Zhuoying Chen

List of Publications by Year
in descending order

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50 papers	3,725 citations	257450 24 h-index	206112 48 g-index
53 all docs	53 docs citations	53 times ranked	6266 citing authors

#	Article	IF	Citations
1	Plasmon Coupled Colloidal Gold Nanorods for Nearâ€Infrared and Shortâ€Waveâ€Infrared Broadband Photodetection. Advanced Materials Technologies, 2022, 7, .	5.8	4
2	Luminescence enhancement effects on nanostructured perovskite thin films for Er/Yb-doped solar cells. Nanoscale Advances, 2022, 4, 1786-1792.	4.6	2
3	Direct imaging of fluorescence enhancement in the gap between two gold nanodisks. Applied Physics Letters, 2021, 118, 161105.	3.3	0
4	Colloidal upconversion nanocrystals enable low-temperature-grown GaAs photoconductive switch operating at Î»Â=Â1.55 Î¼m. Nanotechnology, 2021, 32, 45LT01.	2.6	1
5	Long-Term Stable Near-Infraredâ€“Short-Wave-Infrared Photodetector Driven by the Photothermal Effect of Polypyrrole Nanostructures. ACS Applied Materials & Interfaces, 2021, 13, 45957-45965.	8.0	9
6	Flexible and wearable plasmonic-enabled organic/inorganic hybrid photothermoelectric generators. Materials Today Energy, 2021, 22, 100859.	4.7	20
7	Revealing Crystallization Dynamics and the Compositional Control Mechanism of 2D Perovskite Film Growth by In Situ Synchrotron-Based GIXRD. ACS Energy Letters, 2020, 5, 8-16.	17.4	68
8	Ligand dependent oxidation dictates the performance evolution of high efficiency PbS quantum dot solar cells. Sustainable Energy and Fuels, 2020, 4, 108-115.	4.9	27
9	Enhancing the Efficiency and Stability of Triple-Cation Perovskite Solar Cells by Eliminating Excess PbI₂ from the Perovskite/Hole Transport Layer Interface. ACS Applied Materials & Interfaces, 2020, 12, 54824-54832.	8.0	56
10	Thermal conductivity and diffusivity of triple-cation perovskite halide materials for solar cells. Journal of Applied Physics, 2020, 127, .	2.5	3
11	TiO₂ Nanocolumn Arrays for More Efficient and Stable Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 5979-5989.	8.0	36
12	Upconversion nanoparticles extending the spectral sensitivity of silicon photodetectors to Î» = 1.5 Î¼m. Nanotechnology, 2020, 31, 495201.	2.6	4
13	Heavy-Metal-Free Flexible Hybrid Polymer-Nanocrystal Photodetectors Sensitive to 1.5 Î¼m Wavelength. ACS Applied Materials & Interfaces, 2019, 11, 42571-42579.	8.0	12
14	Microscopic Characterizations of Upconversion-Induced Near-Infrared Light Harvest in Hybrid Perovskite Solar Cells. Microscopy and Microanalysis, 2019, 25, 2134-2135.	0.4	0
15	Hybrid plasmonic gold-nanorodâ€“platinum short-wave infrared photodetectors with fast response. Nanoscale, 2019, 11, 18124-18131.	5.6	7
16	Mapping plasmon-enhanced upconversion fluorescence of Er/Yb-doped nanocrystals near gold nanodisks. Nanoscale, 2019, 11, 10365-10371.	5.6	8
17	Nanoscale thermal characterization of high aspect ratio gold nanorods for photothermal applications at Î»â€‰=â€‰1.5â€‰Î¼m. Journal of Applied Physics, 2019, 125, .	2.5	9
18	Probing charge transfer states at organic and hybrid internal interfaces by photothermal deflection spectroscopy. Journal of Physics Condensed Matter, 2019, 31, 124001.	1.8	9

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19	Shortâ€Wave Infrared Sensor by the Photothermal Effect of Colloidal Gold Nanorods. Small, 2018, 14, e1704013.	10.0	16
20	Compact layer free mixed-cation lead mixed-halide perovskite solar cells. Chemical Communications, 2018, 54, 2623-2626.	4.1	27
21	The effect of ionic composition on acoustic phonon speeds in hybrid perovskites from Brillouin spectroscopy and density functional theory. Journal of Materials Chemistry C, 2018, 6, 3861-3868.	5.5	23
22	Microscopic Evidence of Upconversion-Induced Near-Infrared Light Harvest in Hybrid Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 3537-3543.	5.1	35
23	Effect of Ion Migration-Induced Electrode Degradation on the Operational Stability of Perovskite Solar Cells. ACS Omega, 2018, 3, 10042-10047.	3.5	76
24	Organic Cation Rotation and Immobilization in Pure and Mixed Methylammonium Lead-Halide Perovskites. Journal of the American Chemical Society, 2017, 139, 4068-4074.	13.7	114
25	Fluorescence enhancement near single TiO2 nanodisks. Applied Physics Letters, 2017, 111, .	3.3	13
26	Nanoscale thermometry with fluorescent yttrium-based Er/Yb-doped fluoride nanocrystals. Sensors and Actuators A: Physical, 2016, 250, 71-77.	4.1	19
27	Plasmonic-enhanced perovskiteâ€“graphene hybrid photodetectors. Nanoscale, 2016, 8, 7377-7383.	5.6	144
28	Reduced Carrier Recombination in PbS - CuInS2 Quantum Dot Solar Cells. Scientific Reports, 2015, 5, 10626.	3.3	44
29	Real-Time Observation of Organic Cation Reorientation in Methylammonium Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2015, 6, 3663-3669.	4.6	322
30	Optical, structural, and electrical properties of PEDOT:PSS thin films doped with silver nanoprisms. Optical Materials Express, 2014, 4, 2525.	3.0	20
31	Ultrafast infrared spectroscopy reveals intragap states in methylammonium lead iodide perovskite materials. Proceedings of SPIE, 2014, , .	0.8	3
32	Quasiâ€2D Colloidal Semiconductor Nanoplatelets for Narrow Electroluminescence. Advanced Functional Materials, 2014, 24, 295-302.	14.9	208
33	Multifunctional materials for OFETs, LEFETs and NIR PLEDs. Journal of Materials Chemistry C, 2014, 2, 5133-5141.	5.5	38
34	Ultrafast Optical Control of Charge Dynamics in Organic and Hybrid Electronic Nanodevices. , 2014, , .		0
35	Charge Trapping Dynamics in PbS Colloidal Quantum Dot Photovoltaic Devices. ACS Nano, 2013, 7, 8771-8779.	14.6	78
36	Electrooptical Spectroscopy of Uniaxially Aligned Polythiophene Films in Field-Effect Transistors. Chemistry of Materials, 2013, 25, 2075-2082.	6.7	22

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37	Highâ€Performance Ambipolar Diketopyrrolopyrroleâ€Thieno[3,2â€b]thiophene Copolymer Fieldâ€Effect Transistors with Balanced Hole and Electron Mobilities. Advanced Materials, 2012, 24, 647-652.	21.0	521
38	Origin of the different transport properties of electron and hole polarons in an ambipolar polyselenophene-based conjugated polymer. Physical Review B, 2011, 84, .	3.2	39
39	Silaindacenodithiophene Semiconducting Polymers for Efficient Solar Cells and High-Mobility Ambipolar Transistors. Chemistry of Materials, 2011, 23, 768-770.	6.7	126
40	Thieno[3,2-b]thiopheneâ^'Diketopyrrolopyrrole-Containing Polymers for High-Performance Organic Field-Effect Transistors and Organic Photovoltaic Devices. Journal of the American Chemical Society, 2011, 133, 3272-3275.	13.7	854
41	Enhanced charge transport by incorporating additional thiophene units in the poly(fluorene-thienyl-benzothiadiazole) polymer. Organic Electronics, 2011, 12, 461-471.	2.6	21
42	(100) MgAl2O4 as a lattice-matched substrate for the epitaxial thin film deposition of the relaxor ferroelectric PMN-PT. Applied Physics A: Materials Science and Processing, 2010, 98, 187-194.	2.3	9
43	High Mobility Ambipolar Charge Transport in Polyselenophene Conjugated Polymers. Advanced Materials, 2010, 22, 2371-2375.	21.0	178
44	Structure Direction of IIâ^'VI Semiconductor Quantum Dot Binary Nanoparticle Superlattices by Tuning Radius Ratio. ACS Nano, 2008, 2, 1219-1229.	14.6	135
45	Optimized Conditions for the Self-Organization of CdSe-Au and CdSe-CdSe Binary Nanoparticle Superlattices. Chemistry of Materials, 2008, 20, 3594-3600.	6.7	39
46	Metal Acetylacetonates as General Precursors for the Synthesis of Early Transition Metal Oxide Nanomaterials. Journal of Nanomaterials, 2007, 2007, 1-7.	2.7	44
47	WÃ¼stite nanocrystals: Synthesis, structure and superlattice formation. Journal of Materials Research, 2007, 22, 1987-1995.	2.6	24
48	Binary Nanoparticle Superlattices in the Semiconductorâ^'Semiconductor System:â€‰ CdTe and CdSe. Journal of the American Chemical Society, 2007, 129, 15702-15709.	13.7	122
49	Barium titanate nanocrystals and nanocrystal thin films: Synthesis, ferroelectricity, and dielectric properties. Journal of Applied Physics, 2006, 100, 034316.	2.5	120
50	New nonhydrolytic route to synthesize crystalline BaTiO3 nanocrystals with surface capping ligands. Journal of Materials Research, 2006, 21, 3187-3195.	2.6	13