

Antonio Abate

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171 papers	34,022 citations	67 h-index	184 g-index
203 ext. papers	38,664 ext. citations	16.3 avg, IF	7.49 L-index

#	Paper	IF	Citations
171	Cesium-containing triple cation perovskite solar cells: improved stability, reproducibility and high efficiency. <i>Energy and Environmental Science</i> , 2016 , 9, 1989-1997	35.4	3740
170	Incorporation of rubidium cations into perovskite solar cells improves photovoltaic performance. <i>Science</i> , 2016 , 354, 206-209	33.3	2628
169	Anomalous Hysteresis in Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1511-5	6.4	1951
168	Lead-free organic/inorganic tin halide perovskites for photovoltaic applications. <i>Energy and Environmental Science</i> , 2014 , 7, 3061-3068	35.4	1635
167	Efficient luminescent solar cells based on tailored mixed-cation perovskites. <i>Science Advances</i> , 2016 , 2, e1501170	14.3	1498
166	Overcoming ultraviolet light instability of sensitized TiO ₂ with meso-superstructured organometal tri-halide perovskite solar cells. <i>Nature Communications</i> , 2013 , 4, 2885	17.4	1367
165	Enhanced photoluminescence and solar cell performance via Lewis base passivation of organic-inorganic lead halide perovskites. <i>ACS Nano</i> , 2014 , 8, 9815-21	16.7	1194
164	Promises and challenges of perovskite solar cells. <i>Science</i> , 2017 , 358, 739-744	33.3	1016
163	Highly efficient planar perovskite solar cells through band alignment engineering. <i>Energy and Environmental Science</i> , 2015 , 8, 2928-2934	35.4	949
162	Low-temperature processed electron collection layers of graphene/TiO ₂ nanocomposites in thin film perovskite solar cells. <i>Nano Letters</i> , 2014 , 14, 724-30	11.5	917
161	The rapid evolution of highly efficient perovskite solar cells. <i>Energy and Environmental Science</i> , 2017 , 10, 710-727	35.4	811
160	Not All That Glitters Is Gold: Metal-Migration-Induced Degradation in Perovskite Solar Cells. <i>ACS Nano</i> , 2016 , 10, 6306-14	16.7	759
159	Ultrasmooth organic-inorganic perovskite thin-film formation and crystallization for efficient planar heterojunction solar cells. <i>Nature Communications</i> , 2015 , 6, 6142	17.4	695
158	A molecularly engineered hole-transporting material for efficient perovskite solar cells. <i>Nature Energy</i> , 2016 , 1,	62.3	693
157	Enhanced electronic properties in mesoporous TiO ₂ via lithium doping for high-efficiency perovskite solar cells. <i>Nature Communications</i> , 2016 , 7, 10379	17.4	626
156	Highly efficient and stable planar perovskite solar cells by solution-processed tin oxide. <i>Energy and Environmental Science</i> , 2016 , 9, 3128-3134	35.4	603
155	Heterojunction modification for highly efficient organic-inorganic perovskite solar cells. <i>ACS Nano</i> , 2014 , 8, 12701-9	16.7	546

154	Supramolecular halogen bond passivation of organic-inorganic halide perovskite solar cells. <i>Nano Letters</i> , 2014 , 14, 3247-54	11.5	527
153	Sub-150 °C processed meso-superstructured perovskite solar cells with enhanced efficiency. <i>Energy and Environmental Science</i> , 2014 , 7, 1142-1147	35.4	511
152	Monolithic perovskite/silicon-heterojunction tandem solar cells processed at low temperature. <i>Energy and Environmental Science</i> , 2016 , 9, 81-88	35.4	469
151	Lithium salts as "redox active" p-type dopants for organic semiconductors and their impact in solid-state dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , 2013 , 15, 2572-9	3.6	459
150	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. <i>Science</i> , 2020 , 370, 1300-1309	33.3	438
149	Migration of cations induces reversible performance losses over day/night cycling in perovskite solar cells. <i>Energy and Environmental Science</i> , 2017 , 10, 604-613	35.4	387
148	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , 2020 , 5, 35-49	62.3	369
147	How to Make over 20% Efficient Perovskite Solar Cells in Regular (n-i-p) and Inverted (p-i-n) Architectures. <i>Chemistry of Materials</i> , 2018 , 30, 4193-4201	9.6	339
146	Perovskite Solar Cells: From the Atomic Level to Film Quality and Device Performance. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 2554-2569	16.4	324
145	Improving the Long-Term Stability of Perovskite Solar Cells with a Porous Al ₂ O ₃ Buffer Layer. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 432-7	6.4	301
144	Performance and Stability Enhancement of Dye-Sensitized and Perovskite Solar Cells by Al Doping of TiO ₂ . <i>Advanced Functional Materials</i> , 2014 , 24, 6046-6055	15.6	294
143	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2015 , 137, 16172-8	16.4	268
142	Perovskite Solar Cell Stability in Humid Air: Partially Reversible Phase Transitions in the PbI ₂ -CH ₃ NH ₃ I-H ₂ O System. <i>Advanced Energy Materials</i> , 2016 , 6, 1600846	21.8	263
141	Efficient photosynthesis of carbon monoxide from CO ₂ using perovskite photovoltaics. <i>Nature Communications</i> , 2015 , 6, 7326	17.4	245
140	Identifying and suppressing interfacial recombination to achieve high open-circuit voltage in perovskite solar cells. <i>Energy and Environmental Science</i> , 2017 , 10, 1207-1212	35.4	242
139	Enhancing Efficiency of Perovskite Solar Cells via N-doped Graphene: Crystal Modification and Surface Passivation. <i>Advanced Materials</i> , 2016 , 28, 8681-8686	24	228
138	Unbroken Perovskite: Interplay of Morphology, Electro-optical Properties, and Ionic Movement. <i>Advanced Materials</i> , 2016 , 28, 5031-7	24	208
137	A Methoxydiphenylamine-Substituted Carbazole Twin Derivative: An Efficient Hole-Transporting Material for Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 11409-13	16.4	207

136	Perovskite Solar Cells Go Lead Free. <i>Joule</i> , 2017 , 1, 659-664	27.8	206
135	Enhanced charge carrier mobility and lifetime suppress hysteresis and improve efficiency in planar perovskite solar cells. <i>Energy and Environmental Science</i> , 2018 , 11, 78-86	35.4	202
134	The effect of illumination on the formation of metal halide perovskite films. <i>Nature</i> , 2017 , 545, 208-212	50.4	197
133	Inverted Current-Voltage Hysteresis in Mixed Perovskite Solar Cells: Polarization, Energy Barriers, and Defect Recombination. <i>Advanced Energy Materials</i> , 2016 , 6, 1600396	21.8	174
132	High Temperature-Stable Perovskite Solar Cell Based on Low-Cost Carbon Nanotube Hole Contact. <i>Advanced Materials</i> , 2017 , 29, 1606398	24	173
131	Biological impact of lead from halide perovskites reveals the risk of introducing a safe threshold. <i>Nature Communications</i> , 2020 , 11, 310	17.4	172
130	Mesoporous SnO ₂ electron selective contact enables UV-stable perovskite solar cells. <i>Nano Energy</i> , 2016 , 30, 517-522	17.1	165
129	Ionic Liquid Control Crystal Growth to Enhance Planar Perovskite Solar Cells Efficiency. <i>Advanced Energy Materials</i> , 2016 , 6, 1600767	21.8	165
128	Carbon nanotube-based hybrid hole-transporting material and selective contact for high efficiency perovskite solar cells. <i>Energy and Environmental Science</i> , 2016 , 9, 461-466	35.4	156
127	High-Efficiency Polycrystalline Thin Film Tandem Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 2676-81	6.4	147
126	Silolothiophene-linked triphenylamines as stable hole transporting materials for high efficiency perovskite solar cells. <i>Energy and Environmental Science</i> , 2015 , 8, 2946-2953	35.4	145
125	Protic ionic liquids as p-dopant for organic hole transporting materials and their application in high efficiency hybrid solar cells. <i>Journal of the American Chemical Society</i> , 2013 , 135, 13538-48	16.4	131
124	Enhanced Efficiency and Stability of Perovskite Solar Cells Through Nd-Doping of Mesostructured TiO ₂ . <i>Advanced Energy Materials</i> , 2016 , 6, 1501868	21.8	130
123	Enhancement in lifespan of halide perovskite solar cells. <i>Energy and Environmental Science</i> , 2019 , 12, 865-886	35.4	110
122	Molecular Tailoring of Phenothiazine-Based Hole-Transporting Materials for High-Performing Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 1029-1034	20.1	104
121	Perovskite photovoltachromic cells for building integration. <i>Energy and Environmental Science</i> , 2015 , 8, 1578-1584	35.4	102
120	Perovskite Solar Cells: From the Laboratory to the Assembly Line. <i>Chemistry - A European Journal</i> , 2018 , 24, 3083-3100	4.8	100
119	Spectral splitting photovoltaics using perovskite and wideband dye-sensitized solar cells. <i>Nature Communications</i> , 2015 , 6, 8834	17.4	95

118	A Ga-doped SnO ₂ mesoporous contact for UV stable highly efficient perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 1850-1857	13	91
117	Highly Efficient and Stable Perovskite Solar Cells based on a Low-Cost Carbon Cloth. <i>Advanced Energy Materials</i> , 2016 , 6, 1601116	21.8	91
116	Diacetylene bridged triphenylamines as hole transport materials for solid state dye sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6949	13	89
115	Perovskite Grains Embraced in a Soft Fullerene Network Make Highly Efficient Flexible Solar Cells with Superior Mechanical Stability. <i>Advanced Materials</i> , 2019 , 31, e1901519	24	88
114	Flash Infrared Annealing for Antisolvent-Free Highly Efficient Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1702915	21.8	88
113	Dimensional encapsulation of I(-)...I(2)...I(-) in an organic salt crystal matrix. <i>Chemical Communications</i> , 2010 , 46, 2724-6	5.8	87
112	Optical analysis of CH ₃ NH ₃ Sn Pb I absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 11214-11221	13	87
111	Measuring Aging Stability of Perovskite Solar Cells. <i>Joule</i> , 2018 , 2, 1019-1024	27.8	83
110	Efficient and Stable Inorganic Perovskite Solar Cells Manufactured by Pulsed Flash Infrared Annealing. <i>Advanced Energy Materials</i> , 2018 , 8, 1802060	21.8	78
109	Non-aggregated Zn(ii)octa(2,6-diphenylphenoxy) phthalocyanine as a hole transporting material for efficient perovskite solar cells. <i>Dalton Transactions</i> , 2015 , 44, 10847-51	4.3	76
108	Strong Photocurrent from Two-Dimensional Excitons in Solution-Processed Stacked Perovskite Semiconductor Sheets. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 25227-36	9.5	76
107	Perfluorinated Self-Assembled Monolayers Enhance the Stability and Efficiency of Inverted Perovskite Solar Cells. <i>ACS Nano</i> , 2020 , 14, 1445-1456	16.7	74
106	Tin Halide Perovskite (ASnX ₃) Solar Cells: A Comprehensive Guide toward the Highest Power Conversion Efficiency. <i>Advanced Energy Materials</i> , 2020 , 10, 1902467	21.8	73
105	Stability of Organic Cations in Solution-Processed CH ₃ NH ₃ PbI ₃ Perovskites: Formation of Modified Surface Layers. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 21329-21335	3.8	70
104	Globularity-Selected Large Molecules for a New Generation of Multication Perovskites. <i>Advanced Materials</i> , 2017 , 29, 1702005	24	67
103	The Doping Mechanism of Halide Perovskite Unveiled by Alkaline Earth Metals. <i>Journal of the American Chemical Society</i> , 2020 , 142, 2364-2374	16.4	65
102	Tin Halide Perovskite Films Made of Highly Oriented 2D Crystals Enable More Efficient and Stable Lead-free Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 1923-1929	20.1	61
101	Graphene quantum dots decorated TiO ₂ mesoporous film as an efficient electron transport layer for high-performance perovskite solar cells. <i>Journal of Power Sources</i> , 2018 , 402, 320-326	8.9	61

100	The Role of Charge Selective Contacts in Perovskite Solar Cell Stability. <i>Advanced Energy Materials</i> , 2018 , 9, 1803140	21.8	60
99	Rational Design of Molecular Hole-Transporting Materials for Perovskite Solar Cells: Direct versus Inverted Device Configurations. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 24778-24787	9.5	59
98	Anisotropic ionic conductivity in fluorinated ionic liquid crystals suitable for optoelectronic applications. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6572	13	59
97	Progress, highlights and perspectives on NiO in perovskite photovoltaics. <i>Chemical Science</i> , 2020 , 11, 7746-7759	9.4	58
96	Halide anions driven self-assembly of haloperfluoroarenes: Formation of one-dimensional non-covalent copolymers. <i>Journal of Fluorine Chemistry</i> , 2009 , 130, 1171-1177	2.1	57
95	Ferroelectricity-free lead halide perovskites. <i>Energy and Environmental Science</i> , 2019 , 12, 2537-2547	35.4	56
94	Ion Migration-Induced Amorphization and Phase Segregation as a Degradation Mechanism in Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2000310	21.8	56
93	Additive-Free Transparent Triarylamine-Based Polymeric Hole-Transport Materials for Stable Perovskite Solar Cells. <i>ChemSusChem</i> , 2016 , 9, 2567-2571	8.3	56
92	Hole-transport materials with greatly-differing redox potentials give efficient TiO ₂ -[CH ₃ NH ₃][PbX ₃] perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 2335-8	3.6	52
91	The Role of Grain Boundaries on Ionic Defect Migration in Metal Halide Perovskites. <i>Advanced Energy Materials</i> , 2020 , 10, 1903735	21.8	52
90	20.8% Slot-Die Coated MAPbI ₃ Perovskite Solar Cells by Optimal DMSO-Content and Age of 2-ME Based Precursor Inks. <i>Advanced Energy Materials</i> , 2021 , 11, 2003460	21.8	52
89	Passivation and process engineering approaches of halide perovskite films for high efficiency and stability perovskite solar cells. <i>Energy and Environmental Science</i> , 2021 , 14, 2906-2953	35.4	52
88	Spontaneous crystal coalescence enables highly efficient perovskite solar cells. <i>Nano Energy</i> , 2017 , 39, 24-29	17.1	51
87	Origin of Sn(II) oxidation in tin halide perovskites. <i>Materials Advances</i> , 2020 , 1, 1066-1070	3.3	49
86	Towards Long-Term Photostability of Solid-State Dye Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1301667	21.8	47
85	Influence of ionizing dopants on charge transport in organic semiconductors. <i>Physical Chemistry Chemical Physics</i> , 2014 , 16, 1132-8	3.6	47
84	The effect of selective interactions at the interface of polymer/oxide hybrid solar cells. <i>Energy and Environmental Science</i> , 2012 , 5, 9068	35.4	42
83	Stability and Dark Hysteresis Correlate in NiO-Based Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1901642	21.8	41

82	Mesoporous Electron-Selective Contacts Enhance the Tolerance to Interfacial Ion Accumulation in Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2018 , 3, 163-169	20.1	40
81	Tuning halide perovskite energy levels. <i>Energy and Environmental Science</i> , 2021 , 14, 1429-1438	35.4	38
80	Rationalizing the Molecular Design of Hole-Selective Contacts to Improve Charge Extraction in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1900990	21.8	37
79	A polyfluoroalkyl imidazolium ionic liquid as iodide ion source in dye sensitized solar cells. <i>Organic Electronics</i> , 2012 , 13, 2474-2478	3.5	37
78	Ionic Liquid Stabilizing High-Efficiency Tin Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2101539	21.8	37
77	Ultrathin Nanosheets of Oxo-functionalized Graphene Inhibit the Ion Migration in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 1902653	21.8	35
76	Solvents for Processing Stable Tin Halide Perovskites. <i>ACS Energy Letters</i> , 2021 , 6, 959-968	20.1	35
75	Methoxydiphenylamin-substituiertes Carbazol-Zwillingsderivat: ein effizienter organischer Lochleiter für Perowskit-Solarzellen. <i>Angewandte Chemie</i> , 2015 , 127, 11571-11575	3.6	34
74	Tetrahedral Oxyanions in Halogen-Bonded Coordination Networks. <i>Crystal Growth and Design</i> , 2011 , 11, 4220-4226	3.5	33
73	Understanding the perovskite/self-assembled selective contact interface for ultra-stable and highly efficient p-i-n perovskite solar cells. <i>Energy and Environmental Science</i> , 2021 , 14, 3976-3985	35.4	33
72	The Impact of Nano- and Microstructure on the Stability of Perovskite Solar Cells. <i>Small</i> , 2018 , 14, e1802573	21.8	33
71	Topological distribution of reversible and non-reversible degradation in perovskite solar cells. <i>Nano Energy</i> , 2018 , 45, 94-100	17.1	32
70	An Organic Donor-Free Dye with Enhanced Open-Circuit Voltage in Solid-State Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2014 , 4, 1400166	21.8	31
69	Compositional and Interfacial Engineering Yield High-Performance and Stable p-i-n Perovskite Solar Cells and Mini-Modules. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 13022-13033	9.5	31
68	An efficient perovskite solar cell with symmetrical Zn(ii) phthalocyanine infiltrated buffering porous AlO _x as the hybrid interfacial hole-transporting layer. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 27083-27089	3.6	31
67	Embedded Nickel-Mesh Transparent Electrodes for Highly Efficient and Mechanically Stable Flexible Perovskite Photovoltaics: Toward a Portable Mobile Energy Source. <i>Advanced Materials</i> , 2020 , 32, e2003422	24	30
66	From Bulk to Surface: Sodium Treatment Reduces Recombination at the Nickel Oxide/Perovskite Interface. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900789	4.6	29
65	Co-Evaporated Formamidinium Lead Iodide Based Perovskites with 1000 h Constant Stability for Fully Textured Monolithic Perovskite/Silicon Tandem Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2101460	21.8	29

64	A New 1,3,4-Oxadiazole-Based Hole-Transport Material for Efficient CH ₃ NH ₃ PbBr ₃ Perovskite Solar Cells. <i>ChemSusChem</i> , 2016 , 9, 657-61	8.3	29
63	Perowskit-Solarzellen: atomare Ebene, Schichtqualität und Leistungsfähigkeit der Zellen. <i>Angewandte Chemie</i> , 2018 , 130, 2582-2598	3.6	28
62	Large-Grain Double Cation Perovskites with 18 h Lifetime and High Luminescence Yield for Efficient Inverted Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2021 , 6, 1045-1054	20.1	27
61	Facile Deposition of Nb ₂ O ₅ Thin Film as an Electron-Transporting Layer for Highly Efficient Perovskite Solar Cells. <i>ACS Applied Nano Materials</i> , 2018 , 1, 4101-4109	5.6	26
60	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. <i>Nature Energy</i> , 2022 , 7, 107-115	62.3	26
59	Highly Efficient Perovskite Solar Cells Based on a ZnSnO Compact Layer. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 36553-36559	9.5	24
58	High Absorption Coefficient Cyclopentadithiophene Donor-Free Dyes for Liquid and Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 15027-15034	3.8	24
57	Temperature dependent two-photon photoluminescence of CH ₃ NH ₃ PbBr ₃ : structural phase and exciton to free carrier transition. <i>Optical Materials Express</i> , 2018 , 8, 511	2.6	22
56	Bi-functional interfaces by poly(ionic liquid) treatment in efficient pin and nip perovskite solar cells. <i>Energy and Environmental Science</i> ,	35.4	21
55	TiO ₂ -B as an electron transporting material for highly efficient perovskite solar cells. <i>Journal of Power Sources</i> , 2019 , 415, 8-14	8.9	20
54	Oligothiophene interlayer effect on photocurrent generation for hybrid TiO(2)/P3HT solar cells. <i>ACS Applied Materials & Interfaces</i> , 2014 , 6, 17226-35	9.5	20
53	Influence of cysteine adsorption on the performance of CdSe quantum dots sensitized solar cells. <i>Materials Chemistry and Physics</i> , 2010 , 124, 709-712	4.4	20
52	Cesium-Incorporated Triple Cation Perovskites Deliver Fully Reversible and Stable Nanoscale Voltage Response. <i>ACS Nano</i> , 2019 , 13, 1538-1546	16.7	20
51	Fluoride Chemistry in Tin Halide Perovskites. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 21583-21591	21.5	18
50	Refractive index change dominates the transient absorption response of metal halide perovskite thin films in the near infrared. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 14663-14670	3.6	16
49	The Bloom of Perovskite Optoelectronics: Fundamental Science Matters. <i>ACS Energy Letters</i> , 2019 , 4, 861-865	20.1	16
48	Structure-induced optoelectronic properties of phenothiazine-based materials. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 15486-15506	7.1	16
47	Phosphonic anchoring groups in organic dyes for solid-state solar cells. <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 18780-9	3.6	15

46	Toward High-Throughput Texturing of Polymer Foils for Enhanced Light Trapping in Flexible Perovskite Solar Cells Using Roll-to-Roll Hot Embossing. <i>Advanced Engineering Materials</i> , 2020 , 22, 1901217	3.5	15
45	Moisture-Induced Crystallographic Reorientations and Effects on Charge Carrier Extraction in Metal Halide Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 3526-3534	20.1	15
44	Unravelling fullerene-perovskite interactions introduces advanced blend films for performance-improved solar cells. <i>Sustainable Energy and Fuels</i> , 2019 , 3, 2779-2787	5.8	14
43	Robust Inorganic Hole Transport Materials for Organic and Perovskite Solar Cells: Insights into Materials Electronic Properties and Device Performance. <i>Solar Rrl</i> , 2021 , 5, 2000555	7.1	13
42	Halogen-Bonded Hole-Transport Material Suppresses Charge Recombination and Enhances Stability of Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2021 , 11, 2101553	21.8	13
41	Managing Phase Purities and Crystal Orientation for High-Performance and Photostable Cesium Lead Halide Perovskite Solar Cells. <i>Solar Rrl</i> , 2020 , 4, 2000213	7.1	11
40	Large Conduction Band Energy Offset Is Critical for High Fill Factors in Inorganic Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2020 , 5, 2343-2348	20.1	11
39	Patterning of perovskite-polymer films by wrinkling instabilities. <i>Soft Matter</i> , 2017 , 13, 1654-1659	3.6	10
38	Highly efficient ZnSnO perovskite solar cells through band alignment engineering. <i>Chemical Communications</i> , 2019 , 55, 14673-14676	5.8	10
37	Enhanced Self-Assembled Monolayer Surface Coverage by ALD NiO in p-i-n Perovskite Solar Cells.. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	9
36	Comparing the excited-state properties of a mixed-cation-mixed-halide perovskite to methylammonium lead iodide. <i>Journal of Chemical Physics</i> , 2020 , 152, 104703	3.9	8
35	Perovskite Solar Cells Go Lead Free. <i>Joule</i> , 2017 , 1, 887	27.8	8
34	In-situ observation of moisture-induced degradation of perovskite solar cells using laser-beam induced current 2016 ,		8
33	Ultralow surface energy self-assembled monolayers of iodo-perfluorinated alkanes on silica driven by halogen bonding. <i>Nanoscale</i> , 2019 , 11, 2401-2411	7.7	7
32	Reply to the Comment on the publication Ferroelectricity-free lead halide perovskites by Gomez et al. by Colsmann et al.. <i>Energy and Environmental Science</i> , 2020 , 13, 1892-1895	35.4	7
31	High temperature crystal chemistry of the n=3 Ruddlesden-Popper phase LaSr ₃ Fe _{1.5} Co _{1.5} O ₁₀ <i>Solid State Ionics</i> , 2015 , 270, 54-60	3.3	7
30	Covering effect of conductive glass: a facile route to tailor the grain growth of hybrid perovskites for highly efficient solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 20289-20296	13	7
29	The Effects of Incident Photon Energy on the Time-Dependent Voltage Response of Lead Halide Perovskites. <i>Chemistry of Materials</i> , 2019 , 31, 8969-8976	9.6	6

28	Monitoring Charge Carrier Diffusion across a Perovskite Film with Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 445-450	6.4	6
27	Halogen-bond driven self-assembly of perfluorocarbon monolayers on silicon nitride. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 24445-24453	13	6
26	Challenges in tin perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , 2021 , 23, 23413-23427	3.6	6
25	Small-angle scattering to reveal the colloidal nature of halide perovskite precursor solutions. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 13477-13482	13	6
24	2-Methylimidazole as an interlayer for the enhancement of the open-circuit voltage in perovskite solar cells. <i>Journal of Power Sources</i> , 2020 , 450, 227714	8.9	5
23	In situ Near-Ambient Pressure X-ray Photoelectron Spectroscopy Reveals the Influence of Photon Flux and Water on the Stability of Halide Perovskite. <i>ChemSusChem</i> , 2020 , 13, 5722-5730	8.3	5
22	Tuning of Ionic Liquid Crystal Properties by Combining Halogen Bonding and Fluorous Effect. <i>ChemPlusChem</i> , 2021 , 86, 469-474	2.8	5
21	Perovskite solar cells 2019 , 417-446		4
20	Lights and Shadows of DMSO as Solvent for Tin Halide Perovskites. <i>Chemistry - A European Journal</i> , 2021 ,	4.8	4
19	Perovskite solar cell performance assessment. <i>JPhys Energy</i> , 2020 , 2, 044002	4.9	4
18	Dendritic-Like Molecules Built on a Pillar[5]arene Core as Hole Transporting Materials for Perovskite Solar Cells. <i>Chemistry - A European Journal</i> , 2021 , 27, 8110-8117	4.8	4
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