

# Yaoguang Rong

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/9476805/yaoguang-rong-publications-by-year.pdf>

**Version:** 2024-04-23

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.

112  
papers

9,289  
citations

41  
h-index

96  
g-index

117  
ext. papers

10,674  
ext. citations

11.1  
avg, IF

6.23  
L-index

#	Paper	IF	Citations
112	Development of formamidinium lead iodide-based perovskite solar cells: efficiency and stability.. <i>Chemical Science</i> , <b>2022</b> , 13, 2167-2183	9.4	5
111	In Situ Formation of FAPbI <sub>3</sub> at the Perovskite/Carbon Interface for Enhanced Photovoltage of Printable Mesoscopic Perovskite Solar Cells. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 728-735	9.6	6
110	Interfacial Energy Band Alignment Enables the Reduction of Potential Loss for Hole-Conductor-Free Printable Mesoscopic Perovskite Solar Cells.. <i>Journal of Physical Chemistry Letters</i> , <b>2022</b> , 2144-2149	6.4	2
109	Cl-Assisted Perovskite Crystallization Pathway in the Confined Space of Mesoporous Metal Oxides Unveiled by In Situ Grazing Incidence Wide-Angle X-ray Scattering. <i>Chemistry of Materials</i> , <b>2022</b> , 34, 2231-2237	9.6	4
108	Modeling and Balancing the Solvent Evaporation of Thermal Annealing Process for Metal Halide Perovskites and Solar Cells.. <i>Small Methods</i> , <b>2022</b> , e2200161	12.8	0
107	Printable Mesoscopic Perovskite Solar Cells <b>2021</b> , 431-452		
106	Highly oriented MAPbI <sub>3</sub> crystals for efficient hole-conductor-free printable mesoscopic perovskite solar cells. <i>Fundamental Research</i> , <b>2021</b> ,		12
105	Tailoring the Dimensionality of Hybrid Perovskites in Mesoporous Carbon Electrodes for Type-II Band Alignment and Enhanced Performance of Printable Hole-Conductor-Free Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2100292	21.8	40
104	Revealing the Role of Bifunctional Molecules in Crystallizing Methylammonium Lead Iodide through Geometric Isomers. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 4014-4022	9.6	3
103	Cellulose-Based Oxygen-Rich Activated Carbon for Printable Mesoscopic Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2021</b> , 5, 2100333	7.1	4
102	A Review on Scaling Up Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008621	15.6	54
101	Investigating the iodide and bromide ion exchange in metal halide perovskite single crystals and thin films. <i>Chemical Communications</i> , <b>2021</b> , 57, 6125-6128	5.8	1
100	Improving Hole-Conductor-Free Fully Printable Mesoscopic Perovskite Solar Cells Performance with Enhanced Open-Circuit Voltage via the Octyltrimethylammonium Chloride Additive. <i>Solar Rrl</i> , <b>2021</b> , 5, 2000825	7.1	1
99	Improving the Performance of Perovskite Solar Cells via a Novel Additive of N,1-Fluoroformamidinium Iodide with Electron-Withdrawing Fluorine Group. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2010603	15.6	17
98	Enhanced perovskite electronic properties via A-site cation engineering. <i>Fundamental Research</i> , <b>2021</b> , 1, 385-392		16
97	Designs and applications of multi-functional covalent organic frameworks in rechargeable batteries. <i>Energy Storage Materials</i> , <b>2021</b> , 41, 354-379	19.4	14
96	Aiming at the industrialization of perovskite solar cells: Coping with stability challenge. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 250503	3.4	1

95	Beyond the Phase Segregation: Probing the Irreversible Phase Reconstruction of Mixed-Halide Perovskites.. <i>Advanced Science</i> , <b>2021</b> , e2103948	13.6	7
94	A favored crystal orientation for efficient printable mesoscopic perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 11148-11154	13	21
93	Influence of precursor concentration on printable mesoscopic perovskite solar cells. <i>Frontiers of Optoelectronics</i> , <b>2020</b> , 13, 256-264	2.8	5
92	Post-Treatment of Mesoporous Scaffolds for Enhanced Photovoltage of Triple-Mesoscopic Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000185	7.1	16
91	Hole-conductor-free perovskite solar cells. <i>MRS Bulletin</i> , <b>2020</b> , 45, 449-457	3.2	3
90	Solar Cells: Crystallization Control of Ternary-Cation Perovskite Absorber in Triple-Mesoscopic Layer for Efficient Solar Cells (Adv. Energy Mater. 5/2020). <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 2070022	21.8	1
89	Efficient triple-mesoscopic perovskite solar mini-modules fabricated with slot-die coating. <i>Nano Energy</i> , <b>2020</b> , 74, 104842	17.1	34
88	transfer of CHNHPbI single crystals in mesoporous scaffolds for efficient perovskite solar cells. <i>Chemical Science</i> , <b>2020</b> , 11, 474-481	9.4	13
87	Crystallization Control of Ternary-Cation Perovskite Absorber in Triple-Mesoscopic Layer for Efficient Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1903092	21.8	47
86	Stabilizing Perovskite Solar Cells to IEC61215:2016 Standards with over 9,000-h Operational Tracking. <i>Joule</i> , <b>2020</b> , 4, 2646-2660	27.8	97
85	Mesoporous-Carbon-Based Fully-Printable All-Inorganic Monoclinic CsPbBr Perovskite Solar Cells with Ultrastability under High Temperature and High Humidity. <i>Journal of Physical Chemistry Letters</i> , <b>2020</b> , 11, 9689-9695	6.4	12
84	van der Waals Mixed Valence Tin Oxides for Perovskite Solar Cells as UV-Stable Electron Transport Materials. <i>Nano Letters</i> , <b>2020</b> , 20, 8178-8184	11.5	11
83	Multifunctional Polymer-Regulated SnO Nanocrystals Enhance Interface Contact for Efficient and Stable Planar Perovskite Solar Cells. <i>Advanced Materials</i> , <b>2020</b> , 32, e2003990	24	99
82	Effects of 5-Ammonium Valeric Acid Iodide as Additive on Methyl Ammonium Lead Iodide Perovskite Solar Cells. <i>Nanomaterials</i> , <b>2020</b> , 10,	5.4	10
81	A Review on Additives for Halide Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2020</b> , 10, 1902492	21.8	131
80	Progress in Multifunctional Molecules for Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 1900248	7.1	9
79	Crystallization Control of Methylammonium-Free Perovskite in Two-Step Deposited Printable Triple-Mesoscopic Solar Cells. <i>Solar Rrl</i> , <b>2020</b> , 4, 2000455	7.1	11
78	Standardizing Perovskite Solar Modules beyond Cells. <i>Joule</i> , <b>2019</b> , 3, 2076-2085	27.8	29

77	High performance printable perovskite solar cells based on Cs <sub>0.1</sub> FA <sub>0.9</sub> PbI <sub>3</sub> in mesoporous scaffolds. <i>Journal of Power Sources</i> , <b>2019</b> , 415, 105-111	8.9	29
76	A low-temperature carbon electrode with good perovskite compatibility and high flexibility in carbon based perovskite solar cells. <i>Chemical Communications</i> , <b>2019</b> , 55, 2765-2768	5.8	28
75	Screen printing process control for coating high throughput titanium dioxide films toward printable mesoscopic perovskite solar cells. <i>Frontiers of Optoelectronics</i> , <b>2019</b> , 12, 344-351	2.8	13
74	Modeling the edge effect for measuring the performance of mesoscopic solar cells with shading masks. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 10942-10948	13	9
73	Ethanol stabilized precursors for highly reproducible printable mesoscopic perovskite solar cells. <i>Journal of Power Sources</i> , <b>2019</b> , 424, 261-267	8.9	15
72	Encapsulation of Printable Mesoscopic Perovskite Solar Cells Enables High Temperature and Long-Term Outdoor Stability. <i>Advanced Functional Materials</i> , <b>2019</b> , 29, 1809129	15.6	75
71	Two-Stage Melt Processing of Phase-Pure Selenium for Printable Triple-Mesoscopic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 33879-33885	9.5	9
70	Amide Additives Induced a Fermi Level Shift To Improve the Performance of Hole-Conductor-Free, Printable Mesoscopic Perovskite Solar Cells. <i>Journal of Physical Chemistry Letters</i> , <b>2019</b> , 10, 6865-6872	6.4	37
69	Spacer layer design for efficient fully printable mesoscopic perovskite solar cells.. <i>RSC Advances</i> , <b>2019</b> , 9, 29840-29846	3.7	10
68	Vanadium Oxide Post-Treatment for Enhanced Photovoltage of Printable Perovskite Solar Cells. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2019</b> , 7, 2619-2625	8.3	21
67	Lead-Free DionJacobson Tin Halide Perovskites for Photovoltaics. <i>ACS Energy Letters</i> , <b>2019</b> , 4, 276-277	20.1	73
66	Improved Performance of Printable Perovskite Solar Cells with Bifunctional Conjugated Organic Molecule. <i>Advanced Materials</i> , <b>2018</b> , 30, 1705786	24	176
65	Efficient Perovskite Photovoltaic-Thermoelectric Hybrid Device. <i>Advanced Energy Materials</i> , <b>2018</b> , 8, 1702937	21.8	45
64	Mixed (5-AVA) <sub>x</sub> MA <sub>1-x</sub> PbI <sub>3</sub> (BF <sub>4</sub> ) <sub>y</sub> perovskites enhance the photovoltaic performance of hole-conductor-free printable mesoscopic solar cells. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 2360-2364	13	33
63	Efficient hole-conductor-free printable mesoscopic perovskite solar cells based on SnO <sub>2</sub> compact layer. <i>Electrochimica Acta</i> , <b>2018</b> , 263, 134-139	6.7	22
62	A Multifunctional Bis-Adduct Fullerene for Efficient Printable Mesoscopic Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 10835-10841	9.5	25
61	Printable carbon-based hole-conductor-free mesoscopic perovskite solar cells: From lab to market. <i>Materials Today Energy</i> , <b>2018</b> , 7, 221-231	7	35
60	Fully printable perovskite solar cells with highly-conductive, low-temperature, perovskite-compatible carbon electrode. <i>Carbon</i> , <b>2018</b> , 129, 830-836	10.4	53

59	A C60 Modification Layer Using a Scalable Deposition Technology for Efficient Printable Mesoscopic Perovskite Solar Cells. <i>Solar Rrl</i> , <b>2018</b> , 2, 1800174	7.1	12
58	Toward Industrial-Scale Production of Perovskite Solar Cells: Screen Printing, Slot-Die Coating, and Emerging Techniques. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 2707-2713	6.4	78
57	Oxygen management in carbon electrode for high-performance printable perovskite solar cells. <i>Nano Energy</i> , <b>2018</b> , 53, 160-167	17.1	59
56	Improvements in printable mesoscopic perovskite solar cells via thinner spacer layers. <i>Sustainable Energy and Fuels</i> , <b>2018</b> , 2, 2412-2418	5.8	10
55	Challenges for commercializing perovskite solar cells. <i>Science</i> , <b>2018</b> , 361,	33.3	853
54	Fullerene derivative as an additive for highly efficient printable mesoscopic perovskite solar cells. <i>Organic Electronics</i> , <b>2018</b> , 62, 653-659	3.5	7
53	The Influence of the Work Function of Hybrid Carbon Electrodes on Printable Mesoscopic Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 16481-16487	3.8	36
52	Stable Large-Area (10 × 10 cm <sup>2</sup> ) Printable Mesoscopic Perovskite Module Exceeding 10% Efficiency. <i>Solar Rrl</i> , <b>2017</b> , 1, 1600019	7.1	228
51	Stable monolithic hole-conductor-free perovskite solar cells using TiO <sub>2</sub> nanoparticle binding carbon films. <i>Organic Electronics</i> , <b>2017</b> , 45, 131-138	3.5	47
50	Synergy of ammonium chloride and moisture on perovskite crystallization for efficient printable mesoscopic solar cells. <i>Nature Communications</i> , <b>2017</b> , 8, 14555	17.4	234
49	Efficient hole-conductor-free, fully printable mesoscopic perovskite solar cells with carbon electrode based on ultrathin graphite. <i>Carbon</i> , <b>2017</b> , 120, 71-76	10.4	60
48	Moisture-driven phase transition for improved perovskite solar cells with reduced trap-state density. <i>Nano Research</i> , <b>2017</b> , 10, 1413-1422	10	12
47	Spacer improvement for efficient and fully printable mesoscopic perovskite solar cells. <i>RSC Advances</i> , <b>2017</b> , 7, 10118-10123	3.7	16
46	Boron-Doped Graphite for High Work Function Carbon Electrode in Printable Hole-Conductor-Free Mesoscopic Perovskite Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 31721-31727	9.5	55
45	Improvement and Regeneration of Perovskite Solar Cells via Methylamine Gas Post-Treatment. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1703060	15.6	68
44	Tunable hysteresis effect for perovskite solar cells. <i>Energy and Environmental Science</i> , <b>2017</b> , 10, 2383-2391	33.4	135
43	Effect of guanidinium on mesoscopic perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 73-78	13	119
42	Interaction of Organic Cation with Water Molecule in Perovskite MAPbI <sub>3</sub> : From Dynamic Orientational Disorder to Hydrogen Bonding. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 7385-7393	9.6	133

41	Solvent effect on the hole-conductor-free fully printable perovskite solar cells. <i>Nano Energy</i> , <b>2016</b> , 27, 130-137	17.1	113
40	Critical kinetic control of non-stoichiometric intermediate phase transformation for efficient perovskite solar cells. <i>Nanoscale</i> , <b>2016</b> , 8, 12892-9	7.7	83
39	Flexible electrode for long-life rechargeable sodium-ion batteries: effect of oxygen vacancy in MoO <sub>3</sub> . <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 5402-5405	13	71
38	Hole-Conductor-Free Fully Printable Mesoscopic Solar Cell with Mixed-Anion Perovskite CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> (BF <sub>4</sub> ) <sub>x</sub> . <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1502009	21.8	132
37	Low-temperature solution-processed p-type vanadium oxide for perovskite solar cells. <i>Chemical Communications</i> , <b>2016</b> , 52, 8099-102	5.8	55
36	Synergistic Effect of PbI <sub>2</sub> Passivation and Chlorine Inclusion Yielding High Open-Circuit Voltage Exceeding 1.15 V in Both Mesoscopic and Inverted Planar CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> (Cl)-Based Perovskite Solar Cells. <i>Advanced Functional Materials</i> , <b>2016</b> , 26, 8119-8127	15.6	77
35	Enhanced electronic properties in CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> via LiCl mixing for hole-conductor-free printable perovskite solar cells. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 16731-16736	13	72
34	Efficient Compact-Layer-Free, Hole-Conductor-Free, Fully Printable Mesoscopic Perovskite Solar Cell. <i>Journal of Physical Chemistry Letters</i> , <b>2016</b> , 7, 4142-4146	6.4	29
33	Transparent bifacial dye-sensitized solar cells based on an electrochemically polymerized organic counter electrode and an iodine-free polymer gel electrolyte. <i>Journal of Materials Science</i> , <b>2015</b> , 50, 3803-3811 <sup>11</sup>	4.3	11
32	Heavily n-Dopable π-Conjugated Redox Polymers with Ultrafast Energy Storage Capability. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 4956-9	16.4	188
31	Beyond Efficiency: the Challenge of Stability in Mesoscopic Perovskite Solar Cells. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1501066	21.8	335
30	Solvent engineering towards controlled grain growth in perovskite planar heterojunction solar cells. <i>Nanoscale</i> , <b>2015</b> , 7, 10595-9	7.7	251
29	All-solid-state Mesoscopic Solar Cells: From Dye-sensitized to Perovskite. <i>Acta Chimica Sinica</i> , <b>2015</b> , 73, 237	3.3	3
28	Highly ordered mesoporous carbon for mesoscopic CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> /TiO <sub>2</sub> heterojunction solar cell. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 8607	13	80
27	Enhancement of monobasal solid-state dye-sensitized solar cells with polymer electrolyte assembling imidazolium iodide-functionalized silica nanoparticles. <i>Journal of Power Sources</i> , <b>2014</b> , 248, 283-288	8.9	28
26	Fully printable transparent monolithic solid-state dye-sensitized solar cell with mesoscopic indium tin oxide counter electrode. <i>Physical Chemistry Chemical Physics</i> , <b>2014</b> , 16, 17743-7	3.6	9
25	Efficient monolithic quasi-solid-state dye-sensitized solar cells based on poly(ionic liquids) and carbon counter electrodes. <i>RSC Advances</i> , <b>2014</b> , 4, 9271	3.7	17
24	A hole-conductor-free, fully printable mesoscopic perovskite solar cell with high stability. <i>Science</i> , <b>2014</b> , 345, 295-8	33.3	2374

23	Hole-Conductor-Free Mesoscopic TiO <sub>2</sub> /CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> Heterojunction Solar Cells Based on Anatase Nanosheets and Carbon Counter Electrodes. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2160-4	6.4	211
22	Effect of photo-doping on performance for solid-state dye-sensitized solar cell based on 2,2',7',7'-tetrakis-(N,N-di-p-methoxyphenyl-amine)-9,9'-spirobifluorene and carbon counter electrode. <i>Electrochimica Acta</i> , <b>2013</b> , 99, 238-241	6.7	15
21	Efficient Dye-Sensitized Solar Cells with Potential-Tunable Organic Sulfide Mediators and Graphene-Modified Carbon Counter Electrodes. <i>Advanced Functional Materials</i> , <b>2013</b> , 23, 3344-3352	15.6	18
20	An efficient thiolate/disulfide redox couple based dye-sensitized solar cell with a graphene modified mesoscopic carbon counter electrode. <i>Carbon</i> , <b>2013</b> , 53, 11-18	10.4	38
19	Monolithic all-solid-state dye-sensitized solar cells. <i>Frontiers of Optoelectronics</i> , <b>2013</b> , 6, 359-372	2.8	8
18	Improvement in Solid-State Dye Sensitized Solar Cells by p-Type Doping with Lewis Acid SnCl <sub>4</sub> . <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 22492-22496	3.8	57
17	Monolithic quasi-solid-state dye-sensitized solar cells based on graphene-modified mesoscopic carbon-counter electrodes. <i>Journal of Nanophotonics</i> , <b>2013</b> , 7, 073090	1.1	24
16	Full printable processed mesoscopic CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> /TiO <sub>2</sub> heterojunction solar cells with carbon counter electrode. <i>Scientific Reports</i> , <b>2013</b> , 3, 3132	4.9	574
15	A class of carbon supported transition metal-nitrogen complex catalysts for dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 1475-1480	13	16
14	Transparent NiS counter electrodes for thiolate/disulfide mediated dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 237-240	13	62
13	Improvement of thiolate/disulfide mediated dye-sensitized solar cells through supramolecular lithium cation assembling of crown ether. <i>Scientific Reports</i> , <b>2013</b> , 3, 2413	4.9	7
12	Monolithic quasi-solid-state dye-sensitized solar cells based on iodine-free polymer gel electrolyte. <i>Journal of Power Sources</i> , <b>2013</b> , 235, 243-250	8.9	22
11	Efficient monolithic solid-state dye-sensitized solar cell with a low-cost mesoscopic carbon based screen printable counter electrode. <i>Organic Electronics</i> , <b>2013</b> , 14, 628-634	3.5	23
10	A mesoscopic platinumized graphite/carbon black counter electrode for a highly efficient monolithic dye-sensitized solar cell. <i>Electrochimica Acta</i> , <b>2012</b> , 69, 334-339	6.7	77
9	Design of an organic redox mediator and optimization of an organic counter electrode for efficient transparent bifacial dye-sensitized solar cells. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 14383-90	3.6	30
8	Monolithic all-solid-state dye-sensitized solar module based on mesoscopic carbon counter electrodes. <i>Solar Energy Materials and Solar Cells</i> , <b>2012</b> , 105, 148-152	6.4	22
7	Highly efficient poly(3-hexylthiophene) based monolithic dye-sensitized solar cells with carbon counter electrode. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 2025	35.4	64
6	Mesoporous nitrogen-doped TiO <sub>2</sub> sphere applied for quasi-solid-state dye-sensitized solar cell. <i>Nanoscale Research Letters</i> , <b>2011</b> , 6, 606	5	23

5	High-strain sensors based on ZnO nanowire/polystyrene hybridized flexible films. <i>Advanced Materials</i> , <b>2011</b> , 23, 5440-4	24	438
4	Minimizing the Voltage Loss in Hole-Conductor-Free Printable Mesoscopic Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2102229	21.8	13
3	Halogen Bond Involved Post-Treatment for Improved Performance of Printable Hole-Conductor-Free Mesoscopic Perovskite Solar Cells. <i>Solar Rrl</i> , 2100851	7.1	3
2	Series Resistance Modulation for Large-Area Fully Printable Mesoscopic Perovskite Solar Cells. <i>Solar Rrl</i> , 2100554	7.1	5
1	Modulating Oxygen Vacancies in BaSnO <sub>3</sub> for Printable Carbon-Based Mesoscopic Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> ,	6.1	1