

Qing Shen

List of Publications by Year in descending order

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161
papers

12,487
citations

28190

55
h-index

24915

109
g-index

165
all docs

165
docs citations

165
times ranked

10821
citing authors

#	ARTICLE	IF	CITATIONS
1	CH ₃ NH ₃ Sn ₂ Pb ₃ I ₃ Perovskite Solar Cells Covering up to 1060 nm. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1004-1011.	2.1	852
2	Highly Luminescent Phase-Stable CsPb ₃ Perovskite Quantum Dots Achieving Near 100% Absolute Photoluminescence Quantum Yield. <i>ACS Nano</i> , 2017, 11, 10373-10383.	7.3	748
3	Recombination in Quantum Dot Sensitized Solar Cells. <i>Accounts of Chemical Research</i> , 2009, 42, 1848-1857.	7.6	747
4	High-Efficiency "Green" Quantum Dot Solar Cells. <i>Journal of the American Chemical Society</i> , 2014, 136, 9203-9210.	6.6	547
5	Zn-Cu-In-Se Quantum Dot Solar Cells with a Certified Power Conversion Efficiency of 11.6%. <i>Journal of the American Chemical Society</i> , 2016, 138, 4201-4209.	6.6	537
6	High efficiency of CdSe quantum-dot-sensitized TiO ₂ inverse opal solar cells. <i>Applied Physics Letters</i> , 2007, 91, .	1.5	442
7	Improving the performance of colloidal quantum-dot-sensitized solar cells. <i>Nanotechnology</i> , 2009, 20, 295204.	1.3	383
8	Effect of ZnS coating on the photovoltaic properties of CdSe quantum dot-sensitized solar cells. <i>Journal of Applied Physics</i> , 2008, 103, .	1.1	369
9	Lead-free tin-halide perovskite solar cells with 13% efficiency. <i>Nano Energy</i> , 2020, 74, 104858.	8.2	347
10	Colloidal Synthesis of Air-Stable Alloyed CsSn ₂ Pb ₃ I ₃ Perovskite Nanocrystals for Use in Solar Cells. <i>Journal of the American Chemical Society</i> , 2017, 139, 16708-16719.	6.6	314
11	Highly efficient CdS/CdSe-sensitized solar cells controlled by the structural properties of compact porous TiO ₂ photoelectrodes. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 4659.	1.3	271
12	Uncovering the role of the ZnS treatment in the performance of quantum dot sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 12024.	1.3	217
13	Mixed Sn-Ge Perovskite for Enhanced Perovskite Solar Cell Performance in Air. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1682-1688.	2.1	206
14	Boosting Photocatalytic CO ₂ Reduction on CsPbBr ₃ Perovskite Nanocrystals by Immobilizing Metal Complexes. <i>Chemistry of Materials</i> , 2020, 32, 1517-1525.	3.2	197
15	Suppression of Charge Carrier Recombination in Lead-Free Tin Halide Perovskite via Lewis Base Post-treatment. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 5277-5283.	2.1	196
16	All-Solid Perovskite Solar Cells with HOCO-R-NH ₃ ⁺ Anchor-Group Inserted between Porous Titania and Perovskite. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16651-16659.	1.5	191
17	All-Inorganic CsPb ₂ Ge ₂ Br Perovskite with Enhanced Phase Stability and Photovoltaic Performance. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12745-12749.	7.2	157
18	A multi-objective optimization-based layer-by-layer blade-coating approach for organic solar cells: rational control of vertical stratification for high performance. <i>Energy and Environmental Science</i> , 2019, 12, 3118-3132.	15.6	142

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19	CdSeTe/CdS Type-I Core/Shell Quantum Dot Sensitized Solar Cells with Efficiency over 9%. Journal of Physical Chemistry C, 2015, 119, 28800-28808.	1.5	131
20	Photosensitization of nanostructured TiO ₂ with CdSe quantum dots: effects of microstructure and electron transport in TiO ₂ substrates. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 75-80.	2.0	130
21	Mn doped quantum dot sensitized solar cells with power conversion efficiency exceeding 9%. Journal of Materials Chemistry A, 2016, 4, 877-886.	5.2	122
22	Sensitization of Titanium Dioxide Photoanodes with Cadmium Selenide Quantum Dots Prepared by SILAR: Photoelectrochemical and Carrier Dynamics Studies. Journal of Physical Chemistry C, 2010, 114, 21928-21937.	1.5	120
23	CdSe quantum dot-sensitized solar cell employing TiO ₂ nanotube working-electrode and Cu ₂ S counter-electrode. Applied Physics Letters, 2010, 97, .	1.5	118
24	Elegant Construction of ZnIn ₂ S ₄ /BiVO ₄ Hierarchical Heterostructures as Direct Z-Scheme Photocatalysts for Efficient CO ₂ Photoreduction. ACS Applied Materials & Interfaces, 2021, 13, 15092-15100.	4.0	115
25	Highly Efficient 17.6% Tin-lead Mixed Perovskite Solar Cells Realized through Spike Structure. Nano Letters, 2018, 18, 3600-3607.	4.5	114
26	CsPb(I Br) ₃ solar cells. Science Bulletin, 2019, 64, 1532-1539.	4.3	114
27	Strain Relaxation and Light Management in Tin-lead Perovskite Solar Cells to Achieve High Efficiencies. ACS Energy Letters, 2019, 4, 1991-1998.	8.8	114
28	Gel ₂ Additive for High Optoelectronic Quality CsPbI ₃ Quantum Dots and Their Application in Photovoltaic Devices. Chemistry of Materials, 2019, 31, 798-807.	3.2	112
29	Tin-lead Perovskite Solar Cells Fabricated on Hole Selective Monolayers. ACS Energy Letters, 2022, 7, 966-974.	8.8	111
30	Effect of the conduction band offset on interfacial recombination behavior of the planar perovskite solar cells. Nano Energy, 2018, 53, 17-26.	8.2	110
31	Tin-lead Perovskite Fabricated via Ethylenediamine Interlayer Guides to the Solar Cell Efficiency of 21.74%. Advanced Energy Materials, 2021, 11, 2101069.	10.2	110
32	Role of Gel ₂ and SnF ₂ additives for SnGe perovskite solar cells. Nano Energy, 2019, 58, 130-137.	8.2	104
33	Quantum-Dot-Sensitized Solar Cells: Effect of Nanostructured TiO ₂ Morphologies on Photovoltaic Properties. Journal of Physical Chemistry Letters, 2012, 3, 1885-1893.	2.1	101
34	Surface engineering of PbS quantum dot sensitized solar cells with a conversion efficiency exceeding 7%. Journal of Materials Chemistry A, 2016, 4, 7214-7221.	5.2	101
35	Relationship between Lattice Strain and Efficiency for Sn-Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 31105-31110.	4.0	101
36	Direct Correlation between Ultrafast Injection and Photoanode Performance in Quantum Dot Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 22352-22360.	1.5	97

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37	Charge transfer and recombination at the metal oxide/CH ₃ NH ₃ PbCl ₂ /spiro-OMeTAD interfaces: uncovering the detailed mechanism behind high efficiency solar cells. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 19984-19992.	1.3	88
38	Facile Synthesis and Characterization of Sulfur Doped Low Bandgap Bismuth Based Perovskites by Soluble Precursor Route. <i>Chemistry of Materials</i> , 2016, 28, 6436-6440.	3.2	87
39	Alloying Strategy in CuInGaSe Quantum Dots for High Efficiency Quantum Dot Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 5328-5336.	4.0	87
40	Optical absorption, charge separation and recombination dynamics in Sn/Pb cocktail perovskite solar cells and their relationships to photovoltaic performances. <i>Journal of Materials Chemistry A</i> , 2015, 3, 9308-9316.	5.2	85
41	High reduction of interfacial charge recombination in colloidal quantum dot solar cells by metal oxide surface passivation. <i>Nanoscale</i> , 2015, 7, 5446-5456.	2.8	82
42	Ultrafast Electron Injection from Photoexcited Perovskite CsPb ₃ QDs into TiO ₂ Nanoparticles with Injection Efficiency near 99%. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 294-297.	2.1	75
43	Bismuth Vacancy-Induced Efficient CO ₂ Photoreduction in BiOCl Directly from Natural Air: A Progressive Step toward Photosynthesis in Nature. <i>Nano Letters</i> , 2021, 21, 10260-10266.	4.5	74
44	Copper deficient ZnCuInSe quantum dot sensitized solar cells for high efficiency. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21442-21451.	5.2	73
45	Octadecylamine-Functionalized Single-Walled Carbon Nanotubes for Facilitating the Formation of a Monolithic Perovskite Layer and Stable Solar Cells. <i>Advanced Functional Materials</i> , 2018, 28, 1705545.	7.8	73
46	Hindered Formation of Photoinactive γ -FAPb ₃ Phase and Hysteresis-Free Mixed-Cation Planar Heterojunction Perovskite Solar Cells with Enhanced Efficiency via Potassium Incorporation. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 2113-2120.	2.1	72
47	Photoexcited carrier dynamics in colloidal quantum dot solar cells: insights into individual quantum dots, quantum dot solid films and devices. <i>Chemical Society Reviews</i> , 2020, 49, 49-84.	18.7	70
48	Characterization of electron transfer from CdSe quantum dots to nanostructured TiO ₂ electrode using a near-field heterodyne transient grating technique. <i>Thin Solid Films</i> , 2008, 516, 5927-5930.	0.8	68
49	Characterization of Nanostructured TiO ₂ Electrodes Sensitized with CdSe Quantum Dots Using Photoacoustic and Photoelectrochemical Current Methods. <i>Japanese Journal of Applied Physics</i> , 2004, 43, 2946-2951.	0.8	67
50	Artificial Trees for Artificial Photosynthesis: Construction of Dendrite-Structured γ -Fe ₂ O ₃ /g-C ₃ N ₄ Z-Scheme System for Efficient CO ₂ Reduction into Solar Fuels. <i>ACS Applied Energy Materials</i> , 2020, 3, 6561-6572.	2.5	67
51	Effect of ZnS coatings on the enhancement of the photovoltaic properties of PbS quantum dot-sensitized solar cells. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	66
52	Investigation of Interfacial Charge Transfer in Solution Processed Cs ₂ Snl ₆ Thin Films. <i>Journal of Physical Chemistry C</i> , 2017, 121, 13092-13100.	1.5	66
53	Theoretical analysis of band alignment at back junction in SnGe perovskite solar cells with inverted p-i-n structure. <i>Solar Energy Materials and Solar Cells</i> , 2020, 206, 110268.	3.0	66
54	Effect of nanostructured electrode architecture and semiconductor deposition strategy on the photovoltaic performance of quantum dot sensitized solar cells. <i>Electrochimica Acta</i> , 2012, 75, 139-147.	2.6	62

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55	Recent progress on quantum dot solar cells: a review. <i>Journal of Photonics for Energy</i> , 2016, 6, 040901.	0.8	60
56	Slow hot carrier cooling in cesium lead iodide perovskites. <i>Applied Physics Letters</i> , 2017, 111, .	1.5	56
57	Super stable CsPbBr ₃ @SiO ₂ tumor imaging reagent by stress-response encapsulation. <i>Nano Research</i> , 2020, 13, 795-801.	5.8	55
58	Reducing trap density and carrier concentration by a Ge additive for an efficient quasi 2D/3D perovskite solar cell. <i>Journal of Materials Chemistry A</i> , 2020, 8, 2962-2968.	5.2	53
59	Influence of linker molecules on interfacial electron transfer and photovoltaic performance of quantum dot sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20882-20888.	5.2	52
60	Optical absorption, photosensitization, and ultrafast carrier dynamic investigations of CdSe quantum dots grafted onto nanostructured SnO ₂ electrode and fluorine-doped tin oxide (FTO) glass. <i>Chemical Physics Letters</i> , 2007, 442, 89-96.	1.2	51
61	Understanding charge transfer and recombination by interface engineering for improving the efficiency of PbS quantum dot solar cells. <i>Nanoscale Horizons</i> , 2018, 3, 417-429.	4.1	50
62	Passivation Strategy of Reducing Both Electron and Hole Trap States for Achieving High-Efficiency PbS Quantum-Dot Solar Cells with Power Conversion Efficiency over 12%. <i>ACS Energy Letters</i> , 2020, 5, 3224-3236.	8.8	49
63	Air Stable PbSe Colloidal Quantum Dot Heterojunction Solar Cells: Ligand-Dependent Exciton Dissociation, Recombination, Photovoltaic Property, and Stability. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28509-28518.	1.5	45
64	Ex Situ CdSe Quantum Dot-Sensitized Solar Cells Employing Inorganic Ligand Exchange To Boost Efficiency. <i>Journal of Physical Chemistry C</i> , 2014, 118, 214-222.	1.5	44
65	The effect of water on colloidal quantum dot solar cells. <i>Nature Communications</i> , 2021, 12, 4381.	5.8	44
66	Growth of Amorphous Passivation Layer Using Phenethylammonium Iodide for High-Performance Inverted Perovskite Solar Cells. <i>Solar Rrl</i> , 2020, 4, 1900243.	3.1	43
67	Photoacoustic and Photoelectrochemical Characterization of Inverse Opal TiO ₂ Sensitized with CdSe Quantum Dots. <i>Japanese Journal of Applied Physics</i> , 2006, 45, 5563-5568.	0.8	41
68	A 2,1,3-Benzooxadiazole Moiety in a D ⁺ -type Hole-Transporting Material for Boosting the Photovoltage in Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2017, 121, 17617-17624.	1.5	40
69	Photoacoustic and photoelectrochemical current spectra of combined CdS/CdSe quantum dots adsorbed on nanostructured TiO ₂ electrodes, together with photovoltaic characteristics. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	39
70	High Efficiency Quantum Dot Sensitized Solar Cells Based on Direct Adsorption of Quantum Dots on Photoanodes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 22549-22559.	4.0	39
71	Solution-Processed Air-Stable Copper Bismuth Iodide for Photovoltaics. <i>ChemSusChem</i> , 2018, 11, 2930-2935.	3.6	39
72	Lead Selenide Colloidal Quantum Dot Solar Cells Achieving High Open-Circuit Voltage with One-Step Deposition Strategy. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3598-3603.	2.1	38

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73	Near-Infrared Emission from Tin-Lead (Sn-Pb) Alloyed Perovskite Quantum Dots by Sodium Doping. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 8421-8424.	7.2	38
74	Hollow InVO ₄ Nanocuboid Assemblies toward Promoting Photocatalytic N ₂ Conversion Performance. <i>Advanced Materials</i> , 2021, 33, e2006780.	11.1	38
75	Optical absorption and ultrafast carrier dynamics characterization of CdSe quantum dots deposited on different morphologies of nanostructured TiO ₂ films. <i>Materials Science and Engineering C</i> , 2007, 27, 1514-1520.	3.8	37
76	Multiple electron injection dynamics in linearly-linked two dye co-sensitized nanocrystalline metal oxide electrodes for dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 4605.	1.3	35
77	Improvement of Photovoltaic Performance of Colloidal Quantum Dot Solar Cells Using Organic Small Molecule as Hole-Selective Layer. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 2163-2169.	2.1	35
78	Photoexcited hot and cold electron and hole dynamics at FAPbI ₃ perovskite quantum dots/metal oxide heterojunctions used for stable perovskite quantum dot solar cells. <i>Nano Energy</i> , 2020, 67, 104267.	8.2	35
79	Huge suppression of charge recombination in P3HT-ZnO organic-inorganic hybrid solar cells by locating dyes at the ZnO/P3HT interfaces. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14370.	1.3	33
80	Electrocatalytic fixation of N ₂ into NO ₃ ⁻ : electron transfer between oxygen vacancies and loaded Au in Nb ₂ O ₅ nanobelts to promote ambient nitrogen oxidation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 17442-17450.	5.2	33
81	High performance wide bandgap Lead-free perovskite solar cells by monolayer engineering. <i>Chemical Engineering Journal</i> , 2022, 436, 135196.	6.6	33
82	Ligand-dependent exciton dynamics and photovoltaic properties of PbS quantum dot heterojunction solar cells. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 6358-6367.	1.3	31
83	All-inorganic CsPbI ₃ GeI ₂ Br Perovskite with Enhanced Phase Stability and Photovoltaic Performance. <i>Angewandte Chemie</i> , 2018, 130, 12927-12931.	1.6	31
84	Triethylphosphine Oxide Acts as Alkahest for SnX ₂ /PbX ₂ : A General Synthetic Route to Perovskite ASn _{1-x} Pb _x X ₃ (A = Cs, FA, MA; X =) <i>TJBT/OrgBT/Over</i>		
85	Exquisite design of porous carbon microtubule-scaffolding hierarchical In ₂ O ₃ -ZnIn ₂ S ₄ heterostructures toward efficient photocatalytic conversion of CO ₂ into CO. <i>Nanoscale</i> , 2020, 12, 14676-14681.	2.8	31
86	Separation of ultrafast photoexcited electron and hole dynamics in CdSe quantum dots adsorbed onto nanostructured TiO ₂ films. <i>Applied Physics Letters</i> , 2010, 97, .	1.5	30
87	Photoacoustic spectra of Au quantum dots adsorbed on nanostructured TiO ₂ electrodes together with the photoelectrochemical current characteristics. <i>Journal of Applied Physics</i> , 2009, 105, .	1.1	29
88	Highly symmetrical, 24-faceted, concave BiVO ₄ polyhedron bounded by multiple high-index facets for prominent photocatalytic O ₂ evolution under visible light. <i>Chemical Communications</i> , 2019, 55, 4777-4780.	2.2	29
89	Architecture of the Interface between the Perovskite and Hole-Transport Layers in Perovskite Solar Cells. <i>ChemSusChem</i> , 2016, 9, 2634-2639.	3.6	27
90	Neutral and anionic tetrazole-based ligands in designing novel ruthenium dyes for dye-sensitized solar cells. <i>Journal of Power Sources</i> , 2016, 307, 416-425.	4.0	27

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91	Bimetallic oxyhydroxide <i>in situ</i> derived from an Fe ₂ Co-MOF for efficient electrocatalytic oxygen evolution. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13271-13278.	5.2	27
92	Impact of Auger recombination on performance limitation of perovskite solar cell. <i>Solar Energy</i> , 2021, 217, 342-353.	2.9	27
93	Ultrafast carrier dynamics in PbS quantum dots. <i>Chemical Physics Letters</i> , 2012, 542, 89-93.	1.2	26
94	Electronic structures of two types of TiO ₂ electrodes: inverse opal and nanoparticulate cases. <i>RSC Advances</i> , 2015, 5, 49623-49632.	1.7	26
95	New Tin(II) Fluoride Derivative as a Precursor for Enhancing the Efficiency of Inverted Planar Tin/Lead Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018, 122, 27284-27291.	1.5	26
96	Dependences of the optical absorption and photovoltaic properties of CdS quantum dot-sensitized solar cells on the CdS quantum dot adsorption time. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	25
97	Recombination Suppression in PbS Quantum Dot Heterojunction Solar Cells by Energy-Level Alignment in the Quantum Dot Active Layers. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 26142-26152.	4.0	24
98	Enhanced Device Performance with Passivation of the TiO ₂ Surface Using a Carboxylic Acid Fullerene Monolayer for a SnPb Perovskite Solar Cell with a Normal Planar Structure. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 17776-17782.	4.0	24
99	Matrix Manipulation of Directly Synthesized PbS Quantum Dot Inks Enabled by Coordination Engineering. <i>Advanced Functional Materials</i> , 2021, 31, 2104457.	7.8	24
100	Atomistic and Electronic Origin of Phase Instability of Metal Halide Perovskites. <i>ACS Applied Energy Materials</i> , 2020, 3, 11548-11558.	2.5	23
101	Crystal Growth of CdSe Quantum Dots Adsorbed on Nanoparticle, Inverse Opal, and Nanotube TiO ₂ Photoelectrodes Characterized by Photoacoustic Spectroscopy. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 4616.	0.8	22
102	The Electronic Structure and Photoinduced Electron Transfer Rate of CdSe Quantum Dots on Single Crystal Rutile TiO ₂ : Dependence on the Crystal Orientation of the Substrate. <i>Journal of Physical Chemistry C</i> , 2016, 120, 2047-2057.	1.5	22
103	Inverted CsPbI ₂ Br perovskite solar cells with enhanced efficiency and stability in ambient atmosphere via formamidinium incorporation. <i>Solar Energy Materials and Solar Cells</i> , 2020, 218, 110741.	3.0	21
104	Interface Passivation Effects on the Photovoltaic Performance of Quantum Dot Sensitized Inverse Opal TiO ₂ Solar Cells. <i>Nanomaterials</i> , 2018, 8, 460.	1.9	20
105	Uncovering the charge transfer and recombination mechanism in ZnS-coated PbS quantum dot sensitized solar cells. <i>Solar Energy</i> , 2015, 122, 307-313.	2.9	19
106	Hole-Transport Materials Containing Triphenylamine Donors with a Spiro[fluorene-9,9'-xanthene] Core for Efficient and Stable Large Area Perovskite Solar Cells. <i>Solar Rrl</i> , 2017, 1, 1700096.	3.1	19
107	The interparticle distance limit for multiple exciton dissociation in PbS quantum dot solid films. <i>Nanoscale Horizons</i> , 2019, 4, 445-451.	4.1	19
108	Improving Photovoltaic Performance of ZnO Nanowires Based Colloidal Quantum Dot Solar Cells via SnO ₂ Passivation Strategy. <i>Frontiers in Energy Research</i> , 2019, 7, .	1.2	19

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109	High-Efficiency Lead-Free Wide Band Gap Perovskite Solar Cells via Guanidinium Bromide Incorporation. <i>ACS Applied Energy Materials</i> , 2021, 4, 5615-5624.	2.5	19
110	Enhanced efficiency and stability in Sn-based perovskite solar cells by trimethylsilyl halide surface passivation. <i>Journal of Energy Chemistry</i> , 2022, 71, 604-611.	7.1	19
111	Carrier dynamics in quantum-dot sensitized solar cells measured by transient grating and transient absorption methods. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 11006.	1.3	18
112	BiVO_4 tubular structures: oxygen defect-rich and largely exposed reactive {010} facets synergistically boost photocatalytic water oxidation and the selective N_2 coupling reaction of 5-amino-1H-tetrazole. <i>Chemical Communications</i> , 2019, 55, 5635-5638.	2.2	17
113	A New Strategy for Increasing the Efficiency of Inverted Perovskite Solar Cells to More than 21%: High-Humidity Induced Self-Passivation of Perovskite Films. <i>Solar Rrl</i> , 2020, 4, 2000149.	3.1	17
114	Thiocyanate-free asymmetric ruthenium(II) dye sensitizers containing azole chromophores with near-IR light-harvesting capacity. <i>Journal of Power Sources</i> , 2016, 331, 100-111.	4.0	16
115	Construction of Al-ZnO/CdS photoanodes modified with distinctive alumina passivation layer for improvement of photoelectrochemical efficiency and stability. <i>Nanoscale</i> , 2018, 10, 19621-19627.	2.8	16
116	Surface-Modified Graphene Oxide/Lead Sulfide Hybrid Film-Forming Ink for High-Efficiency Bulk Nano-Heterojunction Colloidal Quantum Dot Solar Cells. <i>Nano-Micro Letters</i> , 2020, 12, 111.	14.4	16
117	Effect of Precursor Solution Aging on the Thermoelectric Performance of CsSnI_3 Thin Film. <i>Journal of Electronic Materials</i> , 2020, 49, 2698-2703.	1.0	15
118	All-inorganic cesium lead halide perovskite nanocrystals for solar-pumped laser application. <i>Journal of Applied Physics</i> , 2020, 127, .	1.1	15
119	Role of lithium and co-existing cations in electrolyte to improve performance of dye-sensitized solar cells. <i>RSC Advances</i> , 2014, 4, 21517-21520.	1.7	14
120	<i>In situ</i> preparation of Bi_2S_3 nanoribbon-anchored BiVO_4 nanoscroll heterostructures for the catalysis of Cr(VI) photoreduction. <i>Catalysis Science and Technology</i> , 2020, 10, 3843-3847.	2.1	14
121	Large Grain Growth and Energy Alignment Optimization by Diethylammonium Iodide Substitution at A Site in Lead-Free Tin Halide Perovskite Solar Cells. <i>Solar Rrl</i> , 2021, 5, 2100633.	3.1	14
122	Large synergy effects of doping, a site substitution, and surface passivation in wide bandgap Pb-free ASnI_2Br perovskite solar cells on efficiency and stability enhancement. <i>Journal of Power Sources</i> , 2022, 520, 230848.	4.0	13
123	Optical absorption of CdSe quantum dots on electrodes with different morphology. <i>AIP Advances</i> , 2013, 3, 102115.	0.6	12
124	Enhancing the Electronic Properties and Stability of High-Efficiency Tin-Lead Mixed Halide Perovskite Solar Cells via Doping Engineering. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 3130-3137.	2.1	12
125	Adsorption and Electronic Structure of CdSe Quantum Dots on Single Crystal ZnO: A Basic Study of Quantum Dot-Sensitization System. <i>Journal of Physical Chemistry C</i> , 2016, 120, 16367-16376.	1.5	11
126	Study of open circuit voltage loss mechanism in perovskite solar cells. <i>Japanese Journal of Applied Physics</i> , 2021, 60, SBBF13.	0.8	11

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127	Effect of TiO ₂ Crystal Orientation on the Adsorption of CdSe Quantum Dots for Photosensitization Studied by the Photoacoustic and Photoelectron Yield Methods. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16680-16687.	1.5	10
128	The effect of CdS on the charge separation and recombination dynamics in PbS/CdS double-layered quantum dot sensitized solar cells. <i>Chemical Physics</i> , 2016, 478, 159-163.	0.9	10
129	Near-Infrared Emission from Tin-Lead (Sn-Pb) Alloyed Perovskite Quantum Dots by Sodium Doping. <i>Angewandte Chemie</i> , 2020, 132, 8499-8502.	1.6	10
130	Relationship between Carrier Density and Precursor Solution Stirring for Lead-Free Tin Halide Perovskite Solar Cells Performance. <i>ACS Applied Energy Materials</i> , 2022, 5, 4002-4007.	2.5	10
131	Characterization of hot carrier cooling and multiple exciton generation dynamics in PbS QDs using an improved transient grating technique. <i>Journal of Energy Chemistry</i> , 2015, 24, 712-716.	7.1	9
132	Two-Step Synthesis of Laminar Vanadate via a Facile Hydrothermal Route and Enhancing the Photocatalytic Reduction of CO ₂ into Solar Fuel through Tuning of the Oxygen Vacancies by in Situ Vacuum Illumination Treatment. <i>ACS Applied Energy Materials</i> , 2018, 1, 6857-6864.	2.5	9
133	The role of sodium in stabilizing tin-lead (Sn-Pb) alloyed perovskite quantum dots. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12087-12098.	5.2	9
134	Ultra-Halide-Rich Synthesis of Stable Pure Tin-Based Halide Perovskite Quantum Dots: Implications for Photovoltaics. <i>ACS Applied Nano Materials</i> , 2021, 4, 3958-3968.	2.4	9
135	Modeling of Nucleation and Growth in the Synthesis of PbS Colloidal Quantum Dots Under Variable Temperatures. <i>ACS Omega</i> , 2021, 6, 3701-3710.	1.6	8
136	Molybdenum Sulfide Quantum Dots Decorated on TiO ₂ for Photocatalytic Hydrogen Evolution. <i>ACS Applied Nano Materials</i> , 2022, 5, 702-709.	2.4	8
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