

Yabing Qi

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4730333/yabing-qi-publications-by-citations.pdf>

Version: 2024-04-26

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.

183
papers

12,639
citations

63
h-index

109
g-index

195
ext. papers

15,476
ext. citations

12.1
avg, IF

7.23
L-index

#	Paper	IF	Citations
183	Thermodynamically stabilized FCSpBi -based perovskite solar cells with efficiencies $>18\%$. <i>Science</i> , 2019 , 365, 591-595	33.3	644
182	Lithium-ion batteries: outlook on present, future, and hybridized technologies. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 2942-2964	13	579
181	Silver Iodide Formation in Methyl Ammonium Lead Iodide Perovskite Solar Cells with Silver Top Electrodes. <i>Advanced Materials Interfaces</i> , 2015 , 2, 1500195	4.6	500
180	Thermal degradation of $\text{CH}_3\text{NH}_3\text{PbI}_3$ perovskite into NH_3 and CH_3I gases observed by coupled thermogravimetry-mass spectrometry analysis. <i>Energy and Environmental Science</i> , 2016 , 9, 3406-3410	35.4	468
179	Accelerated degradation of methylammonium lead iodide perovskites induced by exposure to iodine vapour. <i>Nature Energy</i> , 2017 , 2,	62.3	361
178	Progress on Perovskite Materials and Solar Cells with Mixed Cations and Halide Anions. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 30197-30246	9.5	339
177	Air-Exposure Induced Dopant Redistribution and Energy Level Shifts in Spin-Coated Spiro-MeOTAD Films. <i>Chemistry of Materials</i> , 2015 , 27, 562-569	9.6	289
176	Highly stable and efficient all-inorganic lead-free perovskite solar cells with native-oxide passivation. <i>Nature Communications</i> , 2019 , 10, 16	17.4	283
175	Photodecomposition and thermal decomposition in methylammonium halide lead perovskites and inferred design principles to increase photovoltaic device stability. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 9604-9612	13	276
174	High performance perovskite solar cells by hybrid chemical vapor deposition. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 18742-18745	13	233
173	Recent Advances in Spiro-MeOTAD Hole Transport Material and Its Applications in Organic-Inorganic Halide Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1700623	4.6	229
172	Enhancing Optical, Electronic, Crystalline, and Morphological Properties of Cesium Lead Halide by Mn Substitution for High-Stability All-Inorganic Perovskite Solar Cells with Carbon Electrodes. <i>Advanced Energy Materials</i> , 2018 , 8, 1800504	21.8	221
171	Influence of Air Annealing on High Efficiency Planar Structure Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2015 , 27, 1597-1603	9.6	212
170	Fabrication of semi-transparent perovskite films with centimeter-scale superior uniformity by the hybrid deposition method. <i>Energy and Environmental Science</i> , 2014 , 7, 3989-3993	35.4	193
169	Universal energy level tailoring of self-organized hole extraction layers in organic solar cells and organic-inorganic hybrid perovskite solar cells. <i>Energy and Environmental Science</i> , 2016 , 9, 932-939	35.4	192
168	Reduction of lead leakage from damaged lead halide perovskite solar modules using self-healing polymer-based encapsulation. <i>Nature Energy</i> , 2019 , 4, 585-593	62.3	191
167	Organometal halide perovskite thin films and solar cells by vapor deposition. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 6693-6713	13	177

166	Advances and challenges to the commercialization of organic/inorganic halide perovskite solar cell technology. <i>Materials Today Energy</i> , 2018 , 7, 169-189	7	172
165	Reducing Detrimental Defects for High-Performance Metal Halide Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 6676-6698	16.4	171
164	Surface and Interface Aspects of Organometal Halide Perovskite Materials and Solar Cells. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 4764-4794	6.4	147
163	Energy Level Alignment at Interfaces in Metal Halide Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2018 , 5, 1800260	4.6	147
162	A holistic approach to interface stabilization for efficient perovskite solar modules with over 2,000-hour operational stability. <i>Nature Energy</i> , 2020 , 5, 596-604	62.3	140
161	Large formamidinium lead trihalide perovskite solar cells using chemical vapor deposition with high reproducibility and tunable chlorine concentrations. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 16097-16103	10.3	139
160	n-Doping of organic electronic materials using air-stable organometallics. <i>Advanced Materials</i> , 2012 , 24, 699-703	24	138
159	Chemical vapor deposition grown formamidinium perovskite solar modules with high steady state power and thermal stability. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 13125-13132	13	138
158	Role of the Dopants on the Morphological and Transport Properties of Spiro-MeOTAD Hole Transport Layer. <i>Chemistry of Materials</i> , 2016 , 28, 5702-5709	9.6	134
157	Progress toward Stable Lead Halide Perovskite Solar Cells. <i>Joule</i> , 2018 , 2, 1961-1990	27.8	132
156	Real-Space Imaging of the Atomic Structure of Organic-Inorganic Perovskite. <i>Journal of the American Chemical Society</i> , 2015 , 137, 16049-54	16.4	131
155	Flexible and stable high-energy lithium-sulfur full batteries with only 100% oversized lithium. <i>Nature Communications</i> , 2018 , 9, 4480	17.4	129
154	Combination of Hybrid CVD and Cation Exchange for Upscaling Cs-Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability. <i>Advanced Functional Materials</i> , 2018 , 28, 1703835	15.6	126
153	Highly Efficient Perovskite Solar Cells Enabled by Multiple Ligand Passivation. <i>Advanced Energy Materials</i> , 2020 , 10, 1903696	21.8	119
152	Highly Efficient and Stable Perovskite Solar Cells via Modification of Energy Levels at the Perovskite/Carbon Electrode Interface. <i>Advanced Materials</i> , 2019 , 31, e1804284	24	116
151	Ultrahigh mobility and efficient charge injection in monolayer organic thin-film transistors on boron nitride. <i>Science Advances</i> , 2017 , 3, e1701186	14.3	115
150	Lead halide-templated crystallization of methylamine-free perovskite for efficient photovoltaic modules. <i>Science</i> , 2021 , 372, 1327-1332	33.3	113
149	Phase transition induced recrystallization and low surface potential barrier leading to 10.91%-efficient CsPbBr ₃ perovskite solar cells. <i>Nano Energy</i> , 2019 , 65, 104015	17.1	111

148	Scalable Fabrication of Metal Halide Perovskite Solar Cells and Modules. <i>ACS Energy Letters</i> , 2019 , 4, 2147-2167	20.1	110
147	The Influence of Film Morphology in High-Mobility Small-Molecule:Polymer Blend Organic Transistors. <i>Advanced Functional Materials</i> , 2010 , 20, 2330-2337	15.6	110
146	Post-annealing of MAPbI ₃ perovskite films with methylamine for efficient perovskite solar cells. <i>Materials Horizons</i> , 2016 , 3, 548-555	14.4	109
145	Smooth perovskite thin films and efficient perovskite solar cells prepared by the hybrid deposition method. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 14631-14641	13	108
144	Temperature-dependent hysteresis effects in perovskite-based solar cells. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 9074-9080	13	105
143	Pinhole-free hole transport layers significantly improve the stability of MAPbI ₃ -based perovskite solar cells under operating conditions. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 15451-15456	13	101
142	Substantial improvement of perovskite solar cells stability by pinhole-free hole transport layer with doping engineering. <i>Scientific Reports</i> , 2015 , 5, 9863	4.9	101
141	Improved Efficiency and Stability of Perovskite Solar Cells Induced by C=O Functionalized Hydrophobic Ammonium-Based Additives. <i>Advanced Materials</i> , 2018 , 30, 1703670	24	100
140	Rapid perovskite formation by CH ₃ NH ₂ gas-induced intercalation and reaction of PbI ₂ . <i>Journal of Materials Chemistry A</i> , 2016 , 4, 2494-2500	13	98
139	Modification of gold source and drain electrodes by self-assembled monolayer in staggered n- and p-channel organic thin film transistors. <i>Organic Electronics</i> , 2010 , 11, 227-237	3.5	96
138	Properties and solar cell applications of Pb-free perovskite films formed by vapor deposition. <i>RSC Advances</i> , 2016 , 6, 2819-2825	3.7	93
137	Moisture and Oxygen Enhance Conductivity of LiTFSI-Doped Spiro-MeOTAD Hole Transport Layer in Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600117	4.6	88
136	Methylammonium Lead Bromide Perovskite Light-Emitting Diodes by Chemical Vapor Deposition. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3193-3198	6.4	85
135	Scalable Fabrication of Stable High Efficiency Perovskite Solar Cells and Modules Utilizing Room Temperature Sputtered SnO ₂ Electron Transport Layer. <i>Advanced Functional Materials</i> , 2019 , 29, 1806779	15.6	84
134	Thermal degradation of formamidinium based lead halide perovskites into sym-triazine and hydrogen cyanide observed by coupled thermogravimetry-mass spectrometry analysis. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 16912-16919	13	83
133	Perovskite Solar Cells Towards Commercialization. <i>ACS Energy Letters</i> , 2017 , 2, 1749-1751	20.1	82
132	Gas-solid reaction based over one-micrometer thick stable perovskite films for efficient solar cells and modules. <i>Nature Communications</i> , 2018 , 9, 3880	17.4	82
131	Air-Exposure-Induced Gas-Molecule Incorporation into Spiro-MeOTAD Films. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 1374-9	6.4	81

130	Use of a high electron-affinity molybdenum dithiolene complex to p-dope hole-transport layers. <i>Journal of the American Chemical Society</i> , 2009 , 131, 12530-1	16.4	81
129	The Main Progress of Perovskite Solar Cells in 2020-2021. <i>Nano-Micro Letters</i> , 2021 , 13, 152	19.5	78
128	Accelerating hole extraction by inserting 2D Ti3C2-MXene interlayer to all inorganic perovskite solar cells with long-term stability. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20597-20603	13	77
127	Interfacial Modification of Perovskite Solar Cells Using an Ultrathin MAI Layer Leads to Enhanced Energy Level Alignment, Efficiencies, and Reproducibility. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 3947-3953	6.4	76
126	Solution doping of organic semiconductors using air-stable n-dopants. <i>Applied Physics Letters</i> , 2012 , 100, 083305	3.4	76
125	Unraveling the Impact of Halide Mixing on Perovskite Stability. <i>Journal of the American Chemical Society</i> , 2019 , 141, 3515-3523	16.4	71
124	Hybrid chemical vapor deposition enables scalable and stable Cs-FA mixed cation perovskite solar modules with a designated area of 91.8 cm ² approaching 10% efficiency. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 6920-6929	13	69
123	Improved SnO ₂ Electron Transport Layers Solution-Deposited at Near Room Temperature for Rigid or Flexible Perovskite Solar Cells with High Efficiencies. <i>Advanced Energy Materials</i> , 2019 , 9, 1900834	21.8	67
122	Fully Solution-Processed TCO-Free Semitransparent Perovskite Solar Cells for Tandem and Flexible Applications. <i>Advanced Energy Materials</i> , 2018 , 8, 1701569	21.8	67
121	Slot-die coating large-area formamidinium-cesium perovskite film for efficient and stable parallel solar module. <i>Science Advances</i> , 2021 , 7,	14.3	66
120	A Molybdenum Dithiolene Complex as p-Dopant for Hole-Transport Materials: A Multitechnique Experimental and Theoretical Investigation. <i>Chemistry of Materials</i> , 2010 , 22, 524-531	9.6	60
119	Electronic contribution to friction on GaAs: An atomic force microscope study. <i>Physical Review B</i> , 2008 , 77,	3.3	60
118	Mechanical and charge transport properties of alkanethiol self-assembled monolayers on a au(111) surface: the role of molecular tilt. <i>Langmuir</i> , 2008 , 24, 2219-23	4	55
117	Interface engineering strategies towards Cs ₂ AgBiBr ₆ single-crystalline photodetectors with good Ohmic contact behaviours. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 276-284	7.1	53
116	Progress of Surface Science Studies on ABX ₃ -Based Metal Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 1902726	21.8	51
115	Engineering Interface Structure to Improve Efficiency and Stability of Organometal Halide Perovskite Solar Cells. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 511-520	3.4	48
114	Charge transport across metal/molecular (alkyl) monolayer-Si junctions is dominated by the LUMO level. <i>Physical Review B</i> , 2012 , 85,	3.3	48
113	Negligible-Pb-Waste and Upscalable Perovskite Deposition Technology for High-Operational-Stability Perovskite Solar Modules. <i>Advanced Energy Materials</i> , 2019 , 9, 1803047	21.8	48

112	High Efficient Hole Extraction and Stable All-Bromide Inorganic Perovskite Solar Cells via Derivative-Phase Gradient Bandgap Architecture. <i>Solar Rrl</i> , 2019 , 3, 1900030	7.1	47
111	Research progress on organic/inorganic halide perovskite materials and solar cells. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 093001	3	46
110	Scanning Probe Microscopy Applied to Organic/Inorganic Halide Perovskite Materials and Solar Cells. <i>Small Methods</i> , 2018 , 2, 1700295	12.8	46
109	Transferrable optimization of spray-coated PbI ₂ films for perovskite solar cell fabrication. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 5709-5718	13	45
108	Filled and empty states of alkanethiol monolayer on Au (111): Fermi level asymmetry and implications for electron transport. <i>Chemical Physics Letters</i> , 2011 , 511, 344-347	2.5	44
107	How far are we from attaining 10-year lifetime for metal halide perovskite solar cells?. <i>Materials Science and Engineering Reports</i> , 2020 , 140, 100545	30.9	43
106	Low-Cost Alternative High-Performance Hole-Transport Material for Perovskite Solar Cells and Its Comparative Study with Conventional SPIRO-OMeTAD. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700139	6.4	43
105	Surface Species Formed by the Adsorption and Dissociation of Water Molecules on a Ru(0001) Surface Containing a Small Coverage of Carbon Atoms Studied by Scanning Tunneling Microscopy. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 7445-7454	3.8	43
104	Carbon-Based Electrode Engineering Boosts the Efficiency of All Low-Temperature-Processed Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2019 , 4, 2032-2039	20.1	42
103	Hybrid Heterocycle-Containing Electron-Transport Materials Synthesized by Regioselective Suzuki Cross-Coupling Reactions for Highly Efficient Phosphorescent OLEDs with Unprecedented Low Operating Voltage. <i>Chemistry of Materials</i> , 2012 , 24, 3817-3827	9.6	41
102	The presence of CH ₃ NH ₂ neutral species in organometal halide perovskite films. <i>Applied Physics Letters</i> , 2016 , 108, 073901	3.4	40
101	Influence of carrier density on the friction properties of silicon pn junctions. <i>Physical Review B</i> , 2007 , 76,	3.3	39
100	Application of Methylamine Gas in Fabricating Organic/Inorganic Hybrid Perovskite Solar Cells. <i>Energy Technology</i> , 2017 , 5, 1750-1761	3.5	38
99	Silicon surface passivation by an organic overlayer of 9,10-phenanthrenequinone. <i>Applied Physics Letters</i> , 2010 , 96, 222109	3.4	37
98	Flat-lying semiconductor-insulator interfacial layer in DNTT thin films. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 1833-40	9.5	36
97	Long-life lithium-sulfur batteries with high areal capacity based on coaxial CNTs@TiN-TiO sponge. <i>Nature Communications</i> , 2021 , 12, 4738	17.4	36
96	Advances and Obstacles on Perovskite Solar Cell Research from Material Properties to Photovoltaic Function. <i>ACS Energy Letters</i> , 2017 , 2, 520-523	20.1	35
95	Degradation Mechanism and Relative Stability of Methylammonium Halide Based Perovskites Analyzed on the Basis of Acid-Base Theory. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 12586-12593	9.5	35

94	Hexaazatriphenylene (HAT) versus tri-HAT: the bigger the better?. <i>Chemistry - A European Journal</i> , 2011 , 17, 10312-22	4.8	34
93	Scalable solution coating of the absorber for perovskite solar cells. <i>Journal of Energy Chemistry</i> , 2018 , 27, 1101-1110	12	33
92	Electrical transport properties of oligothiophene-based molecular films studied by current sensing atomic force microscopy. <i>Nano Letters</i> , 2011 , 11, 4107-12	11.5	33
91	Remote doping of a pentacene transistor: Control of charge transfer by molecular-level engineering. <i>Applied Physics Letters</i> , 2010 , 97, 123305	3.4	33
90	Recent Progress of All-Bromide Inorganic Perovskite Solar Cells. <i>Energy Technology</i> , 2020 , 8, 1900961	3.5	33
89	Scalable Fabrication of >90 cm ² Perovskite Solar Modules with >1000 h Operational Stability Based on the Intermediate Phase Strategy. <i>Advanced Energy Materials</i> , 2021 , 11, 2003712	21.8	33
88	Surface Defect Dynamics in Organic-Inorganic Hybrid Perovskites: From Mechanism to Interfacial Properties. <i>ACS Nano</i> , 2019 , 13, 12127-12136	16.7	32
87	Additives in metal halide perovskite films and their applications in solar cells. <i>Journal of Energy Chemistry</i> , 2020 , 46, 215-228	12	32
86	Spin-Coated Crystalline Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 1318-1323	6.4	31
85	Transamidation of dimethylformamide during alkylammonium lead triiodide film formation for perovskite solar cells. <i>Journal of Materials Research</i> , 2017 , 32, 45-55	2.5	31
84	Influences of geometry of particles on electrorheological fluids. <i>Journal Physics D: Applied Physics</i> , 2002 , 35, 2231-2235	3	29
83	Fabrication of efficient metal halide perovskite solar cells by vacuum thermal evaporation: A progress review. <i>Current Opinion in Electrochemistry</i> , 2018 , 11, 130-140	7.2	28
82	Atomic-scale view of stability and degradation of single-crystal MAPbBr ₃ surfaces. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20760-20766	13	27
81	The Effect of Impurities on the Impedance Spectroscopy Response of CH ₃ NH ₃ PbI ₃ Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 28519-28526	3.8	27
80	Efficient Anti-solvent-free Spin-Coated and Printed Sn-Perovskite Solar Cells with Crystal-Based Precursor Solutions. <i>Matter</i> , 2020 , 2, 167-180	12.7	26
79	2D materials for conducting holes from grain boundaries in perovskite solar cells. <i>Light: Science and Applications</i> , 2021 , 10, 68	16.7	26
78	Measurement of high carrier mobility in graphene in an aqueous electrolyte environment. <i>Applied Physics Letters</i> , 2016 , 109, 093104	3.4	25
77	Dopant interdiffusion effects in n-i-p structured spiro-OMeTAD hole transport layer of organometal halide perovskite solar cells. <i>Organic Electronics</i> , 2016 , 31, 71-76	3.5	24

76	Mixed interlayers at the interface between PEDOT:PSS and conjugated polymers provide charge transport control. <i>Journal of Materials Chemistry C</i> , 2015 , 3, 2664-2676	7.1	23
75	Electrical transport and mechanical properties of alkylsilane self-assembled monolayers on silicon surfaces probed by atomic force microscopy. <i>Journal of Chemical Physics</i> , 2009 , 130, 114705	3.9	22
74	Transition metal speciation as a degradation mechanism with the formation of a solid-electrolyte interphase (SEI) in Ni-rich transition metal oxide cathodes. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 14449-14463	13.1	23
73	Inverse Growth of Large-Grain-Size and Stable Inorganic Perovskite Micronanowire Photodetectors. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 14185-14194	9.5	21
72	Imaging of the Atomic Structure of All-Inorganic Halide Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 818-823	6.4	21
71	High-throughput surface preparation for flexible slot die coated perovskite solar cells. <i>Organic Electronics</i> , 2018 , 54, 72-79	3.5	21
70	Two-Dimensional Dion-Jacobson Structure Perovskites for Efficient Sky-Blue Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2021 , 6, 908-914	20.1	21
69	Electrical and optical properties of transparent flexible electrodes: Effects of UV ozone and oxygen plasma treatments. <i>Organic Electronics</i> , 2014 , 15, 721-728	3.5	20
68	Investigation of organic films by atomic force microscopy: Structural, nanotribological and electrical properties. <i>Surface Science Reports</i> , 2011 , 66, 379-393	12.9	19
67	Soluble fullerene derivatives: The effect of electronic structure on transistor performance and air stability. <i>Journal of Applied Physics</i> , 2011 , 110, 014506	2.5	18
66	Engineering Green-to-Blue Emitting CsPbBr ₃ Quantum-Dot Films with Efficient Ligand Passivation. <i>ACS Energy Letters</i> , 2019 , 4, 2731-2738	20.1	17
65	Rapid hybrid chemical vapor deposition for efficient and hysteresis-free perovskite solar modules with an operation lifetime exceeding 800 hours. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 23404-23412	13	17
64	Benchmarking Chemical Stability of Arbitrarily Mixed 3D Hybrid Halide Perovskites for Solar Cell Applications. <i>Small Methods</i> , 2018 , 2, 1800242	12.8	16
63	Influence of molecular ordering on electrical and friction properties of Γ (trans-4-stilbene)alkylthiol self-assembled monolayers on Au(111). <i>Langmuir</i> , 2010 , 26, 16522-8	4	16
62	Removal of residual compositions by powder engineering for high efficiency formamidinium-based perovskite solar cells with operation lifetime over 2000h. <i>Nano Energy</i> , 2021 , 87, 106152	17.1	16
61	Organic additive engineering toward efficient perovskite light-emitting diodes. <i>Informa Materilly</i> , 2020 , 2, 1095-1108	23.1	15
60	Interfacial Flat-Lying Molecular Monolayers for Performance Enhancement in Organic Field-Effect Transistors. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 22513-22519	9.5	14
59	The influence of secondary solvents on the morphology of a spiro-MeOTAD hole transport layer for lead halide perovskite solar cells. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 294001	3	14

58	CsPbBr _{1-3-x} thin films with multiple ammonium ligands for low turn-on pure-red perovskite light-emitting diodes. <i>Nano Research</i> , 2021 , 14, 191-197	10	14
57	Photon Upconverting Solid Films with Improved Efficiency for Endowing Perovskite Solar Cells with Near-Infrared Sensitivity. <i>ChemPhotoChem</i> , 2020 , 4, 5271-5278	3.3	14
56	In-situ passivation perovskite targeting efficient light-emitting diodes via spontaneously formed silica network. <i>Nano Energy</i> , 2020 , 78, 105134	17.1	14
55	Stacked-graphene layers as engineered solid-electrolyte interphase (SEI) grown by chemical vapour deposition for lithium-ion batteries. <i>Carbon</i> , 2018 , 132, 678-690	10.4	13
54	Significant THz absorption in CHNH molecular defect-incorporated organic-inorganic hybrid perovskite thin film. <i>Scientific Reports</i> , 2019 , 9, 5811	4.9	12
53	Electronic structure and band alignment of 9,10-phenanthrenequinone passivated silicon surfaces. <i>Surface Science</i> , 2011 , 605, 1308-1312	1.8	12
52	Anisotropy properties of magnetic colloidal materials. <i>Journal Physics D: Applied Physics</i> , 2003 , 36, L10-L14	1.4	12
51	Atomic-scale insight into the enhanced surface stability of methylammonium lead iodide perovskite by controlled deposition of lead chloride. <i>Energy and Environmental Science</i> ,	35.4	11
50	Elucidating the Mechanism Involved in the Performance Improvement of Lithium-Ion Transition Metal Oxide Battery by Conducting Polymer. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1801785	4.6	10
49	2D Derivative Phase Induced Growth of 3D All Inorganic Perovskite Micro/Nanowire Array Based Photodetectors. <i>Advanced Functional Materials</i> , 2020 , 30, 2002526	15.6	10
48	Up-Scalable Fabrication of SnO with Multifunctional Interface for High Performance Perovskite Solar Modules. <i>Nano-Micro Letters</i> , 2021 , 13, 155	19.5	10
47	Probing nanotribological and electrical properties of organic molecular films with atomic force microscopy. <i>Scanning</i> , 2010 , 32, 257-64	1.6	9
46	Heterogeneous FASnI Absorber with Enhanced Electric Field for High-Performance Lead-Free Perovskite Solar Cells.. <i>Nano-Micro Letters</i> , 2022 , 14, 99	19.5	9
45	Perovskite solar cells by vapor deposition based and assisted methods. <i>Applied Physics Reviews</i> , 2022 , 9, 021305	17.3	9
44	Progress of All-inorganic Cesium Lead-free Perovskite Solar Cells. <i>Chemistry Letters</i> , 2019 , 48, 989-1005	1.7	8
43	The Impact of Atmosphere on Energetics of Lead Halide Perovskites. <i>Advanced Energy Materials</i> , 2020 , 10, 2000908	21.8	8
42	Relative permittivity and Hubbard U of pentacene extracted from scanning tunneling microscopy studies of p-doped films. <i>Chemical Physics Letters</i> , 2010 , 495, 212-217	2.5	7
41	Unclonable Micro-Texture with Clonable Micro-Shape towards Rapid, Convenient, and Low-Cost Fluorescent Anti-Counterfeiting Labels. <i>Small</i> , 2021 , 17, e2100244	11	7

40	Verringerung schädlicher Defekte für leistungsstarke Metallhalogenid-Perowskit-Solarzellen. <i>Angewandte Chemie</i> , 2020 , 132, 6740-6764	3.6	7
39	Narrow-Band Violet-Light-Emitting Diodes Based on Stable Cesium Lead Chloride Perovskite Nanocrystals. <i>ACS Energy Letters</i> , 3545-3554	20.1	7
38	Defect Passivation for Perovskite Solar Cells: from Molecule Design to Device Performance. <i>ChemSusChem</i> , 2021 , 14, 4354-4376	8.3	7
37	Perovskite Solar Cells: Silver Iodide Formation in Methyl Ammonium Lead Iodide Perovskite Solar Cells with Silver Top Electrodes (Adv. Mater. Interfaces 13/2015). <i>Advanced Materials Interfaces</i> , 2015 , 2,	4.6	6
36	Ultra-flat coplanar electrodes for controlled electrical contact of molecular films. <i>Review of Scientific Instruments</i> , 2011 , 82, 123901	1.7	6
35	Noncontact to contact tunneling microscopy in self-assembled monolayers of alkylthiols on gold. <i>Journal of Chemical Physics</i> , 2008 , 128, 234701	3.9	6
34	Effect of zinc doping on the microstructure in YBCO. <i>Physica C: Superconductivity and Its Applications</i> , 2000 , 341-348, 669-670	1.3	6
33	Spectral Stable Blue-Light-Emitting Diodes via Asymmetric Organic Diamine Based Dion-Jacobson Perovskites. <i>Journal of the American Chemical Society</i> , 2021 , 143, 19711-19718	16.4	6
32	Surface Termination-Dependent Nanotribological Properties of Single-Crystal MAPbBr ₃ Surfaces. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 1484-1491	3.8	6
31	Strategies and methods for fabricating high quality metal halide perovskite thin films for solar cells. <i>Journal of Energy Chemistry</i> , 2021 , 60, 300-333	12	6
30	Heat Wave of Metal Halide Perovskite Solar Cells Continues in Phoenix. <i>ACS Energy Letters</i> , 2018 , 3, 1898-1903	20.1	5
29	Observation of chemical separation of In ₃ Sb ₁ Te ₂ thin film during phase transition. <i>Applied Surface Science</i> , 2014 , 292, 986-989	6.7	5
28	Sensitivity to molecular order of the electrical conductivity in oligothiophene monolayer films. <i>Langmuir</i> , 2013 , 29, 1206-10	4	5
27	Band gaps from ring resonators and structural periodicity. <i>Journal Physics D: Applied Physics</i> , 2005 , 38, 590-595	3	5
26	Phase Aggregation Suppression of Homogeneous Perovskites Processed in Ambient Condition toward Efficient Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2021 , 31, 2103399	15.6	5
25	Recent Progress on Metal Halide Perovskite Solar Minimodules. <i>Solar Rrl</i> , 2100458	7.1	5
24	Recent Progress on All-Inorganic Metal Halide Perovskite Solar Cells. <i>Materials Today Nano</i> , 2021 , 1001437	3.7	5
23	A redox shuttle imparts operational durability to perovskite solar cells. <i>Science Bulletin</i> , 2019 , 64, 224-226	6.6	4

22	Reliability improvement of bulk-heterojunction organic solar cell by using reduced graphene oxide as hole-transport layer. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2014 , 211, 1873-1876	1.6	4
21	Large changes of graphene conductance as a function of lattice orientation between stacked layers. <i>Nanotechnology</i> , 2015 , 26, 015702	3.4	4
20	Frequency-controlled interaction between magnetic microspheres. <i>Applied Physics Letters</i> , 2006 , 88, 134107	3.4	4
19	Metal halide perovskite solar cells by modified chemical vapor deposition. <i>Journal of Materials Chemistry A</i> ,	13	4
18	Atomic Scale Investigation of the CuPc-MAPbX Interface and the Effect of Non-Stoichiometric Perovskite Films on Interfacial Structures. <i>ACS Nano</i> , 2021 , 15, 14813-14821	16.7	4
17	Large-Area Perovskite Solar Modules: Combination of Hybrid CVD and Cation Exchange for Upscaling Cs-Substituted Mixed Cation Perovskite Solar Cells with High Efficiency and Stability (Adv. Funct. Mater. 1/2018). <i>Advanced Functional Materials</i> , 2018 , 28, 1870007	15.6	3
16	Graphene specimen support technique for low voltage STEM imaging. <i>Journal of Electron Microscopy</i> , 2017 , 66, 261-271		3
15	[Paper] p-Doping of Squaraine with F4-TCNQ by Solution Processing. <i>ITE Transactions on Media Technology and Applications</i> , 2015 , 3, 133-142	0.7	3
14	Approaching isotropic transfer integrals in crystalline organic semiconductors. <i>Physical Review Materials</i> , 2020 , 4,	3.2	3
13	Photovoltaics: Recent Advances in Spiro-MeOTAD Hole Transport Material and Its Applications in Organic/Inorganic Halide Perovskite Solar Cells (Adv. Mater. Interfaces 1/2018). <i>Advanced Materials Interfaces</i> , 2018 , 5, 1870003	4.6	2
12	Metal halide perovskite-based flexible tandem solar cells: next-generation flexible photovoltaic technology. <i>Materials Chemistry Frontiers</i> ,	7.8	2
11	Determination of Carrier Diffusion Length Using Transient Electron Photoemission Microscopy in the GaAs/InSe Heterojunction. <i>Physica Status Solidi (B): Basic Research</i> , 2019 , 256, 1900126	1.3	1
10	Only the chemical state of Indium changes in Mn-doped In ₃ Sb ₁ Te ₂ (Mn: 10 at.%) during multi-level resistance changes. <i>Scientific Reports</i> , 2014 , 4, 4702	4.9	1
9	Investigating lithium metal anodes with nonaqueous electrolytes for safe and high-performance batteries. <i>Sustainable Energy and Fuels</i> ,	5.8	1
8	Synergistic stabilization of CsPbI ₃ inorganic perovskite via 1D capping and secondary growth. <i>Journal of Energy Chemistry</i> , 2022 , 68, 387-392	12	1
7	Increase the rigidity and hydrophobicity of perovskite by a molecular design. <i>Science Bulletin</i> , 2020 , 65, 175-176	10.6	1
6	A solid-liquid hybrid electrolyte for lithium ion batteries enabled by a single-body polymer/indium tin oxide architecture. <i>Journal Physics D: Applied Physics</i> , 2021 , 54, 475501	3	1
5	Ultrathin polycrystalline 6,13-Bis(triisopropylsilylethynyl)-pentacene films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2015 , 33, 021506	2.9	

- 4 Scanning Tunneling Microscopy in Surface Science, Nanoscience and Catalysis, Michael Bowker and Philip R. Davies (Eds.). Wiley-VCH, Weinheim, 2010, 244 pages. Print ISBN 9783527319824; Online ISBN 9783527628827. *Microscopy and Microanalysis*, **2011**, 17, 132-132 0.5
- 3 Atomic Level Insights into Metal Halide Perovskite Materials by Scanning Tunneling Microscopy and Spectroscopy. *Angewandte Chemie*, **2022**, 134, e202112352 3.6
- 2 From film to ring: Quasi-circular inorganic lead halide perovskite grain induced growth of uniform lead silicate glass ring structure. *Applied Physics Letters*, **2022**, 120, 161604 3.4
- 1 Understanding the nucleation and growth of the degenerated surface structure of the layered transition metal oxide cathodes for lithium-ion batteries by operando Raman spectroscopy. *Journal of Electroanalytical Chemistry*, **2022**, 915, 116340 4.1