Q. Q. Gao, X. J. Wang, N. Y. Gao, X. L. Wen, C. S. Ma, H. J. You, Z. L. Yang, Q. H. Xu, Q. H. Xiong, and Z. Y. Li, "Gold nanorings synthesized via a stress-driven collapse and etching mechanism," *Npg Asia Materials*, vol. 8, Nov 2016, Art no. e323.
- 202 R. Dumke, Z. H. Lu, J. Close, N. Robins, A. Weis, M. Mukherjee, G. Birkl, C. Hufnagel, L. Amico, M. G. Boshier, K. Dieckmann, W. H. Li, and T. C. Killian, "Roadmap on quantum optical systems," *Journal of Optics*, vol. 18, no. 9, Sep 2016, Art no. 093001.
- 203 K. Z. Du, X. Z. Wang, Y. Liu, P. Hu, M. I. B. Utama, C. K. Gan, Q. H. Xiong, and C. Kloc, "Weak Van der Waals Stacking, Wide-Range Band Gap, and Raman Study on Ultrathin Layers of Metal Phosphorus Trichalcogenides," *Acs Nano*, vol. 10, no. 2, pp. 1738-1743, Feb 2016.

- 204 W. L. Dong, M. Krbal, J. Kalikka, X. Y. Chin, B. Gholipour, C. Soci, P. J. Fons, K. V. Mitrofanov, L. J. Chen, and R. E. Simpson, "Enhanced Sb₂S₃ crystallisation by electric field induced silver doping," *Thin Solid Films*, vol. 616, pp. 80-85, Oct 2016.
- 205 S. Dong, S. Pal, J. Lian, Y. Chan, O. V. Prezhdo, and Z. H. Loh, "Sub-Picosecond AugerMediated Hole-Trapping Dynamics in Colloidal CdSe/CdS Core/Shell Nanoplatelets," *Acs Nano*, vol. 10, no. 10, pp. 9370-9378, Oct 2016.
- 206 Y. Deng, S. Xu, R. R. Zhang, B. Zheng, H. Chen, F. Gao, F. X. Yu, B. L. Zhang, and H. S. Chen, "Ultra-broadband carpet cloak for transverse-electric polarization," *Journal of Optics*, vol. 18, no. 4, Apr 2016, Art no. 044006.
- 207 A. Delteil, Z. Sun, W. B. Gao, E. Togan, S. Faelt, and A. Imamoglu, "Generation of heralded entanglement between distant hole spins," *Nature Physics*, vol. 12, no. 3, pp. 218-, Mar 2016.
- 208 G. Dayal, X. Y. Chin, C. Soci, and R. Singh, "High-Q Whispering-Gallery-Mode-Based Plasmonic Fano Resonances in Coupled Metallic Metasurfaces at Near Infrared Frequencies," *Advanced Optical Materials*, vol. 4, no. 8, pp. 1295-1301, Aug 2016.
- 209 G. Dayal, X. Y. Chin, C. Soci, and R. Singh, "Independent Tailoring of Super-Radiant and SubRadiant Modes in High-Q Plasmonic Fano Resonant Metasurfaces," *Advanced Optical Materials*, vol. 4, no. 11, pp. 1860-1866, Nov 2016.
- 210 D. Cortecchia, H. A. Dewi, J. Yin, A. Bruno, S. Chen, T. Baikie, P. P. Boix, M. Gratzel, S. Mhaisalkar, C. Soci, and N. Mathews, "Lead-Free MA(2)CuCl(x)Br(4-x), Hybrid Perovskites," *Inorganic Chemistry*, vol. 55, no. 3, pp. 1044-1052, Feb 2016.
- 211 L. Q. Cong, N. N. Xu, D. R. Chowdhury, M. Manjappa, C. Rockstuhl, W. L. Zhang, and R. Singh, "Nonradiative and Radiative Resonances in Coupled Metamolecules," *Advanced Optical Materials*, vol. 4, no. 2, pp. 252-258, Feb 2016.
- 212 L. Q. Cong, Y. K. Srivastava, and R. Singh, "Inter and intra-metamolecular interaction enabled broadband high-efficiency polarization control in metasurfaces," *Applied Physics Letters*, vol. 108, no. 1, Jan 2016, Art no. 011110.
- 213 L. Q. Cong, Y. K. Srivastava, and R. Singh, "Near-Field Inductive Coupling Induced Polarization Control in Metasurfaces," *Advanced Optical Materials*, vol. 4, no. 6, pp. 848-852, Jun 2016.
- 214 Y. D. Chong and M. C. Rechtsman, "Tachyonic dispersion in coherent networks," *Journal of Optics*, vol. 18, no. 1, Jan 2016, Art no. 014001.
- 215 W. K. Chong, K. Thirumal, D. Giovanni, T. W. Goh, X. F. Liu, N. Mathews, S. Mhaisalkar, and T. C. Sum, "Dominant factors limiting the optical gain in layered two-dimensional halide perovskite thin films," *Physical Chemistry Chemical Physics*, vol. 18, no. 21, pp. 14701-14708, Jun 2016.
- 216 S. T. Chen, K. Roh, J. Lee, W. K. Chong, Y. Lu, N. Mathews, T. C. Sum, and A. Nurmikko, "A Photonic Crystal Laser from Solution Based Organo-Lead Iodide Perovskite Thin Films," *Acs Nano*, vol. 10, no. 4, pp. 3959-3967, Apr 2016.
- 217 H. L. Chen, Y. M. Zhang, B. L. Zhang, and L. Gao, "Optical bistability in a nonlinear-shellcoated metallic nanoparticle," *Scientific Reports*, vol. 6, Feb 2016, Art no. 21741.
- 218 E. A. Chan, S. A. Aljunid, N. I. Zheludev, D. Wilkowski, and M. Ducloy, "Doppler-free approach to optical pumping dynamics in the 6S(1/2)-5D(5/2) electric quadrupole transition of cesium vapor," *Optics Letters*, vol. 41, no. 9, pp. 2005-2008, May 2016.
- 219 Z. S. Chai, N. N. Zhang, P. Sun, Y. Huang, C. X. Zhao, H. J. Fang, X. Fan, and W. J. Mai, "Tailorable and Wearable Textile Devices for Solar Energy Harvesting and Simultaneous Storage," *Acs Nano*, vol. 10, no. 10, pp. 9201-9207, Oct 2016.
- 220 P. Cencillo-Abad, N. I. Zheludev, and E. Plum, "Metadevice for intensity modulation with subwavelength spatial resolution," *Scientific Reports*, vol. 6, Nov 2016, Art no. 37109.
- 221 P. Cencillo-Abad, E. Plum, E. T. F. Rogers, and N. I. Zheludev, "Spatial optical phasemodulating metadevice with subwavelength pixelation," *Optics Express*, vol. 24, no. 16, pp. 18790-18798, Aug 2016.
- 222 P. Cencillo-Abad, J. Y. Ou, E. Plum, J. Valente, and N. I. Zheludev, "Random access actuation of nanowire grid metamaterial," *Nanotechnology*, vol. 27, no. 48, Dec 2016, Art no. 485206.
- 223 H. Cable, M. L. Gu, and K. Modi, "Power of one bit of quantum information in quantum metrology," *Physical Review A*, vol. 93, no. 4, Apr 2016, Art no. 040304.
- 224 M. D. Birowosuto, D. Cortecchia, W. Drozdowski, K. Brylew, W. Lachmansi, A. Bruno, and C. Soci, "X-ray Scintillation in Lead Halide Perovskite Crystals," *Scientific Reports*, vol. 6, Nov 2016, Art no. 37254.

- 225 S. Bhaumik, S. A. Veldhuis, Y. F. Ng, M. J. Li, S. K. Muduli, T. C. Sum, B. Damodaran, S. Mhaisalkar, and N. Mathews, "Highly stable, luminescent core-shell type methylammoniumoctylammonium lead bromide layered perovskite nanoparticles," *Chemical Communications*, vol. 52, no. 44, pp. 7118-7121, 2016.
- 226 S. A. Aljunid, E. A. Chan, G. Adamo, M. Ducloy, D. Wilkowski, and N. I. Zheludev, "Atomic Response in the Near-Field of Nanostructured Plasmonic Metamaterial," *Nano Letters*, vol. 16, no. 5, pp. 3137-3141, May 2016.
- 227 Y. Abe, H. R. Li, J. Yin, C. Soci, A. C. Grimsdale, and Y. M. Lam, "A fused thieno 3,2-b thiophene-dithiophene based donor molecule for organic photovoltaics: a structural comparative study with indacenodithiophene," *Journal of Materials Chemistry C*, vol. 4, no. 41, pp. 9656-9663, Nov 2016.
- 228 "Near-Field Energy Transfer Using Nanoemitters For Optoelectronics", B. Guzelturk, and H. V. Demir, *Advanced Functional Materials*, 26, 8158 (2016).
- 229 "Platelet-in-Box Colloidal Quantum Wells: CdSe/CdS@CdS Core/Crown@Shell Heteronanoplatelets", Y. Kelestemur, B. Guzelturk, O. Erdem, M. Olutas, K. Gungor, and H. V. Demir, *Advanced Functional Materials*, 26, 3570 (2016).
- 230 "Highly Efficient Nonradiative Energy Transfer from Colloidal Semiconductor Quantum Dots to Wells for Sensitive Noncontact Temperature Probing", M. Olutas, B. Guzelturk, Y. Kelestemur, K. Gungor, and H. V. Demir, *Advanced Functional Materials*, 26, 2891 (2016).
- 231 "High-Stability, High-Efficiency Organic Monoliths Made of Oligomer Nanoparticles Wrapped in Organic Matrix", Z. Soran-Erdem, T. Erdem, K. Gungor, J. Pennakalathil, D. Tuncel and H. V. Demir, *ACS Nano*, 10, 5333 (2016).
- 232 "High-efficiency light-emitting diodes of organometal halide perovskite amorphous nanoparticles", J. Xing, F. Yan, Y. Zhao, S. Chen, H. Yu, Q. Zhang, R. Zeng, H. V. Demir, X. W. Sun, A. Huan, Q. Xiong, *ACS Nano*, 10, 6623 (2016).
- 233 "Multie exciton Generation Assisted Highly Photosensitive CdHgTe Nanocrystal Skins", S. Akhavan, A. F. Cihan, A. Yeltik, B. Bozok, V. Lesnyak, N. Gaponik, A. Eychmüller and H. V. Demir, *Nano Energy*, 26, 324 (2016).
- 234 "Colloidal nanophotonics: the emerging technology platform", S. V. Gaponenko, H. V. Demir, C. Seassal, and U. Woggon, *Optics Express*, 24, A430 (2016).
- 235 "Excitonic improvement of colloidal nanocrystals in salt powder matrix for quality lighting and color enrichment", T. Erdem, Z. Soran-Erdem, Y. Kelestemur, N. Gaponik and H. V. Demir, *Optics Express*, 24, A74 (2016).
- 236 "Temperature-Dependent Emission Kinetics of Colloidal Semiconductor Nanoplatelets Strongly Modified by Stacking", O. Erdem, M. Olutas, B. Guzelturk, Y. Kelestemur, and H. V. Demir, *J. Phys. Chem. Lett.*, 7, 548 (2016).
- 237 "Green Stimulated Emission Boosted by Nonradiative Resonant Energy Transfer from Blue Quantum Dots", Y. Gao, G. Yu, Y. Wang, S. C. Dang, T. C. Sum, H. Sun and H. V. Demir, *J. Phys. Chem. Lett.*, 7, 2772 (2016).
- 238 "Colloidal Nanocrystals Embedded in Macrocrys tals: Methods and Applications", M. Adams, N. Gaponik, T. Erdem, Z. Soran-Erdem, H. V. Demir, *J. Phys. Chem. Lett.*, 7, 4117 (2016).
- 239 "Flexible and Fragmentable Tandem Photosensitive Nanocrystal Skins", S. Akhavan, C. Uran, B. Bozok, K. Gungor, Y. Kelestemur, V. Lesnyak, N. Gaponik, A. Eychmüller, and H. V. Demir, *Nanoscale*, 8, 4495 (2016).
- 240 "Exciton energy recycling from ZnO defect levels: towards electrically driven hybrid quantum-dot white light-emitting-diodes", X. Zhao, W. Liu , R. Sun , Y. Gao , B. Zhu , H. V. Demir , H. Sun and S. Wang, *Nanoscale*, 8, 5835 (2016).
- 241 "Solution-processed Highly Bright and Durable Cesium Lead Halide Perovskite Lightemitting Diodes", Z. Wei, A. Perumal, R. Su, S. Sushant, J. Xing, Q. Zhang, S. T. Tan, H. V. Demir, Q. Xiong, *Nanoscale*, 8, 18021 (2016).
- 242 "Exciton dynamics in luminescent carbon nanodots: Electron–hole exchange interaction", B. Peng, X. Lu, S. Chen, C. H. A. Huan, Q. Xiong , E. Mutlugun, H. V. Demir, S. F. Yu, *Nano Research*, 9, 549 (2016).
- 243 "Fluorescent heterodoped nanotetrapods as synergistically enhancing positive and negative MRI contrast agents", V. K. Sharma, A. Alipour, Z. Soran-Erdem, Y. Kelestemur, Z. G. Aykut, and H. V. Demir, *ACS Applied Materials & Interfaces*, 8, 12352 (2016).
- 244 "Quantum Dot / Light Emitting Electrochemical Cell Hybrid Device and Mechanism of its Operation", J. Frohleiks, S. Wepfer, Y. Kelestemur, H. V. Demir, G. Bacher, E. Nannen, *ACS Applied Materials & Interfaces*, 8, 24692 (2016).
- 245 "Colloidal nanocrystals for quality lighting and displays: milestones and recent developments", T. Erdem and H. V. Demir, *Nanophotonics*, 5, 74 (2016).

- 246 "Reconfigurable Liquid Whispering Gallery Mode Microlasers", S. Yang, V. D. Ta, Y. Wang, R. Chen, T. He, H. V. Demir, H. Sun, *Scientific Reports*, 6, 27200 (2016).
- 247 "Cascaded plasmon-plasmon coupling mediated energy transfer across stratified metal-dielectric nanostructures", S. Golmakaniyoon, P. L. Hernandez-Martinez, H. V. Demir and X. W. Sun, *Scientific Reports*, 6, 34086 (2016).
- 248 "High brightness formamidinium lead bromide perovskite nanocrystal light emitting devices", A. Perumal, S. Shendre, M. Li, Y. K. E. Tay, V. K. Sharma, S. Chen, Z. Wei, Q. Liu, Y. Gao, P. J. S. Buenconsejo, S. T. Tan, C. L. Gan, Q. Xiong, T. C. Sum and H. V. Demir, *Scientific Reports*, 6, 36733 (2016).
- 249 "Azimuthally Polarized, Circular Colloidal Quantum Dot Laser Beam Enabled by a Concentric Grating", Y. Gao, L. Y. M. Tobing, A. Kiffer, D. H. Zhang, C. Dang, H. V. Demir, *ACS Photonics*, 3, 2255 (2016).
- 250 "A charge inverter for III-nitride light-emitting diodes", Z.-H. Zhang, Y. Zhang, W. Bi, C. Geng, S. Xu, H. V. Demir, and X. W. Sun, *Applied Physics Letters*, 108, 133502 (2016).
- 251 "On the hole accelerator for III-nitride light-emitting diodes", Z.-H. Zhang, Y. Zhang, W. Bi, C. Geng, S. Xu, H. V. Demir, and X. W. Sun, *Applied Physics Letters*, 108, 151105 (2016).
- 252 "Critical role of CdSe nanoplatelets in color-converting CdSe/ZnS nanocrystals for InGaN/GaN light-emitting diodes", N. Hasanov, V. K. Sharma, P. L. Hernández-Martínez, S. T. Tan, and H. V. Demir, *Optics Letters*, 41, 2883 (2016).
- 253 "Decoupling contact and mirror: an effective way to improve the reflector for flipchip InGaN/GaN-based light-emitting diodes", B. Zhu, W. Liu, S. Lu, Y. Zhang, N. Hasanov, X. Zhang, Y. Ji, Z.-H. Zhang, S. T. Tan, H. Liu and H. V. Demir, *Journal of Physics D: Applied Physics*, 49, 265106 (2016).
- 254 "An Optically Readable InGaN/GaN RRAM", K. Zheng, J. L. Zhao, Z. H. Zhang, Y. Ji, B. B. Zhu, S. T. Tan, H. V. Demir, K. L. Teo, and X. W. Sun, *IEEE Transactions on Electron Devices*, 63, 2328 (2016).
- 255 "Modulating ohmic contact through InGaN/GaN interfacial layer for highperformance InGaN/GaN-based light-emitting diodes", B. Zhu, S. T. Tan, W. Liu, S. Lu, Y. Zhang, S. Chen, N. Hasanov, X. Kang, and H. V. Demir, *IEEE Photonics Journal*, 8, 1600808 (2016).
- 256 "Multi-Point Single-Antenna Sensing Enabled by Wireless Nested Split-Ring Resonator Sensors", B. Ozbey, V. B. Erturk, O. Kurc, A. Altintas and H. V. Demir, *IEEE Sensors Journal*, 16, 7744 (2016).
- 257 "On the internal quantum efficiency for InGaN/GaN light-emitting diodes grown on insulating substrates", Z.-H. Zhang, Y. Zhang, W. Bi, H. V. Demir and X. W. Sun, *Physica Status Solidi A*, 213, 3078 (2016).
- 258 "Improved performance of InGaN/GaN flip-chip light-emitting diodes through the use of robust Ni/Ag/TiW mirror contacts", N. Hasanov, B. Zhu, V. K. Sharma, S. Lu, Y. Zhang, W. Liu, S. T. Tan, X. W. Sun and H. V. Demir, *Vac. Sci. Technol. B*, 34, 011209 (2016).
- 259 C. Zuo, L. Huang, M. Zhang, Q. Chen, A. Asundi, Temporal phase unwrapping algorithms for fringe projection profilometry: A comparative review, *Optics and Lasers in Engineering*, 85 (2016) 84-103.
- 260 R. Zhang, H. Guo, A.K. Asundi, Geometric analysis of influence of fringe directions on phase sensitivities in fringe projection profilometry, *Applied Optics*, 55 (2016) 7675-7687.
- 261 P. Yang, Z. Wang, Y. Yan, W. Qu, H. Zhao, A. Asundi, L. Yan, Close-range photogrammetry with light field camera: From disparity map to absolute distance, *Applied Optics*, 55 (2016) 7477-7486.
- 262 F. Yan, H. Yan, Y. Yu, W. Zhou, A. Asundi, The suppression of phase error by applying window functions to digital holography, *Optics and Lasers in Engineering*, 86 (2016) 206-215.
- 263 Z. Wang, W. Qu, F. Yang, A.K. Asundi, Focal length calibration of an electrically tunable lens by digital holography, *Applied Optics*, 55 (2016) 749-756.
- 264 C. Wang, L.L. Xu, J. Zhu, Z.W. Yuan, Y.J. Yu, A.K. Asundi, A novel integrated fiber-optic interferometer model and its application in micro-displacement measurement, *Optics and Lasers in Engineering*, 86 (2016) 125-131.
- 265 M. Maheshwari, S.C. Tjin, A. Asundi, Combined fiber Bragg grating and fiber optic polarimetric sensors on a single fiber for structural health monitoring of two-dimensional structures, *Structural Health Monitoring*, 15 (2016) 599-609.
- 266 H. Li, G. Feng, P. Yang, Z. Wang, S. Zhou, A. Asundi, Online fringe projection profilometry based on scale-invariant feature transform, *Optical Engineering*, 55 (2016).
- 267 H. Li, G. Feng, T. Bourgade, P. Yang, S. Zhou, A. Asundi, A layered modulation method for pixel matching in online phase measuring profilometry, *Optics Communications*, 377 (2016) 14-23.
- 268 T. Bourgade, S. Jianfei, Z. Wang, R. Elsa, A. Asundi, Compact lens-less digital holographic microscope for MEMS inspection and characterization, *Journal of Visualized Experiments*, 2016 (2016).
- 269 A. Adhikari, K. Dev, A. Asundi, Subwavelength metrological chracterization by Mueller matrix polarimeter and finite difference time domain method, *Optics and Lasers in Engineering*, 86 (2016) 242-247.

- 270 C. Song, A.S. Guru Prasad, K.H.K. Chan, V.M. Murukeshan, Characterization and optimization of illumination vector for contouring surface form and feature using DSPI, *Review of Scientific Instruments*, 87 (2016).
- 271 V.K. Shinoj, X.J.J. Hong, V.M. Murukeshan, M. Baskaran, A. Tin, Progress in anterior chamber angle imaging for glaucoma risk prediction – A review on clinical equipment, practice and research, *Medical Engineering and Physics*, 38 (2016) 1383-1391.
- 272 A. Shinde, S.M. Perinchery, M.V. Matham, Fiber pixelated image database, *Optical Engineering*, (2016).
- 273 K.M. Ratheesh, L.K. Seah, V.M. Murukeshan, Spectral phase-based automatic calibration scheme for swept source-based optical coherence tomography systems, *Physics in Medicine and Biology*, 61 (2016) 7652-7663.
- 274 K.M. Ratheesh, P. Prabhathan, L.K. Seah, V.M. Murukeshan, Gold nanorods with higher aspect ratio as potential contrast agent in optical coherence tomography and for photothermal applications around 1300nm imaging window, *Biomedical Physics and Engineering Express*, 2 (2016).
- 275 P. Prabhathan, V.M. Murukeshan, Surface Plasmon Polariton-coupled Waveguide Back Reflector in Thin-film Silicon Solar Cell, *Plasmonics*, 11 (2016) 253-260.
- 276 S.M. Perinchery, A. Shinde, M.V. Matham, Imaging behind opaque obstacle: a potential method for guided in vitro needle placement, *Biomedical Optics Express*, (2016).
- 277 S.M. Perinchery, A. Shinde, C.Y. Fu, X.J. Jeesmond Hong, M. Baskaran, T. Aung, V.M. Murukeshan, High resolution iridocorneal angle imaging system by axicon lens assisted gonioscopy, *Scientific Reports*, 6 (2016).
- 278 R.K. Meleppat, C. Shearwood, S.L. Keey, M.V. Matham, Quantitative optical coherence microscopy for the in situ investigation of the biofilm *Journal of Biomedical Optics*, (2016).
- 279 R.K. Meleppat, P. Prabhathan, S.L. Keey, M.V. Matham, Plasmon resonant silica-coated silver nanoplates as contrast agents for optical coherence tomography, *Journal of Biomedical Nanotechnology*, (2016).
- 280 H.T. Lim, V.M. Murukeshan, Spatial-scanning hyperspectral imaging probe for bio-imaging applications, *Review of Scientific Instruments*, 87 (2016).
- 281 H.T. Lim, V.M. Murukeshan, A four-dimensional snapshot hyperspectral video-endoscope for bio-imaging applications, *Scientific Reports*, 6 (2016).
- 282 K. Hasna, K. Lakshmi, M.K. Ezhuthachan Jayaraj, K.R. Kumar, M.V. Matham, Development of high-sensitive, reproducible colloidal surface-enhanced Raman spectroscopy active substrate using silver nanocubes for potential biosensing applications, *Journal of Nanophotonics*, (2016).
- 283 J. Bingi, V.M. Murukeshan, Individual speckle diffraction based 1D and 2D Random Grating Fabrication for detector and solar energy harvesting applications, *Scientific Reports*, 6 (2016).
- 284 A.J.T. Teo, A. Mishra, I. Park, Y.J. Kim, W.T. Park, Y.J. Yoon, Polymeric Biomaterials for Medical Implants and Devices, *ACS Biomaterials Science and Engineering*, 2 (2016) 454-472.
- 285 C.Y. Lee, S.W. Hyun, Y.J. Kim, S.W. Kim, Optical inspection of smartphone camera modules by near-infrared low-coherence interferometry, *Optical Engineering*, 55 (2016).
- 286 P. Kim, M.S. Nguyen, O. Kwon, Y.J. Kim, Y.J. Yoon, Phase-dependent dynamic potential of magnetically coupled two-degree-of-freedom bistable energy harvester, *Scientific Reports*, 6 (2016).
- 287 Y.S. Jang, G. Wang, S. Hyun, H.J. Kang, B.J. Chun, Y.J. Kim, S.W. Kim, Comb-referenced laser distance interferometer for industrial nanotechnology, *Scientific Reports*, 6 (2016).
- 288 S. Han, H. Kim, Y.W. Kim, Y.J. Kim, S. Kim, I.Y. Park, S.W. Kim, High-harmonic generation by field enhanced femtosecond pulses in metal-sapphire nanostructure, *Nature Communications*, 7 (2016).
- 289 X.T. Geng, B.J. Chun, J.H. Seo, K. Seo, H. Yoon, D.E. Kim, Y.J. Kim, S. Kim, Frequency comb transferred by surface plasmon resonance, *Nature Communications*, 7 (2016).
- 290 B.J. Chun, Y.J. Kim, S.W. Kim, Inter-comb synchronization by mode-to-mode locking, *Laser Physics Letters*, 13 (2016).
- 291 S. Choi, M.F. Ciappina, J.A. Pérez-Hernández, A.S. Landsman, Y.J. Kim, S.C. Kim, D. Kim, Active tailoring of nanoantenna plasmonic fields using few-cycle laser pulses, *Physical Review A*, 93 (2016).
- 292 J. An, Z. Zhan, G. Sun, H.K.S.V. Mohan, J. Zhou, Y.J. Kim, L. Zheng, Direct Preparation of Carbon Nanotube Intramolecular Junctions on Structured Substrates, *Scientific Reports*, 6 (2016).
- 293 N. Zhang, G. Humbert, T. Gong, P. Shum, K. Li, J. Auguste, Z. Wu, J. Hu, F. Luan, Q. X. Dinh, M. Olivo, and L. Wei, "Side-channel photonic crystal fiber for surface enhanced Raman scattering sensing," *Sensors and Actuators B: Chemical* 223, 195-201, 2016.

- 294 T. Gong, N. Zhang, K. V. Kong, D. Goh, C. Ying, J. Auguste, P. Shum, L. Wei, G. Humbert, K. Yong, and M. Olivo, "Rapid SERS monitoring of lipid-peroxidation-derived protein modifications in cells using photonic crystal fiber sensor," *Journal of Biophotonics* 9, 32-37, 2016.
- 295 PV Sudeep, S Issac Niwas, P Palanisamy, Jeny Rajan, Y. Xiaojun, X. Wang, Y. Luo, Linbo Liu, "Enhancement and Bias Removal of Optical Coherence Tomography Images: an Iterative Approach with Adaptive Bilateral Filtering, *Computers in Biology and Medicine*", Available online 13 February 2016, ISSN 0010-4825, <http://dx.doi.org/10.1016/j.combiomed.2016.02.003>.
- 296 L. Y. M. Tobing, Y. Luo, K. S. Low, D. Zhang, D.H. Zhang, "Observation of the kinetic inductance limitation for fundamental magnetic resonance in ultrasmall gold v-shape split ring resonators", *Advanced Optical Materials*, vol 4,no 7, pp1047-1052, 2016.
- 297 J Tong, Y Xie, Z Xu, S Qiu, P Ni, LYM Tobing, DH Zhang, "Study of dual color infrared photodetection from n-GaSb/n-InAsSb heterostructures", *AIP Advances*, vol 6, no2, p025120, 2016.
- 298 S Qiu, LYM Tobing, J Tong, Y Xie, Z Xu, P Ni, DH Zhang, "Two-dimensional metallic square-hole array for enhancement of mid-wavelength infrared photodetection", *Optical and Quantum Electronics*, vol 48, no 3, pp1-8, 2016.
- 299 S Qiu, LYM Tobing, Z Xu, J Tong, P Ni, DH Zhang, "Surface Plasmon Enhancement on Infrared Photodetection", *Procedia Engineering*, vol 140, pp152-158, 2016.
- 300 Yucheng Wang, Bo Wu, Chengbin Yang, Maixian Liu, Tze Chien Sum, Ken-Tye Yong, "Synthesis and Characterization of Mn:ZnSe/ZnS/ZnMnS Sandwiched QDs for Multimodal Imaging and Theranostic Applications", *Small*, vol 12, no 4, pp534-546, 2016.
- 301 Shengtao Mei, Kun Huang, Hong Liu, Fei Qin, Muhammad Q. Mehmood, Zhengji Xu, Minghui Hong, Daohua Zhang, "On-chip discrimination of orbital angular momentum of light with plasmonic nanoslits", *Nanoscale*, vol 8, no 4, pp2227-2233, 2016.
- 302 Z. Wu, P. P. Shum, X. Shao, H. Zhang, N. Zhang, T. Huang, G. Humbert, J.-L. Auguste, F. Gérôme, J.-M. Blondy, and X. Q. Dinh, "Temperature- and strain-insensitive curvature sensor based on ring-core modes in dual-concentric-core fiber", *Optics Letters*, vol 41, no 2, pp380-383, 2016.
- 303 Jin Tao, Qi Jie Wang, Jingjing Zhang, Yu Luo, "Reverse surface-polariton cherenkov radiation", *Scientific Reports*, vol 6, p30704, 2016.
- 304 Z. Liao, A. I. Fernandez-Dominguez, J. Zhang, S. A. Maier, T. J. Cui, and Yu Luo, "Homogenous metamaterial description of localized spoof plasmons in spiral geometries", *ACS Photonics*, vol 3, no 10, pp1768-1775, 2016.
- 305 Yuan Liang, Hao Yu, Jincai Wen, Anak Agung Alit Apriyana, Nan Li, Yu Luo, "On-chip sub-terahertz surface plasmon polariton transmission lines with mode converter in CMOS", *Scientific Reports*, vol 6, p30063, 2016.
- 306 ZHANG Hailiang, WU Zhifang, SHUM Perry Ping, WANG Ruoxu, DINH Xuan Quyen, FU Songnian, TONG Weijun and TANG Ming, "Fiber Bragg gratings in heterogeneous multicore fiber for directional bending sensing", *Journal of Optics*, vol 18, no 8, p085705, 2016.
- 307 ZHANG Nan, HUMBERT Georges, WU Zhifang, LI Kaiwei, SHUM Perry Ping, ZHANG Nancy Meng Ying, CUI Ying, AUGUSTE Jean-Louis, DINH Xuan Quyen and WEI Lei, "In-line optofluidic refractive index sensing in a side-channel photonic crystal fiber", *Optics Express*, vol 24, no 24, pp27674-27682, 2016.
- 308 Fei Gao, Zhen Gao, Yu Luo, Baile Zhang, "Invisibility Dips of Near-Field Energy Transport in a Spoof Plasmonic Metadimer", *Advanced Functional Materials*, vol 26, no 45, pp8307-8312, 2016.
- 309 Xuefeng Yang, Jun Wang, Xiao Hann Lim, Zhengji Xu, Jinghua Teng, Dao Hua Zhang, "Unidirectional generation of surface plasmon polaritons by a single right-angled trapezoid metallic nanoslit", *Journal of Physics D: Applied Physics*, vol 50, no 4, p045101, 2016.
- 310 H.K.Li, T.P.Chen, S.G.Hu, W.L.Lee, Y.Liu, Q.Zhang, P.S.Lee, X.P.Wang, H.Y.Li, and G.-Q.Lo, "Resistive Switching in p-Type Nickel Oxide/n-Type Indium Gallium Zinc Oxide Thin Film Heterojunction Structure", *ECS Journal of Solid State Science and Technology*, vol 5, no 9, Q239-Q243, 2016.
- 311 Chengbin Yang, Nishtha Panwar, Yucheng Wang, Butian Zhang, Maixian Liu, Huiting Toh, Ho Sup Yoon, Swee Chuan Tjin, Peter Han Joo Chong, Wing-Cheung Law, Chih-Kuang Chen and Ken-Tye Yong, "Biodegradable charged polyester-based vectors (BCPVs) as an efficient non-viral transfection nanoagent for gene knockdown of the BCR-ABL hybrid oncogene in a human chronic myeloid leukemia cell line", *Nanoscale*, vol 8, no 17, pp9405-9416, 2016.
- 312 Y. Zeng, G. Liang, H. K. Liang, S. Mansha, B. Meng, T. Liu, X. Hu, J. Tao, L. Li, A. G. Davies, E. H. Linfield, Y. Zhang, Y. Chong, and Q. J. Wang, "Designer Multimode Localized Random Lasing in Amorphous Lattices at Terahertz Frequencies", *ACS Photonics*, vol 3, pp2453-2460, 2016.

- 313 Pei-Nan Ni, Jin-Chao Tong, Landobasa YM Tobing, Zheng-Ji Xu, Shupeng Qiu, Xiao-Hong Tang, Dao-Hua Zhang, "A buffer-free method for growth of InAsSb films on GaAs (001) substrates using MOCVD", *Journal of Crystal Growth*, 2016.
- 314 Jinchao Tong, Yiyang Xie, Peinan Ni, Zhengji Xu, Shupeng Qiu, Landobasa YM Tobing, Dao-Hua Zhang, "InAs_{0.91}Sb_{0.09} photoconductor for near and middle infrared photodetection", *Physica Scripta*, vol 91, no 11, p115801, 2016.
- 315 Tai-Lok Cheung, Liying Hong, Nanxi Rao, Chengbin Yang, Libo Wang, Wenn Jing Lai, Peter Han Joo Chong, Wing-Cheung Law, Ken-Tye Yong, "The non-aqueous synthesis of shape controllable Cu_{2-x}S plasmonic nanostructures in a continuous-flow millifluidic chip for the generation of photo-induced heating", *Nanoscale*, vol 8, no 12, pp6609-6622, 2016.
- 316 Giovanni Sartorello, Nicolas Olivier, Jingjing Zhang, Weisheng Yue, David J. Gosztola, Gary P. Wiederrecht, Gregory Wurtz, and Anatoly V. Zayats, "Ultrafast Optical Modulation of Second- and Third-Harmonic Generation from Cut-Disk-Based Metasurfaces", *ACS Photonics*, vol 3, no 8, pp1517-1522, 2016.
- 317 Youde Shen, Oleg Lebedev, Stuart Turner, Gustaaf Van Tendeloo, Xiaohui Song, Xuechao Yu, Qi Jie Wang, Hongyu Chen, Shadi A. Dayeh, Tom Wu, "Size-Induced Switching of Growth Direction: a New Approach towards Kinked Nanostructures", *Advanced Functional Materials*, vol 26, pp3687-3695, 2016.
- 318 Xuechao Yu, Zhaogang Dong, Joel K W Yang, Qi Jie Wang, "Room-temperature mid-infrared photodetector in all-carbon graphene nanoribbon-C60 hybrid nanostructure", *Optica*, vol 3, no 9, pp979-984, 2016.
- 319 Jingjing Zhang, Martijn Wubs, Pavel Ginzburg, Gregory Wurtz and Anatoly V Zayats, "Transformation quantum optics: designing spontaneous emission using coordinate transformations", *Journal of Optics*, vol 18, p044029, 2016.
- 320 P. Balasubramanian, "Comments on Dual-Rail Asynchronous Logic Multi-Level Implementation", *Integration, the VLSI Journal*, vol 52, no1, pp34-40, 2016.
- 321 P. Balasubramanian, "An Asynchronous Early Output Full Adder and a Relative-Timed Ripple Carry Adder", *WSEAS Transactions on Circuits and Systems*, vol 15, pp91-101, 2016.
- 322 P. Balasubramanian, K. Prasad, "A Fault Tolerance Improved Majority Voter for TMR System Architectures", *WSEAS Transactions on Circuits and Systems*, vol 15, pp108-122, 2016.
- 323 Balasubramanian Padmanabhan, "Design of Synchronous Section-Carry Based Carry Lookahead Adders with Improved Figure of Merit", *WSEAS Transactions on Circuits and Systems*, vol 15, pp155-164, 2016.
- 324 Balasubramanian Padmanabhan, "Area/Latency Optimized Early Output Asynchronous Full Adders and Relative-Timed Ripple Carry Adders", *SpringerPlus*, vol 5, p26, 2016.
- 325 P. Balasubramanian, "ASIC-based Design of NMR System Health Monitor for Mission/Safety-Critical Applications", *SpringerPlus*, vol 5, p16, 2016.
- 326 P. Balasubramanian, "System Reliability, Fault Tolerance and Design Metrics Tradeoffs in the Distributed Minority and Majority Voting Based Redundancy Scheme", *WSEAS Transactions on Systems*, vol 15, pp59-62, 2016.
- 327 P. Balasubramanian, N.E. Mastorakis, "FPGA Based Implementation of Distributed Minority and Majority Voting Based Redundancy for Mission and Safety-Critical Applications", *International Journal of Circuits and Electronics*, vol 1, pp185-190, 2016.
- 328 Xiaomin Liu, Chengbin Yang, Jing Liu, Jianwei Liu, Rui Hu, Ken-Tye Yong, Ling Ye, "In Vitro evaluation and monitoring of the expression level and localization of aldose reductase using functionalized quantum dots and EGFP", *Biotechnology and bioprocess engineering*, vol 20, no 4, pp800-806, 2016.
- 329 Xuechao Yu, Zhaogang Dong, YanPing Liu, Tao Jin, Jin Tao, YongQuan Zeng, Joel KW Yang, Qijie Wang, "High performance, visible to mid-infrared photodetector based on graphene nanoribbons passivated by HfO₂", *Nanoscale*, vol 8, no 1, pp327-332, 2016.
- 330 Jie Ma, Haitao Huang, Kaijie Ning, Xiaodong Xu, Guoqiang Xie, Liejia Qian, Kian Ping Loh, and Dingyuan Tang, "Generation of 30??fs pulses from a diode-pumped graphene mode-locked Yb:CaYAlO₄ laser", *Optics Letters*, vol 41, no 5, pp890-893, 2016.
- 331 Minmin Zhu, Zehui Du, Zongyou Yin, Wenwen Zhou, Zhengdong Liu, Siu Hon Tsang, Edwin Hang Tong Teo, "Low-Temperature In Situ Growth of Graphene on Metallic Substrates and Its Application in Anticorrosion", *ACS Applied Materials and Interfaces*, vol 8, no 1, p502, 2016.
- 332 R. Zhao, Yu Luo, J. B. Pendry, "Transformation optics applied to van der Waals interactions", *Chinese Science Bulletin*, vol 61, no 1, pp59-67, 2016.
- 333 Jun Wang, Kaijie Ning, Jian Zhang, Dewei Luo, Jie Ma, Danlei Yin, Dingyuan Tang, Ling Bing Kong, "Rapid Rate Sintering of Yttria Transparent Ceramics", *Journal of the American Ceramic Society*, 2016.

- 334 J. Ma; H. Huang ; H. Yu ; H. Zhang ; D. Tang, "45-fs Diode-pumped Passively Mode-locked Yb:NaY(WO₄)₂ Soliton Laser", IEEE Photonics Technology Letters, 2016.
- 335 T. Huang, X. Shao, P. P. Shum, T. Lee, T. Wu, Z. Wu, Y. Sun, H. Q. Lam, J. Zhang, and G. Brambilla, "Internal Asymmetric Plasmonic Slot Waveguide for Third Harmonic Generation with Large Fabrication Tolerance", *Plasmonics*, vol 1, pp1-9, 2016.
- 336 Vivek Mangalam, Kantisara Pita and Christophe Couteau, "Study of energy transfer mechanism from ZnO nanocrystals to Eu³⁺ions", *Nanoscale Research Letters*, vol 11, pp1-9, 2016.
- 337 Xuechao Yu, Shengli Zhang, Haibo Zeng, Qi Jie Wang, "Lateral black phosphorene P–N junctions formed via chemical doping for high performance near-infrared photodetector", *Nano Energy*, vol 25, pp34-41, 2016.

2015

- 1 Maheshwari Muneesh, Tjin Swee Chuan, Asundi A., "Efficient design of Fiber Optic Polarimetric Sensors for crack location & sizing", *Optics & Laser Technology*, Vol. 68, 182-190, May 2015
- 2 Maheshwari M., Tjin S.C., Ching W.W., Asundi A., "FBG and FOPS for local and global structural health monitoring on a single fiber", *Smart Materials and Structures*, Volume 24, Issue 4, Article No. 045033, 1 April 2015.
- 3 Panwar N., Yang C., Yin, Yoon H.S., Chuan T.S., Yong K-T., "RNAi-based therapeutic nanostrategy: IL-* gene silencing in pancreatic cancer cells using gold nanorods delivery vehicles", *Nanotechnology*, Volume 26, Issue 36, Article Number 365101, 11 September 2015.
- 4 Jun Gu, Chit Yaw Fu, Beng Koon Ng, Lin Bo Liu, Soo Kim Lim-Tan, Caroline Guat Lay Lee, "Enhancement of Early Cervical Cancer Diagnosis with Epithelial Layer Analysis of Fluorescence Lifetime Images", *PLoS ONE* 2015.
- 5 X. Li, W.D. Zhong, A. Alphones, C. Yu and Z. Xu "Improving performance of channel equalization in RSOA-based WDM-PON by QR decomposition," *Optics Express*, vol. 23, no. 21, pp. 27299-27305, Oct. 2015.
- 6 Xiaojun Yu^A, Xinyu Liu, Si Chen, Yuemei Luo, Xianghong Wang, Linbo Liu, High-resolution extended source optical coherence tomography, *Optics Express* 2015, 23, 26399-26413, 2015.
- 7 Shi W, Liu X, Wei C, Xu Z, Sim S, Liu Linbo*, Xu C.* , Micro-Optical Coherence Tomography Tracking of Magnetic Gene Transfection via Au-Fe3O4 Dumbbell Nanoparticles. *Nanoscale*, 7, 17249-17253, 2015.
- 8 Xinyu Liu, Si Chen, Dongyao Cui, Xiaojun Yu, and Linbo Liu, Spectral estimation optical coherence tomography for axial super-resolution, *Optics Express*, 23(2), 26521-26532, 2015.
- 9 En Bo, Xinyu Liu, Si Chen, Xiaojun Yu, Xianghong Wang, and Linbo Liu, "Spectral-domain optical coherence tomography with dual-balanced detection for auto-correlation artifacts reduction," *Opt. Express* 23, 28050-28058 (2015).
- 10 Q. D. Zhuang, E. A. Anyebe, R. Chen, H. Liu, A. M. Sanchez, M. K. Rajpalke, T. D. Veal, Z. M. Wang, Y. Z. Huang, and H. D. Sun, "Sb-Induced Phase Control of InAsSb Nanowires Grown by Molecular Beam Epitaxy," *Nano Letters*, vol. 15, no. 2, pp. 1109-1116, Feb 2015.
- 11 W. M. Zhu, Q. H. Song, L. B. Yan, W. Zhang, P. C. Wu, L. K. Chin, H. Cai, D. P. Tsai, Z. X. Shen, T. W. Deng, S. K. Ting, Y. D. Gu, G. Q. Lo, D. L. Kwong, Z. C. Yang, R. Huang, A. Q. Liu, and N. Zheludev, "A Flat Lens with Tunable Phase Gradient by Using Random Access Reconfigurable Metamaterial," *Advanced Materials*, vol. 27, no. 32, pp. 4739-4743, Aug 2015.
- 12 J. D. Zhou, Q. S. Zeng, D. H. Lv, L. F. Sun, L. Niu, W. Fu, F. C. Liu, Z. X. Shen, C. H. Jin, and Z. Liu, "Controlled Synthesis of High-Quality Mono layered alpha-In2Se3 via Physical Vapor Deposition," *Nano Letters*, vol. 15, no. 10, pp. 6400-6405, Oct 2015.
- 13 S. J. Zheng, L. F. Sun, X. H. Zhou, F. C. Liu, Z. Liu, Z. X. Shen, and H. J. Fan, "Coupling and Interlayer Exciton in Twist-Stacked WS2 Bilayers," *Advanced Optical Materials*, vol. 3, no. 11, pp. 1600-1605, Nov 2015.
- 14 S. J. Zheng, L. F. Sun, T. T. Yin, A. M. Dubrovkin, F. C. Liu, Z. Liu, Z. X. Shen, and H. J. Fan, "Monolayers of WxMo1-xS2 alloy heterostructure with in-plane composition variations," *Applied Physics Letters*, vol. 106, no. 6, Feb 2015, Art no. 063113.
- 15 N. I. Zheludev, "Journal of Optics: our strategy for the future," *Journal of Optics*, vol. 17, no. 1, Jan 2015, Art no. 010201.
- 16 N. I. Zheludev, "Obtaining optical properties on demand," *Science*, vol. 348, no. 6238, pp. 973-974, May 2015.
- 17 X. Zhao, Y. Gao, Y. Wang, H. V. Demir, S. J. Wang, and H. D. Sun, "Manipulating Optical Properties of ZnO/Ga:ZnO Core-Shell Nanorods Via Spatially Tailoring Electronic Bandgap," *Advanced Optical Materials*, vol. 3, no. 8, pp. 1066-1071, Aug 2015.
- 18 Z. Y. Zhang, P. H. Lambrev, K. L. Wells, G. Z. Garab, and H. S. Tan, "Direct observation of multistep energy transfer in LHCII with fifth-order 3D electronic spectroscopy," *Nature Communications*, vol. 6, Jul 2015, Art no. 7914.
- 19 Y. M. Zhang, H. Y. Xu, and B. L. Zhang, "Design, implementation, and extension of thermal invisibility cloaks," *Aip Advances*, vol. 5, no. 5, May 2015, Art no. 053402.
- 20 X. Q. Zhang, Y. H. Xu, W. S. Yue, Z. Tian, J. Q. Gu, Y. F. Li, R. J. Singh, S. Zhang, J. G. Han, and W. L. Zhang, "Anomalous Surface Wave Launching by Handedness Phase Control," *Advanced Materials*, vol. 27, no. 44, pp. 7123-+, Nov 2015.
- 21 X. Q. Zhang, N. N. Xu, K. N. Qu, Z. Tian, R. Singh, J. G. Han, G. S. Agarwal, and W. L. Zhang, "Electromagnetically induced absorption in a three-resonator metasurface system," *Scientific Reports*, vol. 5, May 2015, Art no. 10737.

- 22 L. L. Zhang, Y. W. Yuan, X. L. Wen, Y. Li, C. Cao, and Q. H. Xiong, "A coordination and ligand replacement based three-input colorimetric logic gate sensing platform for melamine, mercury ions, and cysteine," *Rsc Advances*, vol. 5, no. 73, pp. 59106-59113, 2015.
- 23 K. N. Zhang, S. H. Hu, Y. Zhang, T. N. Zhang, X. H. Zhou, Y. Sun, T. X. Li, H. J. Fan, G. Z. Shen, X. Chen, and N. Dai, "Self-Induced Uniaxial Strain in MoS₂ Mono layers with Local van der Waals-Stacked Inter layer Interactions," *Acs Nano*, vol. 9, no. 3, pp. 2704-2710, Mar 2015.
- 24 C. H. Zhang, S. L. Zhao, C. H. Jin, A. L. Koh, Y. Zhou, W. G. Xu, Q. C. Li, Q. H. Xiong, H. L. Peng, and Z. F. Liu, "Direct growth of large-area graphene and boron nitride heterostructures by a co-segregation method," *Nature Communications*, vol. 6, Mar 2015, Art no. 6519.
- 25 D. Zhan, J. X. Yan, Z. H. Ni, L. Sun, L. F. Lai, L. Liu, X. Y. Liu, and Z. X. Shen, "Bandgap-Opened Bilayer Graphene Approached by Asymmetrical Intercalation of Trilayer Graphene," *Small*, vol. 11, no. 9-10, pp. 1177-1182, Mar 2015.
- 26 Y. W. Yuan, L. L. Zhang, J. Xing, M. I. B. Utama, X. Lu, K. Z. Du, Y. M. Li, X. Hu, S. J. Wang, A. Genc, R. Dunin-Borkowski, J. Arbiol, and Q. H. Xiong, "High-yield synthesis and optical properties of g-C₃N₄," *Nanoscale*, vol. 7, no. 29, pp. 12343-12350, 2015.
- 27 H. K. Yu, D. Talukdar, W. G. Xu, J. B. Khurgin, and Q. H. Xiong, "Charge-Induced SecondHarmonic Generation in Bilayer WSe₂," *Nano Letters*, vol. 15, no. 8, pp. 5653-5657, Aug 2015.
- 28 J. Yin, M. Kumar, Q. Lei, L. Ma, S. S. K. Raavi, G. G. Gurzadyan, and C. Soci, "Small-Size Effects on Electron Transfer in P3HT/InP Quantum Dots," *Journal of Physical Chemistry C*, vol. 119, no. 47, pp. 26783-26792, Nov 2015.
- 29 J. Yin, D. Cortecchia, A. Krishna, S. Chen, N. Mathews, A. C. Grimsdale, and C. Soci, "Interfacial Charge Transfer Anisotropy in Polycrystalline Lead Iodide Perovskite Films," *Journal of Physical Chemistry Letters*, vol. 6, no. 8, pp. 1396-1402, Apr 2015.
- 30 Z. Yang, M. Q. Wang, S. Shukla, Y. Zhu, J. P. Deng, H. Ge, X. Z. Wang, and Q. H. Xiong, "Developing Seedless Growth of ZnO Micro/Nanowire Arrays towards ZnO/FeS₂/CuI P-I-N Photodiode Application," *Scientific Reports*, vol. 5, Jun 2015, Art no. 11377.
- 31 S. C. Yang, Y. Wang, and H. D. Sun, "Advances and Prospects for Whispering Gallery Mode Microcavities," *Advanced Optical Materials*, vol. 3, no. 9, pp. 1136-1162, Sep 2015.
- 32 D. Yang, D. M. Nguyen, C. Soci, X. Q. Dinh, M. Tang, and P. P. Shum, "Full Bandwidth Measurement of Supercontinuum Spectral Phase Coherence in Long Pulse Regime," *Fiber and Integrated Optics*, vol. 34, no. 1-2, pp. 66-75, Mar 2015.
- 33 F. Yan, G. C. Xing, R. Chen, H. V. Demir, H. D. Sun, T. C. Sum, and X. W. Sun, "Efficient threecolor white organic light-emitting diodes with a spaced multilayer emitting structure," *Applied Physics Letters*, vol. 106, no. 2, Jan 2015, Art no. 023302.
- 34 R. Yahiaoui, S. Y. Tan, L. Q. Cong, R. Singh, F. P. Yan, and W. L. Zhang, "Multispectral terahertz sensing with highly flexible ultrathin metamaterial absorber," *Journal of Applied Physics*, vol. 118, no. 8, Aug 2015, Art no. 083103.
- 35 B. Yadian, R. Chen, H. Liu, H. D. Sun, Q. Liu, C. L. Gan, Z. Kun, C. W. Zhao, B. Zhu, and Y. Z. Huang, "Significant enhancement of UV emission in ZnO nanorods subject to Ga+ ion beam irradiation," *Nano Research*, vol. 8, no. 6, pp. 1857-1864, Jun 2015.
- 36 Z. Xu, Y. Y. Lin, M. Yin, H. F. Zhang, C. W. Cheng, L. F. Lu, X. Z. Xue, H. J. Fan, X. Y. Chen, and D. Li, "Understanding the Enhancement Mechanisms of Surface Plasmon-Mediated Photoelectrochemical Electrodes: A Case Study on Au Nanoparticle Decorated TiO₂ Nanotubes," *Advanced Materials Interfaces*, vol. 2, no. 13, Sep 2015, Art no. 1500169.
- 37 X. Y. Xu, A. K. K. Kyaw, B. Peng, Q. H. Xiong, H. V. Demir, Y. Wang, T. K. S. Wong, and X. W. Sun, "Influence of gold-silica nanoparticles on the performance of small-molecule bulk heterojunction solar cells," *Organic Electronics*, vol. 22, pp. 20-28, Jul 2015.
- 38 W. G. Xu, Y. Y. Zhao, S. Chao, J. Zhang, and Q. H. Xiong, "Phonon-assisted Upconversion Photoluminescence in Monolayer MoSe₂ and WSe₂," *Acta Chimica Sinica*, vol. 73, no. 9, pp. 959-964, Sep 2015.
- 39 S. Xu, H. Y. Xu, H. H. Gao, Y. Y. Jiang, F. X. Yu, J. D. Joannopoulos, M. Soljacic, H. S. Chen, H. D. Sun, and B. L. Zhang, "Broadband surface-wave transformation cloak," *Proceedings of the National Academy of Sciences of the United States of America*, vol. 112, no. 25, pp. 7635-7638, Jun 2015.
- 40 N. N. Xu, R. Singh, and W. L. Zhang, "Collective coherence in nearest neighbor coupled metamaterials: A metasurface ruler equation," *Journal of Applied Physics*, vol. 118, no. 16, Oct 2015, Art no. 163102.

- 41 L. Xu, Y. B. Zhao, G. K. Long, Y. Wang, J. Zhao, D. S. Li, J. B. Li, R. Ganguly, Y. X. Li, H. D. Sun, X. W. Sun, and Q. C. Zhang, "Synthesis, structure, physical properties and OLED application of pyrazine-triphenylamine fused conjugated compounds," *Rsc Advances*, vol. 5, no. 77, pp. 63080-63086, 2015.
- 42 J. Xing, X. F. Liu, Q. Zhang, S. T. Ha, Y. W. Yuan, C. Shen, T. C. Sum, and Q. H. Xiong, "Vapor Phase Synthesis of Organometal Halide Perovskite Nanowires for Tunable RoomTemperature Nanolasers," *Nano Letters*, vol. 15, no. 7, pp. 4571-4577, Jul 2015.
- 43 G. C. Xing, B. Wu, S. Chen, J. Chua, N. Yantara, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Interfacial Electron Transfer Barrier at Compact TiO₂/CH₃NH₃PbI₃ Heterojunction," *Small*, vol. 11, no. 29, pp. 3606-3613, Aug 2015.
- 44 W. Y. Xie, S. X. He, L. P. Xia, H. Zhang, W. Zhang, Z. X. Shen, X. H. Liu, and J. M. Hu, "Fabrication of a trans-scale bimetallic synergistic enhanced Raman scattering substrate with high surface-enhanced Raman scattering activity," *Analytical Methods*, vol. 7, no. 5, pp. 1676-1679, 2015.
- 45 Y. Wu, C. La-o-Vorakiat, X. P. Qiu, J. B. Liu, P. Deorani, K. Banerjee, J. Son, Y. F. Chen, E. E. M. Chia, and H. Yang, "Graphene Terahertz Modulators by Ionic Liquid Gating," *Advanced Materials*, vol. 27, no. 11, pp. 1874-+, Mar 2015.
- 46 X. Y. Wu, F. Liu, K. L. Wells, S. L. J. Tan, R. D. Webster, H. S. Tan, D. W. Zhang, B. G. Xing, and E. K. L. Yeow, "Interplay of Hole Transfer and Host-Guest Interaction in a Molecular Dyad and Triad: Ensemble and Single-Molecule Spectroscopy and Sensing Applications," *Chemistry-a European Journal*, vol. 21, no. 8, pp. 3387-3398, Feb 2015.
- 47 P. C. Wu, W. L. Hsu, W. T. Chen, Y. W. Huang, C. Y. Liao, A. Q. Liu, N. I. Zheludev, G. Sun, and D. P. Tsai, "Plasmon coupling in vertical split-ring resonator metamolecules," *Scientific Reports*, vol. 5, Jun 2015, Art no. 9726.
- 48 B. Wu, K. W. Fu, N. Yantara, G. C. Xing, S. Y. Sun, T. C. Sum, and N. Mathews, "Charge Accumulation and Hysteresis in Perovskite-Based Solar Cells: An Electro-Optical Analysis," *Advanced Energy Materials*, vol. 5, no. 19, Oct 2015, Art no. 1500829.
- 49 R. F. Waters, P. A. Hobson, K. F. MacDonald, and N. I. Zheludev, "Optically switchable photonic metasurfaces," *Applied Physics Letters*, vol. 107, no. 8, Aug 2015, Art no. 081102.
- 50 Z. L. Wang, J. Zhao, B. Frank, Q. D. Ran, G. Adamo, H. Giessen, and C. Soci, "Plasmon-Polaron Coupling in Conjugated Polymer on Infrared Nanoantennas," *Nano Letters*, vol. 15, no. 8, pp. 5382-5387, Aug 2015.
- 51 Y. Wang, S. C. Yang, H. Yang, and H. D. Sun, "Quaternary Alloy Quantum Dots: Toward LowThreshold Stimulated Emission and All-Solution-Processed Lasers in the Green Region," *Advanced Optical Materials*, vol. 3, no. 5, pp. 652-657, May 2015.
- 52 Y. Wang, X. M. Li, J. Z. Song, L. Xiao, H. B. Zeng, and H. D. Sun, "All-Inorganic Colloidal Perovskite Quantum Dots: A New Class of Lasing Materials with Favorable Characteristics," *Advanced Materials*, vol. 27, no. 44, pp. 7101-+, Nov 2015.
- 53 Y. Wang, K. S. Leck, V. D. Ta, R. Chen, V. Nalla, Y. Gao, T. C. He, H. V. Demir, and H. D. Sun, "Blue Liquid Lasers from Solution of CdZnS/ZnS Ternary Alloy Quantum Dots with QuasiContinuous Pumping," *Advanced Materials*, vol. 27, no. 1, pp. 169-175, Jan 2015.
- 54 Y. Wang, K. E. Fong, S. C. Yang, V. D. Ta, Y. Gao, Z. Wang, V. Nalla, H. V. Demir, and H. D. Sun, "Unraveling the ultralow threshold stimulated emission from CdZnS/ZnS quantum dot and enabling high-Q microlasers," *Laser & Photonics Reviews*, vol. 9, no. 5, pp. 507-516, Sep 2015.
- 55 X. T. Wang, C. H. Liow, A. Bisht, X. F. Liu, T. C. Sum, X. D. Chen, and S. Z. Li, "Engineering Interfacial Photo-Induced Charge Transfer Based on Nanobamboo Array Architecture for Efficient Solar-to-Chemical Energy Conversion," *Advanced Materials*, vol. 27, no. 13, pp. 2207-+, Apr 2015.
- 56 S. X. Wang, Y. X. Zhang, R. Zhang, H. H. Yu, H. J. Zhang, and Q. H. Xiong, "High-Order Nonlinearity of Surface Plasmon Resonance in Au Nanoparticles: Paradoxical Combination of Saturable and Reverse-Saturable Absorption," *Advanced Optical Materials*, vol. 3, no. 10, pp. 1342-1348, Oct 2015.
- 57 S. X. Wang, Y. X. Zhang, J. Xing, X. F. Liu, H. H. Yu, A. Di Lieto, M. Tonelli, T. C. Sum, H. J. Zhang, and Q. H. Xiong, "Nonlinear optical response of Au nanorods for broadband pulse modulation in bulk visible lasers," *Applied Physics Letters*, vol. 107, no. 16, Oct 2015, Art no. 161103.
- 58 S. X. Wang, Y. X. Zhang, K. Wu, R. Zhang, H. H. Yu, H. J. Zhang, G. H. Zhang, and Q. H. Xiong, "Third-order nonlinearity and passive Q-switching of Cr4+:YGG garnet crystal," *Optics Letters*, vol. 40, no. 10, pp. 2421-2424, May 2015.
- 59 A. Wan, T. Wang, T. T. Yin, A. R. Lo, H. L. Hu, S. Z. Li, Z. X. Shen, and C. A. Nijhuis, "PlasmonModulated Photoluminescence of Single Gold Nanobeams," *Acs Photonics*, vol. 2, no. 9, pp. 1348-1354, Sep 2015.

- 60 J. Valente, J. Y. Ou, E. Plum, I. J. Youngs, and N. I. Zheludev, "Reconfiguring photonic metamaterials with currents and magnetic fields," *Applied Physics Letters*, vol. 106, no. 11, Mar 2015, Art no. Unsp 111905.
- 61 J. Valente, J. Y. Ou, E. Plum, I. J. Youngs, and N. I. Zheludev, "A magneto-electro-optical effect in a plasmonic nanowire material," *Nature Communications*, vol. 6, Apr 2015, Art no. 7021.
- 62 X. L. Tong, X. H. Xia, C. X. Guo, Y. Q. Zhang, J. P. Tu, H. J. Fan, and X. Y. Guo, "Efficient oxygen reduction reaction using mesoporous Ni-doped Co₃O₄ nanowire array electrocatalysts," *Journal of Materials Chemistry A*, vol. 3, no. 36, pp. 18372-18379, 2015.
- 63 Q. Tay, P. Kanhere, C. F. Ng, S. Chen, S. Chakraborty, A. C. H. Huan, T. C. Sum, R. Ahuja, and Z. Chen, "Defect Engineered g-C₃N₄ for Efficient Visible Light Photocatalytic Hydrogen Production," *Chemistry of Materials*, vol. 27, no. 14, pp. 4930-4933, Jul 2015.
- 64 J. G. Tao, J. W. Chai, X. Lu, L. M. Wong, T. I. Wong, J. S. Pan, Q. H. Xiong, D. Z. Chi, and S. J. Wang, "Growth of wafer-scale MoS₂ monolayer by magnetron sputtering," *Nanoscale*, vol. 7, no. 6, pp. 2497-2503, 2015.
- 65 J. Tang, J. W. Chai, J. Huang, L. Y. Deng, X. S. Nguyen, L. F. Sun, T. Venkatesan, Z. X. Shen, C. B. Tay, and S. J. Chua, "ZnO Nanorods with Low Intrinsic Defects and High Optical Performance Grown by Facile Microwave-Assisted Solution Method," *Acs Applied Materials & Interfaces*, vol. 7, no. 8, pp. 4737-4743, Mar 2015.
- 66 S. Y. Tan, F. P. Yan, L. Singh, W. Cao, N. N. Xu, X. Hu, R. Singh, M. W. Wang, and W. L. Zhang, "Terahertz metasurfaces with a high refractive index enhanced by the strong nearest neighbor coupling," *Optics Express*, vol. 23, no. 22, pp. 29222-29230, Nov 2015.
- 67 V. D. Ta, S. C. Yang, Y. Wang, Y. Gao, T. C. He, R. Chen, H. V. Demir, and H. D. Sun, "Multicolor lasing prints," *Applied Physics Letters*, vol. 107, no. 22, Nov 2015, Art no. 221103.
- 68 J. Sun, V. Nalla, M. Nguyen, Y. Ren, S. Y. Chiam, Y. Wang, K. F. Tai, H. D. Sun, N. Zheludev, S. K. Batabyal, and L. H. Wong, "Effect of Zn(O,S) buffer layer thickness on charge carrier relaxation dynamics of CuInSe₂ solar cell," *Solar Energy*, vol. 115, pp. 396-404, May 2015.
- 69 T. C. Sum, S. Chen, G. C. Xing, X. F. Liu, and B. Wu, "Energetics and dynamics in organicinorganic halide perovskite photovoltaics and light emitters," *Nanotechnology*, vol. 26, no. 34, Aug 2015, Art no. 342001.
- 70 X. Q. Su, C. M. Ouyang, N. N. Xu, S. Y. Tan, J. Q. Gu, Z. Tian, R. Singh, S. Zhang, F. P. Yan, J. G. Han, and W. L. Zhang, "Dynamic mode coupling in terahertz metamaterials," *Scientific Reports*, vol. 5, Jun 2015, Art no. 10823.
- 71 A. Solanki, B. Wu, T. Salim, Y. M. Lam, and T. C. Sum, "Correlation between blend morphology and recombination dynamics in additive-added P3HT:PCBM solar cells," *Physical Chemistry Chemical Physics*, vol. 17, no. 39, pp. 26111-26120, 2015.
- 72 J. K. So, F. J. G. de Abajo, K. F. MacDonald, and N. I. Zheludev, "Amplification of the Evanescent Field of Free Electrons," *Acs Photonics*, vol. 2, no. 9, pp. 1236-1240, Sep 2015.
- 73 X. H. Shi, X. Lin, F. Gao, H. Y. Xu, Z. J. Yang, and B. L. Zhang, "Caustic graphene plasmons with Kelvin angle," *Physical Review B*, vol. 92, no. 8, Aug 2015, Art no. 081404.
- 74 X. H. Shi, F. Gao, X. Lin, and B. L. Zhang, "Electromagnetic Detection of a Perfect Carpet Cloak," *Scientific Reports*, vol. 5, May 2015, Art no. 10401.
- 75 S. V. Savilov, N. Cherkasov, A. V. Egorov, A. S. Ivanov, Z. Shen, and V. V. Lunin, "Sulphur-free synthesis of helical carbon nanotubes," *Materials Technology*, vol. 30, no. A3, pp. A115A120, 2015.
- 76 E. T. F. Rogers, S. Quraishe, J. L. Bailey, T. A. Newman, J. E. Chad, N. I. Zheludev, and P. J. S. Smith, "Super-Oscillatory Imaging of Nanoparticle Interactions with Neurons," *Biophysical Journal*, vol. 108, no. 2, pp. 479A-479A, Jan 2015.
- 77 T. Roger, S. Vezzoli, E. Bolduc, J. Valente, J. J. F. Heitz, J. Jeffers, C. Soci, J. Leach, C. Couteau, N. I. Zheludev, and D. Faccio, "Coherent perfect absorption in deeply subwavelength films in the single-photon regime," *Nature Communications*, vol. 6, May 2015, Art no. 7031.
- 78 S. M. Rao, A. Lyons, T. Roger, M. Clerici, N. I. Zheludev, and D. Faccio, "Geometries for the coherent control of four-wave mixing in graphene multilayers," *Scientific Reports*, vol. 5, Oct 2015, Art no. 15399.
- 79 S. S. K. Raavi, J. Yin, G. Grancini, C. Soci, V. R. Soma, G. Lanzani, and L. Giribabu, "Femtosecond to Microsecond Dynamics of Soret-Band Excited Corroles," *Journal of Physical Chemistry C*, vol. 119, no. 52, pp. 28691-28700, Dec 2015.
- 80 E. Plum and N. I. Zheludev, "Chiral mirrors," *Applied Physics Letters*, vol. 106, no. 22, Jun 2015, Art no. 221901.
- 81 A. Pick, A. Cerjan, D. Liu, A. W. Rodriguez, A. D. Stone, Y. D. Chong, and S. G. Johnson, "Ab initio multimode linewidth theory for arbitrary inhomogeneous laser cavities," *Physical Review A*, vol. 91, no. 6, Jun 2015, Art no. 063806.

- 82 N. Papasimakis, S. Mailis, C. C. Huang, F. Al-Saab, D. W. Hewak, Z. Luo, and Z. X. Shen, "Strain engineering in graphene by laser irradiation," *Applied Physics Letters*, vol. 106, no. 6, Feb 2015, Art no. 061904.
- 83 W. B. Niu, X. L. Li, S. K. Karuturi, D. W. Fam, H. J. Fan, S. Shrestha, L. H. Wong, and A. L. Y. Tok, "Applications of atomic layer deposition in solar cells," *Nanotechnology*, vol. 26, no. 6, Feb 2015, Art no. 064001.
- 84 W. B. Niu, H. Chen, R. Chen, J. F. Huang, H. D. Sun, and A. I. Y. Tok, "NaYF₄:Yb,Er-MoS₂: from synthesis and surface ligand stripping to negative infrared photoresponse," *Chemical Communications*, vol. 51, no. 43, pp. 9030-9033, 2015.
- 85 L. Niu, X. F. Liu, C. X. Cong, C. Y. Wu, D. Wu, T. R. Chang, H. Wang, Q. S. Zeng, J. D. Zhou, X. L. Wang, W. Fu, P. Yu, Q. D. Fu, S. Najmaei, Z. H. Zhang, B. I. Yakobson, B. K. Tay, W. Zhou, H. T. Jeng, H. Lin, T. C. Sum, C. Jin, H. Y. He, T. Yu, and Z. Liu, "Controlled Synthesis of Organic/Inorganic van der Waals Solid for Tunable Light-Matter Interactions," *Advanced Materials*, vol. 27, no. 47, pp. 7800-7808, Dec 2015.
- 86 Z. G. Nie, R. Long, J. S. Teguh, C. C. Huang, D. W. Hewak, E. K. L. Yeow, Z. X. Shen, O. V. Prezhdo, and Z. H. Loh, "Ultrafast Electron and Hole Relaxation Pathways in Few-Layer MoS₂," *Journal of Physical Chemistry C*, vol. 119, no. 35, pp. 20698-20708, Sep 2015.
- 87 D. M. Nguyen, H. Y. Xu, Y. M. Zhang, and B. L. Zhang, "Active thermal cloak," *Applied Physics Letters*, vol. 107, no. 12, Sep 2015, Art no. 121901.
- 88 V. Nalla, R. Medishetty, Y. Wang, Z. Z. Bai, H. D. Sun, J. Wei, and J. J. Vittal, "Second harmonic generation from the 'centrosymmetric' crystals," *Iucrj*, vol. 2, pp. 317-321, May 2015.
- 89 B. Mukherjee, W. S. Leong, Y. D. Li, H. Gong, L. F. Sun, Z. X. Shen, E. Simsek, and J. T. L. Thong, "Raman analysis of gold on WSe₂ single crystal film," *Materials Research Express*, vol. 2, no. 6, Jun 2015, Art no. 065009.
- 90 S. A. Mousavi, E. Plum, J. H. Shi, and N. I. Zheludev, "Coherent control of optical polarization effects in metamaterials," *Scientific Reports*, vol. 5, Mar 2015, Art no. 8977.
- 91 I. Minguez-Bacho, M. Courte, H. J. Fan, and D. Fichou, "Conformal Cu₂S-coated Cu₂O nanostructures grown by ion exchange reaction and their photoelectrochemical properties," *Nanotechnology*, vol. 26, no. 18, May 2015, Art no. 185401.
- 92 D. B. Migas, A. B. Filonov, D. A. Yatsyna, Rusli, and C. Soci, "Role of edge facets on stability and electronic properties of III-V nanowires," *Nano Convergence*, vol. 2, 2015, Art no. 14.
- 93 D. B. Migas, V. E. Borisenko, Rusli, and C. Soci, "Revising morphology of <111>-oriented silicon and germanium nanowires," *Nano Convergence*, vol. 2, 2015, Art no. 16.
- 94 D. D. Men, H. H. Zhang, L. F. Hang, D. L. Liu, X. Y. Li, W. P. Cai, Q. H. Xiong, and Y. Li, "Optical sensor based on hydrogel films with 2D colloidal arrays attached on both the surfaces: anticurling performance and enhanced optical diffraction intensity," *Journal of Materials Chemistry C*, vol. 3, no. 15, pp. 3659-3665, 2015.
- 95 M. Manjappa, S. Y. Chiam, L. Q. Cong, A. A. Bettoli, W. L. Zhang, and R. Singh, "Tailoring the slow light behavior in terahertz metasurfaces," *Applied Physics Letters*, vol. 106, no. 18, May 2015, Art no. 181101.
- 96 A. K. Mandal, S. Sreejith, T. C. He, S. K. Maji, X. J. Wang, S. L. Ong, J. Joseph, H. D. Sun, and Y. L. Zhao, "Three-Photon-Excited Luminescence from Unsymmetrical Cyanostilbene Aggregates: Morphology Tuning and Targeted Bioimaging," *Acs Nano*, vol. 9, no. 5, pp. 47964805, May 2015.
- 97 X. Luo, X. Lu, G. K. W. Koon, A. H. C. Neto, B. Ozyilmaz, Q. H. Xiong, and S. Y. Quek, "Large Frequency Change with Thickness in Interlayer Breathing Mode-Significant Interlayer Interactions in Few Layer Black Phosphorus," *Nano Letters*, vol. 15, no. 6, pp. 3931-3938, Jun 2015.
- 98 X. Luo, X. Lu, C. X. Cong, T. Yu, Q. H. Xiong, and S. Y. Quek, "Stacking sequence determines Raman intensities of observed interlayer shear modes in 2D layered materials - A general bond polarizability model," *Scientific Reports*, vol. 5, Oct 2015, Art no. 14565.
- 99 J. S. Luo, S. D. Tilley, L. Steier, M. Schreier, M. T. Mayer, H. J. Fan, and M. Gratzel, "Solution Transformation of Cu₂O into CuInS₂ for Solar Water Splitting," *Nano Letters*, vol. 15, no. 2, pp. 1395-1402, Feb 2015.
- 100 X. Lu, M. I. B. Utama, J. H. Lin, X. Luo, Y. Y. Zhao, J. Zhang, S. T. Pantelides, W. Zhou, S. Y. Quek, and Q. H. Xiong, "Rapid and Nondestructive Identification of Polytypism and Stacking Sequences in Few-Layer Molybdenum Diselenide by Raman Spectroscopy," *Advanced Materials*, vol. 27, no. 30, pp. 4502-4508, Aug 2015.
- 101 P. Lova, G. Manfredi, L. Boarino, A. Comite, M. Laus, M. Patrini, F. Marabeli, C. Soci, and D. Comoretto, "Polymer Distributed Bragg Reflectors for Vapor Sensing," *Acs Photonics*, vol. 2, no. 4, pp. 537-543, Apr 2015.

- 102 J. Lourembam, A. Srivastava, C. La-O-Vorakiat, H. Rotella, T. Venkatesan, and E. E. M. Chia, "New Insights into the Diverse Electronic Phases of a Novel Vanadium Dioxide Polymorph: A Terahertz Spectroscopy Study," *Scientific Reports*, vol. 5, Mar 2015, Art no. 9182.
- 103 G. K. Long, B. Wu, X. Yang, B. Kan, Y. C. Zhou, L. C. Chen, X. J. Wan, H. L. Zhang, T. C. Sum, and Y. S. Chen, "Enhancement of Performance and Mechanism Studies of All-Solution Processed Small-Molecule based Solar Cells with an Inverted Structure," *Acs Applied Materials & Interfaces*, vol. 7, no. 38, pp. 21245-21253, Sep 2015.
- 104 X. F. Liu, Q. Zhang, W. K. Chong, J. N. Yip, X. L. Wen, Z. P. Li, F. X. Wei, G. N. Yu, Q. H. Xiong, and T. C. Sum, "Cooperative Enhancement of Second-Harmonic Generation from a Single CdS Nanobelt-Hybrid Plasmonic Structure," *Acs Nano*, vol. 9, no. 5, pp. 5018-5026, May 2015.
- 105 X. F. Liu, S. T. Ha, Q. Zhang, M. de la Mata, C. Magen, J. Arbiol, T. C. Sum, and Q. H. Xiong, "Whispering Gallery Mode Lasing from Hexagonal Shaped Layered Lead Iodide Crystals," *Acs Nano*, vol. 9, no. 1, pp. 687-695, Jan 2015.
- 106 F. L. Liu, C. Qian, and Y. D. Chong, "Directional excitation of graphene surface plasmons," *Optics Express*, vol. 23, no. 3, pp. 2383-2391, Feb 2015.
- 107 F. L. Liu, S. Ghosh, and Y. D. Chong, "Localization and adiabatic pumping in a generalized Aubry-Andre-Harper model," *Physical Review B*, vol. 91, no. 1, Jan 2015, Art no. 014108.
- 108 F. C. Liu, W. L. Chow, X. X. He, P. Hu, S. J. Zheng, X. L. Wang, J. D. Zhou, Q. D. Fu, W. Fu, P. Yu, Q. S. Zeng, H. J. Fan, B. K. Tay, C. Kloc, and Z. Liu, "Van der Waals p-n Junction Based on an Organic-Inorganic Heterostructure," *Advanced Functional Materials*, vol. 25, no. 36, pp. 5865-5871, Sep 2015.
- 109 Q. Li, Z. Tian, X. Q. Zhang, N. N. Xu, R. J. Singh, J. Q. Gu, P. Lv, L. B. Luo, S. Zhang, J. G. Han, and W. L. Zhang, "Dual control of active graphene-silicon hybrid metamaterial devices," *Carbon*, vol. 90, pp. 146-153, Aug 2015.
- 110 Q. Li, Z. Tian, X. Q. Zhang, R. Singh, L. L. Du, J. Q. Gu, J. G. Han, and W. L. Zhang, "Active graphene-silicon hybrid diode for terahertz waves," *Nature Communications*, vol. 6, May 2015, Art no. 7082.
- 111 G. Y. Li, X. F. Liu, X. Wang, Y. W. Yuan, T. C. Sum, and Q. H. Xiong, "Purified plasmonic lasing with strong polarization selectivity by reflection," *Optics Express*, vol. 23, no. 12, pp. 15657-15669, Jun 2015.
- 112 D. H. Li, Y. Liu, M. de la Mata, C. Magen, J. Arbiol, Y. P. Feng, and Q. H. Xiong, "Strain-induced spatially indirect exciton recombination in zinc-blende/wurtzite CdS heterostructures," *Nano Research*, vol. 8, no. 9, pp. 3035-3044, Sep 2015.
- 113 C. J. Lech, A. T. Phan, M. E. Michel-Beyerle, and A. A. Voityuk, "Influence of Base Stacking Geometry on the Nature of Excited States in G-Quadruplexes: A Time-Dependent DFT Study," *Journal of Physical Chemistry B*, vol. 119, no. 9, pp. 3697-3705, Mar 2015.
- 114 C. La-o-vorakiat, T. Salim, J. Kadro, M. T. Khuc, R. Haselsberger, L. Cheng, H. X. Xia, G. G. Gurzadyan, H. B. Su, Y. M. Lam, R. A. Marcus, M. E. Michel-Beyerle, and E. E. M. Chia, "Elucidating the role of disorder and free-carrier recombination kinetics in CH₃NH₃PbI₃ perovskite films," *Nature Communications*, vol. 6, Jul 2015, Art no. 7903.
- 115 C. C. Kwong, T. Yang, D. Delande, R. Pierrat, and D. Wilkowski, "Cooperative Emission of a Pulse Train in an Optically Thick Scattering Medium," *Physical Review Letters*, vol. 115, no. 22, Nov 2015, Art no. 223601.
- 116 Z. L. Ku, X. H. Xia, H. Shen, N. H. Tiep, and H. J. Fan, "A mesoporous nickel counter electrode for printable and reusable perovskite solar cells," *Nanoscale*, vol. 7, no. 32, pp. 13363-13368, 2015.
- 117 A. Krishna, D. Sabba, J. Yin, A. Bruno, P. P. Boix, Y. Gao, H. A. Dewi, G. G. Gurzadyan, C. Soci, S. G. Mhaisalkar, and A. C. Grimsdale, "Facile Synthesis of a Furan-Arylamine Hole-Transporting Material for High-Efficiency, Mesoscopic Perovskite Solar Cells," *Chemistry-a European Journal*, vol. 21, no. 43, pp. 15113-15117, Oct 2015.
- 118 A. Karvounis, J. Y. Ou, W. P. Wu, K. F. MacDonald, and N. I. Zheludev, "Nano-optomechanical nonlinear dielectric metamaterials," *Applied Physics Letters*, vol. 107, no. 19, Nov 2015, Art no. 191110.
- 119 M. Kang and Y. D. Chong, "Coherent optical control of polarization with a critical metasurface," *Physical Review A*, vol. 92, no. 4, Oct 2015, Art no. 043826.
- 120 H. Jin, S. Choi, G. C. Xing, J. H. Lee, Y. Kwon, W. K. Chong, T. C. Sum, H. M. Jang, and S. Kim, "SnS44-, SbS43-, and AsS33- Metal Chalcogenide Surface Ligands: Couplings to Quantum Dots, Electron Transfers, and All-Inorganic Multi layered Quantum Dot Sensitized Solar Cells," *Journal of the American Chemical Society*, vol. 137, no. 43, pp. 13827-13835, Nov 2015.
- 121 L. Y. Jiang, T. T. Yin, Z. G. Dong, M. Y. Liao, S. J. Tan, X. M. Goh, D. Allioux, H. L. Hu, X. Y. Li, J. K. W. Yang, and Z. Shen, "Accurate Modeling of Dark-Field Scattering Spectra of Plasmonic Nano structures," *Acs Nano*, vol. 9, no. 10, pp. 10039-10046, Oct 2015.

- 122 L. Y. Jiang, T. T. Yin, Z. G. Dong, H. L. Hu, M. Y. Liao, D. Allioux, S. J. Tan, X. M. Goh, X. Y. Li, J. K. W. Yang, and Z. X. Shen, "Probing Vertical and Horizontal Plasmonic Resonant States in the Photoluminescence of Gold Nanodisks," *Acs Photonics*, vol. 2, no. 8, pp. 1217-1223, Aug 2015.
- 123 W. C. Hu, J. C. Pillay, K. Wu, M. Pasek, P. P. Shum, and Y. D. Chong, "Measurement of a Topological Edge Invariant in a Microwave Network," *Physical Review X*, vol. 5, no. 1, Feb 2015, Art no. 011012.
- 124 T. C. He, S. Sreejith, Y. Gao, A. C. Grimsdale, Y. L. Zhao, X. D. Lin, and H. D. Sun, "Superior optical nonlinearity of an exceptional fluorescent stilbene dye," *Applied Physics Letters*, vol. 106, no. 11, Mar 2015, Art no. 111904.
- 125 S. Han, R. J. Singh, L. Q. Cong, and H. L. Yang, "Engineering the fano resonance and electromagnetically induced transparency in near-field coupled bright and dark metamaterial," *Journal of Physics D-Applied Physics*, vol. 48, no. 3, Jan 2015, Art no. 035104.
- 126 B. Guzelturk, Y. Kelestemur, K. Gungor, A. Yeltik, M. Z. Akgul, Y. Wang, R. Chen, C. Dang, H. D. Sun, and H. V. Demir, "Stable and Low-Threshold Optical Gain in CdSe/CdS Quantum Dots: An All-Colloidal Frequency Up-Converted Laser," *Advanced Materials*, vol. 27, no. 17, pp. 2741+, May 2015.
- 127 D. Giovanni, G. N. Yu, G. C. Xing, M. L. Leek, and T. C. Sum, "Measurement of sub-10 fs Auger processes in monolayer graphene," *Optics Express*, vol. 23, no. 16, pp. 21107-21117, Aug 2015.
- 128 D. Giovanni, H. Ma, J. Chua, M. Gratzel, R. Ramesh, S. Mhaisalkar, N. Mathews, and T. C. Sum, "Highly Spin-Polarized Carrier Dynamics and Ultra large Photoinduced Magnetization in CH(3)NH(3)PbI(3) Perovskite Thin Films," *Nano Letters*, vol. 15, no. 3, pp. 1553-1558, Mar 2015.
- 129 B. Gholipour, P. Bastock, C. Craig, K. Khan, D. Hewak, and C. Soci, "Amorphous MetalSulphide Microfibers Enable Photonic Synapses for Brain-Like Computing," *Advanced Optical Materials*, vol. 3, no. 5, pp. 635-641, May 2015.
- 130 Z. Gao, F. Gao, Y. M. Zhang, and B. L. Zhang, "Complementary structure for designer localized surface plasmons," *Applied Physics Letters*, vol. 107, no. 19, Nov 2015, Art no. 191103.
- 131 Z. Gao, F. Gao, Y. M. Zhang, X. H. Shi, Z. J. Yang, and B. L. Zhang, "Experimental demonstration of high-order magnetic localized spoof surface plasmons," *Applied Physics Letters*, vol. 107, no. 4, Jul 2015, Art no. 041118.
- 132 Y. Gao, V. D. Ta, X. Zhao, Y. Wang, R. Chen, E. Mutlugun, K. E. Fong, S. T. Tan, C. Dang, X. W. Sun, H. D. Sun, and H. V. Demir, "Observation of polarized gain from aligned colloidal nanorods," *Nanoscale*, vol. 7, no. 15, pp. 6481-6486, 2015.
- 133 W. B. Gao, A. Imamoglu, H. Bernien, and R. Hanson, "Coherent manipulation, measurement and entanglement of individual solid-state spins using optical fields," *Nature Photonics*, vol. 9, no. 6, pp. 363-373, Jun 2015.
- 134 F. Gao, Z. Gao, Y. M. Zhang, X. H. Shi, Z. J. Yang, and B. L. Zhang, "Vertical transport of subwavelength localized surface electromagnetic modes," *Laser & Photonics Reviews*, vol. 9, no. 5, pp. 571-576, Sep 2015.
- 135 F. Gao, Z. Gao, X. H. Shi, Z. J. Yang, X. Lin, and B. L. Zhang, "Dispersion-tunable designerplasmonic resonator with enhanced high-order resonances," *Optics Express*, vol. 23, no. 5, pp. 6896-6902, Mar 2015.
- 136 V. A. Fedotov, J. Wallauer, M. Walther, M. Perino, N. Papasimakis, and N. I. Zheludev, "Wavevector Selective Metasurfaces and Tunnel Vision Filters," *Light-Science & Applications*, vol. 4, Jul 2015, Art no. e306.
- 137 X. Fang, K. F. MacDonald, and N. I. Zheludev, "Controlling light with light using coherent metadevices: all-optical transistor, summator and invertor," *Light-Science & Applications*, vol. 4, May 2015, Art no. e292.
- 138 B. Estey, C. H. Yu, H. Muller, P. C. Kuan, and S. Y. Lan, "High-Resolution Atom Interferometers with Suppressed Diffraction Phases," *Physical Review Letters*, vol. 115, no. 8, Aug 2015, Art no. 083002.
- 139 M. M. Enriquez, P. Akhtar, C. Zhang, G. Garab, P. H. Lambrev, and H. S. Tan, "Energy transfer dynamics in trimers and aggregates of light-harvesting complex II probed by 2D electronic spectroscopy," *Journal of Chemical Physics*, vol. 142, no. 21, Jun 2015, Art no. 212432.
- 140 M. Eginligil, B. C. Cao, Z. L. Wang, X. N. Shen, C. X. Cong, J. Z. Shang, C. Soci, and T. Yu, "Dichroic spin-valley photocurrent in monolayer molybdenum disulphide," *Nature Communications*, vol. 6, Jul 2015, Art no. 7636.
- 141 A. M. Dubrovkin, J. Tao, X. C. Yu, N. I. Zheludev, and Q. J. Wang, "The reduction of surface plasmon losses in quasi-suspended graphene," *Scientific Reports*, vol. 5, May 2015, Art no. 09837.
- 142 K. Z. Du, A. Chaturvedi, X. Z. Wang, Y. Zhao, K. K. Zhang, M. I. B. Utama, P. Hu, H. Jiang, Q. H. Xiong, and C. Kloc, "Plasma-enhanced microwave solid-state synthesis of cadmium sulfide: reaction mechanism and optical properties," *Dalton Transactions*, vol. 44, no. 30, pp. 134413449, 2015.

- 143 J. J. Du, B. W. Zhu, W. R. Leow, S. Chen, T. C. Sum, X. J. Peng, and X. D. Chen, "Colorimetric Detection of Creatinine Based on Plasmonic Nanoparticles via Synergistic Coordination Chemistry," *Small*, vol. 11, no. 33, pp. 4104-4110, Sep 2015.
- 144 S. Dong, D. Trivedi, S. Chakrabortty, T. Kobayashi, Y. Chan, O. V. Prezhdo, and Z. H. Loh, "Observation of an Excitonic Quantum Coherence in CdSe Nanocrystals," *Nano Letters*, vol. 15, no. 10, pp. 6875-6882, Oct 2015.
- 145 S. L. Dodson, C. Cao, H. Zaribafzadeh, S. Z. Li, and Q. H. Xiong, "Engineering plasmonic nanorod arrays for colon cancer marker detection," *Biosensors & Bioelectronics*, vol. 63, pp. 472-477, Jan 2015.
- 146 H. Crepaz, L. Y. Ley, and R. Dumke, "Cavity enhanced atomic magnetometry," *Scientific Reports*, vol. 5, Oct 2015, Art no. 15448.
- 147 C. Couteau, A. Larue, C. Wilhelm, and C. Soci, "Nanowire Lasers," *Nanophotonics*, vol. 4, no. 1, pp. 90-107, Apr 2015.
- 148 L. Q. Cong, N. N. Xu, W. L. Zhang, and R. Singh, "Polarization Control in Terahertz Metasurfaces with the Lowest Order Rotational Symmetry," *Advanced Optical Materials*, vol. 3, no. 9, pp. 1176-1183, Sep 2015.
- 149 L. Q. Cong, N. N. Xu, J. G. Han, W. L. Zhang, and R. Singh, "A Tunable Dispersion-Free Terahertz Metadevice with Pancharatnam-Berry-Phase-Enabled Modulation and Polarization Control," *Advanced Materials*, vol. 27, no. 42, pp. 6630-+, Nov 2015.
- 150 L. Q. Cong, S. Y. Tan, R. Yahiaoui, F. P. Yan, W. L. Zhang, and R. Singh, "Experimental demonstration of ultrasensitive sensing with terahertz metamaterial absorbers: A comparison with the metasurfaces," *Applied Physics Letters*, vol. 106, no. 3, Jan 2015, Art no. Unsp 031107.
- 151 L. Q. Cong, M. Manjappa, N. N. Xu, I. Al-Naib, W. L. Zhang, and R. Singh, "Fano Resonances in Terahertz Metasurfaces: A Figure of Merit Optimization," *Advanced Optical Materials*, vol. 3, no. 11, pp. 1537-1543, Nov 2015.
- 152 C. W. Chu, X. M. Zhai, C. J. Lee, P. H. Wang, Y. B. Duan, D. P. Tsai, B. L. Zhang, and Y. Luo, "Phase-preserved macroscopic visible-light carpet cloaking beyond two dimensions," *Laser & Photonics Reviews*, vol. 9, no. 4, pp. 399-404, Jul 2015.
- 153 D. R. Chowdhury, N. N. Xu, W. L. Zhang, and R. Singh, "Resonance tuning due to Coulomb interaction in strong near-field coupled metamaterials," *Journal of Applied Physics*, vol. 118, no. 2, Jul 2015, Art no. 023104.
- 154 S. Chintalapati, L. Shen, Q. H. Xiong, and Y. P. Feng, "Magnetism in phosphorene: Interplay between vacancy and strain," *Applied Physics Letters*, vol. 107, no. 7, Aug 2015, Art no. 072401.
- 155 X. Y. Chin, D. Cortecchia, J. Yin, A. Bruno, and C. Soci, "Lead iodide perovskite light-emitting field-effect transistor," *Nature Communications*, vol. 6, Jun 2015, Art no. 7383.
- 156 A. Cerjan, A. Pick, Y. D. Chong, S. G. Johnson, and A. D. Stone, "Quantitative test of general theories of the intrinsic laser linewidth," *Optics Express*, vol. 23, no. 22, pp. 28316-28340, Nov 2015.
- 157 A. Cerjan, Y. D. Chong, and A. D. Stone, "Steady-state ab initio laser theory for complex gain media," *Optics Express*, vol. 23, no. 5, pp. 6455-6477, Mar 2015.
- 158 O. Buchnev, N. Podoliak, M. Kaczmarek, N. I. Zheludev, and V. A. Fedotov, "Electrically Controlled Nanostructured Metasurface Loaded with Liquid Crystal: Toward Multifunctional Photonic Switch," *Advanced Optical Materials*, vol. 3, no. 5, pp. 674-679, May 2015.
- 159 W. P. Bricker, P. M. Shenai, A. Ghosh, Z. T. Liu, M. G. M. Enriquez, P. H. Lambrev, H. S. Tan, C. S. Lo, S. Tretiak, S. Fernandez-Alberti, and Y. Zhao, "Non-radiative relaxation of photoexcited chlorophylls: theoretical and experimental study," *Scientific Reports*, vol. 5, Sep 2015, Art no. 13625.
- 160 N. Born, I. Al-Naib, C. Jansen, R. Singh, J. V. Moloney, M. Scheller, and M. Koch, "Terahertz Metamaterials with Ultrahigh Angular Sensitivity," *Advanced Optical Materials*, vol. 3, no. 5, pp. 642-645, May 2015.
- 161 A. A. Basharin, M. Kafesaki, E. N. Economou, C. M. Soukoulis, V. A. Fedotov, V. Savinov, and N. I. Zheludev, "Dielectric Metamaterials with Toroidal Dipolar Response," *Physical Review X*, vol. 5, no. 1, Mar 2015, Art no. 011036.
- 162 A. Ananthanarayanan, Y. Wang, P. Routh, M. A. Sk, A. Than, M. Lin, J. Zhang, J. Chen, H. D. Sun, and P. Chen, "Nitrogen and phosphorus co-doped graphene quantum dots: synthesis from adenosine triphosphate, optical properties, and cellular imaging," *Nanoscale*, vol. 7, no. 17, pp. 8159-8165, 2015.
- 163 I. Al-Naib, Y. P. Yang, M. M. Dignam, W. L. Zhang, and R. Singh, "Ultra-high Q even eigenmode resonance in terahertz metamaterials," *Applied Physics Letters*, vol. 106, no. 1, Jan 2015, Art no. 011102.
- 164 P. Akhtar, M. Dorogi, M. M. Enriquez, K. Pawlak, C. Zhang, H. S. Tan, G. Garab, and P. H. Lambrev, "Exitonic interactions and energy transfer in light-harvesting complex II in different environments," *European Biophysics Journal with Biophysics Letters*, vol. 44, pp. S86-S86, Jul 2015.

- 165 "Stable and Low Threshold Optical Gain in CdSe/CdS Quantum Dots: All-Colloidal Frequency Up-Converted Laser", B. Guzelturk, Y. Kelestemur, K. Gungor, A. Yeltik, M. Z. Akgul, Y. Wang, R. Chen, C. Dang, H. Sun and H. V. Demir, *Advanced Materials*, 27, 2741 (2015).
- 166 "Blue Liquid Lasers from Solution of CdZnS/ZnS Ternary Alloy Quantum Dots with Quasi-Continuous Pumping", Y. Wang, K. S. Leck, V. D. Ta, R. Chen, V. Nalla, Y. Gao, T. He, H. V. Demir and H. Sun, *Advanced Materials*, 27, 169 (2015).
- 167 "Lateral Size-Dependent Spontaneous and Stimulated Emission Properties in Colloidal CdSe Nanoplatelets", M. Olutas, B. Guzelturk, Y. Kelestemur, A. Yeltik, S. Delikanli and H. V. Demir, *ACS Nano*, 9, 5041 (2015).
- 168 "Continuously Tunable Emission in Inverted Type-I CdS/CdSe Core/Crown Semiconductor Nanoplatelets", S. Delikanli, B. Guzelturk, P. L. Hernández-Martínez, T. Erdem, Y. Kelestemur, M. Olutas, M. Z. Akgul and H. V. Demir, *Advanced Functional Materials*, 25, 4282 (2015).
- 169 "Liquid-Liquid Diffusion Assisted Crystallization (LLDC): a Fast and Versatile Approach towards High Quality Mixed Quantum Dot-Salt Crystals", M. Adam, Z. Wang, A. Dubavik, G. M. Stachowski, C. Meerbach, Z. Soran-Erdem, C. Rengers, H. V. Demir, N. Gaponik, A. Eychmüller, *Advanced Functional Materials*, 25, 2638 (2015).
- 170 "Organic-Inorganic Composites of Semiconductor Nanocrystals For Efficient Excitonics", B. Guzelturk and H. V. Demir, *J. Phys. Chem. Lett.*, 6, 2206 (2015).
- 171 "Macrocrysats of Colloidal Quantum Dots in Anthracene: Exciton Transfer and Polarized Emission", Z. Soran-Erdem, T. Erdem, P. L. Hernandez-Martinez, M. Z. Akgul, N. Gaponik and H. V. Demir, *J. Phys. Chem. Lett.*, 6, 1767 (2015).
- 172 "Nonradiative energy transfer in colloidal CdSe nanoplatelet films", B. Guzelturk, M. Olutas, S. Delikanli, Y. Kelestemur, O. Erdem and H. V. Demir, *Nanoscale*, 7, 2545 (2015).
- 173 "Type-II colloidal quantum wells: CdSe/CdTe Core/Crown heteronanoplatelets", Y. Kelestemur, M. Olutas, S. Delikanli, B. Guzelturk, M. Z. Akgul and H. V. Demir, *J. Phys. Chem. C*, 119, 2177 (2015).
- 174 "Electroluminescence Efficiency Enhancement in Quantum Dot Light-Emitting Diodes by Embedding a Silver Nanoisland Layer", X. Yang, P. L. Hernández-Martínez, C. Dang, E. Mutlugun, K. Zhang, H. V. Demir and X. W. Sun, *Advanced Optical Materials*, 3, 1439 (2015).
- 175 "Manipulating Optical Properties of ZnO/Ga:ZnO Core–Shell Nanorods Via Spatially Tailoring Electronic Bandgap", X. Zhao, Y. Gao, Y. Wang, H. V. Demir, S. Wang and H. Sun, *Advanced Optical Materials*, 3, 1066 (2015).
- 176 "Graphene-based transparent conductive electrodes for GaN-based light emitting diodes: Challenges and countermeasures", L. Wang, W. Liu, Y. Zhang, Z.-H. Zhang, S. T. Tan, X. Yi, G. Wang, X. W. Sun, H. Zhu and H. V. Demir, *Nano Energy*, 12, 419 (2015).
- 177 "Stable dispersion of iodide-capped PbSe quantum dots for high-performance low-temperature processed electronics and optoelectronics", V. Sayevich, N. Gaponik, M. Ploetner, M. Kruszynska, T. Gemming, V. Dzhagan, S. Akhavan, D. Zahn, H. V. Demir, A. Eychmueller, *Chemistry of Materials*, 27, 4328 (2015).
- 178 "Unraveling the ultralow threshold stimulated emission from CdZnS/ZnS quantum dot and enabling high-Q microlasers", Y. Wang, K. E. Fong, S. Yang, V. D. Ta, Y. Gao, Z. Wang, V. Nalla, H. V. Demir, and H. Sun, *Laser & Photonics Reviews*, 9, 507 (2015).
- 179 "Two-color single hybrid plasmonic nano-emitters with real time switchable dominant emission wavelength", X. Zhou, J. Wenger, F. Visconti, L. Le Cunff, J. Béal, S. Kochtcheev, X. Yang, G. Wiederrecht, G. Colas Des Francs, A. Bisht, S. Jradi, R. Caputo, H. V. Demir, R. Schaller, J. Plain, A. Vial, X. W. Sun, R. Bachelot, *Nano Letters*, 15, 7458 (2015).
- 180 "Observation of polarized gain from aligned colloidal nanorods", Y. Gao, V. D. Ta, X. Zhao, Y. Wang, R. Chen, E. Mutlugun, K. E. Fong, S. T. Tan, C. Dang, X. W. Sun, H. Sun and H. V. Demir, *Nanoscale*, 7, 6481 (2015).
- 181 "Quinoxaline Based N-Heteroacene Interfacial Layer for Efficient Hole-Injection in Quantum Dot Light-Emitting Diodes", L. Bai, X. Yang, C. Y. Ang, K. T. Nguyen, T. Ding, P. Bose, Q. Gao, A. K. Mandal, X. W. Sun, H. V. Demir and Y. Zhao, *Nanoscale*, 7, 11531 (2015).
- 182 "Stable and efficient colour enrichment powders of nonpolar nanocrystals in LiCl", T. Erdem, Z. Soran-Erdem, V. Kumar Sharma, Y. Kelestemur, M. Adam, N. Gaponik, and H. V. Demir, *Nanoscale*, 7, 17611 (2015).
- 183 "Inorganic Halide Perovskites for Efficient Light Emitting Diodes", N. Yantara, S. Bhaumik, F. Yan, D. Sabba, H. Dewi, N. Mathews, P. Boix, H. V. Demir, S. Mhaisalkar, *J. Phys. Chem. Lett.*, 6, 4360 (2015).

- 184 "Carbon Nanotube Driver Circuit for 6×6 Organic Light Emitting Diode Display", J. Zou, K. Zhang, J. Li, Y. Zhao, Y. Wang, S. K. R. Pillai, H. V. Demir, X. W. Sun, M. B. Chan-Park and Q. Zhang, *Scientific Reports*, 5, 11755 (2015).
- 185 "Experimental Determination of the Absorption Cross-Section and Molar Extinction Coefficient of Colloidal CdSe Nanoplatelets", A. Yeltik, S. Delikanli, M. Olutas, Y. Kelestemur, B. Guzelturk and H. V. Demir, *J. Phys Chem C*, 119, 26768 (2015).
- 186 "Ultralow-Threshold Up-Converted Lasing in Oligofluorenes with Tailored Strong Nonlinear Absorption", B. Guzelturk, A. L. Kanibolotsky, C. Orofino-Pena, N. Laurand, M. D. Dawson, P. J. Skabara, H. V. Demir, *Journal of Materials Chemistry C*, 3, 12018 (2015).
- 187 "Construction of multi-layered white emitting organic nanoparticles by clicking polymers", H. Keita, B. Guzelturk, J. Pennakalathil, T. Erdem, H. V. Demir, D. Tuncel, *Journal of Materials Chemistry C*, 3, 10277 (2015).
- 188 "Colloidal quantum-dot LEDs with a solution-processed copper oxide (CuO) hole injection layer", T. Ding, X. Yang, L. Bai, Y. Zhao, K. E. Fong, N. Wang, H. V. Demir, X. W. Sun, *Organic Electronics*, 26, 245 (2015).
- 189 "Highly stable and high power efficiency tandem organic light-emitting diodes with transition metal oxide-based charge generation layers", Y. Zhao, S. T. Tan, H. V. Demir, X. W. Sun, *Organic Electronics*, 23, 70 (2015).
- 190 "Influence of gold-silica nanoparticles on the performance of small-molecule bulk heterojunction solar cells", X. Xu, A. K. K. Kyaw, B. Peng, Q. Xiong, H. V. Demir, Y. Wang, T. K.S. Wong, X. W. Sun, *Organic Electronics*, 22, 20 (2015).
- 191 "Mid-wave infrared metasurface microlensed focal plane array for optical crosstalk suppression", O. Akin and H. V. Demir, *Optics Express*, 23, 27020 (2015).
- 192 "Ultra-thin broadband nanostructured insulator-metal-insulator-metal plasmonic light absorber", A. Hubarevich, A. Kukhta, H. V. Demir, X. W. Sun, and H. Wang, *Optics Express*, 23, 9753 (2015).
- 193 "Nonradiative recombination — critical in choosing quantum well number for InGaN/GaN light-emitting diodes", Y. P. Zhang, Z.-H. Zhang, W. Liu, S. T. Tan, Z. G. Ju, X. L. Zhang, Y. Ji, L. C. Wang, Z. Kyaw, N. Hasanov, B. B. Zhu, S. P. Lu, X. W. Sun and H. V. Demir, *Optics Express*, 23, A34 (2015).
- 194 "Multicolor lasing prints", V. D. Ta, S. Yang, Y. Wang, Y. Gao, T. He, R. Chen, H. V. Demir and H. Sun, *Applied Physics Letters*, 107, 221103 (2015).
- 195 "Efficient three-color white organic light-emitting diodes with a spaced multilayer emitting structure", F. Yan, G. Xing, R. Chen, H. V. Demir, H. Sun, T. C. Sum, and X. W. Sun, *Applied Physics Letters*, 106, 023302 (2015).
- 196 "A hole modulator for InGaN/GaN light-emitting diodes", Z.-H. Zhang, Z. Kyaw, W. Liu, Y. Ji, L. Wang, S. T. Tan, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 106, 063501 (2015).
- 197 "Implementation of graphene multilayer electrodes in quantum dot light-emitting devices", S. Wolff, D. Jansen, H. Terlinden, Y. Kelestemur, W. Mertin, H. V. Demir, G. Bacher, E. Nannen, *Applied Physics A*, 120, 1197 (2015).
- 198 G. Wang, Y.S. Jang, S. Hyun, B.J. Chun, H.J. Kang, S. Yan, S.W. Kim, Y.J. Kim, Absolute positioning by multi-wavelength interferometry referenced to the frequency comb of a femtosecond laser, *Optics Express*, 23 (2015) 9121-9129.
- 199 K. Lee, J. Lee, Y.S. Jang, S. Han, H. Jang, Y.J. Kim, S.W. Kim, Fourier-transform spectroscopy using an Er-doped fiber femtosecond laser by sweeping the pulse repetition rate, *Scientific Reports*, 5 (2015).
- 200 J. Lee, S.W. Kim, Y.J. Kim, Repetition rate multiplication of femtosecond light pulses using a phase-locked all-pass fiber resonator, *Optics Express*, 23 (2015) 10117-10125.
- 201 H.J. Kang, B.J. Chun, Y.S. Jang, Y.J. Kim, S.W. Kim, Real-time compensation of the refractive index of air in distance measurement, *Optics Express*, 23 (2015) 26377-26385.
- 202 H. Jang, Y.S. Jang, S. Kim, K. Lee, S. Han, Y.J. Kim, S.W. Kim, Polarization maintaining linear cavity Er-doped fiber femtosecond laser, *Laser Physics Letters*, 12 (2015).
- 203 S. Han, Y.J. Kim, S.W. Kim, Parallel determination of absolute Distances to multiple targets by time-of-flight measurement using femtosecond light pulses, *Optics Express*, 23 (2015) 25874-25882.
- 204 S. Sreejith, J. Joseph, K.T. Nguyen, V.M. Murukeshan, S.W. Lye, Y. Zhao, Graphene Oxide Wrapping of Gold–Silica Core–Shell Nanohybrids for Photoacoustic Signal Generation and Bimodal Imaging, *ChemNanoMat*, 1 (2015) 39-45.
- 205 V.K. Shinoj, V.M. Murukeshan, M. Baskaran, T. Aung, Integrated flexible handheld probe for imaging and evaluation of iridocorneal angle, *Journal of Biomedical Optics*, 20 (2015).

- 206 P. Prabhathan, V.M. Murukeshan, Dielectric supported bimetal layer configuration for long-range surface plasmon polariton interference-based subwavelength lithography, *Optical Engineering*, 54 (2015).
- 207 R.K. Meleppat, M.V. Matham, L.K. Seah, An efficient phase analysis-based wavenumber linearization scheme for swept source optical coherence tomography systems, *Laser Physics Letters*, 12 (2015).
- 208 H.T. Lim, V.M. Murukeshan, Pushbroom hyperspectral imaging system with selectable region of interest for medical imaging, *Journal of Biomedical Optics*, 20 (2015).
- 209 X.J.J. Hong, V.K. Shinoj, V.M. Murukeshan, M. Baskaran, T. Aung, A simple and non-contact optical imaging probe for evaluation of corneal diseases, *Review of Scientific Instruments*, 86 (2015).
- 210 J. Bingi, V.M. Murukeshan, Plasmonic nanopillar coupled two-dimensional random medium for broadband light trapping and harvesting, *Journal of Nanophotonics*, 9 (2015).
- 211 J. Bingi, V.M. Murukeshan, Speckle lithography for fabricating Gaussian, quasi-random 2D structures and black silicon structures, *Scientific Reports*, 5 (2015).
- 212 J. Bingi, M. Hemalatha, R.W. Anita, C. Vijayan, V.M. Murukeshan, Asymmetric transmission and optical low-pass filtering in a stack of random media with graded transport mean free path, *Optical Materials*, 49 (2015) 15-20
- 213 C. Zuo, Q. Chen, L. Tian, L. Waller, A. Asundi, Transport of intensity phase retrieval and computational imaging for partially coherent fields: The phase space perspective, *Optics and Lasers in Engineering*, 71 (2015) 20-32.
- 214 Y. Wen, W. Qu, H. Cheng, H. Yan, A. Asundi, Further investigation on the phase stitching and system errors in digital holography, *Applied Optics*, 54 (2015) 266-276.
- 215 M. Maheshwari, S.C. Tjin, W.W. Ching, A. Asundi, FBG and FOPS for local and global structural health monitoring on a single fiber, *Smart Materials and Structures*, 24 (2015).
- 216 M. Maheshwari, S.C. Tjin, A. Asundi, Efficient design of Fiber Optic Polarimetric Sensors for crack location and sizing, *Optics and Laser Technology*, 68 (2015) 182-190.
- 217 L. Huang, M. Idir, C. Zuo, K. Kaznatcheev, L. Zhou, A. Asundi, Comparison of two-dimensional integration methods for shape reconstruction from gradient data, *Optics and Lasers in Engineering*, 64 (2015) 1-11.
- 218 L. Huang, M. Idir, C. Zuo, K. Kaznatcheev, L. Zhou, A. Asundi, Shape reconstruction from gradient data in an arbitrarily-shaped aperture by iterative discrete cosine transforms in Southwell configuration, *Optics and Lasers in Engineering*, 67 (2015) 176-181
- 219 P. Yu, X. Yu, W. Lu, D. Wu, H. Lin, L. Sun, K. Du, F. Liu, W. Fu, Q. Zeng, Z. Shen, C. Jin, Q. J. Wang, and Z. Liu, "Fast photoresponse from 1T Tin Diselenide Atomic Layers". *Advanced Functional Materials*, DOI: 10.1002/adfm.201503789, 2015.
- 220 X. Yu, Z. Dong, Y. Liu, T. Liu, J. Tao, Y. Zeng, J. K. W. Yang and Q. J. Wang, "A high performance, visible to mid-infrared photodetector based on graphene nanoribbons passivated with HfO₂". *Nanoscale*, DOI: 10.1039/C5NR06869J, 2015.
- 221 G. Liang, X. N. Hu, X. C. Yu, A. G. Davies, E. Linfield, and Q. J. Wang, "Integrated Terahertz graphene modulators achieving 100% modulation depth", *ACS Photonics*, 2, 1559–1566, 2015.
- 222 X. C. Yu, Y. Shen, T. Liu and Q. J. Wang, "Photocurrent in electron-beam irradiation induced graphene p-n junction", *Scientific Report*, 5 12014, 2015.
- 223 B. Meng, Y. Zeng, G. Liang, J. Tao, X. Hu, E. Rodriguez, and Q. J. Wang, "Broadly continuously tunable slot waveguide quantum cascade lasers based on a continuum-to-continuum active region design", *Applied Physics Letters*, 107, 111110, 2015.
- 224 Z. Liu, Q. Z. Zhong, X. Yu, Q. J. Wang, and Y. Zhang, "High resolution fiber profilometer for hard-to-access areas", *Applied Optics*, 54, 7205, 2015.
- 225 X. C. Yu, Y. Shen, T. Liu and Q. J. Wang, "Photocurrent in electron-beam irradiation induced graphene p-n junction", *Scientific Report*, 5 12014, 2015.
- 226 B. Hu, Y. Zhang and Q. J. Wang, "Surface magneto plasmons and their applications in the infrared frequencies", *Nanophotonics*, invited review, DOI 10.1515/nanoph-2014-0026, 2015.
- 227 X. H. Li, K. Wu, X. C. Yu, P. P. Shum, X. Yu, Y. Zhang, and Q. J. Wang, "Carbon materials-based saturable absorbers and their application in noise characteristics of the passively mode-locked fiber lasers", 2015.
- 228 X. S. Luo, Y. L. Cao, J. F. Song, X. N. Hu, Y. B. Cheng, C. M. Li, C. Y. Liu, T. Y. Liow, M. B. Yu, H. Wang, Q. J. Wang, and P. G. Q. Lo, "High-throughput multiple dies-to-wafer bonding technology and III/V-on-Si hybrid lasers for heterogeneous integration of optoelectronic integrated circuits", invited, *frontiers in Materials*, 2, 28 1-21, 2015.
- 229 A. Dubrovkin, J. Tao, X. C. Yu, N. Zheludev, and Q. J. Wang, "The reduction of surface plasmon losses in quasi-suspended graphene", *Scientific Report*, 5 09837, 2015.

- 230 Z. Y. Yan, Y. L. Tang, X. H. Li, T. Liu, B. Sun, P. Shum, X. Yu, Y. Zhang, and Q. J. Wang, "Switchable multi-wavelength Tm-doped mode-locked fiber laser", *Optics Letters*, 40, 1916-1919, 2015.
- 231 B. Hu, Y. Zhang, and Q. J. Wang, "Surface magneto plasmons and their applications in the infrared frequencies", invited, *Nanophotonics*, nanoph-2014-0026, 2015.
- 232 J. Tao, Z. G. Dong, J. Yang, and Q. J. Wang, "Plasmon excitation on flat graphene by s-polarized beams using four-wave mixing", *Optics Express*, 23, 7809–7819, 2015.
- 233 M. Gebski, M. Dems, A. Szerling, M. Motyka, L. Marona, R. Kruszka, D. Urbanczyk, M. Walczakowski, N. Palka, A. Wojcik-Jedlinska, Q. J. Wang, D. H. Zhang, M. Bugajski, M. Wasiak, and T. Czyszanowski, "Monolithic high-index contrast grating: a material independent high-reflectance VCSEL mirror", *Optics Express*, 23, 11674, 2015.
- 234 Z. Liu, Q. Z. Zhong, Q. J. Wang, X. Yu, and Y. Zhang, "Surface roughness measurement by depolarization method", *Applied Optics*, accepted, 2015.
- 235 Y. L. Cao, X. N. Hu, Y. B. Cheng, B. Meng, T. Liu, H. Wang, and Q. J. Wang, "Optimization of hybrid silicon lasers for high-speed direct modulation", *IEEE Photonics Journal*, 7, 1501013, 2015.
- 236 Y. L. Cao, X. N. Hu, X. Luo, J. Song, Y. B. Cheng, C. M. Li, H. Wang, L. T. Yang, G. Q. Lo, and Q. J. Wang, "Hybrid III-V/Silicon laser with lateral coupled Bragg grating", *Optics Express*, 23, 8800-8808 2015.
- 237 Y. B. Cheng, X. S. Luo, J. F. Song, T. Y. Liow, G. Q. Lo, X. N. Hu, X. H. Li, P. H. Lim and Q. J. Wang, "Passively mode-locked III-V/silicon laser with continuous-wave optical injection", *Optics Express*, 23, 6392-6399, 2015.
- 238 Z. Y. Yan, X. H. Li, Y. L. Tang, P. Shum, X. Yu, Y. Zhang, and Q. J. Wang, "Tunable and switchable dual-wavelength Tmdoped mode-locked fiber laser by nonlinear polarization evolution", *Optics Express*, 23, 4369-4376, 2015.
- 239 K. Wu, X. H. Li, Y. G. Wang, Q. J. Wang, P. P. Shum, and J. P. Chen, "Towards Low Timing Phase Noise Operation in Fiber Lasers Mode Locked by Graphene Oxide and Carbon Nanotubes at 1.5 μm", *Optics Express*, 23, 501-511, 2015.
- 240 Y. B. Cheng, J. Wu, L. J. Zhao, X. S. Luo and Q. J. Wang, "Ground-State Lasing in High Power InAs/GaAs Quantum Dots-in-a-Well Laser Using Active Multimode Interference Structures", *Optics Letters*, 40, 69-72, 2015.
- 241 B. Meng and Q. J. Wang, "Broadly tunable single-mode mid-infrared quantum cascade lasers", invited, *Journal of Optics*, 17, 023001, 2015.
- 242 Matthias Kraft, Yu Luo, S. A. Maier, J. B. Pendry, " Designing Plasmonic Gratings with Transformation Optics", *Physical Review X*, 5(3), 031029, 2015.
- 243 J. B. Pendry, Yu Luo, R. Zhao, "Transforming the optical landscape", *Science*, 348(6234), 521, 2015.
- 244 Xinyu Liu, Si Chen, Dongyao Cui, Xiaojun Yu, and Linbo Liu, "Spectral estimation optical coherence tomography for axial super-resolution", *Optics Express*, 23(20), 26521-26532, 2015.
- 245 Shi W, Liu X, Wei C, Xu Z, Sim S, Liu Linbo, Xu C, "Micro-Optical Coherence Tomography Tracking of Magnetic Gene Transfection via Au-Fe3O4 Dumbbell Nanoparticles", *Nanoscale*, 7, 17249-17253,2015.
- 246 En Bo, Xinyu Liu, Si Chen, Xiaojun Yu, Xianghong Wang, and Linbo Liu, "Spectral-domain optical coherence tomography with dual-balanced detection for auto-correlation artifacts reduction," *Opt. Express* 23, 28050-28058, 2015.
- 247 Xiaojun Yu, Xinyu Liu, Si Chen, Yuemei Luo, Xianghong Wang, Linbo Liu, High-resolution extended source optical coherence tomography, *Optics Express* 2015, 23, 26399-26413, 2015.
- 248 J. Lin, Q. Wang, G. H. Yuan, L. P. Du, S. S. Kou, X.C. Yuan, "Mode-matching metasurfaces: coherent reconstruction and multiplexing of surface waves", *Scientific Reports*, vol 5, 10529, 2015.
- 249 Gu J, Fu CY, Ng BK, Liu LB, Lim-Tan SK, Lee CGL, "Enhancement of Early Cervical Cancer Diagnosis with Epithelial Layer Analysis of Fluorescence Lifetime Images", *PLoS ONE* 10(5): e0125706. doi:10.1371/journal.pone.0125706, 2015.
- 250 Ebrahim Akhondi, Bing Wu, Shuyang Sun, Brigit Marxer, Weikang Lim, Jun Gu, Linbo Liu, Michael Burkhardt, Diane McDougald, Wouter Pronk; Anthony G Fane, "Gravity-Driven Membrane Filtration as Pretreatment for Seawater Reverse Osmosis: Linking Biofouling Layer Morphology with Flux Stabilization", *Water Research*, 70, 158-173, 2015.
- 251 Feng Yin, Chengbin Yang, Qianqian Wang, Shuwen Zeng, Rui Hu, Guimiao Lin, Jinglin Tian, Siyi Hu, Rong Feng Lan, Ho Sup Yoon, Fei Lu, Kuan Wang and Ken-Tye Yong, "A Light-Driven Therapy of Pancreatic Adenocarcinoma Using Gold Nanorods-Based Nanocarriers for Co-Delivery of Doxorubicin and siRNA", *Theranostics*, vol 5, pp818-833, 2015.

- 252 Yan Z, Tang Y, Sun B, Liu T, et al., "Switchable multi-wavelength Tm-doped mode-locked fiber laser", *Optics Letters*, vol 4, 2015.
- 253 Tianye Huang, Perry Ping Shum, Xuguang Shao, Timothy Lee, Zhifang Wu, Huizi Li, Tingting Wu, Meng Zhang, Xuan Quyen Dinh, and Gilberto Brambilla, "Coupling-length phase matching for efficient third-harmonic generation based on parallel-coupled waveguides", *Optics Letters*, vol 40, pp894–897, 2015.
- 254 Tianye Huang, Xiaohui Li, Perry Ping Shum, Qi Jie Wang, Xuguang Shao, Lulu Wang, Huizi Li, Zhifang Wu, Xinyong Dong, "All-fiber multiwavelength thulium-doped laser assisted by four-wave mixing in highly germania-doped fiber", *Optics Express*, vol 23 (1), pp340-348, 2015.
- 255 Viet Cuong Nguyen, K. Pita, C. H. Kam, A. Dolbik, S. K. Lazarouk, and V. Labunov, "Giant and Tunable Mechanical Impulse of Energetic Nanocrystalline Porous Silicon," *Journal of Propulsion and Power* 31, 694-698, 2015.
- 256 Xianqiang Li, Xiaohong Tang, Fei Wang, Vijila Chellappan, Weng Weei Tjiu, Shifeng Guo, Hong Wang, Dan Wu, Jun Li, "Investigations of a New High Performance Low Band Gap Photovoltaic Polymer Semiconductor", *IEEE Journal of Photovoltaics* (accepted).
- 257 Dan WU, Xiaohong Tang, Ho Sup Yoon, Kai Wang, Aurelien Olivier, Xianqiang Li, "MOCVD growth of high quality and density tunable GaAs nanowires on ITO catalyzed by Au nanoparticles deposited by centrifugation", *Nanoscale Research Letters*, 10 (2015) 410.
- 258 Li Xianqiang, Li Jun, Wang Hong, Wu Dan, Tang Xiaohong , "The Effects of Molecular Weight of a New Hole Transporting Polymer on the Organic Solar Cells Performance", *Procedia Engineering*, (Accepted).
- 259 Li Xianqiang, Liu Jie, Tang Xiaohong, Guo Shifeng, Li Jun, Wang Hong, Liu Bin, Wei Lin Leong, "Improvement in polymer solar cell performance via UV-light treatment on conjugated polyelectrolyte cathode interlayer", *Organic Electronics*, Vol.25, pp.105-111, 2015.
- 260 Dan Wu, Xiaohong Tang, Yoon Ho Sup, "Deposition of high density Au nanoparticles on ITO glass by centrifugation", *Journal of Nanoparticle Research*, vol. 17, pp. 1-8, 2015.
- 261 D. Wu, X. Tang, and X. Li, "Optimization of the Nanowire Size and Distribution of Compound Semiconductor Nanowire-Based Hybrid Solar Cells," *IEEE Journal of Photovoltaics*, vol. PP, pp. 1-7, 2015.
- 262 D Wu, X H Tang, A Olivier and X Q Li, "Free-standing GaAs nanowires growth on ITO glass by MOCVD", *Materials Research Express*, vol. 2, p. 045002, 2015.
- 263 Yunjiang Jin, Xiao Hong Tang, Jing Hua Teng, Zhang Daohua, "Optical properties and bonding behaviors of InSbN alloys grown by Metal-organic chemical vapor deposition", *Journal of Crystal Growth*, , Volume 416, Pages 12–16, 2015.
- 264 Tang Xiaohong, Yin Zongyou, "InP Based Quantum Dots for Long Wavelength Emissions and Their Post-growth Bandgap Tuning", *Journal of Nanoelectronics and Optoelectronics*, Vol.10, page-1-6, 2015.
- 265 M. Zhang, X. Dong, P. Shum, D. Hu, H. Su, W. Lew, and L. Wei, "Magnetic field sensor based on magnetic-fluid-coated long-period fiber grating," *Journal of Optics* 17, 065402, 2015.
- 266 A. Canales, X. Jia, U. Froriep, R. Koppen, C. Tringides, J. Selvidge, C. Lu, C. Hou, L. Wei, Y. Fink, and P. Anikeeva, "Multimodal fibres for simultaneous optical, electrical and chemical interrogation of neural circuits *in vivo*," *Nature Biotechnology* 33, 277-284, 2015.
- 267 C. Hou, X. Jia, L. Wei, S. Tan, X. Zhao, J. Joannopoulos, and Y. Fink, "Crystalline silicon core fibres from aluminium core preforms," *Nature Communications* 6, 6248, 2015.
- 268 T. Wu, P. Shum, X. Shao, Y. Sun, T. Huang, and L. Wei, "Efficient phase-matched third harmonic generation in a metal-clad plasmonic double-slot waveguide," *Journal of Optics* 17, 025506, 2015.
- 269 N.Q.Ngo, "Optical chirp z-transform processor: design and application", *IEEE/OSA Journal of Lightwave Technology*, 2015.

2014

- 1 Tan Y.C., Ji W.B., Mamidala V., Chow K.K. and Swee Chuan Tjin, "Carbon-Nanotube-Deposited Long Period Fiber Grating for Continuous Refractive Index Sensor Applications", Sensors & Actuators: B Chemical, Vol 196, 260-264, June 2014.
- 2 Wenbin Ji, Yung Chuen Tan, Bo Lin, Swee Chuan Tjin, Kin Kee Chow, "Nonadiabatically Tapered Microfiber Sensor with Ultrashort Waist", IEEE Photonics Technology Letters, Vol. 26, Issue 22, 2303-2306, Article number 689119615, Nov 2014.
- 3 Dongyao Cui, Xinyu Liu, Jing Zhang, Xiaojun Yu, Sun Ding, Yuemei Luo, Jun Gu, Ping Shum, and Linbo Liu, "Dual spectrometer system with spectral compounding for 1- μ m optical coherence tomography in vivo", Optics Letters, Vol. 39, pp6727-6730, 2014.
- 4 Xiaojun Yu, Xinyu Liu, Jun Gu, Dongyao Cui, Junying Wu, and Linbo Liu,"Depth extension and sidelobe suppression in optical coherence tomography using pupil filters", Optics Express, Vol. 22, 26956-26966, 2014.
- 5 Xinyu Liu, Xiaojun Yu, Hongying Tang, Dongyao Cui, Meghna R. Beotra, Michael J. A. Girard, Ding Sun, Jun Gu, and Linbo Liu, "Spectrally encoded extended source optical coherence tomography", Optics Letters, 2014.
- 6 N. Li, S. Yoo, X. Yu, D. Jain and J. K. Sahu, "Pump power depreciation by photodarkening in ytterbium-doped fibres and amplifiers," Photon. Technol. Lett. 26,pp.115-118, 2014.
- 7 Banglian Xu, Dawei Zhang, Yuanshen Huang, Qi Wang, Baicheng Li, Daohua Zhang, "Real-Time Angular Sensitivity Compensation of Guided-Mode Resonance Filter", IEEE Photonics Technology Letters, Vol. 26, Issue 3, pp.231-234, 2014.
- 8 C. Chen, W. D. Zhong, X. Li, and D. Wu, "MDPSK-based nonequalization OFDM for coherent free-space optical communication," IEEE Photon. Technol. Lett., vol. 26, no. 16, pp. 1617–1620, Aug. 15, 2014.
- 9 Y. Y. Zhao, X. Luo, J. Zhang, J. X. Wu, X. X. Bai, M. X. Wang, J. F. Jia, H. L. Peng, Z. F. Liu, S. Y. Quek, and Q. H. Xiong, "Interlayer vibrational modes in few-quintuple-layer Bi₂Te₃ and Bi₂Se₃ two-dimensional crystals: Raman spectroscopy and first-principles studies," Physical Review B, vol. 90, no. 24, Dec 2014, Art no. 245428.
- 10 Y. B. Zhao, J. Zhang, S. W. Liu, Y. Gao, X. Y. Yang, K. S. Leck, A. P. Abiyasa, Y. Divayana, E. Mutlugun, S. T. Tan, Q. H. Xiong, H. V. Demir, and X. W. Sun, "Transition metal oxides on organic semiconductors," Organic Electronics, vol. 15, no. 4, pp. 871-877, Apr 2014.
- 11 J. F. Zhao, J. I. Wong, J. K. Gao, G. Li, G. C. Xing, H. C. Zhang, T. C. Sum, H. Y. Yang, Y. L. Zhao, S. L. A. Kjelleberg, W. Huang, S. C. J. Loo, and Q. C. Zhang, "Larger pi-extended anti-/synaroylenediimidazole polyaromatic compounds: synthesis, physical properties, self-assembly, and quasi-linear conjugation effect," Rsc Advances, vol. 4, no. 34, pp. 17822-17831, 2014.
- 12 X. Zhang, H. H. Liu, S. Petrikota, S. Ramakrishna, and H. J. Fan, "Electrospun Fe₂O₃-carbon composite nanofibers as durable anode materials for lithium ion batteries," Journal of Materials Chemistry A, vol. 2, no. 28, pp. 10835-10841, 2014.
- 13 W. Zhang, W. M. Zhu, E. E. M. Chia, Z. X. Shen, H. Cai, Y. D. Gu, W. Ser, and A. Q. Liu, "A pseudo-planar metasurface for a polarization rotator," Optics Express, vol. 22, no. 9, pp. 10446-10454, May 2014.
- 14 Q. Zhang, G. Y. Li, X. F. Liu, F. Qian, Y. Li, T. C. Sum, C. M. Lieber, and Q. H. Xiong, "A room temperature low-threshold ultraviolet plasmonic nanolaser," Nature Communications, vol. 5, Sep 2014, Art no. 4953.
- 15 Q. Zhang, S. T. Ha, X. F. Liu, T. C. Sum, and Q. H. Xiong, "Room-Temperature Near-Infrared High-Q Perovskite Whispering-Gallery Planar Nano lasers," Nano Letters, vol. 14, no. 10, pp. 5995-6001, Oct 2014.
- 16 J. F. Zhang, K. F. MacDonald, and N. I. Zheludev, "Giant optical forces in planar dielectric photonic metamaterials," Optics Letters, vol. 39, no. 16, pp. 4883-4886, Aug 2014.
- 17 J. Zhang, K. F. MacDonald, and N. I. Zheludev, "Optical gecko toe: Optically controlled attractive near-field forces between plasmonic metamaterials and dielectric or metal surfaces (vol 85, 205123, 2012)," Physical Review B, vol. 89, no. 23, Jun 2014, Art no. 239901.
- 18 J. Zhang, C. Cao, X. L. Xu, C. Liow, S. Z. Li, P. H. Tan, and Q. H. Xiong, "Tailoring Alphabetical Metamaterials in Optical Frequency: Plasmonic Coupling, Dispersion, and Sensing," Acs Nano, vol. 8, no. 4, pp. 3796-3806, Apr 2014.
- 19 X. Zeng, K. F. Tai, T. L. Zhang, C. W. J. Ho, X. D. Chen, A. Huan, T. C. Sum, and L. H. Wong, "Cu₂ZnSn(S,Se)(4) kesterite solar cell with 5.1% efficiency using spray pyrolysis of aqueous precursor solution followed by selenization," Solar Energy Materials and Solar Cells, vol. 124, pp. 55-60, May 2014.

- 20 G. H. Yuan, E. T. F. Rogers, T. Roy, Z. X. Shen, and N. I. Zheludev, "Flat super-oscillatory lens for heat-assisted magnetic recording with sub-50nm resolution," *Optics Express*, vol. 22, no. 6, pp. 6428-6437, Mar 2014.
- 21 G. H. Yuan, E. T. F. Rogers, T. Roy, G. Adamo, Z. X. Shen, and N. I. Zheludev, "Planar superoscillatory lens for sub-diffraction optical needles at violet wavelengths," *Scientific Reports*, vol. 4, Sep 2014, Art no. 6333.
- 22 H. Yu, C. Guan, X. H. Rui, B. Ouyang, B. Yadian, Y. Z. Huang, H. Zhang, H. E. Hoster, H. J. Fan, and Q. Y. Yan, "Hierarchically porous three-dimensional electrodes of CoMoO₄ and ZnCo₂O₄ and their high anode performance for lithium ion batteries," *Nanoscale*, vol. 6, no. 18, pp. 10556-10561, 2014.
- 23 G. N. Yu, X. F. Liu, G. C. Xing, S. Chen, C. F. Ng, X. Y. Wu, E. K. L. Yeow, W. S. Lew, and T. C. Sum, "Spatially-Resolved Ultrafast Optical Spectroscopy of Polymer-Grafted Residues on CVD Graphene," *Journal of Physical Chemistry C*, vol. 118, no. 1, pp. 708-713, Jan 2014.
- 24 X. S. Yin, C. H. Tang, L. F. Sun, Z. X. Shen, and H. Gong, "Study on Phase Formation Mechanism of Non- and Near-Stoichiometric Cu₂ZnSn(S,Se)(4) Film Prepared by Selenization of Cu-Sn-Zn-S Precursors," *Chemistry of Materials*, vol. 26, no. 6, pp. 2005-2014, Mar 2014.
- 25 Y. P. Yang, R. Singh, and W. L. Zhang, "Resonance properties of THz plasmonic dipole-bowtie antenna array: The critical role of the substrate," *Chinese Physics B*, vol. 23, no. 12, Dec 2014, Art no. 128702.
- 26 Q. L. Yang, J. Q. Gu, D. Y. Wang, X. Q. Zhang, Z. Tian, C. M. Ouyang, R. Singh, J. G. Han, and W. L. Zhang, "Efficient flat metasurface lens for terahertz imaging," *Optics Express*, vol. 22, no. 21, pp. 25931-25939, Oct 2014.
- 27 F. Yan, R. Chen, H. D. Sun, and X. W. Sun, "Organic light-emitting diodes with a spacer enhanced exciplex emission," *Applied Physics Letters*, vol. 104, no. 15, Apr 2014, Art no. 153302.
- 28 X. Y. Xu, A. K. K. Kyaw, B. Peng, Q. G. Du, L. Hong, H. V. Demir, T. K. S. Wong, Q. H. Xiong, and X. W. Sun, "Enhanced efficiency of solution-processed small-molecule solar cells upon incorporation of gold nanospheres and nanorods into organic layers," *Chemical Communications*, vol. 50, no. 34, pp. 4451-4454, 2014.
- 29 X. Y. Xu, Q. G. Du, B. Peng, Q. H. Xiong, L. Hong, H. V. Demir, T. K. S. Wong, A. K. K. Kyaw, and X. W. Sun, "Effect of shell thickness on small-molecule solar cells enhanced by dual plasmonic gold-silica nanorods," *Applied Physics Letters*, vol. 105, no. 11, Sep 2014, Art no. 113306.
- 30 X. L. Xu, Q. Zhang, J. Zhang, Y. X. Zhou, and Q. H. Xiong, "Taming excitons in II-VI semiconductor nanowires and nanobelts," *Journal of Physics D-Applied Physics*, vol. 47, no. 39, Oct 2014, Art no. 394009.
- 31 S. Xu, Y. Y. Jiang, H. Y. Xu, J. X. Wang, S. S. Lin, H. S. Chen, and B. L. Zhang, "Realization of deep subwavelength resolution with singular media," *Scientific Reports*, vol. 4, Jun 2014, Art no. 5212.
- 32 H. Y. Xu, X. H. Shi, F. Gao, H. D. Sun, and B. L. Zhang, "Ultrathin Three-Dimensional Thermal Cloak," *Physical Review Letters*, vol. 112, no. 5, Feb 2014, Art no. 054301.
- 33 G. C. Xing, N. Mathews, S. S. Lim, N. Yantara, X. F. Liu, D. Sabba, M. Gratzel, S. Mhaisalkar, and T. C. Sum, "Low-temperature solution-processed wavelength-tunable perovskites for lasing," *Nature Materials*, vol. 13, no. 5, pp. 476-480, May 2014.
- 34 X. H. Xia, D. L. Chao, Z. X. Fan, C. Guan, X. H. Cao, H. Zhang, and H. J. Fan, "A New Type of Porous Graphite Foams and Their Integrated Composites with Oxide/Polymer Core/Shell Nanowires for Supercapacitors: Structural Design, Fabrication, and Full Supercapacitor Demonstrations," *Nano Letters*, vol. 14, no. 3, pp. 1651-1658, Mar 2014.
- 35 K. Wu, C. Soci, P. P. Shum, and N. I. Zheludev, "Computing matrix inversion with optical networks," *Optics Express*, vol. 22, no. 1, pp. 295-304, Jan 2014.
- 36 K. Wu, J. G. de Abajo, C. Soci, P. P. Shum, and N. I. Zheludev, "An optical fiber network oracle for NP-complete problems," *Light-Science & Applications*, vol. 3, Feb 2014, Art no. e147.
- 37 J. I. Wong, N. Mishra, G. C. Xing, M. J. Li, S. Chakrabortty, T. C. Sum, Y. M. Shi, Y. T. Chan, and H. Y. Yang, "Dual Wavelength Electroluminescence from CdSe/CdS Tetrapods," *Acs Nano*, vol. 8, no. 3, pp. 2873-2879, Mar 2014.
- 38 X. L. Wen, Q. Zhang, J. W. Chai, L. M. Wong, S. J. Wang, and Q. H. Xiong, "Near-infrared active metamaterials and their applications in tunable surface-enhanced Raman scattering," *Optics Express*, vol. 22, no. 3, pp. 2989-2995, Feb 2014.
- 39 X. L. Wen, G. Y. Li, J. Zhang, Q. Zhang, B. Peng, L. M. Wong, S. J. Wang, and Q. H. Xiong, "Transparent free-standing metamaterials and their applications in surface-enhanced Raman scattering," *Nanoscale*, vol. 6, no. 1, pp. 132-139, 2014.

- 40 K. L. Wells, P. H. Lambrev, Z. Y. Zhang, G. Garab, and H. S. Tan, "Pathways of energy transfer in LHCII revealed by room-temperature 2D electronic spectroscopy," *Physical Chemistry Chemical Physics*, vol. 16, no. 23, pp. 11640-11646, 2014.
- 41 W. Wei, Y. Zhang, R. Chen, J. Goggi, N. Ren, L. Huang, K. K. Bhakoo, H. D. Sun, and T. T. Y. Tan, "Cross Relaxation Induced Pure Red Upconversion in Activator- and Sensitizer-Rich Lanthanide Nanoparticles," *Chemistry of Materials*, vol. 26, no. 18, pp. 5183-5186, Sep 2014.
- 42 D. Wasserman, R. Singh, and T. Akalin, "Special issue on mid-infrared and THz photonics," *Journal of Optics*, vol. 16, no. 9, Sep 2014, Art no. 090201.
- 43 Y. Wang, V. D. Ta, Y. Gao, T. C. He, R. Chen, E. Mutlugun, H. V. Demir, and H. D. Sun, "Stimulated Emission and Lasing from CdSe/CdS/ZnS Core-Multi-Shell Quantum Dots by Simultaneous Three-Photon Absorption," *Advanced Materials*, vol. 26, no. 18, pp. 29542961, May 2014.
- 44 Q. Wang, J. Maddock, E. T. F. Rogers, T. Roy, C. Craig, K. F. Macdonald, D. W. Hewak, and N. I. Zheludev, "1.7 Gbit/in.(2) gray-scale continuous-phase-change femtosecond image storage," *Applied Physics Letters*, vol. 104, no. 12, Mar 2014, Art no. 121105.
- 45 A. A. Voityuk, R. A. Marcus, and M. E. Michel-Beyerle, "On the mechanism of photoinduced dimer dissociation in the plant UVR8 photoreceptor," *Proceedings of the National Academy of Sciences of the United States of America*, vol. 111, no. 14, pp. 5219-5224, Apr 2014.
- 46 V. Varghese, X. Y. Qian, S. S. Chen, Z. X. Shen, T. Jin, G. Z. Liang, and Q. J. Wang, "Track-andTune Light Field Image Sensor," *Ieee Sensors Journal*, vol. 14, no. 12, pp. 4372-4384, Dec 2014.
- 47 L. Y. M. Tobing, L. Tjahjana, D. H. Zhang, Q. Zhang, and Q. H. Xiong, "Sub-100-nm Sized Silver Split Ring Resonator Metamaterials with Fundamental Magnetic Resonance in the Middle Visible Spectrum," *Advanced Optical Materials*, vol. 2, no. 3, pp. 280-285, Mar 2014.
- 48 X. R. Tian, Y. R. Fang, and B. L. Zhang, "Multipolar Fano Resonances and Fano-Assisted Optical Activity in Silver Nanorice Heterodimers," *Acs Photonics*, vol. 1, no. 11, pp. 11561164, Nov 2014.
- 49 J. S. Teguh, T. C. Sum, and E. K. L. Yeow, "Effect of charge accumulation on the stability of PEDOT:PSS during device operation," *Chemical Physics Letters*, vol. 607, pp. 52-56, Jun 2014.
- 50 V. D. Ta, R. Chen, and H. D. Sun, "Coupled Polymer Microfiber Lasers for Single Mode Operation and Enhanced Refractive Index Sensing," *Advanced Optical Materials*, vol. 2, no. 3, pp. 220-225, Mar 2014.
- 51 S. Y. Sun, T. Salim, N. Mathews, M. Duchamp, C. Boothroyd, G. C. Xing, T. C. Sum, and Y. M. Lam, "The origin of high efficiency in low-temperature solution-processable bilayer organometal halide hybrid solar cells," *Energy & Environmental Science*, vol. 7, no. 1, pp. 399-407, Jan 2014.
- 52 L. F. Sun, H. L. Hu, D. Zhan, J. X. Yan, L. Liu, J. S. Teguh, E. K. L. Yeow, P. S. Lee, and Z. X. Shen, "Plasma Modified MoS₂ Nanoflakes for Surface Enhanced Raman Scattering," *Small*, vol. 10, no. 6, pp. 1090-1095, Mar 2014.
- 53 T. C. Sum and N. Mathews, "Advancements in perovskite solar cells: photophysics behind the photovoltaics," *Energy & Environmental Science*, vol. 7, no. 8, pp. 2518-2534, Aug 2014.
- 54 Z. Y. Song and B. L. Zhang, "Wide-angle polarization-insensitive transparency of a continuous opaque metal film for near-infrared light," *Optics Express*, vol. 22, no. 6, pp. 6519-6525, Mar 2014.
- 55 Z. Y. Song, Z. Gao, Y. M. Zhang, and B. L. Zhang, "Terahertz transparency of optically opaque metallic films," *Epl*, vol. 106, no. 2, Apr 2014, Art no. 27005.
- 56 A. Solanki, B. Wu, T. Salim, E. K. L. Yeow, Y. M. Lam, and T. C. Sum, "Performance Improvements in Polymer Nanofiber/Fullerene Solar Cells with External Electric Field Treatment," *Journal of Physical Chemistry C*, vol. 118, no. 21, pp. 11285-11291, May 2014.
- 57 J. K. So, K. F. MacDonald, and N. I. Zheludev, "Fiber optic probe of free electron evanescent fields in the optical frequency range," *Applied Physics Letters*, vol. 104, no. 20, May 2014, Art no. 201101.
- 58 R. Singh and N. Zheludev, "MATERIALS Superconductor photonics," *Nature Photonics*, vol. 8, no. 9, pp. 679-680, Sep 2014.
- 59 R. Singh, W. Cao, I. Al-Naib, L. Q. Cong, W. Withayachumnankul, and W. L. Zhang, "Ultrasensitive terahertz sensing with high-Q Fano resonances in metasurfaces," *Applied Physics Letters*, vol. 105, no. 17, Oct 2014, Art no. 171101.
- 60 R. Singh, I. Al-Naib, D. R. Chowdhury, L. Q. Cong, C. Rockstuhl, and W. L. Zhang, "Probing the transition from an uncoupled to a strong near-field coupled regime between bright and dark mode resonators in metasurfaces," *Applied Physics Letters*, vol. 105, no. 8, Aug 2014, Art no. 081108.

- 61 S. Shukla, N. H. Loc, P. P. Boix, T. M. Koh, R. R. Prabhakar, H. K. Mulmudi, J. Zhang, S. Chen, C. F. Ng, C. H. A. Huan, N. Mathews, T. Sritharan, and Q. H. Xiong, "Iron Pyrite Thin Film Counter Electrodes for Dye-Sensitized Solar Cells: High Efficiency for Iodine and Cobalt Redox Electrolyte Cells," *Acs Nano*, vol. 8, no. 10, pp. 10597-10605, Oct 2014.
- 62 J. H. Shi, X. Fang, E. T. F. Rogers, E. Plum, K. F. MacDonald, and N. I. Zheludev, "Coherent control of Snell's law at metasurfaces," *Optics Express*, vol. 22, no. 17, pp. 21051-21060, Aug 2014.
- 63 V. Savinov, V. A. Fedotov, and N. I. Zheludev, "Toroidal dipolar excitation and macroscopic electromagnetic properties of metamaterials," *Physical Review B*, vol. 89, no. 20, May 2014, Art no. 205112.
- 64 T. Roy, E. T. F. Rogers, G. H. Yuan, and N. I. Zheludev, "Point spread function of the optical needle super-oscillatory lens," *Applied Physics Letters*, vol. 104, no. 23, Jun 2014, Art no. 231109.
- 65 D. Rajwar, X. F. Liu, Z. B. Lim, S. J. Cho, S. Chen, J. M. H. Thomas, A. Trewin, Y. M. Lam, T. C. Sum, and A. C. Grimsdale, "Novel self-assembled 2D networks based on zinc metal ion coordination: synthesis and comparative study with 3D networks," *Rsc Advances*, vol. 4, no. 34, pp. 17680-17693, 2014.
- 66 H. Qi, J. Wolfe, D. P. Wang, H. J. Fan, D. Fichou, and Z. Chen, "Triple-layered nanostructured WO₃ photoanodes with enhanced photocurrent generation and superior stability for photoelectrochemical solar energy conversion," *Nanoscale*, vol. 6, no. 22, pp. 13457-13462, Nov 2014.
- 67 K. P. Prasad, Y. Chen, M. A. Sk, A. Than, Y. Wang, H. D. Sun, K. H. Lim, X. C. Dong, and P. Chen, "Fluorescent quantum dots derived from PEDOT and their applications in optical imaging and sensing," *Materials Horizons*, vol. 1, no. 5, pp. 529-534, Sep 2014.
- 68 M. S. Pramod, T. Yang, K. Pandey, M. Giudici, and D. Wilkowski, "Selective injection locking of a multi-mode semiconductor laser to a multi-frequency reference beam," *European Physical Journal D*, vol. 68, no. 7, Jul 2014, Art no. 186.
- 69 J. C. Pillay, Y. Natsume, A. D. Stone, and Y. D. Chong, "Generalized sub-Schawlow-Townes laser linewidths via material dispersion," *Physical Review A*, vol. 89, no. 3, Mar 2014, Art no. 033840.
- 70 B. Peng, Z. P. Li, E. Mutlugun, P. L. H. Martinez, D. H. Li, Q. Zhang, Y. Gao, H. V. Demir, and Q. H. Xiong, "Quantum dots on vertically aligned gold nanorod monolayer: plasmon enhanced fluorescence," *Nanoscale*, vol. 6, no. 11, pp. 5592-5598, Jun 2014.
- 71 M. Pasek and Y. D. Chong, "Network models of photonic Floquet topological insulators," *Physical Review B*, vol. 89, no. 7, Feb 2014, Art no. 075113.
- 72 M. Panahandeh-Fard, J. Yin, M. Kurniawan, Z. L. Wang, G. Leung, T. C. Sum, and C. Soci, "Ambipolar Charge Photogeneration and Transfer at GaAs/P3HT Heterointerfaces," *Journal of Physical Chemistry Letters*, vol. 5, no. 7, pp. 1144-1150, Apr 2014.
- 73 G. X. Pan, X. H. Xia, J. S. Luo, F. Cao, Z. H. Yang, and H. J. Fan, "Preparation of CoAl layered double hydroxide nanoflake arrays and their high supercapacitance performance," *Applied Clay Science*, vol. 102, pp. 28-32, Dec 2014.
- 74 J. Y. Ou, J. K. So, G. Adamo, A. Sulaev, L. Wang, and N. I. Zheludev, "Ultraviolet and visible range plasmonics in the topological insulator Bi_{1.5}Sb_{0.5}Te_{1.8}Se_{1.2}," *Nature Communications*, vol. 5, Oct 2014, Art no. 5139.
- 75 J. Y. Ou, E. Plum, J. F. Zhang, and N. I. Zheludev, "An electromechanically reconfigurable plasmonic metamaterial operating in the near-infrared (vol 8, pg 252, 2013)," *Nature Nanotechnology*, vol. 9, no. 6, pp. 487-487, Jun 2014.
- 76 W. B. Niu, L. T. Su, R. Chen, H. Chen, Y. Wang, A. Palaniappan, H. D. Sun, and A. L. Y. Tok, "3Dimensional photonic crystal surface enhanced upconversion emission for improved nearinfrared photoresponse," *Nanoscale*, vol. 6, no. 2, pp. 817-824, 2014.
- 77 W. B. Niu, H. Chen, R. Chen, J. F. Huang, A. Palaniappan, H. D. Sun, B. G. Liedberg, and A. I. Y. Tok, "Synergetically Enhanced Near-Infrared Photoresponse of Reduced Graphene Oxide by Upconversion and Gold Plasmon," *Small*, vol. 10, no. 18, pp. 3637-3643, Sep 2014.
- 78 Z. G. Nie, R. Long, L. F. Sun, C. C. Huang, J. Zhang, Q. H. Xiong, D. W. Hewak, Z. X. Shen, O. V. Prezhdo, and Z. H. Loh, "Ultrafast Carrier Thermalization and Cooling Dynamics in Few-Layer MoS₂," *Acs Nano*, vol. 8, no. 10, pp. 10931-10940, Oct 2014.
- 79 K. T. Nguyen, S. Sreejith, J. Joseph, T. C. He, P. Borah, E. Y. Guan, S. W. Lye, H. D. Sun, and Y. L. Zhao, "Poly(Acrylic Acid)-Capped and Dye-Loaded Graphene Oxide-Mesoporous Silica: A Nano-Sandwich for Two-Photon and Photoacoustic Dual-Mode Imaging," *Particle & Particle Systems Characterization*, vol. 31, no. 10, pp. 1060-1066, Oct 2014.

- 80 F. Nan, Z. Q. Cheng, Y. L. Wang, Q. Zhang, L. Zhou, Z. J. Yang, Y. T. Zhong, S. Liang, Q. H. Xiong, and Q. Q. Wang, "Manipulating Nonlinear Emission and Cooperative Effect of CdSe/ZnS Quantum Dots by Coupling to a Silver Nanorod Complex Cavity," *Scientific Reports*, vol. 4, May 2014, Art no. 4839.
- 81 V. Nalla, J. C. W. Ho, S. K. Batabyal, Y. Wang, A. I. Y. Tok, H. D. Sun, L. H. Wong, and N. Zheludev, "Photophysical investigation of charge recombination in CdS/ZnO layers of CuIn(S, Se)(2) solar cell," *Rsc Advances*, vol. 4, no. 102, pp. 58372-58376, 2014.
- 82 S. K. Muduli, S. L. Wang, S. Chen, C. F. Ng, C. H. A. Huan, T. C. Sum, and H. S. Soo, "Mesoporous cerium oxide nanospheres for the visible-light driven photocatalytic degradation of dyes," *Beilstein Journal of Nanotechnology*, vol. 5, pp. 517-523, Apr 2014.
- 83 S. A. Mousavi, E. Plum, J. H. Shi, and N. I. Zheludev, "Coherent control of birefringence and optical activity," *Applied Physics Letters*, vol. 105, no. 1, Jul 2014, Art no. 011906.
- 84 A. K. Mandal, T. C. He, S. K. Maji, H. D. Sun, and Y. L. Zhao, "A three-photon probe with dual emission colors for imaging of Zn(II) ions in living cells," *Chemical Communications*, vol. 50, no. 92, pp. 14378-14381, 2014.
- 85 S. K. Maji, S. Sreejith, J. Joseph, M. J. Lin, T. C. He, Y. Tong, H. D. Sun, S. W. K. Yu, and Y. L. Zhao, "Upconversion Nanoparticles as a Contrast Agent for Photoacoustic Imaging in Live Mice," *Advanced Materials*, vol. 26, no. 32, pp. 5633-+, Aug 2014.
- 86 L. Ma, K. J. Tan, H. Jiang, C. Kloc, M. E. Michel-Beyerle, and G. G. Gurzadyan, "Excited-State Dynamics in an alpha-Perylene Single Crystal: Two-Photon- and Consecutive Two-QuantumInduced Singlet Fission," *Journal of Physical Chemistry A*, vol. 118, no. 5, pp. 838-843, Feb 2014.
- 87 L. Ma, P. Hu, C. Kloc, H. D. Sun, M. E. Michel-Beyerle, and G. G. Gurzadyan, "Ultrafast spectroscopic characterization of 7,7,8,8-tetracyanoquinodimethane (TCNQ) and its radical anion (TCNQ(center dot-)),," *Chemical Physics Letters*, vol. 609, pp. 11-14, Aug 2014.
- 88 J. S. Luo, J. H. Im, M. T. Mayer, M. Schreier, M. K. Nazeeruddin, N. G. Park, S. D. Tilley, H. J. Fan, and M. Gratzel, "Water photolysis at 12.3% efficiency via perovskite photovoltaics and Earth-abundant catalysts," *Science*, vol. 345, no. 6204, pp. 1593-1596, Sep 2014.
- 89 F. Lu, D. W. Zhao, J. L. Song, J. Chen, S. T. Tan, L. Ke, H. V. Demir, H. D. Sun, and X. W. Sun, "An improved polymer solar cell incorporating single-wall carbon nanotubes," *Journal of Modern Optics*, vol. 61, no. 21, pp. 1761-1766, Dec 2014.
- 90 Z. Liu, Z. B. Yang, B. Peng, C. Cao, C. Zhang, H. J. You, Q. H. Xiong, Z. Y. Li, and J. X. Fang, "Highly Sensitive, Uniform, and Reproducible SurfaceEnhanced Raman Spectroscopy from Hollow Au-Ag Alloy Nanourchins," *Advanced Materials*, vol. 26, no. 15, pp. 2431-2439, Apr 2014.
- 91 Y. Liu, K. T. E. Chua, T. C. Sum, and C. K. Gan, "First-principles study of the lattice dynamics of Sb₂S," *Physical Chemistry Chemical Physics*, vol. 16, no. 1, pp. 345-350, 2014.
- 92 X. F. Liu, B. Wu, Q. Zhang, J. N. Yip, G. N. Yu, Q. H. Xiong, N. Mathews, and T. C. Sum, "Elucidating the Localized Plasmonic Enhancement Effects from a Single Ag Nanowire in Organic Solar Cells," *Acs Nano*, vol. 8, no. 10, pp. 10101-10110, Oct 2014.
- 93 H. L. Liu, Z. L. Wang, J. Huang, Y. J. Liu, H. J. Fan, N. I. Zheludev, and C. Soci, "Plasmonic Nanoclocks," *Nano Letters*, vol. 14, no. 9, pp. 5162-5169, Sep 2014.
- 94 F. L. Liu, Y. D. Chong, S. Adam, and M. Polini, "Gate-tunable coherent perfect absorption of terahertz radiation in graphene," *2d Materials*, vol. 1, no. 3, Dec 2014, Art no. 031001.
- 95 X. Lin, Z. J. Wang, F. Gao, B. L. Zhang, and H. S. Chen, "Atomically thin nonreciprocal optical isolation," *Scientific Reports*, vol. 4, Feb 2014, Art no. 4190.
- 96 G. Q. Liang and Y. D. Chong, "OPTICAL RESONATOR ANALOG OF A PHOTONIC TOPOLOGICAL INSULATOR: A FINITE-DIFFERENCE TIME-DOMAIN STUDY," *International Journal of Modern Physics B*, vol. 28, no. 2, Jan 2014, Art no. 1441007.
- 97 Z. Li, S. A. Kulkarni, P. P. Boix, E. Z. Shi, A. Y. Cao, K. W. Fu, S. K. Batabyal, J. Zhang, Q. H. Xiong, L. H. Wong, N. Mathews, and S. G. Mhaisalkar, "Laminated Carbon Nanotube Networks for Metal Electrode-Free Efficient Perovskite Solar Cells," *Acs Nano*, vol. 8, no. 7, pp. 6797-6804, Jul 2014.
- 98 X. Li, Y. L. Tang, Z. Y. Yan, Y. Wang, B. Meng, G. Z. Liang, H. D. Sun, X. Yu, Y. Zhang, X. P. Cheng, and Q. J. Wang, "Broadband Saturable Absorption of Graphene Oxide Thin Film and Its Application in Pulsed Fiber Lasers," *Ieee Journal of Selected Topics in Quantum Electronics*, vol. 20, no. 5, Sep-Oct 2014, Art no. 1101107.
- 99 G. Y. Li and Q. H. Xiong, "Scattering by abrupt discontinuities on photonic nanowires: closedform expressions for domain reduction," *Optics Express*, vol. 22, no. 21, pp. 25137-25148, Oct 2014.

- 100 D. H. Li, J. Zhang, X. J. Wang, B. L. Huang, and Q. H. Xiong, "Solid-State Semiconductor Optical Cryocooler Based on CdS Nanobelts," *Nano Letters*, vol. 14, no. 8, pp. 4724-4728, Aug 2014.
- 101 S. R. Leone, C. W. McCurdy, J. Burgdoerfer, L. S. Cederbaum, Z. Chang, N. Dudovich, J. Feist, C. H. Greene, M. Ivanov, R. Kienberger, U. Keller, M. F. Kling, Z. H. Loh, T. Pfeifer, A. N. Pfeiffer, R. Santra, K. Schafer, A. Stolow, U. Thumm, and M. J. J. Vrakking, "What will it take to observe processes in 'real time'?", *Nature Photonics*, vol. 8, no. 3, pp. 162-166, Mar 2014.
- 102 J. Y. Lek, G. C. Xing, T. C. Sum, and Y. M. Lam, "Electron Transport Limitation in P3HT:CdSe Nanorods Hybrid Solar Cells," *Acs Applied Materials & Interfaces*, vol. 6, no. 2, pp. 894-902, Jan 2014.
- 103 C. La-o-Vorakiat, Y. Tian, T. Wu, C. Panagopoulos, J. X. Zhu, H. B. Su, and E. E. M. Chia, "Interface-induced magnetic coupling in multiferroic/ferromagnetic bilayer: An ultrafast pump-probe study," *Applied Physics Letters*, vol. 104, no. 14, Apr 2014, Art no. 141602.
- 104 C. C. Kwong, T. Yang, M. S. Pramod, K. Pandey, D. Delande, R. Pierrat, and D. Wilkowski, "Cooperative Emission of a Coherent Superflash of Light," *Physical Review Letters*, vol. 113, no. 22, Nov 2014, Art no. 223601.
- 105 A. Krishna, D. Sabba, H. R. Li, J. Yin, P. P. Boix, C. Soci, S. G. Mhaisalkar, and A. C. Grimsdale, "Novel hole transporting materials based on triptycene core for high efficiency mesoscopic perovskite solar cells," *Chemical Science*, vol. 5, no. 7, pp. 2702-2709, 2014.
- 106 T. M. Koh, K. W. Fu, Y. N. Fang, S. Chen, T. C. Sum, N. Mathews, S. G. Mhaisalkar, P. P. Boix, and T. Baikie, "Formamidinium-Containing Metal-Halide: An Alternative Material for Near-IR Absorption Perovskite Solar Cells," *Journal of Physical Chemistry C*, vol. 118, no. 30, pp. 16458-16462, Jul 2014.
- 107 M. Kang, Y. D. Chong, H. T. Wang, W. R. Zhu, and M. Premaratne, "Critical route for coherent perfect absorption in a Fano resonance plasmonic system," *Applied Physics Letters*, vol. 105, no. 13, Sep 2014, Art no. 131103.
- 108 Y. Ji, W. Liu, T. Erdem, R. Chen, S. T. Tan, Z. H. Zhang, Z. G. Ju, X. L. Zhang, H. D. Sun, X. W. Sun, Y. J. Zhao, S. P. DenBaars, S. Nakamura, and H. V. Demir, "Comparative study of fielddependent carrier dynamics and emission kinetics of InGaN/GaN light-emitting diodes grown on (11(2)over-bar2) semipolar versus (0001) polar planes," *Applied Physics Letters*, vol. 104, no. 14, Apr 2014, Art no. 143506.
- 109 Y. X. Hu, C. Miniatura, D. Wilkowski, and B. Gremaud, "U(3) artificial gauge fields for cold atoms," *Physical Review A*, vol. 90, no. 2, Aug 2014, Art no. 023601.
- 110 T. C. He, Y. Gao, R. Chen, L. Ma, D. Rajwar, Y. Wang, A. C. Grimsdale, and H. D. Sun, "Multiphoton Harvesting in an Angular Carbazole-Containing Zn(II)-Coordinated Random Copolymer Mediated by Twisted Intramolecular Charge Transfer State," *Macromolecules*, vol. 47, no. 4, pp. 1316-1324, Feb 2014.
- 111 T. C. He, R. Chen, Z. B. Lim, D. Rajwar, L. Ma, Y. Wang, Y. Gao, A. C. Grimsdale, and H. D. Sun, "Efficient Energy Transfer under Two-Photon Excitation in a 3D, Supramolecular, Zn(II)Coordinated, Self-Assembled Organic Network," *Advanced Optical Materials*, vol. 2, no. 1, pp. 40-47, Jan 2014.
- 112 S. T. Ha, X. F. Liu, Q. Zhang, D. Giovanni, T. C. Sum, and Q. H. Xiong, "Synthesis of OrganicInorganic Lead Halide Perovskite Nanoplatelets: Towards High-Performance Perovskite Solar Cells and Optoelectronic Devices," *Advanced Optical Materials*, vol. 2, no. 9, pp. 838-844, Sep 2014.
- 113 B. Guzelturk, P. L. H. Martinez, Q. Zhang, Q. H. Xiong, H. D. Sun, X. W. Sun, A. O. Govorov, and H. V. Demir, "Excitonics of semiconductor quantum dots and wires for lighting and displays," *Laser & Photonics Reviews*, vol. 8, no. 1, pp. 73-93, Jan 2014.
- 114 B. Guzelturk, P. L. Hernandez-Martinez, V. K. Sharma, Y. Coskun, V. Ibrahimova, D. Tuncel, A. O. Govorov, X. W. Sun, Q. H. Xiong, and H. V. Demir, "Study of exciton transfer in dense quantum dot nanocomposites," *Nanoscale*, vol. 6, no. 19, pp. 11387-11394, 2014.
- 115 B. Guilhabert, C. Foucher, A. M. Haughey, E. Mutlugun, Y. Gao, J. Herrnsdorf, H. D. Sun, H. V. Demir, M. D. Dawson, and N. Laurand, "Nanosecond colloidal quantum dot lasers for sensing," *Optics Express*, vol. 22, no. 6, pp. 7308-7319, Mar 2014.
- 116 S. A. Gregory, G. B. G. Stenning, G. J. Bowden, N. I. Zheludev, and P. A. J. de Groot, "Giant magnetic modulation of a planar, hybrid metamolecule resonance," *New Journal of Physics*, vol. 16, Jun 2014, Art no. 063002.
- 117 Y. Gao, T. C. He, P. Hu, T. M. Koh, H. D. Sun, and A. C. Grimsdale, "Influence of H-Bonding on Self-Assembly and Tunable Dual-Emission of Carbazole-Based Zn(II)-Terpyridine Metallocycles," *Macromolecular Chemistry and Physics*, vol. 215, no. 8, pp. 753-762, Apr 2014.
- 118 K. W. Fu, S. S. Lim, Y. A. Fang, P. P. Boix, N. Mathews, T. C. Sum, L. H. Wong, and S. Mhaisalkar, "MODULATING CH₃NH₃PbI₃ PEROVSKITE CRYSTALLIZATION BEHAVIOR THROUGH PRECURSOR CONCENTRATION," *Nano*, vol. 9, no. 5, Jul 2014, Art no. 1440003.

- 119 X. Fang, M. L. Tseng, J. Y. Ou, K. F. MacDonald, D. P. Tsai, and N. I. Zheludev, "Ultrafast alloptical switching via coherent modulation of metamaterial absorption," *Applied Physics Letters*, vol. 104, no. 14, Apr 2014, Art no. 141102.
- 120 A. Delteil, W. B. Gao, P. Fallahi, J. Miguel-Sanchez, and A. Imamoglu, "Observation of Quantum Jumps of a Single Quantum Dot Spin Using Submicrosecond Single-Shot Optical Readout," *Physical Review Letters*, vol. 112, no. 11, Mar 2014, Art no. 116802.
- 121 X. Dai, S. Zhang, Z. L. Wang, G. Adamo, H. Liu, Y. Z. Huang, C. Couteau, and C. Soci, "GaAs/AlGaAs Nanowire Photodetector," *Nano Letters*, vol. 14, no. 5, pp. 2688-2693, May 2014.
- 122 X. Dai, B. M. Nguyen, Y. Hwang, C. Soci, and S. A. Dayeh, "Novel Heterogeneous Integration Technology of III-V Layers and InGaAs FinFETs to Silicon," *Advanced Functional Materials*, vol. 24, no. 28, pp. 4420-4426, Jul 2014.
- 123 L. Q. Cong, N. N. Xu, J. Q. Gu, R. Singh, J. G. Han, and W. L. Zhang, "Highly flexible broadband terahertz metamaterial quarter-wave plate," *Laser & Photonics Reviews*, vol. 8, no. 4, pp. 626-632, Jul 2014.
- 124 L. Q. Cong, J. Q. Gu, Z. Tian, R. Singh, J. G. Han, and W. L. Zhang, "MANIPULATING THE POLARIZATION OF TERAHERTZ WAVES WITH METAMATERIAL DEVICES," *Journal of Molecular and Engineering Materials*, vol. 2, no. 2, Jun 2014, Art no. 1440008.
- 125 D. R. Chowdhury, A. K. Azad, W. L. Zhang, and R. Singh, "Near Field Coupling in Passive and Active Terahertz Metamaterial Devices (vol 3, pg 783, 2013)," *Ieee Transactions on Terahertz Science and Technology*, vol. 4, no. 3, pp. 400-400, May 2014.
- 126 Y. D. Chong, "Asymmetry from symmetry," *Nature Physics*, vol. 10, no. 5, pp. 336-337, May 2014.
- 127 W. K. Chong, G. C. Xing, Y. Liu, E. L. Gui, Q. Zhang, Q. H. Xiong, N. Mathews, C. K. Gan, and T. C. Sum, "Direct measurement of coherent phonon dynamics in solution-processed stibnite thin films," *Physical Review B*, vol. 90, no. 3, Jul 2014, Art no. 035208.
- 128 X. Y. Chin, J. Yin, Z. Wang, M. Caironi, and C. Soci, "Mapping polarons in polymer FETs by charge modulation microscopy in the mid-infrared," *Scientific Reports*, vol. 4, Jan 2014, Art no. 3626.
- 129 L. Cheng, C. La-o-Vorakiat, C. S. Tang, S. K. Nair, B. Xia, L. Wang, J. X. Zhu, and E. E. M. Chia, "Temperature-dependent ultrafast carrier and phonon dynamics of topological insulator Bi_{1.5}Sb_{0.5}Te_{1.8}Se_{1.2}," *Applied Physics Letters*, vol. 104, no. 21, May 2014, Art no. 211906.
- 130 W. Q. Chen, Q. Zhang, T. Salim, S. A. Ekahana, X. J. Wan, T. C. Sum, Y. M. Lam, A. H. H. Cheng, Y. S. Chen, and Q. C. Zhang, "Synthesis and photovoltaic properties of novel C-60 bisadducts based on benzo 2,1,3-thiadiazole," *Tetrahedron*, vol. 70, no. 36, pp. 6217-6221, Sep 2014.
- 131 S. F. Chen, B. Peng, F. Lu, Y. Mei, F. Cheng, L. L. Deng, Q. H. Xiong, L. H. Wang, X. W. Sun, and W. Huang, "Scattering or Photoluminescence? Major Mechanism Exploration on Performance Enhancement in P3HT-Based Polymer Solar Cells with NaYF₄:2% Er³⁺, 18% Yb³⁺ Upconverting Nanocrystals," *Advanced Optical Materials*, vol. 2, no. 5, pp. 442-449, May 2014.
- 132 S. F. Chen, F. Cheng, Y. Mei, B. Peng, M. Kong, J. Y. Hao, R. Zhang, Q. H. Xiong, L. H. Wang, and W. Huang, "Plasmon-enhanced polymer photovoltaic cells based on large aspect ratio gold nanorods and the related working mechanism," *Applied Physics Letters*, vol. 104, no. 21, May 2014, Art no. 213903.
- 133 S. Chen, T. W. Goh, D. Sabba, J. Chua, N. Mathews, C. H. A. Huan, and T. C. Sum, "Energy level alignment at the methylammonium lead iodide/copper phthalocyanine interface," *Apl Materials*, vol. 2, no. 8, Aug 2014, Art no. 081512.
- 134 R. Chen, V. D. Ta, and H. D. Sun, "Bending-Induced Bidirectional Tuning of Whispering Gallery Mode Lasing from Flexible Polymer Fibers," *Acs Photonics*, vol. 1, no. 1, pp. 11-16, Jan 2014.
- 135 S. W. Cao, X. F. Liu, Y. P. Yuan, Z. Y. Zhang, Y. S. Liao, J. Fang, S. C. J. Loo, T. C. Sum, and C. Xue, "Solar-to-fuels conversion over In₂O₃/g-C₃N₄ hybrid photocatalysts," *Applied Catalysis B-Environmental*, vol. 147, pp. 940-946, Apr 2014.
- 136 C. Cao, J. Zhang, S. Z. Li, and Q. H. Xiong, "Intelligent and Ultrasensitive Analysis of Mercury Trace Contaminants via Plasmonic Metamaterial-Based Surface-Enhanced Raman Spectroscopy," *Small*, vol. 10, no. 16, pp. 3252-3256, Aug 2014.
- 137 J. Barre, B. Marcos, and D. Wilkowski, "Nonequilibrium Phase Transition with Gravitationallike Interaction in a Cloud of Cold Atoms," *Physical Review Letters*, vol. 112, no. 13, Mar 2014, Art no. 133001.
- 138 L. Amico, D. Aghamalyan, F. Auksztol, H. Crepaz, R. Dumke, and L. C. Kwek, "Superfluid qubit systems with ring shaped optical lattices," *Scientific Reports*, vol. 4, Mar 2014, Art no. 4298.
- 139 T. Ahmed, C. La-o-Vorakiat, T. Salim, Y. M. Lam, E. E. M. Chia, and J. X. Zhu, "Optical properties of organometallic perovskite: An ab initio study using relativistic GW correction and Bethe-Salpeter equation," *Epl*, vol. 108, no. 6, Dec 2014, Art no. 67015.

- 140 "Amplified spontaneous emission and lasing in colloidal nanoplatelets", B. Guzelturk, Y. Kelestemur, M. Olutas, S. Delikanli and H. V. Demir, *ACS Nano*, 8, 6599 (2014).
- 141 "Stacking in colloidal nanoplatelets: excitonic properties", B. Guzelturk, O. Erdem, M. Olutas, Y. Kelestemur and H. V. Demir, *ACS Nano*, 8, 12524 (2014).
- 142 "Highly flexible, electrically driven, top-emitting, quantum dot light-emitting stickers", X. Yang, E. Mutlugun, C. Dang, K. Dev, Y. Gao, S. T. Tan, X. W. Sun and H. V. Demir, *ACS Nano*, 8, 8224 (2014).
- 143 "Photogeneration of hot plasmonic electrons with metal nanocrystals: Quantum description and potential applications", A. O. Govorov, H. Zhang, H. V. Demir, Y. K. Gunko, *Nano Today*, 9, 85 (2014).
- 144 "Stimulated emission and lasing from CdSe/CdS/ZnS core-multi-shell quantum dots by simultaneous three-photon absorption", Y. Wang, V. D. Ta, Y. Gao, T. C. He, R. Chen, E. Mutlugun, H. V. Demir, H. D. Sun, *Advanced Materials*, 26, 2954 (2014).
- 145 "Light extraction efficiency enhancement of colloidal quantum dot light-emitting diodes using large-scale nanopillar arrays", X. Yang, K. Dev, J. Wang, E. Mutlugun, C. Dang, Y. Zhao, S. Liu, Y. Tang, S. T. Tan, X. W. Sun and H. V. Demir, *Advanced Functional Materials*, 24, 5977 (2014).
- 146 "Excitonics of semiconductor quantum dots and wires for lighting and displays", B. Guzelturk, P. L. Hernandez-Martinez, Q. Zhang, Q. Xiong, H. Sun, X. W. Sun, A. O. Govorov and H. V. Demir, *Laser & Photonics Reviews*, 8, 73 (2014).
- 147 "Nanocrystal Skins with Exciton Funneling for Photosensing", S. Akhavan, A. F. Cihan, B. Bozok and H. V. Demir, *Small*, 10, 2470 (2014).
- 148 "Solution Processed Tungsten Oxide Interfacial Layer for Efficient Hole-Injection in Quantum Dot Light-Emitting Diodes", X. Yang, E. Mutlugun, Y. Zhao, Y. Gao, K. S. Leck, Y. Ma, L. Ke, S. T. Tan, H. V. Demir, and X. W. Sun, *Small*, 10, 246 (2014).
- 149 "Ultralow threshold one-photon and two-photon pumped optical gain media of blue-emitting colloidal quantum dot films", B. Guzelturk, Y. Kelestemur, M. Z. Akgul, V. K. Sharma and H. V. Demir, *J. Phys. Chem. Lett.*, 5, 2214 (2014).
- 150 "Colloidal Quantum Dot Light-Emitting Diodes Employing Phosphorescent Small Organic Molecules as Efficient Exciton Harvesters", E. Mutlugun, B. Guzelturk, A. A. Abiyasa, Y. Gao, X. W. Sun and H. V. Demir, *J. Phys. Chem. Lett.*, 5, 2802 (2014).
- 151 "Enhanced efficiency of solution-processed small-molecule solar cells upon incorporation of gold nanospheres and nanorods into organic layers", X. Xu, A. K. K. Kyaw, B. Peng, Q. Du, L. Hong, H. V. Demir, T. K. S. Wong, Q. Xiong and X. W. Sun, *Chem. Commun.*, 50, 4451 (2014).
- 152 "Study of exciton transfer in dense quantum dot nanocomposites", B. Guzelturk, P. L. Hernandez-Martinez, V. K. Sharma, Y. Coskun, V. Ibrahimova, D. Tuncel, A. O. Govorov, X. W. Sun, Q. Xiong and H. V. Demir, *Nanoscale*, 6, 11387 (2014).
- 153 "Type-Tunable Amplified Spontaneous Emission from Core-Seeded CdSe/CdS Nanorods Controlled by Exciton-Exciton Interaction", Y. Kelestemur, A. F. Cihan, B. Guzelturk and H. V. Demir, *Nanoscale*, 6, 8509 (2014).
- 154 "Quantum Dots on Vertically Aligned Gold Nanorod Monolayer: Plasmon Enhanced Fluorescence", B. Peng, Z. Li, E. Mutlugun, P. L. Hernandez-Martinez, D. Li, Q. Zhang, Y. Gao, H. V. Demir and Q. Xiong, *Nanoscale*, 6, 5592 (2014).
- 155 "Plasmonic Metamaterials and Nanocomposites with the Narrow Transparency Window Effect in Broad Extinction Spectra", H. Zhang, H. V. Demir and A. O. Govorov, *ACS Photonics*, 1, 822 (2014).
- 156 "Advantages of the Blue InGaN/GaN Light-Emitting Diodes with an AlGaN/GaN/AlGaN Quantum Well Structured Electron Blocking Layer", Z. G. Ju, W. Liu, Z.-H. Zhang, S. T. Tan, Y. Ji, Z. Kyaw, X. L. Zhan, S. P. Lu, Y. P. Zhang, B. B. Zhu, N. Hasanov, X. W. Sun and H. V. Demir, *ACS Photonics*, 1, 377 (2014).
- 157 "Energy-saving quality road lighting with colloidal quantum dot nanophosphors", T. Erdem, Y. Kelestemur, Z. Soran-Erdem, Y. Ji, H. V. Demir, *Nanophotonics*, 3, 373 (2014).
- 158 "Stable, Efficient, and All Solution-Processed Quantum Dot Light-Emitting Diodes with Double-Sided Metal-Oxide Nanoparticle Charge Transport Layers", X. Yang, Y. Ma, E. Mutlugun, Y. Zhao, K. S. Leck, S. T. Tan, H. V. Demir, Q. Zhang, H. Du, and X. W. Sun, *ACS Applied Materials & Interfaces*, 6, 495 (2014).
- 159 "Tunable White-light-emitting Mn-doped ZnSe Nanocrystals", V. K. Sharma, B. Guzelturk, T. Erdem, Y. Kelestemur and H. V. Demir *ACS Applied Materials & Interfaces*, 6, 3654 (2014).
- 160 "Photosensitivity enhancement with TiO₂ in semi-transparent light-sensitive skins of nanocrystal monolayers", S. Akhavan, A. Yeltik and H. V. Demir, *ACS Applied Materials & Interfaces*, 6, 9023 (2014).

- 161 "Singlet and triplet exciton harvesting in the thin films of colloidal quantum dots interfacing phosphorescent small organic molecules", B. Guzelturk, P. L. Hernandez-Martinez, D. Zhao, X. W. Sun, and H. V. Demir, *J. Phys Chem C*, 118, 25964 (2014).
- 162 "On the origin of the electron blocking effect by an n-type AlGaN electron blocking layer", Z.-H. Zhang, Y. Ji, W. Liu, S. T. Tan, Z. Kyaw, Z. Ju, X. Zhang, N. Hasanov, S. Lu, Y. Zhang, B. Zhu, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 104, 073511 (2014).
- 163 "Comparative study of field-dependent carrier dynamics and emission kinetics of InGaN/GaN light-emitting diodes grown on (11-22) semipolar versus (0001) polar planes", Y. Ji, W. Liu, T. Erdem, R. Chen, S. T. Tan, Z.-H. Zhang, Z. Ju, X. Zhang, H. Sun, X. W. Sun, Y. Zhao, S. P. DenBaars, S. Nakamura and H. V. Demir, *Applied Physics Letters*, 104, 143506 (2014).
- 164 "Simultaneous enhancement of electron overflow reduction and hole injection promo", Z. Kyaw, Z.-H. Zhang, W. Liu, S. T. Tan, Z. G. Ju, X. L. Zhang, Y. Ji, N. Hasanov, B. Zhu, S. Lu, Y. Zhang, J. H. Teng, S. X. Wei and H. V. Demir, *Applied Physics Letters*, 104, 161113 (2014).
- 165 "Self-screening of the quantum confined Stark effect by the polarization induced bulk charges in the quantum barriers", Z.-H. Zhang, W. Liu, Z. Ju, S. T. Tan, Y. Ji, Z. Kyaw, X. Zhang, L. Wang, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 104, 243501 (2014).
- 166 "Polarization self-screening in [0001] oriented InGaN/GaN light-emitting diodes for improving the electron injection efficiency", Z.-H. Zhang, W. Liu, Z. Ju, S. T. Tan, Y. Ji, X. Zhang, L. Wang, Z. Kyaw, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 104, 251108 (2014).
- 167 "InGaN/GaN multiple-quantum-well light-emitting diodes with a grading InN composition suppressing the Auger recombination", Z.-H. Zhang, W. Liu, Z. Ju, S. T. Tan, Y. Ji, Z. Kyaw, X. Zhang, L. Wang, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 105, 033506 (2014).
- 168 "Highly polarized light emission by isotropic quantum dots integrated with magnetically aligned segmented nanowires", C. Uran, T. Erdem, B. Guzelturk, N. K. Perkgoz, S. Jun, E. Jang and H. V. Demir, *Applied Physics Letters*, 105, 141116 (2014).
- 169 "A hole accelerator for InGaN/GaN light-emitting diodes", Z.-H. Zhang, W. Liu, S. T. Tan, Y. Ji, L. Wang, B. Zhu, Y. Zhang, S. Lu, X. Zhang, N. Hasanov, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 105, 153503 (2014).
- 170 "Hyperbolic metamaterials based on quantum-dot plasmon resonator nanocomposites", S. V. Zhukovsky, T. Ozel, E. Mutlugun, N. Gaponik, A. Eychmuller, A. V. Lavrinenko, H. V. Demir, and S. V. Gaponenko, *Optics Express*, 22, 18290 (2014).
- 171 "On the effect of N-GaN/P-GaN/N-GaN/P-GaN/N-GaN built-in junctions in the n-GaN layer for InGaN/GaN light-emitting diodes", Z. Kyaw, Z.-H. Zhang, W. Liu, S. T. Tan, Z. G. Ju, X. L. Zhang, Y. Ji, N. Hasanov, B. Zhu, S. Lu, Y. Zhang, X. W. Sun, and H. V. Demir, *Optics Express*, 22, 809 (2014).
- 172 "Nanosecond colloidal quantum dot lasers for sensing", B. Guilhabert, C. Foucher, A-M. Haughey, E. Mutlugun, Y. Gao, J. Herrnsdorf, H.D. Sun, H.V. Demir, M.D. Dawson, and N. Laurand, *Optics Express*, 22, 7308 (2014).
- 173 "On the mechanisms of InGaN electron cooler in InGaN/GaN light-emitting diodes", Z.-H. Zhang, W. L., S. T. Tan, Z. Ju, Y. Ji, Z. Kyaw, X. Zhang, N. Hasanov, B. Zhu, S. Lu, Y. Zhang, X. W. Sun, and H. V. Demir, *Optics Express*, 22, A779 (2014).
- 174 "Microstructured porous ZnO thin film for increased light scattering and improved efficiency in inverted organic photovoltaics", A. Nirmal, A. K. K. Kyaw, X. W. Sun and H. V. Demir, *Optics Express*, 22, A1412(2014).
- 175 "Low-thermal-mass LEDs: size effect and limits", S. Lu, W. Liu, Z.-H. Zhang, S. T. Tan, Z. Ju, Y. Ji, X. Zhang, Y. Zhang, B. B. Zhu, Z. Kyaw, N. Hasanov, X. W. Sun and H. V. Demir, *Optics Express*, 22, 32200 (2014).
- 176 "Improving hole injection efficiency by manipulating the hole transport mechanism through p-type electron blocking layer engineering", Z.-H. Zhang, Z. Ju, W. Liu, S. T. Tan, Y. Ji, Z. Kyaw, X. Zhang, N. Hasanov, X. W. Sun, and H. V. Demir, *Optics Letters*, 39, 2483 (2014).
- 177 "Plasmon-based photopolymerization: near-field probing, advanced photonic nanostructures and nanophotocatalysis", Zhou, O. Soppera, J. Plain, S. Jradi, X. W. Sun, H. V. Demir, X. Yang, C. Deeb, S. Gray, G. Wiederrecht and R. Bachelot, *Journal of Optics*, 16, 114002 (2014).
- 178 R. Sidharthan, M. Kumar, J. Joseph, V.M. Murukeshan, Realization of body centered tetragonal, β -tin and diamond type structures using five beam interference, *Optics Communications*, 322 (2014) 160-163.
- 179 V.K. Shinoj, V.M. Murukeshan, S.B. Tor, N.H. Loh, S.W. Lye, Design, fabrication, and characterization of thermoplastic microlenses for fiber-optic probe imaging, *Applied Optics*, (2014) 1083-1088.

- 180 V.K. Shinoj, V.M. Murukeshan, M. Baskaran, T. Aung, Note: A gel based imaging technique of the iridocorneal angle for evaluation of angle-closure glaucoma, *Review of Scientific Instruments*, 85 (2014).
- 181 A. Shinde, M.V. Matham, Pixelate removal in an image fiber probe endoscope incorporating comb structure removal methods, *Journal of Medical Imaging and Health Informatics*, 4 (2014) 203-211.
- 182 P. Prabhathan, V.M. Murukeshan, Silicon waveguide multiplexed sensor array configuration for label-free biosensing applications, *Journal of the Indian Institute of Science*, 94 (2014) 273-282.
- 183 P. Prabhathan, V.M. Murukeshan, Narrow band wavelength selective filter using grating assisted single ring resonator, *Review of Scientific Instruments*, 85 (2014).
- 184 J. James, V.M. Murukeshan, L.S. Woh, Integrated photoacoustic, ultrasound and fluorescence platform for diagnostic medical imaging-proof of concept study with a tissue mimicking phantom, *Biomedical Optics Express*, 5 (2014) 2135-2144.
- 185 J. James, V.M. Murukeshan, K. Sathiyamoorthy, L. Woh, Coherent fiber bundle based integrated photoacoustic, ultrasound and fluorescence imaging (PAUSFI) for endoscopy and diagnostic bio-imaging applications, *Laser Physics*, 24 (2014).
- 186 C. Zuo, Q. Chen, H. Li, W. Qu, A. Asundi, Boundary-artifact-free phase retrieval with the transport of intensity equation II: Applications to microlens characterization, *Optics Express*, 22 (2014) 18310-18324.
- 187 C. Zuo, Q. Chen, L. Huang, A. Asundi, Phase discrepancy analysis and compensation for fast Fourier transform based solution of the transport of intensity equation, *Optics Express*, 22 (2014) 17172-17186.
- 188 C. Zuo, Q. Chen, A. Asundi, Light field moment imaging: Comment, *Optics Letters*, 39 (2014) 654.
- 189 C. Zuo, Q. Chen, A. Asundi, Boundary-artifact-free phase retrieval with the transport of intensity equation: Fast solution with use of discrete cosine transform, *Optics Express*, 22 (2014) 9220-9244.
- 190 H. Yu, S.B. Tor, N.H. Loh, A.K. Asundi, Effect of injection-molding-induced residual stress on microchannel deformation irregularity during thermal bonding, *Journal of Micromechanics and Microengineering*, 24 (2014).
- 191 X. Wu, Y. Yu, W. Zhou, A. Asundi, 4f amplified in-line compressive holography, *Optics Express*, 22 (2014) 19860-19872.
- 192 M.N. Rahman, A. Rajendran, V. Kariwala, A.K. Asundi, Effect of particle concentration and turbidity on particle characterization using digital holography, *Chemical Engineering Research and Design*, 92 (2014) 249-255.
- 193 Y. Dai, P. Li, Y. Liu, A. Asundi, J. Leng, Integrated real-time monitoring system for strain/temperature distribution based on simultaneous wavelength and time division multiplexing technique, *Optics and Lasers in Engineering*, 59 (2014) 19-24.
- 194 A. Asundi, The smart bridge-condition monitoring for military bridges, *Journal of the Indian Institute of Science*, 94 (2014) 261-272.
- 195 V. Mamidala, R. I. Woodward, Y. Yang, H. H. Liu, and K. K. Chow, "Graphene-based passively mode-locked bidirectional fiber ring laser", *Optics Express*, 22, pp.4539-4546, 2014.
- 196 Y. C. Tan, W. B. Ji, V. Mamidala, K. K. Chow, and S. C. Tjin, "Carbon-nanotube-deposited long period fiber grating for continuous refractive index sensor applications", *Sensors and Actuators B-Chemical*, 196, pp.260-264, 2014.
- 197 Tang Xiaohong, Qiao Zhongliang, Lim Peng Huei, Bo BaoXue, "Development of a multi-wavelength high power laser diode chip", *SPIE Photonics West*, 2014.
- 198 Liu, Hai; Khoo, Chee Ying; Yadian, Boluo; Liu, Qing; Gan, Chee; Tang, Xiaohong; Huang, Yizhong, "The role of metal layers in the formation of metal/silicon hybrid nanoneedle arrays", *Nanoscale*, 6, pp.3078-3082., 2014.
- 199 X Li, W Zhong, A Alphones and C Yu, "Time Domain Adaptive Decision Directed Channel Equalizer for RGI-DP-CO-OFDM", *IEEE Photonics Technology Letters*, 26(3), pp.285-288, 2014.
- 200 N. Li, S. Yoo, X. Yu, D. Jain and J. K. Sahu, "Pump power depreciation by photodarkening in ytterbium-doped fibres and amplifiers," *Photon. Technol. Lett.* 26,pp.115-118, 2014.
- 201 X Li, W Zhong, A Alphones and C Yu, "Channel Equalization using Independent Component Analysis in PDM-Co-OFDM", *IEEE Photonics Tech Lett.*, vol.26, no.5, pp.497-500, March 2014.
- 202 H. H. Liu and K. K. Chow, "Operation-switchable bidirectional pulsed fiber laser incorporating carbon-nanotube-based saturable absorber," *Journal of Selected optics in Quantum Electronics*, 20(5):0901905, 2014.
- 203 H. H. Liu and K. K. Chow, "Enhanced stability of dispersion-managed mode-locked fiber lasers with near-zero net cavity dispersion by high-contrast saturable absorbers," *Optics Letters*, 39(1):150, 2014.

- 204 Landobasa Y. M. Tobing, Liliana Tjahjana, Dao Hua Zhang, "Sub-10-nm size and sub-40-nm pitch metal dot patterning for low-cost bit patterned media application", IEEE Transaction on Nanotechnology, Vol. , Issue 99, 4 Feb. 2014.
- 205 Dongdong Li, Dao Hua Zhang*, Changchun Yan, and Zhengji Xu, "Figure of merit for optimization of metal-dielectric multilayer lenses", IEEE Transaction on Nanotechnology, Vol. pp, Issue, 99, 2014.
- 206 Banglian Xu, Dawei Zhang, Yuanshen Huang, Qi Wang, Baicheng Li, Daohua Zhang, "Real-Time Angular Sensitivity Compensation of Guided-Mode Resonance Filter", IEEE Photonics Technology Letters, Vol. 26, Issue 3, pp.231-234, 2014.
- 207 Landobasa Y. M. Tobing, Liliana Tjahjana, Dao Hua Zhang, Qing Zhang and Qihua Xiong, "Sub-100-nm Sized Silver Split Ring Resonator Metamaterials with Fundamental Magnetic Resonance in the Middle Visible Spectrum", Advanced Optical Materials, Volume 2, Issue 3, pages 280–285, March 2014. |DOI: 10.1002/adom.201300456.
- 208 Butian Zhang, Rui Hu, Yucheng Wang, Chengbin Yang, Xin Liu, Ken-Tye Yong, "Revisiting the principles of preparing aqueous quantum dots for biological applications: the effects of surface ligands on the physicochemical properties of quantum dots", RSC Advances, vol 4(27), pp13805-13816, 01 Mar2014.
- 209 Danny Jian Hang Tng, Peiyi Song, Rui Hu, Chengbin Yanga and Ken-Tye Yong, "High reliability nanosandwiched Pt/Ti multilayer electrode actuators for on-chip biomedical applications", The Analyst, vol 139, pp407-415, 01 Jan 2014.
- 210 Y.Cui, ZF.Wu, P.Shum, XQ.Dinh, Humbert, Geogers, "Investigation on the Impact of Hi-Bi Fiber Length on the Sensitivity of Sagnac Interferometer", IEEE Sensors Journal, vol 14(6), pp1952-1956, 01 Jun 2014.
- 211 Zhengji Xu, Tao Li, Dao-Hua Zhang, Changchun Yan, Dongdong Li, Landobasa YM Tobing, Fei Qin, Yueke Wang, Xiaonan Shen, Ting Yu, "Groove-structured metasurfaces for modulation of surface plasmon propagation", Applied Physics Express, vol 7(5), 052001, 01 May 2014.
- 212 Tianye Huang, Xuguang. Shao, Zhifang. Wu, Yunxu. Sun, Jing. Zhang, Huy. Quoc. Lam, Juanjuan. Hu, and Perry Ping Shum, "A sensitivity enhanced temperature sensor based on high Germania-doped few-mode fiber", Optics Communications, vol 324, pp53-57, 01 Jan 2014.
- 213 Hu X, Tao L, Cao Y, et al, "Relative Intensity Noise of Silicon Hybrid Lase", IEEE Journal of Quantum Electronics, vol 50, 466, 01 Jun 2014.
- 214 Unxu Sun, Xuguang Shao, Tianye Huang, Zhifang Wu, Timothy Lee, Perry Ping Shum, and Gilberto Brambilla, "Analysis of One-Third Harmonic Generation in Waveguides", Journal of the Optical Society of America B, vol 31, pp2142-2149, 01 Sep 2014.
- 215 Tianye Huang, Xuguang Shao, Zhifang Wu, Timothy Lee, Tingting Wu, Yunxu Sun, Jing Zhang, Huy Quoc Lam, Gilberto Brambilla, and Perry Ping Shum, "Efficient third harmonic generation from 2 μ m in asymmetric plasmonic slot waveguide", IEEE Photonics Journal, vol 6 (3), 4800607, 01 May 2014.
- 216 Bobo Gu, Wenliang Qi, Yanyan Zhou, Zhifang Wu, Perry Ping Shum, and Feng Luan, "Reflective liquid level sensor based on modes conversion in thin-core fiber incorporating titled fiber Bragg grating", Optics Express, vol 22 (10), 11834, 01 May 2014.
- 217 Tingting Han, Yan-ge Liu, Zhi Wang, Junqi Guo, Zhifang Wu, Mingming Luo, Shuo Li, Jing Wang, and Wei Wang, "Control and design of fiber birefringence characteristics based on selective-filled hybrid photonic crystal fibers", Optics Express, vol 22(12), pp15002-15016, 01 Jun 2014.
- 218 T. Wu, Y. Sun, X. Shao, P. P. Shum, and T. Huang, "Highly efficient phase-matched third harmonic generation from mid-IR to near-IR regions using an asymmetric plasmonic slot waveguide", IEEE Photonics Journal, vol 6, 01 Oct 2014.
- 219 Xi Chen, Zhifang Wu, Xiaopeng Dong, and Perry Ping Shum, "A simple algorithm for C2H2 real-time monitor in DOAS technology", IEEE Photonics Technology Letters, vol 26, pp2341-2344, 01 Dec 2014.
- 220 T. Wu, P. P. Shum, X. Shao, T. Huang, and Y. Sun, "Third harmonic generation from mid-IR to near-IR regions in a phase-matched silicon-silicon-nanocrystal hybrid plasmonic waveguide", Optics Express, vol 22, pp24367-24377, 01 Oct 2014.
- 221 G. Liang, A. G. Davies, E. Linfield, S. F. Yu, and Q. J. Wang, "Planar integrated plasmonics for highly-collimated terahertz quantum cascade lasers", Scientific Report, 4, 7083, 2014.
- 222 B. Hu, J. Tao, Y. Zhang, and Q. J. Wang, "Magneto-plasmonics in graphene-dielectric sandwich", Optics Express, 22, 21727-21738, 2014.
- 223 M. Gebski, O. Kuzior, M. Dems, M. Wasiak, Q. J. Wang, D. H. Zhang, and T. Czyszanowski, "Transverse mode control in high-contrast grating VCSELs", Optics Express, 22, 20954-20963, 2014.

- 224 X. H. Li, Y. G. Wang, Y. Wang, W. Zhao, X. C. Yu, Z. P. Sun, X. Cheng, X. Yu, Y. Zhang, and Q. J. Wang, "Nonlinear absorption of SWNT film and its effects to the operation state of pulsed fiber laser", *Optics Express*, 22, 17227, 2014.
- 225 X. C. Yu, J. Tao*, Y. Shen, G. Liang*, T. Liu, Y. Z. Zhang^, and Q. J. Wang, "Metal-Dielectric-Graphene sandwich for surface enhanced Raman spectroscopy", *Nanoscale*, 6, 9925-9929, 2014.
- 226 B. Meng, J. Tao, X. H. Li, Y. Q. Zeng, S. Wu, and Q. J. Wang, "Tunable single-mode slot waveguide quantum cascade lasers", *Applied Physics Letters*, 104, 201106, 2014.
- 227 X. N. Hu, T. Liu, Y. L. Cao, B. Meng, H. Wang, G. I. Ng, X. S. Luo, T. Y. Liow, J. F. Song, G. Q. Lo, and Q. J. Wang, "Relative intensity noise of silicon hybrid laser", *IEEE Journal of Quantum Electronics*, 20, 1101107, 2014.
- 228 J. Tao, J. Lao, Q. J. Wang, and X. G. Huang, "Tunable graphene-based plasmonic waveguides: nano-modulators and nano-attenuators", *Lasers and Photonics Reviews*, 8, 569-574, 2014.
- 229 T. Liu and Q. J. Wang, "Magnetopolariton in bilayer graphene: a tunable ultrastrong light-matter coupling", *Physics Review B*, 89, 125306, 2014.
- 230 Y. L. Cao, H. M. Ji, T. Yang, Y. H. Zhang, W. Q. Ma and Q. J. Wang, "Three-region characteristic temperature in p-doped quantum dot lasers", *Applied Physics Letters*, 104, 041102, 2014.
- 231 X. H. Li, Y. Tang, Z. Yan, Y. Wang, B. Meng, G. Liang, H. Sun, X. Yu, Y. Zhang, X. Cheng, and Q. J. Wang, "Broadband saturable absorption of graphene oxide thin film and its application in pulsed fiber lasers", *IEEE Journal of Selected Topics in Quantum Electronics*, 20, DOI: 10.1109/JSTQE.2014.2312952, 2014.
- 232 Y. L. Tang, X. H. Li, Z. Y. Yan, Y. Xia, Y. Zhang and Q. J. Wang, "50-W 2-μm nanosecond all-fiber-based thulium-doped fiber amplifier", *IEEE Journal of Selected Topics in Quantum Electronics*, 20, DOI: 10.1109/JSTQE.2014.2314719, 2014.
- 233 Y. L. Tang, X. C. Yu, X. H. Li, Z. Y. Yan, and Q. J. Wang, "High power thulium fiber laser Q switched with single-layer graphene", *Optics Letters*, 39, 614-617, 2014.
- 234 J. Tao, X. C. Yu*, B. Hu, A. Dubrovkin, and Q. J. Wang, "Graphene-based tunable plasmonic Bragg reflector with a broad bandwidth", *Optics Letters*, 39, 271-274, 2014.
- 235 M. Gebski, M. Dems, J. Chen, Q. J. Wang, D. H. Zhang, and T. Czyszanowski, "Optical properties of GaAs/AlOx and Si/SiOx high contrast gratings designed for 980 nm VCSELs", *IEEE Transaction on Nanotechnology*, 13, 418-424, 2014.
- 236 Vigil Varghese, Xinyuan Qian, Shoushun Chen, Zexiang Shen, Qijie Wang, Jin Tao and Guozhen Liang, "Track-and-Tune Light Field CMOS Image Sensor", *IEEE Sensors Journal*, vol 14 (12), pp4372 – 4384, 01 Jul 2014.
- 237 Siyi Hu, Shuwen Zeng, Butian Zhang, Chengbin Yang, Peiyi Song, Tng Jian Hang Danny, Guimiao Lin, Yucheng Wang, Tommy Anderson, Philippe Coquet, Liwei Liu, Xihe Zhang and Ken-Tye Yong, "Preparation of biofunctionalized quantum dots using microfluidic chips for bioimaging", *The Analyst*, vol 139, pp4681-4690, 01 Sep 2014.
- 238 Xinyu Liu, Xiaojun Yu, Hongying Tang, Dongyao Cui, Meghna R. Beotra, Michael J. A. Girard, Ding Sun, Jun Gu, and Linbo Liu, "Spectrally encoded extended source optical coherence tomography," *Opt. Lett.* 39, 6803-6806, 2014.
- 239 Dongyao Cui, Xinyu Liu, Jing Zhang, Xiaojun Yu, Sun Ding, Yuemei Luo, Jun Gu, Ping Shum, and Linbo Liu, "Dual spectrometer system with spectral compounding for 1-μm optical coherence tomography in vivo," *Opt. Lett.* 39, 6727-6730, 2014.
- 240 Kengyeh K Chu, Giovanni J Ughi, Linbo Liu, Guillermo J Tearney, Toward Clinical μOCT—A Review of Resolution-Enhancing Technical Advances, *Current Cardiovascular Imaging Reports*, 7 (12), 1-8, 2014.
- 241 Xiaojun Yu, Xinyu Liu, Jun Gu, Dongyao Cui, Junying Wu, and Linbo Liu, "Depth extension an sidelobe suppression in optical coherence tomography using pupil filters," *Opt. Express* 22, 26956-26966, 2014.
- 242 Susan E Birket, Kengyeh K Chu, Linbo Liu, Grace H Houser, Bradford J Diephuis, Eric J Wilsterman, Gregory Dierksen, Marina Mazur, Suresh Shastry, Yao Li, John D Watson, Alexander T Smith, Benjamin S Schuster, Justin Hanes, William E Grizzle, Eric J Sorscher, Guillermo J Tearney, Steven M Rowe, A Functional Anatomic Defect of the Cystic Fibrosis Airway, *Am J Respir Crit Care Med.*, 190, 421-432, 2014.
- 243 Manabu Kashiwagi, Linbo Liu, Kengyeh K. Chu, Chen-Hsin Sun, Atsushi Tanaka, Joseph A. Gardecki, Guillermo J. Tearney. Feasibility of the assessment of cholesterol crystals in human macrophages using micro optical coherence tomography, *PLoS ONE*, 9 (7), e102669, 2014.
- 244 L. Liu, S. Shastry, S. Byan-Parker, G Houser, K. Chu, Susan E. Birket, Courtney M. Fernandez, J. A. Gardecki , W. Grizzle, E. J. Wilsterman, E. J. Sorscher, S. M. Rowe, G. J. Tearney, An autoregulatory mechanism governing mucociliary transport is sensitive to mucus load, *American Journal of Respiratory Cell and Molecular Biology*, Vol. 51, No. 4, 485-493, 2014.

245 N.Q.Ngo, "Optical chirp z-transform processor with a simplified architecture", Optics Express, vol. 22, no. 26, pp. 32329–32343, Dec. 2014.

2013

- 1 Wen Bin Ji, Swee Chuan Tjin, Bo Lin, and Choong Leng Ng, "Highly Sensitive Refractive Index Sensor Based on Adiabatically Tapered Microfiber Long Period Gratings", *Sensors*, 13, 14055-14063, 17 October 2013.
- 2 Wu Z., Liu Y. G., Wang Z., Jiang M., Ji W., Han T., Li S., Shao X., Dinh X.Q., Tjin S.C., and Shum P.P., "Simultaneous measurement of curvature and strain based on fiber Bragg grating in two-dimensional waveguide array fiber", *Optics Letters*, 30 (20), 4070-4073, 15 October 2013.
- 3 H. H. Liu, Y. Yang, and K. K. Chow, "Enhancement of thermal damage threshold of carbon-nanotube-based saturable absorber by evanescent-field interaction on fiber end," *Optics Express*, 21(16):18975, 2013.
- 4 H. H. Liu and K. K. Chow, "Flat super-continuum generation using carbon nanotube-based mode-locked laser and normal dispersion photonic crystal fibre," *Electronics Letters*, 49(16):1020, 2013.
- 5 H. H. Liu, K. K. Chow, S. Yamashita, and S. Y. Set, "Carbon-nanotube-based Q-switched fiber laser for high pulse generation," *Optics and Laser Technology*, 45:713, 2013.
- 6 Jun Wang, Fei Qin, Dao Hua Zhang, Dongdong Li, Yueke Wang, Xiaonan Shen, Ting Yu, and Jinghua Teng, "Subwavelength superfocusing with a dipole-wave-reciprocal binary zone plate", *Applied Physics Letters*, Vol 102, No 6, pp.061103, 2013.
- 7 Tang, Xiaohong; Yin, Zongyou; Zhang, Baolin. (2013). MOVPE growth of the InP based mid-IR emission quantum dot structures. *Journal of Molecular and Engineering Materials*, 1(2).
- 8 Tang, Xiaohong; Zhang, Baolin; Yin, Zongyou, "Mid-infrared Emissive InAsSb Quantum Dots Grown by Metal-organic Chemical Vapor Deposition", *CrystEngComm*, 15, pp.604-608, 2013.
- 9 Qiao Zhongliang, Tang Xiaohong, Lee Eng Kian Kenneth, Lim Peng Huei and Bo BaoXue, "Large Energy Bandgap Tuning of 980 nm InGaAs/InGaAsP Quantum Well Structure via Quantum Well Intermixing", *Solid-State Electronics*, 79, pp.281–284, 2013.
- 10 Y. L. Tang, X. H. Li, and Q. J. Wang, "High power passively Q-switched thulium fiber laser with distributed stimulated Brillouin scattering", *Optics Letters*, 38, pp.5474-5477, 2013.
- 11 M. Bo, M. Yamanishi, C. Pflugel, Kazuue Fujita, F. Capasso, and Q. J. Wang, "Investigation of tunable single-mode quantum cascade lasers via surface-acoustic wave modulation", *IEEE Journal of Quantum Electronics*, 49, 1053, 2013.
- 12 H. Zhu, X. Chen, L. M. Jin, Q. J. Wang, F. Wang, and S. F. Yu, "Amplified Spontaneous Emission and Lasing from Lanthanide-Doped Up-Conversion Nanocrystals", *ACS Nano*, 12, pp.11420–11426, 2013.
- 13 T. Liu, K. E. Lee and Q. J. Wang, "Microscopic density-matrix analysis on the linewidth enhancement factor of terahertz quantum cascade lasers", *Optics Express*, 21, pp.27804–27815, 2013.
- 14 G. Liang, H. Liang, Y. Zhang, S. P. Khanna, L. Li, A. G. Davies, E. Linfield, S. F. Yu, H. C. Liu, and Q. J. Wang, "Low divergence single-mode surface-emitting concentric-circular-grating terahertz quantum cascade lasers", *Optics Express*, 21, pp.31872-31882, 2013.
- 15 H. Zhu, S. F. Yu, Q. J. Wang, and C. X. Shan, "Directional single-mode emission from coupled whispering gallery resonators realized by using ZnS microbelts", *Optics Letters*, Vol.38, No.9, pp.1527-1529, 2013.
- 16 J. Tao, B. Hu, X. Y. He, and Q. J. Wang, "Tunable Subwavelength Terahertz Plasmonic Stub Waveguide Filters", *IEEE Trans. on Nanotechnology*, 12, 1191-1197, 2013.
- 17 Y. P. Liu, Z. W. Liu, W. S. Liu, and Q. J. Wang, "Temperature dependence of the electrical transport properties in few-layer graphene interconnects", *Nanoscale Research Letters*, 8, 335, 2013.
- 18 H. K. Liang, B. Meng*, G. Z. Liang, Y. D. Chong, Q. J. Wang, and Y. Zhang, "Electrically pumped mid-infrared random lasers", *Advanced Materials*, 25, 6859-6863, 2013.
- 19 T. Liu, K. E. Lee and Q. J. Wang, "Importance of the microscopic effects on the linewidth enhancement factor of quantum cascade lasers", *Optics Express*, 21, 27804–27815, 2013.
- 20 X. H. Li, Y. G. Wang, Y. S. Wang, Y. Z. Zhang, K. Wu, P. P. Shum, X. Yu, Y. Zhang, and Q. J. Wang, "All-normal-dispersion passively mode-locked Yb-doped fiber ring laser based on graphene oxide saturable absorber", *Laser Physics Letters*, 10, 075108, 2013.
- 21 Y. Z. Zhang, T. Liu, X. H. Li, G. Liang, B. Meng, X. N. Hu, and Q. J. Wang, "Broadband high photoresponse from pure monolayer graphene-based photodetector", *Nature Communications*, 4:1811, 2013.
- 22 G. Liang, H. Liang, Y. Zhang, S. P. Khanna, L. Li, A. G. Davies, E. Linfield, D. F. Lim, C. S. Tan, S. F. Yu, H. C. Liu, and Q. J. Wang, "Single-mode surface-emitting concentric-circular-grating terahertz quantum cascade lasers", *Applied Physics Letters*, 102, 031119, 2013.
- 23 Jing Zhu, Tianxun Gong, Atcha Kopwitthaya, Rui Hu, Wing-Cheung Law, Indrajit Roy, Huijie Huang, Ken-Tye Yong, "Synthesis of PEGylated gold nanorods (Au NRs) as absorption nanoprobes for near-infrared optical imaging", *RSC Advances*, early view, 2013.

- 24 Peiyi Song, Danny Jian Hang Tng, Rui Hu, Guimiao Lin, Ellis Meng, Ken-Tye Yong, "An Electrochemically Actuated MEMS Device for Individualized Drug Delivery: an In Vitro Study", Advanced Healthcare Materials, Early view(DOI: 10.1002/ad), 2013.
- 25 Jing Liu, Wing-Cheung Law, Jianwei Liu, Rui Hu, Liwei Liu, Jing Zhu, Hongyan Chen, Jianhua Wang, Yazhuo Hu, Ling Ye, Ken-Tye Yong, "Toxicity assessment of phospholipid micelle-encapsulated cadmium-based quantum dots using Kunming mice", RSC Advances, 3(6), pp.1768-1773, 2013.
- 26 Rui Hu, Yucheng Wang, Xin Liu, Guimiao Lin, Cher Heng Tan, Wing-Cheung Law, Indrajit Roy, Ken-Tye Yong, "Rational design of multimodal and multifunctional InP quantum dot nanoprobes for cancer: in vitro and in vivo applications", RSC Advances, Advance Article(DOI: 10.1039/C3RA231), 2013.
- 27 Kandammathe Valiyaveedu Sreekanth, Shuwen Zeng, Ken-Tye Yong, Ting Yu, "Sensitivity enhanced biosensor using graphene-based one-dimensional photonic crystal", Sensors and Actuators B-Chemical, 182, pp.424–428, 2013.
- 28 LuizC de Freitas, Eimear Phelan, Linbo Liu, Joseph Gardecki, Eman Namati, Willian C Warger, Guillermo J Tearney, Gregory W Randolph, "Optical coherence tomography imaging during thyroid and parathyroid surgery: A novel system of tissue identification and differentiation to obviate tissue resection and frozen section", Head & Neck: Journal of Sciences and Specialties, , DOI: 10.1002/hed.23452, 2013.
- 29 Liu L, Chu KK, Houser GH, Diephuis BJ, Li Y, Wilsterman EJ, et al., "Method for quantitative study of airway functional microanatomy using Micro-Optical Coherence Tomography", PLoS ONE, 8(1), e54473., 2013.
- 30 X Li, W Zhong, A Alphones and C Yu, "Fiber Nonlinearity Tolerance of APSK Modulated DFT-S OFDM Systems", IEEE Photonics Technology Letters, 25(23), pp.2304-2307, 2013.
- 31 X Li, W Zhong, A Alphones and C Yu, "Pilot-Aided Channel Equalization in RGI-PDM-CO-OFDM Systems", IEEE Photonics Technology Letters, 25(19), pp.1924-1927, 2013.
- 32 R. Lin, M. Zukerman, G. Shen and W. D. Zhong, "Design of Light-Tree Based Optical Inter-Datacenter Networks", Journal of Optical Communications and Networking, 5(12), pp.1443 - 1455, 2013.
- 33 R. Lin, W.D. Zhong, S. Bose and M. Zukerman, "Leaking Strategy for Multicast Traffic Grooming in WDM Mesh Networks", Journal of Lightwave Technology , 30(12), pp.3709-3719, 2013.
- 34 Y. Liu, K. Wu, N. Li, L. Lan, S. Yoo, X. Wu, P. Shum, S. Zeng, and X. Tan, "Regenerative Er-doped Fiber Amplifier System for High-repetition-rate Optical Pulses," J. Opt. Soc. Korea 17, pp.357-361, 2013.
- 35 L. P. Du, D. Y. Tang, G. H. Yuan, S. B. Wei, and X. C. Yuan, "Emission pattern of surface-enhanced Raman scattering from single nanoparticles-film junction", Applied Physics Letters, vol 102, 081117, 2013
- 36 S. B. Lu, C. J. Zhao, Y. H. Zou, S. Q. Chen, Y. Chen, Y. Li, H. Zhang, S. C. Wen, and D. Y. Tang, "Third-order nonlinear optical property of Bi₂Se₃", Optics Express, vol 21, pp.2072-2082, 2013.
- 37 H. Gong, D. Y. Tang, H. Huang, M. D. Han, T. Sun, J. Zhang, X. P. Qin, J. Ma, "Crystallization kinetics and characterization of nanosized Nd:YAG by a modified sol-gel combustion process", Journal of Crystal Growth, vol 362, pp.52-57, 2013.
- 38 Y. F. Song, L. Li, H. Zhang, D. Y. Shen, D. Y. Tang, and K. P. Loh, "Vector multi-soliton operation and interaction in a graphene mode-locked fiber laser", Optics Express, vol 21, pp.10010-10018, 2013.
- 39 X Li, A Alphones, W Zhong and C Yu, "Direct Detection Optical OFDM with Zero Padding to Reduce PMD Impairment", Optics Express, vol.21, no.18, pp. 20851-20856, Sept . 2013.
- 40 Ken-Tye Yong, Wing-Cheung Law, Rui Hu, Ling Ye, Liwei Liu, Mark T Swihart, Paras N Prasad, "Nanotoxicity assessment of quantum dots: from cellular to primate studies", Chemical Society Reviews, vol.42, No.3, pp.1236-1250, 2013.
- 41 Yucheng Wang, Rui Hu, Guimiao Lin, Indrajit Roy, Ken-Tye Yong, "Functionalized Quantum Dots for Biosensing and Bioimaging and Concerns on Toxicity", ACS Applied Materials and Interfaces, Vol.5, No.8, pp.2786-2799, 2013.
- 42 Yucheng Wang, Rui Hu, Guimiao Lin, Wing-Cheung Law, Ken-Tye Yong, "Optimizing the Aqueous Phase Synthesis of CdTe Quantum Dots using Mixed-ligands System and Their Applications for Imaging of Live Cancer Cells and Tumor in vivo", Advance Article, DOI: 10.1039/C3RA410, RSC Advances, 2013.
- 43 Venkatesh Mamidala, Venkatram Nalla, Pradipta Sankar Maiti, Suresh Valiyaveetil, and Wei Ji, "Charge transfer assisted nonlinear optical and photoconductive properties of CdS-AgInS₂ nanocrystals grown in semiconducting polymers", Vol.113, 12, Journal of Applied Physics, p.123107, 2013.
- 44 Jun Gu, Chit Yaw Fu, Beng Koon Ng, Sirajudeen s/o Gulam Razul, Soo Kim Lim, "Quantitative diagnosis of cervical neoplasia using fluorescence lifetime imaging on haematoxylin and eosin stained tissue sections", Journal of Biophotonics, 2013.

- 45 Dongdong Li, Dao Hua Zhang, Changchun Yan, Tao Li, Yueke Wang, Zhengji Xu, Jun Wang, and Fei Qin, "Unidirectional surface plasmon-polariton excitation by a compact slot partially filled with dielectric", New Journal of Chemistry, Vol.21, No.5, pp.5949-5956, 2013.
- 46 Jeremiah L.T. Chen, Nalla Venkatram, Ganga Kannaiyan, Venkatesh Mamidala, Wei Ji and Jagadese Vittal, "Synthesis and nonlinear optical switching of Bi₂S₃ nanorods and enhancement in the Bi₂S₃@Aunanorod-composites", New Journal of Chemistry, Vol.38, pp.985-992, 2013.
- 47 Landobasa Y M Tobing, Liliana Tjahjana, Dao Hua Zhang, "Direct patterning of high density sub-15 nm gold dot arrays using ultrahigh contrast electron beam lithography process on positive tone resist", Nanotechnology, Vol.24, No.7, p.075303, 2013.
- 48 Marcin Gebski, Maciej Dems, Jian Chen, Qi Jie Wang , Dao Hua Zhang, and Tomasz Czyszanowski, "The influence of imperfections and absorption on the performance of a GaAs/AlOx high-contrast grating for monolithic integration with 980 nm GaAs-based VCSELs", Journal of Lightwave Technology, Volume 31, Issue 23, pp. 3853-3858, 2013.
- 49 Zhengji Ni, Dawei Zhang, Haojie Sun, Wennan Wang, DaoHua Zhang, Ting Mei, "The new way of controlling aluminum-doped zinc oxide films properties: ion beam post-treatment with cooling system", Applied Physics A, Volume 112, Issue 3, pp 569-573, September 2013.
- 50 X. F. Yang, Shuxia Zhang, Dao-Hua Zhang, YuKe Wang, Jian Wang, "Subwavelength interference lithography based on a unidirectional surface plasmon coupler", Optical Engineering 52(8), 086109, August 2013.
- 51 Landobasa Y. M. Tobing, Liliana Tjahjana, Dao Hua Zhang, Qing Zhang, Qihua Xiong, "Deep subwavelength fourfold rotationally symmetric split-ring-resonator metamaterials for highly sensitive and robust biosensing platform", Scientific Reports, 3, 2437, 14 Aug. 2013.
- 52 Yueke Wang, Dao Hua Zhang, Jun Wang, Fei Qin, Dongdong Li and Zhengji Xu, "Design of sharp bends with transformation plasmonics", Applied Physice A, Volume 112, Issue 3 (2013), Page 549-553, DOI: 10.1007/s00339-013-7773-5, 2013.
- 53 An Yang, Changchun Yan, Guiming Li, and Dao Hua Zhang, "An analogue of double electromagnetically induced transparency with greatly high group indexes", Chin. Opt. Lett., 2013.
- 54 Dongdong Li, Dao Hua Zhang, Changchun Yan, Tao Li, Yueke Wang, Zhengji Xu, Jun Wang and Fei Qin, "Unidirectional surface plasmon-polariton excitation by a compact slot partially filled with dielectric", Optics Express, Vol. 21, Issue 5, pp. 5949-5956, 2013..
- 55 Jun WANG, Fei QIN, Dao Hua ZHANG, Dongdong LI, Yueke WANG, Xiaonan SHEN, Ting YU and Jinghua TENG, "Subwavelength superfocusing with a dipole-wave-reciprocal binary zone plate", Applied Physics Letters, 102, 061103 (2013); doi: 10.1063/1.4791581.
- 56 L. Y. M. Tobing, L. Tjahjana, D. H. Zhang, "Direct patterning of high density sub-15-nm gold dot arrays using ultrahigh contrast electron beam lithography process on positive tone resist", Nanotechnology 24, 075303, 2013.
- 57 LuizC de Freitas, Eimear Phelan, Linbo Liu, Joseph Gardecki, Eman Namati, Willian C Warger, Guillermo J Tearney, Gregory W Randolph, " Optical coherence tomography imaging during thyroid and parathyroid surgery: A novel system of tissue identification and differentiation to obviate tissue resection and frozen section", Head & Neck: Journal of Sciences and Specialties, DOI: 10.1002/hed.23452, 2013.
- 58 Liu L, Chu KK, Houser GH, Diephuis BJ, Li Y, Wilsterman EJ, et al., "Method for quantitative study of airway functional microanatomy using Micro-Optical Coherence Tomography", PLoS ONE, 8(1), e54473, 2013
- 59 X. Q. Zou, J. Z. Shang, J. N. Leaw, Z. Q. Luo, L. Y. Luo, C. La-o-Vorakiat, L. Cheng, S. A. Cheong, H. B. Su, J. X. Zhu, Y. P. Liu, K. P. Loh, A. H. C. Neto, T. Yu, and E. E. M. Chia, "Terahertz Conductivity of Twisted Bilayer Graphene," Physical Review Letters, vol. 110, no. 6, Feb 2013, Art no. 067401.
- 60 Z. H. Zhu, X. Q. Zhang, J. Q. Gu, R. Singh, Z. Tian, J. G. Han, and W. L. Zhang, "A MetamaterialBased Terahertz Low-Pass Filter With Low Insertion Loss and Sharp Rejection," Ieee Transactions on Terahertz Science and Technology, vol. 3, no. 6, pp. 832-837, Nov 2013.
- 61 Y. Zhu, Y. Zhou, M. I. B. Utama, M. de la Mata, Y. Y. Zhao, Q. Zhang, B. Peng, C. Magen, J. Arbiol, and Q. H. Xiong, "Solution phase van der Waals epitaxy of ZnO wire arrays," Nanoscale, vol. 5, no. 16, pp. 7242-7249, 2013.
- 62 Y. Y. Zhao, X. Luo, H. Li, J. Zhang, P. T. Araujo, C. K. Gan, J. Wu, H. Zhang, S. Y. Quek, M. S. Dresselhaus, and Q. H. Xiong, "Inter layer Breathing and Shear Modes in Few-Trilayer MoS₂ and WSe₂," Nano Letters, vol. 13, no. 3, pp. 1007-1015, Mar 2013.

- 63 Y. B. Zhao, R. Chen, Y. Gao, K. S. Leck, X. Y. Yang, S. W. Liu, A. P. Abiyasa, Y. Divayana, E. Mutlugun, S. T. Tan, H. D. Sun, H. V. Demir, and X. W. Sun, "AC-driven, color-and brightness-tunable organic light-emitting diodes constructed from an electron only device," *Organic Electronics*, vol. 14, no. 12, pp. 3195-3200, Dec 2013.
- 64 Z. Y. Zhang, K. L. Wells, M. T. Seidel, and H. S. Tan, "Fifth-Order Three-Dimensional Electronic Spectroscopy Using a Pump-Probe Configuration," *Journal of Physical Chemistry B*, vol. 117, no. 49, pp. 15369-15385, Dec 2013.
- 65 Y. Y. Zhang, Y. X. Tang, X. F. Liu, Z. L. Dong, H. H. Hng, Z. Chen, T. C. Sum, and X. D. Chen, "Three-Dimensional CdSTitanate Composite Nanomaterials for Enhanced Visible-Light-Driven Hydrogen Evolution," *Small*, vol. 9, no. 7, pp. 996-1002, Apr 2013.
- 66 X. Q. Zhang, Q. Li, W. Cao, J. Q. Gu, R. Singh, Z. Tian, J. G. Han, and W. L. Zhang, "Polarization-Independent Plasmon-Induced Transparency in a Fourfold Symmetric Terahertz Metamaterial," *Ieee Journal of Selected Topics in Quantum Electronics*, vol. 19, no. 1, Jan-Feb 2013, Art no. 8400707.
- 67 W. J. Zhang, J. X. Yan, C. H. Chen, L. Lei, J. L. Kuo, Z. X. Shen, and L. J. Li, "Molecular adsorption induces the transformation of rhombohedral- to Bernal-stacking order in trilayer graphene," *Nature Communications*, vol. 4, Jun 2013, Art no. 2074.
- 68 Q. Zhang, X. L. Wen, G. Y. Li, Q. F. Ruan, J. F. Wang, and Q. H. Xiong, "Multiple Magnetic Mode-Based Fano Resonance in Split-Ring Resonator/Disk Nanocavities," *Acs Nano*, vol. 7, no. 12, pp. 11071-11078, Dec 2013.
- 69 J. F. Zhang, K. F. MacDonald, and N. I. Zheludev, "Nonlinear dielectric optomechanical metamaterials," *Light-Science & Applications*, vol. 2, Aug 2013, Art no. UNSP e96.
- 70 J. F. Zhang, K. F. MacDonald, and N. I. Zheludev, "Near-infrared trapped mode magnetic resonance in an all-dielectric metamaterial," *Optics Express*, vol. 21, no. 22, pp. 26721-26728, Nov 2013.
- 71 J. Zhang, D. H. Li, and Q. H. Xiong, "Breakthrough of optical refrigeration: Laser cools a semiconductor by 40 K," *Laser Focus World*, vol. 49, no. 6, pp. 53-55, Jun 2013.
- 72 J. Zhang, D. H. Li, R. J. Chen, and Q. H. Xiong, "Laser cooling of a semiconductor by 40 kelvin," *Nature*, vol. 493, no. 7433, pp. 504-508, Jan 2013.
- 73 J. Yin, D. B. Migas, M. Panahandeh-Fard, S. Chen, Z. L. Wang, P. Lova, and C. Soci, "Charge Redistribution at GaAs/P3HT Heterointerfaces with Different Surface Polarity," *Journal of Physical Chemistry Letters*, vol. 4, no. 19, pp. 3303-3309, Oct 2013.
- 74 F. Yan, R. Chen, H. D. Sun, and X. W. Sun, "Silver nanoparticle facilitated charge generation in tandem organic light-emitting devices," *Applied Physics Letters*, vol. 102, no. 20, May 2013, Art no. 203303.
- 75 X. Y. Xu, A. K. K. Kyaw, B. Peng, D. W. Zhao, T. K. S. Wong, Q. H. Xiong, X. W. Sun, and A. J. Heeger, "A plasmonically enhanced polymer solar cell with gold-silica core-shell nanorods," *Organic Electronics*, vol. 14, no. 9, pp. 2360-2368, Sep 2013.
- 76 S. Xu, Y. Wang, B. L. Zhang, and H. S. Chen, "Invisibility cloaks from forward design to inverse design," *Science China-Information Sciences*, vol. 56, no. 12, Dec 2013, Art no. 120408.
- 77 H. Y. Xu, H. D. Sun, and B. L. Zhang, "Waveguide design and application with transformation optics," *Science China-Information Sciences*, vol. 56, no. 12, Dec 2013, Art no. 120403.
- 78 G. C. Xing, N. Mathews, S. Y. Sun, S. S. Lim, Y. M. Lam, M. Gratzel, S. Mhaisalkar, and T. C. Sum, "Long-Range Balanced Electron- and Hole-Transport Lengths in Organic-Inorganic CH₃NH₃PbI₃," *Science*, vol. 342, no. 6156, pp. 344-347, Oct 2013.
- 79 G. C. Xing, J. S. Luo, H. X. Li, B. Wu, X. F. Liu, C. H. A. Huan, H. J. Fan, and T. C. Sum, "Ultrafast Exciton Dynamics and Two-Photon Pumped Lasing from ZnSe Nanowires," *Advanced Optical Materials*, vol. 1, no. 4, pp. 319-326, Apr 2013.
- 80 X. H. Xia, D. L. Chao, X. Y. Qi, Q. Q. Xiong, Y. Q. Zhang, J. P. Tu, H. Zhang, and H. J. Fan, "Controllable Growth of Conducting Polymers Shell for Constructing High-Quality Organic/Inorganic Core/Shell Nanostructures and Their Optical-Electrochemical Properties," *Nano Letters*, vol. 13, no. 9, pp. 4562-4568, Sep 2013.
- 81 B. Wu, X. Y. Wu, C. Guan, K. F. Tai, E. K. L. Yeow, H. J. Fan, N. Mathews, and T. C. Sum, "Uncovering loss mechanisms in silver nanoparticle-blended plasmonic organic solar cells," *Nature Communications*, vol. 4, Jun 2013, Art no. 2004.
- 82 K. L. Wells, Z. Y. Zhang, J. R. Rouxel, and H. S. Tan, "Measuring the Spectral Diffusion of Chlorophyll a Using Two-Dimensional Electronic Spectroscopy," *Journal of Physical Chemistry B*, vol. 117, no. 8, pp. 2294-2299, Feb 2013.

- 83 R. Q. Wee, W. F. Yang, T. J. Zhou, R. Chen, H. D. Sun, C. F. Wang, A. Y. S. Lee, and H. Gong, "Development of ZnO Nanostructured Films via Sodium Chloride Solution and Investigation of Its Growth Mechanism and Optical Properties," *Journal of the American Ceramic Society*, vol. 96, no. 6, pp. 1972-1977, Jun 2013.
- 84 Y. Wang, X. Yang, T. C. He, Y. Gao, H. V. Demir, X. W. Sun, and H. D. Sun, "Near resonant and nonresonant third-order optical nonlinearities of colloidal InP/ZnS quantum dots," *Applied Physics Letters*, vol. 102, no. 2, Jan 2013, Art no. 021917.
- 85 Q. N. Wang, D. L. Chao, W. H. Zhou, Y. G. Chen, and C. L. Wu, "Influence factors of capacity loss after short-time standing of metal-hydride electrode and its EIS model," *Journal of Rare Earths*, vol. 31, no. 8, pp. 772-777, Aug 2013.
- 86 J. Wang, S. Wang, R. Singh, and W. L. Zhang, "Metamaterial inspired terahertz devices: from ultra-sensitive sensing to near field manipulation," *Chinese Optics Letters*, vol. 11, no. 1, Jan 2013, Art no. 011602.
- 87 G. Wang, J. L. Geng, X. H. Zhang, G. H. Xing, T. C. Sum, Y. H. Lai, and B. Liu, "PEGYLATED CONJUGATED OLIGOMERS FOR TARGETED TWO-PHOTON FLUORESCENCE IMAGING OF CANCER CELLS," *Journal of Molecular and Engineering Materials*, vol. 1, no. 3, Sep 2013, Art no. 1340011.
- 88 D. P. Wang, P. Kanhere, M. J. Li, Q. L. Tay, Y. X. Tang, Y. Z. Huang, T. C. Sum, N. Mathews, T. Sritharan, and Z. Chen, "Improving Photocatalytic H₂ Evolution of TiO₂ via Formation of {001}-{010} Quasi-Heterojunctions," *Journal of Physical Chemistry C*, vol. 117, no. 44, pp. 22894-22902, Nov 2013.
- 89 M. I. B. Utama, Q. Zhang, J. Zhang, Y. W. Yuan, F. J. Belarre, J. Arbiol, and Q. H. Xiong, "Recent developments and future directions in the growth of nanostructures by van der Waals epitaxy," *Nanoscale*, vol. 5, no. 9, pp. 3570-3588, 2013.
- 90 A. Tsiamtas, E. Atmatzakis, N. Papasimakis, V. Fedotov, B. Luk'yanchuk, N. I. Zheludev, and F. J. G. de Abajo, "Optical generation of intense ultrashort magnetic pulses at the nanoscale," *New Journal of Physics*, vol. 15, Nov 2013, Art no. 113035.
- 91 L. Y. M. Tobing, L. Tjahjana, D. H. Zhang, Q. Zhang, and Q. H. Xiong, "Deep subwavelength fourfold rotationally symmetric split-ring-resonator metamaterials for highly sensitive and robust biosensing platform," *Scientific Reports*, vol. 3, Aug 2013, Art no. 2437.
- 92 J. S. Teguh, M. Kurniawan, X. Y. Wu, T. C. Sum, and E. K. L. Yeow, "Other origins for the fluorescence modulation of single dye molecules in open-circuit and short-circuit devices," *Physical Chemistry Chemical Physics*, vol. 15, no. 1, pp. 90-93, 2013.
- 93 Q. L. Tay, X. F. Liu, Y. X. Tang, Z. L. Jiang, T. C. Sum, and Z. Chen, "Enhanced Photocatalytic Hydrogen Production with Synergistic Two-Phase Anatase/Brookite TiO₂ Nanostructures," *Journal of Physical Chemistry C*, vol. 117, no. 29, pp. 14973-14982, Jul 2013.
- 94 Y. X. Tang, Z. L. Jiang, G. C. Xing, A. R. Li, P. D. Kanhere, Y. Y. Zhang, T. C. Sum, S. Z. Li, X. D. Chen, Z. L. Dong, and Z. Chen, "Efficient Ag@AgCl Cubic Cage Photocatalysts Profit from Ultrafast Plasmon-Induced Electron Transfer Processes," *Advanced Functional Materials*, vol. 23, no. 23, pp. 2932-2940, Jun 2013.
- 95 C. S. Tang, B. Xia, X. Q. Zou, S. Chen, H. W. Ou, L. Wang, A. Rusydi, J. X. Zhu, and E. E. M. Chia, "Terahertz conductivity of topological surface states in Bi_{1.5}Sb_{0.5}Te_{1.8}Se_{1.2}," *Scientific Reports*, vol. 3, Dec 2013, Art no. 3513.
- 96 V. D. Ta, R. Chen, and H. D. Sun, "Tuning Whispering Gallery Mode Lasing from SelfAssembled Polymer Droplets," *Scientific Reports*, vol. 3, Mar 2013, Art no. 1362.
- 97 V. D. Ta, R. Chen, D. M. Nguyen, and H. D. Sun, "Application of self-assembled hemispherical microlasers as gas sensors," *Applied Physics Letters*, vol. 102, no. 3, Jan 2013, Art no. 031107.
- 98 V. D. Ta, R. Chen, L. Ma, Y. J. Ying, and H. D. Sun, "Whispering gallery mode microlasers and refractive index sensing based on single polymer fiber," *Laser & Photonics Reviews*, vol. 7, no. 1, pp. 133-139, Jan 2013.
- 99 L. F. Sun, J. X. Yan, D. Zhan, L. Liu, H. L. Hu, H. Li, B. K. Tay, J. L. Kuo, C. C. Huang, D. W. Hewak, P. S. Lee, and Z. X. Shen, "Spin-Orbit Splitting in Single-Layer MoS₂ Revealed by Triply Resonant Raman Scattering," *Physical Review Letters*, vol. 111, no. 12, Sep 2013, Art no. 126801.
- 100 C. Q. Sun, X. Zhang, X. J. Fu, W. T. Zheng, J. L. Kuo, Y. C. Zhou, Z. X. Shen, and J. Zhou, "Density and Phonon-Stiffness Anomalies of Water and Ice in the Full Temperature Range," *Journal of Physical Chemistry Letters*, vol. 4, no. 19, pp. 3238-3244, Oct 2013.
- 101 L. T. Su, S. K. Karuturi, J. S. Luo, L. J. Liu, X. F. Liu, J. Guo, T. C. Sum, R. R. Deng, H. J. Fan, X. G. Liu, and A. I. Y. Tok, "Photon Upconversion in Hetero-nanostructured Photoanodes for Enhanced Near-Infrared Light Harvesting," *Advanced Materials*, vol. 25, no. 11, pp. 16031607, Mar 2013.

- 102 G. B. G. Stenning, G. J. Bowden, L. C. Maple, S. A. Gregory, A. Sposito, R. W. Eason, N. I. Zheludev, and P. A. J. de Groot, "Magnetic control of a meta-molecule," *Optics Express*, vol. 21, no. 2, pp. 1456-1464, Jan 2013.
- 103 R. Singh, D. R. Chowdhury, J. Xiong, H. Yang, A. K. Azad, A. J. Taylor, Q. X. Jia, and H. T. Chen, "Influence of film thickness in THz active metamaterial devices: A comparison between superconductor and metal split-ring resonators," *Applied Physics Letters*, vol. 103, no. 6, Aug 2013, Art no. 061117.
- 104 R. Singh, I. Al-Naib, W. Cao, C. Rockstuhl, M. Koch, and W. L. Zhang, "The Fano Resonance in Symmetry Broken Terahertz Metamaterials," *Ieee Transactions on Terahertz Science and Technology*, vol. 3, no. 6, pp. 820-826, Nov 2013.
- 105 P. Silwal, C. La-o-Vorakiat, E. E. M. Chia, D. H. Kim, and D. Talbayev, "Effect of growth temperature on the terahertz-frequency conductivity of the epitaxial transparent conducting spinel NiCo₂O₄ films," *Aip Advances*, vol. 3, no. 9, Sep 2013, Art no. 092116.
- 106 J. Z. Shang, C. X. Cong, J. Zhang, Q. H. Xiong, G. G. Gurzadyan, and T. Yu, "Observation of lowwavenumber out-of-plane optical phonon in few-layer graphene," *Journal of Raman Spectroscopy*, vol. 44, no. 1, pp. 70-74, Jan 2013.
- 107 V. Savinov, V. A. Fedotov, P. A. J. de Groot, and N. I. Zheludev, "Radiation-harvesting resonant superconducting sub-THz metamaterial bolometer," *Superconductor Science & Technology*, vol. 26, no. 8, Aug 2013, Art no. 084001.
- 108 T. Roy, E. T. F. Rogers, and N. I. Zheludev, "Sub-wavelength focusing meta-lens," *Optics Express*, vol. 21, no. 6, pp. 7577-7582, Mar 2013.
- 109 E. T. F. Rogers and N. I. Zheludev, "Optical super-oscillations: sub-wavelength light focusing and super-resolution imaging," *Journal of Optics*, vol. 15, no. 9, Sep 2013, Art no. 094008.
- 110 E. T. F. Rogers, S. Savo, J. Lindberg, T. Roy, M. R. Dennis, and N. I. Zheludev, "Superoscillatory optical needle," *Applied Physics Letters*, vol. 102, no. 3, Jan 2013, Art no. 031108.
- 111 B. Peng, G. Y. Li, D. H. Li, S. Dodson, Q. Zhang, J. Zhang, Y. H. Lee, H. V. Demir, X. Y. Ling, and Q. H. Xiong, "Vertically Aligned Gold Nanorod Monolayer on Arbitrary Substrates: SelfAssembly and Femtomolar Detection of Food Contaminants," *Acs Nano*, vol. 7, no. 7, pp. 5993-6000, Jul 2013.
- 112 N. Papasimakis, S. Thongrattanasiri, N. I. Zheludev, and F. J. G. de Abajo, "The magnetic response of graphene split-ring metamaterials," *Light-Science & Applications*, vol. 2, Jul 2013, Art no. UNSP e78.
- 113 T. Ozel, P. L. Hernandez-Martinez, E. Mutlugun, O. Akin, S. Nizamoglu, I. O. Ozel, Q. Zhang, Q. H. Xiong, and H. V. Demir, "Observation of Selective Plasmon-Exciton Coupling in Nonradiative Energy Transfer: Donor-Selective versus Acceptor-Selective Plexcitons," *Nano Letters*, vol. 13, no. 7, pp. 3065-3072, Jul 2013.
- 114 Z. G. Nie, R. Long, J. L. Li, Y. Y. Zheng, O. V. Prezhdo, and Z. H. Loh, "Selective Excitation of Atomic-Scale Dynamics by Coherent Exciton Motion in the Non-Born-Oppenheimer Regime," *Journal of Physical Chemistry Letters*, vol. 4, no. 24, pp. 4260-4266, Dec 2013.
- 115 K. T. Nguyen, D. H. Li, P. Borah, X. Ma, Z. N. Liu, L. L. Zhu, G. Gruner, Q. H. Xiong, and Y. L. Zhao, "Photoinduced Charge Transfer within Polyaniline-Encapsulated Quantum Dots Decorated on Graphene," *Acs Applied Materials & Interfaces*, vol. 5, no. 16, pp. 8105-8110, Aug 2013.
- 116 S. Mathew, A. Annadi, T. K. Chan, T. C. Asmara, D. Zhan, X. R. Wang, S. Azimi, Z. X. Shen, A. Rusydi, Ariando, M. B. H. Breese, and T. Venkatesan, "Tuning the Interface Conductivity of LaAlO₃/SrTiO₃ Using Ion Beams: Implications for Patterning," *Acs Nano*, vol. 7, no. 12, pp. 10572-10581, Dec 2013.
- 117 L. Ma, K. K. Zhang, C. Kloc, H. D. Sun, C. Soci, M. E. Michel-Beyerle, and G. G. Gurzadyan, "Fluorescence from rubrene single crystals: Interplay of singlet fission and energy trapping," *Physical Review B*, vol. 87, no. 20, May 2013, Art no. 201203.
- 118 L. Ma, G. Galstyan, K. K. Zhang, C. Kloc, H. D. Sun, C. Soci, M. E. Michel-Beyerle, and G. G. Gurzadyan, "Two-photon-induced singlet fission in rubrene single crystal," *Journal of Chemical Physics*, vol. 138, no. 18, May 2013, Art no. 184508.
- 119 Y. Luo, B. L. Zhang, T. C. Han, Z. Chen, Y. B. Duan, C. W. Chu, G. Barbastathis, and C. W. Qiu, "Phase-preserved optical elevator," *Optics Express*, vol. 21, no. 6, pp. 6650-6657, Mar 2013.
- 120 X. Luo, Y. Y. Zhao, J. Zhang, Q. H. Xiong, and S. Y. Quek, "Anomalous frequency trends in MoS₂ thin films attributed to surface effects," *Physical Review B*, vol. 88, no. 7, Aug 2013, Art no. 075320.
- 121 X. Luo, Y. Y. Zhao, J. Zhang, M. L. Toh, C. Kloc, Q. H. Xiong, and S. Y. Quek, "Effects of lower symmetry and dimensionality on Raman spectra in two-dimensional WSe₂," *Physical Review B*, vol. 88, no. 19, Nov 2013, Art no. 195313.
- 122 J. Lu, K. Zhang, X. F. Liu, H. Zhang, T. C. Sum, A. H. C. Neto, and K. P. Loh, "Order-disorder transition in a two-dimensional boron-carbon-nitride alloy," *Nature Communications*, vol. 4, Oct 2013, Art no. 2681.

- 123 Z. H. Loh and S. R. Leone, "Capturing Ultrafast Quantum Dynamics with Femtosecond and Attosecond X-ray Core-Level Absorption Spectroscopy," *Journal of Physical Chemistry Letters*, vol. 4, no. 2, pp. 292-302, Jan 2013.
- 124 Z. H. Loh, "Breakthroughs in Photonics 2012: Attosecond Electron Dynamics," *Ieee Photonics Journal*, vol. 5, no. 2, Apr 2013, Art no. 0700304.
- 125 X. X. Liu, J. L. Liu, D. Zhan, J. X. Yan, J. Wang, D. L. Chao, L. F. Lai, M. H. Chen, J. H. Yin, and Z. X. Shen, "Repeated microwave-assisted exfoliation of expandable graphite for the preparation of large scale and high quality multi-layer graphene," *Rsc Advances*, vol. 3, no. 29, pp. 11601-11606, 2013.
- 126 X. F. Liu, Q. Zhang, J. N. Yip, Q. H. Xiong, and T. C. Sum, "Wavelength Tunable Single Nanowire Lasers Based on Surface Plasmon Polariton Enhanced Burstein-Moss Effect," *Nano Letters*, vol. 13, no. 11, pp. 5336-5343, Nov 2013.
- 127 X. F. Liu, Q. Zhang, Q. H. Xiong, and T. C. Sum, "Tailoring the Lasing Modes in Semiconductor Nanowire Cavities Using Intrinsic Self-Absorption," *Nano Letters*, vol. 13, no. 3, pp. 10801085, Mar 2013.
- 128 X. F. Liu, Q. Zhang, G. C. Xing, Q. H. Xiong, and T. C. Sum, "Size-Dependent Exciton Recombination Dynamics in Single CdS Nanowires beyond the Quantum Confinement Regime," *Journal of Physical Chemistry C*, vol. 117, no. 20, pp. 10716-10722, May 2013.
- 129 M. N. Liu, R. Chen, G. Adamo, K. F. MacDonald, E. J. Sie, T. C. Sum, N. I. Zheludev, H. D. Sun, and H. J. Fan, "Tuning the influence of metal nanoparticles on ZnO photoluminescence by atomic-layer-deposited dielectric spacer," *Nanophotonics*, vol. 2, no. 2, pp. 153-160, 2013.
- 130 H. L. Liu, E. S. P. Leong, Z. L. Wang, G. Y. Si, L. J. Zheng, Y. J. Liu, and C. Soci, "Multiple and Multipolar Fano Resonances in Plasmonic Nanoring Pentamers," *Advanced Optical Materials*, vol. 1, no. 12, pp. 978-983, Dec 2013.
- 131 X. Lin, Y. Xu, B. L. Zhang, R. Hao, H. S. Chen, and E. P. Li, "Unidirectional surface plasmons in nonreciprocal graphene," *New Journal of Physics*, vol. 15, Nov 2013, Art no. 113003.
- 132 X. Lin, Y. Xu, A. A. Hakro, T. Hasan, R. Hao, B. L. Zhang, and H. S. Chen, "Ab initio optical study of graphene on hexagonal boron nitride and fluorographene substrates," *Journal of Materials Chemistry C*, vol. 1, no. 8, pp. 1618-1627, 2013.
- 133 H. K. Liang, B. Meng, G. Z. Liang, J. Tao, Y. D. Chong, Q. J. Wang, and Y. Zhang, "Electrically Pumped Mid-Infrared Random Lasers," *Advanced Materials*, vol. 25, no. 47, pp. 6859-6863, Dec 2013.
- 134 G. Q. Liang and Y. D. Chong, "Optical Resonator Analog of a Two-Dimensional Topological Insulator," *Physical Review Letters*, vol. 110, no. 20, May 2013, Art no. 203904.
- 135 M. J. Li, G. C. Xing, G. Z. Xing, B. Wu, T. Wu, X. H. Zhang, and T. C. Sum, "Origin of green emission and charge trapping dynamics in ZnO nanowires," *Physical Review B*, vol. 87, no. 11, Mar 2013, Art no. 115309.
- 136 J. L. Li, Z. G. Nie, Y. Y. Zheng, S. Dong, and Z. H. Loh, "Elementary Electron and Ion Dynamics in Ionized Liquid Water," *Journal of Physical Chemistry Letters*, vol. 4, no. 21, pp. 3698-3703, Nov 2013.
- 137 D. H. Li, J. Zhang, and Q. H. Xiong, "Laser cooling of CdS nanobelts: Thickness matters," *Optics Express*, vol. 21, no. 16, pp. 19302-19310, Aug 2013.
- 138 D. F. Li, D. Zhan, J. X. Yan, C. L. Sun, Z. W. Li, Z. H. Ni, L. Liu, and Z. X. Shen, "Thickness and stacking geometry effects on high frequency overtone and combination Raman modes of graphene," *Journal of Raman Spectroscopy*, vol. 44, no. 1, pp. 86-91, Jan 2013.
- 139 C. J. Lech, A. T. Phan, M. E. Michel-Beyerle, and A. A. Voityuk, "Electron-Hole Transfer in GQuadruplexes with Different Tetrad Stacking Geometries: A Combined QM and MD Study," *Journal of Physical Chemistry B*, vol. 117, no. 34, pp. 9851-9856, Aug 2013.
- 140 S. Karamat, R. S. Rawat, T. L. Tan, P. Lee, S. V. Springham, R. Anis ur, R. Chen, and H. D. Sun, "Exciting Dilute Magnetic Semiconductor: Copper-Doped ZnO," *Journal of Superconductivity and Novel Magnetism*, vol. 26, no. 1, pp. 187-195, Jan 2013.
- 141 P. Kannan, F. A. Rahim, X. Teng, R. Chen, H. D. Sun, L. Huang, and D. H. Kim, "Enhanced emission of NaYF₄:Yb,Er/Tm nanoparticles by selective growth of Au and Ag nanoshells," *Rsc Advances*, vol. 3, no. 21, pp. 7718-7721, 2013.
- 142 P. Kannan, F. A. Rahim, R. Chen, X. Teng, L. Huang, H. D. Sun, and D. H. Kim, "Au Nanorod Decoration on NaYF₄:Yb/Tm Nanoparticles for Enhanced Emission and WavelengthDependent Biomolecular Sensing," *Acs Applied Materials & Interfaces*, vol. 5, no. 9, pp. 3508-3513, May 2013.
- 143 W. N. Jia, X. Wu, B. X. Jia, F. Y. Qu, and H. J. Fan, "Self-Assembled Porous ZnS Nanospheres with High Photocatalytic Performance," *Science of Advanced Materials*, vol. 5, no. 10, pp. 1329-1336, Oct 2013.

- 144 U. Ilyas, T. L. Tan, P. Lee, R. V. Ramanujan, F. J. Li, S. Zhang, R. Chen, H. D. Sun, and R. S. Rawat, "Enhanced ferromagnetic response in ZnO:Mn thin films by tailoring composition and defect concentration," *Journal of Magnetism and Magnetic Materials*, vol. 344, pp. 171-175, Oct 2013.
- 145 Y. W. Huang, W. T. Chen, P. C. Wu, V. A. Fedotov, N. I. Zheludev, and D. P. Tsai, "Toroidal Lasing Spaser," *Scientific Reports*, vol. 3, Feb 2013, Art no. 1237.
- 146 H. L. Hu, Y. A. Akimov, H. G. Duan, X. L. Li, M. Y. Liao, R. L. S. Tan, L. Wu, H. Y. Chen, H. J. Fan, P. Bai, P. S. Lee, J. K. W. Yang, and Z. X. Shen, "Photoluminescence via gap plasmons between single silver nanowires and a thin gold film," *Nanoscale*, vol. 5, no. 24, pp. 12086-12091, 2013.
- 147 G. Hetet, D. Wilkowski, and T. Chaneliere, "Quantum memory with a controlled homogeneous splitting," *New Journal of Physics*, vol. 15, Apr 2013, Art no. 045015.
- 148 T. C. He, Z. B. Lim, L. Ma, H. R. Li, D. Rajwar, Y. J. Ying, Z. Y. Di, A. C. Grimsdale, and H. D. Sun, "Large Two-Photon Absorption of Terpyridine-Based Quadrupolar Derivatives: Towards their Applications in Optical Limiting and Biological Imaging," *Chemistry-an Asian Journal*, vol. 8, no. 3, pp. 564-571, Mar 2013.
- 149 N. Gutman, A. A. Sukhorukov, Y. D. Chong, and C. M. de Sterke, "Coherent perfect absorption and reflection in slow-light waveguides," *Optics Letters*, vol. 38, no. 23, pp. 49704973, Dec 2013.
- 150 P. F. Guo, Y. Yang, Y. B. Cheng, G. Q. Han, J. S. Pan, Ivana, Z. Zhang, H. L. Hu, Z. X. Shen, C. K. Chia, and Y. C. Yeo, "Tunneling field-effect transistor with Ge/In0.53Ga0.47As heterostructure as tunneling junction," *Journal of Applied Physics*, vol. 113, no. 9, Mar 2013, Art no. 094502.
- 151 N. K. Grady, B. G. Perkins, H. Y. Hwang, N. C. Brandt, D. Torchinsky, R. Singh, L. Yan, D. Trugman, S. A. Trugman, Q. X. Jia, A. J. Taylor, K. A. Nelson, and H. T. Chen, "Nonlinear hightemperature superconducting terahertz metamaterials," *New Journal of Physics*, vol. 15, Oct 2013, Art no. 105016.
- 152 B. Gholipour, J. F. Zhang, K. F. MacDonald, D. W. Hewak, and N. I. Zheludev, "An All-Optical, Non-volatile, Bidirectional, Phase-Change Meta-Switch," *Advanced Materials*, vol. 25, no. 22, pp. 3050-3054, Jun 2013.
- 153 W. B. Gao, P. Fallahi, E. Togan, A. Delteil, Y. S. Chin, J. Miguel-Sanchez, and A. Imamoglu, "Quantum teleportation from a propagating photon to a solid-state spin qubit," *Nature Communications*, vol. 4, Nov 2013, Art no. 2744.
- 154 V. A. Fedotov, A. V. Rogacheva, V. Savinov, D. P. Tsai, and N. I. Zheludev, "Resonant Transparency and Non-Trivial Non-Radiating Excitations in Toroidal Metamaterials," *Scientific Reports*, vol. 3, Oct 2013, Art no. 2967.
- 155 Y. B. Duan, G. Barbastathis, and B. L. Zhang, "Classical imaging theory of a microlens with super-resolution," *Optics Letters*, vol. 38, no. 16, pp. 2988-2990, Aug 2013.
- 156 H. G. Duan, H. L. Hu, H. K. Hui, Z. X. Shen, and J. K. W. Yang, "Free-standing sub-10 nm nanostencils for the definition of gaps in plasmonic antennas," *Nanotechnology*, vol. 24, no. 18, May 2013, Art no. 185301.
- 157 S. Dodson, M. Haggui, R. Bachelot, J. Plain, S. Z. Li, and Q. H. Xiong, "Optimizing Electromagnetic Hotspots in Plasmonic Bowtie Nanoantennae," *Journal of Physical Chemistry Letters*, vol. 4, no. 3, pp. 496-501, Feb 2013.
- 158 N. T. Dao, R. Haselsberger, M. E. Michel-Beyerle, and A. T. Phan, "Excimer Formation by Stacking G-Quadruplex Blocks," *Chemphyschem*, vol. 14, no. 12, pp. 2667-2671, Aug 2013.
- 159 L. Q. Cong, W. Cao, X. Q. Zhang, Z. Tian, J. Q. Gu, R. Singh, J. G. Han, and W. L. Zhang, "A perfect metamaterial polarization rotator," *Applied Physics Letters*, vol. 103, no. 17, Oct 2013, Art no. 171107.
- 160 D. R. Chowdhury, R. Singh, A. J. Taylor, H. T. Chen, and A. K. Azad, "Ultrafast manipulation of near field coupling between bright and dark modes in terahertz metamaterial," *Applied Physics Letters*, vol. 102, no. 1, Jan 2013, Art no. 011122.
- 161 D. R. Chowdhury, A. K. Azad, W. L. Zhang, and R. Singh, "Near Field Coupling in Passive and Active Terahertz Metamaterial Devices," *Ieee Transactions on Terahertz Science and Technology*, vol. 3, no. 6, pp. 783-790, Nov 2013.
- 162 Y. D. Chong, H. Cao, and A. D. Stone, "Noise properties of coherent perfect absorbers and critically coupled resonators," *Physical Review A*, vol. 87, no. 1, Jan 2013, Art no. 013843.
- 163 Y. D. Chong, "OPTICAL DEVICES Photonic insulators with a twist," *Nature*, vol. 496, no. 7444, pp. 173-174, Apr 2013.
- 164 E. E. M. Chia, D. Springer, S. K. Nair, X. Q. Zou, S. A. Cheong, C. Panagopoulos, T. Tamegai, H. Eisaki, S. Ishida, S. Uchida, A. J. Taylor, and J. X. Zhu, "Doping dependence of the electron-phonon and electron-spin fluctuation interactions in the high-T-c superconductor Bi₂Sr₂CaCu₂O_{8+delta}," *New Journal of Physics*, vol. 15, Oct 2013.

- 165 R. Cheng, W. Wang, X. Gong, L. F. Sun, P. F. Guo, H. L. Hu, Z. X. Shen, G. Q. Han, and Y. C. Yeo, "Relaxed and Strained Patterned Germanium-Tin Structures: A Raman Scattering Study," *Ecs Journal of Solid State Science and Technology*, vol. 2, no. 4, pp. P138-P145, 2013.
- 166 R. Chen, Q. L. Ye, T. C. He, V. D. Ta, Y. J. Ying, Y. Y. Tay, T. Wu, and H. D. Sun, "Exciton Localization and Optical Properties Improvement in Nanocrystal-Embedded ZnO Core-Shell Nanowires," *Nano Letters*, vol. 13, no. 2, pp. 734-739, Feb 2013.
- 167 R. Chen, V. D. Ta, F. Xiao, Q. Y. Zhang, and H. D. Sun, "Multicolor Hybrid Upconversion Nanoparticles and Their Improved Performance as Luminescence Temperature Sensors Due to Energy Transfer," *Small*, vol. 9, no. 7, pp. 1052-1057, Apr 2013.
- 168 H. S. Chen, B. Zheng, L. Shen, H. P. Wang, X. M. Zhang, N. I. Zheludev, and B. L. Zhang, "Rayoptics cloaking devices for large objects in incoherent natural light," *Nature Communications*, vol. 4, Oct 2013, Art no. 2652.
- 169 M. Chalony, J. Barre, B. Marcos, A. Olivetti, and D. Wilkowski, "Long-range one-dimensional gravitational-like interaction in a neutral atomic cold gas," *Physical Review A*, vol. 87, no. 1, Jan 2013, Art no. 013401.
- 170 W. Cao, C. Y. Song, T. E. Lanier, R. Singh, J. F. O'Hara, W. M. Dennis, Y. P. Zhao, and W. L. Zhang, "Tailoring terahertz plasmons with silver nanorod arrays," *Scientific Reports*, vol. 3, May 2013, Art no. 1766.
- 171 W. Cao, R. Singh, C. H. Zhang, J. G. Han, M. Tonouchi, and W. L. Zhang, "Plasmon-induced transparency in metamaterials: Active near field coupling between bright superconducting and dark metallic mode resonators," *Applied Physics Letters*, vol. 103, no. 10, Sep 2013, Art no. 101106.
- 172 C. Cao, J. Zhang, X. L. Wen, S. L. Dodson, N. T. Dao, L. M. Wong, S. J. Wang, S. Z. Li, A. T. Phan, and Q. H. Xiong, "Metamaterials-Based Label-Free Nanosensor for Conformation and Affinity Biosensing," *Acs Nano*, vol. 7, no. 9, pp. 7583-7591, Sep 2013.
- 173 O. Buchnev, J. Wallauer, M. Walther, M. Kaczmarek, N. I. Zheludev, and V. A. Fedotov, "Controlling intensity and phase of terahertz radiation with an optically thin liquid crystal loaded metamaterial," *Applied Physics Letters*, vol. 103, no. 14, Sep 2013, Art no. 141904.
- 174 O. Buchnev, J. Y. Ou, M. Kaczmarek, N. I. Zheludev, and V. A. Fedotov, "Electro-optical control in a plasmonic metamaterial hybridised with a liquid-crystal cell," *Optics Express*, vol. 21, no. 2, pp. 1633-1638, Jan 2013.
- 175 Z. H. Bai, R. Chen, P. Si, Y. J. Huang, H. D. Sun, and D. H. Kim, "Fluorescent pH Sensor Based on Ag@SiO₂ Core-Shell Nanoparticle," *Acs Applied Materials & Interfaces*, vol. 5, no. 12, pp. 5856-5860, Jun 2013.
- 176 A. K. Azad, J. F. O'Hara, R. Singh, H. T. Chen, and A. J. Taylor, "A Review of Terahertz Plasmonics in Subwavelength Holes on Conducting Films," *Ieee Journal of Selected Topics in Quantum Electronics*, vol. 19, no. 1, Jan-Feb 2013, Art no. 8400416.
- 177 K. K. A. Antwi, C. B. Soh, Q. Wee, R. J. N. Tan, P. Yang, H. R. Tan, L. F. Sun, Z. X. Shen, and S. J. Chua, "Crystallographically tilted and partially strain relaxed GaN grown on inclined {111} facets etched on Si(100) substrate," *Journal of Applied Physics*, vol. 114, no. 24, Dec 2013, Art no. 243512.
- 178 P. Ambichl, K. G. Makris, L. Ge, Y. D. Chong, A. D. Stone, and S. Rotter, "Breaking of PT Symmetry in Bounded and Unbounded Scattering Systems," *Physical Review X*, vol. 3, no. 4, Dec 2013, Art no. 041030.
- 179 I. Al-Naib, R. Singh, M. Shalaby, T. Ozaki, and R. Morandotti, "Enhanced Q-factor in Optimally Coupled Macrocell THz Metamaterials: Effect of Spatial Arrangement," *Ieee Journal of Selected Topics in Quantum Electronics*, vol. 19, no. 1, Jan-Feb 2013, Art no. 8400807.
- 180 I. Al-Naib, C. Jansen, R. Singh, M. Walther, and M. Koch, "Novel THz Metamaterial Designs: From Near- and Far-Field Coupling to High-Q Resonances," *Ieee Transactions on Terahertz Science and Technology*, vol. 3, no. 6, pp. 772-782, Nov 2013.
- 181 T. Özel, P. L. Hernandez-Martinez, E. Mutlugün, O. Akin, S. Nizamoglu, I. Ö. Özel, Q. Zhang, Q. Xiong and H. V. Demir "Observation of Selective Plasmon-Exciton Coupling in Nonradiative Energy Transfer: Donor-Selective vs. Acceptor-Selective Plectxcitons", *Nano Letters*, 13, 3065 (2013).
- 182 "Observation of Biexcitons in Nanocrystal Solids in the Presence of Photocharging", A. F. Cihan, P. L. Hernandez-Martinez, Y. Kelestemur, E. Mutlugun and H. V. Demir *ACS Nano*, 7, 4799 (2013).
- 183 "Phonon-Assisted Exciton Transfer into Silicon Using Nanoemitters: The Role of Phonons and Temperature Effects in Förster Resonance Energy Transfer", A. Yeltik, B. Guzelturk, P. L. Hernandez-Martinez, A. O. Govorov and H. V. Demir *ACS Nano*, 7, 10492 (2013).
- 184 "Color science of nanocrystal quantum dots for lighting and displays", T. Erdem and H. V. Demir *Nanophotonics*, 2, 57 (2013).
- 185 "Facile Synthesis of Luminescent AgInS₂-ZnS Solid Solution Nanorods", X. Yang, Y. Tang, S. T. Tan, M. Bosman, Z. Dong, K. S. Leck, Y. Ji, H. V. Demir and X. W. Sun, *Small*, 9, 2689 (2013).

- 186 "Attractive versus Repulsive Excitonic Interactions of Colloidal Quantum Dots Control Blue- to Red-Shifting (and Non-Shifting) Amplified Spontaneous Emission", A. F. Cihan, Y. Kelestemur, B. Guzelturk, O. Yerli, U. Kurum, H. G. Yaglioglu, A. Elmali, and H. V. Demir, *Journal of Physical Chemistry Letters*, 4, 4146 (2013).
- 187 "Bio-Nanohybrids of Quantum Dots and Photoproteins Facilitating Strong Nonradiative Energy Transfer", U. O. S. Seker, E. Mutlugun, P. L. Hernandez-Martinez, V. K. Sharma, V. Lesnyak, N. Gaponik, A. Eychmuller and H. V. Demir *Nanoscale*, 5, 7034 (2013).
- 188 "Quantum Dot Light-Emitting Diode with Quantum Dots Inside the Hole Transporting Layers", K. S. Leck, Y. Divayana, D. W. Zhao, X. Yang, A. P. Abiyasa, E. Mutlugün, Y. Gao, S. W. Liu, S. T. Tan, X. W. Sun and H. V. Demir, *ACS Applied Materials & Interfaces*, 5, 6535 (2013).
- 189 "Generalized Theory of Förster-Type Nonradiative Energy Transfer in Nanostructures with Mixed Dimensionality", P. L. Hernandez-Martinez, A. O. Govorov, H. V. Demir, *Journal of Physical Chemistry C*, 117, 10203 (2013).
- 190 "Morphology-Dependent Energy Transfer of Polyfluorene Nanoparticles Decorating InGaN/GaN Quantum Well Nanopillars", T. Erdem, V. Ibrahimova, D.-W. Jeon, I.-H. Lee, D. Tuncel and H. V. Demir, *Journal of Physical Chemistry C*, 117, 18613 (2013).
- 191 "Plasmonic light-sensitive skins of nanocrystal monolayers", S. Akhavan, K. Gungor, E. Mutlugun and H. V. Demir, *Nanotechnology*, 24, 155201 (2013).
- 192 "AC-driven, color- and brightness-tunable organic light-emitting diodes constructed from an electron only device", Y. Zhao, R. Chen, Y. Gao, K. S. Leck, X. Yang, S. Liu, A. P. Abiyasa, Y. Divayana, E. Mutlugun, S. T. Tan, H. Sun, H. V. Demir, and X. W. Sun, *Organic Electronics*, 14, 3195 (2013).
- 193 "Near resonant and nonresonant third-order optical nonlinearities of colloidal InP/ZnS quantum dots", Y. Wang, X. Yang, T. C. He, Y. Gao, H. V. Demir, X. W. Sun and H. D. Sun, *Applied Physics Letters*, 102, 021917 (2013).
- 194 "An efficient non-Lambertian organic light-emitting diode using imprinted submicron-size zinc oxide pillar arrays", S. W. Liu, J. X. Wang, Y. Divayana, K. Dev, S. T. Tan, H. V. Demir and X. W. Sun, *Applied Physics Letters*, 102, 053305 (2013).
- 195 "InGaN/GaN light-emitting diode with a polarization tunnel junction", Z.-H. Zhang, S. T. Tan, Z. Kyaw, Y. Ji, W. Liu, Z. Ju, N. Hasanov, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 102, 193508 (2013).
- 196 "Improved hole distribution in InGaN/GaN light-emitting diodes with graded thickness quantum barriers", Z. G. Ju, W. Liu, Z.-H. Zhang, S. T. Tan, Y. Ji, Z. B. Kyaw, X. L. Zhang, S. P. Lu, Y. P. Zhang, B. B. Zhu, N. Hasanov, X. W. Sun and H. V. Demir, *Applied Physics Letters*, 102, 243504 (2013).
- 197 "Influence of n-type versus p-type AlGaN electron-blocking layer on InGaN/GaN multiple quantum wells light-emitting diodes", Y. Ji, Z.-H. Zhang, K. Zabu, S. T. Tan, Z. G. Ju, X. L. Zhang, W. Liu, X. W. Sun, and H. V. Demir, *Applied Physics Letters*, 103, 053512 (2013).
- 198 "Excitonic enhancement of nonradiative energy transfer to bulk silicon with the hybridization of cascaded quantum dots", A. Yeltik, B. Guzelturk, P. L. Hernandez-Martinez, S. Akhavan and H. V. Demir, *Applied Physics Letters*, 103, 261103 (2013).
- 199 "P-doping-free InGaN/GaN light-emitting diode driven by three-dimensional hole gas", Z.-H. Zhang, S. T. Tan, Z. Kyaw, W. Liu, Y. Ji, Z. Ju, N. Hasanov, X. W. Sun, and H. V. Demir, *Applied Physics Letters*, 103, 263501 (2013).
- 200 "Dislocation density dependent electroabsorption in epitaxial lateral overgrown InGaN/GaN quantum structures", E. Sari, L. W. Jang, J. H. Baek, I. H. Lee, X. W. Sun and H. V. Demir, *Optics Express*, 21, 1128 (2013).
- 201 "Improved InGaN/GaN light-emitting diodes with a p-GaN/n-GaN/p-GaN/nGaN/p-GaN current-spreading layer", Z.-H. Zhang, S. T. Tan, W. Liu, Z. Ju, K. Zheng, Z. Kyaw, Y. Ji, N. Hasanov, X. W. Sun and H. V. Demir, *Optics Express*, 21, 4958 (2013).
- 202 "A PN-type quantum barrier for InGaN/GaN light emitting diodes", Z.-H. Zhang, S. T. Tan, Z. Ju, Y. Ji, W. Liu, Z. Ju, Z. Kyaw, X. W. Sun and H. V. Demir, *Optics Express*, 21, 15676 (2013).
- 203 "Nanoplasmonic surfaces enabling strong surface-normal electric field enhancement", K. Gungor, E. Unal and H. V. Demir, *Optics Express*, 21, 23097 (2013).
- 204 "Room-temperature larger-scale highly ordered nanorod imprints of ZnO film", Z. Kyaw, W. Jianxiong, K. Dev, S. T. Tan, Z. Ju, Z.-H. Zhang, Y. Ji, N. Hasanov, W. Liu, X. W. Sun, and H. V. Demir, *Optics Express*, 21, 26846 (2013).
- 205 "Optical antenna of comb-shaped split ring architecture for increased field localization in NIR and MIR", V. T. Kilic, V. B. Erturk and H. V. Demir, *Optics Express*, 21, 29455 (2013).

- 206 "Enhanced hole transport in InGaN/GaN multiple quantum well light-emitting diodes with a p-type doped quantum barrier", Y. Ji, Z. H. Zhang, S. T. Tan, Z. G. Ju, Z. Kyaw, N. Hasanov, W. Liu, X. W. Sun and H. V. Demir, *Optics Letters*, 38, 202 (2013).
- 207 "On the Effect of Step-Doped Quantum Barriers in InGaN/GaN Light Emitting Diodes", Z.-H. Zhang, S. T. Tan, Z. Ju, W. Liu, Y. Ji, Z. Kyaw, Y. Dikme, X. W. Sun and H. V. Demir, *Journal of Display Technology*, 9, 226 (2013).
- 208 W. Yin, Q. Chen, S. Feng, T. Tao, L. Huang, M. Trusiak, A. Asundi, C. Zuo, Temporal phase unwrapping using deep learning, *Scientific Reports*, 9 (2019).
- 209 K. Yan, Y. Yu, C. Huang, L. Sui, K. Qian, A. Asundi, Fringe pattern denoising based on deep learning, *Optics Communications*, 437 (2019) 148-152.
- 210 Y. Wen, H. Wang, A. Anand, W. Qu, H. Cheng, Z. Dong, Y. Wu, A fast autofocus method based on virtual differential optical path in digital holography: Theory and applications, *Optics and Lasers in Engineering*, 121 (2019) 133-142.
- 211 Y. Wen, A. Asundi, 3D profile measurement for stepped microstructures using region-based transport of intensity equation, *Measurement Science and Technology*, 30 (2019).
- 212 H. Wang, S. Zhu, A. Asundi, Y. Xu, Experimental characterization of laser trepanning performance enhanced by water-based ultrasonic assistance, *Optics and Laser Technology*, 109 (2019) 547-560.
- 213 C. Wang, Y. Zhang, J. Sun, J. Li, X. Luan, A. Asundi, High-efficiency coupling method of the gradient-index fiber probe and hollow-core photonic crystal fiber, *Applied Sciences (Switzerland)*, 9 (2019).
- 214 C. Wang, J. Sun, C. Yang, B. Kuang, D. Fang, A. Asundi, Research on a novel fabry-perot interferometer model based on the ultra-small gradient-index fiber probe, *Sensors (Switzerland)*, 19 (2019).
- 215 C. Wang, B. Kuang, Z. Wen, J. Sun, Y. Xu, A. Asundi, Further study of coupling efficiency of ultra-small gradient-index fiber probe, *Optik*, 184 (2019) 304-312.
- 216 T. Sun, W. Zheng, Y. Yu, K. Yan, A. Asundi, S. Valukh, Algorithm for surfaces profiles and thickness variation measurement of a transparent plate using a Fizeau interferometer with wavelength tuning, *Applied Sciences (Switzerland)*, 9 (2019).
- 217 T. Sun, W. Zheng, Y. Yu, A.K. Asundi, S. Valyukh, Determination of surface profiles of transparent plates by means of laser interferometry with wavelength tuning, *Optics and Lasers in Engineering*, 115 (2019) 59-66.
- 218 L. Sui, X. Zhao, C. Huang, A. Tian, A. Anand, An optical multiple-image authentication based on transport of intensity equation, *Optics and Lasers in Engineering*, 116 (2019) 116-124.
- 219 G. Lichao, J. Ding, H. Li, L. Du, A.K. Asundi, Attempt to Detect Nano Oil Film on the Surface of Polished KDP Crystal, *Russian Journal of Nondestructive Testing*, 55 (2019) 393-406.
- 220 S. Liansheng, Z. Xiao, H. Chongtian, T. Ailing, A. Krishna Asundi, Silhouette-free interference-based multiple-image encryption using cascaded fractional Fourier transforms, *Optics and Lasers in Engineering*, 113 (2019) 29-37.
- 221 S. Liansheng, W. Jiahao, T. Ailing, A. Asundi, Optical image hiding under framework of computational ghost imaging based on an expansion strategy, *Optics Express*, 27 (2019) 7213-7225.
- 222 Y. Hu, Q. Chen, S. Feng, T. Tao, A. Asundi, C. Zuo, A new microscopic telecentric stereo vision system - Calibration, rectification, and three-dimensional reconstruction, *Optics and Lasers in Engineering*, 113 (2019) 14-22.
- 223 Y. Hao, C. Liu, J. long, P. Cai, Q. Kemao, A. Asundi, Investigation of the systematic axial measurement error caused by the space variance effect in digital holography, *Optics and Lasers in Engineering*, 112 (2019) 16-25.
- 224 C. Zuo, T. Tao, S. Feng, L. Huang, A. Asundi, Q. Chen, Micro Fourier Transform Profilometry (μ FTP): 3D shape measurement at 10,000 frames per second, *Optics and Lasers in Engineering*, 102 (2018) 70-91.
- 225 Z. Zhang, W.N. Li, A. Asundi, G. Barbastathis, Simultaneous measurement and reconstruction tailoring for quantitative phase imaging, *Optics Express*, 26 (2018) 32532-32553.
- 226 Y. Yu, J. Di, W. Qu, A. Asundi, Measurement of thermal effects of diode-pumped solid-state laser by using digital holography, *Applied Optics*, 57 (2018) 5385-5391.
- 227 P. Yang, Z. Wang, W. Zhang, H. Zhao, W. Qu, H. Zhao, A. Asundi, L. Yan, Depth profile measurement with lenslet images of the plenoptic camera, *Optical Engineering*, 57 (2018).
- 228 Y. Yan, P. Yang, L. Yan, J. Wan, Y. Sun, K. Tansey, A. Asundi, H. Zhao, Automatic checkerboard detection for camera calibration using self-correlation, *Journal of Electronic Imaging*, 27 (2018).
- 229 M. Shrestha, A. Asundi, G.K. Lau, Smart Window Based on Electric Unfolding of Microwrinkled TiO_x Nanometric Films, *ACS Photonics*, 5 (2018) 3255-3262.

- 230 S. Sarangapani, A. Patil, Y.K. Ngeow, R. Elsa Mohan, A. Asundi, M.J. Lang, Chitosan nanoparticles' functionality as redox active drugs through cytotoxicity, radical scavenging and cellular behaviour, *Integrative Biology* (United Kingdom), 10 (2018) 313-324.
- 231 S. Liansheng, C. Yin, W. Zhanmin, T. Ailing, A.K. Asundi, Single-pixel correlated imaging with high-quality reconstruction using iterative phase retrieval algorithm, *Optics and Lasers in Engineering*, 111 (2018) 108-113.
- 232 S. Liansheng, C. Yin, L. Bing, T. Ailing, A.K. Asundi, Optical image encryption via high-quality computational ghost imaging using iterative phase retrieval, *Laser Physics Letters*, 15 (2018).
- 233 S. Liansheng, C. Yin, T. Ailing, A.K. Asundi, An optical watermarking scheme with two-layer framework based on computational ghost imaging, *Optics and Lasers in Engineering*, 107 (2018) 38-45.
- 234 L. Huang, M. Idir, C. Zuo, A. Asundi, Review of phase measuring deflectometry, *Optics and Lasers in Engineering*, 107 (2018) 247-257.
- 235 D. Chen, J. Peng, S. Valyukh, A. Asundi, Y. Yu, Measurement of high numerical aperture cylindrical surface with iterative stitching algorithm, *Applied Sciences* (Switzerland), 8 (2018).
- 236 S. Bi, C. Wang, J. Zhu, Z. Yuan, Y. Yu, S. Valyukh, A. Asundi, Influence of no-core fiber on the focusing performance of an ultra-small gradient-index fiber probe, *Optics and Lasers in Engineering*, 107 (2018) 46-53.
- 237 C. Zuo, J. Sun, J. Li, J. Zhang, A. Asundi, Q. Chen, High-resolution transport-of-intensity quantitative phase microscopy with annular illumination, *Scientific Reports*, 7 (2017).
- 238 Z. Zhang, S. Chen, H. Zheng, Z. Zeng, H. Gao, Y. Yu, A.K. Asundi, Full-color holographic 3D display using slicebased fractional Fourier transform combined with free-space Fresnel diffraction, *Applied Optics*, 56 (2017) 5668-5675.
- 239 Z. Zhang, S. Chen, H. Zheng, Z. Zeng, H. Gao, Y. Yu, A.K. Asundi, Full-color holographic 3D display using slice-based fractional Fourier transform combined with free-space Fresnel diffraction: Erratum (*Applied Optics* (2017) 56 (5668-5675) DOI: 10.1364/AO.56.005668), *Applied Optics*, 56 (2017) 7656.
- 240 Z. Zeng, H. Zheng, Y. Yu, A.K. Asundi, S. Valyukh, Full-color holographic display with increased-viewing-angle [Invited], *Applied Optics*, 56 (2017) F112-F120.
- 241 Z. Zeng, H. Zheng, Y. Yu, A.K. Asundi, Off-axis phase-only holograms of 3D objects using accelerated point-based Fresnel diffraction algorithm, *Optics and Lasers in Engineering*, 93 (2017) 47-54.
- 242 Z. Wang, W. Qu, F. Yang, A. Tian, A. Asundi, Absolute measurement of aspheric lens with electrically tunable lens in digital holography, *Optics and Lasers in Engineering*, 88 (2017) 313-318.
- 243 Z. Wang, W. Qu, A. Asundi, A simplified expression for aspheric surface fitting, *Optik*, 140 (2017) 291-298.
- 244 Z. Wang, J. Jiao, W. Qu, F. Yang, H. Li, A. Tian, A. Asundi, Linear programming phase unwrapping for dual-wavelength digital holography, *Applied Optics*, 56 (2017) 424-433.
- 245 C. Wang, J. Sun, F. Sun, J. Zhu, Z. Yuan, A. Asundi, Coupling efficiency of ultra-small gradient-index fiber probe, *Optics Communications*, 389 (2017) 265-269.
- 246 M. Maheshwari, S.C. Tjin, Y. Yang, A. Asundi, Wavelength-shifted chirped FBGs for temperature compensated strain measurement, *Sensors and Actuators, A: Physical*, 265 (2017) 231-235.
- 247 S. Feng, Q. Chen, C. Zuo, T. Tao, Y. Hu, A. Asundi, Motion-oriented high speed 3-D measurements by binocular fringe projection using binary aperiodic patterns, *Optics Express*, 25 (2017) 540-559.
- 248 S. Feng, Q. Chen, C. Zuo, A. Asundi, Fast three-dimensional measurements for dynamic scenes with shiny surfaces, *Optics Communications*, 382 (2017) 18-27.
- 249 C. Zuo, L. Huang, M. Zhang, Q. Chen, A. Asundi, Temporal phase unwrapping algorithms for fringe projection profilometry: A comparative review, *Optics and Lasers in Engineering*, 85 (2016) 84-103.
- 250 R. Zhang, H. Guo, A.K. Asundi, Geometric analysis of influence of fringe directions on phase sensitivities in fringe projection profilometry, *Applied Optics*, 55 (2016) 7675-7687.
- 251 P. Yang, Z. Wang, Y. Yan, W. Qu, H. Zhao, A. Asundi, L. Yan, Close-range photogrammetry with light field camera: From disparity map to absolute distance, *Applied Optics*, 55 (2016) 7477-7486.
- 252 F. Yan, H. Yan, Y. Yu, W. Zhou, A. Asundi, The suppression of phase error by applying window functions to digital holography, *Optics and Lasers in Engineering*, 86 (2016) 206-215.
- 253 Z. Wang, W. Qu, F. Yang, A.K. Asundi, Focal length calibration of an electrically tunable lens by digital holography, *Applied Optics*, 55 (2016) 749-756.
- 254 C. Wang, L.L. Xu, J. Zhu, Z.W. Yuan, Y.J. Yu, A.K. Asundi, A novel integrated fiber-optic interferometer model and its application in micro-displacement measurement, *Optics and Lasers in Engineering*, 86 (2016) 125-131.

- 255 M. Maheshwari, S.C. Tjin, A. Asundi, Combined fiber Bragg grating and fiber optic polarimetric sensors on a single fiber for structural health monitoring of two-dimensional structures, *Structural Health Monitoring*, 15 (2016) 599-609.
- 256 H. Li, G. Feng, P. Yang, Z. Wang, S. Zhou, A. Asundi, Online fringe projection profilometry based on scale-invariant feature transform, *Optical Engineering*, 55 (2016).
- 257 H. Li, G. Feng, T. Bourgade, P. Yang, S. Zhou, A. Asundi, A layered modulation method for pixel matching in online phase measuring profilometry, *Optics Communications*, 377 (2016) 14-23.
- 258 T. Bourgade, S. Jianfei, Z. Wang, R. Elsa, A. Asundi, Compact lens-less digital holographic microscope for MEMS inspection and characterization, *Journal of Visualized Experiments*, 2016 (2016).
- 259 A. Adhikari, K. Dev, A. Asundi, Subwavelength metrological characterization by Mueller matrix polarimeter and finite difference time domain method, *Optics and Lasers in Engineering*, 86 (2016) 242-247.
- 260 C. Zuo, Q. Chen, L. Tian, L. Waller, A. Asundi, Transport of intensity phase retrieval and computational imaging for partially coherent fields: The phase space perspective, *Optics and Lasers in Engineering*, 71 (2015) 20-32.
- 261 Y. Wen, W. Qu, H. Cheng, H. Yan, A. Asundi, Further investigation on the phase stitching and system errors in digital holography, *Applied Optics*, 54 (2015) 266-276.
- 262 M. Maheshwari, S.C. Tjin, W.W. Ching, A. Asundi, FBG and FOPS for local and global structural health monitoring on a single fiber, *Smart Materials and Structures*, 24 (2015).
- 263 M. Maheshwari, S.C. Tjin, A. Asundi, Efficient design of Fiber Optic Polarimetric Sensors for crack location and sizing, *Optics and Laser Technology*, 68 (2015) 182-190.
- 264 L. Huang, M. Idir, C. Zuo, K. Kaznatcheev, L. Zhou, A. Asundi, Comparison of two-dimensional integration methods for shape reconstruction from gradient data, *Optics and Lasers in Engineering*, 64 (2015) 1-11.
- 265 L. Huang, M. Idir, C. Zuo, K. Kaznatcheev, L. Zhou, A. Asundi, Shape reconstruction from gradient data in an arbitrarily-shaped aperture by iterative discrete cosine transforms in Southwell configuration, *Optics and Lasers in Engineering*, 67 (2015) 176-181.
- 266 C. Zuo, Q. Chen, H. Li, W. Qu, A. Asundi, Boundary-artifact-free phase retrieval with the transport of intensity equation II: Applications to microlens characterization, *Optics Express*, 22 (2014) 18310-18324.
- 267 C. Zuo, Q. Chen, L. Huang, A. Asundi, Phase discrepancy analysis and compensation for fast Fourier transform based solution of the transport of intensity equation, *Optics Express*, 22 (2014) 17172-17186.
- 268 C. Zuo, Q. Chen, A. Asundi, Light field moment imaging: Comment, *Optics Letters*, 39 (2014) 654.
- 269 C. Zuo, Q. Chen, A. Asundi, Boundary-artifact-free phase retrieval with the transport of intensity equation: Fast solution with use of discrete cosine transform, *Optics Express*, 22 (2014) 9220-9244.
- 270 H. Yu, S.B. Tor, N.H. Loh, A.K. Asundi, Effect of injection-molding-induced residual stress on microchannel deformation irregularity during thermal bonding, *Journal of Micromechanics and Microengineering*, 24 (2014).
- 271 X. Wu, Y. Yu, W. Zhou, A. Asundi, 4f amplified in-line compressive holography, *Optics Express*, 22 (2014) 19860-19872.
- 272 M.N. Rahman, A. Rajendran, V. Kariwala, A.K. Asundi, Effect of particle concentration and turbidity on particle characterization using digital holography, *Chemical Engineering Research and Design*, 92 (2014) 249-255.
- 273 Y. Dai, P. Li, Y. Liu, A. Asundi, J. Leng, Integrated real-time monitoring system for strain/temperature distribution based on simultaneous wavelength and time division multiplexing technique, *Optics and Lasers in Engineering*, 59 (2014) 19-24.
- 274 A. Asundi, The smart bridge-condition monitoring for military bridges, *Journal of the Indian Institute of Science*, 94 (2014) 261-272.
- 275 C. Zuo, Q. Chen, Y. Yu, A. Asundi, Transport-of-intensity phase imaging using Savitzky-Golay differentiation filter-theory and applications, *Optics Express*, 21 (2013) 5346-5362.
- 276 C. Zuo, Q. Chen, W. Qu, A. Asundi, Phase aberration compensation in digital holographic microscopy based on principal component analysis, *Optics Letters*, 38 (2013) 1724-1726.
- 277 C. Zuo, Q. Chen, W. Qu, A. Asundi, Direct continuous phase demodulation in digital holography with use of the transport-of-intensity equation, *Optics Communications*, 309 (2013) 221-226.
- 278 C. Zuo, Q. Chen, W. Qu, A. Asundi, Noninterferometric single-shot quantitative phase microscopy, *Optics Letters*, 38 (2013) 3538-3541.
- 279 C. Zuo, Q. Chen, W. Qu, A. Asundi, High-speed transport-of-intensity phase microscopy with an electrically tunable lens, *Optics Express*, 21 (2013) 24060-24075.

- 280 C. Zuo, Q. Chen, S. Feng, G. Gu, A. Asundi, Real-time three-dimensional infrared imaging using fringe projection profilometry, *Chinese Optics Letters*, 11 (2013).
- 281 T. Khanam, A. Rajendran, V. Kariwala, A.K. Asundi, Measurement of two-dimensional crystal shape using digital holography, *Crystal Growth and Design*, 13 (2013) 3969-3975.
- 282 L. Huang, Q. Zhang, A. Asundi, Camera calibration with active phase target: Improvement on feature detection and optimization, *Optics Letters*, 38 (2013) 1446-1448.
- 283 L. Huang, Q. Zhang, A. Asundi, Flexible camera calibration using not-measured imperfect target, *Applied Optics*, 52 (2013) 6278-6286.
- 284 L. Huang, A.K. Asundi, Framework for gradient integration by combining radial basis functions method and least-squares method, *Applied Optics*, 52 (2013) 6016-6021.
- 285 G.M. Hegde, V.R. Singh, A. Asundi, Digital holographic microscopy for MEMS/MOEMS device inspection and complete characterization, *Journal of the Indian Institute of Science*, 93 (2013) 85-104.
- 286 Y. Hao, A. Asundi, Impact of charge-coupled device size on axial measurement error in digital holographic system, *Optics Letters*, 38 (2013) 1194-1196.
- 287 K. Dev, A. Asundi, Polarization modulation study of transmissive liquid crystal spatial light modulator using digital holographic polariscope, *Optics and Laser Technology*, 47 (2013) 323-328.
- 288 R. Sidharthan, V.M. Murukeshan, Improved light absorption in thin film solar cell using combination of gap modes and grating back reflector, *Thin Solid Films*, 548 (2013) 581-584.
- 289 K. Sathiyamoorthy, B. Ramya, V.M. Murukeshan, X.W. Sun, Modified two prism SPR sensor configurations to improve the sensitivity of measurement, *Sensors and Actuators, A: Physical*, 191 (2013) 73-77.
- 290 H. H. Liu, Y. Yang, and K. K. Chow, "Enhancement of thermal damage threshold of carbon-nanotube-based saturable absorber by evanescent-field interaction on fiber end," *Optics Express*, 21(16):18975, 2013.
- 291 H. H. Liu and K. K. Chow, "Flat super-continuum generation using carbon nanotube-based mode-locked laser and normal dispersion photonic crystal fibre," *Electronics Letters*, 49(16):1020, 2013.
- 292 H. H. Liu, K. K. Chow, S. Yamashita, and S. Y. Set, "Carbon-nanotube-based Q-switched fiber laser for high pulse generation," *Optics and Laser Technology*, 45:713, 2013.
- 293 Jun Wang, Fei Qin, Dao Hua Zhang, Dongdong Li, Yueke Wang, Xiaonan Shen, Ting Yu, and Jinghua Teng, "Subwavelength superfocusing with a dipole-wave-reciprocal binary zone plate", *Applied Physics Letters*, Vol 102, No 6, pp.061103, 2013.
- 294 Tang, Xiaohong; Yin, Zongyou; Zhang, Baolin. (2013). MOVPE growth of the InP based mid-IR emission quantum dot structures. *Journal of Molecular and Engineering Materials*, 1(2).
- 295 Tang, Xiaohong; Zhang, Baolin; Yin, Zongyou, "Mid-infrared Emissive InAsSb Quantum Dots Grown by Metal-organic Chemical Vapor Deposition", *CrystEngComm*, 15, pp.604-608, 2013.
- 296 Qiao Zhongliang, Tang Xiaohong, Lee Eng Kian Kenneth, Lim Peng Huei and Bo BaoXue, "Large Energy Band-gap Tuning of 980 nm InGaAs/InGaAsP Quantum Well Structure via Quantum Well Intermixing", *Solid-State Electronics*, 79, pp.281--284, 2013.
- 297 Y. L. Tang, X. H. Li, and Q. J. Wang, "High power passively Q-switched thulium fiber laser with distributed stimulated Brillouin scattering", *Optics Letters*, 38, pp.5474-5477, 2013.
- 298 M. Bo, M. Yamanishi, C. Pflugel, Kazuue Fujita, F. Capasso, and Q. J. Wang, "Investigation of tunable single-mode quantum cascade lasers via surface-acoustic wave modulation", *IEEE Journal of Quantum Electronics*, 49, 1053, 2013.
- 299 H. Zhu, X. Chen, L. M. Jin, Q. J. Wang, F. Wang, and S. F. Yu, "Amplified Spontaneous Emission and Lasing from Lanthanide-Doped Up-Conversion Nanocrystals", *ACS Nano*, 12, pp.11420–11426, 2013.
- 300 T. Liu, K. E. Lee and Q. J. Wang, "Microscopic density-matrix analysis on the linewidth enhancement factor of terahertz quantum cascade lasers", *Optics Express*, 21, pp.27804–27815, 2013.
- 301 G. Liang, H. Liang, Y. Zhang, S. P. Khanna, L. Li, A. G. Davies, E. Linfield, S. F. Yu, H. C. Liu, and Q. J. Wang, "Low divergence single-mode surface-emitting concentric-circular-grating terahertz quantum cascade lasers", *Optics Express*, 21, pp.31872-31882, 2013.
- 302 H. Zhu, S. F. Yu, Q. J. Wang, and C. X. Shan, "Directional single-mode emission from coupled whispering gallery resonators realized by using ZnS microbelts", *Optics Letters*, Vol.38, No.9, pp.1527-1529, 2013.
- 303 J. Tao, B. Hu, X. Y. He, and Q. J. Wang, "Tunable Subwavelength Terahertz Plasmonic Stub Waveguide Filters", *IEEE Trans. on Nanotechnology*, 12, 1191-1197, 2013.
- 304 Y. P. Liu, Z. W. Liu, W. S. Liu, and Q. J. Wang, "Temperature dependence of the electrical transport properties in few-layer graphene interconnects", *Nanoscale Research Letters*, 8, 335, 2013.
- 305 H. K. Liang, B. Meng*, G. Z. Liang, Y. D. Chong, Q. J. Wang, and Y. Zhang, "Electrically pumped mid-infrared random lasers", *Advanced Materials*, 25, 6859-6863, 2013.

- 306 T. Liu, K. E. Lee and Q. J. Wang, "Importance of the microscopic effects on the linewidth enhancement factor of quantum cascade lasers", *Optics Express*, 21, 27804–27815, 2013.
- 307 X. H. Li, Y. G. Wang, Y. S. Wang, Y. Z. Zhang, K. Wu, P. P. Shum, X. Yu, Y. Zhang, and Q. J. Wang, "All-normal-dispersion passively mode-locked Yb-doped fiber ring laser based on graphene oxide saturable absorber", *Laser Physics Letters*, 10, 075108, 2013.
- 308 Y. Z. Zhang, T. Liu, X. H. Li, G. Liang, B. Meng, X. N. Hu, and Q. J. Wang, "Broadband high photoresponse from pure monolayer graphene-based photodetector", *Nature Communications*, 4:1811, 2013.
- 309 G. Liang, H. Liang, Y. Zhang, S. P. Khanna, L. Li, A. G. Davies, E. Linfield, D. F. Lim, C. S. Tan, S. F. Yu, H. C. Liu, and Q. J. Wang, "Single-mode surface-emitting concentric-circular-grating terahertz quantum cascade lasers", *Applied Physics Letters*, 102, 031119, 2013.
- 310 Jing Zhu, Tianxun Gong, Atcha Kopwitthaya, Rui Hu, Wing-Cheung Law, Indrajit Roy, Huijie Huang, Ken-Tye Yong, "Synthesis of PEGylated gold nanorods (Au NRs) as absorption nanoprobes for near-infrared optical imaging", *RSC Advances*, early view, 2013.
- 311 Peiyi Song, Danny Jian Hang Tng, Rui Hu, Guimiao Lin, Ellis Meng, Ken-Tye Yong, "An Electrochemically Actuated MEMS Device for Individualized Drug Delivery: an In Vitro Study", *Advanced Healthcare Materials*, Early view(DOI: 10.1002/ad), 2013.
- 312 Jing Liu, Wing-Cheung Law, Jianwei Liu, Rui Hu, Liwei Liu, Jing Zhu, Hongyan Chen, Jianhua Wang, Yazhuo Hu, Ling Ye, Ken-Tye Yong, "Toxicity assessment of phospholipid micelle-encapsulated cadmium-based quantum dots using Kunming mice", *RSC Advances*, 3(6), pp.1768-1773, 2013.
- 313 Rui Hu, Yucheng Wang, Xin Liu, Guimiao Lin, Cher Heng Tan, Wing-Cheung Law, Indrajit Roy, Ken-Tye Yong, "Rational design of multimodal and multifunctional InP quantum dot nanoprobes for cancer: in vitro and in vivo applications", *RSC Advances*, Advance Article(DOI: 10.1039/C3RA231), 2013.
- 314 Kandammathe Valiyaveedu Sreekanth, Shuwen Zeng, Ken-Tye Yong, Ting Yu, "Sensitivity enhanced biosensor using graphene-based one-dimensional photonic crystal", *Sensors and Actuators B-Chemical*, 182, pp.424–428, 2013.
- 315 LuizC de Freitas, Eimear Phelan, Linbo Liu, Joseph Gardecki, Eman Namati, Willian C Warger, Guillermo J Tearney, Gregory W Randolph, "Optical coherence tomography imaging during thyroid and parathyroid surgery: A novel system of tissue identification and differentiation to obviate tissue resection and frozen section", *Head & Neck: Journal of Sciences and Specialties*, , DOI: 10.1002/hed.23452, 2013.
- 316 Liu L, Chu KK, Houser GH, Diephuis BJ, Li Y, Wilsterman EJ, et al., "Method for quantitative study of airway functional microanatomy using Micro-Optical Coherence Tomography", *PLoS ONE*, 8(1), e54473., 2013.
- 317 X Li, W Zhong, A Alphones and C Yu, "Fiber Nonlinearity Tolerance of APSK Modulated DFT-S OFDM Systems", *IEEE Photonics Technology Letters*, 25(23), pp.2304-2307, 2013.
- 318 X Li, W Zhong, A Alphones and C Yu, "Pilot-Aided Channel Equalization in RGI-PDM-CO-OFDM Systems", *IEEE Photonics Technology Letters*, 25(19), pp.1924-1927, 2013.
- 319 R. Lin, M. Zukerman, G. Shen and W. D. Zhong, "Design of Light-Tree Based Optical Inter-Datacenter Networks", *Journal of Optical Communications and Networking*, 5(12), pp.1443 - 1455, 2013.
- 320 R. Lin, W.D. Zhong, S. Bose and M. Zukerman, "Leaking Strategy for Multicast Traffic Grooming in WDM Mesh Networks", *Journal of Lightwave Technology*, 30(12), pp.3709-3719, 2013.
- 321 Y. Liu, K. Wu, N. Li, L. Lan, S. Yoo, X. Wu, P. Shum, S. Zeng, and X. Tan, "Regenerative Er-doped Fiber Amplifier System for High-repetition-rate Optical Pulses," *J. Opt. Soc. Korea* 17, pp.357-361, 2013.
- 322 L. P. Du, D. Y. Tang, G. H. Yuan, S. B. Wei, and X. C. Yuan, "Emission pattern of surface-enhanced Raman scattering from single nanoparticles-film junction", *Applied Physics Letters*, vol 102, 081117, 2013
- 323 S. B. Lu, C. J. Zhao, Y. H. Zou, S. Q. Chen, Y. Chen, Y. Li, H. Zhang, S. C. Wen, and D. Y. Tang, "Third-order nonlinear optical property of Bi₂Se₃", *Optics Express*, vol 21, pp.2072-2082, 2013.
- 324 H. Gong, D. Y. Tang, H. Huang, M. D. Han, T. Sun, J. Zhang, X. P. Qin, J. Ma, "Crystallization kinetics and characterization of nanosized Nd:YAG by a modified sol-gel combustion process", *Journal of Crystal Growth*, vol 362, pp.52-57, 2013.
- 325 Y. F. Song, L. Li, H. Zhang, D. Y. Shen, D. Y. Tang, and K. P. Loh, "Vector multi-soliton operation and interaction in a graphene mode-locked fiber laser", *Optics Express*, vol 21, pp.10010-10018, 2013.
- 326 X Li, A Alphones, W Zhong and C Yu, " Direct Detection Optical OFDM with Zero Padding to Reduce PMD Impairment", *Optics Express*, vol.21, no.18, pp. 20851-20856, Sept . 2013.
- 327 Ken-Tye Yong, Wing-Cheung Law, Rui Hu, Ling Ye, Liwei Liu, Mark T Swihart, Paras N Prasad, "Nanotoxicity assessment of quantum dots: from cellular to primate studies", *Chemical Society Reviews*, vol.42, No.3, pp.1236-1250, 2013.

- 328 Yucheng Wang, Rui Hu, Guimiao Lin, Indrajit Roy, Ken-Tye Yong, "Functionalized Quantum Dots for Biosensing and Bioimaging and Concerns on Toxicity", ACS Applied Materials and Interfaces, Vol.5, No.8, pp.2786-2799, 2013.
- 329 Yucheng Wang, Rui Hu, Guimiao Lin, Wing-Cheung Law, Ken-Tye Yong, "Optimizing the Aqueous Phase Synthesis of CdTe Quantum Dots using Mixed-ligands System and Their Applications for Imaging of Live Cancer Cells and Tumor in vivo", Advance Article, DOI: 10.1039/C3RA410, RSC Advances, 2013.
- 330 Venkatesh Mamidala, Venkatram Nalla, Pradipta Sankar Maiti, Suresh Valiyaveettil, and Wei Ji, "Charge transfer assisted nonlinear optical and photoconductive properties of CdS-AgInS₂ nanocrystals grown in semiconducting polymers", Vol.113, 12, Journal of Applied Physics, p.123107, 2013.
- 331 Jun Gu, Chit Yaw Fu, Beng Koon Ng, Sirajudeen s/o Gulam Razul, Soo Kim Lim, "Quantitative diagnosis of cervical neoplasia using fluorescence lifetime imaging on haematoxylin and eosin stained tissue sections", Journal of Biophotonics, 2013.
- 332 Dongdong Li, Dao Hua Zhang, Changchun Yan, Tao Li, Yueke Wang, Zhengji Xu, Jun Wang, and Fei Qin, "Unidirectional surface plasmon-polariton excitation by a compact slot partially filled with dielectric", New Journal of Chemistry, Vol.21, No.5, pp.5949-5956, 2013.
- 333 Jeremiah L.T. Chen, Nalla Venkatram, Ganga Kannaiyan, Venkatesh Mamidala, Wei Ji and Jagadese Vittal, "Synthesis and nonlinear optical switching of Bi₂S₃ nanorods and enhancement in the Bi₂S₃@Aunanorod-composites", New Journal of Chemistry, Vol.38, pp.985-992, 2013.
- 334 Landobasa Y M Tobing, Liliana Tjahjana, Dao Hua Zhang, "Direct patterning of high density sub-15 nm gold dot arrays using ultrahigh contrast electron beam lithography process on positive tone resist", Nanotechnology, Vol.24, No.7, p.075303, 2013.
- 335 Marcin Gebski, Maciej Dems, Jian Chen, Qi Jie Wang , Dao Hua Zhang, and Tomasz Czyszanowski, "The influence of imperfections and absorption on the performance of a GaAs/AlOx high-contrast grating for monolithic integration with 980 nm GaAs-based VCSELs", Journal of Lightwave Technology, Volume 31, Issue 23, pp. 3853-3858, 2013.
- 336 Zhengji Ni, Dawei Zhang, Haojie Sun, Wennan Wang, DaoHua Zhang, Ting Mei, "The new way of controlling aluminum-doped zinc oxide films properties: ion beam post-treatment with cooling system", Applied Physics A, Volume 112, Issue 3, pp 569-573, September 2013.
- 337 X. F. Yang, Shuxia Zhang, Dao-Hua Zhang, Yuke Wang, Jian Wang, "Subwavelength interference lithography based on a unidirectional surface plasmon coupler", Optical Engineering 52(8), 086109, August 2013.
- 338 Landobasa Y. M. Tobing, Liliana Tjahjana, Dao Hua Zhang, Qing Zhang, Qihua Xiong, "Deep subwavelength fourfold rotationally symmetric split-ring-resonator metamaterials for highly sensitive and robust biosensing platform", Scientific Reports, 3, 2437, 14 Aug. 2013.
- 339 Yueke Wang, Dao Hua Zhang, Jun Wang, Fei Qin, Dongdong Li and Zhengji Xu, "Design of sharp bends with transformation plasmonics", Applied Physice A, Volume 112, Issue 3 (2013), Page 549-553, DOI: 10.1007/s00339-013-7773-5, 2013.
- 340 An Yang, Changchun Yan, Guiming Li, and Dao Hua Zhang, "An analogue of double electromagnetically induced transparency with greatly high group indexes", Chin. Opt. Lett., 2013.
- 341 Dongdong Li, Dao Hua Zhang, Changchun Yan, Tao Li, Yueke Wang, Zhengji Xu, Jun Wang and Fei Qin, "Unidirectional surface plasmon-polariton excitation by a compact slot partially filled with dielectric", Optics Express, Vol. 21, Issue 5, pp. 5949-5956, 2013..
- 342 Jun WANG, Fei QIN, Dao Hua ZHANG, Dongdong LI, Yueke WANG, Xiaonan SHEN, Ting YU and Jinghua TENG, "Subwavelength superfocusing with a dipole-wave-reciprocal binary zone plate", Applied Physics Letters, 102, 061103 (2013); doi: 10.1063/1.4791581.
- 343 L. Y. M. Tobing, L. Tjahjana, D. H. Zhang, "Direct patterning of high density sub-15-nm gold dot arrays using ultrahigh contrast electron beam lithography process on positive tone resist", Nanotechnology 24, 075303, 2013.
- 344 LuizC de Freitas, Eimear Phelan, Linbo Liu, Joseph Gardecki, Eman Namati, Willian C Warger, Guillermo J Tearney, Gregory W Randolph, " Optical coherence tomography imaging during thyroid and parathyroid surgery: A novel system of tissue identification and differentiation to obviate tissue resection and frozen section", Head & Neck: Journal of Sciences and Specialties, DOI: 10.1002/hed.23452, 2013.
- 345 Liu L, Chu KK, Houser GH, Diephuis BJ, Li Y, Wilsterman EJ, et al., "Method for quantitative study of airway functional microanatomy using Micro-Optical Coherence Tomography", PLoS ONE, 8(1), e54473, 2013