

Haibo Zeng

List of Publications by Year in descending order

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papers

44,096
citations

1883

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docs citations

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times ranked

34148
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum Dot Light-Emitting Diodes Based on Inorganic Perovskite Cesium Lead Halides (CsPbX ₃). <i>Advanced Materials</i> , 2015, 27, 7162-7167.	11.1	2,457
2	CsPbX ₃ 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 ₃ 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	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
15	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
16	Toward Efficient Orange Emissive Carbon Nanodots through Conjugated sp ² -Domain Controlling and Surface Charges Engineering. <i>Advanced Materials</i> , 2016, 28, 3516-3521.	11.1	583
17	Engineering surface states of carbon dots to achieve controllable luminescence for solid-luminescent composites and sensitive Be ²⁺ detection. <i>Scientific Reports</i> , 2014, 4, .	1.6	544
18	All Inorganic Halide Perovskites Nanosystem: Synthesis, Structural Features, Optical Properties and Optoelectronic Applications. <i>Small</i> , 2017, 13, 1603996.	5.2	537

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19	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
20	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
21	A Comprehensive Review of One-Dimensional Metal-Oxide Nanostructure Photodetectors. <i>Sensors</i> , 2009, 9, 6504-6529.	2.1	491
22	Room-Temperature Triple-Ligand Surface Engineering Synergistically Boosts Ink Stability, Recombination Dynamics, and Charge Injection toward EQE of 11.6% Perovskite QLEDs. <i>Advanced Materials</i> , 2018, 30, e1800764.	11.1	431
23	Organic-Inorganic Hybrid Passivation Enables Perovskite QLEDs with an EQE of 16.48%. <i>Advanced Materials</i> , 2018, 30, e1805409.	11.1	409
24	In Situ Passivation of PbBr ₆ ⁴⁻ Octahedra toward Blue Luminescent CsPbBr ₃ Nanoplatelets with Near 100% Absolute Quantum Yield. <i>ACS Energy Letters</i> , 2018, 3, 2030-2037.	8.8	402
25	Atomically Thin Arsenene and Antimonene: Semimetal-Semiconductor and Indirect-Direct Band-Gap Transitions. <i>Angewandte Chemie</i> , 2015, 127, 3155-3158.	1.6	397
26	From unstable CsSnI ₃ to air-stable Cs ₂ SnI ₆ : 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
27	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
28	CsPbBr ₃ Quantum Dots 2.0: Benzenesulfonic Acid Equivalent Ligand Awakens Complete Purification. <i>Advanced Materials</i> , 2019, 31, e1900767.	11.1	329
29	Two-dimensional semiconductors: recent progress and future perspectives. <i>Journal of Materials Chemistry C</i> , 2013, 1, 2952.	2.7	317
30	Semiconducting Group-V Monolayers: A Broad Range of Band Gaps and High Carrier Mobilities. <i>Angewandte Chemie</i> , 2016, 128, 1698-1701.	1.6	315
31	Improving All-Inorganic Perovskite Photodetectors by Preferred Orientation and Plasmonic Effect. <i>Small</i> , 2016, 12, 5622-5632.	5.2	314
32	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
33	2D Van Der Waals Binary Materials: Status and Challenges. <i>Advanced Materials</i> , 2019, 31, e1902352.	11.1	303
34	Temperature-dependent shifts of three emission bands for ZnO nanoneedle arrays. <i>Applied Physics Letters</i> , 2006, 88, 161101.	1.5	296
35	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
36	Constructing Fast Carrier Tracks into Flexible Perovskite Photodetectors To Greatly Improve Responsivity. <i>ACS Nano</i> , 2017, 11, 2015-2023.	7.3	274

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37	2D materials via liquid exfoliation: a review on fabrication and applications. Science Bulletin, 2015, 60, 1994-2008.	4.3	270
38	Amino-Mediated Anchoring Perovskite Quantum Dots for Stable and Low-Threshold Random Lasing. Advanced Materials, 2017, 29, 1701185.	11.1	269
39	Superstable Transparent Conductive Cu ₄ Ni Nanowire Elastomer Composites against Oxidation, Bending, Stretching, and Twisting for Flexible and Stretchable Optoelectronics. Nano Letters, 2014, 14, 6298-6305.	4.5	262
40	Antimonene Oxides: Emerging Tunable Direct Bandgap Semiconductor and Novel Topological Insulator. Nano Letters, 2017, 17, 3434-3440.	4.5	250
41	Broadband Nonlinear Photoresponse of 2D TiS ₂ for Ultrashort Pulse Generation and All-Optical Thresholding Devices. Advanced Optical Materials, 2018, 6, 1701166.	3.6	248
42	Cu-N Dopants Boost Electron Transfer and Photooxidation Reactions of Carbon Dots. Angewandte Chemie - International Edition, 2015, 54, 6540-6544.	7.2	244
43	Ultralarge All-Inorganic Perovskite Bulk Single Crystal for High-Performance Visible-Infrared Dual-Modal Photodetectors. Advanced Optical Materials, 2017, 5, 1700157.	3.6	244
44	Solution-Processed Low Threshold Vertical Cavity Surface Emitting Lasers from All-Inorganic Perovskite Nanocrystals. Advanced Functional Materials, 2017, 27, 1605088.	7.8	242
45	Intercrossed Carbon Nanorings with Pure Surface States as Low-Cost and Environment-Friendly Phosphors for White-Light-Emitting Diodes. Angewandte Chemie - International Edition, 2015, 54, 1759-1764.	7.2	238
46	Two-Dimensional, Porous Nickel-Cobalt Sulfide for High-Performance Asymmetric Supercapacitors. ACS Applied Materials & Interfaces, 2015, 7, 19316-19323.	4.0	234
47	Double-Protected All-Inorganic Perovskite Nanocrystals by Crystalline Matrix and Silica for Triple-Modal Anti-Counterfeiting Codes. ACS Applied Materials & Interfaces, 2017, 9, 26556-26564.	4.0	232
48	Efficient and bright white light-emitting diodes based on single-layer heterophase halide perovskites. Nature Photonics, 2021, 15, 238-244.	15.6	231
49	Surface Chemistry of All Inorganic Halide Perovskite Nanocrystals: Passivation Mechanism and Stability. Advanced Materials Interfaces, 2018, 5, 1701662.	1.9	230
50	Template Deformation-Tailored ZnO Nanorod/Nanowire Arrays: Full Growth Control and Optimization of Field-Emission. Advanced Functional Materials, 2009, 19, 3165-3172.	7.8	224
51	Black phosphorene as a hole extraction layer boosting solar water splitting of oxygen evolution catalysts. Nature Communications, 2019, 10, 2001.	5.8	222
52	Chemical Blowing of Thin-Walled Bubbles: High-Throughput Fabrication of Large-Area, Few-Layered BN and C _x Nanosheets. Advanced Materials, 2011, 23, 4072-4076.	11.1	217
53	A promising two-dimensional solar cell donor: Black arsenic-phosphorus monolayer with 1.54 eV direct bandgap and mobility exceeding 14,000 cm ² V ⁻¹ s ⁻¹ . Nano Energy, 2016, 28, 433-439.	8.2	212
54	Nonlinear Saturable Absorption of Liquid-Exfoliated Molybdenum/Tungsten Ditelluride Nanosheets. Small, 2016, 12, 1489-1497.	5.2	211

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55	Violet photoluminescence from shell layer of Zn ²⁺ /ZnO core-shell nanoparticles induced by laser ablation. <i>Applied Physics Letters</i> , 2006, 88, 171910.	1.5	209
56	High Performance Metal Halide Perovskite Light-Emitting Diode: From Material Design to Device Optimization. <i>Small</i> , 2017, 13, 1701770.	5.2	209
57	Boosting Two-Dimensional MoS ₂ /CsPbBr ₃ Photodetectors via Enhanced Light Absorbance and Interfacial Carrier Separation. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2801-2809.	4.0	207
58	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
59	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
60	Controlled Synthesis of Ultrathin 2D In ₂ S ₃ with Broadband Photoresponse by Chemical Vapor Deposition. <i>Advanced Functional Materials</i> , 2017, 27, 1702448.	7.8	194
61	Monolayer MoS ₂ -Graphene Hybrid Aerogels with Controllable Porosity for Lithium-Ion Batteries with High Reversible Capacity. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 2680-2687.	4.0	191
62	WS ₂ saturable absorber for dissipative soliton mode locking at 106 and 155 Åµm. <i>Optics Express</i> , 2015, 23, 27509.	1.7	187
63	Morphology-Dependent Stimulated Emission and Field Emission of Ordered CdS Nanostructure Arrays. <i>ACS Nano</i> , 2009, 3, 949-959.	7.3	185
64	Narrowband Perovskite Photodetector-Based Image Array for Potential Application in Artificial Vision. <i>Nano Letters</i> , 2018, 18, 7628-7634.	4.5	180
65	Integrating large specific surface area and high conductivity in hydrogenated NiCo ₂ O ₄ double-shell hollow spheres to improve supercapacitors. <i>NPG Asia Materials</i> , 2015, 7, e165-e165.	3.8	177
66	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
67	Progress of Carbon Quantum Dots in Photocatalysis Applications. <i>Particle and Particle Systems Characterization</i> , 2016, 33, 457-472.	1.2	172
68	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
69	Lateral black phosphorene P-N junctions formed via chemical doping for high performance near-infrared photodetector. <i>Nano Energy</i> , 2016, 25, 34-41.	8.2	162
70	Controllable Pt/ZnO Porous Nanocages with Improved Photocatalytic Activity. <i>Journal of Physical Chemistry C</i> , 2008, 112, 19620-19624.	1.5	157
71	Polystyrene sphere-assisted one-dimensional nanostructure arrays: synthesis and applications. <i>Journal of Materials Chemistry</i> , 2011, 21, 40-56.	6.7	151
72	Optimizing Hybridization of 1T and 2H Phases in MoS ₂ Monolayers to Improve Capacitances of Supercapacitors. <i>Materials Research Letters</i> , 2015, 3, 177-183.	4.1	149

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73	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
74	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
75	GeSe monolayer semiconductor with tunable direct band gap and small carrier effective mass. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	148
76	Remediying Defects in Carbon Nitride To Improve both Photooxidation and H ₂ Generation Efficiencies. <i>ACS Catalysis</i> , 2016, 6, 3365-3371.	5.5	148
77	Highly Efficient Carbon Dots with Reversibly Switchable Greenâ€“Red Emissions for Trichromatic White Light-Emitting Diodes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 16005-16014.	4.0	147
78	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
79	Recent progress of metal halide perovskite photodetectors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11369-11394.	2.7	138
80	Surface Halogen Compensation for Robust Performance Enhancements of CsPbX ₃ Perovskite Quantum Dots. <i>Advanced Optical Materials</i> , 2019, 7, 1900276.	3.6	138
81	Advances of 2D bismuth in energy sciences. <i>Chemical Society Reviews</i> , 2020, 49, 263-285.	18.7	138
82	Hydrogenated arsenenes as planar magnet and Dirac material. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	137
83	Transparent Electrodes Printed with Nanocrystal Inks for Flexible Smart Devices. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 9760-9774.	7.2	135
84	Solutionâ€“Grown CsPbBr ₃ /Cs ₄ PbBr ₆ Perovskite Nanocomposites: Toward Temperatureâ€“Insensitive Optical Gain. <i>Small</i> , 2017, 13, 1701587.	5.2	134
85	Capping CsPbBr ₃ with ZnO to improve performance and stability of perovskite memristors. <i>Nano Research</i> , 2017, 10, 1584-1594.	5.8	134
86	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
87	Highly Luminescent and Stable Halide Perovskite Nanocrystals. <i>ACS Energy Letters</i> , 2019, 4, 673-681.	8.8	129
88	Ultrathin Bismuth Nanosheets for Stable Na-Ion Batteries: Clarification of Structure and Phase Transition by in Situ Observation. <i>Nano Letters</i> , 2019, 19, 1118-1123.	4.5	124
89	Two-dimensional BX (X = P, As, Sb) semiconductors with mobilities approaching graphene. <i>Nanoscale</i> , 2016, 8, 13407-13413.	2.8	122
90	Lowâ€“Voltage Photodetectors with High Responsivity Based on Solutionâ€“Processed Micrometerâ€“Scale Allâ€“Inorganic Perovskite Nanoplatelets. <i>Small</i> , 2017, 13, 1700364.	5.2	119

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91	Semiconductor-topological insulator transition of two-dimensional SbAs induced by biaxial tensile strain. <i>Physical Review B</i> , 2016, 93, .	1.1	118
92	Efficient Blue Perovskite Light-Emitting Diodes Boosted by 2D/3D Energy Cascade Channels. <i>Advanced Functional Materials</i> , 2020, 30, 2001732.	7.8	118
93	Two-Dimensional Metal Halide Perovskites: Theory, Synthesis, and Optoelectronics. <i>Small Methods</i> , 2017, 1, 1600018.	4.6	115
94	Characterization, Cathodoluminescence, and Field-Emission Properties of Morphology-Tunable CdS Micro/Nanostructures. <i>Advanced Functional Materials</i> , 2009, 19, 2423-2430.	7.8	114
95	Controllable Polyol Synthesis of Uniform Palladium Icosahedra: Effect of Twinned Structure on Deformation of Crystalline Lattices. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6883-6887.	7.2	114
96	Near-Infrared Plasmonic 2D Semimetals for Applications in Communication and Biology. <i>Advanced Functional Materials</i> , 2016, 26, 1793-1802.	7.8	114
97	Size and Structure Control of Si Nanoparticles by Laser Ablation in Different Liquid Media and Further Centrifugation Classification. <i>Journal of Physical Chemistry C</i> , 2009, 113, 19091-19095.	1.5	112
98	Epitaxial ZnO Nanowire-on-Nanoplate Structures as Efficient and Transferable Field Emitters. <i>Advanced Materials</i> , 2013, 25, 5750-5755.	11.1	111
99	Two-dimensional halide perovskite as γ -ray scintillator for nuclear radiation monitoring. <i>Nature Communications</i> , 2020, 11, 3395.	5.8	110
100	Amorphous ZnO based resistive random access memory. <i>RSC Advances</i> , 2016, 6, 17867-17872.	1.7	109
101	A Universal Ternary-Solvent-Ink Strategy toward Efficient Inkjet-Printed Perovskite Quantum Dot Light-Emitting Diodes. <i>Advanced Materials</i> , 2022, 34, e2107798.	11.1	109
102	Space-Constrained Growth of CsPbBr ₃ Film Achieving Photodetectors with High Performance in All Figures of Merit. <i>Advanced Functional Materials</i> , 2018, 28, 1804394.	7.8	108
103	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
104	Stable, Efficient Red Perovskite Light-Emitting Diodes by (1±, 1) CsPbI ₃ Phase Engineering. <i>Advanced Functional Materials</i> , 2018, 28, 1804285.	7.8	105
105	Room temperature synthesized rutile TiO ₂ nanoparticles induced by laser ablation in liquid and their photocatalytic activity. <i>Nanotechnology</i> , 2009, 20, 285707.	1.3	103
106	Tube-in-Tube TiO ₂ Nanotubes with Porous Walls: Fabrication, Formation Mechanism, and Photocatalytic Properties. <i>Small</i> , 2011, 7, 445-449.	5.2	101
107	Localized surface plasmon resonance of Cu nanoparticles by laser ablation in liquid media. <i>RSC Advances</i> , 2015, 5, 79738-79745.	1.7	101
108	Perovskite White Light Emitting Diodes: Progress, Challenges, and Opportunities. <i>ACS Nano</i> , 2021, 15, 17150-17174.	7.3	101

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109	Approaching the Theoretical Capacity of Li_3VO_4 via Electrochemical Reconstruction. <i>Advanced Materials Interfaces</i> , 2016, 3, 1500340.	1.9	97
110	Perovskite nanocrystals: synthesis, properties and applications. <i>Science Bulletin</i> , 2017, 62, 369-380.	4.3	96
111	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
112	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
113	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
114	Welding Perovskite Nanowires for Stable, Sensitive, Flexible Photodetectors. <i>ACS Nano</i> , 2020, 14, 2777-2787.	7.3	90
115	Surface optical phonon Raman scattering in $\text{Zn}^{\bullet}\text{ZnO}$ core-shell structured nanoparticles. <i>Applied Physics Letters</i> , 2006, 88, 181905.	1.5	89
116	Metal Halide Perovskites: Synthesis, Ion Migration, and Application in Field-Effect Transistors. <i>Small</i> , 2018, 14, e1801460.	5.2	88
117	Luminescent hollow carbon shells and fullerene-like carbon spheres produced by laser ablation with toluene. <i>Journal of Materials Chemistry</i> , 2011, 21, 4432.	6.7	87
118	Polyhedral Zn_2SnO_4 : Synthesis, enhanced gas sensing and photocatalytic performance. <i>Sensors and Actuators B: Chemical</i> , 2016, 229, 627-634.	4.0	86
119	Two-dimensional GeS with tunable electronic properties via external electric field and strain. <i>Nanotechnology</i> , 2016, 27, 274001.	1.3	85
120	Recent advances and prospects toward blue perovskite materials and light-emitting diodes. <i>Informa Materials</i> , 2019, 1, 211-233.	8.5	84
121	Modulating Epitaxial Atomic Structure of Antimonene through Interface Design. <i>Advanced Materials</i> , 2019, 31, e1902606.	11.1	84
122	ZnO -Based Transparent Conductive Thin Films: Doping, Performance, and Processing. <i>Journal of Nanomaterials</i> , 2013, 2013, 1-9.	1.5	83
123	Bionic Detectors Based on Low-Bandgap Inorganic Perovskite for Selective NIR Photon Detection and Imaging. <i>Advanced Materials</i> , 2020, 32, e1905362.	11.1	83
124	Self-powered fiber-shaped wearable omnidirectional photodetectors. <i>Nano Energy</i> , 2016, 30, 173-179.	8.2	82
125	Perovskite light-emitting/detecting bifunctional fibres for wearable LiFi communication. <i>Light: Science and Applications</i> , 2020, 9, 163.	7.7	81
126	Nonlinear Optics in Lead Halide Perovskites: Mechanisms and Applications. <i>ACS Photonics</i> , 2021, 8, 113-124.	3.2	80

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127	Ultra-fine \hat{I}^2 -SiC quantum dots fabricated by laser ablation in reactive liquid at room temperature and their violet emission. <i>Journal of Materials Chemistry</i> , 2009, 19, 7119.	6.7	79
128	Two-dimensional SiP: an unexplored direct band-gap semiconductor. <i>2D Materials</i> , 2017, 4, 015030.	2.0	78
129	Dimensionality and Interface Engineering of 2D Homologous Perovskites for Boosted Charge-Carrier Transport and Photodetection Performances. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2565-2572.	2.1	77
130	Mn ²⁺ induced significant improvement and robust stability of radioluminescence in Cs ₃ Cu ₂ I ₅ for high-performance nuclear battery. <i>Nature Communications</i> , 2021, 12, 3879.	5.8	76
131	Constructing Mie-Scattering Porous Interface-Fused Perovskite Films to Synergistically Boost Light Harvesting and Carrier Transport. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 5232-5236.	7.2	75
132	Large Scale Fabrication of Quasi-Aligned ZnO Stacking Nanoplates. <i>Journal of Physical Chemistry C</i> , 2008, 112, 5267-5270.	1.5	74
133	Lead-Free Halide Double Perovskites: Structure, Luminescence, and Applications. <i>Small Structures</i> , 2021, 2, 2000071.	6.9	71
134	Reshaping Formation and Luminescence Evolution of ZnO Quantum Dots by Laser-Induced Fragmentation in Liquid. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5038-5043.	1.5	70
135	Interfacial Tunneling-Enhanced CsPbBr ₃ Photodetectors Featuring High Detectivity and Stability. <i>Advanced Functional Materials</i> , 2019, 29, 1904461.	7.8	70
136	Lead-free, stable, high-efficiency (52%) blue luminescent FA ₃ Bi ₂ Br ₉ perovskite quantum dots. <i>Nanoscale Horizons</i> , 2020, 5, 580-585.	4.1	70
137	Perovskite Single Crystals: Synthesis, Optoelectronic Properties, and Application. <i>Advanced Functional Materials</i> , 2021, 31, 2008684.	7.8	70
138	Designing sub-10-nm Metal-Oxide-Semiconductor Field-Effect Transistors via Ballistic Transport and Disparate Effective Mass: The Case of Two-Dimensional $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mrow} \langle \text{mml:mi} \text{Bi} \langle \text{mml:mi} \langle \text{mml:mi} \text{mathvariant="normal"} \text{N} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review Applied</i> , 2020, 13, .	1.5	69
139	Tinene: a two-dimensional Dirac material with a 72 meV band gap. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 12634-12638.	1.3	66
140	Hydrothermal synthesis of blue-fluorescent monolayer BN and BCNO quantum dots for bio-imaging probes. <i>RSC Advances</i> , 2016, 6, 79090-79094.	1.7	66
141	Ultrathin tellurium dioxide: emerging direct bandgap semiconductor with high-mobility transport anisotropy. <i>Nanoscale</i> , 2018, 10, 8397-8403.	2.8	66
142	Fabrication and Characterization of Beaded SiC Quantum Rings with Anomalous Red Spectral Shift. <i>Advanced Materials</i> , 2012, 24, 5598-5603.	11.1	65
143	Electrochemical Deposition of ZnO Nanowire Arrays: Organization, Doping, and Properties. <i>Science of Advanced Materials</i> , 2010, 2, 336-358.	0.1	62
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