Ruomeng Yu

List of Publications by Citations

Source: https://exaly.com/author-pdf/3394309/ruomeng-yu-publications-by-citations.pdf
Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

35 papers	3,818 citations	32 h-index	35 g-index
35 ext. papers	4,295 ext. citations	18.5 avg, IF	5.45 L-index

#	Paper	IF	Citations
35	Skin-inspired highly stretchable and conformable matrix networks for multifunctional sensing. *Nature Communications*, **2018**, 9, 244	17.4	710
34	High-resolution electroluminescent imaging of pressure distribution using a piezoelectric nanowire LED array. *Nature Photonics*, **2013**, 7, 752-758	33.9	534
33	Light-induced pyroelectric effect as an effective approach for ultrafast ultraviolet nanosensing. *Nature Communications*, **2015**, 6, 8401	17.4	180
32	Flexible, Stretchable and Wearable Multifunctional Sensor Array as Artificial Electronic Skin for Static and Dynamic Strain Mapping. *Advanced Electronic Materials*, **2015**, 1, 1500142	6.4	177
31	Flexible and Controllable Piezo-Phototronic Pressure Mapping Sensor Matrix by ZnO NW/p-Polymer LED Array. *Advanced Functional Materials*, **2015**, 25, 2884-2891	15.6	171
30	Enhanced Performance of a ZnO Nanowire-Based Self-Powered Glucose Sensor by Piezotronic Effect. *Advanced Functional Materials*, **2013**, 23, 5868-5874	15.6	150
29	Piezophototronic Effect in Single-Atomic-Layer MoS for Strain-Gated Flexible Optoelectronics. *Advanced Materials*, **2016**, 28, 8463-8468	24	149
28	Ultrafast Response p-Si/n-ZnO Heterojunction Ultraviolet Detector Based on Pyro-Phototronic Effect. *Advanced Materials*, **2016**, 28, 6880-6	24	121
27	Enhanced Performance of a Self-Powered Organic/Inorganic Photodetector by Pyro-Phototronic and Piezo-Phototronic Effects. *Advanced Materials*, **2017**, 29, 1606698	24	107
26	Piezotronic effect on the transport properties of GaN nanobelts for active flexible electronics. *Advanced Materials*, **2012**, 24, 3532-7	24	103
25	High performance of ZnO nanowire protein sensors enhanced by the piezotronic effect. *Energy and Environmental Science*, **2013**, 6, 494	35.4	99
24	Progress in Piezo-Phototronic-Effect-Enhanced Light-Emitting Diodes and Pressure Imaging. *Advanced Materials*, **2016**, 28, 1535-52	24	93
23	Piezo-Phototronic Enhanced UV Sensing Based on a Nanowire Photodetector Array. *Advanced Materials*, **2015**, 27, 7963-9	24	90
22	Piezotronic effect on the sensitivity and signal level of Schottky contacted proactive micro/nanowire nanosensors. *ACS Nano*, **2013**, 7, 1803-10	16.7	89
21	Self-Powered Triboelectric Nanosensor for Microfluidics and Cavity-Confined Solution Chemistry. *ACS Nano*, **2015**, 9, 11056-63	16.7	86
20	Piezotronic Effect Modulated Heterojunction Electron Gas in AlGaN/AlN/GaN Heterostructure Microwire. *Advanced Materials*, **2016**, 28, 7234-42	24	83
19	A Streaming Potential/Current-Based Microfluidic Direct Current Generator for Self-Powered Nanosystems. *Advanced Materials*, **2015**, 27, 6482-7	24	71

18	Piezotronic effect enhanced Schottky-contact ZnO micro/nanowire humidity sensors. *Nano Research*, **2014**, 7, 1083-1091	10	70
17	GaN nanobelt-based strain-gated piezotronic logic devices and computation. *ACS Nano*, **2013**, 7, 6403-9	16.7	68
16	Enhancing Light Emission of ZnO-Nanofilm/Si-Micropillar Heterostructure Arrays by Piezo-Phototronic Effect. *Advanced Materials*, **2015**, 27, 4447-4453	24	65
15	Piezo-Phototronic Effect on Selective Electron or Hole Transport through Depletion Region of Vis-NIR Broadband Photodiode. *Advanced Materials*, **2017**, 29, 1701412	24	62
14	Temperature dependence of pyro-phototronic effect on self-powered ZnO/perovskite heterostructured photodetectors. *Nano Research*, **2016**, 9, 3695-3704	10	60
13	Piezotronic effect enhanced performance of Schottky-contacted optical, gas, chemical and biological nanosensors. *Nano Energy*, **2015**, 14, 312-339	17.1	58
12	Temperature Dependence of the Piezotronic and Piezophototronic Effects in a-axis GaN Nanobelts. *Advanced Materials*, **2015**, 27, 8067-74	24	51
11	Largely Improved Near-Infrared Silicon-Photosensing by the Piezo-Phototronic Effect. *ACS Nano*, **2017**, 11, 7118-7125	16.7	46
10	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	11.5	44
9	Piezo-phototronic Boolean logic and computation using photon and strain dual-gated nanowire transistors. *Advanced Materials*, **2015**, 27, 940-7	24	44
8	CoS NWs/Au Hybridized Networks as Efficient Counter Electrodes for Flexible Sensitized Solar Cells. *Advanced Energy Materials*, **2015**, 5, 1500141	21.8	42
7	Highly flexible, conductive and catalytic Pt networks as transparent counter electrodes for wearable dye-sensitized solar cells. *Journal of Materials Chemistry A*, **2015**, 3, 23028-23034	13	39
6	Enhanced performance of GaN nanobelt-based photodetectors by means of piezotronic effects. *Nano Research*, **2013**, 6, 758-766	10	39
5	Temperature Dependence of the Piezophototronic Effect in CdS Nanowires. *Advanced Functional Materials*, **2015**, 25, 5277-5284	15.6	37
4	Piezotronic Effect in Strain-Gated Transistor of a-Axis GaN Nanobelt. *ACS Nano*, **2015**, 9, 9822-9	16.7	36
3	Theoretical Study of Triboelectric-Potential Gated/Driven Metal-Oxide-Semiconductor Field-Effect Transistor. *ACS Nano*, **2016**, 10, 4395-402	16.7	29
2	A Bamboo-Like GaN Microwire-Based Piezotronic Memristor. *Advanced Functional Materials*, **2016**, 26, 5307-5314	15.6	15
1	Functional Devices for Clean Energy and Advanced Sensor Applications. *Journal of Nanomaterials*, **2016**, 2016, 1-2	3.2	