List of Publications by Year
in descending order

107 papers	30,111 citations	24978 57 h-index	27345 106 g-index
108 all docs	108 docs citations	108 times ranked	22890 citing authors

#	Article	IF	Citations
1	Sequential deposition as a route to high-performance perovskite-sensitized solar cells. Nature, 2013, 499, 316-319.	13.7	8,542
2	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. Nature Chemistry, 2014, 6, 242-247.	6.6	3,982
3	Mesoscopic CH₃NH₃PbI₃/TiO₂ Heterojunction Solar Cells. Journal of the American Chemical Society, 2012, 134, 17396-17399.	6.6	1,801
4	Efficient luminescent solar cells based on tailored mixed-cation perovskites. Science Advances, 2016, 2, e1501170.	4.7	1,669
5	Organohalide lead perovskites for photovoltaic applications. Energy and Environmental Science, 2014, 7, 2448-2463.	15.6	1,220
6	Mixedâ€Organicâ€Cation Perovskite Photovoltaics for Enhanced Solarâ€Light Harvesting. Angewandte Chemie - International Edition, 2014, 53, 3151-3157.	7.2	1,117
7	Effect of Annealing Temperature on Film Morphology of Organicâ€“Inorganic Hybrid Pervoskite Solidâ€State Solar Cells. Advanced Functional Materials, 2014, 24, 3250-3258.	7.8	850
8	A molecularly engineered hole-transporting material for efficient perovskite solar cells. Nature Energy, 2016, 1, .	19.8	816
9	Impedance Spectroscopic Analysis of Lead Iodide Perovskite-Sensitized Solid-State Solar Cells. ACS Nano, 2014, 8, 362-373.	7.3	663
10	Ionic polarization-induced currentâ€“voltage hysteresis in CH3NH3PbX3 perovskite solar cells. Nature Communications, 2016, 7, 10334.	5.8	602
11	Thermal Behavior of Methylammonium Lead-Trihalide Perovskite Photovoltaic Light Harvesters. Chemistry of Materials, 2014, 26, 6160-6164.	3.2	502
12	Highly efficient perovskite solar cells with a compositionally engineered perovskite/hole transporting material interface. Energy and Environmental Science, 2017, 10, 621-627.	15.6	436
13	High efficiency methylammonium lead triiodide perovskite solar cells: the relevance of non-stoichiometric precursors. Energy and Environmental Science, 2015, 8, 3550-3556.	15.6	384
14	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. Journal of the American Chemical Society, 2015, 137, 16172-16178.	6.6	321
15	Covalent Immobilization of a Molecular Catalyst on Cu₂O Photocathodes for CO₂ Reduction. Journal of the American Chemical Society, 2016, 138, 1938-1946.	6.6	272
16	High Performance Fieldâ€Effect Ammonia Sensors Based on a Structured Ultrathin Organic Semiconductor Film. Advanced Materials, 2013, 25, 3419-3425.	11.1	263
17	Highâ€Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on Amphiphileâ€Modified CH₃NH₃PbI₃. Advanced Materials, 2016, 28, 2910-2915.	11.1	258
18	Facile synthesized organic hole transporting material for perovskite solar cell with efficiency of 19.8%. Nano Energy, 2016, 23, 138-144.	8.2	253

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19	Dimensionality engineering of hybrid halide perovskite light absorbers. Nature Communications, 2018, 9, 5028.	5.8	245
20	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.	11.1	237
21	Less is More: Dopantâ€Free Hole Transporting Materials for Highâ€Efficiency Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702512.	10.2	236
22	From Nano- to Micrometer Scale: The Role of Antisolvent Treatment on High Performance Perovskite Solar Cells. Chemistry of Materials, 2017, 29, 3490-3498.	3.2	234
23	Leadâ€Free Hybrid Perovskite Absorbers for Viable Application: Can We Eat the Cake and Have It too?. Advanced Science, 2018, 5, 1700331.	5.6	233
24	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.	10.2	213
25	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.	5.2	209
26	A simple spiro-type hole transporting material for efficient perovskite solar cells. Energy and Environmental Science, 2015, 8, 1986-1991.	15.6	206
27	A dopant free linear acene derivative as a hole transport material for perovskite pigmented solar cells. Energy and Environmental Science, 2015, 8, 1816-1823.	15.6	202
28	Efficient Perovskite Solar Cells by Reducing Interfaceâ€Mediated Recombination: a Bulky Amine Approach. Advanced Energy Materials, 2020, 10, 2000197.	10.2	198
29	Dopantâ€Free Holeâ€Transporting Materials for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2017, 29, 1606555.	11.1	171
30	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylideneâ€Based Holeâ€Transporting Material. Angewandte Chemie - International Edition, 2016, 55, 7464-7468.	7.2	165
31	Silolothiophene-linked triphenylamines as stable hole transporting materials for high efficiency perovskite solar cells. Energy and Environmental Science, 2015, 8, 2946-2953.	15.6	163
32	Yttrium-substituted nanocrystalline TiO₂photoanodes for perovskite based heterojunction solar cells. Nanoscale, 2014, 6, 1508-1514.	2.8	162
33	Efficient and selective carbon dioxide reduction on low cost protected Cu₂O photocathodes using a molecular catalyst. Energy and Environmental Science, 2015, 8, 855-861.	15.6	142
34	Unraveling the Reasons for Efficiency Loss in Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 3925-3933.	7.8	129
35	Marked Passivation Effect of Naphthaleneâ€1,8â€Dicarboximides in Highâ€Performance Perovskite Solar Cells. Advanced Materials, 2021, 33, e2008405.	11.1	116
36	A Strategy to Produce High Efficiency, High Stability Perovskite Solar Cells Using Functionalized Ionic Liquidâ€Dopants. Advanced Materials, 2017, 29, 1702157.	11.1	115

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37	PbI₂â€“HMPA Complex Pretreatment for Highly Reproducible and Efficient CH₃NH₃PbI₃ Perovskite Solar Cells. Journal of the American Chemical Society, 2016, 138, 14380-14387.	6.6	107
38	Donorâ€“Ï€â€“Acceptor Type Porphyrin Derivatives Assisted Defect Passivation for Efficient Hybrid Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2007762.	7.8	106
39	Degradation mechanisms of perovskite solar cells under vacuum and one atmosphere of nitrogen. Nature Energy, 2021, 6, 977-986.	19.8	103
40	Trash into Treasure: Î´â€FAPbI₃ Polymorph Stabilized MAPbI₃ Perovskite with Power Conversion Efficiency beyond 21%. Advanced Materials, 2018, 30, e1707143.	11.1	101
41	Fine-tuning the Electronic Structure of Organic Dyes for Dye-Sensitized Solar Cells. Organic Letters, 2012, 14, 4330-4333.	2.4	95
42	Molecularly Engineered Phthalocyanines as Holeâ€Transporting Materials in Perovskite Solar Cells Reaching Power Conversion Efficiency of 17.5%. Advanced Energy Materials, 2017, 7, 1601733.	10.2	90
43	Duallyâ€Passivated Perovskite Solar Cells with Reduced Voltage Loss and Increased Super Oxide Resistance. Angewandte Chemie - International Edition, 2021, 60, 8303-8312.	7.2	90
44	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.	3.2	86
45	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.	3.7	85
46	All that glitters is not gold: Recent progress of alternative counter electrodes for perovskite solar cells. Nano Energy, 2018, 52, 211-238.	8.2	85
47	A Novel Oligomer as a Hole Transporting Material for Efficient Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1400980.	10.2	80
48	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. Inorganic Chemistry, 2016, 55, 6653-6659.	1.9	80
49	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.	5.2	78
50	Perovskiteâ€Based Tandem Solar Cells: Get the Most Out of the Sun. Advanced Functional Materials, 2020, 30, 2001904.	7.8	78
51	Intramolecular Noncovalent Interactionâ€Enabled Dopantâ€Free Holeâ€Transporting Materials for Highâ€Performance Inverted Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, e202113749.	7.2	72
52	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.	3.1	68
53	Recent progress in organohalide lead perovskites for photovoltaic and optoelectronic applications. Coordination Chemistry Reviews, 2018, 373, 258-294.	9.5	67
54	Duallyâ€Passivated Perovskite Solar Cells with Reduced Voltage Loss and Increased Super Oxide Resistance. Angewandte Chemie, 2021, 133, 8384-8393.	1.6	66

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55	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.	3.2	65
56	A balanced cation exchange reaction toward highly uniform and pure phase FA_{1â^’x}MA_xPbI₃ perovskite films. Journal of Materials Chemistry A, 2016, 4, 14437-14443.	5.2	64
57	Extending the Lifetime of Perovskite Solar Cells using a Perfluorinated Dopant. ChemSusChem, 2016, 9, 2708-2714.	3.6	62
58	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.	3.6	61
59	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.	5.2	58
60	Rear Interface Engineering to Suppress Migration of Iodide Ions for Efficient Perovskite Solar Cells with Minimized Hysteresis. Advanced Functional Materials, 2022, 32, 2107823.	7.8	57
61	Miscellaneous and Perspicacious: Hybrid Halide Perovskite Materials Based Photodetectors and Sensors. Advanced Optical Materials, 2020, 8, 2001095.	3.6	46
62	Molecular Engineering of 2-Quinolinone Based Anchoring Groups for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16896-16903.	1.5	41
63	Finding junction partners for CsPbI3 in a two-terminal tandem solar cell: A theoretical prospect. Nano Energy, 2020, 75, 104866.	8.2	39
64	Interfacial and structural modifications in perovskite solar cells. Nanoscale, 2020, 12, 5719-5745.	2.8	39
65	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.	1.3	38
66	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylideneâ€Based Holeâ€Transporting Material. Angewandte Chemie, 2016, 128, 7590-7594.	1.6	37
67	Lowâ€Cost Perovskite Solar Cells Employing Dimethoxydiphenylamineâ€Substituted Bistricyclic Aromatic Enes as Hole Transport Materials. ChemSusChem, 2017, 10, 3825-3832.	3.6	37
68	A dual-functional asymmetric squaraine-based low band gap hole transporting material for efficient perovskite solar cells. Nanoscale, 2016, 8, 6335-6340.	2.8	32
69	Lewis-base containing spiro type hole transporting materials for high-performance perovskite solar cells with efficiency approaching 20%. Nanoscale, 2020, 12, 13157-13164.	2.8	30
70	Surface Polarity Regulation by Relieving Fermiâ€Level Pinning with Naphthalocyanine Tetraimides toward Efficient Perovskite Solar Cells with Improved Photostability. Advanced Energy Materials, 2022, 12, .	10.2	30
71	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.	8.2	29
72	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.	4.0	28

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73	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.	7.1	28
74	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.	7.1	28
75	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.	3.2	27
76	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.	4.0	26
77	Development of electron and hole selective contact materials for perovskite solar cells. Chinese Chemical Letters, 2017, 28, 1144-1152.	4.8	20
78	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.	5.2	19
79	Organic dyes containing fused acenes as building blocks: Optical, electrochemical and photovoltaic properties. Chinese Chemical Letters, 2018, 29, 289-292.	4.8	18
80	Phenanthrenone-based hole transport material for efficient dopant-free perovskite solar cells. Organic Electronics, 2019, 65, 135-140.	1.4	18
81	Electron-deficient 4-nitrophthalonitrile passivated efficient perovskite solar cells with efficiency exceeding 22%. Sustainable Energy and Fuels, 2021, 5, 2347-2353.	2.5	18
82	Intramolecular Noncovalent Interactionâ€Enabled Dopantâ€Free Holeâ€Transporting Materials for Highâ€Performance Inverted Perovskite Solar Cells. Angewandte Chemie, 2022, 134, .	1.6	18
83	Hexagonal mesoporous silica islands to enhance photovoltaic performance of planar junction perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 1415-1420.	5.2	17
84	Zero-dimensional hybrid iodobismuthate derivatives: from structure study to photovoltaic application. Dalton Transactions, 2020, 49, 5815-5822.	1.6	17
85	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.	1.7	16
86	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 26827-26833.	4.0	16
87	Enhanced photovoltage and stability of perovskite photovoltaics enabled by a cyclohexylmethylammonium iodide-based 2D perovskite passivation layer. Nanoscale, 2021, 13, 14915-14924.	2.8	16
88	F-containing cations improve the performance of perovskite solar cells. Journal of Semiconductors, 2022, 43, 010202.	2.0	12
89	Passivating defects via 4-cyanobenzenaminium iodide enables 22.44% efficiency perovskite solar cells. Electrochimica Acta, 2022, 413, 140172.	2.6	12
90	A facile gas-driven ink spray (GDIS) deposition strategy toward hole-conductor-free carbon-based perovskite solar cells. Emergent Materials, 2022, 5, 967-975.	3.2	11

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91	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.	4.0	11
92	Impact of strength and size of donors on the optoelectronic properties of Dâ€"Ï€â€"A sensitizers. RSC Advances, 2016, 6, 37347-37361.	1.7	10
93	Accelerated design of photovoltaic Ruddlesdenâ€"Popper perovskite Ca6Sn4S14â^'<i>x</i>O<i>x</i> using machine learning. APL Materials, 2020, 8, .	2.2	9
94	Core Fusion Engineering of Hole-Transporting Materials for Efficient Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 1250-1258.	2.5	9
95	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.	4.0	9
96	Molecular Engineering of Functional Materials for Energy and Opto-Electronic Applications. Chimia, 2015, 69, 253.	0.3	8
97	The roles of fused-ring organic semiconductor treatment on SnO₂ in enhancing perovskite solar cell performance. RSC Advances, 2021, 11, 3792-3800.	1.7	8
98	Enhanced Performance of Perovskite Solar Cells Loaded with Iodine-Rich CsPbI₃ Quantum Dots. ACS Applied Energy Materials, 2021, 4, 7535-7543.	2.5	8
99	CsPbBr3 perovskite based tandem device for CO2 photoreduction. Chemical Engineering Journal, 2022, 443, 136447.	6.6	8
100	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.	1.0	6
101	Gold-Based Double Perovskite-Related Polymorphs: Low Dimensional with an Ultranarrow Bandgap. Chemistry of Materials, 2022, 34, 1544-1553.	3.2	6
102	Atomic Permutation toward New Ruddlesdenâ€"Popper Two-Dimensional Perovskite with the Smallest Interlayer Spacing. Journal of Physical Chemistry C, 2022, 126, 8268-8277.	1.5	6
103	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.	1.0	5
104	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.	2.3	5
105	Impact of Ï€ Spacers on the Optical, Electrochemical and Photovoltaic performance of Dâ€(Ï€â€A) 2 Based Sensitizers. ChemistrySelect, 2018, 3, 5269-5276.	0.7	4
106	Chemistry of Sensitizers for Dye-sensitized Solar Cells. RSC Energy and Environment Series, 2014, , 186-241.	0.2	3
107	Graphene and carbon nanotube-based solar cells. , 2019, , 603-660.		2