

# Hai-Bo Zeng

## List of Publications by Year in descending order

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430  
papers

49,239  
citations

1697

104  
h-index

1851

209  
g-index

459  
all docs

459  
docs citations

459  
times ranked

38301  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Dot Light-Emitting Diodes Based on Inorganic Perovskite Cesium Lead Halides (CsPbX <sub>3</sub> ). <i>Advanced Materials</i> , 2015, 27, 7162-7167.	11.1	2,457
2	CsPbX <sub>3</sub> Quantum Dots for Lighting and Displays: Room-Temperature Synthesis, Photoluminescence Superiorities, Underlying Origins and White Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2016, 26, 2435-2445.	7.8	2,055
3	Blue Luminescence of ZnO Nanoparticles Based on Non-Equilibrium Processes: Defect Origins and Emission Controls. <i>Advanced Functional Materials</i> , 2010, 20, 561-572.	7.8	1,540
4	Atomically Thin Arsenene and Antimonene: Semimetal-Semiconductor and Indirect-Direct Band-Gap Transitions. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 3112-3115.	7.2	1,211
5	All-Inorganic Colloidal Perovskite Quantum Dots: A New Class of Lasing Materials with Favorable Characteristics. <i>Advanced Materials</i> , 2015, 27, 7101-7108.	11.1	1,095
6	Carbon and Graphene Quantum Dots for Optoelectronic and Energy Devices: A Review. <i>Advanced Functional Materials</i> , 2015, 25, 4929-4947.	7.8	1,072
7	50-Fold EQE Improvement up to 6.27% of Solution-Processed All-Inorganic Perovskite CsPbBr <sub>3</sub> QLEDs via Surface Ligand Density Control. <i>Advanced Materials</i> , 2017, 29, 1603885.	11.1	982
8	Two-dimensional antimonene single crystals grown by van der Waals epitaxy. <i>Nature Communications</i> , 2016, 7, 13352.	5.8	798
9	Nanomaterials via Laser Ablation/Irradiation in Liquid: A Review. <i>Advanced Functional Materials</i> , 2012, 22, 1333-1353.	7.8	775
10	White Graphenes: Boron Nitride Nanoribbons via Boron Nitride Nanotube Unwrapping. <i>Nano Letters</i> , 2010, 10, 5049-5055.	4.5	723
11	Stabilizing Cesium Lead Halide Perovskite Lattice through Mn(II) Substitution for Air-Stable Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2017, 139, 11443-11450.	6.6	705
12	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021, 15, 10775-10981.	7.3	705
13	Recent progress in 2D group-VA semiconductors: from theory to experiment. <i>Chemical Society Reviews</i> , 2018, 47, 982-1021.	18.7	697
14	A Voltage-Boosting Strategy Enabling a Low-Frequency, Flexible Electromagnetic Wave Absorption Device. <i>Advanced Materials</i> , 2018, 30, e1706343.	11.1	691
15	Semiconducting Group-V Monolayers: A Broad Range of Band Gaps and High Carrier Mobilities. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 1666-1669.	7.2	651
16	Monolayer and Few-Layer All-Inorganic Perovskites as a New Family of Two-Dimensional Semiconductors for Printable Optoelectronic Devices. <i>Advanced Materials</i> , 2016, 28, 4861-4869.	11.1	614
17	Toward Efficient Orange Emissive Carbon Nanodots through Conjugated sp <sup>2</sup> -Domain Controlling and Surface Charges Engineering. <i>Advanced Materials</i> , 2016, 28, 3516-3521.	11.1	583
18	Engineering surface states of carbon dots to achieve controllable luminescence for solid-luminescent composites and sensitive Be <sup>2+</sup> detection. <i>Scientific Reports</i> , 2014, 4, .	1.6	544

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19	All Inorganic Halide Perovskites Nanosystem: Synthesis, Structural Features, Optical Properties and Optoelectronic Applications. <i>Small</i> , 2017, 13, 1603996.	5.2	537
20	ZnO-Based Hollow Nanoparticles by Selective Etching: Elimination and Reconstruction of Metal-Semiconductor Interface, Improvement of Blue Emission and Photocatalysis. <i>ACS Nano</i> , 2008, 2, 1661-1670.	7.3	530
21	Nonlinear Absorption and Low-Threshold Multiphoton Pumped Stimulated Emission from All-Inorganic Perovskite Nanocrystals. <i>Nano Letters</i> , 2016, 16, 448-453.	4.5	494
22	A Comprehensive Review of One-Dimensional Metal-Oxide Nanostructure Photodetectors. <i>Sensors</i> , 2009, 9, 6504-6529.	2.1	491
23	Ce <sup>3+</sup> -Doping to Modulate Photoluminescence Kinetics for Efficient CsPbBr <sub>3</sub> Nanocrystals Based Light-Emitting Diodes. <i>Journal of the American Chemical Society</i> , 2018, 140, 3626-3634.	6.6	442
24	Room-Temperature Triple-Ligand Surface Engineering Synergistically Boosts Ink Stability, Recombination Dynamics, and Charge Injection toward EQE 1.6% Perovskite QLEDs. <i>Advanced Materials</i> , 2018, 30, e1800764.	11.1	431
25	Amorphous FeOOH Quantum Dots Assembled Mesoporous Film Anchored on Graphene Nanosheets with Superior Electrochemical Performance for Supercapacitors. <i>Advanced Functional Materials</i> , 2016, 26, 919-930.	7.8	423
26	Organic-Inorganic Hybrid Passivation Enables Perovskite QLEDs with an EQE of 16.48%. <i>Advanced Materials</i> , 2018, 30, e1805409.	11.1	409
27	In Situ Passivation of PbBr <sub>6</sub> <sup>4-</sup> Octahedra toward Blue Luminescent CsPbBr <sub>3</sub> Nanoplatelets with Near 100% Absolute Quantum Yield. <i>ACS Energy Letters</i> , 2018, 3, 2030-2037.	8.8	402
28	Atomically Thin Arsenene and Antimonene: Semimetal-Semiconductor and Indirect-Direct Bandgap Transitions. <i>Angewandte Chemie</i> , 2015, 127, 3155-3158.	1.6	397
29	From unstable CsSnI <sub>3</sub> to air-stable Cs <sub>2</sub> SnI <sub>6</sub> : A lead-free perovskite solar cell light absorber with bandgap of 1.48 eV and high absorption coefficient. <i>Solar Energy Materials and Solar Cells</i> , 2017, 159, 227-234.	3.0	388
30	Composition/Structural Evolution and Optical Properties of ZnO/Zn Nanoparticles by Laser Ablation in Liquid Media. <i>Journal of Physical Chemistry B</i> , 2005, 109, 18260-18266.	1.2	353
31	CsPbBr <sub>3</sub> Quantum Dots 2.0: Benzenesulfonic Acid Equivalent Ligand Awakens Complete Purification. <i>Advanced Materials</i> , 2019, 31, e1900767.	11.1	329
32	Two-dimensional semiconductors: recent progress and future perspectives. <i>Journal of Materials Chemistry C</i> , 2013, 1, 2952.	2.7	317
33	Semiconducting Group-15 Monolayers: A Broad Range of Band Gaps and High Carrier Mobilities. <i>Angewandte Chemie</i> , 2016, 128, 1698-1701.	1.6	315
34	Improving All-Inorganic Perovskite Photodetectors by Preferred Orientation and Plasmonic Effect. <i>Small</i> , 2016, 12, 5622-5632.	5.2	314
35	ZnO and ZnS Nanostructures: Ultraviolet-Light Emitters, Lasers, and Sensors. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2009, 34, 190-223.	6.8	306
36	2D Van Der Waals Binary Materials: Status and Challenges. <i>Advanced Materials</i> , 2019, 31, e1902352.	11.1	303

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37	Temperature-dependent shifts of three emission bands for ZnO nanoneedle arrays. <i>Applied Physics Letters</i> , 2006, 88, 161101.	1.5	296
38	Healing All-Inorganic Perovskite Films via Recyclable Dissolution-Recrystallization for Compact and Smooth Carrier Channels of Optoelectronic Devices with High Stability. <i>Advanced Functional Materials</i> , 2016, 26, 5903-5912.	7.8	296
39	Constructing Fast Carrier Tracks into Flexible Perovskite Photodetectors To Greatly Improve Responsivity. <i>ACS Nano</i> , 2017, 11, 2015-2023.	7.3	274
40	2D materials via liquid exfoliation: a review on fabrication and applications. <i>Science Bulletin</i> , 2015, 60, 1994-2008.	4.3	270
41	Amino-Mediated Anchoring Perovskite Quantum Dots for Stable and Low-Threshold Random Lasing. <i>Advanced Materials</i> , 2017, 29, 1701185.	11.1	269
42	Superstable Transparent Conductive Cu <sub>4</sub> Ni Nanowire Elastomer Composites against Oxidation, Bending, Stretching, and Twisting for Flexible and Stretchable Optoelectronics. <i>Nano Letters</i> , 2014, 14, 6298-6305.	4.5	262
43	Antimonene Oxides: Emerging Tunable Direct Bandgap Semiconductor and Novel Topological Insulator. <i>Nano Letters</i> , 2017, 17, 3434-3440.	4.5	250
44	Broadband Nonlinear Photoresponse of 2D TiS <sub>2</sub> for Ultrashort Pulse Generation and All-Optical Thresholding Devices. <i>Advanced Optical Materials</i> , 2018, 6, 1701166.	3.6	248
45	Cu-N Dopants Boost Electron Transfer and Photooxidation Reactions of Carbon Dots. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6540-6544.	7.2	244
46	Ultralarge All-Inorganic Perovskite Bulk Single Crystal for High-Performance Visible-Infrared Dual-Modal Photodetectors. <i>Advanced Optical Materials</i> , 2017, 5, 1700157.	3.6	244
47	Solution-Processed Low Threshold Vertical Cavity Surface Emitting Lasers from All-Inorganic Perovskite Nanocrystals. <i>Advanced Functional Materials</i> , 2017, 27, 1605088.	7.8	242
48	Intercrossed Carbon Nanorings with Pure Surface States as Low-Cost and Environment-Friendly Phosphors for White-Light-Emitting Diodes. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 1759-1764.	7.2	238
49	Two-Dimensional, Porous Nickel-Cobalt Sulfide for High-Performance Asymmetric Supercapacitors. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 19316-19323.	4.0	234
50	Double-Protected All-Inorganic Perovskite Nanocrystals by Crystalline Matrix and Silica for Triple-Modal Anti-Counterfeiting Codes. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 26556-26564.	4.0	232
51	Efficient and bright white light-emitting diodes based on single-layer heterophase halide perovskites. <i>Nature Photonics</i> , 2021, 15, 238-244.	15.6	231
52	Surface Chemistry of All Inorganic Halide Perovskite Nanocrystals: Passivation Mechanism and Stability. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701662.	1.9	230
53	Template Deformation-Tailored ZnO Nanorod/Nanowire Arrays: Full Growth Control and Optimization of Field-Emission. <i>Advanced Functional Materials</i> , 2009, 19, 3165-3172.	7.8	224
54	Black phosphorene as a hole extraction layer boosting solar water splitting of oxygen evolution catalysts. <i>Nature Communications</i> , 2019, 10, 2001.	5.8	222

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55	Chemical Blowing of Thin-Walled Bubbles: High-Throughput Fabrication of Large-Area, Few-Layered BN and C <sub>x</sub> N <sub>y</sub> Nanosheets. <i>Advanced Materials</i> , 2011, 23, 4072-4076.	11.1	217
56	A promising two-dimensional solar cell donor: Black arsenic phosphorus monolayer with 1.54 eV direct bandgap and mobility exceeding 14,000 cm <sup>2</sup> V <sup>-1</sup> s <sup>-1</sup> . <i>Nano Energy</i> , 2016, 28, 433-439.	8.2	212
57	Nonlinear Saturable Absorption of Liquid-Exfoliated Molybdenum/Tungsten DiteLLuride Nanosheets. <i>Small</i> , 2016, 12, 1489-1497.	5.2	211
58	Violet photoluminescence from shell layer of ZnO core-shell nanoparticles induced by laser ablation. <i>Applied Physics Letters</i> , 2006, 88, 171910.	1.5	209
59	High Performance Metal Halide Perovskite Light-Emitting Diode: From Material Design to Device Optimization. <i>Small</i> , 2017, 13, 1701770.	5.2	209
60	Boosting Two-Dimensional MoS <sub>2</sub> /CsPbBr <sub>3</sub> Photodetectors via Enhanced Light Absorbance and Interfacial Carrier Separation. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 2801-2809.	4.0	207
61	Shining Emitter in a Stable Host: Design of Halide Perovskite Scintillators for X-ray Imaging from Commercial Concept. <i>ACS Nano</i> , 2020, 14, 5183-5193.	7.3	205
62	A bilateral interfacial passivation strategy promoting efficiency and stability of perovskite quantum dot light-emitting diodes. <i>Nature Communications</i> , 2020, 11, 3902.	5.8	204
63	A flexible ultrasensitive optoelectronic sensor array for neuromorphic vision systems. <i>Nature Communications</i> , 2021, 12, 1798.	5.8	198
64	Controlled Synthesis of Ultrathin 2D In <sub>2</sub> S <sub>3</sub> with Broadband Photoresponse by Chemical Vapor Deposition. <i>Advanced Functional Materials</i> , 2017, 27, 1702448.	7.8	194
65	Monolayer MoS <sub>2</sub> -Graphene Hybrid Aerogels with Controllable Porosity for Lithium-Ion Batteries with High Reversible Capacity. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 2680-2687.	4.0	191
66	WS <sub>2</sub> saturable absorber for dissipative soliton mode locking at 106 and 155 Åm. <i>Optics Express</i> , 2015, 23, 27509.	1.7	187
67	Morphology-Dependent Stimulated Emission and Field Emission of Ordered CdS Nanostructure Arrays. <i>ACS Nano</i> , 2009, 3, 949-959.	7.3	185
68	Narrowband Perovskite Photodetector-Based Image Array for Potential Application in Artificial Vision. <i>Nano Letters</i> , 2018, 18, 7628-7634.	4.5	180
69	Integrating large specific surface area and high conductivity in hydrogenated NiCo <sub>2</sub> O <sub>4</sub> double-shell hollow spheres to improve supercapacitors. <i>NPG Asia Materials</i> , 2015, 7, e165-e165.	3.8	177
70	Few-Layer Antimonene: Anisotropic Expansion and Reversible Crystalline-Phase Evolution Enable Large-Capacity and Long-Life Na-Ion Batteries. <i>ACS Nano</i> , 2018, 12, 1887-1893.	7.3	175
71	Progress of Carbon Quantum Dots in Photocatalysis Applications. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 457-472.	1.2	172
72	Energy Manipulation in Lanthanide-Doped Core-Shell Nanoparticles for Tunable Dual-Mode Luminescence toward Advanced Anti-Counterfeiting. <i>Advanced Materials</i> , 2020, 32, e2002121.	11.1	165

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73	Lateral black phosphorene Pâ€N junctions formed via chemical doping for high performance near-infrared photodetector. <i>Nano Energy</i> , 2016, 25, 34-41.	8.2	162
74	Controllable Pt/ZnO Porous Nanocages with Improved Photocatalytic Activity. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19620-19624.	1.5	157
75	Polystyrene sphere-assisted one-dimensional nanostructure arrays: synthesis and applications. <i>Journal of Materials Chemistry</i> , 2011, 21, 40-56.	6.7	151
76	Optimizing Hybridization of 1T and 2H Phases in MoS <sub>2</sub> Monolayers to Improve Capacitances of Supercapacitors. <i>Materials Research Letters</i> , 2015, 3, 177-183.	4.1	149
77	All-inorganic quantum-dot light-emitting diodes based on perovskite emitters with low turn-on voltage and high humidity stability. <i>Journal of Materials Chemistry C</i> , 2017, 5, 4565-4570.	2.7	149
78	Enhanced photocatalytic activity of hierarchical ZnO nanoplate-nanowire architecture as environmentally safe and facilely recyclable photocatalyst. <i>Nanoscale</i> , 2011, 3, 5020.	2.8	148
79	GeSe monolayer semiconductor with tunable direct band gap and small carrier effective mass. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	148
80	Remedying Defects in Carbon Nitride To Improve both Photooxidation and H <sub>2</sub> Generation Efficiencies. <i>ACS Catalysis</i> , 2016, 6, 3365-3371.	5.5	148
81	Highly Efficient Carbon Dots with Reversibly Switchable Greenâ€Red Emissions for Trichromatic White Light-Emitting Diodes. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 16005-16014.	4.0	147
82	Microstructure Control of Zn/ZnO Core/Shell Nanoparticles and Their Temperature-Dependent Blue Emissions. <i>Journal of Physical Chemistry B</i> , 2007, 111, 14311-14317.	1.2	143
83	Recent progress of metal halide perovskite photodetectors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11369-11394.	2.7	138
84	Surface Halogen Compensation for Robust Performance Enhancements of CsPbX <sub>3</sub> Perovskite Quantum Dots. <i>Advanced Optical Materials</i> , 2019, 7, 1900276.	3.6	138
85	Advances of 2D bismuth in energy sciences. <i>Chemical Society Reviews</i> , 2020, 49, 263-285.	18.7	138
86	Hydrogenated arsenenes as planar magnet and Dirac material. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	137
87	Transparent Electrodes Printed with Nanocrystal Inks for Flexible Smart Devices. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9760-9774.	7.2	135
88	Solutionâ€Grown CsPbBr <sub>3</sub> /Cs <sub>4</sub> PbBr <sub>6</sub> Perovskite Nanocomposites: Toward Temperatureâ€Insensitive Optical Gain. <i>Small</i> , 2017, 13, 1701587.	5.2	134
89	Capping CsPbBr <sub>3</sub> with ZnO to improve performance and stability of perovskite memristors. <i>Nano Research</i> , 2017, 10, 1584-1594.	5.8	134
90	Photon Driven Transformation of Cesium Lead Halide Perovskites from Fewâ€Monolayer Nanoplatelets to Bulk Phase. <i>Advanced Materials</i> , 2016, 28, 10637-10643.	11.1	130

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91	Highly Luminescent and Stable Halide Perovskite Nanocrystals. ACS Energy Letters, 2019, 4, 673-681.	8.8	129
92	Room-Temperature Ion-Exchange-Mediated Self-Assembly toward Formamidinium Perovskite Nanoplates with Finely Tunable, Ultrapure Green Emissions for Achieving Rec. 2020 Displays. Advanced Functional Materials, 2018, 28, 1800248.	7.8	124
93	Ultrathin Bismuth Nanosheets for Stable Na-Ion Batteries: Clarification of Structure and Phase Transition by in Situ Observation. Nano Letters, 2019, 19, 1118-1123.	4.5	124
94	Two-dimensional BX (X = P, As, Sb) semiconductors with mobilities approaching graphene. Nanoscale, 2016, 8, 13407-13413.	2.8	122
95	Low-Voltage Photodetectors with High Responsivity Based on Solution-Processed Micrometer-Scale All-Inorganic Perovskite Nanoplatelets. Small, 2017, 13, 1700364.	5.2	119
96	Semiconductor-topological insulator transition of two-dimensional SbAs induced by biaxial tensile strain. Physical Review B, 2016, 93, .	1.1	118
97	Efficient Blue Perovskite Light-Emitting Diodes Boosted by 2D/3D Energy Cascade Channels. Advanced Functional Materials, 2020, 30, 2001732.	7.8	118
98	Two-Dimensional Metal Halide Perovskites: Theory, Synthesis, and Optoelectronics. Small Methods, 2017, 1, 1600018.	4.6	115
99	Morphology evolution and photoluminescence properties of ZnO films electrochemically deposited on conductive glass substrates. Journal of Applied Physics, 2006, 99, 073516.	1.1	114
100	Characterization, Cathodoluminescence, and Field-Emission Properties of Morphology-Tunable CdS Micro/Nanostructures. Advanced Functional Materials, 2009, 19, 2423-2430.	7.8	114
101	Controllable Polyol Synthesis of Uniform Palladium Icosahedra: Effect of Twinned Structure on Deformation of Crystalline Lattices. Angewandte Chemie - International Edition, 2009, 48, 6883-6887.	7.2	114
102	Near-Infrared Plasmonic 2D Semimetals for Applications in Communication and Biology. Advanced Functional Materials, 2016, 26, 1793-1802.	7.8	114
103	Size and Structure Control of Si Nanoparticles by Laser Ablation in Different Liquid Media and Further Centrifugation Classification. Journal of Physical Chemistry C, 2009, 113, 19091-19095.	1.5	112
104	Epitaxial ZnO Nanowire-on-Nanoplate Structures as Efficient and Transferable Field Emitters. Advanced Materials, 2013, 25, 5750-5755.	11.1	111
105	Two-dimensional halide perovskite as $\gamma$ -ray scintillator for nuclear radiation monitoring. Nature Communications, 2020, 11, 3395.	5.8	110
106	Amorphous ZnO based resistive random access memory. RSC Advances, 2016, 6, 17867-17872.	1.7	109
107	A Universal Ternary-Solvent-Ink Strategy toward Efficient Inkjet-Printed Perovskite Quantum Dot Light-Emitting Diodes. Advanced Materials, 2022, 34, e2107798.	11.1	109
108	Space-Confinement Growth of CsPbBr <sub>3</sub> Film Achieving Photodetectors with High Performance in All Figures of Merit. Advanced Functional Materials, 2018, 28, 1804394.	7.8	108

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109	Highly Flexible and Self-Healable Thermal Interface Material Based on Boron Nitride Nanosheets and a Dual Cross-Linked Hydrogel. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 10078-10084.	4.0	107
110	Fabrication and Size-Dependent Optical Properties of FeO Nanoparticles Induced by Laser Ablation in a Liquid Medium. <i>Journal of Physical Chemistry C</i> , 2008, 112, 3261-3266.	1.5	105
111	Stable, Efficient Red Perovskite Light-Emitting Diodes by $(\text{I}^{\pm}, \text{I}^{\circ})\text{CsPbI}_3$ Phase Engineering. <i>Advanced Functional Materials</i> , 2018, 28, 1804285.	7.8	105
112	Room temperature synthesized rutile $\text{TiO}_2$ nanoparticles induced by laser ablation in liquid and their photocatalytic activity. <i>Nanotechnology</i> , 2009, 20, 285707.	1.3	103
113	Tube-in-Tube $\text{TiO}_2$ Nanotubes with Porous Walls: Fabrication, Formation Mechanism, and Photocatalytic Properties. <i>Small</i> , 2011, 7, 445-449.	5.2	101
114	Localized surface plasmon resonance of Cu nanoparticles by laser ablation in liquid media. <i>RSC Advances</i> , 2015, 5, 79738-79745.	1.7	101
115	Perovskite White Light Emitting Diodes: Progress, Challenges, and Opportunities. <i>ACS Nano</i> , 2021, 15, 17150-17174.	7.3	101
116	Approaching the Theoretical Capacity of $\text{Li}_3\text{VO}_4$ via Electrochemical Reconstruction. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500340.	1.9	97
117	One-pot synthesis of nitrogen-rich carbon dots decorated graphene oxide as metal-free electrocatalyst for oxygen reduction reaction. <i>Carbon</i> , 2016, 109, 402-410.	5.4	96
118	Perovskite nanocrystals: synthesis, properties and applications. <i>Science Bulletin</i> , 2017, 62, 369-380.	4.3	96
119	Defect-Induced Epitaxial Growth for Efficient Solar Hydrogen Production. <i>Nano Letters</i> , 2017, 17, 6676-6683.	4.5	96
120	Origin of Blue Emission from Silicon Nanoparticles: Direct Transition and Interface Recombination. <i>Journal of Physical Chemistry C</i> , 2011, 115, 21056-21062.	1.5	92
121	Van der Waals bilayer antimonene: A promising thermophotovoltaic cell material with 31% energy conversion efficiency. <i>Nano Energy</i> , 2017, 38, 561-568.	8.2	92
122	Field-Effect Transistors Based on van-der-Waals-Grown and Dry-Transferred All-Inorganic Perovskite Ultrathin Platelets. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 4785-4792.	2.1	91
123	Welding Perovskite Nanowires for Stable, Sensitive, Flexible Photodetectors. <i>ACS Nano</i> , 2020, 14, 2777-2787.	7.3	90
124	Surface optical phonon Raman scattering in $\text{Zn}^{\circ}\text{ZnO}$ core-shell structured nanoparticles. <i>Applied Physics Letters</i> , 2006, 88, 181905.	1.5	89
125	Enriching Hot Electrons via NIR-Photon-Excited Plasmon in $\text{WS}_2$ @Cu Hybrids for Full-Spectrum Solar Hydrogen Evolution. <i>Advanced Functional Materials</i> , 2018, 28, 1804055.	7.8	89
126	Metal Halide Perovskites: Synthesis, Ion Migration, and Application in Field-Effect Transistors. <i>Small</i> , 2018, 14, e1801460.	5.2	88



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127	Understanding and Using the Controller Area Network Communication Protocol. , 2012, , .		88
128	Luminescent hollow carbon shells and fullerene-like carbon spheres produced by laser ablation with toluene. Journal of Materials Chemistry, 2011, 21, 4432.	6.7	87
129	Polyhedral Zn <sub>2</sub> SnO <sub>4</sub> : Synthesis, enhanced gas sensing and photocatalytic performance. Sensors and Actuators B: Chemical, 2016, 229, 627-634.	4.0	86
130	Two-dimensional GeS with tunable electronic properties via external electric field and strain. Nanotechnology, 2016, 27, 274001.	1.3	85
131	Recent advances and prospects toward blue perovskite materials and light-emitting diodes. Informa <sup>Å</sup> n <sup>Å</sup> -Materi <sup>Å</sup> ly, 2019, 1, 211-233.	8.5	84
132	Modulating Epitaxial Atomic Structure of Antimonene through Interface Design. Advanced Materials, 2019, 31, e1902606.	11.1	84
133	Research progress of full electroluminescent white light-emitting diodes based on a single emissive layer. Light: Science and Applications, 2021, 10, 206.	7.7	84
134	ZnO-Based Transparent Conductive Thin Films: Doping, Performance, and Processing. Journal of Nanomaterials, 2013, 2013, 1-9.	1.5	83
135	Bionic Detectors Based on Low-Bandgap Inorganic Perovskite for Selective NIR Photon Detection and Imaging. Advanced Materials, 2020, 32, e1905362.	11.1	83
136	Self-powered fiber-shaped wearable omnidirectional photodetectors. Nano Energy, 2016, 30, 173-179.	8.2	82
137	Perovskite light-emitting/detecting bifunctional fibres for wearable LiFi communication. Light: Science and Applications, 2020, 9, 163.	7.7	81
138	A Ternary Solvent Method for Large-Sized Two-Dimensional Perovskites. Angewandte Chemie - International Edition, 2017, 56, 2390-2394.	7.2	80
139	Nonlinear Optics in Lead Halide Perovskites: Mechanisms and Applications. ACS Photonics, 2021, 8, 113-124.	3.2	80
140	Ultra-fine $\beta$ -SiC quantum dots fabricated by laser ablation in reactive liquid at room temperature and their violet emission. Journal of Materials Chemistry, 2009, 19, 7119.	6.7	79
141	Design of Sb <sub>2</sub> S <sub>3</sub> nanorod-bundles: imperfect oriented attachment. Nanotechnology, 2006, 17, 2098-2104.	1.3	78
142	Two-dimensional SiP: an unexplored direct band-gap semiconductor. 2D Materials, 2017, 4, 015030.	2.0	78
143	Dimensionality and Interface Engineering of 2D Homologous Perovskites for Boosted Charge-Carrier Transport and Photodetection Performances. Journal of Physical Chemistry Letters, 2017, 8, 2565-2572.	2.1	77
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