

# Manzhang Xu

## List of Publications by Year in descending order

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61  
papers

2,062  
citations

257450

24  
h-index

265206

42  
g-index

63  
all docs

63  
docs citations

63  
times ranked

2458  
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent progress of flexible electronics by 2D transition metal dichalcogenides. Nano Research, 2022, 15, 2413-2432.	10.4	58
2	Solid-Ionic Memory in a van der Waals Heterostructure. ACS Nano, 2022, 16, 221-231.	14.6	6
3	Controlled growth of ultrathin ferromagnetic $\text{I}^2\text{MnSe}$ semiconductor. SmartMat, 2022, 3, 482-490.	10.7	7
4	Highly Sensitive Flexible Temperature Sensor Made Using PEDOT:PSS/PANI. ACS Applied Polymer Materials, 2022, 4, 766-772.	4.4	16
5	2D Cairo Pentagonal PdPS: Airâ€Stable Anisotropic Ternary Semiconductor with High Optoelectronic Performance. Advanced Functional Materials, 2022, 32, .	14.9	25
6	Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. Nature Catalysis, 2022, 5, 212-221.	34.4	113
7	Ultraâ€Robust and Extensible Fibrous Mechanical Sensors for Wearable Smart Healthcare. Advanced Materials, 2022, 34, e2107511.	21.0	83
8	Direct growth of single-metal-atom chains. , 2022, 1, 245-253.		16
9	Cobalt nitride as a novel cocatalyst to boost photocatalytic CO <sub>2</sub> reduction. Nano Energy, 2021, 79, 105429.	16.0	117
10	Two-step chemical vapor deposition synthesis of NiTe <sub>2</sub> -MoS <sub>2</sub> vertical junctions with improved MoS <sub>2</sub> transistor performance. Nanotechnology, 2021, 32, 235204.	2.6	12
11	Recent Advances in Synthesis and Study of 2D Twisted Transition Metal Dichalcogenide Bilayers. Small Structures, 2021, 2, 2000153.	12.0	29
12	Blue-violet emission of silicon carbonitride thin films prepared by sputtering and annealing treatment. Applied Surface Science, 2021, 546, 149121.	6.1	7
13	MoO <sub>3</sub> â€MoS <sub>2</sub> vertical heterostructures synthesized via one-step CVD process for optoelectronics. 2D Materials, 2021, 8, 035036.	4.4	24
14	PdPSe: Componentâ€Fusionâ€Based Topology Designer of Twoâ€Dimensional Semiconductor. Advanced Functional Materials, 2021, 31, 2102943.	14.9	15
15	Shape-controlled and stable hollow frame structures of SnO and their highly sensitive NO <sub>2</sub> gas sensing. Sensors and Actuators B: Chemical, 2021, 340, 129940.	7.8	17
16	Study on photoelectricity properties of SiCN thin films prepared by magnetron sputtering. Journal of Materials Research and Technology, 2021, 15, 460-467.	5.8	5
17	Ultrasensitive NO <sub>2</sub> gas sensor based on Sb-doped SnO <sub>2</sub> covered ZnO nano-heterojunction. Journal of Materials Science, 2021, 56, 7348-7356.	3.7	17
18	Inversion symmetry broken in 2H phase vanadium-doped molybdenum disulfide. Nanoscale, 2021, 13, 18103-18111.	5.6	11

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19	Programmable patterned MoS <sub>2</sub> film by direct laser writing for health-related signals monitoring. <i>IScience</i> , 2021, 24, 103313.	4.1	12
20	Machine Learning Driven Synthesis of Few-Layered WTe <sub>2</sub> with Geometrical Control. <i>Journal of the American Chemical Society</i> , 2021, 143, 18103-18113.	13.7	30
21	Space-confined microwave synthesis of ternary-layered BiOCl crystals with high-performance ultraviolet photodetection. <i>Informa-Materials</i> , 2020, 2, 593-600.	17.3	32
22	Carbon Microtube Aerogel Derived from Kapok Fiber: An Efficient and Recyclable Sorbent for Oils and Organic Solvents. <i>ACS Nano</i> , 2020, 14, 595-602.	14.6	104
23	Construction of hierarchical SnO <sub>2</sub> @Fe <sub>3</sub> O <sub>4</sub> nanostructures for efficient microwave absorption. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 498, 166224.	2.3	30
24	Construction of highly ordered ZnO microrod@SnO <sub>2</sub> nanowire heterojunction hybrid with a test-tube brush-like structure for high performance lithium-ion batteries: experimental and theoretical study. <i>Electrochimica Acta</i> , 2020, 330, 135312.	5.2	29
25	Terahertz Surface Emission from MoSe <sub>2</sub> at the Monolayer Limit. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 48161-48169.	8.0	28
26	Strain-Engineering of Bi <sub>12</sub> O <sub>17</sub> Br <sub>2</sub> Nanotubes for Boosting Photocatalytic CO <sub>2</sub> Reduction. , 2020, 2, 1025-1032.		82
27	Phase-controllable growth of ultrathin 2D magnetic FeTe crystals. <i>Nature Communications</i> , 2020, 11, 3729.	12.8	120
28	Giant and Anisotropic Nonlinear Optical Responses of 1D van der Waals Material Tellurium. <i>Advanced Optical Materials</i> , 2020, 8, 2001273.	7.3	17
29	Machine learning-guided synthesis of advanced inorganic materials. <i>Materials Today</i> , 2020, 41, 72-80.	14.2	70
30	Enhanced visible light photocatalytic performances of few-layer MoS <sub>2</sub> @TiO <sub>2</sub> hollow spheres heterostructures. <i>Materials Research Bulletin</i> , 2020, 130, 110936.	5.2	37
31	Optogenetics inspired transition metal dichalcogenide neuristors for in-memory deep recurrent neural networks. <i>Nature Communications</i> , 2020, 11, 3211.	12.8	36
32	Oxygen vacancy mediated bismuth stannate ultra-small nanoparticle towards photocatalytic CO <sub>2</sub> -to-CO conversion. <i>Applied Catalysis B: Environmental</i> , 2020, 276, 119156.	20.2	59
33	A novel preparation method for uniform large-area graphene films on Ni@Cu substrate. <i>Materials Today Communications</i> , 2019, 21, 100607.	1.9	1
34	New strategy towards the assembly of hierarchical heterostructures of SnO <sub>2</sub> /ZnO for NO <sub>2</sub> detection at a ppb level. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 2801-2809.	6.0	24
35	Bismuth Vacancy-Tuned Bismuth Oxybromide Ultrathin Nanosheets toward Photocatalytic CO <sub>2</sub> Reduction. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 30786-30792.	8.0	140
36	Enhancing the cycling stability of Na-ion batteries by bonding MoS <sub>2</sub> on assembled carbon-based materials. <i>Nano Materials Science</i> , 2019, 1, 310-317.	8.8	9

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37	First-principles calculations and experimental investigation on SnO <sub>2</sub> @ZnO heterojunction photocatalyst with enhanced photocatalytic performance. <i>Journal of Colloid and Interface Science</i> , 2019, 553, 613-621.	9.4	67
38	Facile synthesis of oil adsorbent carbon microtubes by pyrolysis of plant tissues. <i>Journal of Materials Science</i> , 2019, 54, 9352-9361.	3.7	12
39	Size-Dependent Activity of Iron-Nickel Oxynitride towards Electrocatalytic Oxygen Evolution. <i>ChemNanoMat</i> , 2019, 5, 883-887.	2.8	5
40	A hierarchical sandwich-structured MoS <sub>2</sub> /SnO <sub>2</sub> /CC heterostructure for high photocatalysis performance. <i>Materials Letters</i> , 2019, 236, 697-701.	2.6	13
41	Pressure induced photoluminescence modulation in a wide range and synthesis of monodispersed ternary Ag <sub>2</sub> S nanocrystal based on Ag <sub>2</sub> S nanocrystals. <i>Nanoscale</i> , 2018, 10, 2577-2587.	5.6	7
42	Novel SnO <sub>2</sub> @ZnO hierarchical nanostructures for highly sensitive and selective NO <sub>2</sub> gas sensing. <i>Sensors and Actuators B: Chemical</i> , 2018, 257, 714-727.	7.8	157
43	Effect of Sb-doping on the morphology and the infrared emissivity of peony-like SnO <sub>2</sub> microspheres. <i>Integrated Ferroelectrics</i> , 2018, 191, 1-7.	0.7	12
44	Tunable band gap of graphyne-based homo- and hetero-structures by stacking sequences, strain and electric field. <i>Physical Chemistry Chemical Physics</i> , 2018, 20, 26934-26946.	2.8	16
45	Inventive design of Cu/SiO <sub>2</sub> substrate for chemical vapor deposition preparation of dense carbon nanofibers. <i>Diamond and Related Materials</i> , 2018, 89, 174-179.	3.9	9
46	Microwave-assistant hydrothermal synthesis of SnO <sub>2</sub> @ZnO hierarchical nanostructures enhanced photocatalytic performance under visible light irradiation. <i>Materials Research Bulletin</i> , 2018, 106, 74-80.	5.2	38
47	Effect of Sn/Zn ratio on structure and photoluminescence properties of SnO <sub>2</sub> @ZnO composites. <i>Integrated Ferroelectrics</i> , 2018, 189, 189-196.	0.7	0
48	In-situ growth of W <sub>18</sub> O <sub>49</sub> @carbon clothes for flexible-easy-recycled photocatalysts with high performance. <i>Materials Letters</i> , 2018, 230, 224-227.	2.6	9
49	One-pot solvothermal preparation of mesoporous Cu(II)Porphyrin-TiO <sub>2</sub> composites with enhanced photocatalytic activity and stability. <i>Inorganic and Nano-Metal Chemistry</i> , 2017, 47, 783-787.	1.6	8
50	Single CdS Nanorod for High Responsivity UV-Visible Photodetector. <i>Advanced Optical Materials</i> , 2017, 5, 1700159.	7.3	47
51	Ingenious design of Cu/Ni substrate for hot filament chemical vapor deposition growth of high quality graphene films. <i>Diamond and Related Materials</i> , 2017, 72, 7-12.	3.9	9
52	Reversible and high-capacity SnO <sub>2</sub> /carbon cloth composite electrode materials prepared by magnetron sputtering for Li-ion batteries. <i>Materials Letters</i> , 2017, 190, 56-59.	2.6	26
53	DFT study of the effect of BN pair doping on the electronic and optical properties of graphyne nanosheets. <i>Journal of Materials Science</i> , 2017, 52, 10294-10307.	3.7	21
54	Enhanced radar and infrared compatible stealth properties in hierarchical SnO <sub>2</sub> @ZnO nanostructures. <i>Ceramics International</i> , 2017, 43, 3443-3447.	4.8	52

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55	Facile synthesis of nano-MoS <sub>2</sub> and its visible light photocatalytic property. Materials Research Bulletin, 2017, 87, 119-122.	5.2	26
56	Synthesis, growth mechanism, and photoluminescence property of hierarchical SnO <sub>2</sub> nanoflower-rod arrays: an experimental and first principles study. Journal of Materials Science, 2016, 51, 9613-9624.	3.7	10
57	Effect of single vacancy on the structural, electronic structure and magnetic properties of monolayer graphyne by first-principles. Materials Chemistry and Physics, 2016, 182, 439-444.	4.0	18
58	Hydrothermal synthesis and photoluminescence properties of SnO <sub>2</sub> nanowire array and pinecone-like nanoparticles on ITO substrate. Materials Letters, 2016, 165, 243-246.	2.6	12
59	Preparation and electrochemical performance of bramble-like ZnO array as anode materials for lithium-ion batteries. Journal of Nanoparticle Research, 2015, 17, 1.	1.9	25
60	First-principles study of B or Al-doping effect on the structural, electronic structure and magnetic properties of $\hat{1}^3$ -graphyne. Computational Materials Science, 2015, 108, 147-152.	3.0	20
61	Physical Vapor Deposition Growth of Ultrathin Molybdenum Dioxide Nanosheets with Excellent Conductivity. Advanced Engineering Materials, 0, , 2101358.	3.5	1