

List of Publications by Year in descending order

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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	Sequential deposition as a route to high-performance perovskite-sensitized solar cells. <i>Nature</i> , 2013, 499, 316-319.	27.8	8,542
2	Dye-sensitized solar cells with 13% efficiency achieved through the molecular engineering of porphyrin sensitizers. <i>Nature Chemistry</i> , 2014, 6, 242-247.	13.6	3,982
3	Mesoscopic CH ₃ NH ₃ PbI ₃ /TiO ₂ Heterojunction Solar Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 17396-17399.	13.7	1,801
4	Efficient luminescent solar cells based on tailored mixed-cation perovskites. <i>Science Advances</i> , 2016, 2, e1501170.	10.3	1,669
5	Organohalide lead perovskites for photovoltaic applications. <i>Energy and Environmental Science</i> , 2014, 7, 2448-2463.	30.8	1,220
6	Mixed Organic-Cation Perovskite Photovoltaics for Enhanced Solar Light Harvesting. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 3151-3157.	13.8	1,117
7	Effect of Annealing Temperature on Film Morphology of Organic-Inorganic Hybrid Perovskite Solid-State Solar Cells. <i>Advanced Functional Materials</i> , 2014, 24, 3250-3258.	14.9	850
8	A molecularly engineered hole-transporting material for efficient perovskite solar cells. <i>Nature Energy</i> , 2016, 1, .	39.5	816
9	Impedance Spectroscopic Analysis of Lead Iodide Perovskite-Sensitized Solid-State Solar Cells. <i>ACS Nano</i> , 2014, 8, 362-373.	14.6	663
10	Ionic polarization-induced current-voltage hysteresis in CH ₃ NH ₃ PbX ₃ perovskite solar cells. <i>Nature Communications</i> , 2016, 7, 10334.	12.8	602
11	Thermal Behavior of Methylammonium Lead-Trihalide Perovskite Photovoltaic Light Harvesters. <i>Chemistry of Materials</i> , 2014, 26, 6160-6164.	6.7	502
12	Highly efficient perovskite solar cells with a compositionally engineered perovskite/hole transporting material interface. <i>Energy and Environmental Science</i> , 2017, 10, 621-627.	30.8	436
13	High efficiency methylammonium lead triiodide perovskite solar cells: the relevance of non-stoichiometric precursors. <i>Energy and Environmental Science</i> , 2015, 8, 3550-3556.	30.8	384
14	Triazatruxene-Based Hole Transporting Materials for Highly Efficient Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 16172-16178.	13.7	321
15	Covalent Immobilization of a Molecular Catalyst on Cu ₂ O Photocathodes for CO ₂ Reduction. <i>Journal of the American Chemical Society</i> , 2016, 138, 1938-1946.	13.7	272
16	High Performance Field-Effect Ammonia Sensors Based on a Structured Ultrathin Organic Semiconductor Film. <i>Advanced Materials</i> , 2013, 25, 3419-3425.	21.0	263
17	High-Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on Amphiphile-Modified CH ₃ NH ₃ PbI ₃ . <i>Advanced Materials</i> , 2016, 28, 2910-2915.	21.0	258
18	Facile synthesized organic hole transporting material for perovskite solar cell with efficiency of 19.8%. <i>Nano Energy</i> , 2016, 23, 138-144.	16.0	253

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19	Dimensionality engineering of hybrid halide perovskite light absorbers. Nature Communications, 2018, 9, 5028.	12.8	245
20	Dithieno[2,3-d;2',3'-d']benzo[1,2-b;4,5-b']dithiophene (DTBDT) as Semiconductor for High Performance, Solution-Processed Organic Field-Effect Transistors. Advanced Materials, 2009, 21, 213-216.	21.0	237
21	Less is More: Dopant-Free Hole Transporting Materials for High Efficiency Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1702512.	19.5	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.	6.7	234
23	Lead-Free Hybrid Perovskite Absorbers for Viable Application: Can We Eat the Cake and Have It too?. Advanced Science, 2018, 5, 1700331.	11.2	233
24	High Performance Perovskite Solar Cells with Enhanced Environmental Stability Based on a (CH ₃) ₂ NH ₂ CH ₂ CH ₂ NH ₂ Capping Layer. Advanced Energy Materials, 2019, 9, 1802595.	19.5	233
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.	10.3	209
26	A simple spiro-type hole transporting material for efficient perovskite solar cells. Energy and Environmental Science, 2015, 8, 1986-1991.	30.8	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.	30.8	202
28	Efficient Perovskite Solar Cells by Reducing Interface-Mediated Recombination: a Bulky Amine Approach. Advanced Energy Materials, 2020, 10, 2000197.	19.5	198
29	Dopant-Free Hole-Transporting Materials for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2017, 29, 1606555.	21.0	171
30	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylidene-Based Hole-Transporting Material. Angewandte Chemie - International Edition, 2016, 55, 7464-7468.	13.8	165
31	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
32	Yttrium-substituted nanocrystalline TiO ₂ photoanodes for perovskite based heterojunction solar cells. Nanoscale, 2014, 6, 1508-1514.	5.6	162
33	Efficient and selective carbon dioxide reduction on low cost protected Cu ₂ O photocathodes using a molecular catalyst. Energy and Environmental Science, 2015, 8, 855-861.	30.8	142
34	Unraveling the Reasons for Efficiency Loss in Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 3925-3933.	14.9	129
35	Marked Passivation Effect of Naphthalene-1,8-dicarboximides in High Performance Perovskite Solar Cells. Advanced Materials, 2021, 33, e2008405.	21.0	116
36	A Strategy to Produce High Efficiency, High Stability Perovskite Solar Cells Using Functionalized Ionic Liquid Dopants. Advanced Materials, 2017, 29, 1702157.	21.0	115

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37	PbI ₂ •HMPA Complex Pretreatment for Highly Reproducible and Efficient CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 14380-14387.	13.7	107
38	Donor•Acceptor Type Porphyrin Derivatives Assisted Defect Passivation for Efficient Hybrid Perovskite Solar Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2007762.	14.9	106
39	Degradation mechanisms of perovskite solar cells under vacuum and one atmosphere of nitrogen. <i>Nature Energy</i> , 2021, 6, 977-986.	39.5	103
40	Trash into Treasure: FAPbI ₃ Polymorph Stabilized MAPbI ₃ Perovskite with Power Conversion Efficiency beyond 21%. <i>Advanced Materials</i> , 2018, 30, e1707143.	21.0	101
41	Fine-tuning the Electronic Structure of Organic Dyes for Dye-Sensitized Solar Cells. <i>Organic Letters</i> , 2012, 14, 4330-4333.	4.6	95
42	Molecularly Engineered Phthalocyanines as Hole-Transporting Materials in Perovskite Solar Cells Reaching Power Conversion Efficiency of 17.5%. <i>Advanced Energy Materials</i> , 2017, 7, 1601733.	19.5	90
43	Dually Passivated Perovskite Solar Cells with Reduced Voltage Loss and Increased Super Oxide Resistance. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 8303-8312.	13.8	90
44	Glutathione Modified Gold Nanoparticles for Sensitive Colorimetric Detection of Pb ²⁺ Ions in Rainwater Polluted by Leaking Perovskite Solar Cells. <i>Analytical Chemistry</i> , 2016, 88, 12316-12322.	6.5	86
45	Donor•donor type hole transporting materials: marked bridge effects on optoelectronic properties, solid-state structure, and perovskite solar cell efficiency. <i>Chemical Science</i> , 2016, 7, 6068-6075.	7.4	85
46	All that glitters is not gold: Recent progress of alternative counter electrodes for perovskite solar cells. <i>Nano Energy</i> , 2018, 52, 211-238.	16.0	85
47	A Novel Oligomer as a Hole Transporting Material for Efficient Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1400980.	19.5	80
48	Ligand Engineering for the Efficient Dye-Sensitized Solar Cells with Ruthenium Sensitizers and Cobalt Electrolytes. <i>Inorganic Chemistry</i> , 2016, 55, 6653-6659.	4.0	80
49	A highly hindered bithiophene-functionalized dispiro-oxepine derivative as an efficient hole transporting material for perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 18259-18264.	10.3	78
50	Perovskite-Based Tandem Solar Cells: Get the Most Out of the Sun. <i>Advanced Functional Materials</i> , 2020, 30, 2001904.	14.9	78
51	Intramolecular Noncovalent Interaction-Enabled Dopant-Free Hole-Transporting Materials for High-Performance Inverted Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202113749.	13.8	72
52	Fluoroaromatic Cation-Assisted Planar Junction Perovskite Solar Cells with Improved <i>v</i> OC and Stability: The Role of Fluorination Position. <i>Solar Rrl</i> , 2020, 4, 2000107.	5.8	68
53	Recent progress in organohalide lead perovskites for photovoltaic and optoelectronic applications. <i>Coordination Chemistry Reviews</i> , 2018, 373, 258-294.	18.8	67
54	Dually Passivated Perovskite Solar Cells with Reduced Voltage Loss and Increased Super Oxide Resistance. <i>Angewandte Chemie</i> , 2021, 133, 8384-8393.	2.0	66

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55	Unravel the Impact of Anchoring Groups on the Photovoltaic Performances of Diketopyrrolopyrrole Sensitizers for Dye-Sensitized Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2015, 3, 2389-2396.	6.7	65
56	A balanced cation exchange reaction toward highly uniform and pure phase FA _{1-x} MA _x PbI ₃ perovskite films. <i>Journal of Materials Chemistry A</i> , 2016, 4, 14437-14443.	10.3	64
57	Extending the Lifetime of Perovskite Solar Cells using a Perfluorinated Dopant. <i>ChemSusChem</i> , 2016, 9, 2708-2714.	6.8	62
58	High-Efficiency Perovskite Solar Cells Employing a S ₂ N ₂ -Heteropentacene-Based Hole-Transport Material. <i>ChemSusChem</i> , 2016, 9, 433-438.	6.8	61
59	Facile synthesis of a bulky BPTPA donor group suitable for cobalt electrolyte based dye sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2013, 1, 5535.	10.3	58
60	Rear Interface Engineering to Suppress Migration of Iodide Ions for Efficient Perovskite Solar Cells with Minimized Hysteresis. <i>Advanced Functional Materials</i> , 2022, 32, 2107823.	14.9	57
61	Miscellaneous and Pespicious: Hybrid Halide Perovskite Materials Based Photodetectors and Sensors. <i>Advanced Optical Materials</i> , 2020, 8, 2001095.	7.3	46
62	Molecular Engineering of 2-Quinolinone Based Anchoring Groups for Dye-Sensitized Solar Cells. <i>Journal of Physical Chemistry C</i> , 2014, 118, 16896-16903.	3.1	41
63	Finding junction partners for CsPbI ₃ in a two-terminal tandem solar cell: A theoretical prospect. <i>Nano Energy</i> , 2020, 75, 104866.	16.0	39
64	Interfacial and structural modifications in perovskite solar cells. <i>Nanoscale</i> , 2020, 12, 5719-5745.	5.6	39
65	An efficient perovskite solar cell with symmetrical Zn(ii) phthalocyanine infiltrated buffering porous Al ₂ O ₃ as the hybrid interfacial hole-transporting layer. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 27083-27089.	2.8	38
66	Highly Efficient Perovskite Solar Cells Employing an Easily Attainable Bifluorenylidene-Based Hole-Transporting Material. <i>Angewandte Chemie</i> , 2016, 128, 7590-7594.	2.0	37
67	Low-Cost Perovskite Solar Cells Employing Dimethoxydiphenylamine-Substituted Bistricyclic Aromatic Enes as Hole Transport Materials. <i>ChemSusChem</i> , 2017, 10, 3825-3832.	6.8	37
68	A dual-functional asymmetric squaraine-based low band gap hole transporting material for efficient perovskite solar cells. <i>Nanoscale</i> , 2016, 8, 6335-6340.	5.6	32
69	Lewis-base containing spiro type hole transporting materials for high-performance perovskite solar cells with efficiency approaching 20%. <i>Nanoscale</i> , 2020, 12, 13157-13164.	5.6	30
70	Surface Polarity Regulation by Relieving Fermi-Level Pinning with Naphthalocyanine Tetraimides toward Efficient Perovskite Solar Cells with Improved Photostability. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	30
71	In-situ peptization of WO ₃ in alkaline SnO ₂ colloid for stable perovskite solar cells with record fill-factor approaching the shockley-queisser limit. <i>Nano Energy</i> , 2022, 100, 107468.	16.0	29
72	NdCl ₃ Dose as a Universal Approach for High-Efficiency Perovskite Solar Cells Based on Low-Temperature-Processed SnO _x . <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46306-46316.	8.0	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?. <i>Journal of Energy Chemistry</i> , 2022, 64, 179-189.	12.9	28
74	Self-assembled donor-acceptor hole contacts for inverted perovskite solar cells with an efficiency approaching 22%: The impact of anchoring groups. <i>Journal of Energy Chemistry</i> , 2022, 68, 87-95.	12.9	28
75	Microribbon Field-Effect Transistors Based on Dithieno[2,3-d;2,3-d']benzo[1,2-b;4,5-b']dithiophene Processed by Solvent Vapor Diffusion. <i>Chemistry of Materials</i> , 2011, 23, 4960-4964.	6.7	27
76	Fused Dithienopicenocarbazole Enabling High Mobility Dopant-Free Hole-Transporting Polymers for Efficient and Stable Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6688-6698.	8.0	26
77	Development of electron and hole selective contact materials for perovskite solar cells. <i>Chinese Chemical Letters</i> , 2017, 28, 1144-1152.	9.0	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%. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3409-3417.	10.3	19
79	Organic dyes containing fused acenes as building blocks: Optical, electrochemical and photovoltaic properties. <i>Chinese Chemical Letters</i> , 2018, 29, 289-292.	9.0	18
80	Phenanthrene-based hole transport material for efficient dopant-free perovskite solar cells. <i>Organic Electronics</i> , 2019, 65, 135-140.	2.6	18
81	Electron-deficient 4-nitrophthalonitrile passivated efficient perovskite solar cells with efficiency exceeding 22%. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2347-2353.	4.9	18
82	Intramolecular Noncovalent Interaction-Enabled Dopant-Free Hole-Transporting Materials for High-Performance Inverted Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	18
83	Hexagonal mesoporous silica islands to enhance photovoltaic performance of planar junction perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 1415-1420.	10.3	17
84	Zero-dimensional hybrid iodobismuthate derivatives: from structure study to photovoltaic application. <i>Dalton Transactions</i> , 2020, 49, 5815-5822.	3.3	17
85	Dithieno[2,3-d;2,3-d']benzo[1,2-b;4,5-b']dithiophene based organic sensitizers for dye-sensitized solar cells. <i>RSC Advances</i> , 2014, 4, 54130-54133.	3.6	16
86	Unraveling the Dual Character of Sulfur Atoms on Sensitizers in Dye-Sensitized Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26827-26833.	8.0	16
87	Enhanced photovoltage and stability of perovskite photovoltaics enabled by a cyclohexylmethylammonium iodide-based 2D perovskite passivation layer. <i>Nanoscale</i> , 2021, 13, 14915-14924.	5.6	16
88	F-containing cations improve the performance of perovskite solar cells. <i>Journal of Semiconductors</i> , 2022, 43, 010202.	3.7	12
89	Passivating defects via 4-cyanobenzenaminium iodide enables 22.44% efficiency perovskite solar cells. <i>Electrochimica Acta</i> , 2022, 413, 140172.	5.2	12
90	A facile gas-driven ink spray (GDIS) deposition strategy toward hole-conductor-free carbon-based perovskite solar cells. <i>Emergent Materials</i> , 2022, 5, 967-975.	5.7	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.	8.0	11
92	Impact of strength and size of donors on the optoelectronic properties of Dâ€™â€™A sensitizers. RSC Advances, 2016, 6, 37347-37361.	3.6	10
93	Accelerated design of photovoltaic Ruddlesdenâ€™â€™opper perovskite Ca6Sn4S14â€™â€™ using machine learning. APL Materials, 2020, 8, .	5.1	9
94	Core Fusion Engineering of Hole-Transporting Materials for Efficient Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 1250-1258.	5.1	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.	8.0	9
96	Molecular Engineering of Functional Materials for Energy and Opto-Electronic Applications. Chimia, 2015, 69, 253.	0.6	8
97	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
98	Enhanced Performance of Perovskite Solar Cells Loaded with Iodine-Rich CsPb₃ Quantum Dots. ACS Applied Energy Materials, 2021, 4, 7535-7543.	5.1	8
99	CsPbBr3 perovskite based tandem device for CO2 photoreduction. Chemical Engineering Journal, 2022, 443, 136447.	12.7	8
100	Double Dâ€™â€™A Dye Linked by 2,2â€™â€™Bipyridine Dicarboxylic Acid: Influence of <i>paraâ€™â€™</i> and <i>metaâ€™â€™</i>Substituted Carboxyl Anchoring Group. ChemPhysChem, 2015, 16, 1035-1041.	2.1	6
101	Gold-Based Double Perovskite-Related Polymorphs: Low Dimensional with an Ultranarrow Bandgap. Chemistry of Materials, 2022, 34, 1544-1553.	6.7	6
102	Atomic Permutation toward New Ruddlesdenâ€™â€™opper Two-Dimensional Perovskite with the Smallest Interlayer Spacing. Journal of Physical Chemistry C, 2022, 126, 8268-8277.	3.1	6
103	The Impact of Pbl 2 :KI Alloys on the Performance of Sequentially Deposited Perovskite Solar Cells. European Journal of Inorganic Chemistry, 2021, 2021, 821-830.	2.0	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.	4.3	5
105	Impact of Iâ€™â€™ Spacers on the Optical, Electrochemical and Photovoltaic performance of Dâ€™â€™A 2 Based Sensitizers. ChemistrySelect, 2018, 3, 5269-5276.	1.5	4
106	Chemistry of Sensitizers for Dye-sensitized Solar Cells. RSC Energy and Environment Series, 2014, , 186-241.	0.5	3
107	Graphene and carbon nanotube-based solar cells. , 2019, , 603-660.		2