Qing Shen

List of Publications by Year
in descending order

161 papers	12,487 citations	28274 55 h-index	24982 109 g-index
165 all docs	165 docs citations	165 times ranked	10821 citing authors

#	Article	IF	Citations
1	CH₃NH₃Sn_{<i>x</i>}Pb_(1â€“<i>x</i>)I₃ Perovskite Solar Cells Covering up to 1060 nm. Journal of Physical Chemistry Letters, 2014, 5, 1004-1011.	4.6	852
2	Highly Luminescent Phase-Stable CsPbI₃ Perovskite Quantum Dots Achieving Near 100% Absolute Photoluminescence Quantum Yield. ACS Nano, 2017, 11, 10373-10383.	14.6	748
3	Recombination in Quantum Dot Sensitized Solar Cells. Accounts of Chemical Research, 2009, 42, 1848-1857.	15.6	747
4	High-Efficiency â€œGreenâ€•Quantum Dot Solar Cells. Journal of the American Chemical Society, 2014, 136, 9203-9210.	13.7	547
5	Znâ€“Cuâ€“Inâ€“Se Quantum Dot Solar Cells with a Certified Power Conversion Efficiency of 11.6%. Journal of the American Chemical Society, 2016, 138, 4201-4209.	13.7	537
6	High efficiency of CdSe quantum-dot-sensitized TiO2 inverse opal solar cells. Applied Physics Letters, 2007, 91, .	3.3	442
7	Improving the performance of colloidal quantum-dot-sensitized solar cells. Nanotechnology, 2009, 20, 295204.	2.6	383
8	Effect of ZnS coating on the photovoltaic properties of CdSe quantum dot-sensitized solar cells. Journal of Applied Physics, 2008, 103, .	2.5	369
9	Lead-free tin-halide perovskite solar cells with 13% efficiency. Nano Energy, 2020, 74, 104858.	16.0	347
10	Colloidal Synthesis of Air-Stable Alloyed CsSn_{1â€“<i>x</i>}Pb_{<i>x</i>}I₃ Perovskite Nanocrystals for Use in Solar Cells. Journal of the American Chemical Society, 2017, 139, 16708-16719.	13.7	314
11	Highly efficient CdS/CdSe-sensitized solar cells controlled by the structural properties of compact porous TiO2 photoelectrodes. Physical Chemistry Chemical Physics, 2011, 13, 4659.	2.8	271
12	Uncovering the role of the ZnS treatment in the performance of quantum dot sensitized solar cells. Physical Chemistry Chemical Physics, 2011, 13, 12024.	2.8	217
13	Mixed Snâ€“Ge Perovskite for Enhanced Perovskite Solar Cell Performance in Air. Journal of Physical Chemistry Letters, 2018, 9, 1682-1688.	4.6	206
14	Boosting Photocatalytic CO₂ Reduction on CsPbBr₃ Perovskite Nanocrystals by Immobilizing Metal Complexes. Chemistry of Materials, 2020, 32, 1517-1525.	6.7	197
15	Suppression of Charge Carrier Recombination in Lead-Free Tin Halide Perovskite via Lewis Base Post-treatment. Journal of Physical Chemistry Letters, 2019, 10, 5277-5283.	4.6	196
16	All-Solid Perovskite Solar Cells with HOCO-R-NH₃⁺I^{â€“} Anchor-Group Inserted between Porous Titania and Perovskite. Journal of Physical Chemistry C, 2014, 118, 16651-16659.	3.1	191
17	Allâ€Inorganic CsPb_{1âˆ’<i>x</i>}Ge_{<i>x</i>}I₂Br Perovskite with Enhanced Phase Stability and Photovoltaic Performance. Angewandte Chemie - International Edition, 2018, 57, 12745-12749.	13.8	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. Energy and Environmental Science, 2019, 12, 3118-3132.	30.8	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.	3.1	131
20	Photosensitization of nanostructured TiO2 with CdSe quantum dots: effects of microstructure and electron transport in TiO2 substrates. Journal of Photochemistry and Photobiology A: Chemistry, 2004, 164, 75-80.	3.9	130
21	Mn doped quantum dot sensitized solar cells with power conversion efficiency exceeding 9%. Journal of Materials Chemistry A, 2016, 4, 877-886.	10.3	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.	3.1	120
23	CdSe quantum dot-sensitized solar cell employing TiO2 nanotube working-electrode and Cu2S counter-electrode. Applied Physics Letters, 2010, 97, .	3.3	118
24	Elegant Construction of ZnIn₂S₄/BiVO₄ Hierarchical Heterostructures as Direct Z-Scheme Photocatalysts for Efficient CO₂ Photoreduction. ACS Applied Materials & Interfaces, 2021, 13, 15092-15100.	8.0	115
25	Highly Efficient 17.6% Tinâ€“Lead Mixed Perovskite Solar Cells Realized through Spike Structure. Nano Letters, 2018, 18, 3600-3607.	9.1	114
26	CsPb(I Br1â^")3 solar cells. Science Bulletin, 2019, 64, 1532-1539.	9.0	114
27	Strain Relaxation and Light Management in Tinâ€“Lead Perovskite Solar Cells to Achieve High Efficiencies. ACS Energy Letters, 2019, 4, 1991-1998.	17.4	114
28	GeI₂ Additive for High Optoelectronic Quality CsPbI₃ Quantum Dots and Their Application in Photovoltaic Devices. Chemistry of Materials, 2019, 31, 798-807.	6.7	112
29	Tinâ€“Lead Perovskite Solar Cells Fabricated on Hole Selective Monolayers. ACS Energy Letters, 2022, 7, 966-974.	17.4	111
30	Effect of the conduction band offset on interfacial recombination behavior of the planar perovskite solar cells. Nano Energy, 2018, 53, 17-26.	16.0	110
31	Tinâ€Lead Perovskite Fabricated via Ethylenediamine Interlayer Guides to the Solar Cell Efficiency of 21.74%. Advanced Energy Materials, 2021, 11, 2101069.	19.5	110
32	Role of GeI2 and SnF2 additives for SnGe perovskite solar cells. Nano Energy, 2019, 58, 130-137.	16.0	104
33	Quantum-Dot-Sensitized Solar Cells: Effect of Nanostructured TiO₂ Morphologies on Photovoltaic Properties. Journal of Physical Chemistry Letters, 2012, 3, 1885-1893.	4.6	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.	10.3	101
35	Relationship between Lattice Strain and Efficiency for Sn-Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 31105-31110.	8.0	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.	3.1	97

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37	Charge transfer and recombination at the metal oxide/CH₃NH₃PbClI₂/spiro-OMeTAD interfaces: uncovering the detailed mechanism behind high efficiency solar cells. Physical Chemistry Chemical Physics, 2014, 16, 19984-19992.	2.8	88
38	Facile Synthesis and Characterization of Sulfur Doped Low Bandgap Bismuth Based Perovskites by Soluble Precursor Route. Chemistry of Materials, 2016, 28, 6436-6440.	6.7	87
39	Alloying Strategy in Cuâ€“Inâ€“Gaâ€“Se Quantum Dots for High Efficiency Quantum Dot Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 5328-5336.	8.0	87
40	Optical absorption, charge separation and recombination dynamics in Sn/Pb cocktail perovskite solar cells and their relationships to photovoltaic performances. Journal of Materials Chemistry A, 2015, 3, 9308-9316.	10.3	85
41	High reduction of interfacial charge recombination in colloidal quantum dot solar cells by metal oxide surface passivation. Nanoscale, 2015, 7, 5446-5456.	5.6	82
42	Ultrafast Electron Injection from Photoexcited Perovskite CsPbI₃ QDs into TiO₂ Nanoparticles with Injection Efficiency near 99%. Journal of Physical Chemistry Letters, 2018, 9, 294-297.	4.6	75
43	Bismuth Vacancy-Induced Efficient CO₂ Photoreduction in BiOCl Directly from Natural Air: A Progressive Step toward Photosynthesis in Nature. Nano Letters, 2021, 21, 10260-10266.	9.1	74
44	Copper deficient Znâ€“Cuâ€“Inâ€“Se quantum dot sensitized solar cells for high efficiency. Journal of Materials Chemistry A, 2017, 5, 21442-21451.	10.3	73
45	Octadecylamineâ€Functionalized Singleâ€Walled Carbon Nanotubes for Facilitating the Formation of a Monolithic Perovskite Layer and Stable Solar Cells. Advanced Functional Materials, 2018, 28, 1705545.	14.9	73
46	Hindered Formation of Photoinactive Î´-FAPbI₃ Phase and Hysteresis-Free Mixed-Cation Planar Heterojunction Perovskite Solar Cells with Enhanced Efficiency via Potassium Incorporation. Journal of Physical Chemistry Letters, 2018, 9, 2113-2120.	4.6	72
47	Photoexcited carrier dynamics in colloidal quantum dot solar cells: insights into individual quantum dots, quantum dot solid films and devices. Chemical Society Reviews, 2020, 49, 49-84.	38.1	70
48	Characterization of electron transfer from CdSe quantum dots to nanostructured TiO2 electrode using a near-field heterodyne transient grating technique. Thin Solid Films, 2008, 516, 5927-5930.	1.8	68
49	Characterization of Nanostructured TiO2Electrodes Sensitized with CdSe Quantum Dots Using Photoacoustic and Photoelectrochemical Current Methods. Japanese Journal of Applied Physics, 2004, 43, 2946-2951.	1.5	67
50	Artificial Trees for Artificial Photosynthesis: Construction of Dendrite-Structured Î±-Fe₂O₃/g-C₃N₄ Z-Scheme System for Efficient CO₂ Reduction into Solar Fuels. ACS Applied Energy Materials, 2020, 3, 6561-6572.	5.1	67
51	Effect of ZnS coatings on the enhancement of the photovoltaic properties of PbS quantum dot-sensitized solar cells. Journal of Applied Physics, 2012, 111, .	2.5	66
52	Investigation of Interfacial Charge Transfer in Solution Processed Cs₂SnI₆ Thin Films. Journal of Physical Chemistry C, 2017, 121, 13092-13100.	3.1	66
53	Theoretical analysis of band alignment at back junction in Snâ€“Ge perovskite solar cells with inverted p-i-n structure. Solar Energy Materials and Solar Cells, 2020, 206, 110268.	6.2	66
54	Effect of nanostructured electrode architecture and semiconductor deposition strategy on the photovoltaic performance of quantum dot sensitized solar cells. Electrochimica Acta, 2012, 75, 139-147.	5.2	62

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55	Recent progress on quantum dot solar cells: a review. Journal of Photonics for Energy, 2016, 6, 040901.	1.3	60
56	Slow hot carrier cooling in cesium lead iodide perovskites. Applied Physics Letters, 2017, 111, .	3.3	56
57	Super stable CsPbBr3@SiO2 tumor imaging reagent by stress-response encapsulation. Nano Research, 2020, 13, 795-801.	10.4	55
58	Reducing trap density and carrier concentration by a Ge additive for an efficient quasi 2D/3D perovskite solar cell. Journal of Materials Chemistry A, 2020, 8, 2962-2968.	10.3	53
59	Influence of linker molecules on interfacial electron transfer and photovoltaic performance of quantum dot sensitized solar cells. Journal of Materials Chemistry A, 2014, 2, 20882-20888.	10.3	52
60	Optical absorption, photosensitization, and ultrafast carrier dynamic investigations of CdSe quantum dots grafted onto nanostructured SnO2 electrode and fluorine-doped tin oxide (FTO) glass. Chemical Physics Letters, 2007, 442, 89-96.	2.6	51
61	Understanding charge transfer and recombination by interface engineering for improving the efficiency of PbS quantum dot solar cells. Nanoscale Horizons, 2018, 3, 417-429.	8.0	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%. ACS Energy Letters, 2020, 5, 3224-3236.	17.4	49
63	Air Stable PbSe Colloidal Quantum Dot Heterojunction Solar Cells: Ligand-Dependent Exciton Dissociation, Recombination, Photovoltaic Property, and Stability. Journal of Physical Chemistry C, 2016, 120, 28509-28518.	3.1	45
64	Ex Situ CdSe Quantum Dot-Sensitized Solar Cells Employing Inorganic Ligand Exchange To Boost Efficiency. Journal of Physical Chemistry C, 2014, 118, 214-222.	3.1	44
65	The effect of water on colloidal quantum dot solar cells. Nature Communications, 2021, 12, 4381.	12.8	44
66	Growth of Amorphous Passivation Layer Using Phenethylammonium Iodide for Highâ€Performance Inverted Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900243.	5.8	43
67	Photoacoustic and Photoelectrochemical Characterization of Inverse Opal TiO2Sensitized with CdSe Quantum Dots. Japanese Journal of Applied Physics, 2006, 45, 5563-5568.	1.5	41
68	A 2,1,3-Benzooxadiazole Moiety in a Dâ€"Aâ€"D-type Hole-Transporting Material for Boosting the Photovoltage in Perovskite Solar Cells. Journal of Physical Chemistry C, 2017, 121, 17617-17624.	3.1	40
69	Photoacoustic and photoelectrochemical current spectra of combined CdS/CdSe quantum dots adsorbed on nanostructured TiO2 electrodes, together with photovoltaic characteristics. Journal of Applied Physics, 2010, 108, .	2.5	39
70	High Efficiency Quantum Dot Sensitized Solar Cells Based on Direct Adsorption of Quantum Dots on Photoanodes. ACS Applied Materials & Interfaces, 2017, 9, 22549-22559.	8.0	39
71	Solutionâ€Processed Airâ€Stable Copper Bismuth Iodide for Photovoltaics. ChemSusChem, 2018, 11, 2930-2935.	6.8	39
72	Lead Selenide Colloidal Quantum Dot Solar Cells Achieving High Open-Circuit Voltage with One-Step Deposition Strategy. Journal of Physical Chemistry Letters, 2018, 9, 3598-3603.	4.6	38

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73	Nearâ€Infrared Emission from Tinâ€“Lead (Snâ€“Pb) Alloyed Perovskite Quantum Dots by Sodium Doping. Angewandte Chemie - International Edition, 2020, 59, 8421-8424.	13.8	38
74	Hollow InVO₄ Nanocuboid Assemblies toward Promoting Photocatalytic N₂ Conversion Performance. Advanced Materials, 2021, 33, e2006780.	21.0	38
75	Optical absorption and ultrafast carrier dynamics characterization of CdSe quantum dots deposited on different morphologies of nanostructured TiO2 films. Materials Science and Engineering C, 2007, 27, 1514-1520.	7.3	37
76	Multiple electron injection dynamics in linearly-linked two dye co-sensitized nanocrystalline metal oxide electrodes for dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 4605.	2.8	35
77	Improvement of Photovoltaic Performance of Colloidal Quantum Dot Solar Cells Using Organic Small Molecule as Hole-Selective Layer. Journal of Physical Chemistry Letters, 2017, 8, 2163-2169.	4.6	35
78	Photoexcited hot and cold electron and hole dynamics at FAPbI3 perovskite quantum dots/metal oxide heterojunctions used for stable perovskite quantum dot solar cells. Nano Energy, 2020, 67, 104267.	16.0	35
79	Huge suppression of charge recombination in P3HTâ€“ZnO organicâ€“inorganic hybrid solar cells by locating dyes at the ZnO/P3HT interfaces. Physical Chemistry Chemical Physics, 2013, 15, 14370.	2.8	33
80	Electrocatalytic fixation of N₂ into NO₃^{âˆ’}: electron transfer between oxygen vacancies and loaded Au in Nb₂O_{5âˆ’<i>x</i>} nanobelts to promote ambient nitrogen oxidation. Journal of Materials Chemistry A, 2021, 9, 17442-17450.	10.3	33
81	High performance wide bandgap Lead-free perovskite solar cells by monolayer engineering. Chemical Engineering Journal, 2022, 436, 135196.	12.7	33
82	Ligand-dependent exciton dynamics and photovoltaic properties of PbS quantum dot heterojunction solar cells. Physical Chemistry Chemical Physics, 2017, 19, 6358-6367.	2.8	31
83	Allâ€Inorganic CsPb_{1âˆ’<i>x</i>}Ge_{<i>x</i>}I₂Br Perovskite with Enhanced Phase Stability and Photovoltaic Performance. Angewandte Chemie, 2018, 130, 12927-12931.	2.0	31
84	Trioctylphosphine Oxide Acts as Alkahest for SnX₂/PbX₂: A General Synthetic Route to Perovskite ASn_{<i>x</i>}Pb_{1â€“<i>x</i>}X₃ (A = Cs, FA, MA; X =) Tj ET Q q0 0 0 rg BT /Over	6.7	31
85	Exquisite design of porous carbon microtubule-scaffolding hierarchical In₂O₃-ZnIn₂S₄ heterostructures toward efficient photocatalytic conversion of CO₂ into CO. Nanoscale, 2020, 12, 14676-14681.	5.6	31
86	Separation of ultrafast photoexcited electron and hole dynamics in CdSe quantum dots adsorbed onto nanostructured TiO2 films. Applied Physics Letters, 2010, 97, .	3.3	30
87	Photoacoustic spectra of Au quantum dots adsorbed on nanostructured TiO2 electrodes together with the photoelectrochemical current characteristics. Journal of Applied Physics, 2009, 105, .	2.5	29
88	Highly symmetrical, 24-faceted, concave BiVO₄ polyhedron bounded by multiple high-index facets for prominent photocatalytic O₂ evolution under visible light. Chemical Communications, 2019, 55, 4777-4780.	4.1	29
89	Architecture of the Interface between the Perovskite and Holeâ€Transport Layers in Perovskite Solar Cells. ChemSusChem, 2016, 9, 2634-2639.	6.8	27
90	Neutral and anionic tetrazole-based ligands in designing novel ruthenium dyes for dye-sensitized solar cells. Journal of Power Sources, 2016, 307, 416-425.	7.8	27

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91	Bimetallic oxyhydroxide<i>in situ</i>derived from an Fe₂Co-MOF for efficient electrocatalytic oxygen evolution. Journal of Materials Chemistry A, 2021, 9, 13271-13278.	10.3	27
92	Impact of Auger recombination on performance limitation of perovskite solar cell. Solar Energy, 2021, 217, 342-353.	6.1	27
93	Ultrafast carrier dynamics in PbS quantum dots. Chemical Physics Letters, 2012, 542, 89-93.	2.6	26
94	Electronic structures of two types of TiO₂ electrodes: inverse opal and nanoparticulate cases. RSC Advances, 2015, 5, 49623-49632.	3.6	26
95	New Tin(II) Fluoride Derivative as a Precursor for Enhancing the Efficiency of Inverted Planar Tin/Lead Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 27284-27291.	3.1	26
96	Dependences of the optical absorption and photovoltaic properties of CdS quantum dot-sensitized solar cells on the CdS quantum dot adsorption time. Journal of Applied Physics, 2011, 110, .	2.5	25
97	Recombination Suppression in PbS Quantum Dot Heterojunction Solar Cells by Energy-Level Alignment in the Quantum Dot Active Layers. ACS Applied Materials & Interfaces, 2018, 10, 26142-26152.	8.0	24
98	Enhanced Device Performance with Passivation of the TiO₂ Surface Using a Carboxylic Acid Fullerene Monolayer for a SnPb Perovskite Solar Cell with a Normal Planar Structure. ACS Applied Materials & Interfaces, 2020, 12, 17776-17782.	8.0	24
99	Matrix Manipulation of Directlyâ€Synthesized PbS Quantum Dot Inks Enabled by Coordination Engineering. Advanced Functional Materials, 2021, 31, 2104457.	14.9	24
100	Atomistic and Electronic Origin of Phase Instability of Metal Halide Perovskites. ACS Applied Energy Materials, 2020, 3, 11548-11558.	5.1	23
101	Crystal Growth of CdSe Quantum Dots Adsorbed on Nanoparticle, Inverse Opal, and Nanotube TiO₂ Photoelectrodes Characterized by Photoacoustic Spectroscopy. Japanese Journal of Applied Physics, 2007, 46, 4616.	1.5	22
102	The Electronic Structure and Photoinduced Electron Transfer Rate of CdSe Quantum Dots on Single Crystal Rutile TiO₂: Dependence on the Crystal Orientation of the Substrate. Journal of Physical Chemistry C, 2016, 120, 2047-2057.	3.1	22
103	Inverted CsPbI2Br perovskite solar cells with enhanced efficiency and stability in ambient atmosphere via formamidinium incorporation. Solar Energy Materials and Solar Cells, 2020, 218, 110741.	6.2	21
104	Interface Passivation Effects on the Photovoltaic Performance of Quantum Dot Sensitized Inverse Opal TiO2 Solar Cells. Nanomaterials, 2018, 8, 460.	4.1	20
105	Uncovering the charge transfer and recombination mechanism in ZnS-coated PbS quantum dot sensitized solar cells. Solar Energy, 2015, 122, 307-313.	6.1	19
106	Hole-Transport Materials Containing Triphenylamine Donors with a Spiro[fluorene-9,9â€²-xanthene] Core for Efficient and Stable Large Area Perovskite Solar Cells. Solar Rrl, 2017, 1, 1700096.	5.8	19
107	The interparticle distance limit for multiple exciton dissociation in PbS quantum dot solid films. Nanoscale Horizons, 2019, 4, 445-451.	8.0	19
108	Improving Photovoltaic Performance of ZnO Nanowires Based Colloidal Quantum Dot Solar Cells via SnO2 Passivation Strategy. Frontiers in Energy Research, 2019, 7, .	2.3	19

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109	High-Efficiency Lead-Free Wide Band Gap Perovskite Solar Cells via Guanidinium Bromide Incorporation. ACS Applied Energy Materials, 2021, 4, 5615-5624.	5.1	19
110	Enhanced efficiency and stability in Sn-based perovskite solar cells by trimethylsilyl halide surface passivation. Journal of Energy Chemistry, 2022, 71, 604-611.	12.9	19
111	Carrier dynamics in quantum-dot sensitized solar cells measured by transient grating and transient absorption methods. Physical Chemistry Chemical Physics, 2013, 15, 11006.	2.8	18
112	BiVO₄ tubular structures: oxygen defect-rich and largely exposed reactive {010} facets synergistically boost photocatalytic water oxidation and the selective Nî€N coupling reaction of 5-amino-1<i>H</i>-tetrazole. Chemical Communications, 2019, 55, 5635-5638.	4.1	17
113	A New Strategy for Increasing the Efficiency of Inverted Perovskite Solar Cells to More than 21%: Highâ€Humidity Induced Selfâ€Passivation of Perovskite Films. Solar Rrl, 2020, 4, 2000149.	5.8	17
114	Thiocyanate-free asymmetric ruthenium(II) dye sensitizers containing azole chromophores with near-IR light-harvesting capacity. Journal of Power Sources, 2016, 331, 100-111.	7.8	16
115	Construction of Al-ZnO/CdS photoanodes modified with distinctive alumina passivation layer for improvement of photoelectrochemical efficiency and stability. Nanoscale, 2018, 10, 19621-19627.	5.6	16
116	Surface-Modified Graphene Oxide/Lead Sulfide Hybrid Film-Forming Ink for High-Efficiency Bulk Nano-Heterojunction Colloidal Quantum Dot Solar Cells. Nano-Micro Letters, 2020, 12, 111.	27.0	16
117	Effect of Precursor Solution Aging on the Thermoelectric Performance of CsSnI3 Thin Film. Journal of Electronic Materials, 2020, 49, 2698-2703.	2.2	15
118	All-inorganic cesium lead halide perovskite nanocrystals for solar-pumped laser application. Journal of Applied Physics, 2020, 127, .	2.5	15
119	Role of lithium and co-existing cations in electrolyte to improve performance of dye-sensitized solar cells. RSC Advances, 2014, 4, 21517-21520.	3.6	14
120	<i>In situ</i> preparation of Bi₂S₃ nanoribbon-anchored BiVO₄ nanoscroll heterostructures for the catalysis of Cr(<scp>vi</scp>) photoreduction. Catalysis Science and Technology, 2020, 10, 3843-3847.	4.1	14
121	Large Grain Growth and Energy Alignment Optimization by Diethylammonium Iodide Substitution at A Site in Leadâ€Free Tin Halide Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100633.	5.8	14
122	Large synergy effects of doping, a site substitution, and surface passivation in wide bandgap Pb-free ASnI2Br perovskite solar cells on efficiency and stability enhancement. Journal of Power Sources, 2022, 520, 230848.	7.8	13
123	Optical absorption of CdSe quantum dots on electrodes with different morphology. AIP Advances, 2013, 3, 102115.	1.3	12
124	Enhancing the Electronic Properties and Stability of High-Efficiency Tinâ€"Lead Mixed Halide Perovskite Solar Cells via Doping Engineering. Journal of Physical Chemistry Letters, 2022, 13, 3130-3137.	4.6	12
125	Adsorption and Electronic Structure of CdSe Quantum Dots on Single Crystal ZnO: A Basic Study of Quantum Dot-Sensitization System. Journal of Physical Chemistry C, 2016, 120, 16367-16376.	3.1	11
126	Study of open circuit voltage loss mechanism in perovskite solar cells. Japanese Journal of Applied Physics, 2021, 60, SBBF13.	1.5	11

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127	Effect of TiO2 Crystal Orientation on the Adsorption of CdSe Quantum Dots for Photosensitization Studied by the Photoacoustic and Photoelectron Yield Methods. Journal of Physical Chemistry C, 2014, 118, 16680-16687.	3.1	10
128	The effect of CdS on the charge separation and recombination dynamics in PbS/CdS double-layered quantum dot sensitized solar cells. Chemical Physics, 2016, 478, 159-163.	1.9	10
129	Nearâ€Infrared Emission from Tinâ€"Lead (Snâ€"Pb) Alloyed Perovskite Quantum Dots by Sodium Doping. Angewandte Chemie, 2020, 132, 8499-8502.	2.0	10
130	Relationship between Carrier Density and Precursor Solution Stirring for Lead-Free Tin Halide Perovskite Solar Cells Performance. ACS Applied Energy Materials, 2022, 5, 4002-4007.	5.1	10
131	Characterization of hot carrier cooling and multiple exciton generation dynamics in PbS QDs using an improved transient grating technique. Journal of Energy Chemistry, 2015, 24, 712-716.	12.9	9
132	Two-Step Synthesis of Laminar Vanadate via a Facile Hydrothermal Route and Enhancing the Photocatalytic Reduction of CO₂ into Solar Fuel through Tuning of the Oxygen Vacancies by in Situ Vacuum Illumination Treatment. ACS Applied Energy Materials, 2018, 1, 6857-6864.	5.1	9
133	The role of sodium in stabilizing tinâ€"lead (Snâ€"Pb) alloyed perovskite quantum dots. Journal of Materials Chemistry A, 2021, 9, 12087-12098.	10.3	9
134	Ultra-Halide-Rich Synthesis of Stable Pure Tin-Based Halide Perovskite Quantum Dots: Implications for Photovoltaics. ACS Applied Nano Materials, 2021, 4, 3958-3968.	5.0	9
135	Modeling of Nucleation and Growth in the Synthesis of PbS Colloidal Quantum Dots Under Variable Temperatures. ACS Omega, 2021, 6, 3701-3710.	3.5	8
136	Molybdenum Sulfide Quantum Dots Decorated on TiO₂ for Photocatalytic Hydrogen Evolution. ACS Applied Nano Materials, 2022, 5, 702-709.	5.0	8
137	Topâ€Contactsâ€Interface Engineering for Highâ€Performance Perovskite Solar Cell With Reducing Lead Leakage. Solar Rrl, 2022, 6, .	5.8	8
138	Î±-Fe₂O₃/Ag/CdS ternary heterojunction photoanode for efficient solar water oxidation. Catalysis Science and Technology, 2021, 11, 5859-5867.	4.1	7
139	Dependences of the Optical Absorption, Ground State Energy Level, and Interfacial Electron Transfer Dynamics on the Size of CdSe Quantum Dots Adsorbed on the (001), (110), and (111) Surfaces of Single Crystal Rutile TiO₂. Journal of Physical Chemistry C, 2017, 121, 25390-25401.	3.1	6
140	Pb-free Sn Perovskite Solar Cells Doped with Samarium Iodide. Chemistry Letters, 2019, 48, 836-839.	1.3	6
141	In-Depth Exploration of the Charge Dynamics in Surface-Passivated ZnO Nanowires. Journal of Physical Chemistry C, 2020, 124, 15812-15817.	3.1	6
142	The Effect of Transparent Conductive Oxide Substrate on the Efficiency of SnGe-perovskite Solar Cells. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2019, 32, 597-602.	0.3	5
143	Micro-scale current path distributions of Zn1-Mg O-coated SnO2:F transparent electrodes prepared by sol-gel and sputtering methods in perovskite solar cells. Thin Solid Films, 2019, 669, 455-460.	1.8	5
144	Colloidal quantum-dot bulk-heterojunction solar cells. Journal of Semiconductors, 2021, 42, 110203.	3.7	4

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145	Hole-Transport Materials Containing Triphenylamine Donors with a Spiro[fluorene-9,9â€²-xanthene] Core for Efficient and Stable Large Area Perovskite Solar Cells (Solar RRL 9â̂•2017). Solar Rrl, 2017, 1, 1770134.	5.8	3
146	Optimization of Experimental Parameters for the Performance of Solid-state Dye-sensitized Solar Cells. Analytical Sciences, 2017, 33, 1041-1046.	1.6	3
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