Jie Xu

List of Publications by Year
in descending order

33 papers	229 citations	1039406 9 h-index	1125271 13 g-index
34 all docs	34 docs citations	34 times ranked	218 citing authors

#	Article	IF	Citations
1	Fabrication of Ordered SnO2 Nanostructures with Enhanced Humidity Sensing Performance. Sensors, 2017, 17, 2392.	2.1	32
2	Nanoscale quantification of charge injection and transportation process in Si-nanocrystal based sandwiched structure. Nanoscale, 2013, 5, 9971.	2.8	16
3	Depth-dependent humidity sensing properties of silicon nanopillar array. Sensors and Actuators B: Chemical, 2016, 237, 526-533.	4.0	15
4	Surface potential modeling and reconstruction in Kelvin probe force microscopy. Nanotechnology, 2017, 28, 365705.	1.3	14
5	Metallic two-dimensional BP₂: a high-performance electrode material for Li- and Na-ion batteries. Physical Chemistry Chemical Physics, 2021, 23, 4386-4393.	1.3	13
6	Characterization of Pt- or Pd-doped graphene based on density functional theory for H₂ gas sensor. Materials Research Express, 2019, 6, 095603.	0.8	11
7	Sensitivity enhancement of WS₂-coated SPR-based optical fiber biosensor for detecting glucose concentration*. Chinese Physics B, 2020, 29, 110701.	0.7	11
8	Toward temperature-insensitive near-infrared optical gain using low-toxicity Ag₂Se quantum dots. Nanoscale, 2022, 14, 10169-10175.	2.8	11
9	Microscopic and macroscopic characterization of the charging effects in SiC/Si nanocrystals/SiC sandwiched structures. Nanotechnology, 2014, 25, 055703.	1.3	10
10	Surface potential extraction from electrostatic and Kelvin-probe force microscopy images. Journal of Applied Physics, 2018, 123, .	1.1	10
11	Separable Nonlinear Least Squares Search of Parameter Values in Photovoltaic Models. IEEE Journal of Photovoltaics, 2022, 12, 372-380.	1.5	10
12	Charge transfer of single laser crystallized intrinsic and phosphorus-doped Si-nanocrystals visualized by Kelvin probe force microscopy. Journal of Applied Physics, 2014, 116, 134309.	1.1	8
13	Organic Vapour Sensing Properties of Area-Ordered and Size-Controlled Silicon Nanopillar. Sensors, 2016, 16, 1880.	2.1	8
14	Plasmon-enhanced upconversion luminescence in pyrochlore phase Yb x Er2-x Ti2O7 thin film. Nanotechnology, 2019, 30, 085701.	1.3	8
15	Enhanced Humidity Sensitivity with Silicon Nanopillar Array by UV Light. Sensors, 2018, 18, 660.	2.1	7
16	Sensing mechanism of hydrogen storage on Li, Na and K-decorated Ti2C. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	1.1	6
17	Electronic properties and charge storage effect of amorphous SiN passivated nanocrystalline silicon. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	0.6	5
18	Calculating electrostatic interactions in atomic force microscopy with semiconductor samples. AIP Advances, 2019, 9, .	0.6	5

#	Article	IF	Citations
19	Microscopic observation of lateral and vertical charge transportation in Si nanocrystals sandwiched by amorphous SiC layers. AIP Advances, 2018, 8, 015224.	0.6	4
20	A separable nonlinear least squares approach for double-diode photovoltaic model parameter extraction. Journal of Renewable and Sustainable Energy, 2021, 13, .	0.8	4
21	Interpreting Kelvin probe force microscopy on semiconductors by Fourier analysis. Journal of Applied Physics, 2021, 129, .	1.1	4
22	A generalized thermodynamic frame of magneto-electric-caloric coupling effects of single phase epitaxial multiferroic thin films. Ferroelectrics, 2018, 531, 186-195.	0.3	3
23	Nanoscale Characterization of Active Doping Concentration in Boronâ€Doped Individual Si Nanocrystals. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1800531.	0.8	3
24	The role of potassium in grain boundaries of flexible CZTSSe thin film solar cells. Journal of Materials Science: Materials in Electronics, 2018, 29, 17503-17507.	1.1	3
25	Enhanced Humidity Sensing Response of SnO2/Silicon Nanopillar Array by UV Irradiation. Sensors, 2019, 19, 2141.	2.1	3
26	Force and resolution analysis in Kelvin probe force microscopy using nanotube probes. IOP Conference Series: Materials Science and Engineering, 2019, 592, 012036.	0.3	2
27	Microscopic and Macroscopic Bipolar Injection and Carrier Recombination in Single-layer Si Nanocrystals. IOP Conference Series: Materials Science and Engineering, 2018, 436, 012003.	0.3	1
28	Inhomogeneous probe surface induced effect in Kelvin probe force microscopy. Journal of Applied Physics, 2020, 127, 184302.	1.1	1
29	Design and Research of Enhanced LED Performance Based on Graphical Substrate with Multilayer Hyperbolic Metamaterials. Plasmonics, 2021, 16, 1593-1604.	1.8	1
30	Charging effect in silicon nanocrystals observed by electrostatic and Kelvin-probe force microscopy. , 2014, , .		0
31	Charge storage in Si-nanocrystals embedded NOS structure characterized by Kelvin probe force microscopy. , 2016, , .		0
32	Sensitivity Analysis of Kelvin Probe Force Microscopy Using Different Probes under Air or UHV Condition. , 2020, , .		0
33	Design of a Microwave Power Detection System in the 5G-Communication Frequency Band. Sensors, 2021, 21, 2674.	2.1	0