Changsheng Wu

List of Publications by Year in descending order

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		66234	168136
53	7,474 citations	42	53
papers	citations	h-index	g-index
53	53	53	6552
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Implantable, wireless, self-fixing thermal sensors for continuous measurements of microvascular blood flow in flaps and organ grafts. Biosensors and Bioelectronics, 2022, 206, 114145.	5.3	18
2	A transient, closed-loop network of wireless, body-integrated devices for autonomous electrotherapy. Science, 2022, 376, 1006-1012.	6.0	90
3	Wireless implantable optical probe for continuous monitoring of oxygen saturation in flaps and organ grafts. Nature Communications, 2022, 13 , .	5.8	22
4	Thermally switchable, crystallizable oil and silicone composite adhesives for skin-interfaced wearable devices. Science Advances, 2022, 8, .	4.7	27
5	Differential cardiopulmonary monitoring system for artifact-canceled physiological tracking of athletes, workers, and COVID-19 patients. Science Advances, 2021, 7, .	4.7	55
6	Bitter Flavored, Soft Composites for Wearables Designed to Reduce Risks of Choking in Infants. Advanced Materials, 2021, 33, e2103857.	11.1	17
7	Functionalized wood with tunable tribopolarity for efficient triboelectric nanogenerators. Matter, 2021, 4, 3049-3066.	5.0	66
8	Selfâ€Powered Iontophoretic Transdermal Drug Delivery System Driven and Regulated by Biomechanical Motions. Advanced Functional Materials, 2020, 30, 1907378.	7.8	105
9	A wireless, skin-interfaced biosensor for cerebral hemodynamic monitoring in pediatric care. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31674-31684.	3.3	55
10	Sustainable and Biodegradable Wood Sponge Piezoelectric Nanogenerator for Sensing and Energy Harvesting Applications. ACS Nano, 2020, 14, 14665-14674.	7.3	124
11	Sub-nanoliter metabolomics via mass spectrometry to characterize volume-limited samples. Nature Communications, 2020, $11,5625$.	5.8	39
12	Large-Area Triboelectric Nanogenerator Mass Spectrometry: Expanded Coverage, Double-Bond Pinpointing, and Supercharging. Journal of the American Society for Mass Spectrometry, 2020, 31, 727-734.	1.2	10
13	Signal Output of Triboelectric Nanogenerator at Oil–Water–Solid Multiphase Interfaces and its Application for Dual‧ignal Chemical Sensing. Advanced Materials, 2019, 31, e1902793.	11.1	120
14	Sunlightâ€Triggerable Transient Energy Harvester and Sensors Based on Triboelectric Nanogenerator Using Acidâ€Sensitive Poly(phthalaldehyde). Advanced Electronic Materials, 2019, 5, 1900725.	2.6	15
15	Contact-Electrification between Two Identical Materials: Curvature Effect. ACS Nano, 2019, 13, 2034-2041.	7.3	78
16	Ferroelectricityâ€Enhanced Piezoâ€Phototronic Effect in 2D Vâ€Doped ZnO Nanosheets. Advanced Science, 2019, 6, 1900314.	5.6	33
17	TriboPump: A Lowâ€Cost, Handâ€Powered Water Disinfection System. Advanced Energy Materials, 2019, 9, 1901320.	10.2	74
18	Electrohydrodynamic Jet Printing Driven by a Triboelectric Nanogenerator. Advanced Functional Materials, 2019, 29, 1901102.	7.8	59

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19	Rational Structure Optimized Hybrid Nanogenerator for Highly Efficient Water Wave Energy Harvesting. Advanced Energy Materials, 2019, 9, 1802892.	10.2	92
20	Human–Machine Interfacing Enabled by Triboelectric Nanogenerators and Tribotronics. Advanced Materials Technologies, 2019, 4, 1800487.	3.0	169
21	Triboelectric Nanogenerator: A Foundation of the Energy for the New Era. Advanced Energy Materials, 2019, 9, 1802906.	10.2	1,086
22	Concurrent Harvesting of Ambient Energy by Hybrid Nanogenerators for Wearable Self-Powered Systems and Active Remote Sensing. ACS Applied Materials & Samp; Interfaces, 2018, 10, 14708-14715.	4.0	78
23	Field Emission of Electrons Powered by a Triboelectric Nanogenerator. Advanced Functional Materials, 2018, 28, 1800610.	7.8	44
24	Keystroke dynamics enabled authentication and identification using triboelectric nanogenerator array. Materials Today, 2018, 21, 216-222.	8.3	176
25	Selfâ€Powered Si/CdS Flexible Photodetector with Broadband Response from 325 to 1550 nm Based on Pyroâ€phototronic Effect: An Approach for Photosensing below Bandgap Energy. Advanced Materials, 2018, 30, 1705893.	11.1	163
26	MXene electrochemical microsupercapacitor integrated with triboelectric nanogenerator as a wearable self-charging power unit. Nano Energy, 2018, 45, 266-272.	8.2	333
27	Self-Powered Wind Sensor System for Detecting Wind Speed and Direction Based on a Triboelectric Nanogenerator. ACS Nano, 2018, 12, 3954-3963.	7.3	224
28	Self-powered wireless optical transmission of mechanical agitation signals. Nano Energy, 2018, 47, 566-572.	8.2	66
29	Polymer nanogenerators: Opportunities and challenges for largeâ€scale applications. Journal of Applied Polymer Science, 2018, 135, 45674.	1.3	73
30	Enhanced performances of Si/CdS heterojunction near-infrared photodetector by the piezo-phototronic effect. Nano Energy, 2018, 44, 311-318.	8.2	54
31	Triboelectric microplasma powered by mechanical stimuli. Nature Communications, 2018, 9, 3733.	5.8	212
32	Pop-Up Conducting Large-Area Biographene Kirigami. ACS Nano, 2018, 12, 9714-9720.	7.3	27
33	Self-Powered Multifunctional Motion Sensor Enabled by Magnetic-Regulated Triboelectric Nanogenerator. ACS Nano, 2018, 12, 5726-5733.	7.3	109
34	A highly sensitive, self-powered triboelectric auditory sensor for social robotics and hearing aids. Science Robotics, 2018, 3, .	9.9	573
35	Bioprinting: an assessment based on manufacturing readiness levels. Critical Reviews in Biotechnology, 2017, 37, 333-354.	5.1	36
36	Nanogenerator-based dual-functional and self-powered thin patch loudspeaker or microphone for flexible electronics. Nature Communications, 2017, 8, 15310.	5.8	169

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37	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.	4.5	55
38	Maximized Effective Energy Output of Contactâ€Separationâ€Triggered Triboelectric Nanogenerators as Limited by Air Breakdown. Advanced Functional Materials, 2017, 27, 1700049.	7.8	144
39	A Selfâ€Powered Dynamic Displacement Monitoring System Based on Triboelectric Accelerometer. Advanced Energy Materials, 2017, 7, 1700565.	10.2	117
40	Silicon Nanowire/Polymer Hybrid Solar Cell-Supercapacitor: A Self-Charging Power Unit with a Total Efficiency of 10.5%. Nano Letters, 2017, 17, 4240-4247.	4.5	149
41	A spring-based resonance coupling for hugely enhancing the performance of triboelectric nanogenerators for harvesting low-frequency vibration energy. Nano Energy, 2017, 32, 287-293.	8.2	164
42	A Highly Stretchable Fiberâ€Based Triboelectric Nanogenerator for Selfâ€Powered Wearable Electronics. Advanced Functional Materials, 2017, 27, 1604378.	7.8	296
43	Achieving ultrahigh triboelectric charge density for efficient energy harvesting. Nature Communications, 2017, 8, 88.	5.8	495
44	Largely Improved Near-Infrared Silicon-Photosensing by the Piezo-Phototronic Effect. ACS Nano, 2017, 11, 7118-7125.	7.3	57
45	Quantitative Prediction of ParavalvularÂLeak in Transcatheter AorticÂValve Replacement Based onÂTissue-Mimicking 3D Printing. JACC: Cardiovascular Imaging, 2017, 10, 719-731.	2.3	102
46	Piezoâ€Phototronic Effect on Selective Electron or Hole Transport through Depletion Region of Vis–NIR Broadband Photodiode. Advanced Materials, 2017, 29, 1701412.	11.1	82
47	Selfâ€Powered Electrochemical Synthesis of Polypyrrole from the Pulsed Output of a Triboelectric Nanogenerator as a Sustainable Energy System. Advanced Functional Materials, 2016, 26, 3542-3548.	7.8	87
48	Paper-Based Triboelectric Nanogenerators Made of Stretchable Interlocking Kirigami Patterns. ACS Nano, 2016, 10, 4652-4659.	7.3	197
49	Electric Eelâ€Skinâ€Inspired Mechanically Durable and Superâ€Stretchable Nanogenerator for Deformable Power Source and Fully Autonomous Conformable Electronicâ€Skin Applications. Advanced Materials, 2016, 28, 10024-10032.	11.1	273
50	Fully Packaged Blue Energy Harvester by Hybridizing a Rolling Triboelectric Nanogenerator and an Electromagnetic Generator. ACS Nano, 2016, 10, 11369-11376.	7.3	181
51	All-in-One Shape-Adaptive Self-Charging Power Package for Wearable Electronics. ACS Nano, 2016, 10, 10580-10588.	7.3	290
52	Dual-material 3D printed metamaterials with tunable mechanical properties for patient-specific tissue-mimicking phantoms. Additive Manufacturing, 2016, 12, 31-37.	1.7	71
53	A facile method for integrating direct-write devices into three-dimensional printed parts. Smart Materials and Structures, 2015, 24, 065008.	1.8	23