Letian Dou

List of Publications by Year
in descending order

89	21,663	41258	48187
papers	citations	49 h-index	88 g-index

95	95	95	21377
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A polymer tandem solar cell with 10.6% power conversion efficiency. Nature Communications, 2013, 4, 1446.	5.8	2,612
2	Solution-processed hybrid perovskite photodetectors with high detectivity. Nature Communications, 2014, 5, 5404.	5.8	2,214
3	Tandem polymer solar cells featuring a spectrally matched low-bandgap polymer. Nature Photonics, 2012, 6, 180-185.	15.6	1,374
4	Controllable Self-Induced Passivation of Hybrid Lead Iodide Perovskites toward High Performance Solar Cells. Nano Letters, 2014, 14, 4158-4163.	4.5	1,343
5	Atomically thin two-dimensional organic-inorganic hybrid perovskites. Science, 2015, 349, 1518-1521.	6.0	1,159
6	25th Anniversary Article: A Decade of Organic/Polymeric Photovoltaic Research. Advanced Materials, 2013, 25, 6642-6671.	11.1	1,055
7	Low-Bandgap Near-IR Conjugated Polymers/Molecules for Organic Electronics. Chemical Reviews, 2015, 115, 12633-12665.	23.0	1,029
8	Solution-Phase Synthesis of Cesium Lead Halide Perovskite Nanowires. Journal of the American Chemical Society, 2015, 137, 9230-9233.	6.6	861
9	Lasing in robust cesium lead halide perovskite nanowires. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1993-1998.	3.3	668
10	Thermochromic halide perovskite solar cells. Nature Materials, 2018, 17, 261-267.	13.3	630
11	Solution-processed small-molecule solar cells: breaking the 10% power conversion efficiency. Scientific Reports, 2013, 3, 3356.	1.6	542
12	Systematic Investigation of Benzodithiophene- and Diketopyrrolopyrrole-Based Low-Bandgap Polymers Designed for Single Junction and Tandem Polymer Solar Cells. Journal of the American Chemical Society, 2012, 134, 10071-10079.	6.6	530
13	Visibly Transparent Polymer Solar Cells Produced by Solution Processing. ACS Nano, 2012, 6, 7185-7190.	7.3	492
14	High-performance multiple-donor bulk heterojunction solar cells. Nature Photonics, 2015, 9, 190-198.	15.6	489
15	A Seleniumâ€Substituted Lowâ€Bandgap Polymer with Versatile Photovoltaic Applications. Advanced Materials, 2013, 25, 825-831.	11.1	396
16	Growth and Anion Exchange Conversion of CH₃NH₃PbX₃ Nanorod Arrays for Light-Emitting Diodes. Nano Letters, 2015, 15, 5519-5524.	4.5	342
17	Two-dimensional halide perovskite nanomaterials and heterostructures. Chemical Society Reviews, 2018, 47, 6046-6072.	18.7	339
18	Metal Oxide Nanoparticles as an Electronâ€Transport Layer in Highâ€Performance and Stable Inverted Polymer Solar Cells. Advanced Materials, 2012, 24, 5267-5272.	11.1	333

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19	Molecular engineering of organicâ€“inorganic hybrid perovskites quantum wells. Nature Chemistry, 2019, 11, 1151-1157.	6.6	302
20	Synthesis of 5H-Dithieno[3,2-b:2â€²,3â€²-d]pyran as an Electron-Rich Building Block for Donorâ€“Acceptor Type Low-Bandgap Polymers. Macromolecules, 2013, 46, 3384-3390.	2.2	299
21	Two-dimensional halide perovskite lateral epitaxial heterostructures. Nature, 2020, 580, 614-620.	13.7	284
22	Bandgap engineering in semiconductor alloy nanomaterials with widely tunable compositions. Nature Reviews Materials, 2017, 2, .	23.3	279
23	Recent trends in polymer tandem solar cells research. Progress in Polymer Science, 2013, 38, 1909-1928.	11.8	246
24	A dopant-free organic hole transport material for efficient planar heterojunction perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 11940-11947.	5.2	213
25	Highly Stable Lead-Free Perovskite Field-Effect Transistors Incorporating Linear Ï€-Conjugated Organic Ligands. Journal of the American Chemical Society, 2019, 141, 15577-15585.	6.6	180
26	Synthesis of Ultrathin Copper Nanowires Using Tris(trimethylsilyl)silane for High-Performance and Low-Haze Transparent Conductors. Nano Letters, 2015, 15, 7610-7615.	4.5	179
27	Spatially resolved multicolor CsPbX ₃ nanowire heterojunctions via anion exchange. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7216-7221.	3.3	178
28	High-performance semi-transparent polymer solar cells possessing tandem structures. Energy and Environmental Science, 2013, 6, 2714.	15.6	170
29	Long-range exciton transport and slow annihilation in two-dimensional hybrid perovskites. Nature Communications, 2020, 11, 664.	5.8	167
30	Solution-Processed Copper/Reduced-Graphene-Oxide Core/Shell Nanowire Transparent Conductors. ACS Nano, 2016, 10, 2600-2606.	7.3	155
31	Intrinsic anion diffusivity in lead halide perovskites is facilitated by a soft lattice. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11929-11934.	3.3	153
32	Active Layer-Incorporated, Spectrally Tuned Au/SiO₂ Core/Shell Nanorod-Based Light Trapping for Organic Photovoltaics. ACS Nano, 2013, 7, 3815-3822.	7.3	134
33	Single-Crystal Linear Polymers Through Visible Lightâ€“Triggered Topochemical Quantitative Polymerization. Science, 2014, 343, 272-277.	6.0	134
34	Structural, optical, and electrical properties of phase-controlled cesium lead iodide nanowires. Nano Research, 2017, 10, 1107-1114.	5.8	128
35	Atomic Resolution Imaging of Halide Perovskites. Nano Letters, 2016, 16, 7530-7535.	4.5	125
36	Ultrathin Epitaxial Cu@Au Coreâ€“Shell Nanowires for Stable Transparent Conductors. Journal of the American Chemical Society, 2017, 139, 7348-7354.	6.6	125

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37	Nearâ€Infrared Materials: The Turning Point of Organic Photovoltaics. Advanced Materials, 2022, 34, e2107330.	11.1	111
38	Multifunctional Conjugated Ligand Engineering for Stable and Efficient Perovskite Solar Cells. Advanced Materials, 2021, 33, e2100791.	11.1	99
39	Solutionâ€Processed Small Molecules Using Different Electron Linkers for Highâ€Performance Solar Cells. Advanced Materials, 2013, 25, 4657-4662.	11.1	96
40	Layer-by-layer anionic diffusion in two-dimensional halide perovskite vertical heterostructures. Nature Nanotechnology, 2021, 16, 584-591.	15.6	88
41	Sideâ€Chain Tunability via Triple Component Random Copolymerization for Better Photovoltaic Polymers. Advanced Energy Materials, 2014, 4, 1300864.	10.2	81
42	Extrinsic and Dynamic Edge States of Two-Dimensional Lead Halide Perovskites. ACS Nano, 2019, 13, 1635-1644.	7.3	79
43	Room-Temperature Coherent Optical Phonon in 2D Electronic Spectra of CH₃NH₃PbI₃ Perovskite as a Possible Cooling Bottleneck. Journal of Physical Chemistry Letters, 2017, 8, 3211-3215.	2.1	73
44	Lead-Free Organicâ€“Perovskite Hybrid Quantum Wells for Highly Stable Light-Emitting Diodes. ACS Nano, 2021, 15, 6316-6325.	7.3	73
45	Emerging two-dimensional halide perovskite nanomaterials. Journal of Materials Chemistry C, 2017, 5, 11165-11173.	2.7	67
46	A Selenophene Containing Benzodithiophene-alt-thienothiophene Polymer for Additive-Free High Performance Solar Cell. Macromolecules, 2015, 48, 562-568.	2.2	59
47	Ligand-Driven Grain Engineering of High Mobility Two-Dimensional Perovskite Thin-Film Transistors. Journal of the American Chemical Society, 2021, 143, 15215-15223.	6.6	55
48	Elucidating Double Aggregation Mechanisms in the Morphology Optimization of Diketopyrrolopyrroleâ€Based Narrow Bandgap Polymer Solar Cells. Advanced Materials, 2014, 26, 3142-3147.	11.1	52
49	Electrical and Optical Tunability in All-Inorganic Halide Perovskite Alloy Nanowires. Nano Letters, 2018, 18, 3538-3542.	4.5	51
50	Two-dimensional halide perovskites featuring semiconducting organic building blocks. Materials Chemistry Frontiers, 2020, 4, 3400-3418.	3.2	50
51	Highly Efficient Halide Perovskite Lightâ€Emitting Diodes via Molecular Passivation. Angewandte Chemie - International Edition, 2021, 60, 8337-8343.	7.2	47
52	Additive manufacturing of patterned 2D semiconductor through recyclable masked growth. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 3437-3442.	3.3	46
53	<scp>Twoâ€dimensional</scp> halide perovskite <scp>quantumâ€well</scp> emitters: A critical review. EcoMat, 2021, 3, e12104.	6.8	45
54	Improving Structural Order for a Highâ€Performance Diketopyrrolopyrroleâ€Based Polymer Solar Cell with a Thick Active Layer. Advanced Energy Materials, 2014, 4, 1300739.	10.2	43

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55	Designing artificial two-dimensional landscapes via atomic-layer substitution. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	43
56	Benzoin Radicals as Reducing Agent for Synthesizing Ultrathin Copper Nanowires. Journal of the American Chemical Society, 2017, 139, 3027-3032.	6.6	40
57	Electronic and Spintronic Open-Shell Macromolecules,Quo Vadis?. Journal of the American Chemical Society, 2022, 144, 626-647.	6.6	38
58	High performance low band gap polymer solar cells with a non-conventional acceptor. Chemical Communications, 2012, 48, 7616.	2.2	33
59	Novel fullerene acceptors: synthesis and application in low band gap polymer solar cells. Journal of Materials Chemistry, 2012, 22, 13391.	6.7	31
60	Quantifying Anionic Diffusion in 2D Halide Perovskite Lateral Heterostructures. Advanced Materials, 2021, 33, .	11.1	31
61	Mechanically robust and self-healable perovskite solar cells. Cell Reports Physical Science, 2021, 2, 100320.	2.8	29
62	Long-lived charge separation in two-dimensional ligand-perovskite heterostructures. Journal of Chemical Physics, 2020, 152, 044711.	1.2	28
63	Thermoelectric Performance of Lead-Free Two-Dimensional Halide Perovskites Featuring Conjugated Ligands. Nano Letters, 2021, 21, 7839-7844.	4.5	28
64	Synthesis and characterization of a novel kind of near-infrared electrochromic polymers containing an anthraquinone imide group and ionic moieties. Journal of Materials Chemistry, 2009, 19, 8470.	6.7	27
65	Lead halide perovskite nanowires stabilized by block copolymers for Langmuir-Blodgett assembly. Nano Research, 2020, 13, 1453-1458.	5.8	26
66	Soft-lock drawing of super-aligned carbon nanotube bundles for nanometre electrical contacts. Nature Nanotechnology, 2022, 17, 278-284.	15.6	24
67	Halide Perovskite Epitaxial Heterostructures. Accounts of Materials Research, 2020, 1, 213-224.	5.9	20
68	Degradation and Self-Healing in Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2022, 14, 24073-24088.	4.0	20
69	Synthesis of 5H-Dithieno[3,2-b:2â€²,3â€²-d]pyran as an Electron-Rich Building Block for Donorâ€“Acceptor Type Low-Bandgap Polymers. Macromolecules, 2013, 46, 4734-4734.	2.2	17
70	Organic semiconductor-incorporated two-dimensional halide perovskites. National Science Review, 2022, 9, nwab111.	4.6	15
71	Formation of liquid phase and nanostructures in flash sintered ZnO. Scripta Materialia, 2021, 195, 113719.	2.6	13
72	A Leap towards High-Performance 2D Perovskite Photodetectors. Trends in Chemistry, 2019, 1, 365-367.	4.4	12

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73	Largeâ€Scale Plasmonic Hybrid Framework with Builtâ€In Nanohole Array as Multifunctional Optical Sensing Platforms. Small, 2020, 16, 1906459.	5.2	11
74	Colloidal nanocrystals for large-area LEDs. Nature Nanotechnology, 2022, 17, 562-563.	15.6	11
75	Highly Efficient Halide Perovskite Lightâ€Emitting Diodes via Molecular Passivation. Angewandte Chemie, 2021, 133, 8418-8424.	1.6	9
76	Two-Dimensional Organic Semiconductor-Incorporated Perovskite (OSiP) Electronics. ACS Applied Electronic Materials, 2021, 3, 5155-5164.	2.0	9
77	Tailoring Anchoring Groups in Lowâ€Dimensional Organic Semiconductorâ€Incorporated Perovskites. Small Structures, 2022, 3, .	6.9	9
78	Tandem Solar Cellâ€”Concept and Practice in Organic Solar Cells. Topics in Applied Physics, 2015, , 315-346.	0.4	8
79	Organic Cation Engineering for Vertical Charge Transport in Leadâ€Free Perovskite Quantum Wells. Small Science, 2021, 1, 2000024.	5.8	8
80	Field-assisted growth of one-dimensional ZnO nanostructures with high defect density. Nanotechnology, 2021, 32, 095603.	1.3	8
81	A selenophene-containing conjugated organic ligand for two-dimensional halide perovskites. Chemical Communications, 2021, 57, 11469-11472.	2.2	7
82	Anion diffusion in two-dimensional halide perovskites. APL Materials, 2022, 10, .	2.2	7
83	Plastic solar cells: breaking the 10% commercialization barrier. Proceedings of SPIE, 2012, , .	0.8	5
84	Structural Damage of Two-Dimensional Organicâ€“Inorganic Halide Perovskites. Inorganics, 2020, 8, 13.	1.2	5
85	Structural Tunability and Diversity of Twoâ€Dimensional Lead Halide Benzenethiolate. Chemistry - A European Journal, 2020, 26, 6599-6607.	1.7	3
86	4D-STEM Characterization of Molecular Ordering in Organic Semiconductors. Microscopy and Microanalysis, 2019, 25, 1752-1753.	0.2	0
87	Understanding phase transition dynamics paves the way to halide perovskites nanoelectronics. MRS Bulletin, 2021, 46, 317-318.	1.7	0
88	Understanding phase transition dynamics paves the way to halide perovskites nanoelectronics. MRS Bulletin, 0, , 1-2.	1.7	0
89	Halide Perovskites for Photonics and Optoelectronics: introduction to special issue. Optical Materials Express, 2022, 12, 1764.	1.6	0