

# Antonio Abate

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/3838139/antonio-abate-publications-by-year.pdf>

**Version:** 2024-04-11

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

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	Environmental lead exposure from halide perovskites in solar cells.. <i>Trends in Ecology and Evolution</i> , <b>2022</b> ,	10.9	3
170	Role of the Alkali Metal Cation in the Early Stages of Crystallization of Halide Perovskites. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 1121-1131	9.6	2
169	Quantitative Predictions of Moisture-Driven Photoemission Dynamics in Metal Halide Perovskites via Machine Learning.. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 2254-2263	6.4	1
168	An open-access database and analysis tool for perovskite solar cells based on the FAIR data principles. <i>Nature Energy</i> , <b>2022</b> , 7, 107-115	62.3	26
167	Enhanced Self-Assembled Monolayer Surface Coverage by ALD NiO in p-i-n Perovskite Solar Cells.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	9
166	Lights and Shadows of DMSO as Solvent for Tin Halide Perovskites. <i>Chemistry - A European Journal</i> , <b>2021</b> ,	4.8	4
165	Compositional and Interfacial Engineering Yield High-Performance and Stable p-i-n Perovskite Solar Cells and Mini-Modules. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 13022-13033	9.5	31
164	Tuning of Ionic Liquid Crystal Properties by Combining Halogen Bonding and Fluorous Effect. <i>ChemPlusChem</i> , <b>2021</b> , 86, 469-474	2.8	5
163	Dendritic-Like Molecules Built on a Pillar[5]arene Core as Hole Transporting Materials for Perovskite Solar Cells. <i>Chemistry - A European Journal</i> , <b>2021</b> , 27, 8110-8117	4.8	4
162	Fluoridchemie in Zinn-Halogenid-Perowskiten. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 21753-21762	3.6	1
161	Fluoride Chemistry in Tin Halide Perovskites. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 21583-21591	31.8	118
160	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> , <b>2021</b> , 11, 2101460	21.8	29
159	Robust Inorganic Hole Transport Materials for Organic and Perovskite Solar Cells: Insights into Materials Electronic Properties and Device Performance. <i>Solar Rrl</i> , <b>2021</b> , 5, 2000555	7.1	13
158	Tuning halide perovskite energy levels. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 1429-1438	35.4	38
157	20.8% Slot-Die Coated MAPbI <sub>3</sub> Perovskite Solar Cells by Optimal DMSO-Content and Age of 2-ME Based Precursor Inks. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2003460	21.8	52
156	Passivation and process engineering approaches of halide perovskite films for high efficiency and stability perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2021</b> , 14, 2906-2953	35.4	52
155	Tin halide perovskites for efficient lead-free solar cells <b>2021</b> , 259-285		

154	Challenges in tin perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2021</b> , 23, 23413-23427	3.6	6
153	Small-angle scattering to reveal the colloidal nature of halide perovskite precursor solutions. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 13477-13482	13	6
152	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> , <b>2021</b> , 14, 3976-3985	35.4	33
151	Solvents for Processing Stable Tin Halide Perovskites. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 959-968	20.1	35
150	Large-Grain Double Cation Perovskites with 18 h Lifetime and High Luminescence Yield for Efficient Inverted Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2021</b> , 6, 1045-1054	20.1	27
149	Ionic Liquid Stabilizing High-Efficiency Tin Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101539	21.8	37
148	Halogen-Bonded Hole-Transport Material Suppresses Charge Recombination and Enhances Stability of Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101553	21.8	13
147	Water-Induced and Wavelength-Dependent Light Absorption and Emission Dynamics in Triple-Cation Halide Perovskites. <i>Advanced Optical Materials</i> , <b>2021</b> , 9, 2100710	8.1	
146	Innenrücktitelbild: Fluoridchemie in Zinn-Halogenid-Perowskiten (Angew. Chem. 39/2021). <i>Angewandte Chemie</i> , <b>2021</b> , 133, 21763-21763	3.6	
145	Monolithic perovskite/silicon tandem solar cell with >29% efficiency by enhanced hole extraction. <i>Science</i> , <b>2020</b> , 370, 1300-1309	33.3	438
144	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> , <b>2020</b> , 5, 1923-1929	20.1	61
143	Reply to the Comment on the publication Ferroelectricity-free lead halide perovskites by Gomez et al. by Colmann et al.. <i>Energy and Environmental Science</i> , <b>2020</b> , 13, 1892-1895	35.4	7
142	Ion Migration-Induced Amorphization and Phase Segregation as a Degradation Mechanism in Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2000310	21.8	56
141	Managing Phase Purities and Crystal Orientation for High-Performance and Photostable Cesium Lead Halide Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000213	7.1	11
140	Large Conduction Band Energy Offset Is Critical for High Fill Factors in Inorganic Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2343-2348	20.1	11
139	Comparing the excited-state properties of a mixed-cation-mixed-halide perovskite to methylammonium lead iodide. <i>Journal of Chemical Physics</i> , <b>2020</b> , 152, 104703	3.9	8
138	Origin of Sn(II) oxidation in tin halide perovskites. <i>Materials Advances</i> , <b>2020</b> , 1, 1066-1070	3.3	49
137	2-Methylimidazole as an interlayer for the enhancement of the open-circuit voltage in perovskite solar cells. <i>Journal of Power Sources</i> , <b>2020</b> , 450, 227714	8.9	5

136	Biological impact of lead from halide perovskites reveals the risk of introducing a safe threshold. <i>Nature Communications</i> , <b>2020</b> , 11, 310	17.4	172
135	Consensus statement for stability assessment and reporting for perovskite photovoltaics based on ISOS procedures. <i>Nature Energy</i> , <b>2020</b> , 5, 35-49	62.3	369
134	Perovskite solar cell performance assessment. <i>JPhys Energy</i> , <b>2020</b> , 2, 044002	4.9	4
133	The Doping Mechanism of Halide Perovskite Unveiled by Alkaline Earth Metals. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 2364-2374	16.4	65
132	Monitoring Charge Carrier Diffusion across a Perovskite Film with Transient Absorption Spectroscopy. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 445-450	6.4	6
131	Perfluorinated Self-Assembled Monolayers Enhance the Stability and Efficiency of Inverted Perovskite Solar Cells. <i>ACS Nano</i> , <b>2020</b> , 14, 1445-1456	16.7	74
130	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> , <b>2020</b> , 22, 1901217	3.5	15
129	Ultrathin Nanosheets of Oxo-functionalized Graphene Inhibit the Ion Migration in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902653	21.8	35
128	Stability of materials and complete devices <b>2020</b> , 197-215		1
127	Moisture-Induced Crystallographic Reorientations and Effects on Charge Carrier Extraction in Metal Halide Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 3526-3534	20.1	15
126	Structure-induced optoelectronic properties of phenothiazine-based materials. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 15486-15506	7.1	16
125	Progress, highlights and perspectives on NiO in perovskite photovoltaics. <i>Chemical Science</i> , <b>2020</b> , 11, 7746-7759	9.4	58
124	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> , <b>2020</b> , 13, 5722-5730	8.3	5
123	Suppression of Electron Trapping in MAPbI <sub>3</sub> Perovskite by Sr <sup>2+</sup> Doping. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2020</b> , 14, 2000307	2.5	3
122	Embedded Nickel-Mesh Transparent Electrodes for Highly Efficient and Mechanically Stable Flexible Perovskite Photovoltaics: Toward a Portable Mobile Energy Source. <i>Advanced Materials</i> , <b>2020</b> , 32, e2003422	24	30
121	Tin Halide Perovskite (ASnX <sub>3</sub> ) Solar Cells: A Comprehensive Guide toward the Highest Power Conversion Efficiency. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902467	21.8	73
120	The Role of Grain Boundaries on Ionic Defect Migration in Metal Halide Perovskites. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1903735	21.8	52
119	The Effects of Incident Photon Energy on the Time-Dependent Voltage Response of Lead Halide Perovskites. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 8969-8976	9.6	6

118	Highly Efficient Perovskite Solar Cells Based on a ZnSnO Compact Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 36553-36559	9.5	24
117	Ultralow surface energy self-assembled monolayers of iodo-perfluorinated alkanes on silica driven by halogen bonding. <i>Nanoscale</i> , <b>2019</b> , 11, 2401-2411	7.7	7
116	TiO <sub>2</sub> -B as an electron transporting material for highly efficient perovskite solar cells. <i>Journal of Power Sources</i> , <b>2019</b> , 415, 8-14	8.9	20
115	Enhancement in lifespan of halide perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 865-886	35.4	110
114	Ferroelectricity-free lead halide perovskites. <i>Energy and Environmental Science</i> , <b>2019</b> , 12, 2537-2547	35.4	56
113	Perovskite solar cells <b>2019</b> , 417-446		4
112	Rationalizing the Molecular Design of Hole-Selective Contacts to Improve Charge Extraction in Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1900990	21.8	37
111	Refractive index change dominates the transient absorption response of metal halide perovskite thin films in the near infrared. <i>Physical Chemistry Chemical Physics</i> , <b>2019</b> , 21, 14663-14670	3.6	16
110	Perovskite Grains Embraced in a Soft Fullerene Network Make Highly Efficient Flexible Solar Cells with Superior Mechanical Stability. <i>Advanced Materials</i> , <b>2019</b> , 31, e1901519	24	88
109	The Bloom of Perovskite Optoelectronics: Fundamental Science Matters. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 861-865	20.1	16
108	Stability and Dark Hysteresis Correlate in NiO-Based Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1901642	21.8	41
107	From Bulk to Surface: Sodium Treatment Reduces Recombination at the Nickel Oxide/Perovskite Interface. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900789	4.6	29
106	Unravelling fullerene-perovskite interactions introduces advanced blend films for performance-improved solar cells. <i>Sustainable Energy and Fuels</i> , <b>2019</b> , 3, 2779-2787	5.8	14
105	Highly efficient ZnSnO perovskite solar cells through band alignment engineering. <i>Chemical Communications</i> , <b>2019</b> , 55, 14673-14676	5.8	10
104	Halogen-bond driven self-assembly of perfluorocarbon monolayers on silicon nitride. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 24445-24453	13	6
103	Cesium-Incorporated Triple Cation Perovskites Deliver Fully Reversible and Stable Nanoscale Voltage Response. <i>ACS Nano</i> , <b>2019</b> , 13, 1538-1546	16.7	20
102	Frontispiece: Perovskite Solar Cells: From the Laboratory to the Assembly Line. <i>Chemistry - A European Journal</i> , <b>2018</b> , 24,	4.8	1
101	Flash Infrared Annealing for Antisolvent-Free Highly Efficient Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702915	21.8	88

100	Topological distribution of reversible and non-reversible degradation in perovskite solar cells. <i>Nano Energy</i> , <b>2018</b> , 45, 94-100	17.1	32
99	A Ga-doped SnO <sub>2</sub> mesoporous contact for UV stable highly efficient perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 1850-1857	13	91
98	Perowskit-Solarzellen: atomare Ebene, Schichtqualität und Leistungsfähigkeit der Zellen. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 2582-2598	3.6	28
97	Perovskite Solar Cells: From the Atomic Level to Film Quality and Device Performance. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 2554-2569	16.4	324
96	Perovskite Solar Cells: From the Laboratory to the Assembly Line. <i>Chemistry - A European Journal</i> , <b>2018</b> , 24, 3083-3100	4.8	100
95	Temperature dependent two-photon photoluminescence of CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> : structural phase and exciton to free carrier transition. <i>Optical Materials Express</i> , <b>2018</b> , 8, 511	2.6	22
94	Facile Deposition of Nb <sub>2</sub> O <sub>5</sub> Thin Film as an Electron-Transporting Layer for Highly Efficient Perovskite Solar Cells. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 4101-4109	5.6	26
93	Measuring Aging Stability of Perovskite Solar Cells. <i>Joule</i> , <b>2018</b> , 2, 1019-1024	27.8	83
92	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> , <b>2018</b> , 30, 4193-4201	9.6	339
91	Mesoporous Electron-Selective Contacts Enhance the Tolerance to Interfacial Ion Accumulation in Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 163-169	20.1	40
90	Enhanced charge carrier mobility and lifetime suppress hysteresis and improve efficiency in planar perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 78-86	35.4	202
89	The Role of Charge Selective Contacts in Perovskite Solar Cell Stability. <i>Advanced Energy Materials</i> , <b>2018</b> , 9, 1803140	21.8	60
88	Perovskite Solar Cells: Promises and Challenges <b>2018</b> , 261-356		1
87	The Impact of Nano- and Microstructure on the Stability of Perovskite Solar Cells. <i>Small</i> , <b>2018</b> , 14, e1802573	18.2	33
86	Graphene quantum dots decorated TiO <sub>2</sub> mesoporous film as an efficient electron transport layer for high-performance perovskite solar cells. <i>Journal of Power Sources</i> , <b>2018</b> , 402, 320-326	8.9	61
85	Efficient and Stable Inorganic Perovskite Solar Cells Manufactured by Pulsed Flash Infrared Annealing. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1802060	21.8	78
84	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> , <b>2018</b> , 6, 20289-20296	13	7
83	Migration of cations induces reversible performance losses over day/night cycling in perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 604-613	35.4	387

82	Patterning of perovskite-polymer films by wrinkling instabilities. <i>Soft Matter</i> , <b>2017</b> , 13, 1654-1659	3.6	10
81	High Temperature-Stable Perovskite Solar Cell Based on Low-Cost Carbon Nanotube Hole Contact. <i>Advanced Materials</i> , <b>2017</b> , 29, 1606398	24	173
80	The rapid evolution of highly efficient perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 710-727	35.4	811
79	Molecular Tailoring of Phenothiazine-Based Hole-Transporting Materials for High-Performing Perovskite Solar Cells. <i>ACS Energy Letters</i> , <b>2017</b> , 2, 1029-1034	20.1	104
78	The effect of illumination on the formation of metal halide perovskite films. <i>Nature</i> , <b>2017</b> , 545, 208-212	50.4	197
77	Spontaneous crystal coalescence enables highly efficient perovskite solar cells. <i>Nano Energy</i> , <b>2017</b> , 39, 24-29	17.1	51
76	Identifying and suppressing interfacial recombination to achieve high open-circuit voltage in perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 1207-1212	35.4	242
75	Perovskite Solar Cells Go Lead Free. <i>Joule</i> , <b>2017</b> , 1, 659-664	27.8	206
74	Globularity-Selected Large Molecules for a New Generation of Multication Perovskites. <i>Advanced Materials</i> , <b>2017</b> , 29, 1702005	24	67
73	Promises and challenges of perovskite solar cells. <i>Science</i> , <b>2017</b> , 358, 739-744	33.3	1016
72	Rational Design of Molecular Hole-Transporting Materials for Perovskite Solar Cells: Direct versus Inverted Device Configurations. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 24778-24787	9.5	59
71	Perovskite Solar Cells Go Lead Free. <i>Joule</i> , <b>2017</b> , 1, 887	27.8	8
70	Control refinement for discrete-time descriptor systems: a behavioural approach via simulation relations. <i>IFAC-PapersOnLine</i> , <b>2017</b> , 50, 15822-15827	0.7	1
69	Additive-Free Transparent Triarylamine-Based Polymeric Hole-Transport Materials for Stable Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2016</b> , 9, 2567-2571	8.3	56
68	Highly efficient and stable planar perovskite solar cells by solution-processed tin oxide. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 3128-3134	35.4	603
67	Highly Efficient and Stable Perovskite Solar Cells based on a Low-Cost Carbon Cloth. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1601116	21.8	91
66	Perovskite Solar Cell Stability in Humid Air: Partially Reversible Phase Transitions in the PbI <sub>2</sub> -CH <sub>3</sub> NH <sub>3</sub> I-H <sub>2</sub> O System. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600846	21.8	263
65	Inverted Current-Voltage Hysteresis in Mixed Perovskite Solar Cells: Polarization, Energy Barriers, and Defect Recombination. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600396	21.8	174



64	A molecularly engineered hole-transporting material for efficient perovskite solar cells. <i>Nature Energy</i> , <b>2016</b> , 1,	62.3	693
63	Solar Cells: Ionic Liquid Control Crystal Growth to Enhance Planar Perovskite Solar Cells Efficiency (Adv. Energy Mater. 20/2016). <i>Advanced Energy Materials</i> , <b>2016</b> , 6,	21.8	1
62	Mesoporous SnO <sub>2</sub> electron selective contact enables UV-stable perovskite solar cells. <i>Nano Energy</i> , <b>2016</b> , 30, 517-522	17.1	165
61	Enhanced Efficiency and Stability of Perovskite Solar Cells Through Nd-Doping of Mesoporous TiO <sub>2</sub> . <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1501868	21.8	130
60	Enhanced electronic properties in mesoporous TiO <sub>2</sub> via lithium doping for high-efficiency perovskite solar cells. <i>Nature Communications</i> , <b>2016</b> , 7, 10379	17.4	626
59	Carbon nanotube-based hybrid hole-transporting material and selective contact for high efficiency perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 461-466	35.4	156
58	Cesium-containing triple cation perovskite solar cells: improved stability, reproducibility and high efficiency. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1989-1997	35.4	374 <sup>o</sup>
57	Efficient luminescent solar cells based on tailored mixed-cation perovskites. <i>Science Advances</i> , <b>2016</b> , 2, e1501170	14.3	1498
56	Monolithic perovskite/silicon-heterojunction tandem solar cells processed at low temperature. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 81-88	35.4	469
55	Unbroken Perovskite: Interplay of Morphology, Electro-optical Properties, and Ionic Movement. <i>Advanced Materials</i> , <b>2016</b> , 28, 5031-7	24	208
54	High Absorption Coefficient Cyclopentadithiophene Donor-Free Dyes for Liquid and Solid-State Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 15027-15034	3.8	24
53	An efficient perovskite solar cell with symmetrical Zn(ii) phthalocyanine infiltrated buffering porous AlO <sub>x</sub> as the hybrid interfacial hole-transporting layer. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 27083-27089	3.6	31
52	Optical analysis of CH <sub>3</sub> NH <sub>3</sub> Sn Pb I absorbers: a roadmap for perovskite-on-perovskite tandem solar cells. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 11214-11221	13	87
51	A New 1,3,4-Oxadiazole-Based Hole-Transport Material for Efficient CH <sub>3</sub> NH <sub>3</sub> PbBr <sub>3</sub> Perovskite Solar Cells. <i>ChemSusChem</i> , <b>2016</b> , 9, 657-61	8.3	29
50	In-situ observation of moisture-induced degradation of perovskite solar cells using laser-beam induced current <b>2016</b> ,		8
49	Not All That Glitters Is Gold: Metal-Migration-Induced Degradation in Perovskite Solar Cells. <i>ACS Nano</i> , <b>2016</b> , 10, 6306-14	16.7	759
48	Incorporation of rubidium cations into perovskite solar cells improves photovoltaic performance. <i>Science</i> , <b>2016</b> , 354, 206-209	33.3	2628
47	Enhancing Efficiency of Perovskite Solar Cells via N-doped Graphene: Crystal Modification and Surface Passivation. <i>Advanced Materials</i> , <b>2016</b> , 28, 8681-8686	24	228



46	Ionic Liquid Control Crystal Growth to Enhance Planar Perovskite Solar Cells Efficiency. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1600767	21.8	165
45	Improving the Long-Term Stability of Perovskite Solar Cells with a Porous Al <sub>2</sub> O <sub>3</sub> Buffer Layer. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 432-7	6.4	301
44	High-Efficiency Polycrystalline Thin Film Tandem Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2015</b> , 6, 2676-81	6.4	147
43	Silolothiophene-linked triphenylamines as stable hole transporting materials for high efficiency perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2946-2953	35.4	145
42	Perovskite photovoltachromic cells for building integration. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 1578-1584	35.4	102
41	Non-aggregated Zn(ii)octa(2,6-diphenylphenoxy) phthalocyanine as a hole transporting material for efficient perovskite solar cells. <i>Dalton Transactions</i> , <b>2015</b> , 44, 10847-51	4.3	76
40	Strong Photocurrent from Two-Dimensional Excitons in Solution-Processed Stacked Perovskite Semiconductor Sheets. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 25227-36	9.5	76
39	Stability of Organic Cations in Solution-Processed CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Perovskites: Formation of Modified Surface Layers. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 21329-21335	3.8	70
38	Highly efficient planar perovskite solar cells through band alignment engineering. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2928-2934	35.4	949
37	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 16172-8	16.4	268
36	Spectral splitting photovoltaics using perovskite and wideband dye-sensitized solar cells. <i>Nature Communications</i> , <b>2015</b> , 6, 8834	17.4	95
35	Hole-transport materials with greatly-differing redox potentials give efficient TiO <sub>2</sub> -[CH <sub>3</sub> NH <sub>3</sub> ][PbX <sub>3</sub> ] perovskite solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 2335-8	3.6	52
34	Methoxydiphenylamin-substituiertes Carbazol-Zwillingsderivat: ein effizienter organischer Lochleiter für Perowskit-Solarzellen. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 11571-11575	3.6	34
33	A Methoxydiphenylamine-Substituted Carbazole Twin Derivative: An Efficient Hole-Transporting Material for Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 11409-13	16.4	207
32	Phosphonic anchoring groups in organic dyes for solid-state solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 18780-9	3.6	15
31	Efficient photosynthesis of carbon monoxide from CO <sub>2</sub> using perovskite photovoltaics. <i>Nature Communications</i> , <b>2015</b> , 6, 7326	17.4	245
30	High temperature crystal chemistry of the n=3 Ruddlesden-Popper phase LaSr <sub>3</sub> Fe <sub>1.5</sub> Co <sub>1.5</sub> O <sub>10</sub>	3.3	7
29	Ultrasooth organic-inorganic perovskite thin-film formation and crystallization for efficient planar heterojunction solar cells. <i>Nature Communications</i> , <b>2015</b> , 6, 6142	17.4	695

28	Towards Long-Term Photostability of Solid-State Dye Sensitized Solar Cells. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1301667	21.8	47
27	Supramolecular halogen bond passivation of organic-inorganic halide perovskite solar cells. <i>Nano Letters</i> , <b>2014</b> , 14, 3247-54	11.5	527
26	Lead-free organic-inorganic tin halide perovskites for photovoltaic applications. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 3061-3068	35.4	1635
25	An Organic Donor-Free Dye with Enhanced Open-Circuit Voltage in Solid-State Sensitized Solar Cells. <i>Advanced Energy Materials</i> , <b>2014</b> , 4, 1400166	21.8	31
24	Low-temperature processed electron collection layers of graphene/TiO <sub>2</sub> nanocomposites in thin film perovskite solar cells. <i>Nano Letters</i> , <b>2014</b> , 14, 724-30	11.5	917
23	Sub-150 °C processed meso-superstructured perovskite solar cells with enhanced efficiency. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 1142-1147	35.4	511
22	Influence of ionizing dopants on charge transport in organic semiconductors. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 1132-8	3.6	47
21	Heterojunction modification for highly efficient organic-inorganic perovskite solar cells. <i>ACS Nano</i> , <b>2014</b> , 8, 12701-9	16.7	546
20	Performance and Stability Enhancement of Dye-Sensitized and Perovskite Solar Cells by Al Doping of TiO <sub>2</sub> . <i>Advanced Functional Materials</i> , <b>2014</b> , 24, 6046-6055	15.6	294
19	Enhanced photoluminescence and solar cell performance via Lewis base passivation of organic-inorganic lead halide perovskites. <i>ACS Nano</i> , <b>2014</b> , 8, 9815-21	16.7	1194
18	Oligothiophene interlayer effect on photocurrent generation for hybrid TiO <sub>2</sub> (2)/P3HT solar cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2014</b> , 6, 17226-35	9.5	20
17	Anomalous Hysteresis in Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 1511-5	6.4	1951
16	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> , <b>2013</b> , 135, 13538-48	16.4	131
15	Overcoming ultraviolet light instability of sensitized TiO <sub>2</sub> with meso-superstructured organometal tri-halide perovskite solar cells. <i>Nature Communications</i> , <b>2013</b> , 4, 2885	17.4	1367
14	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> , <b>2013</b> , 15, 2572-9	3.6	459
13	Diacetylene bridged triphenylamines as hole transport materials for solid state dye sensitized solar cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 6949	13	89
12	Anisotropic ionic conductivity in fluorinated ionic liquid crystals suitable for optoelectronic applications. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 6572	13	59
11	A polyfluoroalkyl imidazolium ionic liquid as iodide ion source in dye sensitized solar cells. <i>Organic Electronics</i> , <b>2012</b> , 13, 2474-2478	3.5	37

10	The effect of selective interactions at the interface of polymeroxide hybrid solar cells. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 9068	35.4	42
9	Tetrahedral Oxyanions in Halogen-Bonded Coordination Networks. <i>Crystal Growth and Design</i> , <b>2011</b> , 11, 4220-4226	3.5	33
8	Dimensional encapsulation of I(-)...I(2)...I(-) in an organic salt crystal matrix. <i>Chemical Communications</i> , <b>2010</b> , 46, 2724-6	5.8	87
7	Influence of cysteine adsorption on the performance of CdSe quantum dots sensitized solar cells. <i>Materials Chemistry and Physics</i> , <b>2010</b> , 124, 709-712	4.4	20
6	Halide anions driven self-assembly of haloperfluoroarenes: Formation of one-dimensional non-covalent copolymers. <i>Journal of Fluorine Chemistry</i> , <b>2009</b> , 130, 1171-1177	2.1	57
5	In Situ Methylammonium Chloride-Assisted Perovskite Crystallization Strategy for High-Performance Solar Cells	448-456	3
4	Hybrid Perovskite Degradation from an Optical Perspective: A Spectroscopic Ellipsometry Study from the Deep Ultraviolet to the Middle Infrared. <i>Advanced Optical Materials</i> , 2101553	8.1	2
3	Energy Distribution in Tin Halide Perovskite. <i>Solar Rrl</i> , 2100825	7.1	3
2	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
1	High-Throughput Aging System for Parallel Maximum Power Point Tracking of Perovskite Solar Cells. <i>Energy Technology</i> , 2200234	3.5	2