Yu Zhao

List of Publications by Year
in descending order

98 papers	1,688 citations	257101 24 h-index	360668 35 g-index
98 all docs	98 docs citations	98 times ranked	2157 citing authors

#	Article	IF	Citations
1	High-Performance Blue Molecular Emitter-Free and Doping-Free Hybrid White Organic Light-Emitting Diodes: an Alternative Concept To Manipulate Charges and Excitons Based on Exciplex and Electroplex Emission. ACS Photonics, 2017, 4, 1566-1575.	3.2	73
2	Preparation and characterization of ZnS thin films prepared by chemical bath deposition. Materials Science in Semiconductor Processing, 2013, 16, 1478-1484.	1.9	70
3	2D In₂S₃ Nanoflake Coupled with Graphene toward Highâ€Sensitivity and Fastâ€Response Bulkâ€Silicon Schottky Photodetector. Small, 2019, 15, e1904912.	5.2	67
4	Synthesis of flower-like MoS2 nanosheets microspheres by hydrothermal method. Journal of Materials Science: Materials in Electronics, 2015, 26, 8160-8166.	1.1	62
5	Self-Powered SnS_{1â€“<i>x</i>}Se<i>_x</i> Alloy/Silicon Heterojunction Photodetectors with High Sensitivity in a Wide Spectral Range. ACS Applied Materials & Interfaces, 2019, 11, 40222-40231.	4.0	58
6	Effect of different complexing agents on the properties of chemical-bath-deposited ZnS thin films. Journal of Alloys and Compounds, 2014, 588, 228-234.	2.8	55
7	2D van der Waals heterostructures: processing, optical properties and applications in ultrafast photonics. Materials Horizons, 2020, 7, 2903-2921.	6.4	44
8	Synthesis and characterization of CdSe nanocrystalline thin films deposited by chemical bath deposition. Materials Science in Semiconductor Processing, 2013, 16, 1592-1598.	1.9	40
9	Doping-free white organic light-emitting diodes without blue molecular emitter: An unexplored approach to achieve high performance via exciplex emission. Applied Physics Letters, 2017, 110, .	1.5	39
10	Thicknessâ€Dependent Optical Properties and Inâ€Plane Anisotropic Raman Response of the 2D Î²â€In 2 S 3. Advanced Optical Materials, 2019, 7, 1901085.	3.6	39
11	Nonâ€Layered Te/In₂S₃ Tunneling Heterojunctions with Ultrahigh Photoresponsivity and Fast Photoresponse. Small, 2022, 18, e2200445.	5.2	38
12	Regulating Charge and Exciton Distribution in High-Performance Hybrid White Organic Light-Emitting Diodes with n-Type Interlayer Switch. Nano-Micro Letters, 2017, 9, 37.	14.4	37
13	Graphene/In₂S₃ van der Waals Heterostructure for Ultrasensitive Photodetection. ACS Photonics, 2018, 5, 4912-4919.	3.2	36
14	Dy3+ Doped Ca9Gd(PO4)7: a novel single-phase full-color emitting phosphor. Journal of Materials Science: Materials in Electronics, 2018, 29, 6548-6555.	1.1	34
15	Allâ€Dielectric Nanostructure Fabryâ€“PÃ©rotâ€Enhanced Mie Resonances Coupled with Photogain Modulation toward Ultrasensitive In₂S₃ Photodetector. Advanced Functional Materials, 2021, 31, 2007987.	7.8	34
16	Solvothermal synthesis of Cu2ZnSnS4 nanocrystalline thin films for application of solar cells. International Journal of Hydrogen Energy, 2015, 40, 797-805.	3.8	32
17	High-performance hybrid white organic light-emitting diodes exploiting blue thermally activated delayed fluorescent dyes. Dyes and Pigments, 2017, 147, 83-89.	2.0	32
18	Dye-sensitized solar cells based on ZnO nanoflowers and TiO2 nanoparticles composite photoanodes. Journal of Materials Science: Materials in Electronics, 2014, 25, 1122-1126.	1.1	29

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19	Growth of Cu2ZnSnS4 thin films on transparent conducting glass substrates by the solvothermal method. Materials Letters, 2013, 111, 120-122.	1.3	28
20	Out of plane stacking of InSe-based heterostructures towards high performance electronic and optoelectronic devices using a graphene electrode. Journal of Materials Chemistry C, 2018, 6, 12509-12517.	2.7	28
21	Investigation on the structure and optical properties of chemically deposited ZnSe nanocrystalline thin films. Physica B: Condensed Matter, 2013, 410, 120-125.	1.3	27
22	Tunable electronic structure of graphdiyne/MoS2 van der Waals heterostructure. Materials Letters, 2018, 228, 289-292.	1.3	26
23	Epitaxial growth of large-scale In₂S₃ nanoflakes and the construction of a high performance In₂S₃/Si photodetector. Journal of Materials Chemistry C, 2019, 7, 12104-12113.	2.7	26
24	Universal Strategy Integrating Strain and Interface Engineering to Drive Highâ€Performance 2D Material Photodetectors. Advanced Optical Materials, 2021, 9, 2100450.	3.6	26
25	Self-supported hierarchical porous Li4Ti5O12/carbon arrays for boosted lithium ion storage. Journal of Energy Chemistry, 2021, 54, 754-760.	7.1	25
26	Synthesis of NiCo2S4 nanowire arrays through ion exchange reaction and their application in Pt-free counter-electrode. Materials Letters, 2016, 166, 154-157.	1.3	24
27	Self-assembly In2Se3/SnSe2 heterostructure array with suppressed dark current and enhanced photosensitivity for weak signal. Science China Materials, 2020, 63, 1560-1569.	3.5	24
28	In-situ growth of Cu2ZnSnS4 nanospheres thin film on transparent conducting glass and its application in dye-sensitized solar cells. Materials Letters, 2015, 141, 228-230.	1.3	23
29	Controllable growth of large-area atomically thin ReS2 films and their thickness-dependent optoelectronic properties. Applied Physics Letters, 2019, 114, .	1.5	23
30	Hydrothermal synthesis of WSe2 films and their application in high-performance photodetectors. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	1.1	22
31	High performance tin diselenide photodetectors dependent on thickness: a vertical graphene sandwiched device and interfacial mechanism. Nanoscale, 2019, 11, 13309-13317.	2.8	22
32	Structural and optical properties of CdS thin films prepared by chemical bath deposition at different ammonia concentration and S/Cd molar ratios. Journal of Materials Science: Materials in Electronics, 2013, 24, 457-462.	1.1	20
33	Nonlinear optical properties of PtTe₂ based saturable absorbers for ultrafast photonics. Journal of Materials Chemistry C, 2022, 10, 5124-5133.	2.7	20
34	Synthesis and up-conversion properties of Ho 3+ -Yb 3+ -F â^' tri-doped TiO 2 nanoparticles and their application in dye-sensitized solar cells. Materials Research Bulletin, 2017, 88, 1-8.	2.7	18
35	Direct growth of Cu2ZnSnS4 on three-dimensional porous reduced graphene oxide thin films as counter electrode with high conductivity and excellent catalytic activity for dye-sensitized solar cells. Journal of Materials Science, 2018, 53, 2748-2757.	1.7	18
36	Silver nanoparticle-decorated graphene oxide for surface-enhanced Raman scattering detection and optical limiting applications. Journal of Materials Science, 2018, 53, 573-580.	1.7	18

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37	Tunable Polarity Behavior and High-Performance Photosensitive Characteristics in Schottky-Barrier Field-Effect Transistors Based on Multilayer WS₂. ACS Applied Materials & Interfaces, 2018, 10, 2745-2751.	4.0	17
38	Memtransistors Based on Non-Layered In₂S₃ Two-Dimensional Thin Films With Optical-Modulated Multilevel Resistance States and Gate-Tunable Artificial Synaptic Plasticity. IEEE Access, 2020, 8, 106726-106734.	2.6	17
39	Large-area ReS2 monolayer films on flexible substrate for SERS based molecular sensing with strong fluorescence quenching. Applied Surface Science, 2021, 542, 148757.	3.1	17
40	NiCo2S4 nanosheet thin film counter electrodes prepared by a two-step approach for dye-sensitized solar cells. Materials Letters, 2018, 217, 185-188.	1.3	16
41	Bright white-light upconversion from core-shell nanocrystals through interfacial energy transfer. Dyes and Pigments, 2018, 154, 87-91.	2.0	15
42	Synthesis of Submillimeterâ€Scale Single Crystal Stannous Sulfide Nanoplates for Visible and Nearâ€Infrared Photodetectors with Ultrahigh Responsivity. Advanced Electronic Materials, 2018, 4, 1800154.	2.6	15
43	Efficient passivation of monolayer MoS2 by epitaxially grown 2D organic crystals. Science Bulletin, 2019, 64, 1700-1706.	4.3	15
44	Electrocatalytic performance of ReS2 nanosheets in hydrogen evolution reaction. International Journal of Hydrogen Energy, 2022, 47, 2293-2303.	3.8	15
45	Effect of stacking type in precursors on composition, morphology and electrical properties of the CIGS films. Journal of Materials Science: Materials in Electronics, 2013, 24, 2553-2557.	1.1	14
46	Study of perovskite solar cells based on mixed-organic-cation FA_xMA_{1â^'x}PbI₃ absorption layer. Physical Chemistry Chemical Physics, 2019, 21, 11822-11828.	1.3	14
47	Synthesis of In2S3 thin films directly onto conductive substrates via PVP-assisted microwave irradiation method. Materials Letters, 2018, 210, 66-69.	1.3	12
48	Enhanced Raman scattering on two-dimensional palladium diselenide. Nanoscale, 2022, 14, 4181-4187.	2.8	12
49	Solvothermal synthesis of CuInS2 powders and CuInS2 thin films for solar cell application. Journal of Materials Science: Materials in Electronics, 2013, 24, 5055-5060.	1.1	11
50	Rapid synthesis of Cu2ZnSnS4 nanocrystalline thin films directly on transparent conductive glass substrates by microwave irradiation. Materials Letters, 2015, 148, 63-66.	1.3	11
51	Synthesis and characterization of Cu2ZnSnS4 nanocrystals prepared by microwave irradiation method. Journal of Materials Science: Materials in Electronics, 2015, 26, 5645-5652.	1.1	11
52	Study of carbon-based hole-conductor-free perovskite solar cells. International Journal of Hydrogen Energy, 2018, 43, 11403-11410.	3.8	11
53	Rational construction of vertical few layer graphene/NiO core-shell nanoflake arrays for efficient oxygen evolution reaction. Materials Research Bulletin, 2021, 139, 111260.	2.7	11
54	High-quality two-dimensional tellurium flakes grown by high-temperature vapor deposition. Journal of Materials Chemistry C, 2021, 9, 14394-14400.	2.7	10

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55	A reasonably designed 2D WS₂ and CdS microwire heterojunction for high performance photoresponse. Nanoscale, 2021, 13, 5660-5669.	2.8	10
56	A spontaneously formed plasmonic-MoTe2 hybrid platform for ultrasensitive Raman enhancement. Cell Reports Physical Science, 2021, 2, 100526.	2.8	10
57	Investigation of the ZnSxSe1-x thin films prepared by chemical bath deposition. Journal of Materials Science: Materials in Electronics, 2013, 24, 1348-1353.	1.1	9
58	Transport and interfacial transfer of electrons in dye-sensitized solar cells based on a TiO2 nanoparticle/TiO2 nanowire â€œdouble-layerâ€• working electrode. Journal of Renewable and Sustainable Energy, 2013, 5, 033101.	0.8	9
59	Junction temperature measurement of GaN-based light-emitting diodes using temperature-dependent resistance. Semiconductor Science and Technology, 2014, 29, 035008.	1.0	8
60	Synthesis of CoS@NiS core/shell nanoarrays as efficient counter electrode for dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2017, 28, 4904-4907.	1.1	8
61	Synthesis of vertically aligned CoS prismatic nanorods as counter electrodes for dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2019, 30, 1541-1546.	1.1	8
62	Synthesis and characterization of the ultra-thin SnS flakes and the micron-thick SnS crystals by chemical vapor deposition. Journal of Materials Science: Materials in Electronics, 2019, 30, 10879-10885.	1.1	8
63	Dye-sensitized solar cells based on multilayered ultrafine TiO2 nanowire photoanodes. Journal of Materials Science: Materials in Electronics, 2014, 25, 4008-4011.	1.1	7
64	Preparation of vertically aligned two-dimensional SnS₂ nanosheet film with strong saturable absorption to femtosecond laser. Journal Physics D: Applied Physics, 2019, 52, 165101.	1.3	7
65	Growth of large-area two-dimensional non-layered Î²-In2S3 continuous thin films and application for photodetector device. Journal of Materials Science: Materials in Electronics, 2020, 31, 18175-18185.	1.1	7
66	Two-dimensional palladium ditelluride: A novel saturable absorption material for ultrafast fiber lasers. Infrared Physics and Technology, 2021, 119, 103962.	1.3	7
67	Influence of V/III Ratio of Low Temperature Grown AlN Interlayer on the Growth of GaN on Si<111> Substrate. Japanese Journal of Applied Physics, 2011, 50, 105501.	0.8	6
68	Studies on up-converting Ho 3+ -Yb 3+ -F âˆ’ tri-doped TiO 2 nanoparticles for enhancing efficiency of dye-sensitized solar cells. Optical Materials, 2017, 69, 219-225.	1.7	6
69	Colloidally synthesized MoSe2 nano-flowers anchored on three-dimensional porous reduced graphene oxide thin films as advanced counter electrode for dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2017, 28, 15418-15422.	1.1	6
70	Chemical vapor deposition of two-dimensional SnS2 nanoflakes and flower-shaped SnS2. Journal of Materials Science: Materials in Electronics, 2018, 29, 16057-16063.	1.1	6
71	<i>Q</i>-switched ytterbium fiber laser based on rhenium diselenide as a saturable absorber. Journal Physics D: Applied Physics, 2019, 52, 465101.	1.3	6
72	Experimental Observation of Ultrahigh Mobility Anisotropy of Organic Semiconductors in the Two-Dimensional Limit. ACS Applied Electronic Materials, 2020, 2, 2888-2894.	2.0	6

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73	Metalâ€“organic framework-derived cobalt diselenide as an efficient electrocatalyst for dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2020, 31, 12309-12316.	1.1	6
74	Nonlayered In₂S₃/Al₂O₃/CsPbBr₃ Quantum Dot Heterojunctions for Sensitive and Stable Photodetectors. ACS Applied Nano Materials, 2021, 4, 5106-5114.	2.4	6
75	Aggregationâ€Induced Emission Luminogens for Direct Exfoliation of 2D Layered Materials in Ethanol. Advanced Materials Interfaces, 2020, 7, 2000795.	1.9	5
76	Layer-dependent electrical transport property of two-dimensional ReS2 thin films. Journal of Materials Science: Materials in Electronics, 2021, 32, 24342-24350.	1.1	5
77	Near-infrared upconversion of Nd through Gd-mediated interfacial energy transfer in core-shell nanoparticles. Optical Materials Express, 2018, 8, 2449.	1.6	4
78	Uniform and electroforming-free resistive memory devices based on solution-processed triple-layered NiO/Al2O3 thin films. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	1.1	4
79	Light Output Enhancement of GaN-Based Light-Emitting Diodes Based on AlN/GaN Distributed Bragg Reflectors Grown on Si (111) Substrates. Crystals, 2020, 10, 772.	1.0	4
80	An artificial optoelectronic nociceptor based on In₂S₃ memristor. Journal Physics D: Applied Physics, 2022, 55, 125401.	1.3	4
81	Influence of Deposition Parameters on the Morphology, Structural, and Optical Properties of ZnSe Nanocrystalline Thin Films. Journal of Electronic Materials, 2013, 42, 684-691.	1.0	3
82	Synthesis of nanostructured CuInS2 thin films and their application in dye-sensitized solar cells. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	3
83	Effect of solution concentration on the properties of Cu2ZnSnS4 nanocrystalline thin films prepared by microwave irradiation. Journal of Materials Science: Materials in Electronics, 2017, 28, 3407-3414.	1.1	3
84	Photon upconversion in Yb/Tb co-sensitized core-shell nanocrystals by interfacial energy transfer. Optical Materials Express, 2017, 7, 1022.	1.6	3
85	Controlling the morphology of ultrathin MoS2/MoO2 nanosheets grown by chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2018, 36, 05G509.	0.9	3
86	Effect of Cs+ Fraction on Photovoltaic Performance of Perovskite Solar Cells Based on CsxMA1âˆ’xPbI3 Absorption Layers. Journal of Electronic Materials, 2020, 49, 7044-7053.	1.0	3
87	Atomic Intercalation Induced Spin-Flip Transition in Bilayer CrI3. Nanomaterials, 2022, 12, 1420.	1.9	3
88	High Quality GaN Grown on Si(111) Using Fast Coalescence Growth. Japanese Journal of Applied Physics, 2011, 50, 121001.	0.8	2
89	High-Power Light-Emitting Diodes Package With Phase Change Material. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 1747-1753.	1.4	2
90	Growth of nanosheet array and nanosheet microsphere CuInS2 thin films on transparent conducting substrates. Electronic Materials Letters, 2014, 10, 1075-1079.	1.0	2

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91	Enhanced light extraction of GaN-based light-emitting diodes with periodic textured SiO ₂ on Al-doped ZnO transparent conductive layer. Chinese Physics B, 2016, 25, 078502.	0.7	2
92	Effects of mixed solvent on morphology of CH3NH3PbI3 absorption layers and photovoltaic performance of perovskite solar cells. Journal of Materials Science: Materials in Electronics, 2018, 29, 18868-18877.	1.1	2
93	A new circular spinneret system for electrospinning numerical approach and electric field optimization. Thermal Science, 2019, 23, 2229-2235.	0.5	2
94	Effect of FA+ Fraction and Dipping Time on Performance of FAxMA1âˆ’xPbI3 Films and Perovskite Solar Cells. Journal of Electronic Materials, 2020, 49, 7054-7064.	1.0	1
95	Anchoring CoS on three-dimensional porous rGO thin films as efficient counter electrodes for dye-sensitized solar cells. Journal of Materials Science: Materials in Electronics, 2020, 31, 22546-22553.	1.1	1
96	Design and tolerance analysis of photonic crystal slabs with ultrahigh reflection. Optical Engineering, 2011, 50, 114602.	0.5	0
97	Study of MAPb(I1âˆ’xBrx)3 thin film and perovskite solar cells based on hole transport material-free and carbon electrode. Journal of Materials Science: Materials in Electronics, 2022, 33, 2654.	1.1	0
98	Ti3C2Tx MXene Quantum Dots with Surface-Terminated Groups (-F, -OH, =O, -Cl) for Ultrafast Photonics. Nanomaterials, 2022, 12, 2043.	1.9	0