Zhinan Guo

List of Publications by Year
in descending order

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62 papers	8,783 citations	76326 40 h-index	106344 65 g-index
67 all docs	67 docs citations	67 times ranked	8339 citing authors

#	Article	IF	Citations
1	Ultrasmall Black Phosphorus Quantum Dots: Synthesis and Use as Photothermal Agents. Angewandte Chemie - International Edition, 2015, 54, 11526-11530.	13.8	906
2	From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics. Advanced Functional Materials, 2015, 25, 6996-7002.	14.9	862
3	Surface Coordination of Black Phosphorus for Robust Air and Water Stability. Angewandte Chemie - International Edition, 2016, 55, 5003-5007.	13.8	479
4	Metalâ€Ionâ€Modified Black Phosphorus with Enhanced Stability and Transistor Performance. Advanced Materials, 2017, 29, 1703811.	21.0	431
5	Ultrathin 2D Nonlayered Tellurium Nanosheets: Facile Liquidâ€Phase Exfoliation, Characterization, and Photoresponse with High Performance and Enhanced Stability. Advanced Functional Materials, 2018, 28, 1705833.	14.9	348
6	Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots. Advanced Optical Materials, 2016, 4, 1223-1229.	7.3	326
7	Recent advances in two-dimensional-material-based sensing technology toward health and environmental monitoring applications. Nanoscale, 2020, 12, 3535-3559.	5.6	318
8	Recent advances in black phosphorus-based photonics, electronics, sensors and energy devices. Materials Horizons, 2017, 4, 997-1019.	12.2	296
9	Emerging Trends in Phosphorene Fabrication towards Next Generation Devices. Advanced Science, 2017, 4, 1600305.	11.2	285
10	Highâ€Performance Photoâ€Electrochemical Photodetector Based on Liquidâ€Exfoliated Fewâ€Layered InSe Nanosheets with Enhanced Stability. Advanced Functional Materials, 2018, 28, 1705237.	14.9	258
11	Black phosphorus: a two-dimension saturable absorption material for mid-infrared Q-switched and mode-locked fiber lasers. Scientific Reports, 2016, 6, 30361.	3.3	242
12	Fewâ€Layer Tin Sulfide: A Promising Blackâ€Phosphorusâ€Analogue 2D Material with Exceptionally Large Nonlinear Optical Response, High Stability, and Applications in Allâ€Optical Switching and Wavelength Conversion. Advanced Optical Materials, 2018, 6, 1700985.	7.3	212
13	Metabolizable Ultrathin Bi₂Se₃ Nanosheets in Imagingâ€Guided Photothermal Therapy. Small, 2016, 12, 4136-4145.	10.0	203
14	Recent advances in emerging Janus two-dimensional materials: from fundamental physics to device applications. Journal of Materials Chemistry A, 2020, 8, 8813-8830.	10.3	185
15	Black Phosphorus Based All-Optical-Signal-Processing: Toward High Performances and Enhanced Stability. ACS Photonics, 2017, 4, 1466-1476.	6.6	173
16	Size-dependent nonlinear optical properties of black phosphorus nanosheets and their applications in ultrafast photonics. Journal of Materials Chemistry C, 2017, 5, 3007-3013.	5.5	150
17	Fluorinated Phosphorene: Electrochemical Synthesis, Atomistic Fluorination, and Enhanced Stability. Small, 2017, 13, 1702739.	10.0	150
18	Two-Dimensional Tellurium: Progress, Challenges, and Prospects. Nano-Micro Letters, 2020, 12, 99.	27.0	139

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19	Surface Coordination of Black Phosphorus for Robust Air and Water Stability. Angewandte Chemie, 2016, 128, 5087-5091.	2.0	116
20	Recent Developments in Stability and Passivation Techniques of Phosphorene toward Nextâ€Generation Device Applications. Advanced Functional Materials, 2019, 29, 1903419.	14.9	113
21	PLLA Nanofibrous Paper-Based Plasmonic Substrate with Tailored Hydrophilicity for Focusing SERS Detection. ACS Applied Materials & Interfaces, 2015, 7, 5391-5399.	8.0	109
22	Ultrathin GeSe Nanosheets: From Systematic Synthesis to Studies of Carrier Dynamics and Applications for a High-Performance UVâ€“Vis Photodetector. ACS Applied Materials & Interfaces, 2019, 11, 4278-4287.	8.0	105
23	Recent advances in doping engineering of black phosphorus. Journal of Materials Chemistry A, 2020, 8, 5421-5441.	10.3	93
24	Perovskite CsPbX₃: A Promising Nonlinear Optical Material and Its Applications for Ambient Allâ€Optical Switching with Enhanced Stability. Advanced Optical Materials, 2018, 6, 1800400.	7.3	90
25	Dual-wavelength Q-switched Er:SrF_2 laser with a black phosphorus absorber in the mid-infrared region. Optics Express, 2016, 24, 30289.	3.4	88
26	Memristive devices based on emerging two-dimensional materials beyond graphene. Nanoscale, 2019, 11, 12413-12435.	5.6	87
27	Efficient Enrichment and Self-Assembly of Hybrid Nanoparticles into Removable and Magnetic SERS Substrates for Sensitive Detection of Environmental Pollutants. ACS Applied Materials & Interfaces, 2017, 9, 7472-7480.	8.0	84
28	2D GeP as a Novel Broadband Nonlinear Optical Material for Ultrafast Photonics. Laser and Photonics Reviews, 2019, 13, 1900123.	8.7	76
29	High-performance polarization-sensitive photodetectors on two-dimensional Î²-InSe. National Science Review, 2022, 9, nwab098.	9.5	75
30	Recent advances in anisotropic two-dimensional materials and device applications. Nano Research, 2021, 14, 897-919.	10.4	69
31	Graphene/MoS₂/Graphene Vertical Heterostructureâ€Based Broadband Photodetector with High Performance. Advanced Materials Interfaces, 2021, 8, 2001730.	3.7	65
32	Tunable Broadband Nonlinear Optical Properties of Black Phosphorus Quantum Dots for Femtosecond Laser Pulses. Materials, 2017, 10, 210.	2.9	56
33	In situ preparation of a CsPbBr₃/black phosphorus heterostructure with an optimized interface and photodetector application. Nanoscale, 2019, 11, 16852-16859.	5.6	55
34	Bismuth telluride topological insulator nanosheet saturable absorbers for qâ€switched modeâ€locked Tm:ZBLAN waveguide lasers. Annalen Der Physik, 2016, 528, 543-550.	2.4	54
35	Phase Transitions and Water Splitting Applications of 2D Transition Metal Dichalcogenides and Metal Phosphorous Trichalcogenides. Advanced Science, 2021, 8, 2002284.	11.2	47
36	Deepâ€Learningâ€Enabled MXeneâ€Based Artificial Throat: Toward Sound Detection and Speech Recognition. Advanced Materials Technologies, 2020, 5, 2000262.	5.8	45

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37	Black phosphorus saturable absorber for a diode-pumped passively Q-switched Er:CaF2 mid-infrared laser. Optics Communications, 2018, 406, 158-162.	2.1	44
38	Emerging two-dimensional noncarbon nanomaterials for flexible lithium-ion batteries: opportunities and challenges. Journal of Materials Chemistry A, 2019, 7, 25227-25246.	10.3	44
39	Two Dimensional Î²-InSe with Layer-Dependent Properties: Band Alignment, Work Function and Optical Properties. Nanomaterials, 2019, 9, 82.	4.1	43
40	Q-switched waveguide laser based on two-dimensional semiconducting materials: tungsten disulfide and black phosphorous. Optics Express, 2016, 24, 2858.	3.4	41
41	Anisotropic Plasmonic Nanostructure Induced Polarization Photoresponse for MoS₂â€Based Photodetector. Advanced Materials Interfaces, 2020, 7, 1902179.	3.7	41
42	Electronic and Optical Properties of Two-Dimensional Tellurene: From First-Principles Calculations. Nanomaterials, 2019, 9, 1075.	4.1	40
43	Recent advances in black phosphorus/carbon hybrid composites: from improved stability to applications. Journal of Materials Chemistry A, 2020, 8, 4647-4676.	10.3	39
44	Liquefaction of water on the surface of anisotropic two-dimensional atomic layered black phosphorus. Nature Communications, 2019, 10, 4062.	12.8	37
45	Monolayer Î²-tellurene: a promising p-type thermoelectric material via first-principles calculations. Nanoscale, 2019, 11, 18116-18123.	5.6	36
46	Synthesis and stabilization of black phosphorus and phosphorene: Recent progress and perspectives. IScience, 2021, 24, 103116.	4.1	30
47	Repression of Interlayer Recombination by Graphene Generates a Sensitive Nanostructured 2D vdW Heterostructure Based Photodetector. Advanced Science, 2021, 8, e2100503.	11.2	28
48	Highly Efficient Silicon Photonic Microheater Based on Black Arsenicâ€“Phosphorus. Advanced Optical Materials, 2020, 8, 1901526.	7.3	26
49	Solar-blind deep-ultraviolet photodetectors based on solution-synthesized quasi-2D Te nanosheets. Nanophotonics, 2020, 9, 2459-2466.	6.0	24
50	The chemistry of colloidal semiconductor nanocrystals: From metal-chalcogenides to emerging perovskite. Coordination Chemistry Reviews, 2020, 418, 213333.	18.8	23
51	Tailoring nonlinear optical properties of Bi2Se3 through ion irradiation. Scientific Reports, 2016, 6, 21799.	3.3	22
52	Water-Dispersible CsPbBr3 Perovskite Nanocrystals with Ultra-Stability and its Application in Electrochemical CO2 Reduction. Nano-Micro Letters, 2021, 13, 172.	27.0	20
53	Unveiling the Stimulated Robust Carrier Lifetime of Surfaceâ€Bound Excitons and Their Photoresponse in InSe. Advanced Materials Interfaces, 2019, 6, 1900171.	3.7	18
54	Fast solution method to prepare hexagonal tellurium nanosheets for optoelectronic and ultrafast photonic applications. Journal of Materials Chemistry C, 2021, 9, 508-516.	5.5	17

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55	Goldâ€patterned microarray chips for ultrasensitive surfaceâ€enhanced Raman scattering detection of ultratrace samples. Journal of Raman Spectroscopy, 2019, 50, 26-33.	2.5	9
56	Drawing-fabrication of multifarious nanoplasmonic platform on PLLA paper for optimized SERS performance. Journal of Raman Spectroscopy, 2016, 47, 687-691.	2.5	8
57	Quantum Dots: Solvothermal Synthesis and Ultrafast Photonics of Black Phosphorus Quantum Dots (Advanced Optical Materials 8/2016). Advanced Optical Materials, 2016, 4, 1222-1222.	7.3	7
58	Photodetectors Based on MoS₂/MAPbBr₃ van der Waals Heterojunction. IEEE Electron Device Letters, 2022, 43, 414-417.	3.9	7
59	Phosphorene: From Black Phosphorus to Phosphorene: Basic Solvent Exfoliation, Evolution of Raman Scattering, and Applications to Ultrafast Photonics (Adv. Funct. Mater. 45/2015). Advanced Functional Materials, 2015, 25, 7100-7100.	14.9	6
60	Photothermal Therapy: Metabolizable Ultrathin Bi2Se3Nanosheets in Imaging-Guided Photothermal Therapy (Small 30/2016). Small, 2016, 12, 4158-4158.	10.0	4
61	Nonlayered 2D Materials: Ultrathin 2D Nonlayered Tellurium Nanosheets: Facile Liquid-Phase Exfoliation, Characterization, and Photoresponse with High Performance and Enhanced Stability (Adv.) Tj ETQq1 1 0.784314 rgBT /Ov	14.9	3
62	RÃ¼cktitelbild: Surface Coordination of Black Phosphorus for Robust Air and Water Stability (Angew.) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.9	0