Kaiyang Wang

List of Publications by Year
in descending order

58
papers

2,124
citations

270111

25
h-index

263392

45
g-index

59
all docs

59
docs citations

59
times ranked

3410
citing authors

#	Article	IF	Citations
1	Overcoming the Limitation of Cs₂AgBiBr₆ Double Perovskite Solar Cells Through Using Mesoporous TiO₂ Electron Extraction Layer. Energy and Environmental Materials, 2022, 5, 1317-1322.	7.3	17
2	Microâ€•and Nanostructured Lead Halide Perovskites: From Materials to Integrations and Devices. Advanced Materials, 2021, 33, e2000306.	11.1	75
3	Deep surface passivation for efficient and hydrophobic perovskite solar cells. Journal of Materials Chemistry A, 2021, 9, 2919-2927.	5.2	74
4	Surface passivation of organometal halide perovskites by atomic layer deposition: an investigation of the mechanism of efficient inverted planar solar cells. Nanoscale Advances, 2021, 3, 2305-2315.	2.2	25
5	Phase Tailoring of Ruddlesdenâ€"Popper Perovskite at Fixed Large Spacer Cation Ratio. Small, 2021, 17, e2100560.	5.2	10
6	All-Inorganic Perovskite Nanorod Arrays with Spatially Randomly Distributed Lasing Modes for All-Photonic Cryptographic Primitives. ACS Applied Materials & Interfaces, 2021, 13, 30891-30901.	4.0	6
7	Robust Ultralong Lead Halide Perovskite Microwire Lasers. ACS Applied Materials & Interfaces, 2021, 13, 38458-38466.	4.0	14
8	Suppressing the defects in cesium-based perovskites <i>via</i> polymeric interlayer assisted crystallization control. Journal of Materials Chemistry A, 2021, 9, 26149-26158.	5.2	6
9	Size-Controlled Patterning of Single-Crystalline Perovskite Arrays toward a Tunable High-Performance Microlaser. ACS Applied Materials & Interfaces, 2020, 12, 2662-2670.	4.0	24
10	Ultrashort laser pulse doubling by metal-halide perovskite multiple quantum wells. Nature Communications, 2020, 11, 3361.	5.8	57
11	Stable Whispering Gallery Mode Lasing from Solutionâ€Processed Formamidinium Lead Bromide Perovskite Microdisks. Advanced Optical Materials, 2020, 8, 2000030.	3.6	32
12	Facile deposition of high-quality Cs2AgBiBr6 films for efficient double perovskite solar cells. Science China Materials, 2020, 63, 1518-1525.	3.5	41
13	Effective Surface Ligand-Concentration Tuning of Deep-Blue Luminescent FAPbBr₃ Nanoplatelets with Enhanced Stability and Charge Transport. ACS Applied Materials & Interfaces, 2020, 12, 31863-31874.	4.0	37
14	Tailoring the Surface Morphology and Phase Distribution for Efficient Perovskite Electroluminescence. Journal of Physical Chemistry Letters, 2020, 11, 5877-5882.	2.1	17
15	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.	5.2	23
16	Light-induced phase transition and photochromism in all-inorganic two-dimensional Cs2PbI2Cl2 perovskite. Science China Materials, 2020, 63, 1510-1517.	3.5	14
17	Morphology Control of Doped Spiroâ€MeOTAD Films for Air Stable Perovskite Solar Cells. Small, 2020, 16, e1907513.	5.2	16
18	Singleâ€Crystalline Perovskite Microlasers for Highâ€Contrast and Subâ€Diffraction Imaging. Advanced Functional Materials, 2019, 29, 1904868.	7.8	13

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19	All-optical control of lead halide perovskite microlasers. Nature Communications, 2019, 10, 1770.	5.8	104
20	Charge Carrier Dynamics and Broad Wavelength Tunable Amplified Spontaneous Emission in Zn<i>_{<i>x</i>}</i>Cd_{1â€“<i>x</i>}Se Nanowires. Journal of Physical Chemistry Letters, 2019, 10, 7516-7522.	2.1	5
21	Formation of Lead Halide Perovskite Based Plasmonic Nanolasers and Nanolaser Arrays by Tailoring the Substrate. ACS Nano, 2018, 12, 3865-3874.	7.3	81
22	Darkâ€Field Sensors based on Organometallic Halide Perovskite Microlasers. Advanced Materials, 2018, 30, e1801481.	11.1	36
23	Recent Advances in Perovskite Microâ€•and Nanolasers. Advanced Optical Materials, 2018, 6, 1800278.	3.6	149
24	Lead Halide Perovskite Nanostructures for Dynamic Color Display. ACS Nano, 2018, 12, 8847-8854.	7.3	142
25	Lead Halide Perovskite Nanoribbon Based Uniform Nanolaser Array on Plasmonic Grating. ACS Photonics, 2017, 4, 649-656.	3.2	26
26	Highly Reproducible Organometallic Halide Perovskite Microdevices based on Topâ€Down Lithography. Advanced Materials, 2017, 29, 1606205.	11.1	138
27	Solutionâ€Phase Synthesis of Cesium Lead Halide Perovskite Microrods for Highâ€Quality Microlasers and Photodetectors. Advanced Optical Materials, 2017, 5, 1700023.	3.6	66
28	Room temperature three-photon pumped CH3NH3PbBr3 perovskite microlasers. Scientific Reports, 2017, 7, 45391.	1.6	48
29	Single Crystal Microrod Based Homonuclear Photonic Molecule Lasers. Advanced Optical Materials, 2017, 5, 1600744.	3.6	13
30	Maskless Fabrication of Aluminum Nanoparticles for Plasmonic Enhancement of Lead Halide Perovskite Lasers. Advanced Optical Materials, 2017, 5, 1700529.	3.6	18
31	Tailoring the Performances of Lead Halide Perovskite Devices with Electronâ€Beam Irradiation. Advanced Materials, 2017, 29, 1701636.	11.1	72
32	Whispering-gallery-mode based CH₃NH₃PbBr₃ perovskite microrod lasers with high quality factors. Materials Chemistry Frontiers, 2017, 1, 477-481.	3.2	39
33	Organic-inorganic Lead Halide Perovskite CH3NH3PbBr3 Nanolaser Array based on Silicon Grating. , 2017, , .		0
34	Triangular lasing modes in hexagonal perovskite microplates with balanced gain and loss. RSC Advances, 2016, 6, 64589-64594.	1.7	5
35	Large-Scale and Defect-Free Silicon Metamaterials with Magnetic Response. Scientific Reports, 2016, 6, 25760.	1.6	10
36	Unidirectional Lasing Emissions from CH₃NH₃PbBr₃ Perovskite Microdisks. ACS Photonics, 2016, 3, 1125-1130.	3.2	106

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37	Hybridizing CH₃NH₃PbBr₃ microwires and tapered fibers for efficient light collection. Journal of Materials Chemistry A, 2016, 4, 8015-8019.	5.2	18
38	The Role of Excitons on Light Amplification in Lead Halide Perovskites. Advanced Materials, 2016, 28, 10165-10169.	11.1	7
39	Improving the Performance of a CH₃NH₃PbBr₃ Perovskite Microrod Laser through Hybridization with Fewâ€Layered Graphene. Advanced Optical Materials, 2016, 4, 2057-2062.	3.6	20
40	Postsynthetic and Selective Control of Lead Halide Perovskite Microlasers. Journal of Physical Chemistry Letters, 2016, 7, 3886-3891.	2.1	37
41	High-Density and Uniform Lead Halide Perovskite Nanolaser Array on Silicon. Journal of Physical Chemistry Letters, 2016, 7, 2549-2555.	2.1	54
42	Random lasing actions in self-assembled perovskite nanoparticles. Optical Engineering, 2016, 55, 057102.	0.5	29
43	Fabricating high refractive index titanium dioxide film using electron beam evaporation for all-dielectric metasurfaces. MRS Communications, 2016, 6, 77-83.	0.8	13
44	Tailoring the lasing modes in CH₃NH₃PbBr₃ perovskite microplates via micro-manipulation. RSC Advances, 2016, 6, 50553-50558.	1.7	11
45	Twoâ€Photon Pumped CH₃NH₃PbBr₃ Perovskite Microwire Lasers. Advanced Optical Materials, 2016, 4, 472-479.	3.6	134
46	Tunable perovskite microdisk lasers. Nanoscale, 2016, 8, 8717-8721.	2.8	32
47	Formation of single-mode laser in transverse plane of perovskite microwire via micromanipulation. Optics Letters, 2016, 41, 555.	1.7	52
48	Inversed Vernier effect based single-mode laser emission in coupled microdisks. Scientific Reports, 2015, 5, 13682.	1.6	25
49	End-fire injection of guided light into optical microcavity. Applied Physics B: Lasers and Optics, 2015, 120, 255-260.	1.1	5
50	Deformed Microdisk-Based End-Fire Injection and Collection Resonant Device. Journal of Lightwave Technology, 2015, 33, 3698-3703.	2.7	6
51	Electromagnetically induced-transparency-like spectrum in an add/drop interferometer. Applied Optics, 2015, 54, 1285.	0.9	5
52	Photon hopping and nanowire based hybrid plasmonic waveguide and ring-resonator. Scientific Reports, 2015, 5, .	1.6	27
53	Quasi-guiding Modes in Microfibers on a High Refractive Index Substrate. ACS Photonics, 2015, 2, 1278-1283.	3.2	16
54	Improvement of the chirality near avoided resonance crossing in optical microcavity. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1.	2.0	7

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55	Single Nanoparticle Detection Using Far-field Emission of Photonic Molecule around the Exceptional Point. Scientific Reports, 2015, 5, 11912.	1.6	35
56	The combination of high Q factor and chirality in twin cavities and microcavity chain. Scientific Reports, 2014, 4, 6493.	1.6	14
57	Tunable Fano resonance in a single-ring-resonator-based add/drop interferometer. Applied Optics, 2013, 52, 4884.	0.9	4
58	Nested fiber ring resonator enhanced Machâ€"Zehnder interferometer for temperature sensing. Applied Optics, 2012, 51, 8873.	0.9	14