Xingfu Wang

List of Publications by Year
in descending order

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38 papers	2,140 citations	293460 24 h-index	355658 38 g-index
38 all docs	38 docs citations	38 times ranked	2812 citing authors

#	Article	IF	Citations
1	Enhanced transfer efficiency of plasmonic hot-electron across Au/GaN interface by the piezo-phototronic effect. Nano Energy, 2022, 93, 106845.	8.2	7
2	Enhanced Photoresponse Performance of Selfâ€Powered PTAA/GaN Microwire Heterojunction Ultraviolet Photodetector Based on Piezoâ€Phototronic Effect. Advanced Materials Interfaces, 2022, 9, .	1.9	5
3	A high-performance polarization-sensitive and stable self-powered UV photodetector based on a dendritic crystal lead-free metal-halide CsCu₂I₃/GaN heterostructure. Materials Horizons, 2022, 9, 1479-1488.	6.4	23
4	Boosting the performance of MA-free inverted perovskite solar cellsviamultifunctional ion liquid. Journal of Materials Chemistry A, 2021, 9, 12746-12754.	5.2	44
5	Anisotropic Piezoelectric Response from InGaN Nanowires with Spatially Modulated Composition and Topography over a Textured Si(100) Substrate. ACS Applied Materials & Interfaces, 2021, 13, 7517-7528.	4.0	3
6	Photothermal-pyroelectric-plasmonic coupling for high performance and tunable band-selective photodetector. Nano Energy, 2021, 83, 105801.	8.2	24
7	Enhanced Photoresponse of Single GaN Microwire Ultraviolet Photodetectors by Heteroepitaxial AlN Coating Layer. Advanced Materials Technologies, 2021, 6, 2100226.	3.0	6
8	Modulating the photoresponse performance of the flexible Si/ZnO film heterojunction photodetectors by piezo-phototronic effect. Applied Physics Letters, 2021, 119, 121104.	1.5	3
9	Enhanced Performances of n-ZnO Nanowires/p-Si Heterojunctioned Pyroelectric Nearâ€“Infrared Photodetectors via the Plasmonic Effect. ACS Applied Materials & Interfaces, 2021, 13, 57750-57758.	4.0	9
10	Enhanced Photovoltaic Performances of La-Doped Bismuth Ferrite/Zinc Oxide Heterojunction by Coupling Piezo-Phototronic Effect and Ferroelectricity. ACS Nano, 2020, 14, 10723-10732.	7.3	62
11	Insights into the pyro-phototronic effect in p-Si/n-ZnO nanowires heterojunction toward high-performance near-infrared photosensing. Nano Energy, 2020, 78, 105260.	8.2	29
12	Long and Ultrastable All-Inorganic Single-Crystal CsPbBr₃Microwires: One-Step Solution In-Plane Self-Assembly at Low Temperature and Application for High-Performance Photodetectors. Journal of Physical Chemistry Letters, 2020, 11, 7224-7231.	2.1	13
13	Novel Strategy of Constructing Hollow Ga₂O₃@N-CQDs as a Self-Healing Anode Material for Lithium-Ion Batteries. ACS Sustainable Chemistry and Engineering, 2020, 8, 13692-13700.	3.2	32
14	A self-powered, flexible ultra-thin Si/ZnO nanowire photodetector as full-spectrum optical sensor and pyroelectric nanogenerator. Beilstein Journal of Nanotechnology, 2020, 11, 1623-1630.	1.5	10
15	In Situ Conformal Coating of Polyaniline on GaN Microwires for Ultrafast, Self-Driven Heterojunction Ultraviolet Photodetectors. ACS Applied Materials & Interfaces, 2020, 12, 13473-13480.	4.0	33
16	The piezotronic effect in InGaN/GaN quantum-well based microwire for ultrasensitive strain sensor. Nano Energy, 2020, 72, 104660.	8.2	28
17	Self-powered, superior high gain silicon-based near-infrared photosensing for low-power light communication. Nano Energy, 2020, 70, 104544.	8.2	35
18	Piezotronic effect in AlGaN/AlN/GaN heterojunction nanowires used as a flexible strain sensor. Beilstein Journal of Nanotechnology, 2020, 11, 1847-1853.	1.5	5

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19	Optimization of All Figure-of-Merits in Well-Aligned GaN Microwire Array Based Schottky UV Photodetectors by Si Doping. ACS Photonics, 2019, 6, 1972-1980.	3.2	25
20	Direct lift-off and the piezo-phototronic study of InGaN/GaN heterostructure membrane. Nano Energy, 2019, 59, 545-552.	8.2	33
21	Temperature dependence of the pyro-phototronic effect in self-powered p-Si/n-ZnO nanowires heterojuncted ultraviolet sensors. Nano Today, 2019, 29, 100798.	6.2	50
22	Field Emission of Electrons Powered by a Triboelectric Nanogenerator. Advanced Functional Materials, 2018, 28, 1800610.	7.8	44
23	Selfâ€Powered Si/CdS Flexible Photodetector with Broadband Response from 325 to 1550 nm Based on Pyroâ€phototronic Effect: An Approach for Photosensing below Bandgap Energy. Advanced Materials, 2018, 30, 1705893.	11.1	163
24	Realization of in-Plane GaN Microwire Array Based Ultraviolet Photodetector with High Responsivity on a Si(100) Substrate. ACS Photonics, 2018, 5, 4810-4816.	3.2	19
25	A Hierarchically Nanostructured Cellulose Fiberâ€Based Triboelectric Nanogenerator for Selfâ€Powered Healthcare Products. Advanced Functional Materials, 2018, 28, 1805540.	7.8	180
26	Actively Perceiving and Responsive Soft Robots Enabled by Selfâ€Powered, Highly Extensible, and Highly Sensitive Triboelectric Proximityâ€and Pressureâ€Sensing Skins. Advanced Materials, 2018, 30, e1801114.	11.1	254
27	Enhanced Performance of a Selfâ€Powered Organic/Inorganic Photodetector by Pyroâ€Phototronic and Piezoâ€Phototronic Effects. Advanced Materials, 2017, 29, 1606698.	11.1	157
28	Simultaneously Enhancing Light Emission and Suppressing Efficiency Droop in GaN Microwire-Based Ultraviolet Light-Emitting Diode by the Piezo-Phototronic Effect. Nano Letters, 2017, 17, 3718-3724.	4.5	55
29	High-performance self-powered UV-Vis-NIR photodetectors based on horizontally aligned GaN microwire array/Si heterojunctions. Journal of Materials Chemistry C, 2017, 5, 11551-11558.	2.7	55
30	Light-Triggered Pyroelectric Nanogenerator Based on a pn-Junction for Self-Powered Near-Infrared Photosensing. ACS Nano, 2017, 11, 8339-8345.	7.3	147
31	a-Axis GaN/AlN/AlGaN Coreâ€“Shell Heterojunction Microwires as Normally Off High Electron Mobility Transistors. ACS Applied Materials & Interfaces, 2017, 9, 41435-41442.	4.0	14
32	Largely Improved Near-Infrared Silicon-Photosensing by the Piezo-Phototronic Effect. ACS Nano, 2017, 11, 7118-7125.	7.3	57
33	Piezotronic Effect Modulated Heterojunction Electron Gas in AlGaN/AlN/GaN Heterostructure Microwire. Advanced Materials, 2016, 28, 7234-7242.	11.1	100
34	Ultrafast Response pâ€Si/nâ€ZnO Heterojunction Ultraviolet Detector Based on Pyroâ€Phototronic Effect. Advanced Materials, 2016, 28, 6880-6886.	11.1	176
35	Temperature dependence of pyro-phototronic effect on self-powered ZnO/perovskite heterostructured photodetectors. Nano Research, 2016, 9, 3695-3704.	5.8	87
36	Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. Advanced Functional Materials, 2015, 25, 5277-5284.	7.8	50

#	ARTICLE	IF	CITATIONS
37	Temperature Dependence of the Piezotronic and Piezophototronic Effects in aâ€axis GaN Nanobelts. Advanced Materials, 2015, 27, 8067-8074.	11.1	60
38	Piezotronic Effect in Strain-Gated Transistor of a-Axis GaN Nanobelt. ACS Nano, 2015, 9, 9822-9829.	7.3	43