Chao Liang

List of Publications by Year
in descending order

42 papers	1,970 citations	257450 24 h-index	276875 41 g-index
42 all docs	42 docs citations	42 times ranked	2482 citing authors

#	Article	IF	Citations
1	Phase Pure 2D Perovskite for Highâ€Performance 2Dâ€“3D Heterostructured Perovskite Solar Cells. Advanced Materials, 2018, 30, e1805323.	21.0	244
2	Rearranging Low-Dimensional Phase Distribution of Quasi-2D Perovskites for Efficient Sky-Blue Perovskite Light-Emitting Diodes. ACS Nano, 2020, 14, 11420-11430.	14.6	206
3	Lowâ€Dimensional Dionâ€"Jacobsonâ€Phase Leadâ€Free Perovskites for Highâ€Performance Photovoltaics with Improved Stability. Angewandte Chemie - International Edition, 2020, 59, 6909-6914.	13.8	123
4	Lowâ€Dimensional Perovskites with Diammonium and Monoammonium Alternant Cations for Highâ€Performance Photovoltaics. Advanced Materials, 2019, 31, e1901966.	21.0	96
5	Recent Progress in Metal Halide Perovskite Microâ€and Nanolasers. Advanced Optical Materials, 2019, 7, 1900080.	7.3	95
6	Ruddlesdenâ€"Popper Perovskite for Stable Solar Cells. Energy and Environmental Materials, 2018, 1, 221-231.	12.8	85
7	Chemical bath deposited rutile TiO 2 compact layer toward efficient planar heterojunction perovskite solar cells. Applied Surface Science, 2017, 391, 337-344.	6.1	76
8	Deep surface passivation for efficient and hydrophobic perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 2919-2927.	10.3	74
9	Thermally Activated Upconversion Nearâ€Infrared Photoluminescence from Carbon Dots Synthesized via Microwave Assisted Exfoliation. Small, 2019, 15, e1905050.	10.0	70
10	Towards Simplifying the Device Structure of Highâ€Performance Perovskite Solar Cells. Advanced Functional Materials, 2020, 30, 2000863.	14.9	67
11	Mild solution-processed metal-doped TiO2 compact layers for hysteresis-less and performance-enhanced perovskite solar cells. Journal of Power Sources, 2017, 372, 235-244.	7.8	66
12	Ultrashort laser pulse doubling by metal-halide perovskite multiple quantum wells. Nature Communications, 2020, 11, 3361.	12.8	57
13	Polyethyleneimine High-Energy Hydrophilic Surface Interfacial Treatment toward Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 32574-32580.	8.0	52
14	Realization of the Photostable Intrinsic Core Emission from Carbon Dots through Surface Deoxidation by Ultraviolet Irradiation. Journal of Physical Chemistry Letters, 2019, 10, 3094-3100.	4.6	50
15	Surface Passivation Toward Efficient and Stable Perovskite Solar Cells. Energy and Environmental Materials, 2023, 6, .	12.8	46
16	Nanoscale hybrid multidimensional perovskites with alternating cations for high performance photovoltaic. Nano Energy, 2019, 65, 104050.	16.0	44
17	Facile deposition of high-quality Cs2AgBiBr6 films for efficient double perovskite solar cells. Science China Materials, 2020, 63, 1518-1525.	6.3	41
18	Efficient Anti-solvent-free Spin-Coated and Printed Sn-Perovskite Solar Cells with Crystal-Based Precursor Solutions. Matter, 2020, 2, 167-180.	10.0	38

#	Article	IF	Citations
19	In Situ Growth of MAPbBr₃ Nanocrystals on Fewâ€Layer MXene Nanosheets with Efficient Energy Transfer. Small, 2020, 16, e1905896.	10.0	38
20	Pure Bromideâ€Based Perovskite Nanoplatelets for Blue Lightâ€Emitting Diodes. Small Methods, 2019, 3, 1900196.	8.6	34
21	Covalently Connecting Crystal Grains with Polyvinylammonium Carbochain Backbone To Suppress Grain Boundaries for Long-Term Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 6064-6071.	8.0	33
22	Simultaneously boost diffusion length and stability of perovskite for high performance solar cells. Nano Energy, 2019, 59, 721-729.	16.0	33
23	Enhanced efficiency and stability of perovskite solar cells by 2D perovskite vapor-assisted interface optimization. Journal of Energy Chemistry, 2020, 45, 103-109.	12.9	32
24	Lowâ€Dimensional Dionâ€“Jacobsonâ€Phase Leadâ€Free Perovskites for Highâ€Performance Photovoltaics with Improved Stability. Angewandte Chemie, 2020, 132, 6976-6981.	2.0	26
25	Enhanced Efficiency of Perovskite Solar Cells by using Coreâ€“Ultrathin Shell Structure Ag@SiO₂ Nanowires as Plasmonic Antennas. Advanced Electronic Materials, 2017, 3, 1700169.	5.1	24
26	Controlling the film structure by regulating 2D Ruddlesdenâ€“Popper perovskite formation enthalpy for efficient and stable tri-cation perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 5874-5881.	10.3	23
27	Highâ€performance flexible perovskite photodetectors based on singleâ€crystalâ€like twoâ€dimensional Ruddlesdenâ€“Popper thin films. , 2023, 5, .		23
28	Solution-processable carbon dots with efficient solid-state red/near-infrared emission. Journal of Colloid and Interface Science, 2022, 613, 547-553.	9.4	21
29	Recent Progress in Perovskiteâ€Based Reversible Photonâ€“Electricity Conversion Devices. Advanced Functional Materials, 2022, 32, 2108926.	14.9	18
30	Tailoring the Surface Morphology and Phase Distribution for Efficient Perovskite Electroluminescence. Journal of Physical Chemistry Letters, 2020, 11, 5877-5882.	4.6	17
31	Overcoming the Limitation of Cs₂AgBiBr₆ Double Perovskite Solar Cells Through Using Mesoporous TiO₂ Electron Extraction Layer. Energy and Environmental Materials, 2022, 5, 1317-1322.	12.8	17
32	Doping Electron Transporting Layer: An Effective Method to Enhance <i>J</i>_{SC} of Allâ€Inorganic Perovskite Solar Cells. Energy and Environmental Materials, 2021, 4, 500-501.	12.8	17
33	Morphology Control of Doped Spiroâ€MeOTAD Films for Air Stable Perovskite Solar Cells. Small, 2020, 16, e1907513.	10.0	16
34	Solutionâ€Processed Perovskite Microdisk for Coherent Light Emission. Advanced Optical Materials, 2019, 7, 1900678.	7.3	12
35	Two-Dimensional Heterostructure of MoS₂/BA₂PbI₄ 2D Ruddlesdenâ€“Popper Perovskite with an S Scheme Alignment for Solar Cells: A First-Principles Study. ACS Applied Electronic Materials, 2022, 4, 1939-1948.	4.3	11
36	Efficient and Stable Perovskite Solar Cells via CsPF₆ Passivation of Perovskite Film Defects. Journal of Physical Chemistry Letters, 2022, 13, 4598-4604.	4.6	11

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37	Phase Tailoring of Ruddlesdenâ€“Popper Perovskite at Fixed Large Spacer Cation Ratio. Small, 2021, 17, e2100560.	10.0	10
38	Manipulation of Band Alignment in Two-Dimensional Vertical WSe₂/BA₂PbI₄ Ruddlesdenâ€“Popper Perovskite Heterojunctions via Defect Engineering. Journal of Physical Chemistry Letters, 2022, 13, 4579-4588.	4.6	10
39	Perovskite Solar Cells: Lowâ€Dimensional Perovskites with Diammonium and Monoammonium Alternant Cations for Highâ€Performance Photovoltaics (Adv. Mater. 35/2019). Advanced Materials, 2019, 31, 1970252.	21.0	6
40	High-performance perovskite solar cells resulting from large perovskite grain size enabled by the urea additive. Sustainable Energy and Fuels, 2022, 6, 2955-2961.	4.9	5
41	Photoluminescence: Thermally Activated Upconversion Nearâ€Infrared Photoluminescence from Carbon Dots Synthesized via Microwave Assisted Exfoliation (Small 50/2019). Small, 2019, 15, 1970288.	10.0	2
42	Inkjet printed perovskite solar cells: progress and prospects. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 158807.	0.5	1