Kangqi Fan

List of Publications by Year
in descending order

54 papers	2,054 citations	26 h-index	45 g-index
56 all docs	56 docs citations	56 times ranked	1210 citing authors

218677

233421

#	Article	IF	Citations
1	Scavenging energy from ultra-low frequency mechanical excitations through a bi-directional hybrid energy harvester. Applied Energy, 2018, 216, 8-20.	10.1	150
2	Scavenging energy from human walking through a shoe-mounted piezoelectric harvester. Applied Physics Letters, 2017, 110, .	3.3	123
3	A monostable piezoelectric energy harvester for broadband low-level excitations. Applied Physics Letters, 2018, 112, .	3.3	120
4	Design and development of a multipurpose piezoelectric energy harvester. Energy Conversion and Management, 2015, 96, 430-439.	9.2	111
5	A string-suspended and driven rotor for efficient ultra-low frequency mechanical energy harvesting. Energy Conversion and Management, 2019, 198, 111820.	9.2	111
6	Capturing energy from ultra-low frequency vibrations and human motion through a monostable electromagnetic energy harvester. Energy, 2019, 169, 356-368.	8.8	110
7	A comprehensive study of non-linear air damping and â€œpull-inâ€• effects on the electrostatic energy harvesters. Energy Conversion and Management, 2020, 203, 112264.	9.2	102
8	A nonlinear two-degree-of-freedom electromagnetic energy harvester for ultra-low frequency vibrations and human body motions. Renewable Energy, 2019, 138, 292-302.	8.9	92
9	Improved energy harvesting from low-frequency small vibrations through a monostable piezoelectric energy harvester. Mechanical Systems and Signal Processing, 2019, 117, 594-608.	8.0	90
10	Hierarchical Honeycomb-Structured Electret/Triboelectric Nanogenerator for Biomechanical and Morphing Wing Energy Harvesting. Nano-Micro Letters, 2021, 13, 123.	27.0	80
11	A nonlinear piezoelectric energy harvester for various mechanical motions. Applied Physics Letters, 2015, 106, .	3.3	69
12	Design and experimental verification of a bi-directional nonlinear piezoelectric energy harvester. Energy Conversion and Management, 2014, 86, 561-567.	9.2	68
13	Investigation of an ultra-low frequency piezoelectric energy harvester with high frequency up-conversion factor caused by internal resonance mechanism. Mechanical Systems and Signal Processing, 2022, 162, 108038.	8.0	67
14	An inertial rotary energy harvester for vibrations at ultra-low frequency with high energy conversion efficiency. Applied Energy, 2020, 279, 115762.	10.1	66
15	Molecular dynamics study on temperature and strain rate dependences of mechanical tensile properties of ultrathin nickel nanowires. Transactions of Nonferrous Metals Society of China, 2013, 23, 3353-3361.	4.2	53
16	Design and development of a rotational energy harvester for ultralow frequency vibrations and irregular human motions. Renewable Energy, 2020, 156, 1028-1039.	8.9	42
17	Hybrid piezoelectric-electromagnetic energy harvester for scavenging energy from low-frequency excitations. Smart Materials and Structures, 2018, 27, 085001.	3.5	40
18	A whirligig-inspired intermittent-contact triboelectric nanogenerator for efficient low-frequency vibration energy harvesting. Nano Energy, 2021, 90, 106576.	16.0	39

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19	An eccentric mass-based rotational energy harvester for capturing ultralow-frequency mechanical energy. Energy Conversion and Management, 2021, 241, 114301.	9.2	38
20	A string-driven rotor for efficient energy harvesting from ultra-low frequency excitations. Applied Physics Letters, 2019, 115, .	3.3	34
21	A cantilever-plucked and vibration-driven rotational energy harvester with high electric outputs. Energy Conversion and Management, 2021, 244, 114504.	9.2	34
22	The Electronic Properties of O-Doped Pure and Sulfur Vacancy-Defect Monolayer WS2: A First-Principles Study. Materials, 2018, 11, 218.	2.9	32
23	Opinion evolution influenced by informed agents. Physica A: Statistical Mechanics and Its Applications, 2016, 462, 431-441.	2.6	31
24	Emergence and spread of extremist opinions. Physica A: Statistical Mechanics and Its Applications, 2015, 436, 87-97.	2.6	30
25	A two-degree-of-freedom string-driven rotor for efficient energy harvesting from ultra-low frequency excitations. Energy, 2020, 196, 117107.	8.8	30
26	A pendulum-plucked rotor for efficient exploitation of ultralow-frequency mechanical energy. Renewable Energy, 2021, 179, 339-350.	8.9	29
27	Scavenging energy from the motion of human lower limbs via a piezoelectric energy harvester. International Journal of Modern Physics B, 2017, 31, 1741011.	2.0	22
28	Exploiting ultralow-frequency energy via vibration-to-rotation conversion of a rope-spun rotor. Energy Conversion and Management, 2020, 225, 113433.	9.2	22
29	A cantilever-driven rotor for efficient vibration energy harvesting. Energy, 2021, 235, 121326.	8.8	21
30	An assessment model for collecting and transporting cellulosic biomass. Renewable Energy, 2013, 50, 786-794.	8.9	18
31	Human Body Heat Based Thermoelectric Harvester with Ultra-Low Input Power Management System for Wireless Sensors Powering. Energies, 2019, 12, 3942.	3.1	18
32	Evolution of public opinions in closed societies influenced by broadcast media. Physica A: Statistical Mechanics and Its Applications, 2017, 472, 53-66.	2.6	17
33	A magnetically coupled nonlinear T-shaped piezoelectric energy harvester with internal resonance. Smart Materials and Structures, 2019, 28, 11LT01.	3.5	17
34	An innovative energy harvesting backpack strategy through a flexible mechanical motion rectifier. Energy Conversion and Management, 2022, 264, 115731.	9.2	17
35	Achieving high electric outputs from low-frequency motions through a double-string-spun rotor. Mechanical Systems and Signal Processing, 2021, 155, 107648.	8.0	15
36	Achieving high-speed rotations with a semi-flexible rotor driven by ultralow-frequency vibrations. Applied Physics Letters, 2020, 117, .	3.3	14

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37	Development of bipolar-charged electret rotatory power generator and application in self-powered intelligent thrust bearing. Nano Energy, 2021, 90, 106491.	16.0	14
38	Magnetically induced micropillar arrays for an ultrasensitive flexible sensor with a wireless recharging system. Science China Materials, 2021, 64, 1977-1988.	6.3	13
39	A monostable hybrid energy harvester for capturing energy from low-frequency excitations. Journal of Intelligent Material Systems and Structures, 2019, 30, 2716-2732.	2.5	12
40	Harvesting energy from twisting vibration of a rotor suspended by a piece of string. Smart Materials and Structures, 2019, 28, 07LT01.	3.5	11
41	Ultrasonic vibration-assisted pelleting of wheat straw: a predictive model for pellet density using response surface methodology. Biofuels, 2012, 3, 259-267.	2.4	7
42	A multiscale modeling approach to adhesive contact. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1680-1686.	5.1	6
43	Hybridizing linear and nonlinear couplings for constructing twoâ€degreeâ€ofâ€freedom electromagnetic energy harvesters. International Journal of Energy Research, 2019, 43, 8004.	4.5	6
44	Performance of a multipurpose piezoelectric energy harvester. International Journal of Modern Physics B, 2017, 31, 1741007.	2.0	5
45	Transient Charging Behavior of an Energy Harvesting System Using SSHI Interface. Integrated Ferroelectrics, 2014, 154, 1-13.	0.7	3
46	Scavenging energy from human limb motions. , 2017, , .		2
47	Stokes' Second Problem with Velocity Slip Boundary Condition. Key Engineering Materials, 0, 483, 287-292.	0.4	1
48	Complete charging for piezoelectric energy harvesting system. Transactions of Tianjin University, 2014, 20, 407-414.	6.4	1
49	An arc-shaped electromagnetic energy harvester for ultra-low frequency vibrations and swing motions. , 2019, , .		1
50	Adhesive Failure of Micro-Cantilever Beams. , 2006, , .		0
51	Study on Atoms Diffusion of Vacuum Fusion Sintering WC-Co Composite Nano-coatings. , 2006, , .		0
52	Design of a Micro Magnetic Acceleration Switch. , 2006, , .		0
53	Sugar Yield Comparison of Wheat Straw Processed by Two Pelleting Methods for Cellulosic Biofuel Manufacturing. , 2012, , .		0
54	A twisting vibration based energy harvester for ultra-low frequency excitations. International Journal of Applied Electromagnetics and Mechanics, 2020, 64, 693-700.	0.6	0