Weiyang Qin

List of Publications by Year
in descending order

31 papers	1,250 citations	430874 18 h-index	477307 29 g-index
31 all docs	31 docs citations	31 times ranked	993 citing authors

#	Article	IF	Citations
1	Stretchable piezoelectric energy harvesters and self-powered sensors for wearable and implantable devices. Biosensors and Bioelectronics, 2020, 168, 112569.	10.1	225
2	Enhancing ability of harvesting energy from random vibration by decreasing the potential barrier of bistable harvester. Mechanical Systems and Signal Processing, 2017, 85, 71-81.	8.0	129
3	Nonlinear vibration energy harvesting and vibration suppression technologies: Designs, analysis, and applications. Applied Physics Reviews, 2021, 8, .	11.3	95
4	Improving energy harvesting from random excitation by nonlinear flexible bi-stable energy harvester with a variable potential energy function. Mechanical Systems and Signal Processing, 2019, 115, 162-172.	8.0	86
5	Transfer Printing and its Applications in Flexible Electronic Devices. Nanomaterials, 2019, 9, 283.	4.1	78
6	Energy harvesting by dynamic unstability and internal resonance for piezoelectric beam. Applied Physics Letters, 2015, 107, .	3.3	69
7	Scavenging wind energy by a Y-shaped bi-stable energy harvester with curved wings. Energy, 2018, 153, 400-412.	8.8	67
8	Improve efficiency of harvesting random energy by snap-through in a quad-stable harvester. Sensors and Actuators A: Physical, 2016, 243, 151-158.	4.1	62
9	Magnetically coupled dual-beam energy harvester: Benefit and trade-off. Journal of Intelligent Material Systems and Structures, 2018, 29, 1216-1235.	2.5	53
10	Scavenging wind energy by a dynamic-stable flutter energy harvester with rectangular wing. Applied Physics Letters, 2019, 114, .	3.3	52
11	Improving efficiency of energy harvesting by a novel penta-stable configuration. Sensors and Actuators A: Physical, 2017, 265, 297-305.	4.1	51
12	Obtaining high-energy responses of nonlinear piezoelectric energy harvester by voltage impulse perturbations. EPJ Applied Physics, 2017, 79, 20902.	0.7	41
13	Dynamic response analysis of an overhung rotor with interval uncertainties. Nonlinear Dynamics, 2017, 89, 2115-2124.	5.2	35
14	Dynamics and coherence resonance of a laminated piezoelectric beam for energy harvesting. Nonlinear Dynamics, 2015, 81, 1751-1757.	5.2	30
15	Improving energy harvesting by stochastic resonance in a laminated bistable beam. European Physical Journal Plus, 2016, 131, 1.	2.6	28
16	Improving energy harvesting in a tri-stable piezomagnetoelastic beam with two attractive external magnets subjected to random excitation. Archive of Applied Mechanics, 2017, 87, 45-57.	2.2	26
17	Grazing Bifurcation in the Response of Cracked Jeffcott Rotor. Nonlinear Dynamics, 2004, 35, 147-157.	5.2	24
18	Theoretical and experimental studies on the characteristics of a tri-stable piezoelectric harvester. Archive of Applied Mechanics, 2017, 87, 1541-1554.	2.2	23

#	Article	IF	Citations
19	Energy harvesting from coherent resonance of horizontal vibration of beam excited by vertical base motion. Applied Physics Letters, 2014, 105, 113901.	3.3	18
20	Investigation on the transient response of a speed-varying rotor with sudden unbalance and its application in the unbalance identification. Journal of Low Frequency Noise Vibration and Active Control, 2020, 39, 1065-1086.	2.9	12
21	Distributed parameter model and experimental validation of a compressive-mode energy harvester under harmonic excitations. AIP Advances, 2016, 6, 085310.	1.3	8
22	Coherence resonance of a magnet-induced buckled piezoelectric energy harvester under stochastic parametric excitation. Journal of Intelligent Material Systems and Structures, 2018, 29, 1620-1631.	2.5	7
23	Investigation of snap-through and homoclinic bifurcation of a magnet-induced buckled energy harvester by the Melnikov method. Chaos, 2016, 26, 123109.	2.5	6
24	Harvesting Variable-Speed Wind Energy with a Dynamic Multi-Stable Configuration. Materials, 2020, 13, 1389.	2.9	5
25	Hybrid vibration energy harvesting based on piezoelectric polyline beams with electret coupling. Journal of Intelligent Material Systems and Structures, 2022, 33, 319-329.	2.5	5
26	Mechanical Shunt Resonators-Based Piezoelectric Metamaterial for Elastic Wave Attenuation. Materials, 2022, 15, 891.	2.9	5
27	Harvesting Energy from Bridge Vibration by Piezoelectric Structure with Magnets Tailoring Potential Energy. Materials, 2022, 15, 33.	2.9	4
28	Nonlinear dynamics of a pendulum-beam coupling piezoelectric energy harvesting system. European Physical Journal Plus, 2019, 134, 1.	2.6	3
29	Improve harvesting efficiency of tri-stable energy harvester by tailoring potential energy. European Physical Journal Plus, 2022, 137, 1.	2.6	2
30	Improving Energy Harvesting from Bridge Vibration Excited by Moving Vehicles with a Bi-Stable Harvester. Materials, 2022, 15, 2237.	2.9	1
31	Stability for Discrete Hopfield Neural Networks with Delay. , 2008, , .		0