Henry J Snaith

List of Publications by Year
in descending order

482 papers	142,188 citations	151 156 h-index	75 371 g-index
498 all docs	498 docs citations	498 times ranked	43283 citing authors

#	Article	IF	Citations
1	Efficient Hybrid Solar Cells Based on Meso-Superstructured Organometal Halide Perovskites. Science, 2012, 338, 643-647.	6.0	9,249
2	Electron-Hole Diffusion Lengths Exceeding 1 Micrometer in an Organometal Trihalide Perovskite Absorber. Science, 2013, 342, 341-344.	6.0	8,703
3	Efficient planar heterojunction perovskite solar cells by vapour deposition. Nature, 2013, 501, 395-398.	13.7	7,055
4	The emergence of perovskite solar cells. Nature Photonics, 2014, 8, 506-514.	15.6	5,727
5	Bright light-emitting diodes based on organometal halide perovskite. Nature Nanotechnology, 2014, 9, 687-692.	15.6	3,627
6	Formamidinium lead trihalide: a broadly tunable perovskite for efficient planar heterojunction solar cells. Energy and Environmental Science, 2014, 7, 982.	15.6	3,352
7	High Charge Carrier Mobilities and Lifetimes in Organolead Trihalide Perovskites. Advanced Materials, 2014, 26, 1584-1589.	11.1	2,785
8	Metal-halide perovskites for photovoltaic and light-emitting devices. Nature Nanotechnology, 2015, 10, 391-402.	15.6	2,604
9	A mixed-cation lead mixed-halide perovskite absorber for tandem solar cells. Science, 2016, 351, 151-155.	6.0	2,514
10	Perovskites: The Emergence of a New Era for Low-Cost, High-Efficiency Solar Cells. Journal of Physical Chemistry Letters, 2013, 4, 3623-3630.	2.1	2,483
11	Anomalous Hysteresis in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 1511-1515.	2.1	2,190
12	Lead-free organicâ€"inorganic tin halide perovskites for photovoltaic applications. Energy and Environmental Science, 2014, 7, 3061-3068.	15.6	2,086
13	Impact of microstructure on local carrier lifetime in perovskite solar cells. Science, 2015, 348, 683-686.	6.0	1,833
14	Morphological Control for High Performance, Solutionâ€Processed Planar Heterojunction Perovskite Solar Cells. Advanced Functional Materials, 2014, 24, 151-157.	7.8	1,782
15	Direct measurement of the exciton binding energy and effective masses for charge carriers in organicâ€"inorganic tri-halide perovskites. Nature Physics, 2015, 11, 582-587.	6.5	1,651
16	Overcoming ultraviolet light instability of sensitized TiO2 with meso-superstructured organometal tri-halide perovskite solar cells. Nature Communications, 2013, 4, 2885.	5.8	1,592
17	Efficient organometal trihalide perovskite planar-heterojunction solar cells on flexible polymer substrates. Nature Communications, 2013, 4, 2761.	5.8	1,525
18	Low-temperature processed meso-superstructured to thin-film perovskite solar cells. Energy and Environmental Science, 2013, 6, 1739.	15.6	1,509

#	Article	IF	Citations
19	High Photoluminescence Efficiency and Optically Pumped Lasing in Solution-Processed Mixed Halide Perovskite Semiconductors. Journal of Physical Chemistry Letters, 2014, 5, 1421-1426.	2.1	1,490
20	Excitons versus free charges in organo-lead tri-halide perovskites. Nature Communications, 2014, 5, 3586.	5.8	1,443
21	Enhanced Photoluminescence and Solar Cell Performance <i>via</i> Lewis Base Passivation of Organicâ€“Inorganic Lead Halide Perovskites. ACS Nano, 2014, 8, 9815-9821.	7.3	1,439
22	Inorganic caesium lead iodide perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 19688-19695.	5.2	1,419
23	Bandgapâ€Tunable Cesium Lead Halide Perovskites with High Thermal Stability for Efficient Solar Cells. Advanced Energy Materials, 2016, 6, 1502458.	10.2	1,265
24	Enhanced photovoltage for inverted planar heterojunction perovskite solar cells. Science, 2018, 360, 1442-1446.	6.0	1,221
25	23.6%-efficient monolithic perovskite/silicon tandem solar cells with improved stability. Nature Energy, 2017, 2, .	19.8	1,204
26	The renaissance of dye-sensitized solar cells. Nature Photonics, 2012, 6, 162-169.	15.6	1,197
27	Efficient ambient-air-stable solar cells with 2Dâ€“3D heterostructured butylammonium-caesium-formamidinium lead halide perovskites. Nature Energy, 2017, 2, .	19.8	1,169
28	Perovskite-perovskite tandem photovoltaics with optimized band gaps. Science, 2016, 354, 861-865.	6.0	1,107
29	Planar perovskite solar cells with long-term stability using ionic liquid additives. Nature, 2019, 571, 245-250.	13.7	1,103
30	Carbon Nanotube/Polymer Composites as a Highly Stable Hole Collection Layer in Perovskite Solar Cells. Nano Letters, 2014, 14, 5561-5568.	4.5	1,073
31	Stability of Metal Halide Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1500963.	10.2	1,045
32	Recombination Kinetics in Organic-Inorganic Perovskites: Excitons, Free Charge, and Subgap States. Physical Review Applied, 2014, 2, .	1.5	1,005
33	Low-Temperature Processed Electron Collection Layers of Graphene/TiO₂ Nanocomposites in Thin Film Perovskite Solar Cells. Nano Letters, 2014, 14, 724-730.	4.5	999
34	Electronâ€“phonon coupling in hybrid lead halide perovskites. Nature Communications, 2016, 7, .	5.8	919
35	Toward Lead-Free Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 1233-1240.	8.8	848
36	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. Nature Energy, 2020, 5, 35-49.	19.8	797

#	Article	IF	Citations
37	Steric engineering of metal-halide perovskites with tunable optical band gaps. Nature Communications, 2014, 5, 5757.	5.8	787
38	Temperatureâ€Dependent Chargeâ€Carrier Dynamics in CH₃NH₃PbI₃ Perovskite Thin Films. Advanced Functional Materials, 2015, 25, 6218-6227.	7.8	785
39	Ultrasmooth organicâ€“inorganic perovskite thin-film formation and crystallization for efficient planar heterojunction solar cells. Nature Communications, 2015, 6, 6142.	5.8	784
40	Photo-induced halide redistribution in organicâ€“inorganic perovskite films. Nature Communications, 2016, 7, 11683.	5.8	778
41	Lead-Free Halide Double Perovskites via Heterovalent Substitution of Noble Metals. Journal of Physical Chemistry Letters, 2016, 7, 1254-1259.	2.1	761
42	Cs₂InAgCl₆: A New Lead-Free Halide Double Perovskite with Direct Band Gap. Journal of Physical Chemistry Letters, 2017, 8, 772-778.	2.1	752
43	Mesoporous TiO2 single crystals delivering enhanced mobility and optoelectronic device performance. Nature, 2013, 495, 215-219.	13.7	751
44	Photovoltaic solar cell technologies: analysing the state of the art. Nature Reviews Materials, 2019, 4, 269-285.	23.3	727
45	Metal halide perovskites for energy applications. Nature Energy, 2016, 1, .	19.8	726
46	High-efficiency perovskiteâ€“polymer bulk heterostructure light-emitting diodes. Nature Photonics, 2018, 12, 783-789.	15.6	715
47	Electron Mobility and Injection Dynamics in Mesoporous ZnO, SnO₂, and TiO₂ Films Used in Dye-Sensitized Solar Cells. ACS Nano, 2011, 5, 5158-5166.	7.3	698
48	Supramolecular Halogen Bond Passivation of Organicâ€“Inorganic Halide Perovskite Solar Cells. Nano Letters, 2014, 14, 3247-3254.	4.5	651
49	Enhanced optoelectronic quality of perovskite thin films with hypophosphorous acid for planar heterojunction solar cells. Nature Communications, 2015, 6, 10030.	5.8	620
50	Heterojunction Modification for Highly Efficient Organicâ€“Inorganic Perovskite Solar Cells. ACS Nano, 2014, 8, 12701-12709.	7.3	614
51	Determination of the exciton binding energy and effective masses for methylammonium and formamidinium lead tri-halide perovskite semiconductors. Energy and Environmental Science, 2016, 9, 962-970.	15.6	603
52	High-Performance Perovskite-Polymer Hybrid Solar Cells via Electronic Coupling with Fullerene Monolayers. Nano Letters, 2013, 13, 3124-3128.	4.5	602
53	Photon recycling in lead iodide perovskite solar cells. Science, 2016, 351, 1430-1433.	6.0	600
54	Present status and future prospects of perovskite photovoltaics. Nature Materials, 2018, 17, 372-376.	13.3	590

#	Article	IF	Citations
55	Modeling Anomalous Hysteresis in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 3808-3814.	2.1	581
56	Advances in Liquidâ€Electrolyte and Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Materials, 2007, 19, 3187-3200.	11.1	564
57	Sub-150 Â°C processed meso-superstructured perovskite solar cells with enhanced efficiency. Energy and Environmental Science, 2014, 7, 1142-1147.	15.6	560
58	Lithium salts as â€œredox activeâ€• p-type dopants for organic semiconductors and their impact in solid-state dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2013, 15, 2572.	1.3	557
59	The Raman Spectrum of the CH₃NH₃PbI₃ Hybrid Perovskite: Interplay of Theory and Experiment. Journal of Physical Chemistry Letters, 2014, 5, 279-284.	2.1	555
60	A generic interface to reduce the efficiency-stability-cost gap of perovskite solar cells. Science, 2017, 358, 1192-1197.	6.0	554
61	Plasmonic Dye-Sensitized Solar Cells Using Coreâ^'Shell Metalâ^'Insulator Nanoparticles. Nano Letters, 2011, 11, 438-445.	4.5	550
62	Enhanced UV-light stability of planar heterojunction perovskite solar cells with caesium bromide interface modification. Energy and Environmental Science, 2016, 9, 490-498.	15.6	535
63	Band Gaps of the Lead-Free Halide Double Perovskites Cs₂BiAgCl₆ and Cs₂BiAgBr₆ from Theory and Experiment. Journal of Physical Chemistry Letters, 2016, 7, 2579-2585.	2.1	529
64	Enhancement of Perovskite-Based Solar Cells Employing Coreâ€"Shell Metal Nanoparticles. Nano Letters, 2013, 13, 4505-4510.	4.5	505
65	SnO₂-Based Dye-Sensitized Hybrid Solar Cells Exhibiting Near Unity Absorbed Photon-to-Electron Conversion Efficiency. Nano Letters, 2010, 10, 1259-1265.	4.5	495
66	Photovoltaic mixed-cation lead mixed-halide perovskites: links between crystallinity, photo-stability and electronic properties. Energy and Environmental Science, 2017, 10, 361-369.	15.6	482
67	Ligand-engineered bandgap stability in mixed-halide perovskite LEDs. Nature, 2021, 591, 72-77.	13.7	471
68	A piperidinium salt stabilizes efficient metal-halide perovskite solar cells. Science, 2020, 369, 96-102.	6.0	461
69	Estimating the Maximum Attainable Efficiency in Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2010, 20, 13-19.	7.8	458
70	Cubic or Orthorhombic? Revealing the Crystal Structure of Metastable Black-Phase CsPbI₃ by Theory and Experiment. ACS Energy Letters, 2018, 3, 1787-1794.	8.8	455
71	The Importance of Moisture in Hybrid Lead Halide Perovskite Thin Film Fabrication. ACS Nano, 2015, 9, 9380-9393.	7.3	451
72	A Bicontinuous Double Gyroid Hybrid Solar Cell. Nano Letters, 2009, 9, 2807-2812.	4.5	446

#	Article	IF	Citations
73	Charge-Carrier Dynamics in 2D Hybrid Metalâ€“Halide Perovskites. Nano Letters, 2016, 16, 7001-7007.	4.5	428
74	Charge-carrier dynamics in vapour-deposited films of the organolead halide perovskite CH₃NH₃PbI_{3âˆ’x}Cl_x. Energy and Environmental Science, 2014, 7, 2269-2275.	15.6	427
75	Structural and optical properties of methylammonium lead iodide across the tetragonal to cubic phase transition: implications for perovskite solar cells. Energy and Environmental Science, 2016, 9, 155-163.	15.6	423
76	Optical properties and limiting photocurrent of thin-film perovskite solar cells. Energy and Environmental Science, 2015, 8, 602-609.	15.6	417
77	Enhanced charge mobility in a molecular hole transporter via addition of redox inactive ionic dopant: Implication to dye-sensitized solar cells. Applied Physics Letters, 2006, 89, 262114.	1.5	416
78	Neutral Color Semitransparent Microstructured Perovskite Solar Cells. ACS Nano, 2014, 8, 591-598.	7.3	412
79	Carrier trapping and recombination: the role of defect physics in enhancing the open circuit voltage of metal halide perovskite solar cells. Energy and Environmental Science, 2016, 9, 3472-3481.	15.6	409
80	Efficient perovskite solar cells by metal ion doping. Energy and Environmental Science, 2016, 9, 2892-2901.	15.6	372
81	Electronic Properties of Meso-Superstructured and Planar Organometal Halide Perovskite Films: Charge Trapping, Photodoping, and Carrier Mobility. ACS Nano, 2014, 8, 7147-7155.	7.3	370
82	Charge selective contacts, mobile ions and anomalous hysteresis in organicâ€“inorganic perovskite solar cells. Materials Horizons, 2015, 2, 315-322.	6.4	366
83	Efficiency Enhancements in Solid-State Hybrid Solar Cells via Reduced Charge Recombination and Increased Light Capture. Nano Letters, 2007, 7, 3372-3376.	4.5	363
84	Perovskite Crystals for Tunable White Light Emission. Chemistry of Materials, 2015, 27, 8066-8075.	3.2	362
85	Characterization of Planar Lead Halide Perovskite Solar Cells by Impedance Spectroscopy, Open-Circuit Photovoltage Decay, and Intensity-Modulated Photovoltage/Photocurrent Spectroscopy. Journal of Physical Chemistry C, 2015, 119, 3456-3465.	1.5	361
86	Metal halide perovskite tandem and multiple-junction photovoltaics. Nature Reviews Chemistry, 2017, 1, .	13.8	344
87	Chargeâ€Carrier Dynamics and Mobilities in Formamidinium Lead Mixedâ€Halide Perovskites. Advanced Materials, 2015, 27, 7938-7944.	11.1	343
88	Improving the Long-Term Stability of Perovskite Solar Cells with a Porous Al₂O₃ Buffer Layer. Journal of Physical Chemistry Letters, 2015, 6, 432-437.	2.1	343
89	Efficient Sensitization of Nanocrystalline TiO2 Films by a Near-IR-Absorbing Unsymmetrical Zinc Phthalocyanine. Angewandte Chemie - International Edition, 2007, 46, 373-376.	7.2	334
90	Performance and Stability Enhancement of Dyeâ€Sensitized and Perovskite Solar Cells by Al Doping of TiO₂. Advanced Functional Materials, 2014, 24, 6046-6055.	7.8	330

#	Article	IF	Citations
91	Crystallization Kinetics of Organicâ€“Inorganic Trihalide Perovskites and the Role of the Lead Anion in Crystal Growth. Journal of the American Chemical Society, 2015, 137, 2350-2358.	6.6	326
92	Solution Depositionâ€Conversion for Planar Heterojunction Mixed Halide Perovskite Solar Cells. Advanced Energy Materials, 2014, 4, 1400355.	10.2	325
93	C₆₀ as an Efficient n-Type Compact Layer in Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 2399-2405.	2.1	324
94	Homogeneous Emission Line Broadening in the Organo Lead Halide Perovskite CH₃NH₃PbI_{3â€“<i>x</i>}Cl_{<i>x</i>}. Journal of Physical Chemistry Letters, 2014, 5, 1300-1306.	2.1	319
95	A low viscosity, low boiling point, clean solvent system for the rapid crystallisation of highly specular perovskite films. Energy and Environmental Science, 2017, 10, 145-152.	15.6	319
96	Light-induced annihilation of Frenkel defects in organo-lead halide perovskites. Energy and Environmental Science, 2016, 9, 3180-3187.	15.6	302
97	Optical phonons in methylammonium lead halide perovskites and implications for charge transport. Materials Horizons, 2016, 3, 613-620.	6.4	299
98	Highly Efficient Perovskite Solar Cells with Tunable Structural Color. Nano Letters, 2015, 15, 1698-1702.	4.5	289
99	Radiative efficiency of lead iodide based perovskite solar cells. Scientific Reports, 2014, 4, 6071.	1.6	283
100	Revealing the origin of voltage loss in mixed-halide perovskite solar cells. Energy and Environmental Science, 2020, 13, 258-267.	15.6	283
101	The Potential of Multijunction Perovskite Solar Cells. ACS Energy Letters, 2017, 2, 2506-2513.	8.8	272
102	Thermally Induced Structural Evolution and Performance of Mesoporous Block Copolymer-Directed Alumina Perovskite Solar Cells. ACS Nano, 2014, 8, 4730-4739.	7.3	269
103	Metal Halide Perovskite Polycrystalline Films Exhibiting Properties of Single Crystals. Joule, 2017, 1, 155-167.	11.7	264
104	Crystallization Kinetics and Morphology Control of Formamidiniumâ€“Cesium Mixedâ€Cation Lead Mixedâ€Halide Perovskite via Tunability of the Colloidal Precursor Solution. Advanced Materials, 2017, 29, 1607039.	11.1	263
105	Structured Organicâ€“Inorganic Perovskite toward a Distributed Feedback Laser. Advanced Materials, 2016, 28, 923-929.	11.1	257
106	Monodisperse Dualâ€Functional Upconversion Nanoparticles Enabled Nearâ€Infrared Organolead Halide Perovskite Solar Cells. Angewandte Chemie - International Edition, 2016, 55, 4280-4284.	7.2	257
107	Hysteresis Index: A Figure without Merit for Quantifying Hysteresis in Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 2472-2476.	8.8	257
108	Revealing Charge Carrier Mobility and Defect Densities in Metal Halide Perovskites via Space-Charge-Limited Current Measurements. ACS Energy Letters, 2021, 6, 1087-1094.	8.8	254

#	Article	IF	Citations
109	Pinhole-free perovskite films for efficient solar modules. Energy and Environmental Science, 2016, 9, 484-489.	15.6	252
110	Vertically segregated hybrid blends for photovoltaic devices with improved efficiency. Journal of Applied Physics, 2005, 97, 014914.	1.1	251
111	Aligned and Graded Typeâ€II Ruddlesdenâ€“Popper Perovskite Films for Efficient Solar Cells. Advanced Energy Materials, 2018, 8, 1800185.	10.2	247
112	Formation of Thin Films of Organicâ€“Inorganic Perovskites for Highâ€Efficiency Solar Cells. Angewandte Chemie - International Edition, 2015, 54, 3240-3248.	7.2	245
113	Efficient Singleâ€Layer Polymer Lightâ€Emitting Diodes. Advanced Materials, 2010, 22, 3194-3198.	11.1	243
114	Infrared Light Management Using a Nanocrystalline Silicon Oxide Interlayer in Monolithic Perovskite/Silicon Heterojunction Tandem Solar Cells with Efficiency above 25%. Advanced Energy Materials, 2019, 9, 1803241.	10.2	239
115	Charge collection and pore filling in solid-state dye-sensitized solar cells. Nanotechnology, 2008, 19, 424003.	1.3	238
116	The Impact of the Crystallization Processes on the Structural and Optical Properties of Hybrid Perovskite Films for Photovoltaics. Journal of Physical Chemistry Letters, 2014, 5, 3836-3842.	2.1	238
117	Efficient and Airâ€Stable Mixedâ€Cation Lead Mixedâ€Halide Perovskite Solar Cells with nâ€Doped Organic Electron Extraction Layers. Advanced Materials, 2017, 29, 1604186.	11.1	237
118	Tailoring metal halide perovskites through metal substitution: influence on photovoltaic and material properties. Energy and Environmental Science, 2017, 10, 236-246.	15.6	230
119	Influence of Thermal Processing Protocol upon the Crystallization and Photovoltaic Performance of Organicâ€“Inorganic Lead Trihalide Perovskites. Journal of Physical Chemistry C, 2014, 118, 17171-17177.	1.5	225
120	Mapping Electric Fieldâ€Induced Switchable Poling and Structural Degradation in Hybrid Lead Halide Perovskite Thin Films. Advanced Energy Materials, 2015, 5, 1500962.	10.2	225
121	The Importance of Perovskite Pore Filling in Organometal Mixed Halide Sensitized TiO₂-Based Solar Cells. Journal of Physical Chemistry Letters, 2014, 5, 1096-1102.	2.1	221
122	Charge Density Dependent Mobility of Organic Holeâ€Transporters and Mesoporous TiO₂ Determined by Transient Mobility Spectroscopy: Implications to Dyeâ€Sensitized and Organic Solar Cells. Advanced Materials, 2013, 25, 3227-3233.	11.1	217
123	Impact of the Halide Cage on the Electronic Properties of Fully Inorganic Cesium Lead Halide Perovskites. ACS Energy Letters, 2017, 2, 1621-1627.	8.8	215
124	Charge Generation Kinetics and Transport Mechanisms in Blended Polyfluorene Photovoltaic Devices. Nano Letters, 2002, 2, 1353-1357.	4.5	214
125	A one-step low temperature processing route for organolead halide perovskite solar cells. Chemical Communications, 2013, 49, 7893.	2.2	212
126	Electronic Traps and Phase Segregation in Lead Mixed-Halide Perovskite. ACS Energy Letters, 2019, 4, 75-84.	8.8	212

#	Article	IF	Citations
127	Oxygen Degradation in Mesoporous Al₂O₃/CH₃NH₃PbI_{3â€•}<i>_x</i>Cl<i>_x</i> Perovskite Solar Cells: Kinetics and Mechanisms. Advanced Energy Materials, 2016, 6, 1600014.	10.2	211
128	Toward Understanding Space-Charge Limited Current Measurements on Metal Halide Perovskites. ACS Energy Letters, 2020, 5, 376-384.	8.8	211
129	Consolidation of the optoelectronic properties of CH3NH3PbBr3 perovskite single crystals. Nature Communications, 2017, 8, 590.	5.8	207
130	Microseconds, milliseconds and seconds: deconvoluting the dynamic behaviour of planar perovskite solar cells. Physical Chemistry Chemical Physics, 2017, 19, 5959-5970.	1.3	200
131	Plasmonicâ€Induced Photon Recycling in Metal Halide Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 5038-5046.	7.8	198
132	Well-Defined Nanostructured, Single-Crystalline TiO₂ Electron Transport Layer for Efficient Planar Perovskite Solar Cells. ACS Nano, 2016, 10, 6029-6036.	7.3	196
133	The Function of a TiO₂ Compact Layer in Dye-Sensitized Solar Cells Incorporating â€œPlanarâ€• Organic Dyes. Nano Letters, 2008, 8, 977-981.	4.5	195
134	Charge carrier recombination channels in the low-temperature phase of organic-inorganic lead halide perovskite thin films. APL Materials, 2014, 2, .	2.2	194
135	Predicting and optimising the energy yield of perovskite-on-silicon tandem solar cells under real world conditions. Energy and Environmental Science, 2017, 10, 1983-1993.	15.6	192
136	Mechanism for rapid growth of organicâ€“inorganic halide perovskite crystals. Nature Communications, 2016, 7, 13303.	5.8	191
137	Non-ferroelectric nature of the conductance hysteresis in CH3NH3PbI3 perovskite-based photovoltaic devices. Applied Physics Letters, 2015, 106, .	1.5	189
138	Solution-Processed Cesium Hexabromopalladate(IV), Cs₂PdBr₆, for Optoelectronic Applications. Journal of the American Chemical Society, 2017, 139, 6030-6033.	6.6	189
139	How should you measure your excitonic solar cells?. Energy and Environmental Science, 2012, 5, 6513.	15.6	187
140	Hydrophobic Organic Hole Transporters for Improved Moisture Resistance in Metal Halide Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 5981-5989.	4.0	184
141	Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films. Advanced Energy Materials, 2017, 7, 1700977.	10.2	183
142	Atomic-scale microstructure of metal halide perovskite. Science, 2020, 370, .	6.0	183
143	Impact of Bi³⁺ Heterovalent Doping in Organicâ€“Inorganic Metal Halide Perovskite Crystals. Journal of the American Chemical Society, 2018, 140, 574-577.	6.6	181
144	High irradiance performance of metal halide perovskites for concentrator photovoltaics. Nature Energy, 2018, 3, 855-861.	19.8	180

#	Article	IF	Citations
145	Solution-Processed All-Perovskite Multi-junction Solar Cells. Joule, 2019, 3, 387-401.	11.7	177
146	Highâ€Performance Inverted Planar Heterojunction Perovskite Solar Cells Based on Lead Acetate Precursor with Efficiency Exceeding 18%. Advanced Functional Materials, 2016, 26, 3508-3514.	7.8	176
147	Electron and Hole Transport through Mesoporous TiO₂ Infiltrated with Spiroâ€MeOTAD. Advanced Materials, 2007, 19, 3643-3647.	11.1	174
148	Atmospheric Influence upon Crystallization and Electronic Disorder and Its Impact on the Photophysical Properties of Organicâ€"Inorganic Perovskite Solar Cells. ACS Nano, 2015, 9, 2311-2320.	7.3	173
149	Efficient, Semitransparent Neutral-Colored Solar Cells Based on Microstructured Formamidinium Lead Trihalide Perovskite. Journal of Physical Chemistry Letters, 2015, 6, 129-138.	2.1	173
150	A Transparent Conductive Adhesive Laminate Electrode for Highâ€Efficiency Organicâ€Inorganic Lead Halide Perovskite Solar Cells. Advanced Materials, 2014, 26, 7499-7504.	11.1	169
151	Protic Ionic Liquids as p-Dopant for Organic Hole Transporting Materials and Their Application in High Efficiency Hybrid Solar Cells. Journal of the American Chemical Society, 2013, 135, 13538-13548.	6.6	167
152	Observation and Mediation of the Presence of Metallic Lead in Organicâ€"Inorganic Perovskite Films. ACS Applied Materials & Interfaces, 2015, 7, 13440-13444.	4.0	167
153	Light intensity, temperature, and thickness dependence of the open-circuit voltage in solid-state dye-sensitized solar cells. Physical Review B, 2006, 74, .	1.1	166
154	Block Copolymer Morphologies in Dye-Sensitized Solar Cells: Probing the Photovoltaic Structureâˆ'Function Relation. Nano Letters, 2009, 9, 2813-2819.	4.5	163
155	Ion Coordinating Sensitizer for High Efficiency Mesoscopic Dye-Sensitized Solar Cells:â€‰ Influence of Lithium Ions on the Photovoltaic Performance of Liquid and Solid-State Cells. Nano Letters, 2006, 6, 769-773.	4.5	161
156	Understanding the Performance-Limiting Factors of Cs₂AgBiBr₆ Double-Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 2200-2207.	8.8	161
157	Enhanced Efficiency and Stability of Perovskite Solar Cells Through Ndâ€Doping of Mesostructured TiO₂. Advanced Energy Materials, 2016, 6, 1501868.	10.2	157
158	Enhanced Hole Extraction in Perovskite Solar Cells Through Carbon Nanotubes. Journal of Physical Chemistry Letters, 2014, 5, 4207-4212.	2.1	156
159	The Effects of Doping Density and Temperature on the Optoelectronic Properties of Formamidinium Tin Triiodide Thin Films. Advanced Materials, 2018, 30, e1804506.	11.1	156
160	Nonlinear Optical Response of Organicâ€"Inorganic Halide Perovskites. ACS Photonics, 2016, 3, 371-377.	3.2	154
161	Unraveling the Exciton Binding Energy and the Dielectric Constant in Single-Crystal Methylammonium Lead Triiodide Perovskite. Journal of Physical Chemistry Letters, 2017, 8, 1851-1855.	2.1	152
162	Revealing the nature of photoluminescence emission in the metal-halide double perovskite Cs₂AgBiBr₆. Journal of Materials Chemistry C, 2019, 7, 8350-8356.	2.7	149

#	Article	IF	Citations
163	Unveiling the Influence of pH on the Crystallization of Hybrid Perovskites, Delivering Low Voltage Loss Photovoltaics. Joule, 2017, 1, 328-343.	11.7	148
164	Self-Organization of Nanocrystals in Polymer Brushes. Application in Heterojunction Photovoltaic Diodes. Nano Letters, 2005, 5, 1653-1657.	4.5	146
165	Cation exchange for thin film lead iodide perovskite interconversion. Materials Horizons, 2016, 3, 63-71.	6.4	146
166	Structural and Optical Properties of Cs₂AgBiBr₆ Double Perovskite. ACS Energy Letters, 2019, 4, 299-305.	8.8	146
167	Optoelectronic and spectroscopic characterization of vapour-transport grown Cu₂ZnSnS₄ single crystals. Journal of Materials Chemistry A, 2017, 5, 1192-1200.	5.2	145
168	Lessons Learned: From Dyeâ€Sensitized Solar Cells to Allâ€Solidâ€State Hybrid Devices. Advanced Materials, 2014, 26, 4013-4030.	11.1	144
169	High Efficiency Composite Metal Oxideâ€Polymer Electroluminescent Devices: A Morphological and Material Based Investigation. Advanced Materials, 2008, 20, 3447-3452.	11.1	143
170	The Phosphine Oxide Route toward Lead Halide Perovskite Nanocrystals. Journal of the American Chemical Society, 2018, 140, 14878-14886.	6.6	136
171	Morphological and electronic consequences of modifications to the polymer anode â€˜PEDOT:PSSâ€™. Polymer, 2005, 46, 2573-2578.	1.8	135
172	Effect of Structural Phase Transition on Charge-Carrier Lifetimes and Defects in CH₃NH₃SnI₃ Perovskite. Journal of Physical Chemistry Letters, 2016, 7, 1321-1326.	2.1	135
173	Highly efficient, flexible, indium-free perovskite solar cells employing metallic substrates. Journal of Materials Chemistry A, 2015, 3, 9141-9145.	5.2	133
174	Control of Solidâ€State Dyeâ€Sensitized Solar Cell Performance by Blockâ€Copolymerâ€Directed TiO₂ Synthesis. Advanced Functional Materials, 2010, 20, 1787-1796.	7.8	131
175	Influence of Shell Thickness and Surface Passivation on PbS/CdS Core/Shell Colloidal Quantum Dot Solar Cells. Chemistry of Materials, 2014, 26, 4004-4013.	3.2	129
176	Overcoming Zinc Oxide Interface Instability with a Methylammoniumâ€Free Perovskite for Highâ€Performance Solar Cells. Advanced Functional Materials, 2019, 29, 1900466.	7.8	129
177	Halide Segregation in Mixed-Halide Perovskites: Influence of A-Site Cations. ACS Energy Letters, 2021, 6, 799-808.	8.8	129
178	Vapour-Deposited Cesium Lead Iodide Perovskites: Microsecond Charge Carrier Lifetimes and Enhanced Photovoltaic Performance. ACS Energy Letters, 2017, 2, 1901-1908.	8.8	128
179	Bandâ€Tail Recombination in Hybrid Lead Iodide Perovskite. Advanced Functional Materials, 2017, 27, 1700860.	7.8	127
180	Scalable processing for realizing 21.7%-efficient all-perovskite tandem solar modules. Science, 2022, 376, 762-767.	6.0	127

#	Article	IF	Citations
181	Research Update: Strategies for improving the stability of perovskite solar cells. APL Materials, 2016, 4, .	2.2	126
182	Charge Generation and Photovoltaic Operation of Solidâ€State Dyeâ€Sensitized Solar Cells Incorporating a High Extinction Coefficient Indoleneâ€Based Sensitizer. Advanced Functional Materials, 2009, 19, 1810-1818.	7.8	125
183	Perovskite photovoltachromic cells for building integration. Energy and Environmental Science, 2015, 8, 1578-1584.	15.6	125
184	Fractional deviations in precursor stoichiometry dictate the properties, performance and stability of perovskite photovoltaic devices. Energy and Environmental Science, 2018, 11, 3380-3391.	15.6	125
185	The Origin of Collected Charge and Open-Circuit Voltage in Blended Polyfluorene Photovoltaic Devices. Advanced Materials, 2004, 16, 1640-1645.	11.1	124
186	Enabling reliability assessments of pre-commercial perovskite photovoltaics with lessons learned from industrial standards. Nature Energy, 2018, 3, 459-465.	19.8	123
187	Forthcoming perspectives of photoelectrochromic devices: a critical review. Energy and Environmental Science, 2016, 9, 2682-2719.	15.6	122
188	The perils of solar cell efficiency measurements. Nature Photonics, 2012, 6, 337-340.	15.6	119
189	Templated microstructural growth of perovskite thin films via colloidal monolayer lithography. Energy and Environmental Science, 2015, 8, 2041-2047.	15.6	119
190	Interface-Dependent Ion Migration/Accumulation Controls Hysteresis in MAPbI₃ Solar Cells. Journal of Physical Chemistry C, 2016, 120, 16399-16411.	1.5	118
191	Enhanced Amplified Spontaneous Emission in Perovskites Using a Flexible Cholesteric Liquid Crystal Reflector. Nano Letters, 2015, 15, 4935-4941.	4.5	117
192	Large-Area, Highly Uniform Evaporated Formamidinium Lead Triiodide Thin Films for Solar Cells. ACS Energy Letters, 2017, 2, 2799-2804.	8.8	116
193	Elucidating the long-range charge carrier mobility in metal halide perovskite thin films. Energy and Environmental Science, 2019, 12, 169-176.	15.6	115
194	A simple low temperature synthesis route for ZnOâ€"MgO coreâ€"shell nanowires. Nanotechnology, 2008, 19, 465603.	1.3	111
195	Charge Transport Limitations in Self-Assembled TiO₂ Photoanodes for Dye-Sensitized Solar Cells. Journal of Physical Chemistry Letters, 2013, 4, 698-703.	2.1	111
196	Mechanisms of Lithium Intercalation and Conversion Processes in Organicâ€"Inorganic Halide Perovskites. ACS Energy Letters, 2017, 2, 1818-1824.	8.8	111
197	Interfacial charge-transfer doping of metal halide perovskites for high performance photovoltaics. Energy and Environmental Science, 2019, 12, 3063-3073.	15.6	111
198	Radiative Monomolecular Recombination Boosts Amplified Spontaneous Emission in HC(NH₂)₂SnI₃ Perovskite Films. Journal of Physical Chemistry Letters, 2016, 7, 4178-4184.	2.1	110

#	Article	IF	Citations
199	Block copolymer directed synthesis of mesoporous TiO2for dye-sensitized solar cells. Soft Matter, 2009, 5, 134-139.	1.2	108
200	Facile Synthesis of Stable and Highly Luminescent Methylammonium Lead Halide Nanocrystals for Efficient Light Emitting Devices. Journal of the American Chemical Society, 2019, 141, 1269-1279.	6.6	108
201	Carbon Nanotubes in Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1601839.	10.2	107
202	Investigating the Role of 4â€<i>Tert</i> Butylpyridine in Perovskite Solar Cells. Advanced Energy Materials, 2017, 7, 1601079.	10.2	106
203	Diacetylene bridged triphenylamines as hole transport materials for solid state dye sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 6949.	5.2	105
204	Identification and Mitigation of a Critical Interfacial Instability in Perovskite Solar Cells Employing Copper Thiocyanate Holeâ€Transporter. Advanced Materials Interfaces, 2016, 3, 1600571.	1.9	105
205	Tracking Photoexcited Carriers in Hybrid Perovskite Semiconductors: Trap-Dominated Spatial Heterogeneity and Diffusion. ACS Nano, 2017, 11, 11488-11496.	7.3	105
206	Fabrication of Efficient and Stable CsPbI₃ Perovskite Solar Cells through Cation Exchange Process. Advanced Energy Materials, 2019, 9, 1901685.	10.2	101
207	A Universal Deposition Protocol for Planar Heterojunction Solar Cells with High Efficiency Based on Hybrid Lead Halide Perovskite Families. Advanced Materials, 2016, 28, 10701-10709.	11.1	100
208	The Role of a â€œSchottky Barrierâ€•at an Electron-Collection Electrode in Solid-State Dye-Sensitized Solar Cells. Advanced Materials, 2006, 18, 1910-1914.	11.1	98
209	Direct observation of an inhomogeneous chlorine distribution in CH₃NH₃PbI_{3âˆ’x}Cl_x layers: surface depletion and interface enrichment. Energy and Environmental Science, 2015, 8, 1609-1615.	15.6	97
210	Carbazole-based enamine: Low-cost and efficient hole transporting material for perovskite solar cells. Nano Energy, 2017, 32, 551-557.	8.2	97
211	Employing PEDOT as the p-Type Charge Collection Layer in Regular Organicâ€“Inorganic Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 1666-1673.	2.1	96
212	Device Performance of Emerging Photovoltaic Materials (Version 1). Advanced Energy Materials, 2021, 11, 2002774.	10.2	93
213	Enhancement of Charge-Transport Characteristics in Polymeric Films Using Polymer Brushes. Nano Letters, 2006, 6, 573-578.	4.5	92
214	Dye-Sensitized Solar Cells Incorporating a â€œLiquidâ€•Hole-Transporting Material. Nano Letters, 2006, 6, 2000-2003.	4.5	89
215	Role of the crystallization substrate on the photoluminescence properties of organo-lead mixed halides perovskites. APL Materials, 2014, 2, .	2.2	89
216	Improved conductivity in dye-sensitised solar cells through block-copolymer confined TiO₂crystallisation. Energy and Environmental Science, 2011, 4, 225-233.	15.6	88

#	Article	IF	Citations
217	Metal composition influences optoelectronic quality in mixed-metal leadâ€“tin triiodide perovskite solar absorbers. Energy and Environmental Science, 2020, 13, 1776-1787.	15.6	87
218	The mechanism of toluene-assisted crystallization of organicâ€“inorganic perovskites for highly efficient solar cells. Journal of Materials Chemistry A, 2016, 4, 4464-4471.	5.2	86
219	Efficient ZnO Nanowire Solid-State Dye-Sensitized Solar Cells Using Organic Dyes and Coreâˆ’shell Nanostructures. Journal of Physical Chemistry C, 2009, 113, 18515-18522.	1.5	85
220	Ultrafast Terahertz Conductivity Dynamics in Mesoporous TiO₂: Influence of Dye Sensitization and Surface Treatment in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 1365-1371.	1.5	84
221	Isotype Heterojunction Solar Cells Using n-Type Sb₂Se₃ Thin Films. Chemistry of Materials, 2020, 32, 2621-2630.	3.2	83
222	Route to Stable Lead-Free Double Perovskites with the Electronic Structure of CH₃NH₃PbI₃: A Case for Mixed-Cation [Cs/CH₃NH₃/CH(NH₂)₂]₂InBiBr₆. Journal of Physical Chemistry Letters, 2017, 8, 3917-3924.	2.1	82
223	Oxidative Passivation of Metal Halide Perovskites. Joule, 2019, 3, 2716-2731.	11.7	81
224	Elucidating the Role of a Tetrafluoroborateâ€Based Ionic Liquid at the nâ€Type Oxide/Perovskite Interface. Advanced Energy Materials, 2020, 10, 1903231.	10.2	81
225	Ultrafast Excited-State Localization in Cs₂AgBiBr₆ Double Perovskite. Journal of Physical Chemistry Letters, 2021, 12, 3352-3360.	2.1	81
226	Nanoimprinted distributed feedback lasers of solution processed hybrid perovskites. Optics Express, 2016, 24, 23677.	1.7	80
227	Efficient and Stable Perovskite Solar Cells Using Molybdenum Tris(dithiolene)s as p-Dopants for Spiro-OMeTAD. ACS Energy Letters, 2017, 2, 2044-2050.	8.8	79
228	Trap States, Electric Fields, and Phase Segregation in Mixedâ€Halide Perovskite Photovoltaic Devices. Advanced Energy Materials, 2020, 10, 1903488.	10.2	79
229	Pore Filling of Spiroâ€OMeTAD in Solidâ€State Dyeâ€Sensitized Solar Cells Determined Via Optical Reflectometry. Advanced Functional Materials, 2012, 22, 5010-5019.	7.8	78
230	Efficient room temperature aqueous Sb₂S₃ synthesis for inorganicâ€“organic sensitized solar cells with 5.1% efficiencies. Chemical Communications, 2015, 51, 8640-8643.	2.2	78
231	New Generation Hole Transporting Materials for Perovskite Solar Cells: Amideâ€Based Smallâ€Molecules with Nonconjugated Backbones. Advanced Energy Materials, 2018, 8, 1801605.	10.2	78
232	<i>In situ</i> simultaneous photovoltaic and structural evolution of perovskite solar cells during film formation. Energy and Environmental Science, 2018, 11, 383-393.	15.6	77
233	Perovskite/Colloidal Quantum Dot Tandem Solar Cells: Theoretical Modeling and Monolithic Structure. ACS Energy Letters, 2018, 3, 869-874.	8.8	77
234	Ion-Coordinating Sensitizer in Solid-State Hybrid Solar Cells. Angewandte Chemie - International Edition, 2005, 44, 6413-6417.	7.2	76

#	Article	IF	Citations
235	Roomâ€Temperature Atomic Layer Deposition of Al₂O₃: Impact on Efficiency, Stability and Surface Properties in Perovskite Solar Cells. ChemSusChem, 2016, 9, 3401-3406.	3.6	76
236	Building integration of semitransparent perovskite-based solar cells: Energy performance and visual comfort assessment. Applied Energy, 2017, 194, 94-107.	5.1	76
237	Hybrid Perovskites: Prospects for Concentrator Solar Cells. Advanced Science, 2018, 5, 1700792.	5.6	76
238	Synthesis and spectroscopic characterization of solution processable highly ordered polythiopheneâ€"carbon nanotube nanohybrid structures. Nanotechnology, 2010, 21, 025201.	1.3	75
239	Shuntâ€Blocking Layers for Semitransparent Perovskite Solar Cells. Advanced Materials Interfaces, 2016, 3, 1500837.	1.9	73
240	Dopant-Free Planar nâ€"iâ€"p Perovskite Solar Cells with Steady-State Efficiencies Exceeding 18%. ACS Energy Letters, 2017, 2, 622-628.	8.8	73
241	Control over Crystal Size in Vapor Deposited Metal-Halide Perovskite Films. ACS Energy Letters, 2020, 5, 710-717.	8.8	72
242	Phase segregation in mixed-halide perovskites affects charge-carrier dynamics while preserving mobility. Nature Communications, 2021, 12, 6955.	5.8	72
243	Monodisperse Dualâ€Functional Upconversion Nanoparticles Enabled Nearâ€Infrared Organolead Halide Perovskite Solar Cells. Angewandte Chemie, 2016, 128, 4352-4356.	1.6	71
244	Defect states in perovskite solar cells associated with hysteresis and performance. Applied Physics Letters, 2016, 109, .	1.5	69
245	Facile infiltration of semiconducting polymer into mesoporous electrodes for hybrid solar cells. Energy and Environmental Science, 2011, 4, 3051.	15.6	68
246	Influence of Ion Induced Local Coulomb Field and Polarity on Charge Generation and Efficiency in Poly(3â€Hexylthiophene)â€Based Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Functional Materials, 2011, 21, 2571-2579.	7.8	68
247	Solid-state supercapacitors with rationally designed heterogeneous electrodes fabricated by large area spray processing for wearable energy storage applications. Scientific Reports, 2016, 6, 25684.	1.6	68
248	Efficient and Stable Perovskite Solar Cells Using Lowâ€Cost Anilineâ€Based Enamine Holeâ€Transporting Materials. Advanced Materials, 2018, 30, e1803735.	11.1	68
249	Long-Range Charge Extraction in Back-Contact Perovskite Architectures via Suppressed Recombination. Joule, 2019, 3, 1301-1313.	11.7	68
250	Understanding and suppressing non-radiative losses in methylammonium-free wide-bandgap perovskite solar cells. Energy and Environmental Science, 2022, 15, 714-726.	15.6	68
251	The origin of an efficiency improving â€œlight soakingâ€• effect in SnO2 based solid-state dye-sensitized solar cells. Energy and Environmental Science, 2012, 5, 9566.	15.6	67
252	Cross-Linkable Fullerene Derivatives for Solution-Processed nâ€"iâ€"p Perovskite Solar Cells. ACS Energy Letters, 2016, 1, 648-653.	8.8	67

#	Article	IF	Citations
253	Chargeâ€Carrier Trapping and Radiative Recombination in Metal Halide Perovskite Semiconductors. Advanced Functional Materials, 2020, 30, 2004312.	7.8	67
254	Device Performance of Emerging Photovoltaic Materials (Version 2). Advanced Energy Materials, 2021, 11, .	10.2	66
255	Hyperbranched Quasi-1D Nanostructures for Solid-State Dye-Sensitized Solar Cells. ACS Nano, 2013, 7, 10023-10031.	7.3	65
256	Measurement and modelling of dark current decay transients in perovskite solar cells. Journal of Materials Chemistry C, 2017, 5, 452-462.	2.7	64
257	Layered Mixed Tinâ€"Lead Hybrid Perovskite Solar Cells with High Stability. ACS Energy Letters, 2018, 3, 2246-2251.	8.8	64
258	Interfacial electron accumulation for efficient homo-junction perovskite solar cells. Nano Energy, 2016, 28, 269-276.	8.2	63
259	Influence of Interface Morphology on Hysteresis in Vaporâ€Deposited Perovskite Solar Cells. Advanced Electronic Materials, 2017, 3, 1600470.	2.6	63
260	Interplay of Structural and Optoelectronic Properties in Formamidinium Mixed Tinâ€"Lead Triiodide Perovskites. Advanced Functional Materials, 2018, 28, 1802803.	7.8	63
261	Electroluminescence from Organometallic Lead Halide Perovskiteâ€Conjugated Polymer Diodes. Advanced Electronic Materials, 2015, 1, 1500008.	2.6	62
262	Modulating the Electronâ€"Hole Interaction in a Hybrid Lead Halide Perovskite with an Electric Field. Journal of the American Chemical Society, 2015, 137, 15451-15459.	6.6	61
263	Inducing swift nucleation morphology control for efficient planar perovskite solar cells by hot-air quenching. Journal of Materials Chemistry A, 2017, 5, 3812-3818.	5.2	61
264	A two layer electrode structure for improved Li Ion diffusion and volumetric capacity in Li Ion batteries. Nano Energy, 2017, 31, 377-385.	8.2	60
265	A panchromatic anthracene-fused porphyrin sensitizer for dye-sensitized solar cells. RSC Advances, 2012, 2, 6846.	1.7	59
266	Optical Description of Mesostructured Organicâ€"Inorganic Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 48-53.	2.1	59
267	Nearâ€Infrared and Shortâ€Wavelength Infrared Photodiodes Based on Dyeâ€"Perovskite Composites. Advanced Functional Materials, 2017, 27, 1702485.	7.8	59
268	Highly Absorbing Lead-Free Semiconductor Cu₂AgBiI₆ for Photovoltaic Applications from the Quaternary CuIâ€"AgIâ€"BiI₃ Phase Space. Journal of the American Chemical Society, 2021, 143, 3983-3992.	6.6	59
269	Triblockâ€Terpolymerâ€Directed Selfâ€Assembly of Mesoporous TiO₂: Highâ€Performance Photoanodes for Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2012, 2, 676-682.	10.2	58
270	Influence of ionizing dopants on charge transport in organic semiconductors. Physical Chemistry Chemical Physics, 2014, 16, 1132-1138.	1.3	58

#	Article	IF	Citations
271	Electron injection and scaffold effects in perovskite solar cells. Journal of Materials Chemistry C, 2017, 5, 634-644.	2.7	58
272	Unraveling the Function of an MgO Interlayer in Both Electrolyte and Solid-State SnO₂ Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2012, 116, 22840-22846.	1.5	57
273	Hole-transport materials with greatly-differing redox potentials give efficient TiO2â€“[CH3NH3][PbX3] perovskite solar cells. Physical Chemistry Chemical Physics, 2015, 17, 2335-2338.	1.3	57
274	Direct Observation of Ultrafast Exciton Dissociation in Lead Iodide Perovskite by 2D Electronic Spectroscopy. ACS Photonics, 2018, 5, 852-860.	3.2	57
275	Revealing Factors Influencing the Operational Stability of Perovskite Light-Emitting Diodes. ACS Nano, 2020, 14, 8855-8865.	7.3	57
276	A new ion-coordinating ruthenium sensitizer for mesoscopic dye-sensitized solar cells. Inorganica Chimica Acta, 2008, 361, 699-706.	1.2	56
277	Electron Transport and Recombination in Dye-Sensitized Mesoporous TiO2 Probed by Photoinduced Charge-Conductivity Modulation Spectroscopy with Monte Carlo Modeling. Journal of the American Chemical Society, 2008, 130, 12912-12920.	6.6	55
278	Opticallyâ€Pumped Lasing in Hybrid Organicâ€“Inorganic Lightâ€Emitting Diodes. Advanced Functional Materials, 2009, 19, 2130-2136.	7.8	55
279	CsIâ€Antisolvent Adduct Formation in Allâ€Inorganic Metal Halide Perovskites. Advanced Energy Materials, 2020, 10, 1903365.	10.2	55
280	Charge-Carrier Trapping Dynamics in Bismuth-Doped Thin Films of MAPbBr₃ Perovskite. Journal of Physical Chemistry Letters, 2020, 11, 3681-3688.	2.1	55
281	Highly Crystalline Methylammonium Lead Tribromide Perovskite Films for Efficient Photovoltaic Devices. ACS Energy Letters, 2018, 3, 1233-1240.	8.8	54
282	Boosting the efficiency of quasi-2D perovskites light-emitting diodes by using encapsulation growth method. Nano Energy, 2021, 80, 105511.	8.2	54
283	A Model for the Operation of Perovskite Based Hybrid Solar Cells: Formulation, Analysis, and Comparison to Experiment. SIAM Journal on Applied Mathematics, 2014, 74, 1935-1966.	0.8	53
284	High Extinction Coefficient â€œAntennaâ€• Dye in Solid-State Dye-Sensitized Solar Cells: A Photophysical and Electronic Study. Journal of Physical Chemistry C, 2008, 112, 7562-7566.	1.5	52
285	Simple Approach to Hybrid Polymer/Porous Metal Oxide Solar Cells from Solution-Processed ZnO Nanocrystals. Journal of Physical Chemistry C, 2010, 114, 3664-3674.	1.5	52
286	Surface modified fullerene electron transport layers for stable and reproducible flexible perovskite solar cells. Nano Energy, 2018, 49, 324-332.	8.2	52
287	Universal Current Losses in Perovskite Solar Cells Due to Mobile Ions. Advanced Energy Materials, 2021, 11, 2101447.	10.2	52
288	Towards Longâ€Term Photostability of Solidâ€State Dye Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1301667.	10.2	51

#	Article	IF	Citations
289	Improving energy and visual performance in offices using building integrated perovskite-based solar cells: A case study in Southern Italy. Applied Energy, 2017, 205, 834-846.	5.1	51
290	Growth modes and quantum confinement in ultrathin vapour-deposited MAPbI₃ films. Nanoscale, 2019, 11, 14276-14284.	2.8	51
291	Enhancing the Charge Extraction and Stability of Perovskite Solar Cells Using Strontium Titanate (SrTiO₃) Electron Transport Layer. ACS Applied Energy Materials, 2019, 2, 8090-8097.	2.5	51
292	Identification of lead vacancy defects in lead halide perovskites. Nature Communications, 2021, 12, 5566.	5.8	51
293	Local Versus Longâ€Range Diffusion Effects of Photoexcited States on Radiative Recombination in Organicâ€“Inorganic Lead Halide Perovskites. Advanced Science, 2015, 2, 1500136.	5.6	50
294	Fast Charge-Carrier Trapping in TiO₂ Nanotubes. Journal of Physical Chemistry C, 2015, 119, 9159-9168.	1.5	50
295	Low cost triazatruxene hole transporting material for >20% efficiency perovskite solar cells. Journal of Materials Chemistry C, 2019, 7, 5235-5243.	2.7	50
296	Boosting Infrared Light Harvesting by Molecular Functionalization of Metal Oxide/Polymer Interfaces in Efficient Hybrid Solar Cells. Advanced Functional Materials, 2012, 22, 2160-2166.	7.8	49
297	Deciphering photocarrier dynamics for tuneable high-performance perovskite-organic semiconductor heterojunction phototransistors. Nature Communications, 2019, 10, 4475.	5.8	49
298	Impact of Tin Fluoride Additive on the Properties of Mixed Tinâ€Lead Iodide Perovskite Semiconductors. Advanced Functional Materials, 2020, 30, 2005594.	7.8	48
299	Enhanced Photoresponse in Solid-State Excitonic Solar Cells via Resonant Energy Transfer and Cascaded Charge Transfer from a Secondary Absorber. Nano Letters, 2010, 10, 4981-4988.	4.5	47
300	Near-neutral-colored semitransparent perovskite films using a combination of colloidal self-assembly and plasma etching. Solar Energy Materials and Solar Cells, 2017, 160, 193-202.	3.0	47
301	Microsecond Carrier Lifetimes, Controlled p-Doping, and Enhanced Air Stability in Low-Bandgap Metal Halide Perovskites. ACS Energy Letters, 2019, 4, 2301-2307.	8.8	46
302	Solid-state dye-sensitized solar cells based on ZnO nanocrystals. Nanotechnology, 2010, 21, 205203.	1.3	45
303	Methylammonium lead triiodide perovskite solar cells: A new paradigm in photovoltaics. MRS Bulletin, 2015, 40, 641-645.	1.7	45
304	Nonspiro, Fluoreneâ€Based, Amorphous Hole Transporting Materials for Efficient and Stable Perovskite Solar Cells. Advanced Science, 2018, 5, 1700811.	5.6	45
305	Chargeâ€Carrier Dynamics, Mobilities, and Diffusion Lengths of 2Dâ€“3D Hybrid Butylammoniumâ€“Cesiumâ€“Formamidinium Lead Halide Perovskites. Advanced Functional Materials, 2019, 29, 1902656.	7.8	45
306	Structureâ€“Property Relations of Methylamine Vapor Treated Hybrid Perovskite CH₃NH₃PbI₃ Films and Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 8092-8099.	4.0	44

#	Article	IF	Citations
307	Spatially resolved studies of the phases and morphology of methylammonium and formamidinium lead tri-halide perovskites. Nanoscale, 2017, 9, 3222-3230.	2.8	44
308	Degradation Kinetics of Inverted Perovskite Solar Cells. Scientific Reports, 2018, 8, 5977.	1.6	44
309	Dual-Source Coevaporation of Low-Bandgap FA_{1â€“<i>x</i>}Cs_{<i>x</i>}Sn_{1â€“<i>y</i>}Pb_{<i>y</i>}I₃ Perovskites for Photovoltaics. ACS Energy Letters, 2019, 4, 2748-2756.	8.8	43
310	The effect of selective interactions at the interface of polymerâ€“oxide hybrid solar cells. Energy and Environmental Science, 2012, 5, 9068.	15.6	42
311	Charge carrier recombination dynamics in perovskite and polymer solar cells. Applied Physics Letters, 2016, 108, .	1.5	42
312	Modeling the effect of ionic additives on the optical and electronic properties of a dye-sensitized TiO2 heterointerface: absorption, charge injection and aggregation. Journal of Materials Chemistry A, 2013, 1, 14675.	5.2	41
313	ZrO₂/TiO₂ Electron Collection Layer for Efficient Meso-Superstructured Hybrid Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 2342-2349.	4.0	41
314	Giant Fine Structure Splitting of the Bright Exciton in a Bulk MAPbBr₃ Single Crystal. Nano Letters, 2019, 19, 7054-7061.	4.5	41
315	Vacancy-Ordered Double Perovskite Cs₂TeI₆ Thin Films for Optoelectronics. Chemistry of Materials, 2020, 32, 6676-6684.	3.2	41
316	Charge-Carrier Mobility and Localization in Semiconducting Cu₂AgBiI₆ for Photovoltaic Applications. ACS Energy Letters, 2021, 6, 1729-1739.	8.8	41
317	Monolithic route to efficient dye-sensitized solar cells employing diblock copolymers for mesoporous TiO2. Journal of Materials Chemistry, 2010, 20, 1261-1268.	6.7	40
318	Obviating the requirement for oxygen in SnO2-based solid-state dye-sensitized solar cells. Nanotechnology, 2011, 22, 225403.	1.3	40
319	Monolithic Wide Band Gap Perovskite/Perovskite Tandem Solar Cells with Organic Recombination Layers. Journal of Physical Chemistry C, 2017, 121, 27256-27262.	1.5	40
320	A universal solution processed interfacial bilayer enabling ohmic contact in organic and hybrid optoelectronic devices. Energy and Environmental Science, 2020, 13, 268-276.	15.6	40
321	Adduct-based p-doping of organic semiconductors. Nature Materials, 2021, 20, 1248-1254.	13.3	40
322	Optical description of solid-state dye-sensitized solar cells. I. Measurement of layer optical properties. Journal of Applied Physics, 2009, 106, .	1.1	39
323	Lead-sulphide quantum-dot sensitization of tin oxide based hybrid solar cells. Solar Energy, 2011, 85, 1283-1290.	2.9	39
324	High Responsivity and Response Speed Singleâ€Layer Mixedâ€Cation Lead Mixedâ€Halide Perovskite Photodetectors Based on Nanogap Electrodes Manufactured on Largeâ€Area Rigid and Flexible Substrates. Advanced Functional Materials, 2019, 29, 1901371.	7.8	39

#	Article	IF	Citations
325	Time-Evolution of Poly(3-Hexylthiophene) as an Energy Relay Dye in Dye-Sensitized Solar Cells. Nano Letters, 2012, 12, 634-639.	4.5	38
326	Impurity Tracking Enables Enhanced Control and Reproducibility of Hybrid Perovskite Vapor Deposition. ACS Applied Materials & Interfaces, 2019, 11, 28851-28857.	4.0	38
327	Morphological dependence of charge generation and transport in blended polyfluorene photovoltaic devices. Thin Solid Films, 2004, 451-452, 567-571.	0.8	37
328	A polyfluoroalkyl imidazolium ionic liquid as iodide ion source in dye sensitized solar cells. Organic Electronics, 2012, 13, 2474-2478.	1.4	37
329	Balancing Charge Carrier Transport in a Quantum Dot Pâ€“N Junction toward Hysteresis-Free High-Performance Solar Cells. ACS Energy Letters, 2018, 3, 1036-1043.	8.8	37
330	Controlling Nucleation and Growth of Metal Halide Perovskite Thin Films for Highâ€Efficiency Perovskite Solar Cells. Small, 2017, 13, 1602808.	5.2	36
331	Oxide Analogs of Halide Perovskites and the New Semiconductor Ba₂AgIO₆. Journal of Physical Chemistry Letters, 2019, 10, 1722-1728.	2.1	36
332	Quantification of Efficiency Losses Due to Mobile Ions in Perovskite Solar Cells via Fast Hysteresis Measurements. Solar Rrl, 2022, 6, .	3.1	36
333	Layerâ€byâ€Layer Formation of Blockâ€Copolymerâ€Derived TiO₂ for Solidâ€State Dyeâ€Sensitized Solar Cells. Small, 2012, 8, 432-440.	5.2	35
334	An Organic â€œDonorâ€Freeâ€• Dye with Enhanced Openâ€Circuit Voltage in Solidâ€State Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1400166.	10.2	35
335	The Role of Hole Transport between Dyes in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2015, 119, 18975-18985.	1.5	35
336	Reproducible Planar Heterojunction Solar Cells Based on One-Step Solution-Processed Methylammonium Lead Halide Perovskites. Chemistry of Materials, 2017, 29, 462-473.	3.2	35
337	Solution-processed dye-sensitized ZnO phototransistors with extremely high photoresponsivity. Journal of Applied Physics, 2012, 112, .	1.1	34
338	Controlling coverage of solution cast materials with unfavourable surface interactions. Applied Physics Letters, 2014, 104, .	1.5	34
339	Solvent-Free Method for Defect Reduction and Improved Performance of p-i-n Vapor-Deposited Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 1903-1911.	8.8	33
340	Light-Enhanced Charge Mobility in a Molecular Hole Transporter. Physical Review Letters, 2007, 98, .	2.9	32
341	Solubilization of Carbon Nanotubes with Ethylene-Vinyl Acetate for Solution-Processed Conductive Films and Charge Extraction Layers in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 1185-1191.	4.0	31
342	Competitive Nucleation Mechanism for CsPbBr₃ Perovskite Nanoplatelet Growth. Journal of Physical Chemistry Letters, 2020, 11, 6535-6543.	2.1	31

#	Article	IF	Citations
343	Surface Energy Relay Between Cosensitized Molecules in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2011, 115, 23204-23208.	1.5	30
344	The real TiO₂/HTM interface of solid-state dye solar cells: role of trapped states from a multiscale modelling perspective. Nanoscale, 2015, 7, 1136-1144.	2.8	30
345	Engineering the Membrane/Electrode Interface To Improve the Performance of Solid-State Supercapacitors. ACS Applied Materials & Interfaces, 2016, 8, 20756-20765.	4.0	30
346	Photoinduced Vibrations Drive Ultrafast Structural Distortion in Lead Halide Perovskite. Journal of the American Chemical Society, 2020, 142, 16569-16578.	6.6	30
347	Understanding Dark Current-Voltage Characteristics in Metal-Halide Perovskite Single Crystals. Physical Review Applied, 2021, 15, .	1.5	30
348	Dependence of Dye Regeneration and Charge Collection on the Pore-Filling Fraction in Solid-State Dye-Sensitized Solar Cells. Advanced Functional Materials, 2014, 24, 668-677.	7.8	29
349	Enhanced charge carrier transport properties in colloidal quantum dot solar cells via organic and inorganic hybrid surface passivation. Journal of Materials Chemistry A, 2016, 4, 18769-18775.	5.2	29
350	Processing Solvent-Dependent Electronic and Structural Properties of Cesium Lead Triiodide Thin Films. Journal of Physical Chemistry Letters, 2017, 8, 4172-4176.	2.1	29
351	CsPbBr₃ Nanocrystal Films: Deviations from Bulk Vibrational and Optoelectronic Properties. Advanced Functional Materials, 2020, 30, 1909904.	7.8	29
352	Light Absorption and Recycling in Hybrid Metal Halide Perovskite Photovoltaic Devices. Advanced Energy Materials, 2020, 10, 1903653.	10.2	28
353	Oligothiophene Interlayer Effect on Photocurrent Generation for Hybrid TiO₂/P3HT Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 17226-17235.	4.0	27
354	Meso-Superstructured Perovskite Solar Cells: Revealing the Role of the Mesoporous Layer. Journal of Physical Chemistry C, 2018, 122, 21239-21247.	1.5	27
355	Bulk recrystallization for efficient mixed-cation mixed-halide perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 25511-25520.	5.2	27
356	Trends in Perovskite Solar Cells and Optoelectronics: Status of Research and Applications from the PSCO Conference. ACS Energy Letters, 2017, 2, 857-861.	8.8	25
357	Dimethylammonium: An Aâ€Site Cation for Modifying CsPbI₃. Solar Rrl, 2021, 5, .	3.1	25
358	Outshining Silicon. Scientific American, 2015, 313, 54-59.	1.0	23
359	The effect of ionic composition on acoustic phonon speeds in hybrid perovskites from Brillouin spectroscopy and density functional theory. Journal of Materials Chemistry C, 2018, 6, 3861-3868.	2.7	23
360	Unravelling the Improved Electronic and Structural Properties of Methylammonium Lead Iodide Deposited from Acetonitrile. Chemistry of Materials, 2018, 30, 7737-7743.	3.2	23

#	Article	IF	Citations
361	The influence of 1D, meso- and crystal structures on charge transport and recombination in solid-state dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 12088.	5.2	22
362	Exciton-Dominated Core-Level Absorption Spectra of Hybrid Organicâ€“Inorganic Lead Halide Perovskites. Journal of Physical Chemistry Letters, 2018, 9, 1852-1858.	2.1	22
363	A photo-crosslinkable bis-triarylamine side-chain polymer as a hole-transport material for stable perovskite solar cells. Sustainable Energy and Fuels, 2020, 4, 190-198.	2.5	22
364	Evidence of Nitrogen Contribution to the Electronic Structure of the CH₃NH₃PbI₃ Perovskite. Chemistry - A European Journal, 2018, 24, 3539-3544.	1.7	20
365	Strong performance enhancement in lead-halide perovskite solar cells through rapid, atmospheric deposition of n-type buffer layer oxides. Nano Energy, 2020, 75, 104946.	8.2	20
366	Light soaking in metal halide perovskites studied via steady-state microwave conductivity. Communications Physics, 2020, 3, .	2.0	20
367	Visualizing Macroscopic Inhomogeneities in Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 2311-2322.	8.8	20
368	Excellent Longâ€Range Chargeâ€Carrier Mobility in 2D Perovskites. Advanced Functional Materials, 2022, 32, .	7.8	20
369	Optimizing the Energy Offset between Dye and Hole-Transporting Material in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 19850-19858.	1.5	19
370	Observation of Annealing-Induced Doping in TiO₂ Mesoporous Single Crystals for Use in Solid State Dye Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 1821-1827.	1.5	19
371	Dye Monolayers Used as the Hole Transporting Medium in Dyeâ€Sensitized Solar Cells. Advanced Materials, 2015, 27, 5889-5894.	11.1	19
372	Thermally Stable Passivation toward High Efficiency Inverted Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3336-3343.	8.8	19
373	Crystallographic, Optical, and Electronic Properties of the Cs2AgBi1â€“xInxBr6 Double Perovskite: Understanding the Fundamental Photovoltaic Efficiency Challenges. ACS Energy Letters, 2021, 6, 1073-1081.	8.8	19
374	Interplay of Structure, Chargeâ€Carrier Localization and Dynamics in Copperâ€Silverâ€Bismuthâ€Halide Semiconductors. Advanced Functional Materials, 2022, 32, .	7.8	19
375	Phosphonic anchoring groups in organic dyes for solid-state solar cells. Physical Chemistry Chemical Physics, 2015, 17, 18780-18789.	1.3	18
376	<i>In situ</i> cadmium surface passivation of perovskite nanocrystals for blue LEDs. Journal of Materials Chemistry A, 2021, 9, 26750-26757.	5.2	18
377	Enhanced electronic contacts in SnO2â€“dyeâ€“P3HT based solid state dye sensitized solar cells. Physical Chemistry Chemical Physics, 2013, 15, 2075.	1.3	17
378	Effect of polymer morphology on P3HT-based solid-state dye sensitized solar cells: an ultrafast spectroscopic investigation. Optics Express, 2013, 21, A469.	1.7	17

#	Article	IF	Citations
379	Amorphous Holeâ€•Transporting Material based on 2,2â€²â€•Bisâ€•substituted 1,1â€²â€•Biphenyl Scaffold for Application in Perovskite Solar Cells. Chemistry - an Asian Journal, 2017, 12, 958-962.	1.7	17
380	Spectral Response Measurements of Perovskite Solar Cells. IEEE Journal of Photovoltaics, 2019, 9, 220-226.	1.5	17
381	A Theoretical Framework for Microscopic Surface and Interface Dipoles, Work Functions, and Valence Band Alignments in 2D and 3D Halide Perovskite Heterostructures. ACS Energy Letters, 2022, 7, 349-357.	8.8	17
382	Charge-Carrier Cooling and Polarization Memory Loss in Formamidinium Tin Triiodide. Journal of Physical Chemistry Letters, 2019, 10, 6038-6047.	2.1	16
383	The Path to Perovskite on Silicon PV. , 2018, 1, 1-8.		16
384	Optoelectronic Properties of Mixed Iodideâ€“Bromide Perovskites from First-Principles Computational Modeling and Experiment. Journal of Physical Chemistry Letters, 2022, 13, 4184-4192.	2.1	16
385	Optical description of solid-state dye-sensitized solar cells. II. Device optical modeling with implications for improving efficiency. Journal of Applied Physics, 2009, 106, .	1.1	15
386	Chemical Control of the Dimensionality of the Octahedral Network of Solar Absorbers from the CuIâ€“AgIâ€“BiI₃ Phase Space by Synthesis of 3D CuAgBiI₅. Inorganic Chemistry, 2021, 60, 18154-18167.	1.9	15
387	Panchromatic â€œDye-Dopedâ€• Polymer Solar Cells: From Femtosecond Energy Relays to Enhanced Photo-Response. Journal of Physical Chemistry Letters, 2013, 4, 442-447.	2.1	14
388	Time-Resolved Changes in Dielectric Constant of Metal Halide Perovskites under Illumination. Journal of the American Chemical Society, 2020, 142, 19799-19803.	6.6	14
389	Revealing Ultrafast Charge-Carrier Thermalization in Tin-Iodide Perovskites through Novel Pumpâ€“Pushâ€“Probe Terahertz Spectroscopy. ACS Photonics, 2021, 8, 2509-2518.	3.2	14
390	Impact of Molecular Charge-Transfer States on Photocurrent Generation in Solid State Dye-Sensitized Solar Cells Employing Low-Band-Gap Dyes. Journal of Physical Chemistry C, 2014, 118, 16825-16830.	1.5	13
391	Room temperature atomic layer deposited Al2O3 on CH3NH3PbI3 characterized by synchrotron-based X-ray photoelectron spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2017, 411, 49-52.	0.6	13
392	Insights Into the Microscopic and Degradation Processes in Hybrid Perovskite Solar Cells Using Noise Spectroscopy. Solar Rrl, 2018, 2, 1700173.	3.1	13
393	Thermal stability of CH3NH3PbIxCl3-x versus [HC(NH2)2]0.83Cs0.17PbI2.7Br0.3 perovskite films by X-ray photoelectron spectroscopy. Applied Surface Science, 2020, 513, 145596.	3.1	13
394	Chemical Interaction at the MoO₃/CH₃NH₃PbI_{3â€“<i>x</i>}Cl<i>_x</i> Interface. ACS Applied Materials & Interfaces, 2021, 13, 17085-17092.	4.0	13
395	Rapid sequestration of perovskite solar cell-derived lead in soil. Journal of Hazardous Materials, 2022, 436, 128995.	6.5	13
396	Dynamic Effects and Hydrogen Bonding in Mixed-Halide Perovskite Solar Cell Absorbers. Journal of Physical Chemistry Letters, 2021, 12, 3885-3890.	2.1	12

#	Article	IF	Citations
397	Utilizing Nonpolar Organic Solvents for the Deposition of Metal-Halide Perovskite Films and the Realization of Organic Semiconductor/Perovskite Composite Photovoltaics. ACS Energy Letters, 2022, 7, 1246-1254.	8.8	12
398	Photovoltaic devices fabricated from an aqueous dispersion of polyfluorene nanoparticles using an electroplating method. Synthetic Metals, 2004, 147, 105-109.	2.1	11
399	Polystyrene Templated Porous Titania Wells for Quantum Dot Heterojunction Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 14247-14252.	4.0	11
400	Spatially Resolved Insight into the Chemical and Electronic Structure of Solutionâ€Processed Perovskitesâ€"Why to (Not) Worry about Pinholes. Advanced Materials Interfaces, 2018, 5, 1701420.	1.9	11
401	Observation of Charge Generation via Photoinduced Stark Effect in Mixed-Cation Lead Bromide Perovskite Thin Films. Journal of Physical Chemistry Letters, 2020, 11, 10081-10087.	2.1	11
402	2D Position-Sensitive Hybrid-Perovskite Detectors. ACS Applied Materials & Interfaces, 2021, 13, 54527-54535.	4.0	11
403	Interlayer excitons in MoSe₂/2D perovskite hybrid heterostructures â€" the interplay between charge and energy transfer. Nanoscale, 2022, 14, 8085-8095.	2.8	11
404	Enhanced efficiency in the excitation of higher modes for atomic force microscopy and mechanical sensors operated in liquids. Applied Physics Letters, 2014, 105, .	1.5	9
405	Synthesis and Investigation of the Vâ€shaped TrÃ¶gerâ€²s Base Derivatives as Holeâ€transporting Materials. Chemistry - an Asian Journal, 2016, 11, 2049-2056.	1.7	9
406	How to Avoid Artifacts in Surface Photovoltage Measurements: A Case Study with Halide Perovskites. Journal of Physical Chemistry Letters, 2017, 8, 2941-2943.	2.1	9
407	Modification of the fluorinated tin oxide/electron-transporting material interface by a strong reductant and its effect on perovskite solar cell efficiency. Molecular Systems Design and Engineering, 2018, 3, 741-747.	1.7	9
408	Selfâ€Assembled Perovskite Nanoislands on CH₃NH₃PbI₃ Cuboid Single Crystals by Energetic Surface Engineering. Advanced Functional Materials, 2021, 31, 2105542.	7.8	9
409	Maximizing the external radiative efficiency of hybrid perovskite solar cells. Pure and Applied Chemistry, 2020, 92, 697-706.	0.9	9
410	Critique of charge collection efficiencies calculated through small perturbation measurements of dye sensitized solar cells. Journal of Applied Physics, 2013, 113, .	1.1	8
411	Atomic Layer Deposited Electron Transport Layers in Efficient Organometallic Halide Perovskite Devices. MRS Advances, 2018, 3, 3075-3084.	0.5	8
412	Revealing the Stoichiometric Tolerance of Lead Trihalide Perovskite Thin Films. Chemistry of Materials, 2020, 32, 114-120.	3.2	8
413	A Phosphine Oxide Route to Formamidinium Lead Tribromide Nanoparticles. Chemistry of Materials, 2020, 32, 7172-7180.	3.2	8
414	Balanced Charge Carrier Transport Mediated by Quantum Dot Film Post-organization for Light-Emitting Diode Applications. ACS Applied Materials & Interfaces, 2021, 13, 26170-26179.	4.0	8

#	Article	IF	Citations
415	Large area hole transporter deposition in efficient solid-state dye-sensitized solar cell mini-modules. Journal of Applied Physics, 2013, 114, .	1.1	7
416	Quantum funneling in blended multi-band gap core/shell colloidal quantum dot solar cells. Applied Physics Letters, 2015, 107, 103902.	1.5	7
417	Self-assembled 2D-3D heterostructured butylammonium-caesium-formamidinium lead halide perovskites for stable and efficient solar cells. , 0, , .		7
418	Lowâ€Cost Dopantâ€Free Carbazole Enamine Holeâ€Transporting Materials for Thermally Stable Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	7
419	Perovskite Solar Cells: High-Performance Inverted Planar Heterojunction Perovskite Solar Cells Based on Lead Acetate Precursor with Efficiency Exceeding 18% (Adv. Funct. Mater. 20/2016). Advanced Functional Materials, 2016, 26, 3551-3551.	7.8	6
420	V-Shaped Hole-Transporting TPD Dimers Containing TrÃ¶gerâ€™s Base Core. Journal of Physical Chemistry C, 2017, 121, 10267-10274.	1.5	6
421	Benzocyclobutene polymer as an additive for a benzocyclobutene-fullerene: application in stable pâ€“iâ€“n perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 9347-9353.	5.2	6
422	Role of Electronic States and Their Coupling on Radiative Losses of Open-Circuit Voltage in Organic Photovoltaics. ACS Applied Materials & Interfaces, 2021, 13, 60279-60287.	4.0	6
423	High-resolution TEM characterization of ZnO core-shell nanowires for dye-sensitized solar cells. Journal of Physics: Conference Series, 2010, 241, 012031.	0.3	5
424	Preface: Special Topic on Perovskite Solar Cells. APL Materials, 2014, 2, .	2.2	5
425	Inverted perovskite solar cells with air stable diketopyrrolopyrrole-based electron transport layer. Solar Energy, 2019, 186, 9-16.	2.9	5
426	Direct Silicon Heterostructures With Methylammonium Lead Iodide Perovskite for Photovoltaic Applications. IEEE Journal of Photovoltaics, 2020, 10, 945-951.	1.5	5
427	In Operando, Photovoltaic, and Microscopic Evaluation of Recombination Centers in Halide Perovskite-Based Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 34171-34179.	4.0	4
428	Tunable transition metal complexes as hole transport materials for stable perovskite solar cells. Chemical Communications, 2021, 57, 2093-2096.	2.2	4
429	Self-assembly as a design tool for the integration of photonic structures into excitonic solar cells. Proceedings of SPIE, 2011, , .	0.8	3
430	Photoluminescence: Local Versus Long-Range Diffusion Effects of Photoexcited States on Radiative Recombination in Organic-Inorganic Lead Halide Perovskites (Adv. Sci. 9/2015). Advanced Science, 2015, 2, .	5.6	3
431	InnenrÃ¼cktitelbild: Monodisperse Dualâ€Functional Upconversion Nanoparticles Enabled Nearâ€Infrared Organolead Halide Perovskite Solar Cells (Angew. Chem. 13/2016). Angewandte Chemie, 2016, 128, 4441-4441.	1.6	3
432	A polymeric bis(di-<i>p</i>-anisylamino)fluorene hole-transport material for stable n-i-p perovskite solar cells. New Journal of Chemistry, 2021, 45, 15017-15021.	1.4	3

#	Article	IF	Citations
433	Insights into the charge carrier dynamics in perovskite/Si tandem solar cells using transient photocurrent spectroscopy. Applied Physics Letters, 2022, 120, .	1.5	3
434	Photon recycling in Lead-Iodide Perovskite solar cells (Conference Presentation). , 2016, , .		2
435	Nanocrystalline silicon oxide interlayer in monolithic perovskite/silicon heterojunction tandem solar cells with total current density >39 mA/cm². , 2018, , .		2
436	Perovskite based optoelectronics: molecular design perspectives â€" a themed collection. Molecular Systems Design and Engineering, 2018, 3, 700-701.	1.7	2
437	Out shining silicon. Scientific American, 2015, 313, 54-9.	1.0	2
438	Improving performance of fully scalable, flexible transparent conductive films made from carbon nanotubes and ethylene-vinyl acetate. Energy Reports, 2022, 8, 48-60.	2.5	2
439	Multiscale simulation of solid state dye sensitized solar cells including morphology effects. , 2014, , .		1
440	Novel low cost hole transporting materials for efficient organic-inorganic perovskite solar cells. , 2015, , .		1
441	A Conversation with Henry Snaith. ACS Central Science, 2015, 1, 159-160.	5.3	1
442	Solar Cells: Role of Microstructure in Oxygen Induced Photodegradation of Methylammonium Lead Triiodide Perovskite Films (Adv. Energy Mater. 20/2017). Advanced Energy Materials, 2017, 7, .	10.2	1
443	A Conversation with Henry Snaith. ACS Energy Letters, 2017, 2, 2552-2554.	8.8	1
444	Solid State Dye-Sensitized Solar Cell. , 2014, , 2029-2040.		1
445	Selfâ€Assembled Perovskite Nanoislands on CH₃NH₃PbI₃ Cuboid Single Crystals by Energetic Surface Engineering (Adv. Funct. Mater. 50/2021). Advanced Functional Materials, 2021, 31, .	7.8	1
446	Charge transport and efficiency in photovoltaic devices based on polyfluorene blends. , 2004, 5520, 26.		0
447	Excitonic Materials for Hybrid Solar Cells and Energy Efficient Lighting. , 2011, , .		0
448	Semiconducting organic polymers as hole-transport layer in solid-state dye sensitized solar cells: comprehensive insights from femtosecond transient spectroscopy and device optimization. , 2012, , .		0
449	Fast electron trapping in anodized TiO<inf>2</inf> nanotubes. , 2013, , .		0
450	Sub 150 Â°C processed meso-superstructured perovskite solar cells with enhanced efficiency (presentation video). , 2014, , .		0

#	Article	IF	Citations
451	Quantitative electron tomography investigation of a TiO₂based solar cell photoanode. Journal of Physics: Conference Series, 2014, 522, 012063.	0.3	0
452	Charge-carrier dynamics in hybrid metal halide perovskites (Conference Presentation). , 2016, , .		0
453	Getting rid of anti-solvents: gas quenching for high performance perovskite solar cells. , 2018, , .		0
454	Evidence and implications for exciton dissociation in lead halide perovskites. EPJ Web of Conferences, 2019, 205, 06018.	0.1	0
455	Spectral shifts upon halide segregation in perovskite nanocrystals observed via transient absorption spectroscopy. MRS Advances, 2020, 5, 2613-2621.	0.5	0
456	Azetidinium as cation in lead mixed halide perovskite nanocrystals of optoelectronic quality. AIP Advances, 2020, 10, 025001.	0.6	0
457	Controlling and Understanding the Effects of Crystal Size in Vapor Deposited Metal-Halide Perovskite Solar Cells. , 0, , .		0
458	A Dimethylammonium-Induced Intermediate Phase Approach Towards Stable Formamidinium-Caesium-based Perovskite Solar Cells. , 0, , .		0
459	The impact of phase segregation in mixed halide perovskites: a matter of charge recombination rather than transport. , 0, , .		0
460	Understanding the crystallographic and microstructural properties of hybrid perovskite thin films through electron microscopy. , 0, , .		0
461	Rapid Sequestration of Perovskite Solar Cell-derived Lead in Soil. , 0, , .		0
462	The atomic-scale microstructure of metal halide perovskite elucidated via low-dose electron microscopy. Microscopy and Microanalysis, 2021, 27, 966-968.	0.2	0
463	Improved performances in annealed P3HT-based dye sensitized solar cells (DSSC): a detailed morphological and spectroscopic investigation. , 2011, , .		0
464	Electrochemical Replication of Self-Assembled Block Copolymer Nanostructures. , 2011, , 63-116.		0
465	On the role of semiconducting polymer as hole-transport layer in solid-state dye sensitized solar cells. , 2012, , .		0
466	Effective Lateral Mobility and Diffusion Length Determined by Refractive Index Change of Perovskite at the Sub-Bandgap : Photoinduced Reflection Spectroscopy. , 0, , .		0
467	Crystallization kinetics and morphology control of formamidinium-cesium mixed-cation lead mixed-halide perovskite via tunability of the colloidal precursor solution. , 0, , .		0
468	The Importance of Interface Morphology for Hysteresis-Free Perovskite Solar Cells. , 0, , .		0

#	Article	IF	Citations
469	Improving efficiency and stability in single and multi-junction perovskite solar cells. , 0, , .		0
470	Band Tail States in FAPbI3: Characterization and Simulation. , 0, , .		0
471	Vapour deposited lead free double perovskite for photovoltaic applications. , 0, , .		0
472	Vacuum-deposited Cs2AgBiBr6. Photovoltaic devices and fundamental characterization.. , 0, , .		0
473	Impurities and their influence on the co-evaporation of methylammonium perovskite thin-film solar cells. , 0, , .		0
474	Reliable Atomic-Resolution Observations of the Nanoscopic Properties of Hybrid Perovskite Thin Films. , 0, , .		0
475	Perovskite Solar Cells: Improving Device Efficiency and Stability, and Understanding Optoelectronic Processes. , 0, , .		0
476	Solution-Processed All-Perovskite Multi-Junction Solar Cells. , 0, , .		0
477	Perovskite solar cells: materials, devices and industrialization. , 0, , .		0
478	Charge-Carrier Cooling and Polarization Memory Loss in Formamidinium Tin Triiodide. , 0, , .		0
479	Band engineering of nickel oxide interfaces and connection between absolute valence energy alignment and surface dipoles in halide perovskite heterostructures. , 0, , .		0
480	Mechanism of Electronic Coupling in Hybrid Transition Metal Dichalcogenide-2D Perovskite Heterostructures. , 0, , .		0
481	Improving n-i-p Perovskite Solar Cells Stability through Transport Layers. , 0, , .		0
482	Dynamics of Ionic Additive Passivation in Perovskite Solar Cells. , 0, , .		0