Yaoguang Rong

List of Publications by Year
in descending order

115 papers	12,228 citations	47006 47 h-index	24982 109 g-index
117 all docs	117 docs citations	117 times ranked	11381 citing authors

#	Article	IF	Citations
1	Series Resistance Modulation for Largeâ€Area Fully Printable Mesoscopic Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100554.	5.8	13
2	Highly oriented MAPbI3 crystals for efficient hole-conductor-free printable mesoscopic perovskite solar cells. Fundamental Research, 2022, 2, 276-283.	3.3	40
3	Minimizing the Voltage Loss in Holeâ€Conductorâ€Free Printable Mesoscopic Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	19.5	41
4	Halogen Bond Involved Postâ€Treatment for Improved Performance of Printable Holeâ€Conductorâ€Free Mesoscopic Perovskite Solar Cells. Solar Rrl, 2022, 6, 2100851.	5.8	14
5	Development of formamidinium lead iodide-based perovskite solar cells: efficiency and stability. Chemical Science, 2022, 13, 2167-2183.	7.4	37
6	In Situ Formation of Î´-FAPbI₃ at the Perovskite/Carbon Interface for Enhanced Photovoltage of Printable Mesoscopic Perovskite Solar Cells. Chemistry of Materials, 2022, 34, 728-735.	6.7	24
7	Interfacial Energy Band Alignment Enables the Reduction of Potential Loss for Hole-Conductor-Free Printable Mesoscopic Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2022, 13, 2144-2149.	4.6	10
8	Cl-Assisted Perovskite Crystallization Pathway in the Confined Space of Mesoporous Metal Oxides Unveiled by In Situ Grazing Incidence Wide-Angle X-ray Scattering. Chemistry of Materials, 2022, 34, 2231-2237.	6.7	9
9	Oxygen Vacancy Management for Highâ€Temperature Mesoporous SnO₂ Electron Transport Layers in Printable Perovskite Solar Cells. Angewandte Chemie - International Edition, 2022, 61, .	13.8	32
10	Oxygen Vacancy Management for Highâ€Temperature Mesoporous SnO₂ Electron Transport Layers in Printable Perovskite Solar Cells. Angewandte Chemie, 2022, 134, .	2.0	3
11	Beyond the Phase Segregation: Probing the Irreversible Phase Reconstruction of Mixedâ€Halide Perovskites. Advanced Science, 2022, 9, e2103948.	11.2	17
12	Modeling and Balancing the Solvent Evaporation of Thermal Annealing Process for Metal Halide Perovskites and Solar Cells. Small Methods, 2022, 6, e2200161.	8.6	2
13	A Review on Scaling Up Perovskite Solar Cells. Advanced Functional Materials, 2021, 31, 2008621.	14.9	143
14	Investigating the iodide and bromide ion exchange in metal halide perovskite single crystals and thin films. Chemical Communications, 2021, 57, 6125-6128.	4.1	7
15	Improving Holeâ€Conductorâ€Free Fully Printable Mesoscopic Perovskite Solar Cellsâ€™ Performance with Enhanced Openâ€Circuit Voltage via the Octyltrimethylammonium Chloride Additive. Solar Rrl, 2021, 5, 2000825.	5.8	6
16	Improving the Performance of Perovskite Solar Cells via a Novel Additive of <i>N</i>,1â€Fluoroformamidinium Iodide with Electronâ€Withdrawing Fluorine Group. Advanced Functional Materials, 2021, 31, 2010603.	14.9	37
17	Tailoring the Dimensionality of Hybrid Perovskites in Mesoporous Carbon Electrodes for Typeâ€II Band Alignment and Enhanced Performance of Printable Holeâ€Conductorâ€Free Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2100292.	19.5	85
18	Revealing the Role of Bifunctional Molecules in Crystallizing Methylammonium Lead Iodide through Geometric Isomers. Chemistry of Materials, 2021, 33, 4014-4022.	6.7	10

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19	Celluloseâ€Based Oxygenâ€Rich Activated Carbon for Printable Mesoscopic Perovskite Solar Cells. Solar Rrl, 2021, 5, 2100333.	5.8	16
20	Enhanced perovskite electronic properties via A-site cation engineering. Fundamental Research, 2021, 1, 385-392.	3.3	34
21	Modulating Oxygen Vacancies in BaSnO₃ for Printable Carbon-Based Mesoscopic Perovskite Solar Cells. ACS Applied Energy Materials, 2021, 4, 11032-11040.	5.1	17
22	Designs and applications of multi-functional covalent organic frameworks in rechargeable batteries. Energy Storage Materials, 2021, 41, 354-379.	18.0	52
23	Aiming at the industrialization of perovskite solar cells: Coping with stability challenge. Applied Physics Letters, 2021, 119, .	3.3	3
24	A Review on Additives for Halide Perovskite Solar Cells. Advanced Energy Materials, 2020, 10, 1902492.	19.5	240
25	Progress in Multifunctional Molecules for Perovskite Solar Cells. Solar Rrl, 2020, 4, 1900248.	5.8	13
26	<i>In situ</i> transfer of CH₃NH₃PbI₃ single crystals in mesoporous scaffolds for efficient perovskite solar cells. Chemical Science, 2020, 11, 474-481.	7.4	19
27	Crystallization Control of Ternaryâ€Cation Perovskite Absorber in Tripleâ€Mesoscopic Layer for Efficient Solar Cells. Advanced Energy Materials, 2020, 10, 1903092.	19.5	63
28	Stabilizing Perovskite Solar Cells to IEC61215:2016 Standards with over 9,000-h Operational Tracking. Joule, 2020, 4, 2646-2660.	24.0	218
29	Mesoporous-Carbon-Based Fully-Printable All-Inorganic Monoclinic CsPbBr₃ Perovskite Solar Cells with Ultrastability under High Temperature and High Humidity. Journal of Physical Chemistry Letters, 2020, 11, 9689-9695.	4.6	23
30	van der Waals Mixed Valence Tin Oxides for Perovskite Solar Cells as UV-Stable Electron Transport Materials. Nano Letters, 2020, 20, 8178-8184.	9.1	26
31	Multifunctional Polymerâ€Regulated SnO₂ Nanocrystals Enhance Interface Contact for Efficient and Stable Planar Perovskite Solar Cells. Advanced Materials, 2020, 32, e2003990.	21.0	208
32	Effects of 5-Ammonium Valeric Acid Iodide as Additive on Methyl Ammonium Lead Iodide Perovskite Solar Cells. Nanomaterials, 2020, 10, 2512.	4.1	15
33	A favored crystal orientation for efficient printable mesoscopic perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 11148-11154.	10.3	42
34	Influence of precursor concentration on printable mesoscopic perovskite solar cells. Frontiers of Optoelectronics, 2020, 13, 256-264.	3.7	11
35	Postâ€Treatment of Mesoporous Scaffolds for Enhanced Photovoltage of Tripleâ€Mesoscopic Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000185.	5.8	22
36	Hole-conductor-free perovskite solar cells. MRS Bulletin, 2020, 45, 449-457.	3.5	5

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37	Solar Cells: Crystallization Control of Ternaryâ€Cation Perovskite Absorber in Tripleâ€Mesoscopic Layer for Efficient Solar Cells (Adv. Energy Mater. 5/2020). Advanced Energy Materials, 2020, 10, 2070022.	19.5	1
38	Efficient triple-mesoscopic perovskite solar mini-modules fabricated with slot-die coating. Nano Energy, 2020, 74, 104842.	16.0	63
39	Crystallization Control of Methylammoniumâ€Free Perovskite in Twoâ€Step Deposited Printable Tripleâ€Mesoscopic Solar Cells. Solar Rrl, 2020, 4, 2000455.	5.8	24
40	Two-Stage Melt Processing of Phase-Pure Selenium for Printable Triple-Mesoscopic Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 33879-33885.	8.0	14
41	Amide Additives Induced a Fermi Level Shift To Improve the Performance of Hole-Conductor-Free, Printable Mesoscopic Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2019, 10, 6865-6872.	4.6	62
42	Standardizing Perovskite Solar Modules beyond Cells. Joule, 2019, 3, 2076-2085.	24.0	56
43	High performance printable perovskite solar cells based on Cs0.1FA0.9PbI3 in mesoporous scaffolds. Journal of Power Sources, 2019, 415, 105-111.	7.8	34
44	A low-temperature carbon electrode with good perovskite compatibility and high flexibility in carbon based perovskite solar cells. Chemical Communications, 2019, 55, 2765-2768.	4.1	40
45	Screen printing process control for coating high throughput titanium dioxide films toward printable mesoscopic perovskite solar cells. Frontiers of Optoelectronics, 2019, 12, 344-351.	3.7	26
46	Modeling the edge effect for measuring the performance of mesoscopic solar cells with shading masks. Journal of Materials Chemistry A, 2019, 7, 10942-10948.	10.3	11
47	Ethanol stabilized precursors for highly reproducible printable mesoscopic perovskite solar cells. Journal of Power Sources, 2019, 424, 261-267.	7.8	21
48	Encapsulation of Printable Mesoscopic Perovskite Solar Cells Enables High Temperature and Longâ€Term Outdoor Stability. Advanced Functional Materials, 2019, 29, 1809129.	14.9	133
49	Spacer layer design for efficient fully printable mesoscopic perovskite solar cells. RSC Advances, 2019, 9, 29840-29846.	3.6	14
50	Vanadium Oxide Post-Treatment for Enhanced Photovoltage of Printable Perovskite Solar Cells. ACS Sustainable Chemistry and Engineering, 2019, 7, 2619-2625.	6.7	36
51	Lead-Free Dionâ€"Jacobson Tin Halide Perovskites for Photovoltaics. ACS Energy Letters, 2019, 4, 276-277.	17.4	101
52	Improved Performance of Printable Perovskite Solar Cells with Bifunctional Conjugated Organic Molecule. Advanced Materials, 2018, 30, 1705786.	21.0	209
53	Efficient Perovskite Photovoltaicâ€Thermoelectric Hybrid Device. Advanced Energy Materials, 2018, 8, 1702937.	19.5	71
54	Mixed (5-AVA)_xMA_{1âˆ’x}PbI_{3âˆ’y}(BF₄)_y perovskites enhance the photovoltaic performance of hole-conductor-free printable mesoscopic solar cells. Journal of Materials Chemistry A, 2018, 6, 2360-2364.	10.3	40

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55	Efficient hole-conductor-free printable mesoscopic perovskite solar cells based on SnO2 compact layer. Electrochimica Acta, 2018, 263, 134-139.	5.2	27
56	A Multifunctional Bis-Adduct Fullerene for Efficient Printable Mesoscopic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 10835-10841.	8.0	28
57	Printable carbon-based hole-conductor-free mesoscopic perovskite solar cells: From lab to market. Materials Today Energy, 2018, 7, 221-231.	4.7	47
58	Fully printable perovskite solar cells with highly-conductive, low-temperature, perovskite-compatible carbon electrode. Carbon, 2018, 129, 830-836.	10.3	79
59	Improvements in printable mesoscopic perovskite solar cells <i>via</i> thinner spacer layers. Sustainable Energy and Fuels, 2018, 2, 2412-2418.	4.9	21
60	Challenges for commercializing perovskite solar cells. Science, 2018, 361, .	12.6	1,327
61	Fullerene derivative as an additive for highly efficient printable mesoscopic perovskite solar cells. Organic Electronics, 2018, 62, 653-659.	2.6	10
62	The Influence of the Work Function of Hybrid Carbon Electrodes on Printable Mesoscopic Perovskite Solar Cells. Journal of Physical Chemistry C, 2018, 122, 16481-16487.	3.1	52
63	A C₆₀ Modification Layer Using a Scalable Deposition Technology for Efficient Printable Mesoscopic Perovskite Solar Cells. Solar Rrl, 2018, 2, 1800174.	5.8	19
64	Toward Industrial-Scale Production of Perovskite Solar Cells: Screen Printing, Slot-Die Coating, and Emerging Techniques. Journal of Physical Chemistry Letters, 2018, 9, 2707-2713.	4.6	124
65	Oxygen management in carbon electrode for high-performance printable perovskite solar cells. Nano Energy, 2018, 53, 160-167.	16.0	83
66	Efficient hole-conductor-free printable mesoscopic perovskite solar cells based on hybrid carbon electrodes. , 2018, , .		0
67	Stable Largeâ€Area (10â€‰Ã—â€‰10â€‰cm²) Printable Mesoscopic Perovskite Module Exceeding 10% Efficiency. Solar Rrl, 2017, 1, 1600019.	5.8	272
68	Stable monolithic hole-conductor-free perovskite solar cells using TiO 2 nanoparticle binding carbon films. Organic Electronics, 2017, 45, 131-138.	2.6	49
69	Synergy of ammonium chloride and moisture on perovskite crystallization for efficient printable mesoscopic solar cells. Nature Communications, 2017, 8, 14555.	12.8	270
70	Efficient hole-conductor-free, fully printable mesoscopic perovskite solar cells with carbon electrode based on ultrathin graphite. Carbon, 2017, 120, 71-76.	10.3	77
71	Moisture-driven phase transition for improved perovskite solar cells with reduced trap-state density. Nano Research, 2017, 10, 1413-1422.	10.4	20
72	Spacer improvement for efficient and fully printable mesoscopic perovskite solar cells. RSC Advances, 2017, 7, 10118-10123.	3.6	19

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73	Boron-Doped Graphite for High Work Function Carbon Electrode in Printable Hole-Conductor-Free Mesoscopic Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 31721-31727.	8.0	83
74	Improvement and Regeneration of Perovskite Solar Cells via Methylamine Gas Postâ€Treatment. Advanced Functional Materials, 2017, 27, 1703060.	14.9	89
75	Tunable hysteresis effect for perovskite solar cells. Energy and Environmental Science, 2017, 10, 2383-2391.	30.8	188
76	Effect of guanidinium on mesoscopic perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 73-78.	10.3	146
77	Application of highly reflective spacer layer in monolithic dye-sensitized solar cells. Chinese Science Bulletin, 2017, 62, 1492-1499.	0.7	0
78	Holeâ€Conductorâ€Free Fully Printable Mesoscopic Solar Cell with Mixedâ€Anion Perovskite CH₃NH₃PbI_{(3â^'}<i>_x</i>₎(BF₄)<i>_x</i>. Advanced Energy Materials, 2016, 6, 1502009.	19.5	161
79	Low-temperature solution-processed p-type vanadium oxide for perovskite solar cells. Chemical Communications, 2016, 52, 8099-8102.	4.1	71
80	Synergistic Effect of PbI₂ Passivation and Chlorine Inclusion Yielding High Openâ€Circuit Voltage Exceeding 1.15 V in Both Mesoscopic and Inverted Planar CH3NH₃PbI₃(Cl)â€Based Perovskite Solar Cells. Advanced Functional Materials, 2016, 26, 8119-8127.	14.9	93
81	Enhanced electronic properties in CH₃NH₃PbI₃via LiCl mixing for hole-conductor-free printable perovskite solar cells. Journal of Materials Chemistry A, 2016, 4, 16731-16736.	10.3	81
82	Efficient Compact-Layer-Free, Hole-Conductor-Free, Fully Printable Mesoscopic Perovskite Solar Cell. Journal of Physical Chemistry Letters, 2016, 7, 4142-4146.	4.6	35
83	Interaction of Organic Cation with Water Molecule in Perovskite MAPbI₃: From Dynamic Orientational Disorder to Hydrogen Bonding. Chemistry of Materials, 2016, 28, 7385-7393.	6.7	169
84	Solvent effect on the hole-conductor-free fully printable perovskite solar cells. Nano Energy, 2016, 27, 130-137.	16.0	141
85	Critical kinetic control of non-stoichiometric intermediate phase transformation for efficient perovskite solar cells. Nanoscale, 2016, 8, 12892-12899.	5.6	98
86	Flexible electrode for long-life rechargeable sodium-ion batteries: effect of oxygen vacancy in MoO_{3â^'x}. Journal of Materials Chemistry A, 2016, 4, 5402-5405.	10.3	82
87	Beyond Efficiency: the Challenge of Stability in Mesoscopic Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1501066.	19.5	395
88	Solvent engineering towards controlled grain growth in perovskite planar heterojunction solar cells. Nanoscale, 2015, 7, 10595-10599.	5.6	294
89	Transparent bifacial dye-sensitized solar cells based on an electrochemically polymerized organic counter electrode and an iodine-free polymer gel electrolyte. Journal of Materials Science, 2015, 50, 3803-3811.	3.7	11
90	Heavily n-Dopable Ï€-Conjugated Redox Polymers with Ultrafast Energy Storage Capability. Journal of the American Chemical Society, 2015, 137, 4956-4959.	13.7	242

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91	All-solid-state Mesoscopic Solar Cells: From Dye-sensitized to Perovskite. Acta Chimica Sinica, 2015, 73, 237.	1.4	4
92	Highly ordered mesoporous carbon for mesoscopic CH3NH3PbI3/TiO2 heterojunction solar cell. Journal of Materials Chemistry A, 2014, 2, 8607.	10.3	88
93	Enhancement of monobasal solid-state dye-sensitized solar cells with polymer electrolyte assembling imidazolium iodide-functionalized silica nanoparticles. Journal of Power Sources, 2014, 248, 283-288.	7.8	28
94	Fully printable transparent monolithic solid-state dye-sensitized solar cell with mesoscopic indium tin oxide counter electrode. Physical Chemistry Chemical Physics, 2014, 16, 17743-17747.	2.8	11
95	Efficient monolithic quasi-solid-state dye-sensitized solar cells based on poly(ionic liquids) and carbon counter electrodes. RSC Advances, 2014, 4, 9271.	3.6	19
96	A hole-conductorâ€“free, fully printable mesoscopic perovskite solar cell with high stability. Science, 2014, 345, 295-298.	12.6	2,685
97	Hole-Conductor-Free Mesoscopic TiO₂/CH₃NH₃PbI₃ Heterojunction Solar Cells Based on Anatase Nanosheets and Carbon Counter Electrodes. Journal of Physical Chemistry Letters, 2014, 5, 2160-2164.	4.6	224
98	Effect of photo-doping on performance for solid-state dye-sensitized solar cell based on 2,2â€²7,7â€²-tetrakis-(N,N-di-p-methoxyphenyl-amine)-9,9â€²-spirobifluorene and carbon counter electrode. Electrochimica Acta, 2013, 99, 238-241.	5.2	16
99	Efficient Dyeâ€Sensitized Solar Cells with Potentialâ€Tunable Organic Sulfide Mediators and Grapheneâ€Modified Carbon Counter Electrodes. Advanced Functional Materials, 2013, 23, 3344-3352.	14.9	18
100	An efficient thiolate/disulfide redox couple based dye-sensitized solar cell with a graphene modified mesoscopic carbon counter electrode. Carbon, 2013, 53, 11-18.	10.3	38
101	Monolithic all-solid-state dye-sensitized solar cells. Frontiers of Optoelectronics, 2013, 6, 359-372.	3.7	12
102	Improvement in Solid-State Dye Sensitized Solar Cells by <i>p</i>-Type Doping with Lewis Acid SnCl₄. Journal of Physical Chemistry C, 2013, 117, 22492-22496.	3.1	64
103	Monolithic quasi-solid-state dye-sensitized solar cells based on graphene-modified mesoscopic carbon-counter electrodes. Journal of Nanophotonics, 2013, 7, 073090.	1.0	25
104	Full Printable Processed Mesoscopic CH3NH3PbI3/TiO2 Heterojunction Solar Cells with Carbon Counter Electrode. Scientific Reports, 2013, 3, 3132.	3.3	697
105	A class of carbon supported transition metalâ€“nitrogen complex catalysts for dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 1475-1480.	10.3	17
106	Transparent NiS counter electrodes for thiolate/disulfide mediated dye-sensitized solar cells. Journal of Materials Chemistry A, 2013, 1, 237-240.	10.3	68
107	Improvement of Thiolate/Disulfide Mediated Dye-Sensitized Solar Cells through Supramolecular Lithium Cation Assembling of Crown Ether. Scientific Reports, 2013, 3, 2413.	3.3	8
108	Monolithic quasi-solid-state dye-sensitized solar cells based on iodine-free polymer gel electrolyte. Journal of Power Sources, 2013, 235, 243-250.	7.8	28

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109	Efficient monolithic solid-state dye-sensitized solar cell with a low-cost mesoscopic carbon based screen printable counter electrode. Organic Electronics, 2013, 14, 628-634.	2.6	26
110	Design of an organic redox mediator and optimization of an organic counter electrode for efficient transparent bifacial dye-sensitized solar cells. Physical Chemistry Chemical Physics, 2012, 14, 14383.	2.8	34
111	Monolithic all-solid-state dye-sensitized solar module based on mesoscopic carbon counter electrodes. Solar Energy Materials and Solar Cells, 2012, 105, 148-152.	6.2	26
112	A mesoscopic platinized graphite/carbon black counter electrode for a highly efficient monolithic dye-sensitized solar cell. Electrochimica Acta, 2012, 69, 334-339.	5.2	83
113	Highly efficient poly(3-hexylthiophene) based monolithic dye-sensitized solar cells with carbon counter electrode. Energy and Environmental Science, 2011, 4, 2025.	30.8	70
114	Mesoporous nitrogen-doped TiO2 sphere applied for quasi-solid-state dye-sensitized solar cell. Nanoscale Research Letters, 2011, 6, 606.	5.7	26
115	Highâ€Strain Sensors Based on ZnO Nanowire/Polystyrene Hybridized Flexible Films. Advanced Materials, 2011, 23, 5440-5444.	21.0	497