

# Xiang Chen

## List of Publications by Year in descending order

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48  
papers

2,664  
citations

201674

27  
h-index

233421

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g-index

48  
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48  
docs citations

48  
times ranked

4878  
citing authors

#	ARTICLE	IF	CITATIONS
1	Graphene-Based Flexible and Stretchable Electronics. <i>Advanced Materials</i> , 2016, 28, 4184-4202.	21.0	537
2	MoS <sub>2</sub> -Based Tactile Sensor for Electronic Skin Applications. <i>Advanced Materials</i> , 2016, 28, 2556-2562.	21.0	351
3	CVD-grown monolayer MoS <sub>2</sub> in bioabsorbable electronics and biosensors. <i>Nature Communications</i> , 2018, 9, 1690.	12.8	155
4	A self-powered ultraviolet photodetector based on solution-processed p-NiO/n-ZnO nanorod array heterojunction. <i>RSC Advances</i> , 2015, 5, 5976-5981.	3.6	97
5	Local Strain Induced Band Gap Modulation and Photoluminescence Enhancement of Multilayer Transition Metal Dichalcogenides. <i>Chemistry of Materials</i> , 2017, 29, 5124-5133.	6.7	97
6	Enhanced photoresponse of Cu <sub>2</sub> O/ZnO heterojunction with piezo-modulated interface engineering. <i>Nano Research</i> , 2014, 7, 860-868.	10.4	93
7	Stacking-controllable interlayer coupling and symmetric configuration of multilayered MoS <sub>2</sub> . <i>NPG Asia Materials</i> , 2018, 10, e468-e468.	7.9	90
8	A wafer-scale van der Waals dielectric made from an inorganic molecular crystal film. <i>Nature Electronics</i> , 2021, 4, 906-913.	26.0	86
9	ZnO nanowire array ultraviolet photodetectors with self-powered properties. <i>Current Applied Physics</i> , 2013, 13, 165-169.	2.4	81
10	Three-Dimensional Ordered ZnO/Cu <sub>2</sub> O Nanoheterojunctions for Efficient Metal-Oxide Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2015, 7, 3216-3223.	8.0	74
11	Lithography-free plasma-induced patterned growth of MoS <sub>2</sub> and its heterojunction with graphene. <i>Nanoscale</i> , 2016, 8, 15181-15188.	5.6	68
12	Surface-Functionalization-Mediated Direct Transfer of Molybdenum Disulfide for Large-Area Flexible Devices. <i>Advanced Functional Materials</i> , 2018, 28, 1706231.	14.9	66
13	Lattice Strain Leads to High Thermoelectric Performance in Polycrystalline SnSe. <i>ACS Nano</i> , 2021, 15, 8204-8215.	14.6	66
14	Transition Metal Dichalcogenides for Sensing and Oncotherapy: Status, Challenges, and Perspective. <i>Advanced Functional Materials</i> , 2021, 31, 2004408.	14.9	49
15	Self-powered ultraviolet photodetectors based on selectively grown ZnO nanowire arrays with thermal tuning performance. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 9525.	2.8	48
16	Achieving ultra-strong Magnesium-lithium alloys by low-strain rotary swaging. <i>Materials Research Letters</i> , 2021, 9, 255-262.	8.7	48
17	Highly Flexible Hybrid CMOS Inverter Based on Si Nanomembrane and Molybdenum Disulfide. <i>Small</i> , 2016, 12, 5720-5727.	10.0	46
18	Simple fabrication of a ZnO nanorod array UV detector with a high performance. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014, 61, 180-184.	2.7	45

#	ARTICLE	IF	CITATIONS
19	Large-scale patterned ZnO nanorod arrays for efficient photoelectrochemical water splitting. <i>Applied Surface Science</i> , 2015, 339, 122-127.	6.1	44
20	Large-area synthesis of transition metal dichalcogenides <i>via</i> CVD and solution-based approaches and their device applications. <i>Nanoscale</i> , 2021, 13, 615-633.	5.6	44
21	Low-voltage blue light emission from n-ZnO/p-GaN heterojunction formed by RF magnetron sputtering method. <i>Current Applied Physics</i> , 2014, 14, 345-348.	2.4	41
22	Solution-gated transistors of two-dimensional materials for chemical and biological sensors: status and challenges. <i>Nanoscale</i> , 2020, 12, 11364-11394.	5.6	41
23	Design of efficient dye-sensitized solar cells with patterned ZnO@ZnS core-shell nanowire array photoanodes. <i>Nanoscale</i> , 2014, 6, 4691-4697.	5.6	38
24	Degradation behaviors and mechanisms of MoS <sub>2</sub> crystals relevant to bioabsorbable electronics. <i>NPG Asia Materials</i> , 2018, 10, 810-820.	7.9	36
25	Semiconducting quantum dots: Modification and applications in biomedical science. <i>Science China Materials</i> , 2020, 63, 1631-1650.	6.3	33
26	Biodegradable and bioabsorbable sensors based on two-dimensional materials. <i>Journal of Materials Chemistry B</i> , 2020, 8, 1082-1092.	5.8	30
27	High sensitivity, fast speed and self-powered ultraviolet photodetectors based on ZnO micro/nanowire networks. <i>Progress in Natural Science: Materials International</i> , 2014, 24, 1-5.	4.4	28
28	Ultraviolet and visible photoresponse properties of a ZnO/Si heterojunction at zero bias. <i>RSC Advances</i> , 2013, 3, 17682.	3.6	24
29	Orientation-dependent optical characterization of atomically thin transition metal ditellurides. <i>Nanoscale</i> , 2018, 10, 21978-21984.	5.6	24
30	Transient SHG Imaging on Ultrafast Carrier Dynamics of MoS <sub>2</sub> Nanosheets. <i>Advanced Materials</i> , 2018, 30, e1705190.	21.0	23
31	Improving microstructure and wear resistance of plasma clad Fe-based alloy coating by a mechanical vibration technique during cladding. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2010, 528, 397-401.	5.6	22
32	Facile fabrication of large-scale patterned ZnO nanorod arrays with tunable arrangement, period and morphology. <i>CrystEngComm</i> , 2013, 15, 8022.	2.6	19
33	High-performance vertical field-effect transistors based on all-inorganic perovskite microplatelets. <i>Journal of Materials Chemistry C</i> , 2020, 8, 12632-12637.	5.5	16
34	Tunable channel width of a UV-gate field effect transistor based on ZnO micro-nano wire. <i>RSC Advances</i> , 2014, 4, 18378.	3.6	14
35	Advanced Devices for Tumor Diagnosis and Therapy. <i>Small</i> , 2021, 17, 2100003.	10.0	14
36	High-throughput fabrication of large-scale highly ordered ZnO nanorod arrays via three-beam interference lithography. <i>CrystEngComm</i> , 2013, 15, 8416.	2.6	13

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37	Enhancing the high temperature oxidation behavior of Cr <sub>2</sub> AlC coatings by reducing grain boundary nanoporosity. Materials Research Letters, 2021, 9, 127-133.	8.7	13
38	Nano-Gradient Materials Prepared by Rotary Swaging. Nanomaterials, 2021, 11, 2223.	4.1	12
39	High-performance monolayer Na <sub>3</sub> Sb shrinking transistors: a DFT-NEGF study. Nanoscale, 2020, 12, 18931-18937.	5.6	11
40	Directed graph attention neural network utilizing 3D coordinates for molecular property prediction. Computational Materials Science, 2021, 200, 110761.	3.0	11
41	High-Throughput Discovery and Investigation of Auxetic Two-Dimensional Crystals. Chemistry of Materials, 2022, 34, 4344-4354.	6.7	6
42	Tactile Sensors: MoS <sub>2</sub> -Based Tactile Sensor for Electronic Skin Applications (Adv. Mater.) Tj ETQq0 0,0 rBT /Overlock 10 Tf 5	21.0	0
43	Creating a Ferromagnetic Ground State with <i>T<sub>c</sub></i> Above Room Temperature in a Paramagnetic Alloy through Non-equilibrium Nanostructuring. Advanced Materials, 2022, 34, e2108793.	21.0	3
44	DFT coupled with NEGF study of structural, electronic and transport properties of two-dimensional InOBr. Vacuum, 2020, 182, 109745.	3.5	1
45	A mixed-dimensional WS <sub>2</sub> /GaSb heterojunction for high-performance p-n diodes and junction field-effect transistors. Journal of Materials Chemistry C, 2022, 10, 1511-1516.	5.5	1
46	SOLUTION PROCESSED ZNO NANOROD ARRAYS/PFO HYBRID HETEROJUNCTION FOR LIGHT EMITTING. , 2012, , .		0
47	Flexible Electronics: Highly Flexible Hybrid CMOS Inverter Based on Si Nanomembrane and Molybdenum Disulfide (Small 41/2016). Small, 2016, 12, 5650-5650.	10.0	0
48	Carrier Dynamics: Transient SHG Imaging on Ultrafast Carrier Dynamics of MoS <sub>2</sub> Nanosheets (Adv.) Tj ETQq0 0 0 rBT /Overlock 10 Tf 5	21.0	0