Ziyu Wang

List of Publications by Year
in descending order

43 papers	3,557 citations	218677 26 h-index	276875 41 g-index
46 all docs	46 docs citations	46 times ranked	6198 citing authors

#	Article	IF	Citations
1	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	14.6	705
2	Scalable Production of a Few-Layer MoS₂/WS₂ Vertical Heterojunction Array and Its Application for Photodetectors. ACS Nano, 2016, 10, 573-580.	14.6	362
3	Two-Dimensional CH₃NH₃PbI₃ Perovskite: Synthesis and Optoelectronic Application. ACS Nano, 2016, 10, 3536-3542.	14.6	359
4	Phase Segregation Enhanced Ion Movement in Efficient Inorganic CsPbIBr₂ Solar Cells. Advanced Energy Materials, 2017, 7, 1700946.	19.5	318
5	Synthesis, properties, and optical applications of low-dimensional perovskites. Chemical Communications, 2016, 52, 13637-13655.	4.1	252
6	Highly stable hybrid perovskite light-emitting diodes based on Dion-Jacobson structure. Science Advances, 2019, 5, eaaw8072.	10.3	188
7	Strong Depletion in Hybrid Perovskite pâ€“n Junctions Induced by Local Electronic Doping. Advanced Materials, 2018, 30, e1705792.	21.0	141
8	Stretchable Nanolayered Thermoelectric Energy Harvester on Complex and Dynamic Surfaces. Nano Letters, 2020, 20, 4445-4453.	9.1	106
9	Strain Relaxation of Monolayer WS₂ on Plastic Substrate. Advanced Functional Materials, 2016, 26, 8707-8714.	14.9	97
10	Atomically thin lateral pâ€“n junction photodetector with large effective detection area. 2D Materials, 2016, 3, 041001.	4.4	78
11	Wavelength-tunable waveguides based on polycrystalline organicâ€“inorganic perovskite microwires. Nanoscale, 2016, 8, 6258-6264.	5.6	76
12	Reversible Structural Swellâ€“Shrink and Recoverable Optical Properties in Hybrid Inorganicâ€“Organic Perovskite. ACS Nano, 2016, 10, 7031-7038.	14.6	68
13	Growth of nano-textured graphene coatings across highly porous stainless steel supports towards corrosion resistant coatings. Carbon, 2015, 87, 395-408.	10.3	65
14	Diffraction-limited imaging with monolayer 2D material-based ultrathin flat lenses. Light: Science and Applications, 2020, 9, 137.	16.6	65
15	Controlled Growth of Monocrystalline Organoâ€Lead Halide Perovskite and Its Application in Photonic Devices. Angewandte Chemie - International Edition, 2017, 56, 12486-12491.	13.8	54
16	Synergetic utilization of photoabsorption and surface facet in crystalline/amorphous contacted BiOCl-Bi2S3 composite for photocatalytic degradation. Journal of Alloys and Compounds, 2019, 780, 907-916.	5.5	46
17	Back-contact perovskite solar cells with honeycomb-like charge collecting electrodes. Nano Energy, 2018, 50, 710-716.	16.0	44
18	Role of Surface Recombination in Halide Perovskite Nanoplatelets. ACS Applied Materials & Interfaces, 2018, 10, 31586-31593.	8.0	41

#	Article	IF	Citations
19	Capillary-bridge mediated assembly of aligned perovskite quantum dots for high-performance photodetectors. Journal of Materials Chemistry C, 2019, 7, 5954-5961.	5.5	41
20	Interface engineering in CeO2 (1 1 1) facets decorated with CdSe quantum dots for photocatalytic hydrogen evolution. Journal of Colloid and Interface Science, 2020, 579, 707-713.	9.4	41
21	Degradation of Two-Dimensional CH₃NH₃PbI₃ Perovskite and CH₃NH₃PbI₃/Graphene Heterostructure. ACS Applied Materials & Interfaces, 2018, 10, 24258-24265.	8.0	40
22	Fabrication of bismuth titanate nanosheets with tunable crystal facets for photocatalytic degradation of antibiotic. Journal of Materials Science, 2019, 54, 13740-13752.	3.7	35
23	Construction of porous N-doped graphene layer for efficient oxygen reduction reaction. Chemical Engineering Science, 2019, 194, 36-44.	3.8	34
24	Silverâ€Nanoparticleâ€Modified Polyimide for Multiple Artificial Skinâ€Sensing Applications. Advanced Materials Technologies, 2019, 4, 1900426.	5.8	32
25	Dramatically improving thermoelectric performance of topological half-Heusler compound LuPtSb via hydrostatic pressure. Journal of Materials Chemistry A, 2018, 6, 20069-20075.	10.3	31
26	Reliable Synthesis of Largeâ€Area Monolayer WS₂ Single Crystals, Films, and Heterostructures with Extraordinary Photoluminescence Induced by Water Intercalation. Advanced Optical Materials, 2018, 6, 1701347.	7.3	28
27	Synergistical Tuning Interface Barrier and Phonon Propagation in Auâ€“Sb₂Te₃ Nanoplate for Boosting Thermoelectric Performance. Journal of Physical Chemistry Letters, 2019, 10, 4903-4909.	4.6	26
28	Flat Lenses Based on 2D Perovskite Nanosheets. Advanced Materials, 2020, 32, e2001388.	21.0	26
29	Self-healing: A new skill unlocked for ultrasound transducer. Nano Energy, 2020, 68, 104348.	16.0	22
30	Thermoelectric Properties of Strained Î²-Cu₂Se. ACS Applied Materials & Interfaces, 2021, 13, 34367-34373.	8.0	20
31	One-pot nitridation route synthesis of SrTaO2N/Ta3N5 type II heterostructure with enhanced visible-light photocatalytic activity. Journal of Colloid and Interface Science, 2019, 554, 74-79.	9.4	19
32	Ultralow thermal conductivity and high thermoelectric performance of Cu2Se/TiO2 nanocomposite. Applied Physics Letters, 2019, 115, .	3.3	18
33	3D Printing of Nacre-Inspired Structures with Exceptional Mechanical and Flame-Retardant Properties. Research, 2022, 2022, 9840574.	5.7	18
34	Enhanced photoresponse behavior of Au@Bi2Te3 based photoelectrochemical-type photodetector at solid-solid-liquid joint interface. Materials Today Energy, 2020, 16, 100401.	4.7	17
35	Controlled Growth of Monocrystalline Organoâ€Lead Halide Perovskite and Its Application in Photonic Devices. Angewandte Chemie, 2017, 129, 12660-12665.	2.0	10
36	Superscattering of Sound by a Deep-Subwavelength Solid Mazelike Rod. Physical Review Applied, 2019, 12, .	3.8	10

#	Article	IF	Citations
37	Extremely Anisotropic Thermoelectric Properties of SnSe Under Pressure. Energy and Environmental Materials, 2023, 6, .	12.8	8
38	Improvement of the thermoelectric properties of a MoO₃ monolayer through oxygen vacancies. Beilstein Journal of Nanotechnology, 2019, 10, 2031-2038.	2.8	7
39	Metafluids beyond the Bulk Modulus. Physical Review Letters, 2020, 125, 185502.	7.8	4
40	Strong Anisotropy and Bipolar Conduction-Dominated Thermoelectric Transport Properties in the Polycrystalline Topological Phase of ZrTe₅. Inorganic Chemistry, 2021, 60, 8890-8897.	4.0	4
41	Role of lone pair electrons in n-type thermoelectric properties of tin oxides ^{**}. Journal of Physics Condensed Matter, 2020, 33, 065504.	1.8	1
42	Titelbild: Controlled Growth of Monocrystalline Organoâ€Lead Halide Perovskite and Its Application in Photonic Devices (Angew. Chem. 41/2017). Angewandte Chemie, 2017, 129, 12547-12547.	2.0	0
43	Revealing the Relationship between Design and Performance of Back-Contact Perovskite Solar Cells with Honeycomb Charge Collecting Electrode. , 0, , .		0