Youbin Zheng

List of Publications by Year
in descending order

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65 papers	3,766 citations	101543 36 h-index	128289 60 g-index
65 all docs	65 docs citations	65 times ranked	3077 citing authors

#	Article	IF	Citations
1	Disease Detection with Molecular Biomarkers: From Chemistry of Body Fluids to Nature-Inspired Chemical Sensors. Chemical Reviews, 2019, 119, 11761-11817.	47.7	269
2	Leaves based triboelectric nanogenerator (TENG) and TENG tree for wind energy harvesting. Nano Energy, 2019, 55, 260-268.	16.0	217
3	An electrospun nanowire-based triboelectric nanogenerator and its application in a fully self-powered UV detector. Nanoscale, 2014, 6, 7842-7846.	5.6	209
4	A self-improving triboelectric nanogenerator with improved charge density and increased charge accumulation speed. Nature Communications, 2018, 9, 3773.	12.8	207
5	Self-powered ammonia nanosensor based on the integration of the gas sensor and triboelectric nanogenerator. Nano Energy, 2018, 49, 31-39.	16.0	156
6	High output polypropylene nanowire array triboelectric nanogenerator through surface structural control and chemical modification. Nano Energy, 2016, 19, 48-57.	16.0	141
7	A new protocol toward high output TENG with polyimide as charge storage layer. Nano Energy, 2017, 38, 467-476.	16.0	121
8	Enhancing the performance of triboelectric nanogenerator through prior-charge injection and its application on self-powered anticorrosion. Nano Energy, 2014, 10, 37-43.	16.0	119
9	Conducting polymer PPy nanowire-based triboelectric nanogenerator and its application for self-powered electrochemical cathodic protection. Chemical Science, 2016, 7, 6477-6483.	7.4	94
10	Highly Efficient Selfâ€Healing Multifunctional Dressing with Antibacterial Activity for Sutureless Wound Closure and Infected Wound Monitoring. Advanced Materials, 2022, 34, e2106842.	21.0	89
11	Solid-liquid triboelectrification in smart U-tube for multifunctional sensors. Nano Energy, 2017, 40, 95-106.	16.0	88
12	Water-solid triboelectrification with self-repairable surfaces for water-flow energy harvesting. Nano Energy, 2019, 61, 454-461.	16.0	88
13	A Highâ€Reliability Kevlar Fiberâ€ZnO Nanowires Hybrid Nanogenerator and its Application on Selfâ€Powered UV Detection. Advanced Functional Materials, 2015, 25, 5794-5798.	14.9	85
14	Paper-based triboelectric nanogenerators and their application in self-powered anticorrosion and antifouling. Journal of Materials Chemistry A, 2016, 4, 18022-18030.	10.3	84
15	New Hydrogen Bonding Enhanced Polyvinyl Alcohol Based Selfâ€Charged Medical Mask with Superior Charge Retention and Moisture Resistance Performances. Advanced Functional Materials, 2021, 31, 2009172.	14.9	83
16	Liquidâ€“solid contact triboelectrification and its use in self-powered nanosensor for detecting organics in water. Nano Energy, 2016, 30, 321-329.	16.0	81
17	Two dimensional woven nanogenerator. Nano Energy, 2013, 2, 749-753.	16.0	76
18	Triboelectrification based on double-layered polyaniline nanofibers for self-powered cathodic protection driven by wind. Nano Research, 2018, 11, 1873-1882.	10.4	73

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19	A Highly Aligned Nanowireâ€Based Strain Sensor for Ultrasensitive Monitoring of Subtle Human Motion. Small, 2020, 16, e2001363.	10.0	72
20	Controllable TiO2 core-shell phase heterojunction for efficient photoelectrochemical water splitting under solar light. Applied Catalysis B: Environmental, 2019, 244, 519-528.	20.2	71
21	Gas sensing properties of p-type semiconducting vanadium oxide nanotubes. Applied Surface Science, 2012, 258, 9554-9558.	6.1	70
22	A three-dimensional integrated nanogenerator for effectively harvesting sound energy from the environment. Nanoscale, 2016, 8, 4938-4944.	5.6	70
23	Conductive elastic sponge-based triboelectric nanogenerator (TENG) for effective random mechanical energy harvesting and ammonia sensing. Nano Energy, 2021, 79, 105422.	16.0	67
24	A Transparent Antipeep Piezoelectric Nanogenerator to Harvest Tapping Energy on Screen. Small, 2016, 12, 1315-1321.	10.0	64
25	Biofilm material based triboelectric nanogenerator with high output performance in 95% humidity environment. Nano Energy, 2020, 77, 105088.	16.0	57
26	Smart Materials Enabled with Artificial Intelligence for Healthcare Wearables. Advanced Functional Materials, 2021, 31, 2105482.	14.9	56
27	Oleic-acid enhanced triboelectric nanogenerator with high output performance and wear resistance. Nano Energy, 2020, 69, 104435.	16.0	54
28	New Self-Healing Triboelectric Nanogenerator Based on Simultaneous Repair Friction Layer and Conductive Layer. ACS Applied Materials & Interfaces, 2020, 12, 30390-30398.	8.0	53
29	New Hydrophobic Organic Coating Based Triboelectric Nanogenerator for Efficient and Stable Hydropower Harvesting. ACS Applied Materials & Interfaces, 2020, 12, 31351-31359.	8.0	53
30	Nanoflower like SnO2-TiO2 nanotubes composite photoelectrode for efficient photocathodic protection of 304 stainless steel. Applied Surface Science, 2018, 457, 516-521.	6.1	52
31	Wearable Sensors and Systems for Wound Healing-Related pH and Temperature Detection. Micromachines, 2021, 12, 430.	2.9	51
32	Multifunctional Dressing for Wound Diagnosis and Rehabilitation. Advanced Healthcare Materials, 2021, 10, e2101292.	7.6	49
33	Packaged triboelectric nanogenerator with high endurability for severe environments. Nanoscale, 2015, 7, 18049-18053.	5.6	45
34	Liquid-solid triboelectric nanogenerators array and its applications for wave energy harvesting and self-powered cathodic protection. Energy, 2021, 217, 119388.	8.8	45
35	A new synergetic system based on triboelectric nanogenerator and corrosion inhibitor for enhanced anticorrosion performance. Nano Energy, 2022, 91, 106696.	16.0	41
36	Macro-superlubric triboelectric nanogenerator based on tribovoltaic effect. Matter, 2022, 5, 1532-1546.	10.0	40

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37	Stretchable and Highly Permeable Nanofibrous Sensors for Detecting Complex Human Body Motion. Advanced Materials, 2021, 33, e2102488.	21.0	35
38	An asymmetric AC electric field of triboelectric nanogenerator for efficient water/oil emulsion separation. Nano Energy, 2021, 90, 106641.	16.0	34
39	Reversible Temperatureâ€Sensitive Liquidâ€“Solid Triboelectrification with Polycaprolactone Material for Wetting Monitoring and Temperature Sensing. Advanced Functional Materials, 2021, 31, 2010220.	14.9	32
40	A Wearable Microneedleâ€Based Extended Gate Transistor for Realâ€Time Detection of Sodium in Interstitial Fluids. Advanced Materials, 2022, 34, e2108607.	21.0	31
41	A new method for the electrostatic manipulation of droplet movement by triboelectric nanogenerator. Nano Energy, 2021, 86, 106115.	16.0	30
42	New Coating TENG with Antiwear and Healing Functions for Energy Harvesting. ACS Applied Materials & Interfaces, 2020, 12, 9387-9394.	8.0	29
43	Control of triboelectricity by mechanoluminescence in ZnS/Mn-containing polymer films. Nano Energy, 2021, 90, 106646.	16.0	28
44	A Light Sensitive Nanogenerator for Selfâ€Powered UV Detection with Two Measuring Ranges. Advanced Optical Materials, 2017, 5, 1600623.	7.3	27
45	Techniques for wearable gas sensors fabrication. Sensors and Actuators B: Chemical, 2022, 353, 131133.	7.8	27
46	New inorganic coating-based triboelectric nanogenerators with anti-wear and self-healing properties for efficient wave energy harvesting. Applied Materials Today, 2020, 20, 100645.	4.3	26
47	High-Performance Polyimide-Based Waterâ€“Solid Triboelectric Nanogenerator for Hydropower Harvesting. ACS Applied Materials & Interfaces, 2021, 13, 32106-32114.	8.0	26
48	Artificially Intelligent Olfaction for Fast and Noninvasive Diagnosis of Bladder Cancer from Urine. ACS Sensors, 2022, 7, 1720-1731.	7.8	26
49	A triboelectric/electromagnetic hybrid generator for efficient wind energy collection and power supply for electronic devices. Science China Technological Sciences, 2021, 64, 2003-2011.	4.0	19
50	Bioinspired Triboelectric Nanosensors for Self-Powered Wearable Applications. ACS Biomaterials Science and Engineering, 2023, 9, 2087-2102.	5.2	16
51	A flexible dual-structured MXene for ultra-sensitive and ultra-wide monitoring of anatomical and physiological movements. Journal of Materials Chemistry A, 2021, 9, 26867-26874.	10.3	14
52	Green plantâ€based triboelectricity system for green energy harvesting and contact warning. EcoMat, 2021, 3, e12145.	11.9	13
53	Interfaceâ€Regulated Contact Electrification for Powerâ€Free and Highly Selective Gas Sensing. Advanced Intelligent Systems, 2019, 1, 1900066.	6.1	11
54	Triboelectrification of interface controlled by photothermal materials based on electron transfer. Nano Energy, 2021, 89, 106336.	16.0	10

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55	Surface engineering and on-site charge neutralization for the regulation of contact electrification. Nano Energy, 2022, 91, 106687.	16.0	6
56	Fully Integrated Self-Powered Electrical Stimulation Cell Culture Dish for Noncontact High-Efficiency Plasmid Transfection. ACS Applied Materials & Interfaces, 2021, 13, 54762-54769.	8.0	6
57	Highly Efficient Selfâ€Healing Multifunctional Dressing with Antibacterial Activity for Sutureless Wound Closure and Infected Wound Monitoring (Adv. Mater. 3/2022). Advanced Materials, 2022, 34, .	21.0	6
58	Quantifying Wetting Dynamics with Triboelectrification. Advanced Science, 2022, 9, .	11.2	6
59	New starch capsules with antistatic, anti-wear and superlubricity properties. Frontiers of Materials Science, 2021, 15, 266-279.	2.2	5
60	The marriage of sealant agent between structure transformable silk fibroin and traditional Chinese medicine for faster skin repair. Chinese Chemical Letters, 2022, 33, 1599-1603.	9.0	5
61	Strain Sensors: A Highly Aligned Nanowireâ€Based Strain Sensor for Ultrasensitive Monitoring of Subtle Human Motion (Small 24/2020). Small, 2020, 16, 2070132.	10.0	3
62	A Wearable Microneedleâ€Based Extended Gate Transistor for Realâ€Time Detection of Sodium in Interstitial Fluids (Adv. Mater. 10/2022). Advanced Materials, 2022, 34, .	21.0	3
63	Stretchable and Highly Permeable Nanofibrous Sensors for Detecting Complex Human Body Motion (Adv. Mater. 41/2021). Advanced Materials, 2021, 33, 2170325.	21.0	2
64	Investigation on the interface control and utilization oftriboelectrification. Scientia Sinica Chimica, 2018, 48, 1514-1530.	0.4	0
65	Smart Materials Enabled with Artificial Intelligence for Healthcare Wearables (Adv. Funct. Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock	14.9	0