Kai Dong

List of Publications by Year
in descending order

55	6,655	87723	161609
papers	citations	38 h-index	54 g-index

55	55	55	4406
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Fiber/Fabricâ€Based Piezoelectric and Triboelectric Nanogenerators for Flexible/Stretchable and Wearable Electronics and Artificial Intelligence. Advanced Materials, 2020, 32, e1902549.	11.1	826
2	A breathable, biodegradable, antibacterial, and self-powered electronic skin based on all-nanofiber triboelectric nanogenerators. Science Advances, 2020, 6, eaba9624.	4.7	589
3	A Highly Stretchable and Washable All-Yarn-Based Self-Charging Knitting Power Textile Composed of Fiber Triboelectric Nanogenerators and Supercapacitors. ACS Nano, 2017, 11, 9490-9499.	7.3	419
4	A Stretchable Yarn Embedded Triboelectric Nanogenerator as Electronic Skin for Biomechanical Energy Harvesting and Multifunctional Pressure Sensing. Advanced Materials, 2018, 30, e1804944.	11.1	396
5	3D Orthogonal Woven Triboelectric Nanogenerator for Effective Biomechanical Energy Harvesting and as Selfâ€Powered Active Motion Sensors. Advanced Materials, 2017, 29, 1702648.	11.1	321
6	An Ultra-Low-Friction Triboelectricâ€“Electromagnetic Hybrid Nanogenerator for Rotation Energy Harvesting and Self-Powered Wind Speed Sensor. ACS Nano, 2018, 12, 9433-9440.	7.3	286
7	Shape adaptable and highly resilient 3D braided triboelectric nanogenerators as e-textiles for power and sensing. Nature Communications, 2020, 11, 2868.	5.8	285
8	Vitrimer Elastomerâ€Based Jigsaw Puzzleâ€Like Healable Triboelectric Nanogenerator for Selfâ€Powered Wearable Electronics. Advanced Materials, 2018, 30, e1705918.	11.1	265
9	Versatile Coreâ€“Sheath Yarn for Sustainable Biomechanical Energy Harvesting and Realâ€Time Humanâ€Interactive Sensing. Advanced Energy Materials, 2018, 8, 1801114.	10.2	212
10	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
11	Stretchable, Washable, and Ultrathin Triboelectric Nanogenerators as Skinâ€Like Highly Sensitive Selfâ€Powered Haptic Sensors. Advanced Functional Materials, 2021, 31, .	7.8	155
12	Flexible and Stretchable Fiberâ€Shaped Triboelectric Nanogenerators for Biomechanical Monitoring and Humanâ€Interactive Sensing. Advanced Functional Materials, 2021, 31, 2006679.	7.8	145
13	Flame-Retardant Textile-Based Triboelectric Nanogenerators for Fire Protection Applications. ACS Nano, 2020, 14, 15853-15863.	7.3	133
14	Continuous and Scalable Manufacture of Hybridized Nano-Micro Triboelectric Yarns for Energy Harvesting and Signal Sensing. ACS Nano, 2020, 14, 4716-4726.	7.3	130
15	Advances in Highâ€Performance Autonomous Energy and Selfâ€Powered Sensing Textiles with Novel 3D Fabric Structures. Advanced Materials, 2022, 34, e2109355.	11.1	118
16	Allâ€Nanofiber Selfâ€Powered Skinâ€Interfaced Realâ€Time Respiratory Monitoring System for Obstructive Sleep Apneaâ€Hypopnea Syndrome Diagnosing. Advanced Functional Materials, 2021, 31, 2103559.	7.8	115
17	UV-Protective, Self-Cleaning, and Antibacterial Nanofiber-Based Triboelectric Nanogenerators for Self-Powered Human Motion Monitoring. ACS Applied Materials & Interfaces, 2021, 13, 11205-11214.	4.0	111
18	Smart textile triboelectric nanogenerators: Current status and perspectives. MRS Bulletin, 2021, 46, 512-521.	1.7	111

#	Article	IF	Citations
19	A Triboelectricâ€“Electromagnetic Hybrid Nanogenerator with Broadband Working Range for Wind Energy Harvesting and a Self-Powered Wind Speed Sensor. ACS Energy Letters, 0, , 1443-1452.	8.8	110
20	Self-Powered Multifunctional Motion Sensor Enabled by Magnetic-Regulated Triboelectric Nanogenerator. ACS Nano, 2018, 12, 5726-5733.	7.3	109
21	Helical Fiber Strain Sensors Based on Triboelectric Nanogenerators for Self-Powered Human Respiratory Monitoring. ACS Nano, 2022, 16, 2811-2821.	7.3	102
22	Fully Fabric-Based Triboelectric Nanogenerators as Self-Powered Humanâ€“Machine Interactive Keyboards. Nano-Micro Letters, 2021, 13, 103.	14.4	96
23	Recent Progress of Wearable Piezoelectric Nanogenerators. ACS Applied Electronic Materials, 2021, 3, 2449-2467.	2.0	88
24	Complementary Electromagneticâ€Triboelectric Active Sensor for Detecting Multiple Mechanical Triggering. Advanced Functional Materials, 2018, 28, 1705808.	7.8	87
25	A Hydrophobic Self-Repairing Power Textile for Effective Water Droplet Energy Harvesting. ACS Nano, 2021, 15, 18172-18181.	7.3	83
26	Changes in volatile flavor of yak meat during oxidation based on multi-omics. Food Chemistry, 2022, 371, 131103.	4.2	82
27	Sweatâ€Permeable, Biodegradable, Transparent and Selfâ€powered Chitosanâ€Based Electronic Skin with Ultrathin Elastic Gold Nanofibers. Advanced Functional Materials, 2022, 32, .	7.8	80
28	Self-charging power textiles integrating energy harvesting triboelectric nanogenerators with energy storage batteries/supercapacitors. Journal of Semiconductors, 2021, 42, 101601.	2.0	76
29	Experimental and numerical analyses on the thermal conductive behaviors of carbon fiber/epoxy plain woven composites. International Journal of Heat and Mass Transfer, 2016, 102, 501-517.	2.5	65
30	Smart Textile Triboelectric Nanogenerators: Prospective Strategies for Improving Electricity Output Performance. Nanoenergy Advances, 2022, 2, 133-164.	3.6	59
31	High output direct-current power fabrics based on the air breakdown effect. Energy and Environmental Science, 2021, 14, 2460-2471.	15.6	58
32	Enhanced performances of Si/CdS heterojunction near-infrared photodetector by the piezo-phototronic effect. Nano Energy, 2018, 44, 311-318.	8.2	54
33	A Novel Strategy to Fabricate Core-Sheath Structure Piezoelectric Yarns for Wearable Energy Harvesters. Advanced Fiber Materials, 2021, 3, 239-250.	7.9	53
34	Multi-scale finite element analyses on the thermal conductive behaviors of 3D braided composites. Composite Structures, 2016, 143, 9-22.	3.1	50
35	A review on emerging biodegradable polymers for environmentally benign transient electronic skins. Journal of Materials Science, 2021, 56, 16765-16789.	1.7	49
36	Self-Powered Smart Arm Training Band Sensor Based on Extremely Stretchable Hydrogel Conductors. ACS Applied Materials & Interfaces, 2021, 13, 44868-44877.	4.0	49

#	Article	IF	Citations
37	A mesoscale study of thermal expansion behaviors of epoxy resin and carbon fiber/epoxy unidirectional composites based on periodic temperature and displacement boundary conditions. Polymer Testing, 2016, 55, 44-60.	2.3	47
38	Temperature-dependent thermal expansion behaviors of carbon fiber/epoxy plain woven composites: Experimental and numerical studies. Composite Structures, 2017, 176, 329-341.	3.1	45
39	<scp>Largeâ€scale</scp> fabrication of <scp>coreâ€shell</scp> triboelectric braided fibers and power textiles for energy harvesting and plantar pressure monitoring. EcoMat, 2022, 4, .	6.8	44
40	Ultrathin Eardrumâ€Inspired Selfâ€Powered Acoustic Sensor for Vocal Synchronization Recognition with the Assistance of Machine Learning. Small, 2022, 18, e2106960.	5.2	43
41	Knitted self-powered sensing textiles for machine learning-assisted sitting posture monitoring and correction. Nano Research, 2022, 15, 8389-8397.	5.8	41
42	A Oneâ€Step Fabricated Sheathâ€Core Stretchable Fiber Based on Liquid Metal with Superior Electric Conductivity for Wearable Sensors and Heaters. Advanced Materials Technologies, 2022, 7, .	3.0	36
43	Dual-mode thermal-regulating and self-powered pressure sensing hybrid smart fibers. Chemical Engineering Journal, 2021, 420, 129650.	6.6	34
44	Experimental and numerical investigation on the thermal conduction properties of 2.5D angle-interlock woven composites. Composite Structures, 2016, 154, 319-333.	3.1	33
45	Ultrastretchable Organogel/Silicone Fiber-Helical Sensors for Self-Powered Implantable Ligament Strain Monitoring. ACS Nano, 2022, 16, 10958-10967.	7.3	33
46	Industrial production of bionic scales knitting fabric-based triboelectric nanogenerator for outdoor rescue and human protection. Nano Energy, 2022, 97, 107168.	8.2	28
47	High-Efficiency Wastewater Purification System Based on Coupled Photoelectricâ€“Catalytic Action Provided by Triboelectric Nanogenerator. Nano-Micro Letters, 2021, 13, 194.	14.4	26
48	Scalable and washable 3D warp-knitted spacer power fabrics for energy harvesting and pressure sensing. Journal Physics D: Applied Physics, 2021, 54, 424006.	1.3	23
49	Enhanced Output of Onâ€Body Directâ€Current Power Textiles by Efficient Energy Management for Sustainable Working of Mobile Electronics. Advanced Energy Materials, 2022, 12, .	10.2	23
50	Comparisons of thermal conductive behaviors of epoxy resin in unidirectional composite materials. Journal of Thermal Analysis and Calorimetry, 2016, 124, 775-789.	2.0	17
51	Electromagnetic Shielding Triboelectric Yarns for Humanâ€“Machine Interacting. Advanced Electronic Materials, 2022, 8, .	2.6	16
52	Continuous and scalable manufacture of aggregation induced emission luminogen fibers for anti-counterfeiting and hazardous gas detecting smart textiles. Materials and Design, 2021, 205, 109761.	3.3	15
53	A Skinâ€Inspired Triboelectric Nanogenerator with an Interpenetrating Structure for Motion Sensing and Energy Harvesting. Macromolecular Materials and Engineering, 2021, 306, 2100147.	1.7	13
54	Underwater Monitoring Networks Based on Cable-Structured Triboelectric Nanogenerators. Research, 2022, 2022, 9809406.	2.8	4

#	Article	IF	Citations
55	Research Progress of Fe-Based Superelastic Alloys. Crystals, 2022, 12, 602.	1.0	4