

# Shujuan Huang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

187 papers	8,411 citations	52 h-index	87 g-index
216 ext. papers	9,790 ext. citations	9.1 avg, IF	6.25 L-index

#	Paper	IF	Citations
187	Ultrafast exciton transport at early times in quantum dot solids.. <i>Nature Materials</i> , <b>2022</b> ,	27	7
186	Perovskite Quantum Dot Solar Cells Fabricated from Recycled Lead-Acid Battery Waste <b>2022</b> , 4, 120-127		2
185	Adjusting optical and fluorescent properties of quantum dots: Moving towards best optical heat-rejecting materials. <i>Solar Energy</i> , <b>2022</b> , 238, 272-279	6.8	0
184	Homologous Bromides Treatment for Improving the Open-circuit Voltage of Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2021</b> , e2106280	24	6
183	Quantum Dot Passivation of Halide Perovskite Films with Reduced Defects, Suppressed Phase Segregation, and Enhanced Stability. <i>Advanced Science</i> , <b>2021</b> , e2102258	13.6	8
182	Hybrid Perovskite Quantum Dot/Non-Fullerene Molecule Solar Cells with Efficiency Over 15%. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2101272	15.6	23
181	Quantum Dots for Photovoltaics: A Tale of Two Materials. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100354	21.8	25
180	Simultaneous FeO Nanoparticle Formation and Catalyst-Driven Hydrothermal Cellulose Degradation. <i>ACS Omega</i> , <b>2021</b> , 6, 10790-10800	3.9	1
179	Passivating Quantum Dot Carrier Transport Layer with Metal Salts. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 28679-28688	9.5	1
178	Enhancing the cooling potential of photoluminescent materials through evaluation of thermal and transmission loss mechanisms. <i>Scientific Reports</i> , <b>2021</b> , 11, 14725	4.9	0
177	Integrating Low-Cost Earth-Abundant Co-Catalysts with Encapsulated Perovskite Solar Cells for Efficient and Stable Overall Solar Water Splitting. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008245	15.6	17
176	Optimizing Surface Chemistry of PbS Colloidal Quantum Dot for Highly Efficient and Stable Solar Cells via Chemical Binding. <i>Advanced Science</i> , <b>2021</b> , 8, 2003138	13.6	16
175	Flexible and efficient perovskite quantum dot solar cells via hybrid interfacial architecture. <i>Nature Communications</i> , <b>2021</b> , 12, 466	17.4	73
174	Elucidating Mechanisms behind Ambient Storage-Induced Efficiency Improvements in Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 925-933	20.1	23
173	Silicate glass-to-glass hermetic bonding for encapsulation of next-generation optoelectronics: A review. <i>Materials Today</i> , <b>2021</b> , 47, 131-155	21.8	2
172	Non-Fullerene Molecules: Hybrid Perovskite Quantum Dot/Non-Fullerene Molecule Solar Cells with Efficiency Over 15% (Adv. Funct. Mater. 27/2021). <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2170196	15.6	1
171	Kinetics studies of thin film amorphous titanium niobium oxides for lithium ion battery anodes. <i>Electrochimica Acta</i> , <b>2021</b> , 388, 138544	6.7	0

170	Immediate and Temporal Enhancement of Power Conversion Efficiency in Surface-Passivated Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 39178-39185	9.5	2
169	Complementary bulk and surface passivations for highly efficient perovskite solar cells by gas quenching. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100511	6.1	10
168	Magnetron Sputtered SnO <sub>2</sub> Constituting Double Electron Transport Layers for Efficient PbS Quantum Dot Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000218	7.1	3
167	Enhancing Resistive Switching Performance and Ambient Stability of Hybrid Perovskite Single Crystals via Embedding Colloidal Quantum Dots. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 2002948	15.6	34
166	Gas chromatography-mass spectrometry analyses of encapsulated stable perovskite solar cells. <i>Science</i> , <b>2020</b> , 368,	33.3	167
165	Can quantum dots help to mitigate urban overheating? An experimental and modelling study. <i>Solar Energy</i> , <b>2020</b> , 206, 308-316	6.8	15
164	Unveiling the Relationship between the Perovskite Precursor Solution and the Resulting Device Performance. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 6251-6260	16.4	57
163	Solution-Processed Faraday Rotators Using Single Crystal Lead Halide Perovskites. <i>Advanced Science</i> , <b>2020</b> , 7, 1902950	13.6	6
162	Unveiling the Importance of Precursor Preparation for Highly Efficient and Stable Phenethylammonium-Based Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900463	7.1	1
161	Acetic Acid Assisted Crystallization Strategy for High Efficiency and Long-Term Stable Perovskite Solar Cell. <i>Advanced Science</i> , <b>2020</b> , 7, 1903368	13.6	53
160	Direct Determination of Total Hemispherical Emittance of Perovskite and Silicon Solar Cells. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100008	6.1	2
159	Enhanced Power Conversion Efficiency via Hybrid Ligand Exchange Treatment of p-Type PbS Quantum Dots. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 22751-22759	9.5	17
158	Superior Self-Charged and -Powered Chemical Sensing with High Performance for NO <sub>2</sub> Detection at Room Temperature. <i>Advanced Optical Materials</i> , <b>2020</b> , 8, 1901863	8.1	14
157	Progress and Opportunities for Cs Incorporated Perovskite Photovoltaics. <i>Trends in Chemistry</i> , <b>2020</b> , 2, 638-653	14.8	19
156	Grain Quality Engineering for Organic Metal Halide Perovskites Using Mixed Antisolvent Spraying Treatment. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900397	7.1	6
155	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. <i>Energy Technology</i> , <b>2020</b> , 8, 1901114	3.5	20
154	Grain Quality Engineering for Organic Metal Halide Perovskites Using Mixed Antisolvent Spraying Treatment. <i>Solar Rrl</i> , <b>2020</b> , 4, 2070012	7.1	2
153	Quantum-Dot Tandem Solar Cells Based on a Solution-Processed Nanoparticle Intermediate Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 2313-2318	9.5	8

152	Visualizing the Impact of Light Soaking on Morphological Domains in an Operational Cesium Lead Halide Perovskite Solar Cell. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 136-143	6.4	10
151	On the combination of quantum dots with near-infrared reflective base coats to maximize their urban overheating mitigation potential. <i>Solar Energy</i> , <b>2020</b> , 211, 111-116	6.8	9
150	Photochemical upconversion of near-infrared light from below the silicon bandgap. <i>Nature Photonics</i> , <b>2020</b> , 14, 585-590	33.9	48
149	The importance of total hemispherical emittance in evaluating performance of building-integrated silicon and perovskite solar cells in insulated glazings. <i>Applied Energy</i> , <b>2020</b> , 276, 115490	10.7	5
148	Enhancing the Efficiency and Stability of PbS Quantum Dot Solar Cells through Engineering an Ultrathin NiO Nanocrystalline Interlayer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 46239-46246	9.5	12
147	Stabilizing CsPbBr <sub>3</sub> perovskite quantum dots on zirconium phosphate nanosheets through an ion exchange/surface adsorption strategy. <i>Chemical Engineering Journal</i> , <b>2020</b> , 381, 122735	14.7	17
146	A Review on Halide Perovskite Film Formation by Sequential Solution Processing for Solar Cell Applications. <i>Energy Technology</i> , <b>2020</b> , 8, 2070043	3.5	2
145	Unveiling the Importance of Precursor Preparation for Highly Efficient and Stable Phenethylammonium-Based Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2070043	7.1	
144	Enhancing PbS Colloidal Quantum Dot Tandem Solar Cell Performance by Graded Band Alignment. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 5729-5734	6.4	19
143	Deconstruction-assisted perovskite formation for sequential solution processing of Cs <sub>0.15</sub> (MA <sub>0.7</sub> FA <sub>0.3</sub> ) <sub>0.85</sub> PbI <sub>3</sub> solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 203, 110200	6.4	8
142	Light- and bias-induced structural variations in metal halide perovskites. <i>Nature Communications</i> , <b>2019</b> , 10, 444	17.4	51
141	Synergistic effect of potassium and iodine from potassium triiodide complex additive on gas-quenched perovskite solar cells. <i>Nano Energy</i> , <b>2019</b> , 63, 103853	17.1	27
140	Solar Cells Based on Hot Carriers and Quantum Dots <b>2019</b> , 175-213		1
139	Enhanced mobility in PbS quantum dot films via PbSe quantum dot mixing for optoelectronic applications. <i>Journal of Materials Chemistry C</i> , <b>2019</b> , 7, 4497-4502	7.1	24
138	Effect of Pressing Pressure on the Performance of Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 2358-2363	6.1	8
137	Untapped Potentials of Inorganic Metal Halide Perovskite Solar Cells. <i>Joule</i> , <b>2019</b> , 3, 938-955	27.8	131
136	Ligand-mediated synthesis of colloidal CsSnI <sub>3</sub> three-dimensional nanocrystals and two-dimensional nanoplatelets. <i>Nanotechnology</i> , <b>2019</b> , 30, 295601	3.4	21
135	The Impact of a Dynamic Two-Step Solution Process on Film Formation of Cs (MA FA ) PbI Perovskite and Solar Cell Performance. <i>Small</i> , <b>2019</b> , 15, e1804858	11	31

134	Review of Novel Passivation Techniques for Efficient and Stable Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2019</b> , 3, 1800302	7.1	94
133	Fabrication of Efficient and Stable CsPbI <sub>3</sub> Perovskite Solar Cells through Cation Exchange Process. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901685	21.8	67
132	Synergistic effect of electron transport layer and colloidal quantum dot solid enable PbSe quantum dot solar cell achieving over 10 % efficiency. <i>Nano Energy</i> , <b>2019</b> , 64, 103922	17.1	34
131	Large-Area 23%-Efficient Monolithic Perovskite/Homojunction-Silicon Tandem Solar Cell with Enhanced UV Stability Using Down-Shifting Material. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 2623-2631	20.1	57
130	The Effect of 4-tert-Butylpyridine Removal on Efficiency and Thermal Stability in Perovskite Solar Cells. <i>Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi]</i> , <b>2019</b> , 32, 715-720	0.7	2
129	Light-activated inorganic CsPbBr <sub>3</sub> perovskite for room-temperature self-powered chemical sensing. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 24187-24193	3.6	13
128	Ambient-Temperature Waterborne Polymer/rGO Nanocomposite Films: Effect of rGO Distribution on Electrical Conductivity. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 48450-48458	9.5	28
127	External Stokes shift of perovskite nanocrystals enlarged by photon recycling. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 011906	3.4	26
126	MgCl passivated ZnO electron transporting layer to improve PbS quantum dot solar cells. <i>Nanotechnology</i> , <b>2019</b> , 30, 085403	3.4	8
125	Enhanced performance via partial lead replacement with calcium for a CsPbI <sub>3</sub> perovskite solar cell exceeding 13% power conversion efficiency. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 5580-5586	13	162
124	Mixed 3D/2D Passivation Treatment for Mixed-Cation Lead Mixed-Halide Perovskite Solar Cells for Higher Efficiency and Better Stability. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1703392	21.8	226
123	Balancing the Electron and Hole Transfer for Efficient Quantum Dot Light-Emitting Diodes by Employing a Versatile Organic Electron-Blocking Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 15803-15811	9.5	46
122	Dynamic study of the light soaking effect on perovskite solar cells by in-situ photoluminescence microscopy. <i>Nano Energy</i> , <b>2018</b> , 46, 356-364	17.1	37
121	Achieving high-performance PbS quantum dot solar cells by improving hole extraction through Ag doping. <i>Nano Energy</i> , <b>2018</b> , 46, 212-219	17.1	57
120	Passivation of Grain Boundaries by Phenethylammonium in Formamidinium-Methylammonium Lead Halide Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 647-654	20.1	220
119	Free charges versus excitons: photoluminescence investigation of InGa <sub>0.5</sub> N/GaN multiple quantum well nanorods and their planar counterparts. <i>Nanoscale</i> , <b>2018</b> , 10, 5358-5365	7.7	12
118	Humidity-Induced Degradation via Grain Boundaries of HC(NH <sub>2</sub> ) <sub>2</sub> PbI <sub>3</sub> Planar Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705363	15.6	172
117	Superior Self-Powered Room-Temperature Chemical Sensing with Light-Activated Inorganic Halides Perovskites. <i>Small</i> , <b>2018</b> , 14, 1702571	11	54

116	Solution-Processed, Silver-Doped NiOx as Hole Transporting Layer for High-Efficiency Inverted Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , <b>2018</b> , 1, 561-570	6.1	69
115	Enhanced optoelectronic performance in AgBiS2 nanocrystals obtained via an improved amine-based synthesis route. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 731-737	7.1	42
114	Bright alloy type-II quantum dots and their application to light-emitting diodes. <i>Journal of Colloid and Interface Science</i> , <b>2018</b> , 510, 376-383	9.3	17
113	Ab initio calculation of electronic transport properties between PbSe quantum dots facets with halide ligands (Cl, Br, I). <i>Japanese Journal of Applied Physics</i> , <b>2018</b> , 57, 08RF01	1.4	2
112	Improving hole extraction for PbS quantum dot solar cells <b>2018</b> ,		1
111	Electrode Design to Overcome Substrate Transparency Limitations for Highly Efficient 1 cm2 Mesoscopic Perovskite Solar Cells. <i>Joule</i> , <b>2018</b> , 2, 2694-2705	27.8	26
110	Improving carrier extraction in a PbSe quantum dot solar cell by introducing a solution-processed antimony-doped SnO2 buffer layer. <i>Journal of Materials Chemistry C</i> , <b>2018</b> , 6, 9861-9866	7.1	15
109	21.8% Efficient Monolithic Perovskite/Homo-Junction-Silicon Tandem Solar Cell on 16 cm2. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 2299-2300	20.1	69
108	Potential for improved transport in core-shell CuInS2 nanoparticle solar cells from an Ag surface termination. <i>CrystEngComm</i> , <b>2018</b> , 20, 3381-3387	3.3	2
107	Large area efficient interface layer free monolithic perovskite/homo-junction-silicon tandem solar cell with over 20% efficiency. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2432-2443	35.4	122
106	Acoustic-optical phonon up-conversion and hot-phonon bottleneck in lead-halide perovskites. <i>Nature Communications</i> , <b>2017</b> , 8, 14120	17.4	245
105	High-Efficiency Rubidium-Incorporated Perovskite Solar Cells by Gas Quenching. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 438-444	20.1	200
104	Spatial Distribution of Lead Iodide and Local Passivation on Organo-Lead Halide Perovskite. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 6072-6078	9.5	50
103	Inelastic X-ray scattering measurements of III/V multiple quantum wells. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 043102	3.4	5
102	An effective method of predicting perovskite solar cell lifetime—Case study on planar CH3NH3PbI3 and HC(NH2)2PbI3 perovskite solar cells and hole transfer materials of spiro-OMeTAD and PTAA. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 162, 41-46	6.4	61
101	Nanoscale characterization of GaN/InGaN multiple quantum wells on GaN nanorods by photoluminescence spectroscopy <b>2017</b> ,		1
100	Spin-coating free fabrication for highly efficient perovskite solar cells. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 168, 165-171	6.4	53
99	Nanosecond long excited state lifetimes observed in hafnium nitride. <i>Solar Energy Materials and Solar Cells</i> , <b>2017</b> , 169, 13-18	6.4	15

98	Investigation of anti-solvent induced optical properties change of cesium lead bromide iodide mixed perovskite (CsPbBrI) quantum dots. <i>Journal of Colloid and Interface Science</i> , <b>2017</b> , 504, 586-592	9.3	22
97	Resonant Tunneling through Monolayer Si Colloidal Quantum Dots and Ge Nanocrystals. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1605348	15.6	10
96	Morphology effects on the bandgap of silicon nanocrystals Numerically modelled by a full multi-grid method. <i>Journal of Applied Physics</i> , <b>2017</b> , 121, 054306	2.5	4
95	Difference in hot carrier cooling rate between Langmuir-Blodgett and drop cast PbS QD films due to strong electron-phonon coupling. <i>Nanoscale</i> , <b>2017</b> , 9, 17133-17142	7.7	10
94	High Performance PbS Colloidal Quantum Dot Solar Cells by Employing Solution-Processed CdS Thin Films from a Single-Source Precursor as the Electron Transport Layer. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1703687	15.6	35
93	The Effect of Stoichiometry on the Stability of Inorganic Cesium Lead Mixed-Halide Perovskites Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 19642-19649	3.8	83
92	A New Passivation Route Leading to Over 8% Efficient PbSe Quantum-Dot Solar Cells via Direct Ion Exchange with Perovskite Nanocrystals. <i>Advanced Materials</i> , <b>2017</b> , 29, 1703214	24	64
91	Monolithic Wide Band Gap Perovskite/Perovskite Tandem Solar Cells with Organic Recombination Layers. <i>Journal of Physical Chemistry C</i> , <b>2017</b> , 121, 27256-27262	3.8	35
90	Strontium-Doped Low-Temperature-Processed CsPbI <sub>2</sub> Br Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 2319-2325	20.1	258
89	Interfacial Area between Hetero-Epitaxial Al <sub>2</sub> O <sub>3</sub> and Silicon. <i>Advanced Materials Interfaces</i> , <b>2017</b> , 4, 1700259	4.6	
88	Overcoming the Challenges of Large-Area High-Efficiency Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 1978-1984	20.1	104
87	Light Illumination Induced Photoluminescence Enhancement and Quenching in Lead Halide Perovskite. <i>Solar Rrl</i> , <b>2017</b> , 1, 1600001	7.1	88
86	Significant Improvement in the Performance of PbSe Quantum Dot Solar Cell by Introducing a CsPbBr <sub>3</sub> Perovskite Colloidal Nanocrystal Back Layer. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601773	21.8	43
85	Effect of vacuum thermal annealing on a molybdenum bilayer back contact deposited by radio-frequency magnetron sputtering for chalcogenide- and kesterite-based solar cells. <i>Journal of the Korean Physical Society</i> , <b>2017</b> , 71, 968-973	0.6	5
84	Oxygen substitution and sulfur vacancies in NaBiS <sub>2</sub> : a Pb-free candidate for solution processable solar cells <b>2017</b> ,		1
83	Hot Carrier Cooling in In <sub>0.17</sub> Ga <sub>0.83</sub> As/GaAs <sub>0.80</sub> P <sub>0.20</sub> Multiple Quantum Wells: The Effect of Barrier Thickness. <i>IEEE Journal of Photovoltaics</i> , <b>2016</b> , 6, 166-171	3.7	6
82	CsPbI <sub>2</sub> Br <sub>2</sub> Perovskite Solar Cell by Spray-Assisted Deposition. <i>ACS Energy Letters</i> , <b>2016</b> , 1, 573-577	20.1	196
81	Quantification of hot carrier thermalization in PbS colloidal quantum dots by power and temperature dependent photoluminescence spectroscopy. <i>RSC Advances</i> , <b>2016</b> , 6, 90846-90855	3.7	16

80	Nanoscale Characterization of Carrier Dynamic and Surface Passivation in InGaN/GaN Multiple Quantum Wells on GaN Nanorods. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 31887-31893	9.5	29
79	Hole Transport Layer Free Inorganic CsPbI <sub>2</sub> Br <sub>2</sub> Perovskite Solar Cell by Dual Source Thermal Evaporation. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502202	21.8	317
78	Ultrafast Carrier Dynamics in Methylammonium Lead Bromide Perovskite. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 2542-2547	3.8	42
77	Defect trapping states and charge carrier recombination in organic/inorganic halide perovskites. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 793-800	7.1	136
76	Time-resolved fluorescence anisotropy study of organic lead halide perovskite. <i>Solar Energy Materials and Solar Cells</i> , <b>2016</b> , 151, 102-112	6.4	12
75	Mobile Ion Induced Slow Carrier Dynamics in Organic-Inorganic Perovskite CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> . <i>ACS Applied Materials &amp; Interfaces</i> , <b>2016</b> , 8, 5351-7	9.5	87
74	Generation of hot carrier population in colloidal silicon quantum dots for high-efficiency photovoltaics. <i>Solar Energy Materials and Solar Cells</i> , <b>2016</b> , 145, 391-396	6.4	15
73	Critical Role of Grain Boundaries for Ion Migration in Formamidinium and Methylammonium Lead Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600330	21.8	281
72	Beneficial Effects of PbI <sub>2</sub> Incorporated in Organo-Lead Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502104	21.8	335
71	Extended hot carrier lifetimes observed in bulk In <sub>0.265</sub> Bi <sub>0.02</sub> Ga <sub>0.735</sub> N under high-density photoexcitation. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 131904	3.4	18
70	Theoretical investigation of carrier transfer by an optical contacting scheme for optoelectronic application. <i>Journal of Applied Physics</i> , <b>2016</b> , 119, 153102	2.5	3
69	Nucleation and Growth Control of HC(NH <sub>2</sub> ) <sub>2</sub> PbI <sub>3</sub> for Planar Perovskite Solar Cell. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 11262-11267	3.8	74
68	Optical analysis of perovskite/silicon tandem solar cells. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 5679-5689	5.689	86
67	Electric field induced reversible and irreversible photoluminescence responses in methylammonium lead iodide perovskite. <i>Journal of Materials Chemistry C</i> , <b>2016</b> , 4, 9060-9068	7.1	61
66	Optical Probe Ion and Carrier Dynamics at the CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Interface with Electron and Hole Transport Materials. <i>Advanced Materials Interfaces</i> , <b>2016</b> , 3, 1600467	4.6	18
65	Benefit of Grain Boundaries in Organic-Inorganic Halide Planar Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 875-80	6.4	367
64	Mobile Charge-Induced Fluorescence Intermittency in Methylammonium Lead Bromide Perovskite. <i>Nano Letters</i> , <b>2015</b> , 15, 4644-9	11.5	97
63	Accurate determination of the size distribution of Si nanocrystals from PL spectra. <i>RSC Advances</i> , <b>2015</b> , 5, 55119-55125	3.7	13

62	Effect of Halide Treatments on PbSe Quantum Dot Thin Films: Stability, Hot Carrier Lifetime, and Application to Photovoltaics. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 24149-24155	3.8	38
61	Air-stable PbS quantum dots synthesized with slow reaction kinetics via a PbBr <sub>2</sub> precursor. <i>RSC Advances</i> , <b>2015</b> , 5, 68579-68586	3.7	18
60	Size-dependent evolution of phonon confinement in colloidal Si nanoparticles. <i>Journal of Raman Spectroscopy</i> , <b>2015</b> , 46, 1110-1116	2.3	9
59	Four-Terminal Tandem Solar Cells Using CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> by Spectrum Splitting. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 3931-4	6.4	65
58	Theoretical and Experimental Investigation of the Electronic Structure and Quantum Confinement of Wet-Chemistry Synthesized Ag <sub>2</sub> S Nanocrystals. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 867-872	3.8	49
57	Hot carrier solar cell absorber prerequisites and candidate material systems. <i>Solar Energy Materials and Solar Cells</i> , <b>2015</b> , 135, 124-129	6.4	55
56	The role of Ag in (Ag,Cu) <sub>2</sub> ZnSnS <sub>4</sub> thin film for solar cell application. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 625, 277-283	5.7	63
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