Di Liu

List of Publications by Year
in descending order

38 papers	3,890 citations	185998 28 h-index	344852 36 g-index
38 all docs	38 docs citations	38 times ranked	2293 citing authors

#	Article	IF	Citations
1	A breathable, biodegradable, antibacterial, and self-powered electronic skin based on all-nanofiber triboelectric nanogenerators. Science Advances, 2020, 6, eaba9624.	4.7	589
2	A highly sensitive, self-powered triboelectric auditory sensor for social robotics and hearing aids. Science Robotics, 2018, 3, .	9.9	573
3	Largely enhanced triboelectric nanogenerator for efficient harvesting of water wave energy by soft contacted structure. Nano Energy, 2019, 57, 432-439.	8.2	278
4	A constant current triboelectric nanogenerator arising from electrostatic breakdown. Science Advances, 2019, 5, eaav6437.	4.7	237
5	Triboelectric nanogenerators: Fundamental physics and potential applications. Friction, 2020, 8, 481-506.	3.4	224
6	A Fully Self-Powered Vibration Monitoring System Driven by Dual-Mode Triboelectric Nanogenerators. ACS Nano, 2020, 14, 2475-2482.	7.3	154
7	Selection rules of triboelectric materials for direct-current triboelectric nanogenerator. Nature Communications, 2021, 12, 4686.	5.8	154
8	Flame-Retardant Textile-Based Triboelectric Nanogenerators for Fire Protection Applications. ACS Nano, 2020, 14, 15853-15863.	7.3	133
9	Rationally patterned electrode of direct-current triboelectric nanogenerators for ultrahigh effective surface charge density. Nature Communications, 2020, 11, 6186.	5.8	129
10	Sensing of joint and spinal bending or stretching via a retractable and wearable badge reel. Nature Communications, 2021, 12, 2950.	5.8	114
11	Simultaneously Enhancing Power Density and Durability of Slidingâ€Mode Triboelectric Nanogenerator via Interface Liquid Lubrication. Advanced Energy Materials, 2020, 10, 2002920.	10.2	112
12	Direct current triboelectric cell by sliding an n-type semiconductor on a p-type semiconductor. Nano Energy, 2019, 66, 104185.	8.2	98
13	A Hydrophobic Self-Repairing Power Textile for Effective Water Droplet Energy Harvesting. ACS Nano, 2021, 15, 18172-18181.	7.3	83
14	A Motion Vector Sensor via Directâ€Current Triboelectric Nanogenerator. Advanced Functional Materials, 2020, 30, 2002547.	7.8	78
15	Rationally Designed Dualâ€Mode Triboelectric Nanogenerator for Harvesting Mechanical Energy by Both Electrostatic Induction and Dielectric Breakdown Effects. Advanced Energy Materials, 2020, 10, 2000965.	10.2	70
16	Improved Output Performance of Triboelectric Nanogenerator by Fast Accumulation Process of Surface Charges. Advanced Energy Materials, 2021, 11, 2100050.	10.2	67
17	Triboelectric nanogenerator: from alternating current to direct current. IScience, 2021, 24, 102018.	1.9	66
18	Surface charge density of triboelectric nanogenerators: Theoretical boundary and optimization methodology. Applied Materials Today, 2020, 18, 100496.	2.3	64

#	Article	IF	Citations
19	Waterâ€Wave Driven Route Avoidance Warning System for Wireless Ocean Navigation. Advanced Energy Materials, 2021, 11, 2101116.	10.2	62
20	High output direct-current power fabrics based on the air breakdown effect. Energy and Environmental Science, 2021, 14, 2460-2471.	15.6	58
21	Ultrathin, transparent, and robust self-healing electronic skins for tactile and non-contact sensing. Nano Energy, 2022, 95, 107056.	8.2	55
22	Longâ€Lifetime Triboelectric Nanogenerator Operated in Conjunction Modes and Low Crest Factor. Advanced Energy Materials, 2020, 10, 1903024.	10.2	53
23	Improving performance of triboelectric nanogenerators by dielectric enhancement effect. Matter, 2022, 5, 180-193.	5.0	53
24	Hugely Enhanced Output Power of Directâ€Current Triboelectric Nanogenerators by Using Electrostatic Breakdown Effect. Advanced Materials Technologies, 2020, 5, 2000289.	3.0	49
25	A Selfâ€Powered Dualâ€Type Signal Vector Sensor for Smart Robotics and Automatic Vehicles. Advanced Materials, 2022, 34, e2110363.	11.1	48
26	Three-dimensional modeling of alternating current triboelectric nanogenerator in the linear sliding mode. Applied Physics Reviews, 2020, 7, .	5.5	45
27	Achieving Ultrarobust and Humidityâ€Resistant Triboelectric Nanogenerator by Dualâ€Capacitor Enhancement System. Advanced Energy Materials, 0, , 2101958.	10.2	42
28	Enhancing output performance of direct-current triboelectric nanogenerator under controlled atmosphere. Nano Energy, 2021, 84, 105864.	8.2	37
29	A robust rolling-mode direct-current triboelectric nanogenerator arising from electrostatic breakdown effect. Nano Energy, 2021, 85, 106014.	8.2	34
30	Rehabilitation of Total Knee Arthroplasty by Integrating Conjoint Isometric Myodynamia and Realâ€Time Rotation Sensing System. Advanced Science, 2022, 9, e2105219.	5.6	28
31	Achieving Ultrahigh Effective Surface Charge Density of Directâ€Current Triboelectric Nanogenerator in High Humidity. Small, 2022, 18, e2201402.	5.2	28
32	Recent Advances in Self-Powered Electrochemical Systems. Research, 2021, 2021, 4673028.	2.8	27
33	Improved Output Performance of Directâ€Current Triboelectric Nanogenerator through Field Enhancing Breakdown Effect. Advanced Materials Technologies, 2021, 6, 2100195.	3.0	19
34	Transient physical modeling and comprehensive optimal design of air-breakdown direct-current triboelectric nanogenerators. Nano Energy, 2022, 92, 106742.	8.2	12
35	Active-Sensing Epidermal Stretchable Bioelectronic Patch for Noninvasive, Conformal, and Wireless Tendon Monitoring. Research, 2021, 2021, 9783432.	2.8	6
36	A Triboelectric Closedâ€Loop Sensing System for Authenticity Identification of Paperâ€Based Artworks. Advanced Materials Technologies, 2020, 5, 2000194.	3.0	5

#	Article	IF	Citations
37	A Tuningâ€Fork Triboelectric Nanogenerator with Frequency Multiplication for Efficient Mechanical Energy Harvesting. Small Methods, 2022, 6, e2200066.	4.6	5
38	Nanogenerators from Electrical Discharge. , 0, , .		1