

Jiamei Lin

List of Publications by Year in descending order

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Version: 2024-02-01

454
papers

49,652
citations

807

118
h-index

2027

205
g-index

468
all docs

468
docs citations

468
times ranked

29867
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Atomic Layer Graphene as a Saturable Absorber for Ultrafast Pulsed Lasers. <i>Advanced Functional Materials</i> , 2009, 19, 3077-3083. | 7.8 | 2,310 |
| 2 | Broadband graphene polarizer. <i>Nature Photonics</i> , 2011, 5, 411-415. | 15.6 | 961 |
| 3 | Ultrasmall Black Phosphorus Quantum Dots: Synthesis and Use as Photothermal Agents. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 11526-11530. | 7.2 | 906 |
| 4 | Mechanically exfoliated black phosphorus as a new saturable absorber for both Q-switching and Mode-locking laser operation. <i>Optics Express</i> , 2015, 23, 12823. | 1.7 | 866 |
| 5 | From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics. <i>Advanced Functional Materials</i> , 2015, 25, 6996-7002. | 7.8 | 862 |
| 6 | Biodegradable black phosphorus-based nanospheres for in vivo photothermal cancer therapy. <i>Nature Communications</i> , 2016, 7, 12967. | 5.8 | 835 |
| 7 | Black Phosphorus Nanosheets as a Robust Delivery Platform for Cancer Theranostics. <i>Advanced Materials</i> , 2017, 29, 1603276. | 11.1 | 721 |
| 8 | Novel concept of the smart NIR-light controlled drug release of black phosphorus nanostructure for cancer therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 501-506. | 3.3 | 657 |
| 9 | Z-scan measurement of the nonlinear refractive index of graphene. <i>Optics Letters</i> , 2012, 37, 1856. | 1.7 | 589 |
| 10 | Broadband Nonlinear Photonics in Few-Layer MXene Ti_3C_2Tx ($T = O, OH$). <i>Optics Express</i> , 2019, 27, 4400-4410. | 4.4 | 550 |
| 11 | Recent developments in emerging two-dimensional materials and their applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 387-440. | 2.7 | 501 |
| 12 | Advances in nanomaterials for photodynamic therapy applications: Status and challenges. <i>Biomaterials</i> , 2020, 237, 119827. | 5.7 | 484 |
| 13 | Emerging two-dimensional monoelemental materials (Xenes) for biomedical applications. <i>Chemical Society Reviews</i> , 2019, 48, 2891-2912. | 18.7 | 482 |
| 14 | Ultrasensitive detection of miRNA with an antimonene-based surface plasmon resonance sensor. <i>Nature Communications</i> , 2019, 10, 28. | 5.8 | 475 |
| 15 | Antimonene Quantum Dots: Synthesis and Application as Near-Infrared Photothermal Agents for Effective Cancer Therapy. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11896-11900. | 7.2 | 465 |
| 16 | 2D Black Phosphorus-Based Biomedical Applications. <i>Advanced Functional Materials</i> , 2019, 29, 1808306. | 7.8 | 438 |
| 17 | Graphene-Polymer Nanofiber Membrane for Ultrafast Photonics. <i>Advanced Functional Materials</i> , 2010, 20, 782-791. | 7.8 | 434 |
| 18 | Metal-Ion-Modified Black Phosphorus with Enhanced Stability and Transistor Performance. <i>Advanced Materials</i> , 2017, 29, 1703811. | 11.1 | 431 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | MXene/Polymer Membranes: Synthesis, Properties, and Emerging Applications. <i>Chemistry of Materials</i> , 2020, 32, 1703-1747. | 3.2 | 429 |
| 20 | Monolayer graphene as a saturable absorber in a mode-locked laser. <i>Nano Research</i> , 2011, 4, 297-307. | 5.8 | 408 |
| 21 | Microfiber-based few-layer black phosphorus saturable absorber for ultra-fast fiber laser. <i>Optics Express</i> , 2015, 23, 20030. | 1.7 | 399 |
| 22 | 2D Layered Materials: Synthesis, Nonlinear Optical Properties, and Device Applications. <i>Laser and Photonics Reviews</i> , 2019, 13, 1800327. | 4.4 | 353 |
| 23 | Omnipotent phosphorene: a next-generation, two-dimensional nanoplatform for multidisciplinary biomedical applications. <i>Chemical Society Reviews</i> , 2018, 47, 5588-5601. | 18.7 | 352 |
| 24 | Ultrathin 2D Nonlayered Tellurium Nanosheets: Facile Liquid-Phase Exfoliation, Characterization, and Photoresponse with High Performance and Enhanced Stability. <i>Advanced Functional Materials</i> , 2018, 28, 1705833. | 7.8 | 348 |
| 25 | Two-Dimensional MXene (Ti ₃ C ₂)-Integrated Cellulose Hydrogels: Toward Smart Three-Dimensional Network Nanoplatforms Exhibiting Light-Induced Swelling and Bimodal Photothermal/Chemotherapy Anticancer Activity. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 27631-27643. | 4.0 | 346 |
| 26 | Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Self-Powered Photodetector. <i>Advanced Functional Materials</i> , 2017, 27, 1606834. | 7.8 | 342 |
| 27 | Plant cell-surface GIPC sphingolipids sense salt to trigger Ca ²⁺ influx. <i>Nature</i> , 2019, 572, 341-346. | 13.7 | 341 |
| 28 | Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots. <i>Advanced Optical Materials</i> , 2016, 4, 1223-1229. | 3.6 | 326 |
| 29 | A Novel Top-Down Synthesis of Ultrathin 2D Boron Nanosheets for Multimodal Imaging-Guided Cancer Therapy. <i>Advanced Materials</i> , 2018, 30, e1803031. | 11.1 | 318 |
| 30 | Recent advances in two-dimensional-material-based sensing technology toward health and environmental monitoring applications. <i>Nanoscale</i> , 2020, 12, 3535-3559. | 2.8 | 318 |
| 31 | Two-Dimensional Antimonene-Based Photonic Nanomedicine for Cancer Theranostics. <i>Advanced Materials</i> , 2018, 30, e1802061. | 11.1 | 314 |
| 32 | Few-Layer Bismuthene: Sonochemical Exfoliation, Nonlinear Optics and Applications for Ultrafast Photonics with Enhanced Stability. <i>Laser and Photonics Reviews</i> , 2018, 12, 1700221. | 4.4 | 311 |
| 33 | 2D Van Der Waals Binary Materials: Status and Challenges. <i>Advanced Materials</i> , 2019, 31, e1902352. | 11.1 | 303 |
| 34 | Photothermal cancer immunotherapy by erythrocyte membrane-coated black phosphorus formulation. <i>Journal of Controlled Release</i> , 2019, 296, 150-161. | 4.8 | 303 |
| 35 | Photonics and optoelectronics using nano-structured hybrid perovskite media and their optical cavities. <i>Physics Reports</i> , 2019, 795, 1-51. | 10.3 | 303 |
| 36 | Few-Layer Black Phosphorus Nanosheets as Electrocatalysts for Highly Efficient Oxygen Evolution Reaction. <i>Advanced Energy Materials</i> , 2017, 7, 1700396. | 10.2 | 301 |

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|----|--|------|-----------|
| 37 | MXene-Enabled Electrochemical Microfluidic Biosensor: Applications toward Multicomponent Continuous Monitoring in Whole Blood. <i>Advanced Functional Materials</i> , 2019, 29, 1807326. | 7.8 | 301 |
| 38 | Two-Dimensional $\text{CH}_3\text{NH}_3\text{PbI}_3$ Perovskite Nanosheets for Ultrafast Pulsed Fiber Lasers. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12759-12765. | 4.0 | 296 |
| 39 | Recent advances in black phosphorus-based photonics, electronics, sensors and energy devices. <i>Materials Horizons</i> , 2017, 4, 997-1019. | 6.4 | 296 |
| 40 | Sub-200 fs soliton mode-locked fiber laser based on bismuthene saturable absorber. <i>Optics Express</i> , 2018, 26, 22750. | 1.7 | 289 |
| 41 | Emerging Trends in Phosphorene Fabrication towards Next Generation Devices. <i>Advanced Science</i> , 2017, 4, 1600305. | 5.6 | 285 |
| 42 | Facile Synthesis of Black Phosphorus: an Efficient Electrocatalyst for the Oxygen Evolving Reaction. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 13849-13853. | 7.2 | 269 |
| 43 | Broadband Nonlinear Optical Response in Few-Layer Antimonene and Antimonene Quantum Dots: A Promising Optical Kerr Media with Enhanced Stability. <i>Advanced Optical Materials</i> , 2017, 5, 1700301. | 3.6 | 269 |
| 44 | Ultrathin Metal-Organic Framework: An Emerging Broadband Nonlinear Optical Material for Ultrafast Photonics. <i>Advanced Optical Materials</i> , 2018, 6, 1800561. | 3.6 | 268 |
| 45 | Black phosphorus as saturable absorber for the Q-switched Er:ZBLAN fiber laser at 28 μm . <i>Optics Express</i> , 2015, 23, 24713. | 1.7 | 259 |
| 46 | Photonics and optoelectronics of two-dimensional materials beyond graphene. <i>Nanotechnology</i> , 2016, 27, 462001. | 1.3 | 259 |
| 47 | High-Performance Photo-Electrochemical Photodetector Based on Liquid-Exfoliated Few-Layered InSe Nanosheets with Enhanced Stability. <i>Advanced Functional Materials</i> , 2018, 28, 1705237. | 7.8 | 258 |
| 48 | Many-Body Complexes in 2D Semiconductors. <i>Advanced Materials</i> , 2019, 31, e1706945. | 11.1 | 255 |
| 49 | Robust SnO_2 Nanoparticle-Impregnated Carbon Nanofibers with Outstanding Electrochemical Performance for Advanced Sodium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8901-8905. | 7.2 | 252 |
| 50 | TiL_4 -Coordinated Black Phosphorus Quantum Dots as an Efficient Contrast Agent for In Vivo Photoacoustic Imaging of Cancer. <i>Small</i> , 2017, 13, 1602896. | 5.2 | 251 |
| 51 | Broadband Nonlinear Photoresponse of 2D TiS_2 for Ultrashort Pulse Generation and All-Optical Thresholding Devices. <i>Advanced Optical Materials</i> , 2018, 6, 1701166. | 3.6 | 248 |
| 52 | Small gold nanorods laden macrophages for enhanced tumor coverage in photothermal therapy. <i>Biomaterials</i> , 2016, 74, 144-154. | 5.7 | 247 |
| 53 | Two-dimensional material-based saturable absorbers: towards compact visible-wavelength all-fiber pulsed lasers. <i>Nanoscale</i> , 2016, 8, 1066-1072. | 2.8 | 246 |
| 54 | Many-body Effect, Carrier Mobility, and Device Performance of Hexagonal Arsenene and Antimonene. <i>Chemistry of Materials</i> , 2017, 29, 2191-2201. | 3.2 | 244 |

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|----|--|------|-----------|
| 55 | Black phosphorus: a two-dimension saturable absorption material for mid-infrared Q-switched and mode-locked fiber lasers. <i>Scientific Reports</i> , 2016, 6, 30361. | 1.6 | 242 |
| 56 | Biocompatible and biodegradable inorganic nanostructures for nanomedicine: Silicon and black phosphorus. <i>Nano Today</i> , 2019, 25, 135-155. | 6.2 | 240 |
| 57 | Emerging 2D materials beyond graphene for ultrashort pulse generation in fiber lasers. <i>Nanoscale</i> , 2019, 11, 2577-2593. | 2.8 | 236 |
| 58 | Flexible Transparent Electronic Gas Sensors. <i>Small</i> , 2016, 12, 3748-3756. | 5.2 | 234 |
| 59 | Present perspectives of broadband photodetectors based on nanobelts, nanoribbons, nanosheets and the emerging 2D materials. <i>Nanoscale</i> , 2016, 8, 6410-6434. | 2.8 | 233 |
| 60 | Ultrasmall Bismuth Quantum Dots: Facile Liquid-Phase Exfoliation, Characterization, and Application in High-Performance UV-Vis Photodetector. <i>ACS Photonics</i> , 2018, 5, 621-629. | 3.2 | 230 |
| 61 | Black Phosphorus-Polymer Composites for Pulsed Lasers. <i>Advanced Optical Materials</i> , 2015, 3, 1447-1453. | 3.6 | 228 |
| 62 | Flexible Transparent Films Based on Nanocomposite Networks of Polyaniline and Carbon Nanotubes for High-Performance Gas Sensing. <i>Small</i> , 2015, 11, 5409-5415. | 5.2 | 225 |
| 63 | Microwave and optical saturable absorption in graphene. <i>Optics Express</i> , 2012, 20, 23201. | 1.7 | 220 |
| 64 | Few-layer black phosphorus based saturable absorber mirror for pulsed solid-state lasers. <i>Optics Express</i> , 2015, 23, 22643. | 1.7 | 220 |
| 65 | Recent Progress of Two-Dimensional Thermoelectric Materials. <i>Nano-Micro Letters</i> , 2020, 12, 36. | 14.4 | 218 |
| 66 | Short-Chain Ligand-Passivated Stable CsPb ₃ Quantum Dot for All-Inorganic Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2019, 29, 1900991. | 7.8 | 216 |
| 67 | Recent Advances in Functional 2D MXene-Based Nanostructures for Next-Generation Devices. <i>Advanced Functional Materials</i> , 2020, 30, 2005223. | 7.8 | 216 |
| 68 | Few-Layer Tin Sulfide: A Promising Black-Phosphorus Analogue 2D Material with Exceptionally Large Nonlinear Optical Response, High Stability, and Applications in All-Optical Switching and Wavelength Conversion. <i>Advanced Optical Materials</i> , 2018, 6, 1700985. | 3.6 | 212 |
| 69 | Graphene-Bi ₂ Te ₃ Heterostructure as Saturable Absorber for Short Pulse Generation. <i>ACS Photonics</i> , 2015, 2, 832-841. | 3.2 | 208 |
| 70 | Graphene oxide/black phosphorus nanoflake aerogels with robust thermo-stability and significantly enhanced photothermal properties in air. <i>Nanoscale</i> , 2017, 9, 8096-8101. | 2.8 | 207 |
| 71 | Simultaneous voltammetric determination of acetaminophen and isoniazid using MXene modified screen-printed electrode. <i>Biosensors and Bioelectronics</i> , 2019, 130, 315-321. | 5.3 | 207 |
| 72 | Metabolizable Ultrathin Bi ₂ Se ₃ Nanosheets in Imaging-Guided Photothermal Therapy. <i>Small</i> , 2016, 12, 4136-4145. | 5.2 | 203 |

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|----|--|------|-----------|
| 73 | Vector soliton fiber laser passively mode locked by few layer black phosphorus-based optical saturable absorber. <i>Optics Express</i> , 2016, 24, 25933. | 1.7 | 200 |
| 74 | Conceptually Novel Black Phosphorus/Cellulose Hydrogels as Promising Photothermal Agents for Effective Cancer Therapy. <i>Advanced Healthcare Materials</i> , 2018, 7, e1701510. | 3.9 | 188 |
| 75 | Kerr Nonlinearity in 2D Graphdiyne for Passive Photonic Diodes. <i>Advanced Materials</i> , 2019, 31, e1807981. | 11.1 | 187 |
| 76 | Highly Efficient and Air-Stable Infrared Photodetector Based on 2D Layered Grapheneâ€“Black Phosphorus Heterostructure. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 36137-36145. | 4.0 | 185 |
| 77 | Recent advances in emerging Janus two-dimensional materials: from fundamental physics to device applications. <i>Journal of Materials Chemistry A</i> , 2020, 8, 8813-8830. | 5.2 | 185 |
| 78 | Black Phosphorus Based All-Optical-Signal-Processing: Toward High Performances and Enhanced Stability. <i>ACS Photonics</i> , 2017, 4, 1466-1476. | 3.2 | 173 |
| 79 | Graphdiyneâ€“Based Flexible Photodetectors with High Responsivity and Detectivity. <i>Advanced Materials</i> , 2020, 32, e2001082. | 11.1 | 171 |
| 80 | Recent Advances in Emerging 2D Materialâ€“Based Gas Sensors: Potential in Disease Diagnosis. <i>Advanced Materials Interfaces</i> , 2019, 6, 1901329. | 1.9 | 169 |
| 81 | Photonics and Optoelectronics of 2D Metalâ€“Halide Perovskites. <i>Small</i> , 2018, 14, e1800682. | 5.2 | 168 |
| 82 | New Strategy for Polysulfide Protection Based on Atomic Layer Deposition of TiO ₂ onto Ferroelectricâ€“Encapsulated Cathode: Toward Ultrastable Freeâ€“Standing Room Temperature Sodiumâ€“Sulfur Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1705537. | 7.8 | 167 |
| 83 | 2D Tellurium Based Highâ€“Performance Allâ€“Optical Nonlinear Photonic Devices. <i>Advanced Functional Materials</i> , 2019, 29, 1806346. | 7.8 | 165 |
| 84 | All-Optical Switching of Two Continuous Waves in Few Layer Bismuthene Based on Spatial Cross-Phase Modulation. <i>ACS Photonics</i> , 2017, 4, 2852-2861. | 3.2 | 164 |
| 85 | Recent Advances in Oxidation Stable Chemistry of 2D MXenes. <i>Advanced Materials</i> , 2022, 34, e2107554. | 11.1 | 163 |
| 86 | 2D Nonlayered Selenium Nanosheets: Facile Synthesis, Photoluminescence, and Ultrafast Photonics. <i>Advanced Optical Materials</i> , 2017, 5, 1700884. | 3.6 | 162 |
| 87 | A black/red phosphorus hybrid as an electrode material for high-performance Li-ion batteries and supercapacitors. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6581-6588. | 5.2 | 160 |
| 88 | Self-Standing Polypyrrole/Black Phosphorus Laminated Film: Promising Electrode for Flexible Supercapacitor with Enhanced Capacitance and Cycling Stability. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 3538-3548. | 4.0 | 159 |
| 89 | Critical coupling with graphene-based hyperbolic metamaterials. <i>Scientific Reports</i> , 2014, 4, 5483. | 1.6 | 158 |
| 90 | ROS-Mediated Selective Killing Effect of Black Phosphorus: Mechanistic Understanding and Its Guidance for Safe Biomedical Applications. <i>Nano Letters</i> , 2020, 20, 3943-3955. | 4.5 | 158 |

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|-----|--|------|-----------|
| 91 | High Efficiency Mesoscopic Solar Cells Using CsPbI ₃ Perovskite Quantum Dots Enabled by Chemical Interface Engineering. <i>Journal of the American Chemical Society</i> , 2020, 142, 3775-3783. | 6.6 | 156 |
| 92 | All-Optical Phosphorene Phase Modulator with Enhanced Stability Under Ambient Conditions. <i>Laser and Photonics Reviews</i> , 2018, 12, 1800016. | 4.4 | 155 |
| 93 | Black-phosphorus-analogue tin monosulfide: an emerging optoelectronic two-dimensional material for high-performance photodetection with improved stability under ambient/harsh conditions. <i>Journal of Materials Chemistry C</i> , 2018, 6, 9582-9593. | 2.7 | 153 |
| 94 | Black phosphorus quantum dot based novel siRNA delivery systems in human pluripotent teratoma PA-1 cells. <i>Journal of Materials Chemistry B</i> , 2017, 5, 5433-5440. | 2.9 | 152 |
| 95 | Healable, Transparent, Room-Temperature Electronic Sensors Based on Carbon Nanotube Network-Coated Polyelectrolyte Multilayers. <i>Small</i> , 2015, 11, 5807-5813. | 5.2 | 151 |
| 96 | Size-dependent nonlinear optical properties of black phosphorus nanosheets and their applications in ultrafast photonics. <i>Journal of Materials Chemistry C</i> , 2017, 5, 3007-3013. | 2.7 | 150 |
| 97 | Fluorinated Phosphorene: Electrochemical Synthesis, Atomistic Fluorination, and Enhanced Stability. <i>Small</i> , 2017, 13, 1702739. | 5.2 | 150 |
| 98 | Hetero-MXenes: Theory, Synthesis, and Emerging Applications. <i>Advanced Materials</i> , 2021, 33, e2004129. | 11.1 | 150 |
| 99 | Ultrathin 2D Transition Metal Carbides for Ultrafast Pulsed Fiber Lasers. <i>ACS Photonics</i> , 2018, 5, 1808-1816. | 3.2 | 148 |
| 100 | Skyrmion dynamics in a frustrated ferromagnetic film and current-induced helicity locking-unlocking transition. <i>Nature Communications</i> , 2017, 8, 1717. | 5.8 | 147 |
| 101 | Biocompatible Two-Dimensional Titanium Nanosheets for Multimodal Imaging-Guided Cancer Theranostics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 22129-22140. | 4.0 | 147 |
| 102 | Insights from nanotechnology in COVID-19 treatment. <i>Nano Today</i> , 2021, 36, 101019. | 6.2 | 146 |
| 103 | Nanoscale Parallel Circuitry Based on Interpenetrating Conductive Assembly for Flexible and High-Power Zinc Ion Battery. <i>Advanced Functional Materials</i> , 2019, 29, 1901336. | 7.8 | 145 |
| 104 | Black phosphorus-based photothermal therapy with aCD47-mediated immune checkpoint blockade for enhanced cancer immunotherapy. <i>Light: Science and Applications</i> , 2020, 9, 161. | 7.7 | 145 |
| 105 | Recent progress in ultrafast lasers based on 2D materials as a saturable absorber. <i>Applied Physics Reviews</i> , 2019, 6, . | 5.5 | 143 |
| 106 | Layered Oxide Cathodes Promoted by Structure Modulation Technology for Sodium-Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2001334. | 7.8 | 142 |
| 107 | Strong Depletion in Hybrid Perovskite p-n Junctions Induced by Local Electronic Doping. <i>Advanced Materials</i> , 2018, 30, e1705792. | 11.1 | 141 |
| 108 | Two-Dimensional Tellurium: Progress, Challenges, and Prospects. <i>Nano-Micro Letters</i> , 2020, 12, 99. | 14.4 | 139 |

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|-----|--|-----|-----------|
| 109 | Vector dissipative solitons in graphene mode locked fiber lasers. Optics Communications, 2010, 283, 3334-3338. | 1.0 | 138 |
| 110 | Chiral Perovskites: Promising Materials toward Next-Generation Optoelectronics. Small, 2019, 15, e1902237. | 5.2 | 137 |
| 111 | Stabilization of Black Phosphorous Quantum Dots in PMMA Nanofiber Film and Broadband Nonlinear Optics and Ultrafast Photonics Application. Advanced Functional Materials, 2017, 27, 1702437. | 7.8 | 136 |
| 112 | Vector multi-soliton operation and interaction in a graphene mode-locked fiber laser. Optics Express, 2013, 21, 10010. | 1.7 | 135 |
| 113 | Solar-Inspired Water Purification Based on Emerging 2D Materials: Status and Challenges. Solar Rrl, 2020, 4, 1900400. | 3.1 | 133 |
| 114 | Eradication of tumor growth by delivering novel photothermal selenium-coated tellurium nanoheterojunctions. Science Advances, 2020, 6, eaay6825. | 4.7 | 126 |
| 115 | NIR-Responsive Inorganic 2D Nanomaterials for Cancer Photothermal Therapy: Recent Advances and Future Challenges. Advanced Functional Materials, 2021, 31, 2101625. | 7.8 | 126 |
| 116 | Few-Layer Phosphorene-Decorated Microfiber for All-Optical Thresholding and Optical Modulation. Advanced Optical Materials, 2017, 5, 1700026. | 3.6 | 125 |
| 117 | 2 $\frac{1}{4}$ m passively Q-switched laser based on black phosphorus. Optical Materials Express, 2016, 6, 2374. | 1.6 | 124 |
| 118 | THz photonics in two dimensional materials and metamaterials: properties, devices and prospects. Journal of Materials Chemistry C, 2018, 6, 1291-1306. | 2.7 | 124 |
| 119 | An All-Optical, Actively Q-Switched Fiber Laser by an Antimonene-Based Optical Modulator. Laser and Photonics Reviews, 2019, 13, 1800313. | 4.4 | 122 |
| 120 | Enhanced Photodetection Properties of Tellurium@Selenium Roll-to-Roll Nanotube Heterojunctions. Small, 2019, 15, e1900902. | 5.2 | 120 |
| 121 | MXenes: Synthesis, Optical Properties, and Applications in Ultrafast Photonics. Small, 2021, 17, e2006054. | 5.2 | 119 |
| 122 | Polarization rotation vector solitons in a graphene mode-locked fiber laser. Optics Express, 2012, 20, 27283. | 1.7 | 118 |
| 123 | Carbon-based nanozymes for biomedical applications. Nano Research, 2021, 14, 570-583. | 5.8 | 118 |
| 124 | MXene-Based Nonlinear Optical Information Converter for All-Optical Modulator and Switcher. Laser and Photonics Reviews, 2018, 12, 1800215. | 4.4 | 117 |
| 125 | MXene $Ti_3C_2T_x$: A Promising Photothermal Conversion Material and Application in All-Optical Modulation and All-Optical Information Loading. Advanced Optical Materials, 2019, 7, 1900060. | 3.6 | 115 |
| 126 | Fundamental and harmonic mode-locking at 21 $\frac{1}{4}$ m with black phosphorus saturable absorber. Optics Express, 2017, 25, 16916. | 1.7 | 114 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | Recent Developments in Stability and Passivation Techniques of Phosphorene toward Next-Generation Device Applications. <i>Advanced Functional Materials</i> , 2019, 29, 1903419. | 7.8 | 113 |
| 128 | Recent Progress in 2D Material-Based Saturable Absorbers for All Solid-State Pulsed Bulk Lasers. <i>Laser and Photonics Reviews</i> , 2020, 14, 1900240. | 4.4 | 111 |
| 129 | Few-layer selenium-doped black phosphorus: synthesis, nonlinear optical properties and ultrafast photonics applications. <i>Journal of Materials Chemistry C</i> , 2017, 5, 6129-6135. | 2.7 | 109 |
| 130 | Mid-Infrared Photonics Using 2D Materials: Status and Challenges. <i>Laser and Photonics Reviews</i> , 2020, 14, 1900098. | 4.4 | 106 |
| 131 | Ultrathin GeSe Nanosheets: From Systematic Synthesis to Studies of Carrier Dynamics and Applications for a High-Performance UV-Vis Photodetector. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 4278-4287. | 4.0 | 105 |
| 132 | A flexible transparent colorimetric wrist strap sensor. <i>Nanoscale</i> , 2017, 9, 869-874. | 2.8 | 104 |
| 133 | Two-dimensional tellurium-polymer membrane for ultrafast photonics. <i>Nanoscale</i> , 2019, 11, 6235-6242. | 2.8 | 104 |
| 134 | Chemistry, Functionalization, and Applications of Recent Monoelemental Two-Dimensional Materials and Their Heterostructures. <i>Chemical Reviews</i> , 2022, 122, 1127-1207. | 23.0 | 103 |
| 135 | Epitaxial nucleation and lateral growth of high-crystalline black phosphorus films on silicon. <i>Nature Communications</i> , 2020, 11, 1330. | 5.8 | 102 |
| 136 | Emerging Mono-Elemental Bismuth Nanostructures: Controlled Synthesis and Their Versatile Applications. <i>Advanced Functional Materials</i> , 2021, 31, 2007584. | 7.8 | 102 |
| 137 | Current status and prospects of memristors based on novel 2D materials. <i>Materials Horizons</i> , 2020, 7, 1495-1518. | 6.4 | 101 |
| 138 | Additive-mediated intercalation and surface modification of MXenes. <i>Chemical Society Reviews</i> , 2022, 51, 2972-2990. | 18.7 | 101 |
| 139 | Black phosphorus-based van der Waals heterostructures for mid-infrared light-emission applications. <i>Light: Science and Applications</i> , 2020, 9, 114. | 7.7 | 100 |
| 140 | Graphdiyne-Polymer Nanocomposite as a Broadband and Robust Saturable Absorber for Ultrafast Photonics. <i>Laser and Photonics Reviews</i> , 2020, 14, 1900367. | 4.4 | 99 |
| 141 | Nonlinear Few-Layer Antimonene-Based All-Optical Signal Processing: Ultrafast Optical Switching and High-Speed Wavelength Conversion. <i>Advanced Optical Materials</i> , 2018, 6, 1701287. | 3.6 | 97 |
| 142 | Topological Insulator Solution Filled in Photonic Crystal Fiber for Passive Mode-Locked Fiber Laser. <i>IEEE Photonics Technology Letters</i> , 2015, 27, 264-267. | 1.3 | 96 |
| 143 | Niobium Carbide MXenes with Broad-Band Nonlinear Optical Response and Ultrafast Carrier Dynamics. <i>ACS Nano</i> , 2020, 14, 10492-10502. | 7.3 | 96 |
| 144 | Field-Induced n-Doping of Black Phosphorus for CMOS Compatible 2D Logic Electronics with High Electron Mobility. <i>Advanced Functional Materials</i> , 2017, 27, 1702211. | 7.8 | 95 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Schottky Barriers in Bilayer Phosphorene Transistors. ACS Applied Materials & Interfaces, 2017, 9, 12694-12705. | 4.0 | 94 |
| 146 | Antimonene Quantum Dots: Synthesis and Application as Near-Infrared Photothermal Agents for Effective Cancer Therapy. Angewandte Chemie, 2017, 129, 12058-12062. | 1.6 | 93 |
| 147 | Recent Advances in Semiconducting Monoelemental Selenium Nanostructures for Device Applications. Advanced Functional Materials, 2020, 30, 2003301. | 7.8 | 93 |
| 148 | Recent advances in doping engineering of black phosphorus. Journal of Materials Chemistry A, 2020, 8, 5421-5441. | 5.2 | 93 |
| 149 | Two-Dimensional Borophene: Properties, Fabrication, and Promising Applications. Research, 2020, 2020, 2624617. | 2.8 | 93 |
| 150 | Facile Synthesis of Black Phosphorus: an Efficient Electrocatalyst for the Oxygen Evolving Reaction. Angewandte Chemie, 2016, 128, 14053-14057. | 1.6 | 92 |
| 151 | Black phosphorus nanosheets for rapid microRNA detection. Nanoscale, 2018, 10, 5060-5064. | 2.8 | 91 |
| 152 | Mechano-Based Transductive Sensing for Wearable Healthcare. Small, 2018, 14, e1702933. | 5.2 | 91 |
| 153 | High-Speed and High-Responsivity Hybrid Silicon/Black Phosphorus Waveguide Photodetectors at 2 μm . Laser and Photonics Reviews, 2019, 13, 1900032. | 4.4 | 91 |
| 154 | 2D Material Chemistry: Graphdiyne-based Biochemical Sensing. Chemical Research in Chinese Universities, 2020, 36, 622-630. | 1.3 | 91 |
| 155 | Broadband ultrafast nonlinear optical response of few-layers graphene: toward the mid-infrared regime. Photonics Research, 2015, 3, 214. | 3.4 | 90 |
| 156 | Perovskite CsPbX ₃ : A Promising Nonlinear Optical Material and Its Applications for Ambient All-Optical Switching with Enhanced Stability. Advanced Optical Materials, 2018, 6, 1800400. | 3.6 | 90 |
| 157 | Black Phosphorous/Indium Selenide Photoconductive Detector for Visible and Near-Infrared Light with High Sensitivity. Advanced Optical Materials, 2019, 7, 1900020. | 3.6 | 89 |
| 158 | Recent Advances in Strain-Induced Piezoelectric and Piezoresistive Effect-Engineered 2D Semiconductors for Adaptive Electronics and Optoelectronics. Nano-Micro Letters, 2020, 12, 106. | 14.4 | 89 |
| 159 | Dual-wavelength Q-switched Er:SrF ₂ laser with a black phosphorus absorber in the mid-infrared region. Optics Express, 2016, 24, 30289. | 1.7 | 88 |
| 160 | On-Nanowire Axial Heterojunction Design for High-Performance Photodetectors. ACS Nano, 2016, 10, 8474-8481. | 7.3 | 88 |
| 161 | 2D Nanomaterials for Tissue Engineering and Regenerative Nanomedicines: Recent Advances and Future Challenges. Advanced Healthcare Materials, 2021, 10, e2001743. | 3.9 | 88 |
| 162 | Few-Layer Topological Insulator for All-Optical Signal Processing Using the Nonlinear Kerr Effect. Advanced Optical Materials, 2015, 3, 1769-1778. | 3.6 | 87 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 163 | Inkjet-printed MXene micro-scale devices for integrated broadband ultrafast photonics. Npj 2D Materials and Applications, 2019, 3, . | 3.9 | 87 |
| 164 | Memristive devices based on emerging two-dimensional materials beyond graphene. Nanoscale, 2019, 11, 12413-12435. | 2.8 | 87 |
| 165 | MZI-Based All-Optical Modulator Using MXene Ti ₃ C ₂ T _x (T =) Tj ETOq1 1 0.784314 | 3.0 | 87 |
| 166 | Reassembly of ⁸⁹ Zr-Labeled Cancer Cell Membranes into Multicompartment Membrane-Derived Liposomes for PET-Trackable Tumor-Targeted Theranostics. Advanced Materials, 2018, 30, e1704934. | 11.1 | 86 |
| 167 | Nonlinear Few-Layer MXene-Assisted All-Optical Wavelength Conversion at Telecommunication Band. Advanced Optical Materials, 2019, 7, 1801777. | 3.6 | 86 |
| 168 | Polydopamine-functionalized black phosphorus quantum dots for cancer theranostics. Applied Materials Today, 2019, 15, 297-304. | 2.3 | 86 |
| 169 | Graphene/phosphorene nano-heterojunction: facile synthesis, nonlinear optics, and ultrafast photonics applications with enhanced performance. Photonics Research, 2017, 5, 662. | 3.4 | 85 |
| 170 | In-plane anisotropic electronics based on low-symmetry 2D materials: progress and prospects. Nanoscale Advances, 2020, 2, 109-139. | 2.2 | 84 |
| 171 | Ultrafast Relaxation Dynamics and Nonlinear Response of Few-Layer Niobium Carbide MXene. Small Methods, 2020, 4, 2000250. | 4.6 | 84 |
| 172 | Highly stable MXene (V ₂ CT _x)-based harmonic pulse generation. Nanophotonics, 2020, 9, 2577-2585. | 2.9 | 83 |
| 173 | Broadband photodetectors based on 2D group IVA metal chalcogenides semiconductors. Applied Materials Today, 2019, 15, 115-138. | 2.3 | 82 |
| 174 | Two-Dimensional Black Phosphorus Nanomaterials: Emerging Advances in Electrochemical Energy Storage Science. Nano-Micro Letters, 2020, 12, 179. | 14.4 | 82 |
| 175 | Monolayer tellurene "metal contacts. Journal of Materials Chemistry C, 2018, 6, 6153-6163. | 2.7 | 81 |
| 176 | Porphyrin-palladium hydride MOF nanoparticles for tumor-targeting photoacoustic imaging-guided hydrogenothermal cancer therapy. Nanoscale Horizons, 2019, 4, 1185-1193. | 4.1 | 81 |
| 177 | Band Structure Engineering in 2D Materials for Optoelectronic Applications. Advanced Materials Technologies, 2018, 3, 1800072. | 3.0 | 78 |
| 178 | Electrical Contacts in Monolayer Arsenene Devices. ACS Applied Materials & Interfaces, 2017, 9, 29273-29284. | 4.0 | 76 |
| 179 | 2D GeP as a Novel Broadband Nonlinear Optical Material for Ultrafast Photonics. Laser and Photonics Reviews, 2019, 13, 1900123. | 4.4 | 76 |
| 180 | Tuning of Interlayer Coupling in Large-Area Graphene/WSe ₂ van der Waals Heterostructure via Ion Irradiation: Optical Evidences and Photonic Applications. ACS Photonics, 2017, 4, 1531-1538. | 3.2 | 75 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 181 | High-performance polarization-sensitive photodetectors on two-dimensional In_2Se_3 -InSe. National Science Review, 2022, 9, nwab098. | 4.6 | 75 |
| 182 | Refractive Index Sensors Based on $\text{Ti}_3\text{C}_2\text{T}_x$ MXene Fibers. ACS Applied Nano Materials, 2020, 3, 303-311. | 2.4 | 74 |
| 183 | Monolayer Bismuthene-Metal Contacts: A Theoretical Study. ACS Applied Materials & Interfaces, 2017, 9, 23128-23140. | 4.0 | 73 |
| 184 | An antimonene/Cp*Rh(phen)Cl/black phosphorus hybrid nanosheet-based Z-scheme artificial photosynthesis for enhanced photo/bio-catalytic CO_2 reduction. Journal of Materials Chemistry A, 2020, 8, 323-333. | 5.2 | 71 |
| 185 | Recent advances in solution-processed photodetectors based on inorganic and hybrid photo-active materials. Nanoscale, 2020, 12, 2201-2227. | 2.8 | 71 |
| 186 | Black phosphorus: A novel nanoplatform with potential in the field of bio-photonic nanomedicine. Journal of Innovative Optical Health Sciences, 2018, 11, . | 0.5 | 70 |
| 187 | Switchable dual-wavelength Q-switched fiber laser using multilayer black phosphorus as a saturable absorber. Photonics Research, 2018, 6, 198. | 3.4 | 70 |
| 188 | 2D Materials Enabled Next-Generation Integrated Optoelectronics: from Fabrication to Applications. Advanced Science, 2021, 8, e2003834. | 5.6 | 70 |
| 189 | An overview of the optical properties and applications of black phosphorus. Nanoscale, 2020, 12, 3513-3534. | 2.8 | 69 |
| 190 | Pulsed Lasers Employing Solution-Processed Plasmonic Cu_3P Colloidal Nanocrystals. Advanced Materials, 2016, 28, 3535-3542. | 11.1 | 68 |
| 191 | A fully inkjet-printed transparent humidity sensor based on a $\text{Ti}_3\text{C}_2/\text{Ag}$ hybrid for touchless sensing of finger motion. Nanoscale, 2019, 11, 21522-21531. | 2.8 | 68 |
| 192 | A bismuthene-based multifunctional all-optical phase and intensity modulator enabled by photothermal effect. Journal of Materials Chemistry C, 2019, 7, 871-878. | 2.7 | 67 |
| 193 | Recent advances in two-dimensional ferromagnetism: materials synthesis, physical properties and device applications. Nanoscale, 2020, 12, 2309-2327. | 2.8 | 67 |
| 194 | Brain-targeted delivery shuttled by black phosphorus nanostructure to treat Parkinson's disease. Biomaterials, 2020, 260, 120339. | 5.7 | 66 |
| 195 | Xenes as an Emerging 2D Monoelemental Family: Fundamental Electrochemistry and Energy Applications. Advanced Functional Materials, 2020, 30, 2002885. | 7.8 | 66 |
| 196 | Graphene/MoS ₂ /Graphene Vertical Heterostructure-Based Broadband Photodetector with High Performance. Advanced Materials Interfaces, 2021, 8, 2001730. | 1.9 | 65 |
| 197 | 2D Materials-Based Quantum Dots: Gateway Towards Next-Generation Optical Devices. Advanced Optical Materials, 2017, 5, 1700257. | 3.6 | 64 |
| 198 | Black phosphorus: a two-dimensional reductant for in situ nanofabrication. Npj 2D Materials and Applications, 2017, 1, . | 3.9 | 63 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | Developments and Perspectives on Robust Nano- and Microstructured Binder-Free Electrodes for Bifunctional Water Electrolysis and Beyond. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 63 |
| 200 | Ferroelectric-Driven Exciton and Trion Modulation in Monolayer Molybdenum and Tungsten Diselenides. <i>ACS Nano</i> , 2019, 13, 5335-5343. | 7.3 | 61 |
| 201 | A Broadband Optical Modulator Based on a Graphene Hybrid Plasmonic Waveguide. <i>Journal of Lightwave Technology</i> , 2016, 34, 4948-4953. | 2.7 | 60 |
| 202 | A self-powered photodetector based on two-dimensional boron nanosheets. <i>Nanoscale</i> , 2020, 12, 5313-5323. | 2.8 | 60 |
| 203 | Nonlinear Photonics Using Low-Dimensional Metal-Halide Perovskites: Recent Advances and Future Challenges. <i>Advanced Materials</i> , 2021, 33, e2004446. | 11.1 | 58 |
| 204 | 2D III-Nitride Materials: Properties, Growth, and Applications. <i>Advanced Materials</i> , 2021, 33, e2006761. | 11.1 | 58 |
| 205 | Fascinating MXene nanomaterials: emerging opportunities in the biomedical field. <i>Biomaterials Science</i> , 2021, 9, 5437-5471. | 2.6 | 58 |
| 206 | Improved Transfer Quality of CVD-Grown Graphene by Ultrasonic Processing of Target Substrates: Applications for Ultra-fast Laser Photonics. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 10288-10293. | 4.0 | 57 |
| 207 | Ultraeffective Cancer Therapy with an Antimonene-Based X-Ray Radiosensitizer. <i>Advanced Functional Materials</i> , 2020, 30, 1906010. | 7.8 | 57 |
| 208 | Recent Progress, Challenges, and Prospects in Two-Dimensional Photo-Catalyst Materials and Environmental Remediation. <i>Nano-Micro Letters</i> , 2020, 12, 167. | 14.4 | 57 |
| 209 | Graphdiyne as a Promising Mid-Infrared Nonlinear Optical Material for Ultrafast Photonics. <i>Advanced Optical Materials</i> , 2020, 8, 2000067. | 3.6 | 57 |
| 210 | Tunable Broadband Nonlinear Optical Properties of Black Phosphorus Quantum Dots for Femtosecond Laser Pulses. <i>Materials</i> , 2017, 10, 210. | 1.3 | 56 |
| 211 | Recent advance in near-infrared/ultrasound-sensitive 2D-nanomaterials for cancer therapeutics. <i>Science China Materials</i> , 2020, 63, 2397-2428. | 3.5 | 56 |
| 212 | A CRISPR/Cas12a-empowered surface plasmon resonance platform for rapid and specific diagnosis of the Omicron variant of SARS-CoV-2. <i>National Science Review</i> , 2022, 9, . | 4.6 | 56 |
| 213 | Bismuth telluride topological insulator nanosheet saturable absorbers for q-switched mode-locked Tm:ZBLAN waveguide lasers. <i>Annalen Der Physik</i> , 2016, 528, 543-550. | 0.9 | 54 |
| 214 | UV-Visible Photodetector Based on I-type Heterostructure of ZnO-QDs/Monolayer MoS ₂ . <i>Nanoscale Research Letters</i> , 2019, 14, 364. | 3.1 | 54 |
| 215 | Tellurene Nanoflake-Based NO ₂ Sensors with Superior Sensitivity and a Sub-Parts-per-Billion Detection Limit. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 47704-47713. | 4.0 | 54 |
| 216 | Stability of Perovskite Light Sources: Status and Challenges. <i>Advanced Optical Materials</i> , 2020, 8, 1902012. | 3.6 | 54 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 217 | Emerging black phosphorus analogue nanomaterials for high-performance device applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 1172-1197. | 2.7 | 54 |
| 218 | Valley manipulation in monolayer transition metal dichalcogenides and their hybrid systems: status and challenges. <i>Reports on Progress in Physics</i> , 2021, 84, 026401. | 8.1 | 54 |
| 219 | Photodynamic immunotherapy of cancers based on nanotechnology: recent advances and future challenges. <i>Journal of Nanobiotechnology</i> , 2021, 19, 160. | 4.2 | 54 |
| 220 | A Regioselectively Oxidized 2D Bi/BiO _x Lateral Nano-heterostructure for Hypoxic Photodynamic Therapy. <i>Advanced Materials</i> , 2021, 33, e2102562. | 11.1 | 54 |
| 221 | EpCAM aptamer-functionalized polydopamine-coated mesoporous silica nanoparticles loaded with DM1 for targeted therapy in colorectal cancer. <i>International Journal of Nanomedicine</i> , 2017, Volume 12, 6239-6257. | 3.3 | 53 |
| 222 | Black Phosphorus/Polymers: Status and Challenges. <i>Advanced Materials</i> , 2021, 33, e2100113. | 11.1 | 53 |
| 223 | Plasma-Assisted Sulfur Doping of LiMn ₂ O ₄ for High-Performance Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2015, 119, 28776-28782. | 1.5 | 52 |
| 224 | Broadband Nonlinear Optical Response of InSe Nanosheets for the Pulse Generation From 1 to 2 $\frac{1}{4}$ μ m. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 48281-48289. | 4.0 | 51 |
| 225 | Manipulating Charge and Energy Transfer between 2D Atomic Layers via Heterostructure Engineering. <i>Nano Letters</i> , 2020, 20, 5359-5366. | 4.5 | 51 |
| 226 | Robust SnO ₂ Nanoparticle-impregnated Carbon Nanofibers with Outstanding Electrochemical Performance for Advanced Sodium-Ion Batteries. <i>Angewandte Chemie</i> , 2018, 130, 9039-9043. | 1.6 | 50 |
| 227 | Ultra-small 2D PbS Nanoplatelets: Liquid-Phase Exfoliation and Emerging Applications for Photo-electrochemical Photodetectors. <i>Small</i> , 2021, 17, e2005913. | 5.2 | 50 |
| 228 | (Q)-Switched Mode-Locked Nd:YVO ₄ Laser by Topological Insulator Bi ₂ Te ₃ Saturable Absorber. <i>IEEE Photonics Technology Letters</i> , 2014, 26, 1912-1915. | 1.3 | 49 |
| 229 | Graphene-Bi ₂ Te ₃ Heterostructure as Broadband Saturable Absorber for Ultra-Short Pulse Generation in Er-Doped and Yb-Doped Fiber Lasers. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2017, 23, 195-199. | 1.9 | 49 |
| 230 | 2D group-VA fluorinated antimonene: synthesis and saturable absorption. <i>Nanoscale</i> , 2019, 11, 1762-1769. | 2.8 | 49 |
| 231 | Transition Metal Dichalcogenides for Sensing and Oncotherapy: Status, Challenges, and Perspective. <i>Advanced Functional Materials</i> , 2021, 31, 2004408. | 7.8 | 49 |
| 232 | Self-Healable Black Phosphorus Photodetectors. <i>Advanced Functional Materials</i> , 2019, 29, 1906610. | 7.8 | 48 |
| 233 | Boosting Lithium Storage in Free-Standing Black Phosphorus Anode via Multifunction of Nanocellulose. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 31628-31636. | 4.0 | 48 |
| 234 | Enhanced gas sensing properties of V ₂ O ₅ nanowires decorated with SnO ₂ nanoparticles to ethanol at room temperature. <i>RSC Advances</i> , 2015, 5, 41050-41058. | 1.7 | 47 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 235 | Two-Dimensional Lead Monoxide: Facile Liquid Phase Exfoliation, Excellent Photoresponse Performance, and Theoretical Investigation. <i>ACS Photonics</i> , 2018, 5, 5055-5067. | 3.2 | 47 |
| 236 | Two-Dimensional Black Arsenic Phosphorus for Ultrafast Photonics in Near- and Mid-Infrared Regimes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46509-46518. | 4.0 | 47 |
| 237 | Optoelectronic Gas Sensor Based on Few-Layered InSe Nanosheets for NO ₂ Detection with Ultrahigh Antihumidity Ability. <i>Analytical Chemistry</i> , 2020, 92, 11277-11287. | 3.2 | 47 |
| 238 | Subwavelength-Polarized Quasi-Two-Dimensional Perovskite Single-Mode Nanolaser. <i>ACS Nano</i> , 2021, 15, 6900-6908. | 7.3 | 47 |
| 239 | Few-Layer Antimonene Nanosheet: A Metal-Free Bifunctional Electrocatalyst for Effective Water Splitting. <i>ACS Applied Energy Materials</i> , 2019, 2, 4774-4781. | 2.5 | 46 |
| 240 | Bladder drug mirabegron exacerbates atherosclerosis through activation of brown fat-mediated lipolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10937-10942. | 3.3 | 46 |
| 241 | Optical Properties of Few-Layer Ti ₃ CN MXene: From Experimental Observations to Theoretical Calculations. <i>ACS Nano</i> , 2022, 16, 3059-3069. | 7.3 | 46 |
| 242 | Epitaxial Growth of Topological Insulators on Semiconductors (Bi ₂ Se ₃ /Te@Se) toward High-Performance Photodetectors. <i>Small Methods</i> , 2019, 3, 1900349. | 4.6 | 45 |
| 243 | Van der Waals Integration of Bismuth Quantum Dots-Decorated Tellurium Nanotubes (Te@Bi) Heterojunctions and Plasma-Enhanced Optoelectronic Applications. <i>Small</i> , 2019, 15, e1903233. | 5.2 | 45 |
| 244 | Tactile Chemomechanical Transduction Based on an Elastic Microstructured Array to Enhance the Sensitivity of Portable Biosensors. <i>Advanced Materials</i> , 2019, 31, e1803883. | 11.1 | 45 |
| 245 | Deep-Learning-Enabled MXene-Based Artificial Throat: Toward Sound Detection and Speech Recognition. <i>Advanced Materials Technologies</i> , 2020, 5, 2000262. | 3.0 | 45 |
| 246 | Black phosphorus saturable absorber for a diode-pumped passively Q-switched Er:CaF ₂ mid-infrared laser. <i>Optics Communications</i> , 2018, 406, 158-162. | 1.0 | 44 |
| 247 | Emerging two-dimensional noncarbon nanomaterials for flexible lithium-ion batteries: opportunities and challenges. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25227-25246. | 5.2 | 44 |
| 248 | In Situ Surface Protection for Enhancing Stability and Performance of LiNi _{0.5} Mn _{0.3} Co _{0.2} O ₂ at 4.8 V: The Working Mechanisms. , 2020, 2, 280-290. | | 44 |
| 249 | 2D van der Waals heterostructures: processing, optical properties and applications in ultrafast photonics. <i>Materials Horizons</i> , 2020, 7, 2903-2921. | 6.4 | 44 |
| 250 | Two Dimensional Î ² -InSe with Layer-Dependent Properties: Band Alignment, Work Function and Optical Properties. <i>Nanomaterials</i> , 2019, 9, 82. | 1.9 | 43 |
| 251 | Site-Selective Bi ₂ Te ₃ -FeTe ₂ Heterostructure as a Broadband Saturable Absorber for Ultrafast Photonics. <i>Laser and Photonics Reviews</i> , 2020, 14, 1900409. | 4.4 | 43 |
| 252 | Strategic Design of Intelligent-Responsive Nanogel Carriers for Cancer Therapy. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 54621-54647. | 4.0 | 43 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 253 | Black Phosphorus Quantum Dots as an Efficient Saturable Absorber for Bound Soliton Operation in an Erbium Doped Fiber Laser. <i>IEEE Photonics Journal</i> , 2016, 8, 1-10. | 1.0 | 42 |
| 254 | Single frequency fiber laser based on an ultrathin metal-organic framework. <i>Journal of Materials Chemistry C</i> , 2019, 7, 4662-4666. | 2.7 | 42 |
| 255 | MXene Photonic Devices for Near-Infrared to Mid-Infrared Ultrashort Pulse Generation. <i>ACS Applied Nano Materials</i> , 2020, 3, 3513-3522. | 2.4 | 42 |
| 256 | 2D-ultrathin MXene/DOX-jade platform for iron chelation chemo-photothermal therapy. <i>Bioactive Materials</i> , 2022, 14, 76-85. | 8.6 | 42 |
| 257 | Microfiber-Based Highly Nonlinear Topological Insulator Photonic Device for the Formation of Versatile Multi-Soliton Patterns in a Fiber Laser. <i>Journal of Lightwave Technology</i> , 2015, 33, 2056-2061. | 2.7 | 41 |
| 258 | Q-switched waveguide laser based on two-dimensional semiconducting materials: tungsten disulfide and black phosphorus. <i>Optics Express</i> , 2016, 24, 2858. | 1.7 | 41 |
| 259 | Recent Advances in Twisted Structures of Flatland Materials and Crafting Moiré Superlattices. <i>Advanced Functional Materials</i> , 2020, 30, 2000878. | 7.8 | 41 |
| 260 | Solution-gated transistors of two-dimensional materials for chemical and biological sensors: status and challenges. <i>Nanoscale</i> , 2020, 12, 11364-11394. | 2.8 | 41 |
| 261 | Anisotropic Plasmonic Nanostructure Induced Polarization Photoresponse for MoS ₂ -Based Photodetector. <i>Advanced Materials Interfaces</i> , 2020, 7, 1902179. | 1.9 | 41 |
| 262 | Engineering Lateral Heterojunction of Selenium-Coated Tellurium Nanomaterials toward Highly Efficient Solar Desalination. <i>Advanced Science</i> , 2019, 6, 1900531. | 5.6 | 40 |
| 263 | Electronic and Optical Properties of Two-Dimensional Tellurene: From First-Principles Calculations. <i>Nanomaterials</i> , 2019, 9, 1075. | 1.9 | 40 |
| 264 | Metamaterial and nanomaterial electromagnetic wave absorbers: structures, properties and applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12768-12794. | 2.7 | 40 |
| 265 | MXene (Ti ₂ NT _x): Synthesis, characteristics and application as a thermo-optical switcher for all-optical wavelength tuning laser. <i>Science China Materials</i> , 2021, 64, 259-265. | 3.5 | 40 |
| 266 | Booming development and present advances of two dimensional MXenes for photodetectors. <i>Chemical Engineering Journal</i> , 2021, 403, 126336. | 6.6 | 40 |
| 267 | Dual targeting delivery of miR-328 by functionalized mesoporous silica nanoparticles for colorectal cancer therapy. <i>Nanomedicine</i> , 2018, 13, 1753-1772. | 1.7 | 39 |
| 268 | Synthesis Techniques, Optoelectronic Properties, and Broadband Photodetection of Thin-Film Black Phosphorus. <i>Advanced Optical Materials</i> , 2020, 8, 2000045. | 3.6 | 39 |
| 269 | Recent advances in black phosphorus/carbon hybrid composites: from improved stability to applications. <i>Journal of Materials Chemistry A</i> , 2020, 8, 4647-4676. | 5.2 | 39 |
| 270 | All-Optical Control of Microfiber Knot Resonator Based on 2D Ti ₂ CT _x MXene. <i>Advanced Optical Materials</i> , 2020, 8, 1900977. | 3.6 | 39 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 271 | Robust Above-Room-Temperature Ferromagnetism in Few-Layer Antimonene Triggered by Nonmagnetic Adatoms. <i>Advanced Functional Materials</i> , 2019, 29, 1808746. | 7.8 | 38 |
| 272 | Fe-doped mayenite electride composite with 2D reduced Graphene Oxide: As a non-platinum based, highly durable electrocatalyst for Oxygen Reduction Reaction. <i>Scientific Reports</i> , 2019, 9, 19809. | 1.6 | 38 |
| 273 | MXene and black phosphorus based 2D nanomaterials in bioimaging and biosensing: progress and perspectives. <i>Journal of Materials Chemistry B</i> , 2021, 9, 5195-5220. | 2.9 | 38 |
| 274 | Liquefaction of water on the surface of anisotropic two-dimensional atomic layered black phosphorus. <i>Nature Communications</i> , 2019, 10, 4062. | 5.8 | 37 |
| 275 | Inorganic 2D Luminescent Materials: Structure, Luminescence Modulation, and Applications. <i>Advanced Optical Materials</i> , 2020, 8, 1900978. | 3.6 | 37 |
| 276 | Sensing Applications of Atomically Thin Group IV Carbon Siblings Xenes: Progress, Challenges, and Prospects. <i>Advanced Functional Materials</i> , 2021, 31, 2005957. | 7.8 | 37 |
| 277 | Organosilicon modification to enhance the stability of black phosphorus nanosheets under ambient conditions. <i>Journal of Materials Chemistry B</i> , 2018, 6, 4065-4070. | 2.9 | 36 |
| 278 | A Robust 2D Photo-Electrochemical Detector Based on NiPS ₃ Flakes. <i>Advanced Electronic Materials</i> , 2019, 5, 1900726. | 2.6 | 36 |
| 279 | Recent advances in photodynamic therapy based on emerging two-dimensional layered nanomaterials. <i>Nano Research</i> , 2020, 13, 1485-1508. | 5.8 | 36 |
| 280 | Present advances and perspectives of broadband photo-detectors based on emerging 2D-Xenes beyond graphene. <i>Nano Research</i> , 2020, 13, 891-918. | 5.8 | 36 |
| 281 | Wideband saturable absorption in metal-organic frameworks (MOFs) for mode-locking Er- and Tm-doped fiber lasers. <i>Nanoscale</i> , 2020, 12, 4586-4590. | 2.8 | 36 |
| 282 | 2D Crystal-Based Fibers: Status and Challenges. <i>Small</i> , 2019, 15, e1902691. | 5.2 | 35 |
| 283 | Recent development and advances in Photodetectors based on two-dimensional topological insulators. <i>Journal of Materials Chemistry C</i> , 2020, 8, 15526-15574. | 2.7 | 35 |
| 284 | Recent Advances of Spatial Self-Phase Modulation in 2D Materials and Passive Photonic Device Applications. <i>Small</i> , 2020, 16, e2002252. | 5.2 | 35 |
| 285 | Recent advances in OD nanostructure-functionalized low-dimensional nanomaterials for chemiresistive gas sensors. <i>Journal of Materials Chemistry C</i> , 2020, 8, 7272-7299. | 2.7 | 35 |
| 286 | PbSe Nanocrystals Produced by Facile Liquid Phase Exfoliation for Efficient UV-Vis Photodetectors. <i>Advanced Functional Materials</i> , 2021, 31, 2010401. | 7.8 | 35 |
| 287 | Nano-bio interfaces effect of two-dimensional nanomaterials and their applications in cancer immunotherapy. <i>Acta Pharmaceutica Sinica B</i> , 2021, 11, 3447-3464. | 5.7 | 35 |
| 288 | Broadband, High-Sensitivity Graphene Photodetector Based on Ferroelectric Polarization of Lithium Niobate. <i>Advanced Optical Materials</i> , 2021, 9, 2100245. | 3.6 | 35 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 289 | Defect Engineering in Ultrathin SnSe Nanosheets for High-Performance Optoelectronic Applications. ACS Applied Materials & Interfaces, 2021, 13, 33226-33236. | 4.0 | 35 |
| 290 | Recent advances in real-time spectrum measurement of soliton dynamics by dispersive Fourier transformation. Reports on Progress in Physics, 2020, 83, 116401. | 8.1 | 35 |
| 291 | Novel Two-Dimensional Carbon-Chromium Nitride-Based Composite as an Electrocatalyst for Oxygen Reduction Reaction. Frontiers in Chemistry, 2019, 7, 738. | 1.8 | 34 |
| 292 | Emetine-Loaded Black Phosphorus Hydrogel Sensitizes Tumor to Photothermal Therapy through Inhibition of Stress Granule Formation. Advanced Functional Materials, 2020, 30, 2003891. | 7.8 | 34 |
| 293 | Fano Resonance in Artificial Photonic Molecules. Advanced Optical Materials, 2020, 8, 1902153. | 3.6 | 34 |
| 294 | Epsilon-near-zero medium for optical switches in a monolithic waveguide chip at 1.9 μm . Nanophotonics, 2018, 7, 1835-1843. | 2.9 | 33 |
| 295 | Halogenated Antimonene: One-Step Synthesis, Structural Simulation, Tunable Electronic and Photoresponse Property. Advanced Functional Materials, 2019, 29, 1905857. | 7.8 | 33 |
| 296 | Semiconducting quantum dots: Modification and applications in biomedical science. Science China Materials, 2020, 63, 1631-1650. | 3.5 | 33 |
| 297 | Two-dimensional porous coordination polymers and nano-composites for electrocatalysis and electrically conductive applications. Journal of Materials Chemistry A, 2020, 8, 14356-14383. | 5.2 | 33 |
| 298 | Few-layer hexagonal bismuth telluride (Bi_2Te_3) nanoplates with high-performance UV-Vis photodetection. Nanoscale Advances, 2020, 2, 1333-1339. | 2.2 | 33 |
| 299 | Emerging 2D pnictogens for catalytic applications: status and challenges. Journal of Materials Chemistry A, 2020, 8, 12887-12927. | 5.2 | 32 |
| 300 | Smart nano-micro platforms for ophthalmological applications: The state-of-the-art and future perspectives. Biomaterials, 2021, 270, 120682. | 5.7 | 32 |
| 301 | Giant local circular dichroism within an asymmetric plasmonic nanoparticle trimer. Scientific Reports, 2015, 5, 8207. | 1.6 | 30 |
| 302 | Spontaneously Regenerative Tough Hydrogels. Angewandte Chemie - International Edition, 2019, 58, 10951-10955. | 7.2 | 30 |
| 303 | Low-Charge-Carrier-Scattering Three-Dimensional $\text{MnO}_2/\text{MnO}_2$ Networks for Ultra-High-Rate Asymmetrical Supercapacitors. ACS Applied Energy Materials, 2019, 2, 1051-1059. | 2.5 | 30 |
| 304 | Short-pulsed Raman fiber laser and its dynamics. Science China: Physics, Mechanics and Astronomy, 2021, 64, 1. | 2.0 | 30 |
| 305 | Recent advances on TMDCs for medical diagnosis. Biomaterials, 2021, 269, 120471. | 5.7 | 30 |
| 306 | 2D Materials for Nonlinear Photonics and Electro-Optical Applications. Advanced Materials Interfaces, 2021, 8, 2100367. | 1.9 | 30 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 307 | A Highly Sensitive CRISPR-Empowered Surface Plasmon Resonance Sensor for Diagnosis of Inherited Diseases with Femtomolar-Level Real-Time Quantification. <i>Advanced Science</i> , 2022, 9, e2105231. | 5.6 | 30 |
| 308 | Polarization domain wall pulses in a microfiber-based topological insulator fiber laser. <i>Scientific Reports</i> , 2016, 6, 29128. | 1.6 | 29 |
| 309 | A Fully Integrated Flexible Tunable Chemical Sensor Based on Gold-Modified Indium Selenide Nanosheets. <i>ACS Sensors</i> , 2022, 7, 1183-1193. | 4.0 | 29 |
| 310 | Repression of Interlayer Recombination by Graphene Generates a Sensitive Nanostructured 2D vdW Heterostructure Based Photodetector. <i>Advanced Science</i> , 2021, 8, e2100503. | 5.6 | 28 |
| 311 | CdS@CdSe Core/Shell Quantum Dots for Highly Improved Self-Powered Photodetection Performance. <i>Inorganic Chemistry</i> , 2021, 60, 18608-18613. | 1.9 | 28 |
| 312 | Recent Advances in SnSe Nanostructures beyond Thermoelectricity. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 28 |
| 313 | Dynamically Tuning the Up-conversion Luminescence of Er ³⁺ /Yb ³⁺ Co-doped Sodium Niobate Nano-crystals through Magnetic Field. <i>Scientific Reports</i> , 2016, 6, 31327. | 1.6 | 27 |
| 314 | Plasma-enhanced low-temperature solid-state synthesis of spinel LiMn ₂ O ₄ with superior performance for lithium-ion batteries. <i>Green Chemistry</i> , 2016, 18, 662-666. | 4.6 | 27 |
| 315 | Defect Engineering in Few-Layer Phosphorene. <i>Small</i> , 2018, 14, e1704556. | 5.2 | 27 |
| 316 | Facile Synthesis of Mayenite Electride Nanoparticles Encapsulated in Graphitic Shells Like Carbon Nano Onions: Non-noble-metal Electrocatalysts for Oxygen Reduction Reaction (ORR). <i>Frontiers in Chemistry</i> , 2019, 7, 934. | 1.8 | 27 |
| 317 | Harmonic mode-locking and wavelength-tunable Q-switching operation in the graphene-Bi ₂ Te ₃ heterostructure saturable absorber-based fiber laser. <i>Optical Engineering</i> , 2016, 55, 081314. | 0.5 | 26 |
| 318 | Graphene Heterostructure Integrated Optical Fiber Bragg Grating for Light Motion Tracking and Ultrabroadband Photodetection from 400 nm to 10.768 Åµm. <i>Advanced Functional Materials</i> , 2019, 29, 1807274. | 7.8 | 26 |
| 319 | BN as a Saturable Absorber for a Passively Mode-Locked 2-Åµm Solid-State Laser. <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1800482. | 1.2 | 26 |
| 320 | Highly Efficient Silicon Photonic Microheater Based on Black Arsenic-Phosphorus. <i>Advanced Optical Materials</i> , 2020, 8, 1901526. | 3.6 | 26 |
| 321 | Two-dimensional selenium and its composites for device applications. <i>Nano Research</i> , 2022, 15, 104-122. | 5.8 | 26 |
| 322 | Surface Coordination of Black Phosphorus with Modified Cisplatin. <i>Bioconjugate Chemistry</i> , 2019, 30, 1658-1664. | 1.8 | 25 |
| 323 | Smart Acid-Activatable Self-Assembly of Black Phosphorous as Photosensitizer to Overcome Poor Tumor Retention in Photothermal Therapy. <i>Advanced Functional Materials</i> , 2020, 30, 2003338. | 7.8 | 25 |
| 324 | All-Optical Modulator Using MXene Inkjet-Printed Microring Resonator. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2020, 26, 1-6. | 1.9 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 325 | Pulse duration dependent nonlinear optical response in black phosphorus dispersions. <i>Optics Communications</i> , 2018, 406, 244-248. | 1.0 | 24 |
| 326 | Facile liquid-phase exfoliated few-layer GeP nanosheets and their optoelectronic device applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 5547-5553. | 2.7 | 24 |
| 327 | Phosphorene-assisted silicon photonic modulator with fast response time. <i>Nanophotonics</i> , 2020, 9, 1973-1979. | 2.9 | 24 |
| 328 | Low-dimensional saturable absorbers for ultrafast photonics in solid-state bulk lasers: status and prospects. <i>Nanophotonics</i> , 2020, 9, 2603-2639. | 2.9 | 24 |
| 329 | Two-dimensional monoelemental germanene nanosheets: facile preparation and optoelectronic applications. <i>Journal of Materials Chemistry C</i> , 2020, 8, 16318-16325. | 2.7 | 23 |
| 330 | Infrared response in photocatalytic polymeric carbon nitride for water splitting via an upconversion mechanism. <i>Communications Materials</i> , 2020, 1, . | 2.9 | 23 |
| 331 | Recent progress, challenges, and prospects in emerging group-VIA Xenes: synthesis, properties and novel applications. <i>Nanoscale</i> , 2021, 13, 510-552. | 2.8 | 23 |
| 332 | An Insightful Picture of Nonlinear Photonics in 2D Materials and their Applications: Recent Advances and Future Prospects. <i>Advanced Optical Materials</i> , 2021, 9, 2001671. | 3.6 | 23 |
| 333 | Recent Progress on Metal-Based Nanomaterials: Fabrications, Optical Properties, and Applications in Ultrafast Photonics. <i>Advanced Functional Materials</i> , 2021, 31, 2107363. | 7.8 | 23 |
| 334 | 2D materials for bone therapy. <i>Advanced Drug Delivery Reviews</i> , 2021, 178, 113970. | 6.6 | 23 |
| 335 | Facile Synthesis of 2D Tin Selenide for Near- and Mid-Infrared Ultrafast Photonics Applications. <i>Advanced Optical Materials</i> , 2020, 8, 1902183. | 3.6 | 23 |
| 336 | The rise of 2D materials/ferroelectrics for next generation photonics and optoelectronics devices. <i>APL Materials</i> , 2022, 10, . | 2.2 | 23 |
| 337 | Tailoring nonlinear optical properties of Bi ₂ Se ₃ through ion irradiation. <i>Scientific Reports</i> , 2016, 6, 21799. | 1.6 | 22 |
| 338 | Synthesis of Ultrathin Composition Graded Doped Lateral WSe ₂ /WS ₂ Heterostructures. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 34204-34212. | 4.0 | 22 |
| 339 | A self-encapsulated broadband phototransistor based on a hybrid of graphene and black phosphorus nanosheets. <i>Nanoscale Advances</i> , 2020, 2, 1059-1065. | 2.2 | 22 |
| 340 | Quantum confinement-induced enhanced nonlinearity and carrier lifetime modulation in two-dimensional tin sulfide. <i>Nanophotonics</i> , 2020, 9, 1963-1972. | 2.9 | 22 |
| 341 | Broadband saturable absorption in germanene for mode-locked Yb, Er, and Tm fiber lasers. <i>Nanophotonics</i> , 2022, 11, 3127-3137. | 2.9 | 22 |
| 342 | Stable Single-Longitudinal-Mode Fiber Ring Laser Using Topological Insulator-Based Saturable Absorber. <i>Journal of Lightwave Technology</i> , 2014, 32, 4438-4444. | 2.7 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 343 | High-performance monolayer MoS ₂ photodetector enabled by oxide stress liner using scalable chemical vapor growth method. Nanophotonics, 2020, 9, 1981-1991. | 2.9 | 21 |
| 344 | Berlin Green Framework-Based Gas Sensor for Room-Temperature and High-Selectivity Detection of Ammonia. Nano-Micro Letters, 2021, 13, 63. | 14.4 | 21 |
| 345 | Recent Progresses in Integrated Nanoplasmonic Devices Based on Propagating Surface Plasmon Polaritons. Plasmonics, 2015, 10, 1841-1852. | 1.8 | 20 |
| 346 | Tuning magnetoresistance in molybdenum disulphide and graphene using a molecular spin transition. Nature Communications, 2017, 8, 677. | 5.8 | 20 |
| 347 | Optical vortex fiber laser based on modulation of transverse modes in two mode fiber. APL Photonics, 2019, 4, . | 3.0 | 20 |
| 348 | Electrospun porous Fe ₂ O ₃ nanotubes as counter electrodes for dye-sensitized solar cells. International Journal of Energy Research, 2019, 43, 5355-5366. | 2.2 | 20 |
| 349 | Recent advances in multiphoton microscopy combined with nanomaterials in the field of disease evolution and clinical applications to liver cancer. Nanoscale, 2019, 11, 19619-19635. | 2.8 | 20 |
| 350 | Band structure tuning of Hf-MoO_3 by tin intercalation for ultrafast photonic applications. Nanoscale, 2020, 12, 23140-23149. | 2.8 | 20 |
| 351 | Halogen Functionalization in the 2D Material Flatland: Strategies, Properties, and Applications. Small, 2021, 17, e2005640. | 5.2 | 20 |
| 352 | Water-Dispersible CsPbBr ₃ Perovskite Nanocrystals with Ultra-Stability and its Application in Electrochemical CO ₂ Reduction. Nano-Micro Letters, 2021, 13, 172. | 14.4 | 20 |
| 353 | Navigating recent advances in mono-elemental materials (Xenes)-fundamental to biomedical applications. Progress in Solid State Chemistry, 2021, 63, 100326. | 3.9 | 20 |
| 354 | All-Optical Modulation Technology Based on 2D Layered Materials. Micromachines, 2022, 13, 92. | 1.4 | 20 |
| 355 | Tailoring polarization and magnetization of absorbing terahertz metamaterials using a cut-wire sandwich structure. Beilstein Journal of Nanotechnology, 2018, 9, 1437-1447. | 1.5 | 19 |
| 356 | Low-Dimensional Black Phosphorus in Sensor Applications: Advances and Challenges. Advanced Functional Materials, 2021, 31, 2106484. | 7.8 | 19 |
| 357 | Bismuth quantum dots as an optical saturable absorber for a 13-µm Q-switched solid-state laser. Applied Optics, 2019, 58, 1621. | 0.9 | 19 |
| 358 | Recent development in graphdiyne and its derivative materials for novel biomedical applications. Journal of Materials Chemistry B, 2021, 9, 9461-9484. | 2.9 | 19 |
| 359 | Point and complex defects in monolayer PdSe ₂ : Evolution of electronic structure and emergence of magnetism. Physical Review B, 2021, 104, . | | |
| 360 | MXene-Based Materials for Solar Cell Applications. Nanomaterials, 2021, 11, 3170. | 1.9 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 361 | Electrochemical Analysis for Enhancing Interface Layer of Spinel LiNi _{0.5} Mn _{1.5} O ₄ Using p-Toluenesulfonyl Isocyanate as Electrolyte Additive. <i>Frontiers in Chemistry</i> , 2019, 7, 591. | 1.8 | 18 |
| 362 | Unveiling the Stimulated Robust Carrier Lifetime of Surface-Bound Excitons and Their Photoresponse in InSe. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900171. | 1.9 | 18 |
| 363 | Recent progress in high-performance photo-detectors enabled by the pulsed laser deposition technology. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4988-5014. | 2.7 | 18 |
| 364 | Black phosphorus as a versatile nanoplatform: From unique properties to biomedical applications. <i>Journal of Innovative Optical Health Sciences</i> , 2020, 13, . | 0.5 | 18 |
| 365 | Novel synthesis, properties and applications of emerging group VA two-dimensional monoelemental materials (2D-Xenes). <i>Materials Chemistry Frontiers</i> , 2021, 5, 6333-6391. | 3.2 | 18 |
| 366 | Enhancing the saturable absorption and carrier dynamics of graphene with plasmonic nanowires. <i>Physica Status Solidi (B): Basic Research</i> , 2015, 252, 2159-2166. | 0.7 | 17 |
| 367 | Highly Efficient Super-Continuum Generation on an Epsilon-Near-Zero Surface. <i>ACS Omega</i> , 2020, 5, 2458-2464. | 1.6 | 17 |
| 368 | Ultrafast Surface Plasmon Resonance Imaging Sensor via the High-Precision Four-Parameter-Based Spectral Curve Readjusting Method. <i>Analytical Chemistry</i> , 2021, 93, 828-833. | 3.2 | 17 |
| 369 | Carbon coated to improve the electrochemical properties of LiMn ₂ O ₄ cathode material synthesized by the novel acetone hydrothermal method. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 119, 1069-1074. | 1.1 | 16 |
| 370 | Artificial Carbon Graphdiyne: Status and Challenges in Nonlinear Photonic and Optoelectronic Applications. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 49281-49296. | 4.0 | 16 |
| 371 | A Facile Approach for Elemental-Doped Carbon Quantum Dots and Their Application for Efficient Photodetectors. <i>Small</i> , 2021, 17, e2105683. | 5.2 | 16 |
| 372 | A few-layer InSe-based sensitivity-enhanced photothermal fiber sensor. <i>Journal of Materials Chemistry C</i> , 2020, 8, 132-138. | 2.7 | 15 |
| 373 | Recent Advances in 2D Layered Phosphorous Compounds. <i>Small Methods</i> , 2021, 5, e2001068. | 4.6 | 15 |
| 374 | Quantum tunneling in two-dimensional van der Waals heterostructures and devices. <i>Science China Materials</i> , 2021, 64, 2359-2387. | 3.5 | 15 |
| 375 | A separator modified by high efficiency oxygen plasma for lithium ion batteries with superior performance. <i>RSC Advances</i> , 2015, 5, 92995-93001. | 1.7 | 14 |
| 376 | Photodetectors: Enhanced Photodetection Properties of Tellurium@Selenium Roll-to-Roll Nanotube Heterojunctions (<i>Small</i> 23/2019). <i>Small</i> , 2019, 15, 1970125. | 5.2 | 14 |
| 377 | Surface Nonlinear Optics on Centrosymmetric Dirac Nodal-Line Semimetal ZrSiS. <i>Advanced Materials</i> , 2020, 32, e1904498. | 11.1 | 14 |
| 378 | Nanostructured metal nitrides for photocatalysts. <i>Journal of Materials Chemistry C</i> , 2021, 9, 5323-5342. | 2.7 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 379 | 2D GeP-based photonic device for near-infrared and mid-infrared ultrafast photonics. <i>Nanophotonics</i> , 2020, 9, 3645-3654. | 2.9 | 14 |
| 380 | Au Nanoparticle Modification Induces Charge-Transfer Channels to Enhance the Electrocatalytic Hydrogen Evolution Reaction of InSe Nanosheets. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 2908-2917. | 4.0 | 14 |
| 381 | Characteristics, properties, synthesis and advanced applications of 2D graphdiyne <i>versus</i> graphene. <i>Materials Chemistry Frontiers</i> , 2022, 6, 528-552. | 3.2 | 14 |
| 382 | Synergistic Photothermal and Chemical Therapy by Smart Dual-Functional Graphdiyne Nanosheets for Treatment of Parkinson's Disease. <i>Advanced Therapeutics</i> , 2021, 4, 2100082. | 1.6 | 13 |
| 383 | Plasma-assisted highly efficient synthesis of Li(Ni _{1/3} Co _{1/3} Mn _{1/3})O ₂ cathode materials with superior performance for Li-ion batteries. <i>RSC Advances</i> , 2015, 5, 75145-75148. | 1.7 | 12 |
| 384 | One-Pot Hydrothermal Synthesis of LiMn ₂ O ₄ Cathode Material with Excellent High-Rate and Cycling Properties. <i>Journal of Electronic Materials</i> , 2016, 45, 4350-4356. | 1.0 | 12 |
| 385 | Flexible Li[Li _{0.2} Ni _{0.13} Co _{0.13} Mn _{0.54}]O ₂ /Carbon Nanotubes/Nanofibrillated Celluloses Composite Electrode for High-Performance Lithium-Ion Battery. <i>Frontiers in Chemistry</i> , 2019, 7, 555. | 1.8 | 12 |
| 386 | A carob-inspired nanoscale design of yolk-shell Si@void@TiO ₂ -CNF composite as anode material for high-performance lithium-ion batteries. <i>Dalton Transactions</i> , 2019, 48, 6846-6852. | 1.6 | 12 |
| 387 | Control of dissipative rogue waves in nonlinear cavity optics: Optical injection and time-delayed feedback. <i>Chaos</i> , 2020, 30, 053103. | 1.0 | 12 |
| 388 | Magnetic black phosphorus microbubbles for targeted tumor theranostics. <i>Nanophotonics</i> , 2021, 10, 3339-3358. | 2.9 | 12 |
| 389 | Crystalline chirality and interlocked double hourglass Weyl fermion in polyhedra-intercalated transition metal dichalcogenides. <i>NPG Asia Materials</i> , 2021, 13, . | 3.8 | 12 |
| 390 | Recent Advance of Tellurium for Biomedical Applications. <i>Chemical Research in Chinese Universities</i> , 2020, 36, 551-559. | 1.3 | 11 |
| 391 | Engineering Mono-Chalcogen Nanomaterials for Omnipotent Anticancer Applications: Progress and Challenges. <i>Advanced Healthcare Materials</i> , 2020, 9, 2000273. | 3.9 | 11 |
| 392 | A nano-lateral heterojunction of selenium-coated tellurium for infrared-band soliton fiber lasers. <i>Nanoscale</i> , 2020, 12, 15252-15260. | 2.8 | 11 |
| 393 | Evolutional carrier mobility and power factor of two-dimensional tin telluride due to quantum size effects. <i>Journal of Materials Chemistry C</i> , 2020, 8, 4181-4191. | 2.7 | 11 |
| 394 | Tailoring the ultrafast and nonlinear photonics of MXenes through elemental replacement. <i>Nanoscale</i> , 2021, 13, 15891-15898. | 2.8 | 11 |
| 395 | Advances in photonics of recently developed Xenes. <i>Nanophotonics</i> , 2020, 9, 1621-1649. | 2.9 | 11 |
| 396 | Current advances in the imaging of atherosclerotic vulnerable plaque using nanoparticles. <i>Materials Today Bio</i> , 2022, 14, 100236. | 2.6 | 11 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 397 | Black Phosphorus: Black Phosphorus Nanosheets as a Robust Delivery Platform for Cancer Theranostics (Adv. Mater. 1/2017). Advanced Materials, 2017, 29, . | 11.1 | 10 |
| 398 | Dual-wavelength dissipative solitons in an anomalous-dispersion-cavity fiber laser. Nanophotonics, 2020, 9, 2361-2366. | 2.9 | 9 |
| 399 | Gold-patterned microarray chips for ultrasensitive surface-enhanced Raman scattering detection of ultratrace samples. Journal of Raman Spectroscopy, 2019, 50, 26-33. | 1.2 | 9 |
| 400 | Broadband and ultrafast all-optical switching based on transition metal carbide. Nanophotonics, 2021, 10, 2617-2623. | 2.9 | 9 |
| 401 | Tunable engineering of photo- and electro-induced carrier dynamics in perovskite photoelectronic devices. Science China Materials, 2022, 65, 855-875. | 3.5 | 9 |
| 402 | Vanadium Disulfide Nanosheets Synthesized by Facile Liquid-Phase Exfoliation for Ammonia Detection with High Selectivity. Advanced Electronic Materials, 2022, 8, . | 2.6 | 9 |
| 403 | Spontaneously Regenerative Tough Hydrogels. Angewandte Chemie, 2019, 131, 11067-11071. | 1.6 | 8 |
| 404 | Multifunctional VI-VI binary heterostructure-based self-powered pH-sensitive photo-detector. Journal of Materials Chemistry C, 2020, 8, 5991-6000. | 2.7 | 8 |
| 405 | Colloidal semiconductor nanocrystals: synthesis, optical nonlinearity, and related device applications. Journal of Materials Chemistry C, 2021, 9, 6686-6721. | 2.7 | 8 |
| 406 | Autologous tumor antigens and boron nanosheet-based nanovaccines for enhanced photo-immunotherapy against immune desert tumors. Nanophotonics, 2021, 10, 2519-2535. | 2.9 | 8 |
| 407 | Frontiers in Electronic and Optoelectronic Devices Based on 2D Materials. Advanced Electronic Materials, 2021, 7, 2100444. | 2.6 | 8 |
| 408 | pH-responsive black phosphorus quantum dots for tumor-targeted photodynamic therapy. Photodiagnosis and Photodynamic Therapy, 2021, 35, 102429. | 1.3 | 8 |
| 409 | Two-Dimensional Nitrogen-Doped Ti ₃ C ₂ Promoted Catalysis Performance of Silver Nanozyme for Ultrasensitive Detection of Hydrogen Peroxide. ChemElectroChem, 2022, 9, . | 1.7 | 8 |
| 410 | Quantum Dots: Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots (Advanced Optical Materials 8/2016). Advanced Optical Materials, 2016, 4, 1222-1222. | 3.6 | 7 |
| 411 | Non-Isothermal Crystallization Kinetics of Polyamide 6/h-Boron Nitride Composites. Journal of Macromolecular Science - Physics, 2017, 56, 170-177. | 0.4 | 7 |
| 412 | Chiral Perovskite: Chiral Perovskites: Promising Materials toward Next-Generation Optoelectronics (Small 39/2019). Small, 2019, 15, 1970209. | 5.2 | 7 |
| 413 | Graphdiyne nanosheets as a platform for accurate copper(II) ion detection via click chemistry and fluorescence resonance energy transfer. RSC Advances, 2021, 11, 5320-5324. | 1.7 | 7 |
| 414 | Facile sonochemical-assisted synthesis of orthorhombic phase black phosphorus/rGO hybrids for effective photothermal therapy. Nanophotonics, 2020, 9, 3023-3034. | 2.9 | 7 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 415 | Nanomaterials for neurodegenerative diseases: Molecular mechanisms guided design and applications. Nano Research, 2022, 15, 3299-3322. | 5.8 | 7 |
| 416 | Photodetectors Based on MoS ₂ /MAPbBr ₃ van der Waals Heterojunction. IEEE Electron Device Letters, 2022, 43, 414-417. | 2.2 | 7 |
| 417 | Phosphorene: From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics (Adv. Funct. Mater. 45/2015). Advanced Functional Materials, 2015, 25, 7100-7100. | 7.8 | 6 |
| 418 | Pulsed Lasers: Black Phosphorus-Polymer Composites for Pulsed Lasers (Advanced Optical Materials) Tj ETQq0 0 0 rrgBT /Overlock 10 Tf | 3.6 | 6 |
| 419 | Characterization of Dark Soliton Sidebands in All-Normal-Dispersion Fiber Lasers. IEEE Journal of Selected Topics in Quantum Electronics, 2018, 24, 1-7. | 1.9 | 6 |
| 420 | Artificial visual memory device based on a photo-memorizing composite and one-step manufacturing. Materials Horizons, 2020, 7, 1597-1604. | 6.4 | 6 |
| 421 | Density Functional Investigation on $\hat{\Gamma}$ -MoO ₃ (100): Amines Adsorption and Surface Chemistry. ACS Sensors, 2022, 7, 1213-1221. | 4.0 | 6 |
| 422 | Dynamics of broadband photoinduced species and enabled photodetection in MXenes. Nanophotonics, 2022, 11, 3139-3148. | 2.9 | 6 |
| 423 | Fiber all-optical light control with low-dimensional materials (LDMs): thermo-optic effect and saturable absorption. Nanoscale Advances, 2019, 1, 4190-4206. | 2.2 | 5 |
| 424 | Photodetectors: Graphdiyne-Based Flexible Photodetectors with High Responsivity and Detectivity (Adv. Mater. 23/2020). Advanced Materials, 2020, 32, 2070175. | 11.1 | 5 |
| 425 | Dynamic behaviors of multiple-soliton pulsation in an L-band passively mode-locked fiber laser with anomalous dispersion. Chaos, 2021, 31, 063122. | 1.0 | 5 |
| 426 | Controlled Generation of Bright or Dark Solitons in a Fiber Laser by Intracavity Nonlinear Absorber. IEEE Photonics Journal, 2016, 8, 1-12. | 1.0 | 4 |
| 427 | Photothermal Therapy: Metabolizable Ultrathin Bi ₂ Se ₃ Nanosheets in Imaging-Guided Photothermal Therapy (Small 30/2016). Small, 2016, 12, 4158-4158. | 5.2 | 4 |
| 428 | Photodetectors: Environmentally Robust Black Phosphorus Nanosheets in Solution: Application for Self-Powered Photodetector (Adv. Funct. Mater. 18/2017). Advanced Functional Materials, 2017, 27, . | 7.8 | 4 |
| 429 | Quantum Dots: Broadband Nonlinear Optical Response in Few-Layer Antimonene and Antimonene Quantum Dots: A Promising Optical Kerr Media with Enhanced Stability (Advanced Optical Materials) Tj ETQq1 1 0.384314 rrgBT /Over | 3.6 | 4 |
| 430 | Cancer Theranostics: A Novel Top-Down Synthesis of Ultrathin 2D Boron Nanosheets for Multimodal Imaging-Guided Cancer Therapy (Adv. Mater. 36/2018). Advanced Materials, 2018, 30, 1870268. | 11.1 | 4 |
| 431 | Ferri-chiral compounds with potentially switchable Dresselhaus spin splitting. Physical Review B, 2020, 102, . | 1.1 | 4 |
| 432 | 2D Xenes: from fundamentals to applications. Nanophotonics, 2020, 9, 1555-1556. | 2.9 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 433 | High-detectivity tin disulfide nanowire photodetectors with manipulation of localized ferroelectric polarization field. <i>Nanophotonics</i> , 2021, 10, 4637-4644. | 2.9 | 4 |
| 434 | All-Optical Signal Processing: Few-Layer Topological Insulator for All-Optical Signal Processing Using the Nonlinear Kerr Effect (<i>Advanced Optical Materials</i> 12/2015). <i>Advanced Optical Materials</i> , 2015, 3, 1768-1768. | 3.6 | 3 |
| 435 | Superior electrochemical properties of Li(Ni _{1/3} Co _{1/3} Mn _{1/3})O ₂ /C synthesized by the precursor solid-phase method. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 121, 23-28. | 1.1 | 3 |
| 436 | Nonlayered 2D Materials: Ultrathin 2D Nonlayered Tellurium Nanosheets: Facile Liquid-Phase Exfoliation, Characterization, and Photoresponse with High Performance and Enhanced Stability (<i>Adv. Mater.</i> 08/2018). <i>Advanced Materials</i> , 2018, 30, 1802008. | 10.8 | 10 |
| 437 | Cancer Theranostics: Two-Dimensional Antimonene-Based Photonic Nanomedicine for Cancer Theranostics (<i>Adv. Mater.</i> 38/2018). <i>Advanced Materials</i> , 2018, 30, 1870283. | 11.1 | 3 |
| 438 | Black Phosphorous Photodetectors: Black Phosphorous/Indium Selenide Photoconductive Detector for Visible and Near-Infrared Light with High Sensitivity (<i>Advanced Optical Materials</i> 12/2019). <i>Advanced Optical Materials</i> , 2019, 7, 1970047. | 3.6 | 3 |
| 439 | Two-Dimensional Gold Halides: Novel Semiconductors with Giant Spin-Orbit Splitting and Tunable Optoelectronic Properties. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 9759-9765. | 2.1 | 3 |
| 440 | MXenes: MXenes: Synthesis, Optical Properties, and Applications in Ultrafast Photonics (<i>Small</i> 11/2021). <i>Small</i> , 2021, 17, 2170048. | 5.2 | 3 |
| 441 | An Assessment of MXenes through Scanning Probe Microscopy. <i>Small Methods</i> , 2022, 6, e2101599. | 4.6 | 3 |
| 442 | Spin-dependent k.p Hamiltonian of black phosphorene based on Landau partitioning method. <i>Journal of Applied Physics</i> , 2018, 124, 035702. | 1.1 | 2 |
| 443 | Optical Modulation: Few-Layer Phosphorene-Decorated Microfiber for All-Optical Thresholding and Optical Modulation (<i>Advanced Optical Materials</i> 9/2017). <i>Advanced Optical Materials</i> , 2017, 5, . | 3.6 | 1 |
| 444 | Quantum Dots: Stabilization of Black Phosphorous Quantum Dots in PMMA Nanofiber Film and Broadband Nonlinear Optics and Ultrafast Photonics Application (<i>Adv. Funct. Mater.</i> 32/2017). <i>Advanced Functional Materials</i> , 2017, 27, . | 7.8 | 1 |
| 445 | Innenteilbild: Antimonene Quantum Dots: Synthesis and Application as Near-Infrared Photothermal Agents for Effective Cancer Therapy (<i>Angew. Chem.</i> 39/2017). <i>Angewandte Chemie</i> , 2017, 129, 11816-11816. | 1.6 | 1 |
| 446 | Quantum Dots: Fluorination-Enhanced Ambient Stability and Electronic Tolerance of Black Phosphorus Quantum Dots (<i>Adv. Sci.</i> 9/2018). <i>Advanced Science</i> , 2018, 5, 1870055. | 5.6 | 1 |
| 447 | Mini-Generator Based on Self-Propelled Vertical Motion of a Functionally Cooperating Device Driven by H ₂ -Forming Reaction. <i>Chemistry - an Asian Journal</i> , 2019, 14, 2465-2471. | 1.7 | 1 |
| 448 | 2D Ferromagnetism: Robust Above-Room-Temperature Ferromagnetism in Few-Layer Antimonene Triggered by Nonmagnetic Adatoms (<i>Adv. Funct. Mater.</i> 15/2019). <i>Advanced Functional Materials</i> , 2019, 29, 1970099. | 7.8 | 1 |
| 449 | Tailored negative/positive photoresponse of BP via doping. <i>Nanotechnology</i> , 2021, 32, 185201. | 1.3 | 1 |
| 450 | Recent Progress on Metal-Based Nanomaterials: Fabrications, Optical Properties, and Applications in Ultrafast Photonics (<i>Adv. Funct. Mater.</i> 49/2021). <i>Advanced Functional Materials</i> , 2021, 31, 2170364. | 7.8 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 451 | Pulsed Lasers: Pulsed Lasers Employing Solution-Processed Plasmonic Cu ₃ P Colloidal Nanocrystals (Adv. Mater. 18/2016). Advanced Materials, 2016, 28, 3604-3604. | 11.1 | 0 |
| 452 | Ultrashort pulse generation in 2.1 μ m spectral range using black phosphorus based saturable absorber. , 2017, , . | | 0 |
| 453 | Titelbild: Robust SnO ₂ Nanoparticle-Impregnated Carbon Nanofibers with Outstanding Electrochemical Performance for Advanced Sodium-Ion Batteries (Angew. Chem. 29/2018). Angewandte Chemie, 2018, 130, 8919-8919. | 1.6 | 0 |
| 454 | A Facile Approach for Elemental-Doped Carbon Quantum Dots and Their Application for Efficient Photodetectors (Small 52/2021). Small, 2021, 17, . | 5.2 | 0 |