Xiao-Ming Wen

List of Publications by Year
in descending order

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186 papers	8,771 citations	31902 53 h-index	49773 87 g-index
188 all docs	188 docs citations	188 times ranked	12368 citing authors

#	Article	IF	Citations
1	Universal passivation strategy to slot-die printed SnO2 for hysteresis-free efficient flexible perovskite solar module. Nature Communications, 2018, 9, 4609.	5.8	596
2	Temperature-Dependent Fluorescence in Carbon Dots. Journal of Physical Chemistry C, 2012, 116, 25552-25557.	1.5	407
3	Unravelling charge carrier dynamics in protonated g-C3N4 interfaced with carbon nanodots as co-catalysts toward enhanced photocatalytic CO2 reduction: A combined experimental and first-principles DFT study. Nano Research, 2017, 10, 1673-1696.	5.8	376
4	Hole Transport Layer Free Inorganic CsPbIBr₂ Perovskite Solar Cell by Dual Source Thermal Evaporation. Advanced Energy Materials, 2016, 6, 1502202.	10.2	373
5	Acoustic-optical phonon up-conversion and hot-phonon bottleneck in lead-halide perovskites. Nature Communications, 2017, 8, 14120.	5.8	330
6	BiVO₄ {010} and {110} Relative Exposure Extent: Governing Factor of Surface Charge Population and Photocatalytic Activity. Journal of Physical Chemistry Letters, 2016, 7, 1400-1405.	2.1	231
7	Methylammonium Lead Bromide Perovskite-Based Solar Cells by Vapor-Assisted Deposition. Journal of Physical Chemistry C, 2015, 119, 3545-3549.	1.5	223
8	Consolidation of the optoelectronic properties of CH3NH3PbBr3 perovskite single crystals. Nature Communications, 2017, 8, 590.	5.8	207
9	Defect trapping states and charge carrier recombination in organicâ€“inorganic halide perovskites. Journal of Materials Chemistry C, 2016, 4, 793-800.	2.7	171
10	Intrinsic and Extrinsic Fluorescence in Carbon Nanodots: Ultrafast Timeâ€Resolved Fluorescence and Carrier Dynamics. Advanced Optical Materials, 2013, 1, 173-178.	3.6	156
11	Metalâ€“Organic Framework Decorated Cuprous Oxide Nanowires for Longâ€lived Charges Applied in Selective Photocatalytic CO₂ Reduction to CH₄. Angewandte Chemie - International Edition, 2021, 60, 8455-8459.	7.2	152
12	Tunable Type I and II heterojunction of CoOx nanoparticles confined in g-C3N4 nanotubes for photocatalytic hydrogen production. Applied Catalysis B: Environmental, 2019, 244, 814-822.	10.8	151
13	The critical role of composition-dependent intragrain planar defects in the performance of MA1â€“xFAxPbI3 perovskite solar cells. Nature Energy, 2021, 6, 624-632.	19.8	144
14	On the upconversion fluorescence in carbon nanodots and graphene quantum dots. Chemical Communications, 2014, 50, 4703-4706.	2.2	140
15	Fluorescence Dynamics in BSA-Protected Au₂₅ Nanoclusters. Journal of Physical Chemistry C, 2012, 116, 19032-19038.	1.5	114
16	Light Illumination Induced Photoluminescence Enhancement and Quenching in Lead Halide Perovskite. Solar Rrl, 2017, 1, 1600001.	3.1	109
17	Triggering the Passivation Effect of Potassium Doping in Mixedâ€Cation Mixedâ€Halide Perovskite by Light Illumination. Advanced Energy Materials, 2019, 9, 1901016.	10.2	109
18	Mobile Charge-Induced Fluorescence Intermittency in Methylammonium Lead Bromide Perovskite. Nano Letters, 2015, 15, 4644-4649.	4.5	108

#	Article	IF	Citations
19	Mobile Ion Induced Slow Carrier Dynamics in Organicâ€“Inorganic Perovskite CH₃NH₃PbBr₃. ACS Applied Materials & Interfaces, 2016, 8, 5351-5357.	4.0	100
20	Structure-Correlated Dual Fluorescent Bands in BSA-Protected Au₂₅ Nanoclusters. Journal of Physical Chemistry C, 2012, 116, 11830-11836.	1.5	97
21	Efficient electron transfer in carbon nanodotâ€“graphene oxide nanocomposites. Journal of Materials Chemistry C, 2014, 2, 2894.	2.7	87
22	Photoinduced Ultrafast Charge Separation in Plexcitonic CdSe/Au and CdSe/Pt Nanorods. Journal of Physical Chemistry Letters, 2013, 4, 3596-3601.	2.1	86
23	LiTFSIâ€Free Spiroâ€OMeTADâ€Based Perovskite Solar Cells with Power Conversion Efficiencies Exceeding 19%. Advanced Energy Materials, 2019, 9, 1901519.	10.2	85
24	The Dominant Energy Transport Pathway in Halide Perovskites: Photon Recycling or Carrier Diffusion?. Advanced Energy Materials, 2019, 9, 1900185.	10.2	85
25	Morphology and Carrier Extraction Study of Organicâ€“Inorganic Metal Halide Perovskite by One- and Two-Photon Fluorescence Microscopy. Journal of Physical Chemistry Letters, 2014, 5, 3849-3853.	2.1	84
26	Ultrafast electron transfer in the nanocomposite of the graphene oxideâ€“Au nanocluster with graphene oxide as a donor. Journal of Materials Chemistry C, 2014, 2, 3826-3834.	2.7	82
27	Nucleation and Growth Control of HC(NH2)2PbI3 for Planar Perovskite Solar Cell. Journal of Physical Chemistry C, 2016, 120, 11262-11267.	1.5	80
28	Temperature-Dependent Fluorescence in Au₁₀ Nanoclusters. Journal of Physical Chemistry C, 2012, 116, 6567-6571.	1.5	78
29	Chemical Dopant Engineering in Hole Transport Layers for Efficient Perovskite Solar Cells: Insight into the Interfacial Recombination. ACS Nano, 2018, 12, 10452-10462.	7.3	78
30	A pulse electrodeposited amorphous tunnel layer stabilises Cu₂O for efficient photoelectrochemical water splitting under visible-light irradiation. Journal of Materials Chemistry A, 2020, 8, 5638-5646.	5.2	78
31	A highly efficient graphene oxide absorber forQ-switched Nd:GdVO₄lasers. Nanotechnology, 2011, 22, 455203.	1.3	77
32	Fluorescent Metallic Nanoclusters: Electron Dynamics, Structure, and Applications. Particle and Particle Systems Characterization, 2015, 32, 142-163.	1.2	77
33	Electric field induced reversible and irreversible photoluminescence responses in methylammonium lead iodide perovskite. Journal of Materials Chemistry C, 2016, 4, 9060-9068.	2.7	77
34	Template-Free Synthesis of High-Yield Fe-Doped Cesium Lead Halide Perovskite Ultralong Microwires with Enhanced Two-Photon Absorption. Journal of Physical Chemistry Letters, 2018, 9, 4878-4885.	2.1	73
35	Kesterite Cu₂ZnSn(S,Se)₄ Solar Cells with beyond 8% Efficiency by a Solâ€“Gel and Selenization Process. ACS Applied Materials & Interfaces, 2015, 7, 14376-14383.	4.0	72
36	Inverted Hysteresis in CH₃NH₃PbI₃ Solar Cells: Role of Stoichiometry and Band Alignment. Journal of Physical Chemistry Letters, 2017, 8, 2672-2680.	2.1	71

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37	A New Passivation Route Leading to Over 8% Efficient PbSe Quantumâ€Dot Solar Cells via Direct Ion Exchange with Perovskite Nanocrystals. Advanced Materials, 2017, 29, 1703214.	11.1	69
38	Tunability Limit of Photoluminescence in Colloidal Silicon Nanocrystals. Scientific Reports, 2015, 5, 12469.	1.6	68
39	Interfacing BiVO 4 with Reduced Graphene Oxide for Enhanced Photoactivity: A Tale of Facet Dependence of Electron Shuttling. Small, 2016, 12, 5295-5302.	5.2	68
40	Temperature dependence of photoluminescence in silicon quantum dots. Journal Physics D: Applied Physics, 2007, 40, 3573-3578.	1.3	67
41	Dynamic study of the light soaking effect on perovskite solar cells by in-situ photoluminescence microscopy. Nano Energy, 2018, 46, 356-364.	8.2	67
42	Light-Induced Formation of MoO_xS_y Clusters on CdS Nanorods as Cocatalyst for Enhanced Hydrogen Evolution. ACS Applied Materials & Interfaces, 2020, 12, 8324-8332.	4.0	67
43	Spatial Distribution of Lead Iodide and Local Passivation on Organo-Lead Halide Perovskite. ACS Applied Materials & Interfaces, 2017, 9, 6072-6078.	4.0	62
44	Kesterite Cu₂ZnSnS₄thin film solar cells by a facile DMF-based solution coating process. Journal of Materials Chemistry C, 2015, 3, 10783-10792.	2.7	61
45	Theoretical and Experimental Investigation of the Electronic Structure and Quantum Confinement of Wet-Chemistry Synthesized Ag₂S Nanocrystals. Journal of Physical Chemistry C, 2015, 119, 867-872.	1.5	61
46	Photoluminescence characterisations of a dynamic aging process of organicâ€“inorganic CH₃NH₃PbBr₃perovskite. Nanoscale, 2016, 8, 1926-1931.	2.8	61
47	Photophysics of 2D Organicâ€“Inorganic Hybrid Lead Halide Perovskites: Progress, Debates, and Challenges. Advanced Science, 2021, 8, 2001843.	5.6	59
48	2D Plasmonic Tungsten Oxide Enabled Ultrasensitive Fiber Optics Gas Sensor. Advanced Optical Materials, 2019, 7, 1901383.	3.6	57
49	Significant Improvement in the Performance of PbSe Quantum Dot Solar Cell by Introducing a CsPbBr₃ Perovskite Colloidal Nanocrystal Back Layer. Advanced Energy Materials, 2017, 7, 1601773.	10.2	56
50	Construction of a Bi2MoO6:Bi2Mo3O12 heterojunction for efficient photocatalytic oxygen evolution. Chemical Engineering Journal, 2018, 353, 636-644.	6.6	56
51	Photogenerated charge dynamics of CdS nanorods with spatially distributed MoS2 for photocatalytic hydrogen generation. Chemical Engineering Journal, 2021, 420, 127709.	6.6	56
52	Introducing a protective interlayer of TiO2 in Cu2Oâ€“CuO heterojunction thin film as a highly stable visible light photocathode. RSC Advances, 2015, 5, 5231-5236.	1.7	55
53	Ultrafast Carrier Dynamics in Methylammonium Lead Bromide Perovskite. Journal of Physical Chemistry C, 2016, 120, 2542-2547.	1.5	54
54	Temperature dependent spectral properties of type-I and quasi type-II CdSe/CdS dot-in-rod nanocrystals. Physical Chemistry Chemical Physics, 2012, 14, 3505.	1.3	49

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55	An Emerging Leadâ€Free Doubleâ€Perovskite Cs₂AgFeCl₆:In Single Crystal. Advanced Functional Materials, 2020, 30, 2002225.	7.8	48
56	Slow Response of Carrier Dynamics in Perovskite Interface upon Illumination. ACS Applied Materials & Interfaces, 2018, 10, 31452-31461.	4.0	47
57	Revealing the Role of Methylammonium Chloride for Improving the Performance of 2D Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 25980-25990.	4.0	47
58	Synthesis, Photophysical, and Device Properties of Novel Dendrimers Based on a Fluoreneâ^'Hexabenzocoronene (FHBC) Core. Organic Letters, 2009, 11, 975-978.	2.4	46
59	Transient Energy Reservoir in 2D Perovskites. Advanced Optical Materials, 2019, 7, 1900971.	3.6	46
60	Phase segregation in inorganic mixed-halide perovskites: from phenomena to mechanisms. Photonics Research, 2020, 8, A56.	3.4	45
61	Improving the Photo-Oxidative Performance of Bi₂MoO₆ by Harnessing the Synergy between Spatial Charge Separation and Rational Co-Catalyst Deposition. ACS Applied Materials & Interfaces, 2018, 10, 9342-9352.	4.0	44
62	Spatially Modulating the Fluorescence Color of Mixed-Halide Perovskite Nanoplatelets through Direct Femtosecond Laser Writing. ACS Applied Materials & Interfaces, 2019, 11, 26017-26023.	4.0	44
63	Tracking Dynamic Phase Segregation in Mixedâ€Halide Perovskite Single Crystals under Twoâ€Photon Scanning Laser Illumination. Small Methods, 2019, 3, 1900273.	4.6	44
64	Structure engineering of hierarchical layered perovskite interface for efficient and stable wide bandgap photovoltaics. Nano Energy, 2020, 75, 104917.	8.2	44
65	Exciton-Driven Chemical Sensors Based on Excitation-Dependent Photoluminescent Two-Dimensional SnS. ACS Applied Materials & Interfaces, 2019, 11, 42462-42468.	4.0	42
66	Role of Surface Recombination in Halide Perovskite Nanoplatelets. ACS Applied Materials & Interfaces, 2018, 10, 31586-31593.	4.0	41
67	Effect of Halide Treatments on PbSe Quantum Dot Thin Films: Stability, Hot Carrier Lifetime, and Application to Photovoltaics. Journal of Physical Chemistry C, 2015, 119, 24149-24155.	1.5	40
68	The optical properties of Cs₄PbBr₆â€“CsPbBr₃ perovskite composites. Nanoscale, 2019, 11, 14676-14683.	2.8	40
69	Free-standing ultra-thin Janus indium oxysulfide for ultrasensitive visible-light-driven optoelectronic chemical sensing. Nano Today, 2021, 37, 101096.	6.2	38
70	External stokes shift of perovskite nanocrystals enlarged by photon recycling. Applied Physics Letters, 2019, 114, .	1.5	36
71	The Importance of the Interfacial Contact: Is Reduced Graphene Oxide Always an Enhancer in Photo(Electro)Catalytic Water Oxidation?. ACS Applied Materials & Interfaces, 2019, 11, 23125-23134.	4.0	34
72	Near-infrared enhanced carbon nanodots by thermally assisted growth. Applied Physics Letters, 2012, 101, .	1.5	33

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73	Linking Phase Segregation and Photovoltaic Performance of Mixed-Halide Perovskite Films through Grain Size Engineering. ACS Energy Letters, 0, , 1649-1658.	8.8	33
74	Lead-free metal-halide double perovskites: from optoelectronic properties to applications. Nanophotonics, 2021, 10, 2181-2219.	2.9	33
75	Engineering van der Waals Materials for Advanced Metaphotonics. Chemical Reviews, 2022, 122, 15204-15355.	23.0	33
76	Nanoscale Characterization of Carrier Dynamic and Surface Passivation in InGaN/GaN Multiple Quantum Wells on GaN Nanorods. ACS Applied Materials & Interfaces, 2016, 8, 31887-31893.	4.0	32
77	Metallophilic Bondâ€Induced Quenching of Delayed Fluorescence in Au₂₅@BSA Nanoclusters. Particle and Particle Systems Characterization, 2013, 30, 467-472.	1.2	31
78	Time-resolved and time-integrated photoluminescence analysis of state filling and quantum confinement of silicon quantum dots. Journal of Applied Physics, 2005, 97, 013501.	1.1	30
79	Illuminationâ€Induced Halide Segregation in Gradient Bandgap Mixedâ€Halide Perovskite Nanoplatelets. Advanced Optical Materials, 2018, 6, 1801107.	3.6	30
80	Oxygen-deficient bismuth tungstate and bismuth oxide composite photoanode with improved photostability. Science Bulletin, 2018, 63, 990-996.	4.3	29
81	Suppression of the internal electric field effects in ZnO/Zn_{0.7}Mg_{0.3}O quantum wells by ion-implantation induced intermixing. Nanotechnology, 2008, 19, 055205.	1.3	28
82	Improving Efficiency of Evaporated Cu2ZnSnS4Thin Film Solar Cells by a Thin Ag Intermediate Layer between Absorber and Back Contact. International Journal of Photoenergy, 2015, 2015, 1-9.	1.4	28
83	Long-Distance Ionic Diffusion in Cesium Lead Mixed Halide Perovskite Induced by Focused Illumination. Chemistry of Materials, 2019, 31, 9049-9056.	3.2	28
84	Enhanced Visible Light-Induced Charge Separation and Charge Transport in Cu₂O-Based Photocathodes by Urea Treatment. ACS Applied Materials & Interfaces, 2015, 7, 19887-19893.	4.0	27
85	Investigation of anti-solvent induced optical properties change of cesium lead bromide iodide mixed perovskite (CsPbBr3-xIx) quantum dots. Journal of Colloid and Interface Science, 2017, 504, 586-592.	5.0	27
86	Illumination-Induced Phase Segregation and Suppressed Solubility Limit in Br-Rich Mixed-Halide Inorganic Perovskites. ACS Applied Materials & Interfaces, 2020, 12, 38376-38385.	4.0	27
87	Temperature dependent photoluminescence in oxygen ion implanted and rapid thermally annealed ZnOâ•ZnMgO multiple quantum wells. Applied Physics Letters, 2007, 90, 221914.	1.5	25
88	A room temperature all-optical sensor based on two-dimensional SnS2 for highly sensitive and reversible NO2 sensing. Journal of Hazardous Materials, 2022, 426, 127813.	6.5	25
89	Quantum Confined Stark Effect in Au8 and Au25 Nanoclusters. Journal of Physical Chemistry C, 2013, 117, 3621-3626.	1.5	24
90	Hafnium nitride for hot carrier solar cells. Solar Energy Materials and Solar Cells, 2016, 144, 781-786.	3.0	24

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91	Optical Probe Ion and Carrier Dynamics at the CH₃NH₃PbI₃ Interface with Electron and Hole Transport Materials. Advanced Materials Interfaces, 2016, 3, 1600467.	1.9	23
92	The Dependence of Bi₂MoO₆ Photocatalytic Water Oxidation Capability on Crystal Facet Engineering. ChemPhotoChem, 2019, 3, 1246-1253.	1.5	23
93	Singlet and Triplet Carrier Dynamics in Rubrene Single Crystal. Journal of Physical Chemistry C, 2013, 117, 17741-17747.	1.5	22
94	Fluorescence origin and spectral broadening mechanism in atomically precise Au8 nanoclusters. Nanoscale, 2013, 5, 10251.	2.8	22
95	Extended hot carrier lifetimes observed in bulk In0.265Â±0.02Ga0.735N under high-density photoexcitation. Applied Physics Letters, 2016, 108, .	1.5	22
96	Self-assembled carbon dot-wrapped perovskites enable light trapping and defect passivation for efficient and stable perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 7508-7521.	5.2	21
97	Performance improvement of low bandgap polymer bulk heterojunction solar cells by incorporating P3HT. Organic Electronics, 2014, 15, 2837-2846.	1.4	20
98	Quantification of hot carrier thermalization in PbS colloidal quantum dots by power and temperature dependent photoluminescence spectroscopy. RSC Advances, 2016, 6, 90846-90855.	1.7	20
99	Determining In-Plane Carrier Diffusion in Two-Dimensional Perovskite Using Local Time-Resolved Photoluminescence. ACS Applied Materials & Interfaces, 2020, 12, 26384-26390.	4.0	20
100	Enhancing stability and luminescence quantum yield of CsPbBr3 quantum dots by embedded in borosilicate glass. Journal of Alloys and Compounds, 2021, 874, 159962.	2.8	20
101	Excitation dependence of photoluminescence in silicon quantum dots. New Journal of Physics, 2007, 9, 337-337.	1.2	19
102	Hot carrier dynamics in HfN and ZrN measured by transient absorption spectroscopy. Solar Energy Materials and Solar Cells, 2016, 150, 51-56.	3.0	19
103	Generation of hot carrier population in colloidal silicon quantum dots for high-efficiency photovoltaics. Solar Energy Materials and Solar Cells, 2016, 145, 391-396.	3.0	19
104	Nanosecond long excited state lifetimes observed in hafnium nitride. Solar Energy Materials and Solar Cells, 2017, 169, 13-18.	3.0	19
105	Confined Auâ€Pd Ensembles in Mesoporous TiO₂ Spheres for the Photocatalytic Oxidation of Acetaldehyde. ChemCatChem, 2013, 5, 3557-3561.	1.8	18
106	Revealing Dynamic Effects of Mobile Ions in Halide Perovskite Solar Cells Using Timeâ€Resolved Microspectroscopy. Small Methods, 2021, 5, e2000731.	4.6	18
107	Layer number dependent exciton dissociation and carrier recombination in 2D Ruddlesdenâ€“Popper halide perovskites. Journal of Materials Chemistry C, 2021, 9, 8966-8974.	2.7	18
108	Plasmon-induced long-lived hot electrons in degenerately doped molybdenum oxides for visible-light-driven photochemical reactions. Materials Today, 2022, 55, 21-28.	8.3	18

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109	Visualizing the Impact of Light Soaking on Morphological Domains in an Operational Cesium Lead Halide Perovskite Solar Cell. Journal of Physical Chemistry Letters, 2020, 11, 136-143.	2.1	17
110	Spectroscopic Insight into Efficient and Stable Hole Transfer at the Perovskite/Spiro-OMeTAD Interface with Alternative Additives. ACS Applied Materials & Interfaces, 2021, 13, 5752-5761.	4.0	17
111	Free chargesversusexcitons: photoluminescence investigation of InGaN/GaN multiple quantum well nanorods and their planar counterparts. Nanoscale, 2018, 10, 5358-5365.	2.8	16
112	Observation of coherent biexcitons in ZnOâˆ•ZnMgO multiple quantum wells at room temperature. Applied Physics Letters, 2006, 89, 182109.	1.5	15
113	The state filling effect in p-doped InGaAs/GaAs quantum dots. Journal of Physics Condensed Matter, 2007, 19, 386213.	0.7	15
114	Studies of the photostability of CdSe/CdS dot-in-rod nanoparticles. Journal of Nanoparticle Research, 2012, 14, 1.	0.8	14
115	Time-resolved fluorescence anisotropy study of organic lead halide perovskite. Solar Energy Materials and Solar Cells, 2016, 151, 102-112.	3.0	14
116	Efficient Energy Funnelling by Engineering the Bandgap of a Perovskite: FÃ¶rster Resonance Energy Transfer or Charge Transfer?. Journal of Physical Chemistry Letters, 2020, 11, 5963-5971.	2.1	14
117	Manipulating the Fate of Charge Carriers with Tungsten Concentration: Enhancing Photoelectrochemical Water Oxidation of Bi₂WO₆. Small, 2021, 17, e2102023.	5.2	14
118	Optical properties of gold particle-cluster coreâ€“satellite nanoassemblies. RSC Advances, 2013, 3, 19609.	1.7	13
119	Mechanism of Photoinduced Phase Segregation in Mixed-Halide Perovskite Microplatelets and Its Application in Micropatterning. ACS Applied Materials & Interfaces, 2022, 14, 12412-12422.	4.0	13
120	Two-photon optical characteristics of zinc oxide in bulk, low dimensional and nanoforms. Journal of Luminescence, 2007, 126, 641-643.	1.5	12
121	Induced pH-dependent shift by local surface plasmon resonance in functionalized gold nanorods. Nanoscale Research Letters, 2013, 8, 103.	3.1	12
122	The enhancement of electronâ€“phonon coupling in glutathione-protected Au25 clusters. Journal of Colloid and Interface Science, 2013, 402, 86-89.	5.0	12
123	Evidence for a large phononic band gap leading to slow hot carrier thermalisation. IOP Conference Series: Materials Science and Engineering, 2014, 68, 012002.	0.3	12
124	Potential of HfN, ZrN, and TiH as hot carrier absorber and Al₂O₃/Ge quantum well/Al₂O₃and Al₂O₃/PbS quantum dots/Al₂O₃as energy selective contacts. Japanese Journal of Applied Physics, 2017, 56, 08MA03.	0.8	12
125	A high-performance visible-light-driven all-optical switch enabled by ultra-thin gallium sulfide. Journal of Materials Chemistry C, 2021, 9, 3115-3121.	2.7	12
126	Intermediate phase-enhanced Ostwald ripening for the elimination of phase segregation in efficient inorganic CsPbIBr2 perovskite solar cells. Science China Materials, 2021, 64, 2655-2666.	3.5	12

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127	Confocal two-photon spectroscopy of red mercuric iodide. Applied Physics Letters, 2003, 83, 425-427.	1.5	11
128	Ultrafast dynamics in ZnO/ZnMgO multiple quantum wells. Nanotechnology, 2007, 18, 315403.	1.3	11
129	Observation of Hot Carriers Existing in Ag₂S Nanoparticles and Its Implication on Solar Cell Application. Journal of Physical Chemistry C, 2016, 120, 10199-10205.	1.5	11
130	Difference in hot carrier cooling rate between Langmuirâ€“Blodgett and drop cast PbS QD films due to strong electronâ€“phonon coupling. Nanoscale, 2017, 9, 17133-17142.	2.8	11
131	Metalâ€“Organic Framework Decorated Cuprous Oxide Nanowires for Longâ€lived Charges Applied in Selective Photocatalytic CO₂ Reduction to CH₄. Angewandte Chemie, 2021, 133, 8536-8540.	1.6	11
132	Radio frequency magnetron sputtered highly textured Cu2ZnSnS4 thin films on sapphire (0 0 0 1) substrates. Journal of Alloys and Compounds, 2015, 632, 53-58.	2.8	10
133	Highly transparent and luminescent gel glass based on reabsorption-free gold nanoclusters. Nanoscale, 2020, 12, 10781-10789.	2.8	10
134	Selfâ€Assembled Perovskite Nanoislands on CH₃NH₃PbI₃ Cuboid Single Crystals by Energetic Surface Engineering. Advanced Functional Materials, 2021, 31, 2105542.	7.8	9
135	New insight into carrier transport in 2D layered perovskites. CheM, 2022, 8, 904-906.	5.8	9
136	Dynamic study on the transformation process of gold nanoclusters. Nanotechnology, 2014, 25, 445705.	1.3	8
137	Effects of blend composition on the morphology of Si-PCPDTBT:PC₇₁ BM bulk heterojunction organic solar cells. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1931-1940.	0.8	8
138	Energy Funneling in Quasiâ€2D Ruddlesdenâ€“Popper Perovskites: Charge Transfer versus Resonant Energy Transfer. Advanced Photonics Research, 2022, 3, 2100283.	1.7	8
139	Origin and physical effects of edge states in two-dimensional Ruddlesden-Popper perovskites. IScience, 2022, 25, 104420.	1.9	8
140	Characterization of enhanced emission from excimer laser treated ZnO ceramics using one- and two-photon luminescence spectroscopy and microscopy. Journal of Luminescence, 2004, 106, 1-7.	1.5	7
141	Electron dynamics in modulation p-doped InGaAs/GaAs quantum dots. European Physical Journal B, 2008, 62, 65-70.	0.6	7
142	Thermal quenching of photoluminescence in ZnO/ZnMgO multiple quantum wells following oxygen implantation and rapid thermal annealing. Journal of Luminescence, 2009, 129, 153-157.	1.5	7
143	InOOH-mediated intergrown heterojunctions for enhanced photocatalytic Performance: Assembly and interfacial charge carrier transferring. Chemical Engineering Journal, 2022, 442, 136355.	6.6	7
144	Time-resolved photoluminescence of sintered ZnO ceramics. Chinese Physics B, 2001, 10, 874-876.	1.3	6

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145	Characterization of a Cu2 ZnSnS4 solar cell fabricated by sulfurization of metallic precursor Mo/Zn/Cu/Sn. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 2074-2079.	0.8	6
146	TIME-RESOLVED PHOTOLUMINESCENCE OF EXCITONS IN HgI2. International Journal of Modern Physics B, 2001, 15, 3920-3923.	1.0	5
147	Proton irradiation-induced intermixing in InxGa1â^'xAs/InP quantum wellsâ€"the effect of In composition. Semiconductor Science and Technology, 2006, 21, 1441-1446.	1.0	5
148	Carrier dynamics in p-type InGaAs/GaAs quantum dots. Journal of Materials Science: Materials in Electronics, 2007, 18, 363-365.	1.1	5
149	Evaluation of hafnium nitride and zirconium nitride as Hot Carrier absorber. , 2014, , .		5
150	Numerical calculation of optical phonon decay rate in InN/GaN MQW. IOP Conference Series: Materials Science and Engineering, 2014, 68, 012009.	0.3	5
151	Hot carrier transfer processes in nonstoichiometric titanium hydride. Japanese Journal of Applied Physics, 2017, 56, 08MA10.	0.8	5
152	The kinetics of exciton photoluminescence in mercuric iodide. Journal of Physics and Chemistry of Solids, 2002, 63, 2107-2113.	1.9	4
153	Time-resolved photoluminescence of red mercuric iodide. Journal of Applied Physics, 2002, 91, 4095-4100.	1.1	3
154	Study on the Ultrafast Carrier Dynamics in the Bulk In0.265GaN Thin Film. Energy Procedia, 2015, 84, 165-175.	1.8	3
155	Ni2+ doping induced structural phase transition and photoluminescence enhancement of CsPbBr3. AIP Advances, 2021, 11, .	0.6	3
156	Controllable Acceleration and Deceleration of Charge Carrier Transport in Metalâ€Halide Perovskite Singleâ€Crystal by Csâ€Cation Induced Bandgap Engineering. Small, 2022, 18, e2107680.	5.2	3
157	Research on marking of enamelware with excimer lasers. , 1996, 2888, 316.		2
158	Femtosecond two-color three-pulse photon echoes for studying dephasing in silicon quantum dots. Journal of Materials Science: Materials in Electronics, 2007, 18, 305-308.	1.1	2
159	Ultrafast Transient Grating Spectroscopy in Silicon Quantum Dots. Journal of Nanoscience and Nanotechnology, 2009, 9, 4575-4579.	0.9	2
160	Heterogeneous nano-particle array for the realization of the hot carrier solar cell. , 2013, , .		2
161	Manipulating the Fate of Charge Carriers with Tungsten Concentration: Enhancing Photoelectrochemical Water Oxidation of Bi₂WO₆ (Small 35/2021). Small, 2021, 17, 2170183.	5.2	2
162	Unencapsulated CsPbClBr₂ Film Photodetectors Grown by Thermal Vacuum Deposition Exhibit Exceptional Environmental Stability in High-Humidity Air. ACS Applied Energy Materials, 2022, 5, 8709-8716.	2.5	2

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