Rui Wang

List of Publications by Year
in descending order

22 papers	734 citations	687363 13 h-index	677142 22 g-index
22 all docs	22 docs citations	22 times ranked	541 citing authors

#	Article	IF	Citations
1	Progress on AlGaN-based solar-blind ultraviolet photodetectors and focal plane arrays. Light: Science and Applications, 2021, 10, 94.	16.6	193
2	Tailoring activation sites of metastable distorted 1T′-phase MoS2 by Ni doping for enhanced hydrogen evolution. Nano Research, 2022, 15, 5946-5952.	10.4	80
3	Ultra‐Small 2D PbS Nanoplatelets: Liquid‐Phase Exfoliation and Emerging Applications for Photo‐Electrochemical Photodetectors. Small, 2021, 17, e2005913.	10.0	50
4	Hydrogen gas sensor based on SnO2 nanospheres modified with Sb2O3 prepared by one-step solvothermal route. Sensors and Actuators B: Chemical, 2021, 331, 129441.	7.8	48
5	Facile synthesis of mesoporous CdS/PbS/SnO2 composites for high-selectivity H2 gas sensor. Sensors and Actuators B: Chemical, 2021, 340, 129924.	7.8	48
6	A Reusable and High Sensitivity Nitrogen Dioxide Sensor Based on Monolayer SnSe. IEEE Electron Device Letters, 2018, 39, 599-602.	3.9	43
7	Performance of Monolayer Blue Phosphorene Double-Gate MOSFETs from the First Principles. ACS Applied Materials & Interfaces, 2019, 11, 20956-20964.	8.0	39
8	Do all screw dislocations cause leakage in GaN-based devices?. Applied Physics Letters, 2020, 116, .	3.3	38
9	PbSe Nanocrystals Produced by Facile Liquid Phase Exfoliation for Efficient UV–Vis Photodetectors. Advanced Functional Materials, 2021, 31, 2010401.	14.9	35
10	Nanoplasmonically Enhanced High-Performance Metastable Phase α-Ga$_2$O$_3$ Solar-Blind Photodetectors. ACS Applied Materials & Interfaces, 2019, 11, 40283-40289.	8.0	31
11	An ultra-sensitive and selective nitrogen dioxide sensor based on a novel P$_2$C$_2$ monolayer from a theoretical perspective. Nanoscale, 2018, 10, 21936-21943.	5.6	28
12	Achieving Record High External Quantum Efficiency >86.7% in Solar‐Blind Photoelectrochemical Photodetection. Advanced Functional Materials, 2022, 32, .	14.9	23
13	μ-Ga2O3: A Promising Candidate for High-Electron-Mobility Transistors. IEEE Electron Device Letters, 2020, , 1-1.	3.9	15
14	Janus Ga$_2$SeTe: A Promising Candidate for Highly Efficient Solar Cells. Solar Rrl, 2019, 3, 1900321.	5.8	13
15	Precise Extraction of Dynamic R_{dson} Under High Frequency and High Voltage by a Double-Diode-Isolation Method. IEEE Journal of the Electron Devices Society, 2019, 7, 690-695.	2.1	10
16	Performance Modulation for Back-Illuminated AlGaN Ultraviolet Avalanche Photodiodes Based on Multiplication Scaling. IEEE Photonics Journal, 2019, 11, 1-7.	2.0	10
17	High-performance sub-10 nm monolayer black arsenic phosphorus tunneling transistors. Applied Surface Science, 2022, 576, 151705.	6.1	9
18	High-performance normally off p-GaN gate high-electron-mobility transistor with In0.17Al0.83N barrier layer design. Optical and Quantum Electronics, 2021, 53, 1.	3.3	7

#	Article	IF	Citations
19	Investigation on the Activation Energy of Device Degradation and Switching Time in AlGaN/GaN HEMTs for High-Frequency Application. IEEE Journal of the Electron Devices Society, 2019, 7, 417-424.	2.1	5
20	Electronic properties of arsenene nanoribbons for FET application. Optical and Quantum Electronics, 2020, 52, 1.	3.3	3
21	Direct observation of reach-through behavior in back-illuminated algan avalanche photodiode with separate absorption and multiplication structure. Journal Physics D: Applied Physics, 2020, 53, 425101.	2.8	3
22	Charge induced reconstruction of glide partial dislocations and electronic properties in GaN. Scripta Materialia, 2022, 207, 114276.	5.2	3