# Yumeng Shi

List of Publications by Year
in descending order



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|---|---|---|---|
| 193 papers | 26,705 citations | 22153 59 h-index | 5829 161 g-index |
| 196 all docs | 196 docs citations | 196 times ranked | 29881 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Single-Layer MoS<sub>2</sub>Phototransistors. ACS Nano, 2012, 6, 74-80. | 14.6 | 3,103 |
| 2 | Intrinsic Structural Defects in Monolayer Molybdenum Disulfide. Nano Letters, 2013, 13, 2615-2622. | 9.1 | 1,766 |
| 3 | Growth of Large-Area and Highly Crystalline MoS<sub>2</sub> Thin Layers on Insulating Substrates. Nano Letters, 2012, 12, 1538-1544. | 9.1 | 1,749 |
| 4 | Integrated Circuits Based on Bilayer MoS<sub>2</sub> Transistors. Nano Letters, 2012, 12, 4674-4680. | 9.1 | 1,526 |
| 5 | Synthesis of Few-Layer Hexagonal Boron Nitride Thin Film by Chemical Vapor Deposition. Nano Letters, 2010, 10, 4134-4139. | 9.1 | 1,058 |
| 6 | Synthesis of Monolayer Hexagonal Boron Nitride on Cu Foil Using Chemical Vapor Deposition. Nano Letters, 2012, 12, 161-166. | 9.1 | 1,057 |
| 7 | Epitaxial growth of a monolayer WSe <sub>2</sub> -MoS <sub>2</sub> lateral p-n junction with an atomically sharp interface. Science, 2015, 349, 524-528. | 12.6 | 1,009 |
| 8 | Preparation of Novel 3D Graphene Networks for Supercapacitor Applications. Small, 2011, 7, 3163-3168. | 10.0 | 980 |
| 9 | van der Waals Epitaxy of MoS<sub>2</sub> Layers Using Graphene As Growth Templates. Nano Letters, 2012, 12, 2784-2791. | 9.1 | 888 |
| 10 | Recent advances in controlled synthesis of two-dimensional transition metal dichalcogenides via vapour deposition techniques. Chemical Society Reviews, 2015, 44, 2744-2756. | 38.1 | 709 |
| 11 | Synthesis and Transfer of Single-Layer Transition Metal Disulfides on Diverse Surfaces. Nano Letters, 2013, 13, 1852-1857. | 9.1 | 612 |
| 12 | Preparation of MoS<sub>2</sub>â€Coated Threeâ€Dimensional Graphene Networks for Highâ€Performance Anode Material in Lithiumâ€Ion Batteries. Small, 2013, 9, 3433-3438. | 10.0 | 542 |
| 13 | Doping Singleâ€Layer Graphene with Aromatic Molecules. Small, 2009, 5, 1422-1426. | 10.0 | 537 |
| 14 | Electrical Detection of DNA Hybridization with Singleâ€Base Specificity Using Transistors Based on CVDâ€Grown Graphene Sheets. Advanced Materials, 2010, 22, 1649-1653. | 21.0 | 516 |
| 15 | Work Function Engineering of Graphene ElectrodeviaChemical Doping. ACS Nano, 2010, 4, 2689-2694. | 14.6 | 501 |
| 16 | Synthesis and Characterization of Hexagonal Boron Nitride Film as a Dielectric Layer for Graphene Devices. ACS Nano, 2012, 6, 8583-8590. | 14.6 | 472 |
| 17 | Heterostructures based on two-dimensional layered materials and their potential applications. Materials Today, 2016, 19, 322-335. | 14.2 | 469 |
| 18 | Nanoelectronic biosensors based on CVD grown graphene. Nanoscale, 2010, 2, 1485. | 5.6 | 408 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Heterostructured WS<sub>2</sub>/CH<sub>3</sub>NH<sub>3</sub>PbI<sub>3</sub> Photoconductors with Suppressed Dark Current and Enhanced Photodetectivity. Advanced Materials, 2016, 28, 3683-3689. | 21.0 | 396 |
| 20 | Selective Decoration of Au Nanoparticles on Monolayer MoS2 Single Crystals. Scientific Reports, 2013, 3, 1839. | 3.3 | 380 |
| 21 | Enhancing the conductivity of transparent graphene films via doping. Nanotechnology, 2010, 21, 285205. | 2.6 | 321 |
| 22 | Self-assembly of hierarchical MoSx/CNT nanocomposites (2<x<3): towards high performance anode materials for lithium ion batteries. Scientific Reports, 2013, 3, 2169. | 3.3 | 290 |
| 23 | Epitaxial Growth of Two-Dimensional Layered Transition-Metal Dichalcogenides: Growth Mechanism, Controllability, and Scalability. Chemical Reviews, 2018, 118, 6134-6150. | 47.7 | 285 |
| 24 | Strong Rashba-Edelstein Effect-Induced Spinâ€“Orbit Torques in Monolayer Transition Metal Dichalcogenide/Ferromagnet Bilayers. Nano Letters, 2016, 16, 7514-7520. | 9.1 | 247 |
| 25 | Emerging energy applications of two-dimensionalÂlayered transition metal dichalcogenides. Nano Energy, 2015, 18, 293-305. | 16.0 | 236 |
| 26 | Symmetry Breaking of Graphene Monolayers by Molecular Decoration. Physical Review Letters, 2009, 102, 135501. | 7.8 | 224 |
| 27 | CoO nanoflowers woven by CNT network for high energy density flexible micro-supercapacitor. Nano Energy, 2014, 3, 46-54. | 16.0 | 185 |
| 28 | Photoluminescence Enhancement and Structure Repairing of Monolayer MoSe<sub>2</sub> by Hydrohalic Acid Treatment. ACS Nano, 2016, 10, 1454-1461. | 14.6 | 179 |
| 29 | Effective doping of single-layer graphene from underlying<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>SiO</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2009, 79, . | 3.2 | 173 |
| 30 | Photoelectrical Response in Singleâ€Layer Graphene Transistors. Small, 2009, 5, 2005-2011. | 10.0 | 141 |
| 31 | Efficient White Photoluminescence from Self-Trapped Excitons in Sb<sup>3+</sup>/Bi<sup>3+</sup>-Codoped Cs<sub>2</sub>NaInCl<sub>6</sub> Double Perovskites with Tunable Dual-Emission. ACS Energy Letters, 2021, 6, 3343-3351. | 17.4 | 126 |
| 32 | Designed hybrid nanostructure with catalytic effect: beyond the theoretical capacity of SnO2 anode material for lithium ion batteries. Scientific Reports, 2015, 5, 9164. | 3.3 | 119 |
| 33 | 3D carbon foam-supported WS<sub>2</sub> nanosheets for cable-shaped flexible sodium ion batteries. Journal of Materials Chemistry A, 2018, 6, 10813-10824. | 10.3 | 112 |
| 34 | 3D self-branched zinc-cobalt Oxide@N-doped carbon hollow nanowall arrays for high-performance asymmetric supercapacitors and oxygen electrocatalysis. Energy Storage Materials, 2019, 23, 653-663. | 18.0 | 104 |
| 35 | Bifunctional porous iron phosphide/carbon nanostructure enabled high-performance sodium-ion battery and hydrogen evolution reaction. Energy Storage Materials, 2018, 15, 98-107. | 18.0 | 102 |
| 36 | Monitoring Morphological Changes in 2D Monolayer Semiconductors Using Atom-Thick Plasmonic Nanocavities. ACS Nano, 2015, 9, 825-830. | 14.6 | 101 |

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| 37 | Printed all-solid flexible microsupercapacitors: towards the general route for high energy storage devices. Nanotechnology, 2014, 25, 094010. | 2.6 | 100 |
| 38 | A novel single-layered MoS<sub>2</sub>nanosheet based microfluidic biosensor for ultrasensitive detection of DNA. Nanoscale, 2015, 7, 2245-2249. | 5.6 | 100 |
| 39 | In Situ Transmission Electron Microscopy for Energy Materials and Devices. Advanced Materials, 2019, 31, e1900608. | 21.0 | 95 |
| 40 | Nanocarbon Catalysts: Recent Understanding Regarding the Active Sites. Advanced Science, 2020, 7, 1902126. | 11.2 | 94 |
| 41 | Pre-lithiation of onion-like carbon/MoS<sub>2</sub>nano-urchin anodes for high-performance rechargeable lithium ion batteries. Nanoscale, 2014, 6, 8884-8890. | 5.6 | 93 |
| 42 | MXeneâ€Based Materials for Electrochemical Sodiumâ€Ion Storage. Advanced Science, 2021, 8, e2003185. | 11.2 | 88 |
| 43 | Efficient Sodium Storage in Rolledâ€Up Amorphous Si Nanomembranes. Advanced Materials, 2018, 30, e1706637. | 21.0 | 87 |
| 44 | Differentiation of Gas Molecules Using Flexible and All-Carbon Nanotube Devices. Journal of Physical Chemistry C, 2008, 112, 650-653. | 3.1 | 85 |
| 45 | Phase Transformation Induced Capacitance Activation for 3D Grapheneâ€CoO Nanorod Pseudocapacitor. Advanced Energy Materials, 2014, 4, 1301788. | 19.5 | 83 |
| 46 | Construction of complex NiS multi-shelled hollow structures with enhanced sodium storage. Energy Storage Materials, 2019, 23, 17-24. | 18.0 | 83 |
| 47 | Rational design of MXene-based films for energy storage: Progress, prospects. Materials Today, 2021, 46, 183-211. | 14.2 | 83 |
| 48 | 3D graphene supported MoO<sub>2</sub> for high performance binder-free lithium ion battery. Nanoscale, 2014, 6, 9839-9845. | 5.6 | 82 |
| 49 | 3D printed rGO/CNT microlattice aerogel for a dendrite-free sodium metal anode. Journal of Materials Chemistry A, 2020, 8, 19843-19854. | 10.3 | 82 |
| 50 | Enhanced sodium storage kinetics by volume regulation and surface engineering via rationally designed hierarchical porous FeP@C/rGO. Nanoscale, 2020, 12, 4341-4351. | 5.6 | 80 |
| 51 | Boosting Sodium Storage of Fe1â^'xS/MoS2 Composite via Heterointerface Engineering. Nano-Micro Letters, 2019, 11, 80. | 27.0 | 77 |
| 52 | Boosting the Electrocatalytic Water Oxidation Performance of CoFe<sub>2</sub>O<sub>4</sub> Nanoparticles by Surface Defect Engineering. ACS Applied Materials & Interfaces, 2019, 11, 3978-3983. | 8.0 | 76 |
| 53 | Graphene Oxide as a Carbon Source for Controlled Growth of Carbon Nanowires. Small, 2011, 7, 1199-1202. | 10.0 | 75 |
| 54 | Growth selectivity of hexagonal-boron nitride layers on Ni with various crystal orientations. RSC Advances, 2012, 2, 111-115. | 3.6 | 72 |

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| 55 | Chemically modified graphene: flame retardant or fuel for combustion?. Journal of Materials Chemistry, 2011, 21, 3277-3279. | 6.7 | 70 |
| 56 | Promoting polysulfide conversion by catalytic ternary Fe<sub>3</sub>O<sub>4</sub>/carbon/graphene composites with ordered microchannels for ultrahigh-rate lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2019, 7, 25078-25087. | 10.3 | 68 |
| 57 | Self-Powered Perovskite/CdS Heterostructure Photodetectors. ACS Applied Materials & Interfaces, 2019, 11, 40204-40213. | 8.0 | 65 |
| 58 | Determination of band offsets at GaN/single-layer MoS2 heterojunction. Applied Physics Letters, 2016, 109, . | 3.3 | 64 |
| 59 | Efficient low-frequency microwave absorption and solar evaporation properties of Î³-Fe2O3 nanocubes/graphene composites. Chemical Engineering Journal, 2021, 405, 126676. | 12.7 | 63 |
| 60 | Design Multifunctional Catalytic Interface: Toward Regulation of Polysulfide and Li<sub>2</sub>S Redox Conversion in Liâ€“S Batteries. Small, 2019, 15, e1906132. | 10.0 | 62 |
| 61 | Application of solvent modified PEDOT:PSS to graphene electrodes in organic solar cells. Nanoscale, 2013, 5, 8934. | 5.6 | 61 |
| 62 | Tunable Pseudocapacitive Behavior in Metalâ€“Organic Framework-Derived TiO<sub>2</sub>@Porous Carbon Enabling High-Performance Membrane Capacitive Deionization. ACS Applied Energy Materials, 2019, 2, 1812-1822. | 5.1 | 60 |
| 63 | Rechargeable Aqueous Zinc-Ion Batteries in MgSO4/ZnSO4 Hybrid Electrolytes. Nano-Micro Letters, 2020, 12, 60. | 27.0 | 60 |
| 64 | Two-step fabrication of single-layer rectangular SnSe flakes. 2D Materials, 2017, 4, 021026. | 4.4 | 57 |
| 65 | Porosity Engineering of MXene Membrane towards Polysulfide Inhibition and Fast Lithium Ion Transportation for Lithiumâ€“Sulfur Batteries. Small, 2021, 17, e2007442. | 10.0 | 57 |
| 66 | Dual Wavelength Electroluminescence from CdSe/CdS Tetrapods. ACS Nano, 2014, 8, 2873-2879. | 14.6 | 56 |
| 67 | Gap States at Low-Angle Grain Boundaries in Monolayer Tungsten Diselenide. Nano Letters, 2016, 16, 3682-3688. | 9.1 | 55 |
| 68 | Stimuliâ€Enabled Artificial Synapses for Neuromorphic Perception: Progress and Perspectives. Small, 2020, 16, e2001504. | 10.0 | 55 |
| 69 | Hybrid CuO/SnO2 nanocomposites: Towards cost-effective and high performance binder free lithium ion batteries anode materials. Applied Physics Letters, 2014, 105, . | 3.3 | 53 |
| 70 | Bifunctional nickel oxide-based nanosheets for highly efficient overall urea splitting. Chemical Communications, 2019, 55, 6555-6558. | 4.1 | 53 |
| 71 | Laterally Stitched Heterostructures of Transition Metal Dichalcogenide: Chemical Vapor Deposition Growth on Lithographically Patterned Area. ACS Nano, 2016, 10, 10516-10523. | 14.6 | 52 |
| 72 | In Situ Synthesis of Lead-Free Halide Perovskite Cs<sub>2</sub>AgBiBr<sub>6</sub> Supported on Nitrogen-Doped Carbon for Efficient Hydrogen Evolution in Aqueous HBr Solution. ACS Applied Materials & Interfaces, 2021, 13, 10037-10046. | 8.0 | 52 |

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| 73 | Constructing stress-release layer on Fe7Se8-based composite for highly stable sodium-storage. Nano Energy, 2020, 69, 104389. | 16.0 | 49 |
| 74 | Rapid synthesis and mechanochemical reactions of cesium copper halides for convenient chromaticity tuning and efficient white light emission. Journal of Materials Chemistry C, 2020, 8, 4895-4901. | 5.5 | 49 |
| 75 | Two-Dimensional Cs<sub>2</sub>AgBiBr<sub>6</sub>/WS<sub>2</sub> Heterostructure-Based Photodetector with Boosted Detectivity via Interfacial Engineering. ACS Nano, 2022, 16, 3985-3993. | 14.6 | 49 |
| 76 | Efficient Multicolor and White Photoluminescence in Erbium- and Holmium-Incorporated Cs<sub>2</sub>NaInCl<sub>6</sub>:Sb<sup>3+</sup> Double Perovskites. Chemistry of Materials, 2022, 34, 6288-6295. | 6.7 | 49 |
| 77 | An organic flow desalination battery. Energy Storage Materials, 2019, 20, 203-207. | 18.0 | 47 |
| 78 | Large-Area 2-D Electronics: Materials, Technology, and Devices. Proceedings of the IEEE, 2013, 101, 1638-1652. | 21.3 | 46 |
| 79 | Rhenium disulfide nanosheets/carbon composite as novel anodes for high-rate and long lifespan sodium-ion batteries. Nano Energy, 2019, 61, 626-636. | 16.0 | 46 |
| 80 | Photocatalytic Hydrogen Evolution under Ambient Conditions on Polymeric Carbon Nitride/Donorâ€Ⅰâ€Acceptor Organic Molecule Heterostructures. Advanced Functional Materials, 2020, 30, 2005106. | 14.9 | 46 |
| 81 | Atomic-Monolayer Two-Dimensional Lateral Quasi-Heterojunction Bipolar Transistors with Resonant Tunneling Phenomenon. ACS Nano, 2017, 11, 11015-11023. | 14.6 | 45 |
| 82 | Tracking Optical Welding through Groove Modes in Plasmonic Nanocavities. Nano Letters, 2016, 16, 5605-5611. | 9.1 | 44 |
| 83 | Electrochemical Performance of Sb<sub>4</sub>O<sub>5</sub>Cl<sub>2</sub> as a New Anode Material in Aqueous Chloride-Ion Battery. ACS Applied Materials & Interfaces, 2019, 11, 9144-9148. | 8.0 | 44 |
| 84 | Synthesis and structure of two-dimensional transition-metal dichalcogenides. MRS Bulletin, 2015, 40, 566-576. | 3.5 | 43 |
| 85 | The photoluminescence mechanism of CsPb<sub>2</sub>Br<sub>5</sub> microplates revealed by spatially resolved single particle spectroscopy. Nanoscale, 2019, 11, 3186-3192. | 5.6 | 43 |
| 86 | Synthesis of bismuth sulfide nanobelts for high performance broadband photodetectors. Journal of Materials Chemistry C, 2020, 8, 2102-2108. | 5.5 | 43 |
| 87 | Toward the Growth of High Mobility 2D Transition Metal Dichalcogenide Semiconductors. Advanced Materials Interfaces, 2019, 6, 1900220. | 3.7 | 42 |
| 88 | 2D Cs<sub>2</sub>AgBiBr<sub>6</sub> with Boosted Lightâ€“Matter Interaction for Highâ€Performance Photodetectors. Advanced Optical Materials, 2021, 9, 2001930. | 7.3 | 42 |
| 89 | Atomic-Monolayer MoS<sub>2</sub>Band-to-Band Tunneling Field-Effect Transistor. Small, 2016, 12, 5676-5683. | 10.0 | 41 |
| 90 | Tailoring NiO Nanostructured Arrays by Sulfate Anions for Sodiumâ€Ⅰon Batteries. Small, 2018, 14, e1800898. | 10.0 | 39 |

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|---|---|---|---|
| 91 | Continuous desalination with a metal-free redox-mediator. Journal of Materials Chemistry A, 2019, 7, 13941-13947. | 10.3 | 38 |
| 92 | Label-Free Electronic Detection of DNA Using Simple Double-Walled Carbon Nanotube Resistors. Journal of Physical Chemistry C, 2008, 112, 9891-9895. | 3.1 | 37 |
| 93 | Low-defect-density WS2 by hydroxide vapor phase deposition. Nature Communications, 2022, 13, . | 12.8 | 37 |
| 94 | Base-enhanced electrochemical water oxidation by a nickel complex in neutral aqueous solution. Chemical Communications, 2019, 55, 6122-6125. | 4.1 | 36 |
| 95 | Unlocking Rapid and Robust Sodium Storage Performance of Zinc-Based Sulfide via Indium Incorporation. ACS Nano, 2021, 15, 8507-8516. | 14.6 | 36 |
| 96 | Significant photoluminescence enhancement in WS<sub>2</sub> monolayers through Na<sub>2</sub>S treatment. Nanoscale, 2018, 10, 6105-6112. | 5.6 | 35 |
| 97 | Stepwise Intercalation-Conversion-Intercalation Sodiation Mechanism in CuInS<sub>2</sub> Prompting Sodium Storage Performance. ACS Energy Letters, 2020, 5, 3725-3732. | 17.4 | 33 |
| 98 | Morphological and Electronic Dual Regulation of Cobaltâ€“Nickel Bimetal Phosphide Heterostructures Inducing High Water-Splitting Performance. Journal of Physical Chemistry Letters, 2020, 11, 3911-3919. | 4.6 | 33 |
| 99 | InGaN/GaN nanowires epitaxy on large-area MoS2 for high-performance light-emitters. RSC Advances, 2017, 7, 26665-26672. | 3.6 | 32 |
| 100 | Towards Dendriteâ€Free Potassiumâ€Metal Batteries: Rational Design of a Multifunctional 3D Polyvinyl Alcoholâ€Borax Layer. Angewandte Chemie - International Edition, 2021, 60, 25122-25127. | 13.8 | 32 |
| 101 | Excitons in a mirror: Formation of â€œoptical bilayersâ€•using MoS2 monolayers on gold substrates. Applied Physics Letters, 2014, 104, . | 3.3 | 31 |
| 102 | Efficient red photoluminescence in holmium-doped Cs2NaInCl6 double perovskite. Cell Reports Physical Science, 2022, 3, 100820. | 5.6 | 31 |
| 103 | Work function engineering of electrodes via electropolymerization of ethylenedioxythiophenes and its derivatives. Organic Electronics, 2008, 9, 859-863. | 2.6 | 30 |
| 104 | Boosting chem-insertion and phys-adsorption in S/N co-doped porous carbon nanospheres for high-performance symmetric Li-ion capacitors. Journal of Materials Chemistry A, 2020, 8, 11529-11537. | 10.3 | 30 |
| 105 | Supramolecular engineering of charge transfer in wide bandgap organic semiconductors with enhanced visible-to-NIR photoresponse. Nature Communications, 2021, 12, 3667. | 12.8 | 30 |
| 106 | One-Dimensional Organicâ€“Metal Halide with Highly Efficient Warm White-Light Emission and Its Moisture-Induced Structural Transformation. Chemistry of Materials, 2021, 33, 5668-5674. | 6.7 | 30 |
| 107 | Zincâ€“Air Battery-Based Desalination Device. ACS Applied Materials & Interfaces, 2020, 12, 25728-25735. | 8.0 | 29 |
| 108 | Photocathode-assisted redox flow desalination. Green Chemistry, 2020, 22, 4133-4139. | 9.0 | 29 |

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| 109 | MoS2 Surface Structure Tailoring via Carbonaceous Promoter. Scientific Reports, 2015, 5, 10378. | 3.3 | 28 |
| 110 | Mechanism investigation of high performance Na3V2(PO4)2O2F/reduced graphene oxide cathode for sodium-ion batteries. Journal of Power Sources, 2021, 482, 228906. | 7.8 | 27 |
| 111 | Poly(3,3â€´-didodecylquarterthiophene) field effect transistors with single-walled carbon nanotube based source and drain electrodes. Applied Physics Letters, 2007, 91, 223512. | 3.3 | 26 |
| 112 | Catalyst engineering for lithium ion batteries: the catalytic role of Ge in enhancing the electrochemical performance of SnO<sub>2</sub>(GeO<sub>2</sub>)<sub>0.13</sub>/G anodes. Nanoscale, 2014, 6, 15020-15028. | 5.6 | 26 |
| 113 | Graphene-Au nanoparticle based vertical heterostructures: A novel route towards high- ZT Thermoelectric devices. Nano Energy, 2017, 38, 385-391. | 16.0 | 26 |
| 114 | Effect of mechanical forces on thermal stability reinforcement for lead based perovskite materials. Journal of Materials Chemistry A, 2019, 7, 540-548. | 10.3 | 26 |
| 115 | Quantum dot-carbonaceous nanohybrid composites: preparation and application in electrochemical energy storage. Journal of Materials Chemistry A, 2020, 8, 22488-22506. | 10.3 | 26 |
| 116 | Direct Observation of Perovskite Photodetector Performance Enhancement by Atomically Thin Interface Engineering. ACS Applied Materials & Interfaces, 2018, 10, 36493-36504. | 8.0 | 25 |
| 117 | Zeroâ€Ðimensional Organicâ€“Inorganic Hybrid Copperâ€Based Halides with Highly Efficient Orangeâ€“Red Emission. Small, 2021, 17, e2103831. | 10.0 | 25 |
| 118 | Photoresponse in Self-Assembled Films of Carbon Nanotubes. Journal of Physical Chemistry C, 2008, 112, 13004-13009. | 3.1 | 24 |
| 119 | MoS<sub>x</sub>-coated NbS<sub>2</sub> nanoflakes grown on glass carbon: an advanced electrocatalyst for the hydrogen evolution reaction. Nanoscale, 2018, 10, 3444-3450. | 5.6 | 24 |
| 120 | Dendrite-Free Li Metal Plating/Stripping Onto Three-Dimensional Vertical-Graphene@Carbon-Cloth Host. Frontiers in Chemistry, 2019, 7, 714. | 3.6 | 24 |
| 121 | Chiral Ligand-Induced Structural Transformation of Low-Dimensional Hybrid Perovskite for Circularly Polarized Photodetection. Chemistry of Materials, 2022, 34, 2955-2962. | 6.7 | 24 |
| 122 | High-efficiency omnidirectional photoresponses based on monolayer lateral pâ€“n heterojunctions. Nanoscale Horizons, 2017, 2, 37-42. | 8.0 | 21 |
| 123 | High-Concentration Niobium-Substituted WS2 Basal Domains with Reconfigured Electronic Band Structure for Hydrogen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 34862-34868. | 8.0 | 21 |
| 124 | Sb nanoparticle decorated rGO as a new anode material in aqueous chloride ion batteries. Nanoscale, 2020, 12, 12268-12274. | 5.6 | 20 |
| 125 | An Aqueous Rechargeable Fluoride Ion Battery with Dual Fluoride Electrodes. Journal of the Electrochemical Society, 2019, 166, A2419-A2424. | 2.9 | 19 |
| 126 | High speed capacitive deionization system with flow-through electrodes. Desalination, 2020, 496, 114750. | 8.2 | 19 |

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| 127 | Recent advances in kinetic optimizations of cathode materials for rechargeable magnesium batteries. Coordination Chemistry Reviews, 2022, 466, 214597. | 18.8 | 19 |
| 128 | A review on the research progress of tailoring photoluminescence of monolayer transition metal dichalcogenides. FlatChem, 2017, 4, 48-53. | 5.6 | 18 |
| 129 | Redox-catalysis flow electrode desalination in an organic solvent. Journal of Materials Chemistry A, 2021, 9, 22254-22261. | 10.3 | 18 |
| 130 | Wafer-scale single-orientation 2D layers by atomic edge-guided epitaxial growth. Chemical Society Reviews, 2022, 51, 803-811. | 38.1 | 18 |
| 131 | Photoconductivity from Carbon Nanotube Transistors Activated by Photosensitive Polymers. Journal of Physical Chemistry C, 2008, 112, 18201-18206. | 3.1 | 17 |
| 132 | Effects of precursor pre-treatment on the vapor deposition of WS<sub>2</sub> monolayers. Nanoscale Advances, 2019, 1, 953-960. | 4.6 | 17 |
| 133 | Heme-Enabled Electrical Detection of Carbon Monoxide at Room Temperature Using Networked Carbon Nanotube Field-Effect Transistors. Chemistry of Materials, 2007, 19, 6059-6061. | 6.7 | 16 |
| 134 | Large scale synthesized sulphonated reduced graphene oxide: a high performance material for electrochemical capacitors. RSC Advances, 2013, 3, 14954. | 3.6 | 16 |
| 135 | PAH contamination in road dust from a moderate city in North China: The significant role of traffic emission. Human and Ecological Risk Assessment (HERA), 2017, 23, 1072-1085. | 3.4 | 16 |
| 136 | Location-selective growth of two-dimensional metallic/semiconducting transition metal dichalcogenide heterostructures. Nanoscale, 2019, 11, 4183-4189. | 5.6 | 16 |
| 137 | High Oxidation Resistance of CVD Graphene-Reinforced Copper Matrix Composites. Nanomaterials, 2019, 9, 498. | 4.1 | 16 |
| 138 | Lithiophilic Silver Coating on Lithium Metal Surface for Inhibiting Lithium Dendrites. Frontiers in Chemistry, 2020, 8, 109. | 3.6 | 16 |
| 139 | Photoluminescence Mechanisms of Allâ€Inorganic Cesium Lead Bromide Perovskites Revealed by Single Particle Spectroscopy. ChemNanoMat, 2020, 6, 327-335. | 2.8 | 16 |
| 140 | A Scalable H<sub>2</sub>Oâ€“DMFâ€“DMSO Solvent Synthesis of Highly Luminescent Inorganic Perovskiteâ€Related Cesium Lead Bromides. Advanced Optical Materials, 2021, 9, 2001435. | 7.3 | 16 |
| 141 | Synthesis and optoelectronic applications of graphene/transition metal dichalcogenides flat-pack assembly. Carbon, 2018, 127, 602-610. | 10.3 | 15 |
| 142 | Nanoframes@CNT Beadsâ€onâ€aâ€String Structures: Toward an Advanced Highâ€Stable Sodiumâ€Ion Full Battery. Small, 2020, 16, e2005095. | 10.0 | 15 |
| 143 | Highly Efficient Whiteâ€Light Emission Triggered by Sb<sup>3+</sup> Dopant in Indiumâ€Based Double Perovskites. Advanced Photonics Research, 2021, 2, 2100143. | 3.6 | 15 |
| 144 | Organic light-emitting diodes with improved holeâ€“electron balance and tunable light emission with aromatic diamine/bathocuproine multiple hole-trapping-layer. Displays, 2006, 27, 166-169. | 3.7 | 14 |

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| 145 | Fe 2 O 3 nanothorns sensitized two-dimensional TiO 2 nanosheets for highly efficient solar energy conversion. FlatChem, 2017, 3, 1-7. | 5.6 | 14 |
| 146 | Recent advances of low-dimensional materials in lasing applications. FlatChem, 2018, 10, 22-38. | 5.6 | 14 |
| 147 | Defective NiFe<sub>2</sub>O<sub>4</sub> Nanoparticles for Efficient Urea Electroâ€oxidation. Chemistry - an Asian Journal, 2019, 14, 2796-2801. | 3.3 | 14 |
| 148 | Harmonic generation in transition metal dichalcogenides and their heterostructures. Materials Today, 2021, 50, 570-586. | 14.2 | 14 |
| 149 | Surface Charge Transfer Doping Enabled Large Hysteresis in van der Waals Heterostructures for Artificial Synapse. , 2021, 3, 235-242. | | 14 |
| 150 | Ultrafast growth of high-quality large-sized GaSe crystals by liquid metal promoter. Nano Research, 2022, 15, 4677-4681. | 10.4 | 14 |
| 151 | Influence of the Organic Chain on the Optical Properties of Two-Dimensional Organicâ€“Inorganic Hybrid Lead Iodide Perovskites. ACS Applied Electronic Materials, 2019, 1, 2253-2259. | 4.3 | 13 |
| 152 | Electroluminescent devices based on rare-earth complex TbY(p-MBA)6(phen)2. Journal of Luminescence, 2007, 122-123, 671-673. | 3.1 | 12 |
| 153 | Dual-mode operation of 2D material-base hot electron transistors. Scientific Reports, 2016, 6, 32503. | 3.3 | 12 |
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