

Ruomeng Yu

List of Publications by Year in descending order

Source: [//exaly.com/author-pdf/3394309/publications.pdf](https://exaly.com/author-pdf/3394309/publications.pdf)

Version: 2024-02-01

34
papers

5,015
citations

114150

32
h-index

334537

33
g-index

34
all docs

34
docs citations

34
times ranked

6054
citing authors

#	ARTICLE	IF	CITATIONS
1	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. Nature Communications, 2018, 9, 244.	12.8	1,102
2	High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. Nature Photonics, 2013, 7, 752-758.	22.6	657
3	Light-induced pyroelectric effect as an effective approach for ultrafast ultraviolet nanosensing. Nature Communications, 2015, 6, 8401.	12.8	287
4	Flexible, Stretchable and Wearable Multifunctional Sensor Array as Artificial Electronic Skin for Static and Dynamic Strain Mapping. Advanced Electronic Materials, 2015, 1, 1500142.	5.3	236
5	Flexible and Controllable Piezo-Phototronic Pressure Mapping Sensor Matrix by ZnO NW/polymer LED Array. Advanced Functional Materials, 2015, 25, 2884-2891.	16.0	202
6	Piezophototronic Effect in Single-Atomic-Layer MoS ₂ for Strain-Gated Flexible Optoelectronics. Advanced Materials, 2016, 28, 8463-8468.	23.6	194
7	Ultrafast Response Si/ZnO Heterojunction Ultraviolet Detector Based on Pyro-Phototronic Effect. Advanced Materials, 2016, 28, 6880-6886.	23.6	190
8	Enhanced Performance of a ZnO Nanowire-Based Self-Powered Glucose Sensor by Piezotronic Effect. Advanced Functional Materials, 2013, 23, 5868-5874.	16.0	177
9	Enhanced Performance of a Self-Powered Organic/Inorganic Photodetector by Pyro-Phototronic and Piezo-Phototronic Effects. Advanced Materials, 2017, 29, 1606698.	23.6	165
10	Piezo-Phototronic Enhanced UV Sensing Based on a Nanowire Photodetector Array. Advanced Materials, 2015, 27, 7963-7969.	23.6	121
11	Piezotronic Effect on the Transport Properties of GaN Nanobelts for Active Flexible Electronics. Advanced Materials, 2012, 24, 3532-3537.	23.6	118
12	Progress in Piezo-Phototronic Effect-Enhanced Light-Emitting Diodes and Pressure Imaging. Advanced Materials, 2016, 28, 1535-1552.	23.6	114
13	A Streaming Potential/Current-Based Microfluidic Direct Current Generator for Self-Powered Nanosystems. Advanced Materials, 2015, 27, 6482-6487.	23.6	112
14	High performance of ZnO nanowire protein sensors enhanced by the piezotronic effect. Energy and Environmental Science, 2013, 6, 494.	31.3	111
15	Piezotronic Effect Modulated Heterojunction Electron Gas in AlGaIn/AlN/GaN Heterostructure Microwire. Advanced Materials, 2016, 28, 7234-7242.	23.6	105
16	Self-Powered Triboelectric Nanosensor for Microfluidics and Cavity-Confined Solution Chemistry. ACS Nano, 2015, 9, 11056-11063.	14.9	101
17	Temperature dependence of pyro-phototronic effect on self-powered ZnO/perovskite heterostructured photodetectors. Nano Research, 2016, 9, 3695-3704.	10.3	93
18	GaN Nanobelt-Based Strain-Gated Piezotronic Logic Devices and Computation. ACS Nano, 2013, 7, 6403-6409.	14.9	89

#	ARTICLE	IF	CITATIONS
19	Piezo-Phototronic Effect on Selective Electron or Hole Transport through Depletion Region of Vis-NIR Broadband Photodiode. <i>Advanced Materials</i> , 2017, 29, 1701412.	23.6	86
20	Piezotronic effect enhanced Schottky-contact ZnO micro/nanowire humidity sensors. <i>Nano Research</i> , 2014, 7, 1083-1091.	10.3	82
21	Enhancing Light Emission of ZnO Nanofilm/Si Micropillar Heterostructure Arrays by Piezo-Phototronic Effect. <i>Advanced Materials</i> , 2015, 27, 4447-4453.	23.6	81
22	Piezotronic effect enhanced performance of Schottky-contacted optical, gas, chemical and biological nanosensors. <i>Nano Energy</i> , 2015, 14, 312-339.	16.0	71
23	Temperature Dependence of the Piezotronic and Piezophototronic Effects in <i>c</i> -axis GaN Nanobelts. <i>Advanced Materials</i> , 2015, 27, 8067-8074.	23.6	61
24	Simultaneously Enhancing Light Emission and Suppressing Efficiency Droop in GaN Microwire-Based Ultraviolet Light-Emitting Diode by the Piezo-Phototronic Effect. <i>Nano Letters</i> , 2017, 17, 3718-3724.	9.2	58
25	Largely Improved Near-Infrared Silicon-Photosensing by the Piezo-Phototronic Effect. <i>ACS Nano</i> , 2017, 11, 7118-7125.	14.9	58
26	Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. <i>Advanced Functional Materials</i> , 2015, 25, 5277-5284.	16.0	50
27	Highly flexible, conductive and catalytic Pt networks as transparent counter electrodes for wearable dye-sensitized solar cells. <i>Journal of Materials Chemistry A</i> , 2015, 3, 23028-23034.	10.3	49
28	Piezo-Phototronic Boolean Logic and Computation Using Photon and Strain Dual-Gated Nanowire Transistors. <i>Advanced Materials</i> , 2015, 27, 940-947.	23.6	47
29	CoS NWs/Au Hybridized Networks as Efficient Counter Electrodes for Flexible Sensitized Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1500141.	21.5	46
30	Piezotronic Effect in Strain-Gated Transistor of <i>c</i> -Axis GaN Nanobelt. <i>ACS Nano</i> , 2015, 9, 9822-9829.	14.9	45
31	Enhanced performance of GaN nanobelt-based photodetectors by means of piezotronic effects. <i>Nano Research</i> , 2013, 6, 758-766.	10.3	43
32	Theoretical Study of Triboelectric-Potential Gated/Driven Metal-Oxide Semiconductor Field-Effect Transistor. <i>ACS Nano</i> , 2016, 10, 4395-4402.	14.9	36
33	A Bamboo-Like GaN Microwire-Based Piezotronic Memristor. <i>Advanced Functional Materials</i> , 2016, 26, 5307-5314.	16.0	28
34	Functional Devices for Clean Energy and Advanced Sensor Applications. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-2.	2.8	0