Xuewen Wang

List of Publications by Year in descending order

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69	6,674	109137	91712
papers	citations	35 h-index	69 g-index

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

#	Article	IF	Citations
1	Recent progress of flexible electronics by 2D transition metal dichalcogenides. Nano Research, 2022, 15, 2413-2432.	5.8	58
2	Highly Sensitive Flexible Temperature Sensor Made Using PEDOT:PSS/PANI. ACS Applied Polymer Materials, 2022, 4, 766-772.	2.0	16
3	Amorphizing noble metal chalcogenide catalysts at the single-layer limit towards hydrogen production. Nature Catalysis, 2022, 5, 212-221.	16.1	113
4	Tough and Healable Elastomers via Dynamic Integrated Moiety Comprising Covalent and Noncovalent Interactions. Chemistry of Materials, 2022, 34, 2981-2988.	3.2	11
5	Ultraâ€Robust and Extensible Fibrous Mechanical Sensors for Wearable Smart Healthcare. Advanced Materials, 2022, 34, e2107511.	11.1	83
6	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
7	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
8	Two-Dimensional Lateral Heterostructures Made by Selective Reaction on a Patterned Monolayer MoS2 Matrix. ACS Applied Materials & Interfaces, 2021, 13, 26143-26151.	4.0	5
9	Grainâ€Boundary Engineering of Monolayer MoS₂ for Energyâ€Efficient Lateral Synaptic Devices. Advanced Materials, 2021, 33, e2102435.	11.1	53
10	Grainâ€Boundary Engineering of Monolayer MoS₂ for Energyâ€Efficient Lateral Synaptic Devices (Adv. Mater. 32/2021). Advanced Materials, 2021, 33, 2170251.	11.1	1
11	In-situ investigation of the elastic behavior of two-dimensional MoS₂ on flexible substrate by nanoindentation. Journal Physics D: Applied Physics, 2021, 54, 504006.	1.3	9
12	Resistive tactile sensors. , 2021, , 13-30.		2
13	Inversion symmetry broken in 2H phase vanadium-doped molybdenum disulfide. Nanoscale, 2021, 13, 18103-18111.	2.8	11
14	Programmable patterned MoS2 film by direct laser writing for health-related signals monitoring. IScience, 2021, 24, 103313.	1.9	12
15	Machine Learning Driven Synthesis of Few-Layered WTe₂ with Geometrical Control. Journal of the American Chemical Society, 2021, 143, 18103-18113.	6.6	30
16	Wearable Sweat Biosensors Refresh Personalized Health/Medical Diagnostics. Research, 2021, 2021, 9757126.	2.8	29
17	Monolayer MoS₂ Synaptic Transistors for High-Temperature Neuromorphic Applications. Nano Letters, 2021, 21, 10400-10408.	4.5	41
18	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

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19	Twoâ€dimensional materials: From mechanical properties to flexible mechanical sensors. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 1077-1094.	8.5	158
20	Engineering grain boundaries at theÂ2D limit for theÂhydrogen evolution reaction. Nature Communications, 2020, 11, 57.	5.8	153
21	Bifunctional NbS₂-Based Asymmetric Heterostructure for Lateral and Vertical Electronic Devices. ACS Nano, 2020, 14, 175-184.	7.3	51
22	Terahertz Surface Emission from MoSe₂ at the Monolayer Limit. ACS Applied Materials & Interfaces, 2020, 12, 48161-48169.	4.0	28
23	Giant and Anisotropic Nonlinear Optical Responses of 1D van der Waals Material Tellurium. Advanced Optical Materials, 2020, 8, 2001273.	3.6	17
24	Self-cross-linked arrays enabled flexible mechanical sensors for monitoring the body tremor. Npj Flexible Electronics, 2020, 4, .	5.1	12
25	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
26	Synthesis of Atomically Thin 1Tâ€TaSe₂ with a Strongly Enhanced Chargeâ€Ðensityâ€Wave Order. Advanced Functional Materials, 2020, 30, 2001903.	7.8	15
27	Structure-Enhanced Mechanically Robust Graphite Foam with Ultrahigh MnO ₂ Loading for Supercapacitors. Research, 2020, 2020, 7304767.	2.8	24
28	New strategy towards the assembly of hierarchical heterostructures of SnO₂/ZnO for NO₂ detection at a ppb level. Inorganic Chemistry Frontiers, 2019, 6, 2801-2809.	3.0	24
29	Self-gating in semiconductor electrocatalysis. Nature Materials, 2019, 18, 1098-1104.	13.3	167
30	High-Responsivity Photovoltaic Photodetectors Based on MoTe2/MoSe2 van der Waals Heterojunctions. Crystals, 2019, 9, 315.	1.0	21
31	Flexible and wearable healthcare sensors for visual reality health-monitoring. Virtual Reality & Intelligent Hardware, 2019, 1, 411-427.	1.8	42
32	Facile synthesis of oil adsorbent carbon microtubes by pyrolysis of plant tissues. Journal of Materials Science, 2019, 54, 9352-9361.	1.7	12
33	Watching Dynamic Self-Assembly of Web Buckles in Strained MoS₂ Thin Films. ACS Nano, 2019, 13, 3106-3116.	7.3	24
34	Phase-transition modulated, high-performance dual-mode photodetectors based on WSe₂/VO₂ heterojunctions. Applied Physics Reviews, 2019, 6, 041407.	5.5	50
35	Dual-Mode Sensor and Actuator to Learn Human-Hand Tracking and Grasping. IEEE Transactions on Electron Devices, 2019, 66, 5407-5410.	1.6	20
36	Substrate modified thermal stability of mono- and few-layer MoS₂. Nanoscale, 2018, 10, 3540-3546.	2.8	43

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37	Free-Standing, Binder-Free Titania/Super-Aligned Carbon Nanotube Anodes for Flexible and Fast-Charging Li-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2018, 6, 3426-3433.	3.2	34
38	Largeâ€Area Atomic Layers of the Chargeâ€Densityâ€Wave Conductor TiSe₂. Advanced Materials, 2018, 30, 1704382.	11.1	60
39	Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications. Advanced Science, 2017, 4, 1600404.	5.6	207
40	Programmable high crystallinity carbon patterns. 2D Materials, 2017, 4, 025011.	2.0	2
41	Flexible electronic eardrum. Nano Research, 2017, 10, 2683-2691.	5.8	35
42	Single CdS Nanorod for High Responsivity UVâ€“Visible Photodetector. Advanced Optical Materials, 2017, 5, 1700159.	3.6	47
43	Humidity Sensors: Porous Ionic Membrane Based Flexible Humidity Sensor and its Multifunctional Applications (Adv. Sci. 5/2017). Advanced Science, 2017, 4, .	5.6	2
44	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
45	Flexible Sensing Electronics for Wearable/Attachable Health Monitoring. Small, 2017, 13, 1602790.	5.2	690
46	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
47	Surface State Mediated Interlayer Excitons in a 2D Nonlayeredâ€“Layered Semiconductor Heterojunction. Advanced Electronic Materials, 2017, 3, 1700373.	2.6	15
48	High-quality monolayer superconductor NbSe2 grown by chemical vapour deposition. Nature Communications, 2017, 8, 394.	5.8	290
49	Wearable Electronics: Flexible Sensing Electronics for Wearable/Attachable Health Monitoring (Small 25/2017). Small, 2017, 13, .	5.2	4
50	Largeâ€Area and Highâ€Quality 2D Transition Metal Telluride. Advanced Materials, 2017, 29, 1603471.	11.1	181
51	Flexible Capacitive Tactile Sensor Based on Micropatterned Dielectric Layer. Small, 2016, 12, 5042-5048.	5.2	377
52	Subatomic deformation driven by vertical piezoelectricity from CdS ultrathin films. Science Advances, 2016, 2, e1600209.	4.7	67
53	Room-temperature ferroelectricity in CuInP2S6 ultrathin flakes. Nature Communications, 2016, 7, 12357.	5.8	637
54	Controlled Synthesis of Atomically Thin 1T-TaS₂ for Tunable Charge Density Wave Phase Transitions. Chemistry of Materials, 2016, 28, 7613-7618.	3.2	75

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55	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
56	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
57	Controllable Synthesis of 3D Ni(OH)₂and NiO Nanowalls on Various Substrates for High-Performance Nanosensors. Small, 2015, 11, 731-739.	5.2	81
58	Silkâ€Molded Flexible, Ultrasensitive, and Highly Stable Electronic Skin for Monitoring Human Physiological Signals. Advanced Materials, 2014, 26, 1336-1342.	11.1	1,225
59	Single-Layer Single-Crystalline SnSe Nanosheets. Journal of the American Chemical Society, 2013, 135, 1213-1216.	6.6	433
60	Controlled synthesis of AgInS2 nanocrystals and their application in organicâ€“inorganic hybrid photodetectors. CrystEngComm, 2013, 15, 6443.	1.3	52
61	Fabrication of highly transparent ultrathin films based on reduced graphene oxide. , 2013, , .		0
62	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
63	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
64	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
65	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
66	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
67	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
68	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
69	Vaporâ€“liquidâ€“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