Yusheng Zhou

List of Publications by Year
in descending order

48 papers	13,697 citations	57631 44 h-index	197535 49 g-index
49 all docs	49 docs citations	49 times ranked	7933 citing authors

#	Article	IF	Citations
1	Effect of contact- and sliding-mode electrification on nanoscale charge transfer for energy harvesting. Nano Research, 2016, 9, 3705-3713.	5.8	33
2	Excluding Contact Electrification in Surface Potential Measurement Using Kelvin Probe Force Microscopy. ACS Nano, 2016, 10, 2528-2535.	7.3	60
3	Molecular surface functionalization to enhance the power output of triboelectric nanogenerators. Journal of Materials Chemistry A, 2016, 4, 3728-3734.	5.2	257
4	A universal self-charging system driven by random biomechanical energy for sustainable operation of mobile electronics. Nature Communications, 2015, 6, 8975.	5.8	526
5	Optimization of Triboelectric Nanogenerator Charging Systems for Efficient Energy Harvesting and Storage. IEEE Transactions on Electron Devices, 2015, 62, 641-647.	1.6	144
6	Theory of freestanding triboelectric-layer-based nanogenerators. Nano Energy, 2015, 12, 760-774.	8.2	409
7	Stretchableâ€Rubberâ€Based Triboelectric Nanogenerator and Its Application as Selfâ€Powered Body Motion Sensors. Advanced Functional Materials, 2015, 25, 3688-3696.	7.8	320
8	Theoretical Investigation and Structural Optimization of Singleâ€Electrode Triboelectric Nanogenerators. Advanced Functional Materials, 2014, 24, 3332-3340.	7.8	513
9	Nanometer Resolution Selfâ€Powered Static and Dynamic Motion Sensor Based on Microâ€Grated Triboelectrification. Advanced Materials, 2014, 26, 1719-1724.	11.1	129
10	Maximum Surface Charge Density for Triboelectric Nanogenerators Achieved by Ionizedâ€Air Injection: Methodology and Theoretical Understanding. Advanced Materials, 2014, 26, 6720-6728.	11.1	517
11	Theoretical Study of Piezoâ€phototronic Nanoâ€LEDs. Advanced Materials, 2014, 26, 7209-7216.	11.1	64
12	Triboelectric Nanogenerator as an Active UV Photodetector. Advanced Functional Materials, 2014, 24, 2810-2816.	7.8	180
13	A theoretical study of grating structured triboelectric nanogenerators. Energy and Environmental Science, 2014, 7, 2339-2349.	15.6	194
14	Manipulating Nanoscale Contact Electrification by an Applied Electric Field. Nano Letters, 2014, 14, 1567-1572.	4.5	175
15	Self-Powered, Ultrasensitive, Flexible Tactile Sensors Based on Contact Electrification. Nano Letters, 2014, 14, 3208-3213.	4.5	405
16	Dipole-moment-induced effect on contact electrification for triboelectric nanogenerators. Nano Research, 2014, 7, 990-997.	5.8	180
17	Rational design of hybrid dye-sensitized solar cells composed of double-layered photoanodes with enhanced power conversion efficiency. Journal of Materials Chemistry A, 2014, 2, 11035-11039.	5.2	17
18	Single-Electrode-Based Rotating Triboelectric Nanogenerator for Harvesting Energy from Tires. ACS Nano, 2014, 8, 680-689.	7.3	182

#	Article	IF	Citations
19	A Shapeâ€Adaptive Thinâ€Filmâ€Based Approach for 50% Highâ€Efficiency Energy Generation Through Microâ€Grating Sliding Electrification. Advanced Materials, 2014, 26, 3788-3796.	11.1	415
20	Simulation method for optimizing the performance of an integrated triboelectric nanogenerator energy harvesting system. Nano Energy, 2014, 8, 150-156.	8.2	214
21	A hybrid energy cell for self-powered water splitting. Energy and Environmental Science, 2013, 6, 2429.	15.6	162
22	Enhanced Performance of Flexible ZnO Nanowire Based Roomâ€Temperature Oxygen Sensors by Piezotronic Effect. Advanced Materials, 2013, 25, 3701-3706.	11.1	146
23	Human Skin Based Triboelectric Nanogenerators for Harvesting Biomechanical Energy and as Self-Powered Active Tactile Sensor System. ACS Nano, 2013, 7, 9213-9222.	7.3	667
24	Single-Electrode-Based Sliding Triboelectric Nanogenerator for Self-Powered Displacement Vector Sensor System. ACS Nano, 2013, 7, 7342-7351.	7.3	523
25	Theoretical study of contact-mode triboelectric nanogenerators as an effective power source. Energy and Environmental Science, 2013, 6, 3576.	15.6	1,380
26	In Situ Quantitative Study of Nanoscale Triboelectrification and Patterning. Nano Letters, 2013, 13, 2771-2776.	4.5	210
27	Linear-Grating Triboelectric Generator Based on Sliding Electrification. Nano Letters, 2013, 13, 2282-2289.	4.5	442
28	Toward Large-Scale Energy Harvesting by a Nanoparticle-Enhanced Triboelectric Nanogenerator. Nano Letters, 2013, 13, 847-853.	4.5	979
29	Piezotronic Effect in Solution-Grown p-Type ZnO Nanowires and Films. Nano Letters, 2013, 13, 2647-2653.	4.5	118
30	Nanoâ€Newton Transverse Force Sensor Using a Vertical GaN Nanowire based on the Piezotronic Effect. Advanced Materials, 2013, 25, 883-888.	11.1	89
31	A Selfâ€Powered Triboelectric Nanosensor for Mercury Ion Detection. Angewandte Chemie - International Edition, 2013, 52, 5065-5069.	7.2	323
32	Theory of Slidingâ€Mode Triboelectric Nanogenerators. Advanced Materials, 2013, 25, 6184-6193.	11.1	581
33	A Singleâ€Electrode Based Triboelectric Nanogenerator as Selfâ€Powered Tracking System. Advanced Materials, 2013, 25, 6594-6601.	11.1	299
34	Single Micro/Nanowire Pyroelectric Nanogenerators as Self-Powered Temperature Sensors. ACS Nano, 2012, 6, 8456-8461.	7.3	149
35	Triboelectric-Generator-Driven Pulse Electrodeposition for Micropatterning. Nano Letters, 2012, 12, 4960-4965.	4.5	874
36	In Situ Observation of Dehydration-Induced Phase Transformation from Na₂Nb₂O₆â€“H₂O to NaNbO₃. Journal of Physical Chemistry C, 2012, 116, 22261-22265.	1.5	23

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37	Synthesis of vertically aligned ultra-long ZnO nanowires on heterogeneous substrates with catalyst at the root. Nanotechnology, 2012, 23, 055604.	1.3	74
38	Lead-free KNbO₃ferroelectric nanorod based flexible nanogenerators and capacitors. Nanotechnology, 2012, 23, 375401.	1.3	111
39	Functional Electrical Stimulation by Nanogenerator with 58 V Output Voltage. Nano Letters, 2012, 12, 3086-3090.	4.5	288
40	Electricity generation based on vertically aligned PbZr0.2Ti0.8O3 nanowire arrays. Nano Energy, 2012, 1, 424-428.	8.2	46
41	Flexible and Transparent Nanogenerators Based on a Composite of Leadâ€Free ZnSnO₃ Triangularâ€Belts. Advanced Materials, 2012, 24, 6094-6099.	11.1	110
42	Thermoelectric Nanogenerators Based on Single Sb-Doped ZnO Micro/Nanobelts. ACS Nano, 2012, 6, 6984-6989.	7.3	199
43	Strain-Gated Piezotronic Transistors Based on Vertical Zinc Oxide Nanowires. ACS Nano, 2012, 6, 3760-3766.	7.3	113
44	Vertically Aligned CdSe Nanowire Arrays for Energy Harvesting and Piezotronic Devices. ACS Nano, 2012, 6, 6478-6482.	7.3	91
45	Pyroelectric Nanogenerators for Harvesting Thermoelectric Energy. Nano Letters, 2012, 12, 2833-2838.	4.5	639
46	Anisotropic Outputs of a Nanogenerator from Oblique-Aligned ZnO Nanowire Arrays. ACS Nano, 2011, 5, 6707-6713.	7.3	56
47	Cantilevered bimorph-based scanner for high speed atomic force microscopy with large scanning range. Review of Scientific Instruments, 2010, 81, 053708.	0.6	13
48	An alternative flat scanner and micropositioning method for scanning probe microscope. Review of Scientific Instruments, 2010, 81, 123701.	0.6	6