List of Publications by Year
in descending order

107 papers	30,111 citations	25034 57 h-index	27406 106 g-index
108 all docs	108 docs citations	108 times ranked	22890 citing authors

#	Article	IF	Citations
1	A facile gas-driven ink spray (GDIS) deposition strategy toward hole-conductor-free carbon-based perovskite solar cells. Emergent Materials, 2022, 5, 967-975.	5.7	11
2	A guide to use fluorinated aromatic bulky cations for stable and high-performance 2D/3D perovskite solar cells: The more fluorination the better?. Journal of Energy Chemistry, 2022, 64, 179-189.	12.9	28
3	Rear Interface Engineering to Suppress Migration of Iodide Ions for Efficient Perovskite Solar Cells with Minimized Hysteresis. Advanced Functional Materials, 2022, 32, 2107823.	14.9	57
4	Self-assembled donor-acceptor hole contacts for inverted perovskite solar cells with an efficiency approaching 22%: The impact of anchoring groups. Journal of Energy Chemistry, 2022, 68, 87-95.	12.9	28
5	Intramolecular Noncovalent Interactionâ€Enabled Dopantâ€Free Holeâ€Transporting Materials for Highâ€Performance Inverted Perovskite Solar Cells. Angewandte Chemie, 2022, 134, .	2.0	18
6	Intramolecular Noncovalent Interactionâ€Enabled Dopantâ€Free Holeâ€Transporting Materials for Highâ€Performance Inverted Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, e202113749.	13.8	72
7	Face-on oriented hydrophobic conjugated polymers as dopant-free hole-transport materials for efficient and stable perovskite solar cells with a fill factor approaching 85%. Journal of Materials Chemistry A, 2022, 10, 3409-3417.	10.3	19
8	Hot-Air Treatment-Regulated Diffusion of LiTFSI to Accelerate the Aging-Induced Efficiency Rising of Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 4378-4388.	8.0	9
9	F-containing cations improve the performance of perovskite solar cells. Journal of Semiconductors, 2022, 43, 010202.	3.7	12
10	Gold-Based Double Perovskite-Related Polymorphs: Low Dimensional with an Ultranarrow Bandgap. Chemistry of Materials, 2022, 34, 1544-1553.	6.7	6
11	Deciphering the Reduced Loss in High Fill Factor Inverted Perovskite Solar Cells with Methoxy-Substituted Poly(Triarylamine) as the Hole Selective Contact. ACS Applied Materials & Interfaces, 2022, 14, 12640-12651.	8.0	11
12	Passivating defects via 4-cyanobenzenaminium iodide enables 22.44% efficiency perovskite solar cells. Electrochimica Acta, 2022, 413, 140172.	5.2	12
13	CsPbBr3 perovskite based tandem device for CO2 photoreduction. Chemical Engineering Journal, 2022, 443, 136447.	12.7	8
14	Atomic Permutation toward New Ruddlesdenâ€"Popper Two-Dimensional Perovskite with the Smallest Interlayer Spacing. Journal of Physical Chemistry C, 2022, 126, 8268-8277.	3.1	6
15	Surface Polarity Regulation by Relieving Fermiâ€Level Pinning with Naphthalocyanine Tetraimides toward Efficient Perovskite Solar Cells with Improved Photostability. Advanced Energy Materials, 2022, 12, .	19.5	30
16	2D or not 2D? Selectively formed low-dimensional perovskitoids based on chiral organic cation to passivate perovskite solar cells. Applied Materials Today, 2022, 28, 101550.	4.3	5
17	In-situ peptization of WO3 in alkaline SnO2 colloid for stable perovskite solar cells with record fill-factor approaching the shockleyâ€"queisser limit. Nano Energy, 2022, 100, 107468.	16.0	29
18	Donorâ€"Ï€â€"Acceptor Type Porphyrin Derivatives Assisted Defect Passivation for Efficient Hybrid Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2007762.	14.9	106

#	Article	IF	Citations
19	Enhanced photovoltage and stability of perovskite photovoltaics enabled by a cyclohexylmethylammonium iodide-based 2D perovskite passivation layer. Nanoscale, 2021, 13, 14915-14924.	5.6	16
20	The roles of fused-ring organic semiconductor treatment on SnO₂ in enhancing perovskite solar cell performance. RSC Advances, 2021, 11, 3792-3800.	3.6	8
21	Core Fusion Engineering of Hole-Transporting Materials for Efficient Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 1250-1258.	5.1	9
22	Electron-deficient 4-nitrophthalonitrile passivated efficient perovskite solar cells with efficiency exceeding 22%. Sustainable Energy and Fuels, 2021, 5, 2347-2353.	4.9	18
23	Fused Dithienopicenocarbazole Enabling High Mobility Dopant-Free Hole-Transporting Polymers for Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 6688-6698.	8.0	26
24	The Impact of PbI 2 :KI Alloys on the Performance of Sequentially Deposited Perovskite Solar Cells. European Journal of Inorganic Chemistry, 2021, 2021, 821-830.	2.0	5
25	Duallyâ€Passivated Perovskite Solar Cells with Reduced Voltage Loss and Increased Super Oxide Resistance. Angewandte Chemie, 2021, 133, 8384-8393.	2.0	66
26	Duallyâ€Passivated Perovskite Solar Cells with Reduced Voltage Loss and Increased Super Oxide Resistance. Angewandte Chemie - International Edition, 2021, 60, 8303-8312.	13.8	90
27	Marked Passivation Effect of Naphthaleneâ€1,8â€Dicarboximides in Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2021, 33, e2008405.	21.0	116
28	Enhanced Performance of Perovskite Solar Cells Loaded with Iodine-Rich CsPbI₃ Quantum Dots. ACS Applied Energy Materials, 2021, 4, 7535-7543.	5.1	8
29	Degradation mechanisms of perovskite solar cells under vacuum and one atmosphere of nitrogen. Nature Energy, 2021, 6, 977-986.	39.5	103
30	Miscellaneous and Perspicacious: Hybrid Halide Perovskite Materials Based Photodetectors and Sensors. Advanced Optical Materials, 2020, 8, 2001095.	7.3	46
31	Perovskiteâ€Based Tandem Solar Cells: Get the Most Out of the Sun. Advanced Functional Materials, 2020, 30, 2001904.	14.9	78
32	Accelerated design of photovoltaic Ruddlesdenâ€“Popper perovskite Ca6Sn4S14âˆ’<i>x</i>O<i>x</i> using machine learning. APL Materials, 2020, 8, .	5.1	9
33	NdCl₃ Dose as a Universal Approach for High-Efficiency Perovskite Solar Cells Based on Low-Temperature-Processed SnO_{<i>x</i>}. ACS Applied Materials & Interfaces, 2020, 12, 46306-46316.	8.0	28
34	Finding junction partners for CsPbI3 in a two-terminal tandem solar cell: A theoretical prospect. Nano Energy, 2020, 75, 104866.	16.0	39
35	Lewis-base containing spiro type hole transporting materials for high-performance perovskite solar cells with efficiency approaching 20%. Nanoscale, 2020, 12, 13157-13164.	5.6	30
36	Efficient Perovskite Solar Cells by Reducing Interfaceâ€Mediated Recombination: a Bulky Amine Approach. Advanced Energy Materials, 2020, 10, 2000197.	19.5	198

#	Article	IF	Citations
37	Interfacial and structural modifications in perovskite solar cells. Nanoscale, 2020, 12, 5719-5745.	5.6	39
38	Fluoroaromatic Cationâ€Assisted Planar Junction Perovskite Solar Cells with Improved <i>V</i>_{OC} and Stability: The Role of Fluorination Position. Solar Rrl, 2020, 4, 2000107.	5.8	68
39	Zero-dimensional hybrid iodobismuthate derivatives: from structure study to photovoltaic application. Dalton Transactions, 2020, 49, 5815-5822.	3.3	17
40	Highâ€Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on a (<i>p</i>â€FC₆H₄C₂H₄NH₃)₂[PbI₄] Capping Layer. Advanced Energy Materials, 2019, 9, 1802595.	19.5	213
41	Graphene and carbon nanotube-based solar cells. , 2019, , 603-660.		2
42	Phenanthrenone-based hole transport material for efficient dopant-free perovskite solar cells. Organic Electronics, 2019, 65, 135-140.	2.6	18
43	Trash into Treasure: Î´â€FAPbI₃ Polymorph Stabilized MAPbI₃ Perovskite with Power Conversion Efficiency beyond 21%. Advanced Materials, 2018, 30, e1707143.	21.0	101
44	Less is More: Dopantâ€Free Hole Transporting Materials for Highâ€Efficiency Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702512.	19.5	236
45	Organic dyes containing fused acenes as building blocks: Optical, electrochemical and photovoltaic properties. Chinese Chemical Letters, 2018, 29, 289-292.	9.0	18
46	Leadâ€Free Hybrid Perovskite Absorbers for Viable Application: Can We Eat the Cake and Have It too?. Advanced Science, 2018, 5, 1700331.	11.2	233
47	Recent progress in organohalide lead perovskites for photovoltaic and optoelectronic applications. Coordination Chemistry Reviews, 2018, 373, 258-294.	18.8	67
48	Dimensionality engineering of hybrid halide perovskite light absorbers. Nature Communications, 2018, 9, 5028.	12.8	245
49	Impact of Ï€ Spacers on the Optical, Electrochemical and Photovoltaic performance of Dâ€(Ï€âA) 2 Based Sensitizers. ChemistrySelect, 2018, 3, 5269-5276.	1.5	4
50	All that glitters is not gold: Recent progress of alternative counter electrodes for perovskite solar cells. Nano Energy, 2018, 52, 211-238.	16.0	85
51	Development of electron and hole selective contact materials for perovskite solar cells. Chinese Chemical Letters, 2017, 28, 1144-1152.	9.0	20
52	From Nano- to Micrometer Scale: The Role of Antisolvent Treatment on High Performance Perovskite Solar Cells. Chemistry of Materials, 2017, 29, 3490-3498.	6.7	234
53	Molecular engineering of face-on oriented dopant-free hole transporting material for perovskite solar cells with 19% PCE. Journal of Materials Chemistry A, 2017, 5, 7811-7815.	10.3	209
54	Highly efficient perovskite solar cells with a compositionally engineered perovskite/hole transporting material interface. Energy and Environmental Science, 2017, 10, 621-627.	30.8	436

#	Article	IF	Citations
55	Molecularly Engineered Phthalocyanines as Holeâ€Transporting Materials in Perovskite Solar Cells Reaching Power Conversion Efficiency of 17.5%. Advanced Energy Materials, 2017, 7, 1601733.	19.5	90
56	Hexagonal mesoporous silica islands to enhance photovoltaic performance of planar junction perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 1415-1420.	10.3	17
57	Dopantâ€Free Holeâ€Transporting Materials for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2017, 29, 1606555.	21.0	171
58	A Strategy to Produce High Efficiency, High Stability Perovskite Solar Cells Using Functionalized Ionic Liquidâ€Dopants. Advanced Materials, 2017, 29, 1702157.	21.0	115
59	Lowâ€Cost Perovskite Solar Cells Employing Dimethoxydiphenylamineâ€Substituted Bistricyclic Aromatic Enes as Hole Transport Materials. ChemSusChem, 2017, 10, 3825-3832.	6.8	37
60	Highâ€Efficiency Perovskite Solar Cells Employing a <i>S</i>,<i>N</i>â€Heteropentaceneâ€based Dâ€“A Holeâ€Transport Material. ChemSusChem, 2016, 9, 433-438.	6.8	61
61	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylideneâ€Based Holeâ€Transporting Material. Angewandte Chemie, 2016, 128, 7590-7594.	2.0	37
62	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylideneâ€Based Holeâ€Transporting Material. Angewandte Chemie - International Edition, 2016, 55, 7464-7468.	13.8	165
63	An efficient perovskite solar cell with symmetrical Zn(ii) phthalocyanine infiltrated buffering porous Al2O3 as the hybrid interfacial hole-transporting layer. Physical Chemistry Chemical Physics, 2016, 18, 27083-27089.	2.8	38
64	Facile synthesized organic hole transporting material for perovskite solar cell with efficiency of 19.8%. Nano Energy, 2016, 23, 138-144.	16.0	253
65	Donorâ€“Ï€â€“donor type hole transporting materials: marked Ï€-bridge effects on optoelectronic properties, solid-state structure, and perovskite solar cell efficiency. Chemical Science, 2016, 7, 6068-6075.	7.4	85
66	Impact of strength and size of donors on the optoelectronic properties of Dâ€“Ï€â€“A sensitizers. RSC Advances, 2016, 6, 37347-37361.	3.6	10
67	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 26827-26833.	8.0	16
68	PbI₂â€“HMPA Complex Pretreatment for Highly Reproducible and Efficient CH₃NH₃PbI₃ Perovskite Solar Cells. Journal of the American Chemical Society, 2016, 138, 14380-14387.	13.7	107
69	A balanced cation exchange reaction toward highly uniform and pure phase FA_{1âˆ’x}MA_xPbI₃ perovskite films. Journal of Materials Chemistry A, 2016, 4, 14437-14443.	10.3	64
70	Extending the Lifetime of Perovskite Solar Cells using a Perfluorinated Dopant. ChemSusChem, 2016, 9, 2708-2714.	6.8	62
71	Glutathione Modified Gold Nanoparticles for Sensitive Colorimetric Detection of Pb²⁺ Ions in Rainwater Polluted by Leaking Perovskite Solar Cells. Analytical Chemistry, 2016, 88, 12316-12322.	6.5	86
72	A molecularly engineered hole-transporting material for efficient perovskite solar cells. Nature Energy, 2016, 1, .	39.5	816

#	Article	IF	Citations
73	A highly hindered bithiophene-functionalized dispiro-oxepine derivative as an efficient hole transporting material for perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 18259-18264.	10.3	78
74	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. Inorganic Chemistry, 2016, 55, 6653-6659.	4.0	80
75	Highâ€Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on Amphiphileâ€Modified CH₃NH₃PbI₃. Advanced Materials, 2016, 28, 2910-2915.	21.0	258
76	Covalent Immobilization of a Molecular Catalyst on Cu₂O Photocathodes for CO₂ Reduction. Journal of the American Chemical Society, 2016, 138, 1938-1946.	13.7	272
77	Ionic polarization-induced currentâ€“voltage hysteresis in CH3NH3PbX3 perovskite solar cells. Nature Communications, 2016, 7, 10334.	12.8	602
78	Efficient luminescent solar cells based on tailored mixed-cation perovskites. Science Advances, 2016, 2, e1501170.	10.3	1,669
79	A dual-functional asymmetric squaraine-based low band gap hole transporting material for efficient perovskite solar cells. Nanoscale, 2016, 8, 6335-6340.	5.6	32
80	Unraveling the Reasons for Efficiency Loss in Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 3925-3933.	14.9	129
81	Double Dâ€“Ï€â€“A Dye Linked by 2,2â€²â€Bipyridine Dicarboxylic Acid: Influence of <i>paraâ€</i> and <i>metaâ€</i>Substituted Carboxyl Anchoring Group. ChemPhysChem, 2015, 16, 1035-1041.	2.1	6
82	Silolothiophene-linked triphenylamines as stable hole transporting materials for high efficiency perovskite solar cells. Energy and Environmental Science, 2015, 8, 2946-2953.	30.8	163
83	A simple spiro-type hole transporting material for efficient perovskite solar cells. Energy and Environmental Science, 2015, 8, 1986-1991.	30.8	206
84	A dopant free linear acene derivative as a hole transport material for perovskite pigmented solar cells. Energy and Environmental Science, 2015, 8, 1816-1823.	30.8	202
85	Molecular Engineering of Functional Materials for Energy and Opto-Electronic Applications. Chimia, 2015, 69, 253.	0.6	8
86	High efficiency methylammonium lead triiodide perovskite solar cells: the relevance of non-stoichiometric precursors. Energy and Environmental Science, 2015, 8, 3550-3556.	30.8	384
87	Unravel the Impact of Anchoring Groups on the Photovoltaic Performances of Diketopyrrolopyrrole Sensitizers for Dye-Sensitized Solar Cells. ACS Sustainable Chemistry and Engineering, 2015, 3, 2389-2396.	6.7	65
88	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2015, 137, 16172-16178.	13.7	321
89	Efficient and selective carbon dioxide reduction on low cost protected Cu₂O photocathodes using a molecular catalyst. Energy and Environmental Science, 2015, 8, 855-861.	30.8	142
90	A Novel Oligomer as a Hole Transporting Material for Efficient Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1400980.	19.5	80

#	Article	IF	Citations
91	Chemistry of Sensitizers for Dye-sensitized Solar Cells. RSC Energy and Environment Series, 2014, , 186-241.	0.5	3
92	Effect of Annealing Temperature on Film Morphology of Organicâ€“Inorganic Hybrid Pervoskite Solidâ€State Solar Cells. Advanced Functional Materials, 2014, 24, 3250-3258.	14.9	850
93	Organohalide lead perovskites for photovoltaic applications. Energy and Environmental Science, 2014, 7, 2448-2463.	30.8	1,220
94	Yttrium-substituted nanocrystalline TiO₂photoanodes for perovskite based heterojunction solar cells. Nanoscale, 2014, 6, 1508-1514.	5.6	162
95	Impedance Spectroscopic Analysis of Lead Iodide Perovskite-Sensitized Solid-State Solar Cells. ACS Nano, 2014, 8, 362-373.	14.6	663
96	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. Nature Chemistry, 2014, 6, 242-247.	13.6	3,982
97	Dithieno[2,3-d;2â€²,3â€²-dâ€²]benzo[1,2-b;4,5-bâ€²]dithiophene based organic sensitizers for dye-sensitized solar cells. RSC Advances, 2014, 4, 54130-54133.	3.6	16
98	Thermal Behavior of Methylammonium Lead-Trihalide Perovskite Photovoltaic Light Harvesters. Chemistry of Materials, 2014, 26, 6160-6164.	6.7	502
99	Molecular Engineering of 2-Quinolinone Based Anchoring Groups for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16896-16903.	3.1	41
100	Mixedâ€Organicâ€Cation Perovskite Photovoltaics for Enhanced Solarâ€Light Harvesting. Angewandte Chemie - International Edition, 2014, 53, 3151-3157.	13.8	1,117
101	Sequential deposition as a route to high-performance perovskite-sensitized solar cells. Nature, 2013, 499, 316-319.	27.8	8,542
102	Facile synthesis of a bulky BPTPA donor group suitable for cobalt electrolyte based dye sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 5535.	10.3	58
103	High Performance Fieldâ€Effect Ammonia Sensors Based on a Structured Ultrathin Organic Semiconductor Film. Advanced Materials, 2013, 25, 3419-3425.	21.0	263
104	Fine-tuning the Electronic Structure of Organic Dyes for Dye-Sensitized Solar Cells. Organic Letters, 2012, 14, 4330-4333.	4.6	95
105	Mesoscopic CH₃NH₃PbI₃/TiO₂ Heterojunction Solar Cells. Journal of the American Chemical Society, 2012, 134, 17396-17399.	13.7	1,801
106	Microribbon Field-Effect Transistors Based on Dithieno[2,3-d;2,3â€²-dâ€²]benzo[1,2-b;4,5-bâ€²]dithiophene Processed by Solvent Vapor Diffusion. Chemistry of Materials, 2011, 23, 4960-4964.	6.7	27
107	Dithieno[2,3â€<i>d</i>;2â€²,3â€²â€<i>d</i>â€²]benzo[1,2â€<i>b</i>;4,5â€<i>b</i>â€²]dithiophene (DTBDT) as Semiconductor for Highâ€Performance, Solutionâ€Processed Organic Fieldâ€Effect Transistors. Advanced Materials, 2009, 21, 213-216.	21.0	237