

Pei Lin

List of Publications by Year in descending order

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Version: 2024-02-01

61
papers

4,074
citations

109321

35
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133252

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61
all docs

61
docs citations

61
times ranked

5301
citing authors

#	ARTICLE	IF	CITATIONS
1	Coupled Triboelectric Nanogenerator Networks for Efficient Water Wave Energy Harvesting. ACS Nano, 2018, 12, 1849-1858.	14.6	299
2	Ultrabroadband and High-Detectivity Photodetector Based on WS ₂ /Ge Heterojunction through Defect Engineering and Interface Passivation. ACS Nano, 2021, 15, 10119-10129.	14.6	252
3	Mechanically Durable and Highly Stretchable Transistors Employing Carbon Nanotube Semiconductor and Electrodes. Advanced Materials, 2016, 28, 4441-4448.	21.0	234
4	Three-dimensional ultraflexible triboelectric nanogenerator made by 3D printing. Nano Energy, 2018, 45, 380-389.	16.0	178
5	Electron Transfer in Nanoscale Contact Electrification: Effect of Temperature in the Metal-Dielectric Case. Advanced Materials, 2019, 31, e1808197.	21.0	165
6	Mixed-dimensional PdSe ₂ /SiNWA heterostructure based photovoltaic detectors for self-driven, broadband photodetection, infrared imaging and humidity sensing. Journal of Materials Chemistry A, 2020, 8, 3632-3642.	10.3	158
7	Highly sensitive solar-blind deep ultraviolet photodetector based on graphene/PtSe ₂ /Ga ₂ O ₃ 2D/3D Schottky junction with ultrafast speed. Nano Research, 2021, 14, 1973-1979.	10.4	152
8	Electronic Structure Engineering of Cu ₂ O Film/ZnO Nanorods Array All-Oxide p-n Heterostructure for Enhanced Photoelectrochemical Property and Self-powered Biosensing Application. Scientific Reports, 2015, 5, 7882.	3.3	151
9	Macroscopic self-assembly network of encapsulated high-performance triboelectric nanogenerators for water wave energy harvesting. Nano Energy, 2019, 60, 404-412.	16.0	144
10	Piezoelectric-Phototronic Effect for Enhanced Flexible MoS ₂ /WSe ₂ van der Waals Photodiodes. Advanced Functional Materials, 2018, 28, 1802849.	14.9	130
11	Self-Powered UV Photosensor Based on PEDOT:PSS/ZnO Micro/Nanowire with Strain-Modulated Photoresponse. ACS Applied Materials & Interfaces, 2013, 5, 3671-3676.	8.0	128
12	Graphene-Based Mixed-Dimensional van der Waals Heterostructures for Advanced Optoelectronics. Advanced Materials, 2019, 31, e1806411.	21.0	115
13	Piezotronic Interface Engineering on ZnO/Au-Based Schottky Junction for Enhanced Photoresponse of a Flexible Self-Powered UV Detector. ACS Applied Materials & Interfaces, 2014, 6, 14116-14122.	8.0	105
14	A self-powered ultraviolet photodetector based on solution-processed p-NiO/n-ZnO nanorod array heterojunction. RSC Advances, 2015, 5, 5976-5981.	3.6	97
15	Enhanced Efficiency and Stability of Perovskite Solar Cells via Anti-Solvent Treatment in Two-Step Deposition Method. ACS Applied Materials & Interfaces, 2017, 9, 7224-7231.	8.0	97
16	Two-dimensional nanomaterials for novel piezotronics and piezophototronics. Materials Today Nano, 2018, 4, 17-31.	4.6	97
17	Enzyme-coated single ZnO nanowire FET biosensor for detection of uric acid. Sensors and Actuators B: Chemical, 2013, 176, 22-27.	7.8	93
18	Enhanced photoresponse of Cu ₂ O/ZnO heterojunction with piezo-modulated interface engineering. Nano Research, 2014, 7, 860-868.	10.4	93

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19	Improved Photoresponse Performance of Self-Powered ZnO/Spiro-MeOTAD Heterojunction Ultraviolet Photodetector by Piezo-Phototronic Effect. ACS Applied Materials & Interfaces, 2016, 8, 6137-6143.	8.0	92
20	Three-Dimensional Ordered ZnO/Cu ₂ O Nanoheterojunctions for Efficient Metal-Oxide Solar Cells. ACS Applied Materials & Interfaces, 2015, 7, 3216-3223.	8.0	74
21	Enhanced Performance of ZnO Piezotronic Pressure Sensor through Electron-Tunneling Modulation of MgO Nanolayer. ACS Applied Materials & Interfaces, 2015, 7, 1602-1607.	8.0	70
22	Piezo-phototronic Effect Enhanced Photodetector Based on CH ₃ NH ₃ PbI ₃ Single Crystals. ACS Nano, 2018, 12, 10501-10508.	14.6	67
23	Highly sensitive uric acid biosensor based on individual zinc oxide micro/nanowires. Mikrochimica Acta, 2013, 180, 759-766.	5.0	65
24	In Situ Transmission Electron Microscopy Investigation on Fatigue Behavior of Single ZnO Wires under High-Cycle Strain. Nano Letters, 2014, 14, 480-485.	9.1	62
25	Piezotronic Effect on Rashba Spin-Orbit Coupling in a ZnO/P3HT Nanowire Array Structure. ACS Nano, 2018, 12, 1811-1820.	14.6	61
26	Functional nanogenerators as vibration sensors enhanced by piezotronic effects. Nano Research, 2014, 7, 190-198.	10.4	56
27	Tunable WSe ₂ /CdS mixed-dimensional van der Waals heterojunction with a piezo-phototronic effect for an enhanced flexible photodetector. Nanoscale, 2018, 10, 14472-14479.	5.6	53
28	WS ₂ /CsPbBr ₃ van der Waals heterostructure planar photodetectors with ultrahigh on/off ratio and piezo-phototronic effect-induced strain-gated characteristics. Nano Energy, 2019, 65, 104001.	16.0	48
29	A defect-induced broadband photodetector based on WS ₂ /pyramid Si 2D/3D mixed-dimensional heterojunction with a light confinement effect. Nanoscale, 2021, 13, 13550-13557.	5.6	48
30	Universal Selective Dispersion of Semiconducting Carbon Nanotubes from Commercial Sources Using a Supramolecular Polymer. ACS Nano, 2017, 11, 5660-5669.	14.6	47
31	Highly-efficient and stable photocatalytic activity of lead-free Cs ₂ AgInCl ₆ double perovskite for organic pollutant degradation. Journal of Colloid and Interface Science, 2021, 596, 376-383.	9.4	47
32	Low-voltage blue light emission from n-ZnO/p-GaN heterojunction formed by RF magnetron sputtering method. Current Applied Physics, 2014, 14, 345-348.	2.4	41
33	Tunable WSe ₂ /WS ₂ van der Waals heterojunction for self-powered photodetector and photovoltaics. Journal of Alloys and Compounds, 2020, 842, 155890.	5.5	40
34	Design of efficient dye-sensitized solar cells with patterned ZnO/ZnS core-shell nanowire array photoanodes. Nanoscale, 2014, 6, 4691-4697.	5.6	38
35	Two-dimensional Ti ₃ C ₂ MXene-based nanostructures for emerging optoelectronic applications. Materials Horizons, 2021, 8, 2929-2963.	12.2	37
36	A tunable ZnO/electrolyte heterojunction for a self-powered photodetector. Physical Chemistry Chemical Physics, 2014, 16, 26697-26700.	2.8	32

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37	Gold nanoparticles coated zinc oxide nanorods as the matrix for enhanced Lactate sensing. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 126, 476-480.	5.0	32
38	A high-performance short-wave infrared phototransistor based on a 2D tellurium/MoS ₂ van der Waals heterojunction. <i>Journal of Materials Chemistry C</i> , 2021, 9, 13123-13131.	5.5	32
39	A self-powered strain sensor based on a ZnO/PEDOT:PSS hybrid structure. <i>RSC Advances</i> , 2013, 3, 17011.	3.6	30
40	Fabrication of 2D PdSe ₂ /3D CdTe Mixed-Dimensional van der Waals Heterojunction for Broadband Infrared Detection. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 41791-41801.	8.0	30
41	High sensitivity, fast speed and self-powered ultraviolet photodetectors based on ZnO micro/nanowire networks. <i>Progress in Natural Science: Materials International</i> , 2014, 24, 1-5.	4.4	28
42	Size effect in a cantilevered ZnO micro/nanowire and its potential as a performance tunable force sensor. <i>RSC Advances</i> , 2013, 3, 19375.	3.6	27
43	Size dependence and UV irradiation tuning of the surface potential in single conical ZnO nanowires. <i>RSC Advances</i> , 2015, 5, 42075-42080.	3.6	26
44	Ultraviolet and visible photoresponse properties of a ZnO/Si heterojunction at zero bias. <i>RSC Advances</i> , 2013, 3, 17682.	3.6	24
45	Surpassing the Exciton Diffusion Limit in Single-Walled Carbon Nanotube Sensitized Solar Cells. <i>ACS Nano</i> , 2016, 10, 11258-11265.	14.6	22
46	Piezo-phototronic and pyro-phototronic effects to enhance Cu(In, Ga)Se ₂ thin film solar cells. <i>Nano Research</i> , 2018, 11, 3877-3885.	10.4	22
47	Defect repair for enhanced piezo-phototronic MoS ₂ flexible phototransistors. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14731-14738.	5.5	20
48	Facile fabrication of large-scale patterned ZnO nanorod arrays with tunable arrangement, period and morphology. <i>CrystEngComm</i> , 2013, 15, 8022.	2.6	19
49	Illumination-dependent free carrier screening effect on the performance evolution of ZnO piezotronic strain sensor. <i>Nano Research</i> , 2016, 9, 1091-1100.	10.4	16
50	Mixed-dimensional Te/CdS van der Waals heterojunction for self-powered broadband photodetector. <i>Nanotechnology</i> , 2021, 32, 415201.	2.6	16
51	Tunable channel width of a UV-gate field effect transistor based on ZnO micro-nano wire. <i>RSC Advances</i> , 2014, 4, 18378.	3.6	14
52	Investigation on the Mechanism of Nanodamage and Nanofailure for Single ZnO Nanowires under an Electric Field. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 2344-2349.	8.0	12
53	Polarity-Dependent Piezotronic Effect and Controllable Transport Modulation of ZnO with Multifield Coupled Interface Engineering. <i>Advanced Materials Interfaces</i> , 2017, 4, 1600842.	3.7	12
54	AFM investigation of nanomechanical properties of ZnO nanowires. <i>RSC Advances</i> , 2015, 5, 33445-33449.	3.6	6

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55	Skin-attachable and flexible MWCNT grid/Ecoflex strain sensors with fast equilibrium of response for detection of sound vibrations and human motions. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 26439-26448.	2.2	6
56	Genetic and Chemical Diversity of Edible Mushroom <i>Pleurotus</i> Species. <i>BioMed Research International</i> , 2022, 2022, 1-13.	1.9	6
57	Controllable synthesis of Cs _x Pb _y Br _z -based perovskites by a polar solvent-triggered transformation method and its application as an invisible security ink. <i>Journal of Materials Science</i> , 2020, 55, 6826-6833.	3.7	5
58	Asymmetric Behavior in Flexible Piezoelectric Strain Sensors Made of Single ZnO Nanowires. <i>Journal of Nanoscience and Nanotechnology</i> , 2014, 14, 6084-6088.	0.9	2
59	Calibration on force upon the surface of single ZnO nanowire applied by AFM tip with different scanning angles. <i>RSC Advances</i> , 2015, 5, 47309-47313.	3.6	1
60	FABRICATION AND PERFORMANCE STUDY ON INDIVIDUAL ZNO NANOWIRES BASED BIOELECTRODE. , 2012, , .		0
61	Active Flexible Strain Sensor Based on Single ZnO Micro/Nanowire. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1556, 1.	0.1	0