## Xuewen Wang

List of Publications by Year in descending order

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Version: 2024-02-01

69 6,674 35 69 papers citations h-index g-index

71 71 71 10098 all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Silkâ€Molded Flexible, Ultrasensitive, and Highly Stable Electronic Skin for Monitoring Human Physiological Signals. Advanced Materials, 2014, 26, 1336-1342.	11.1	1,225
2	Flexible Sensing Electronics for Wearable/Attachable Health Monitoring. Small, 2017, 13, 1602790.	5.2	690
3	Room-temperature ferroelectricity in CulnP2S6 ultrathin flakes. Nature Communications, 2016, 7, 12357.	5 <b>.</b> 8	637
4	Single-Layer Single-Crystalline SnSe Nanosheets. Journal of the American Chemical Society, 2013, 135, 1213-1216.	6.6	433
5	Flexible Capacitive Tactile Sensor Based on Micropatterned Dielectric Layer. Small, 2016, 12, 5042-5048.	5.2	377
6	High-quality monolayer superconductor NbSe2 grown by chemical vapour deposition. Nature Communications, 2017, 8, 394.	<b>5.</b> 8	290
7	Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications. Advanced Science, 2017, 4, 1600404.	5.6	207
8	Largeâ€Area and Highâ€Quality 2D Transition Metal Telluride. Advanced Materials, 2017, 29, 1603471.	11.1	181
9	Self-gating in semiconductor electrocatalysis. Nature Materials, 2019, 18, 1098-1104.	13.3	167
10	Twoâ€dimensional materials: From mechanical properties to flexible mechanical sensors. InformaÄnÃ-Materiály, 2020, 2, 1077-1094.	8.5	158
11	Engineering grain boundaries at theÂ2D limit for theÂhydrogen evolution reaction. Nature Communications, 2020, 11, 57.	5 <b>.</b> 8	153
12	Exfoliation at the Liquid/Air Interface to Assemble Reduced Graphene Oxide Ultrathin Films for a Flexible Noncontact Sensing Device. Advanced Materials, 2015, 27, 1370-1375.	11.1	148
13	Versatile Electronic Skins for Motion Detection of Joints Enabled by Aligned Fewâ€Walled Carbon Nanotubes in Flexible Polymer Composites. Advanced Functional Materials, 2017, 27, 1606604.	7.8	119
14	Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. Nature Catalysis, 2022, 5, 212-221.	16.1	113
15	Strong interfacial coupling of MoS2/g-C3N4 van de Waals solids for highly active water reduction. Nano Energy, 2016, 27, 44-50.	8.2	96
16	Ultraâ∈Robust and Extensible Fibrous Mechanical Sensors for Wearable Smart Healthcare. Advanced Materials, 2022, 34, e2107511.	11.1	83
17	Controllable Synthesis of 3D Ni(OH) <sub>2</sub> and NiO Nanowalls on Various Substrates for High-Performance Nanosensors. Small, 2015, 11, 731-739.	5.2	81
18	Controlled Synthesis of Atomically Thin 1T-TaS <sub>2</sub> for Tunable Charge Density Wave Phase Transitions. Chemistry of Materials, 2016, 28, 7613-7618.	3.2	75

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19	A facile synthesis method for Ni(OH)2 ultrathin nanosheets and their conversion to porous NiO nanosheets used for formaldehyde sensing. RSC Advances, 2012, 2, 13018.	1.7	74
20	Subatomic deformation driven by vertical piezoelectricity from CdS ultrathin films. Science Advances, 2016, 2, e1600209.	4.7	67
21	Solution processed lead-free cesium titanium halide perovskites and their structural, thermal and optical characteristics. Journal of Materials Chemistry C, 2020, 8, 1591-1597.	2.7	67
22	Largeâ€Area Atomic Layers of the Chargeâ€Densityâ€Wave Conductor TiSe <sub>2</sub> . Advanced Materials, 2018, 30, 1704382.	11.1	60
23	Recent progress of flexible electronics by 2D transition metal dichalcogenides. Nano Research, 2022, 15, 2413-2432.	5.8	58
24	Fabrication of Superstrong Ultrathin Free-Standing Single-Walled Carbon Nanotube Films via a Wet Process. Advanced Functional Materials, 2011, 21, 4358-4363.	7.8	53
25	Grainâ∈Boundary Engineering of Monolayer MoS <sub>2</sub> for Energyâ∈Efficient Lateral Synaptic Devices. Advanced Materials, 2021, 33, e2102435.	11.1	53
26	Controlled synthesis of AgInS2 nanocrystals and their application in organic–inorganic hybrid photodetectors. CrystEngComm, 2013, 15, 6443.	1.3	52
27	Bifunctional NbS <sub>2</sub> -Based Asymmetric Heterostructure for Lateral and Vertical Electronic Devices. ACS Nano, 2020, 14, 175-184.	<b>7.</b> 3	51
28	Phase-transition modulated, high-performance dual-mode photodetectors based on WSe <sub>2</sub> /VO <sub>2</sub> heterojunctions. Applied Physics Reviews, 2019, 6, 041407.	5.5	50
29	Single CdS Nanorod for High Responsivity UV–Visible Photodetector. Advanced Optical Materials, 2017, 5, 1700159.	3.6	47
30	Hydrothermal synthesis and gas sensing properties ofÂsingle-crystalline ultralong ZnO nanowires. Applied Physics A: Materials Science and Processing, 2010, 98, 635-641.	1,1	43
31	Substrate modified thermal stability of mono- and few-layer MoS <sub>2</sub> . Nanoscale, 2018, 10, 3540-3546.	2.8	43
32	Flexible and wearable healthcare sensors for visual reality health-monitoring. Virtual Reality & Intelligent Hardware, 2019, 1, 411-427.	1.8	42
33	Monolayer MoS <sub>2</sub> Synaptic Transistors for High-Temperature Neuromorphic Applications. Nano Letters, 2021, 21, 10400-10408.	4.5	41
34	Flexible electronic eardrum. Nano Research, 2017, 10, 2683-2691.	5.8	35
35	Free-Standing, Binder-Free Titania/Super-Aligned Carbon Nanotube Anodes for Flexible and Fast-Charging Li-lon Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 3426-3433.	3.2	34
36	Controllable synthesis and shape-dependent photocatalytic activity of ZnO nanorods with a cone and different aspect ratios and of short-and-fat ZnO microrods by varying the reaction temperature and time. Applied Physics A: Materials Science and Processing, 2010, 100, 1061-1067.	1.1	32

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37	Reproducible layer-by-layer exfoliation for free-standing ultrathin films of single-walled carbon nanotubes. Journal of Materials Chemistry, 2012, 22, 21824.	6.7	32
38	Machine Learning Driven Synthesis of Few-Layered WTe <sub>2</sub> with Geometrical Control. Journal of the American Chemical Society, 2021, 143, 18103-18113.	6.6	30
39	Wearable Sweat Biosensors Refresh Personalized Health/Medical Diagnostics. Research, 2021, 2021, 9757126.	2.8	29
40	Terahertz Surface Emission from MoSe <sub>2</sub> at the Monolayer Limit. ACS Applied Materials & Limit and Surfaces, 2020, 12, 48161-48169.	4.0	28
41	Monodisperse rutile TiO2 nanorod-based microspheres withÂvarious diameters: hydrothermal synthesis, formation mechanism and diameter- and crystallinity-dependent photocatalytic properties. Applied Physics A: Materials Science and Processing, 2011, 104, 149-158.	1.1	26
42	New strategy towards the assembly of hierarchical heterostructures of SnO <sub>2</sub> /ZnO for NO <sub>2</sub> detection at a ppb level. Inorganic Chemistry Frontiers, 2019, 6, 2801-2809.	3.0	24
43	Watching Dynamic Self-Assembly of Web Buckles in Strained MoS <sub>2</sub> Thin Films. ACS Nano, 2019, 13, 3106-3116.	7.3	24
44	Structure-Enhanced Mechanically Robust Graphite Foam with Ultrahigh MnO <sub>2</sub> Loading for Supercapacitors. Research, 2020, 2020, 7304767.	2.8	24
45	High-Responsivity Photovoltaic Photodetectors Based on MoTe2/MoSe2 van der Waals Heterojunctions. Crystals, 2019, 9, 315.	1.0	21
46	Direct laser patterning of two-dimensional lateral transition metal disulfide-oxide-disulfide heterostructures for ultrasensitive sensors. Nano Research, 2020, 13, 2035-2043.	5.8	21
47	Dual-Mode Sensor and Actuator to Learn Human-Hand Tracking and Grasping. IEEE Transactions on Electron Devices, 2019, 66, 5407-5410.	1.6	20
48	In situ growth of ZnO nanowires on Zn comb-shaped interdigitating electrodes and their photosensitive and gas-sensing characteristics. Materials Research Bulletin, 2012, 47, 3971-3975.	2.7	18
49	Giant and Anisotropic Nonlinear Optical Responses of 1D van der Waals Material Tellurium. Advanced Optical Materials, 2020, 8, 2001273.	3 <b>.</b> 6	17
50	Ultrafast, Kinetically Limited, Ambient Synthesis of Vanadium Dioxides through Laser Direct Writing on Ultrathin Chalcogenide Matrix. ACS Nano, 2021, 15, 10502-10513.	7.3	17
51	Highly Sensitive Flexible Temperature Sensor Made Using PEDOT:PSS/PANI. ACS Applied Polymer Materials, 2022, 4, 766-772.	2.0	16
52	Surface State Mediated Interlayer Excitons in a 2D Nonlayered–Layered Semiconductor Heterojunction. Advanced Electronic Materials, 2017, 3, 1700373.	2.6	15
53	Synthesis of Atomically Thin 1Tâ€₹aSe <sub>2</sub> with a Strongly Enhanced Chargeâ€Densityâ€Wave Order. Advanced Functional Materials, 2020, 30, 2001903.	7.8	15
54	Wearable hydroxylated MWCNTs/ecoflex composite strain sensor with high comprehensive performance based on electron irradiation. Composites Science and Technology, 2022, 226, 109537.	3.8	14

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55	Vapor–liquid–solid growth and narrow-band ultraviolet photoluminescence of well-aligned GeO2 nanowire arrays withÂcontrollable aspect ratios. Applied Physics A: Materials Science and Processing, 2010, 100, 493-499.	1.1	12
56	Facile synthesis of oil adsorbent carbon microtubes by pyrolysis of plant tissues. Journal of Materials Science, 2019, 54, 9352-9361.	1.7	12
57	Self-cross-linked arrays enabled flexible mechanical sensors for monitoring the body tremor. Npj Flexible Electronics, 2020, 4, .	5.1	12
58	Programmable patterned MoS2 film by direct laser writing for health-related signals monitoring. IScience, 2021, 24, 103313.	1.9	12
59	Preparation and optical properties of SiCN thin films deposited by reactive magnetron sputtering. Journal of Materials Science: Materials in Electronics, 2017, 28, 6769-6781.	1.1	11
60	Inversion symmetry broken in 2H phase vanadium-doped molybdenum disulfide. Nanoscale, 2021, 13, 18103-18111.	2.8	11
61	Tough and Healable Elastomers via Dynamic Integrated Moiety Comprising Covalent and Noncovalent Interactions. Chemistry of Materials, 2022, 34, 2981-2988.	3.2	11
62	In-situ investigation of the elastic behavior of two-dimensional MoS <sub>2</sub> on flexible substrate by nanoindentation. Journal Physics D: Applied Physics, 2021, 54, 504006.	1.3	9
63	Two-Dimensional Lateral Heterostructures Made by Selective Reaction on a Patterned Monolayer MoS2 Matrix. ACS Applied Materials & Samp; Interfaces, 2021, 13, 26143-26151.	4.0	5
64	Wearable Electronics: Flexible Sensing Electronics for Wearable/Attachable Health Monitoring (Small 25/2017). Small, 2017, 13, .	5.2	4
65	Programmable high crystallinity carbon patterns. 2D Materials, 2017, 4, 025011.	2.0	2
66	Humidity Sensors: Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications (Adv. Sci. 5/2017). Advanced Science, 2017, 4, .	5.6	2
67	Resistive tactile sensors. , 2021, , 13-30.		2
68	Grainâ€Boundary Engineering of Monolayer MoS <sub>2</sub> for Energyâ€Efficient Lateral Synaptic Devices (Adv. Mater. 32/2021). Advanced Materials, 2021, 33, 2170251.	11.1	1
69	Fabrication of highly transparent ultrathin films based on reduced graphene oxide. , 2013, , .		O