Alper ErtÃœrk

List of Publications by Year
in descending order

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		32410	23841
250	15,192	55	115
papers	citations	h-index	g-index

264	264	264	6312
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Experimentally validated geometrically exact model for extreme nonlinear motions of cantilevers. Nonlinear Dynamics, 2022, 107, 457-475.	2.7	13
2	Concurrent vibration attenuation and low-power electricity generation in a locally resonant metastructure. Journal of Intelligent Material Systems and Structures, 2022, 33, 1990-1999.	1.4	5
3	Programmable Rainbow Trapping and Band-Gap Enhancement via Spatial Group-Velocity Tailoring in Elastic Metamaterials. Physical Review Applied, 2022, 17, .	1.5	25
4	Multistable vibration energy harvesters: Principle, progress, and perspectives. Journal of Sound and Vibration, 2022, 528, 116886.	2.1	92
5	Programmable spatial and spatiotemporal modulation of piezoelectric metamaterials with synthetic impedance circuits. , 2022, , .		0
6	Nonlinear synthetic impedance circuits for piezoelectric structures. , 2022, , .		1
7	Aspect ratio-dependent hysteresis response of a heavy inverted flag. Journal of Fluid Mechanics, 2022, 942, .	1.4	3
8	Machined phononic crystals to block high-order Lamb waves and crosstalk in through-metal ultrasonic communication systems. Applied Physics Letters, 2022, 120, 191705.	1.5	2
9	Piezoelectric transducer design for simultaneous ultrasonic power transfer and backscatter communication. Smart Materials and Structures, 2022, 31, 095003.	1.8	8
10	Hydrodynamic performance of oscillating elastic propulsors with tapered thickness. Journal of Fluid Mechanics, 2022, 944, .	1.4	5
11	Experimentally validated broadband self-collimation of elastic waves. International Journal of Mechanical Sciences, 2021, 192, 106131.	3.6	16
12	Leveraging size effects in flexoelectric-piezoelectric vibration energy harvesting. , 2021, , 107-146.		0
13	Effect of actuation method on hydrodynamics of elastic plates oscillating at resonance. Journal of Fluid Mechanics, 2021, 910, .	1.4	13
14	Numerical and Experimental Investigations of Energy Harvesting From Piezoelectric Inverted Flags. , 2021, , .		2
15	Experimental Observation of Temporal Pumping in Electromechanical Waveguides. Physical Review Letters, 2021, 126, 095501.	2.9	56
16	Experimental and Computational Investigation of Guided Waves in a Human Skull. Ultrasound in Medicine and Biology, 2021, 47, 787-798.	0.7	10
17	Sound energy harvesting by leveraging a 3D-printed phononic crystal lens. Applied Physics Letters, 2021, 118, .	1.5	18
18	Experimental identification of high order Lamb waves and estimation of the mechanical properties of a dry human skull. Ultrasonics, 2021, 113, 106343.	2.1	21

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19	Phased Array Ultrasonic Testing of Inconel 625 Produced by Selective Laser Melting. Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems, 2021, 4, .	0.7	1
20	Radiation Characteristics of Cranial Leaky Lamb Waves. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2129-2140.	1.7	10
21	Trout-like multifunctional piezoelectric robotic fish and energy harvester. Bioinspiration and Biomimetics, 2021, 16, 046024.	1.5	22
22	Three-dimensional nonlinear extreme vibrations of cantilevers based on a geometrically exact model. Journal of Sound and Vibration, 2021, 510, 116295.	2.1	7
23	Vibration-based elastic parameter identification of the diploÃ« and cortical tables in dry cranial bones. Journal of the Mechanical Behavior of Biomedical Materials, 2021, 123, 104747.	1.5	5
24	Vibration Stimulation as a Non-Invasive Approach to Monitor the Severity of Meniscus Tears. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 350-359.	2.7	2
25	Graded multifunctional piezoelectric metastructures for wideband vibration attenuation and energy harvesting. Smart Materials and Structures, 2021, 30, 015029.	1.8	49
26	Wideband Acoustic Data Transmission Through Staircase Piezoelectric Transducers. , 2021, , .		0
27	Experimental Validation of Crosstalk Minimization in Metallic Barriers with Simultaneous Ultrasonic Power and Data Transfer. , 2021, , .		0
28	Radiation Characterization of Leaky Guided Waves in Monolithic and Sutured Cranial Bones. , 2021, , .		0
29	Mechanical Characterization of Cranial Sutures Using Guided Ultrasonic Waves. , 2021, , .		0
30	Mechanically and electrically nonlinear non-ideal piezoelectric energy harvesting framework with experimental validations. Nonlinear Dynamics, 2020, 99, 625-641.	2.7	18
31	An analytical framework for locally resonant piezoelectric metamaterial plates. International Journal of Solids and Structures, 2020, 182-183, 281-294.	1.3	57
32	Aspect Ratio-Dependent Dynamics of Piezoelectric Transducers in Wireless Acoustic Power Transfer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 984-996.	1.7	9
33	Bistable attachments for wideband nonlinear vibration attenuation in a metamaterial beam. Nonlinear Dynamics, 2020, 102, 1285-1296.	2.7	56
34	Vibration Sensing Systems Based on Poly(Vinylidene Fluoride) and Microwave-Assisted Synthesized ZnO Star-Like Particles with Controllable Structural and Physical Properties. Nanomaterials, 2020, 10, 2345.	1.9	8
35	Vibration Characterization of the Human Knee Joint in Audible Frequencies. Sensors, 2020, 20, 4138.	2.1	8
36	Nonlinear piezoelectric plate framework for aeroelastic energy harvesting and actuation applications. Smart Materials and Structures, 2020, 29, 105006.	1.8	8

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37	Characterization of hydrogel structural damping. Extreme Mechanics Letters, 2020, 40, 100841.	2.0	11
38	Digitally Programmable Resonant Elastic Metamaterials. Physical Review Applied, 2020, 13, .	1.5	44
39	3D-Printed Gradient-Index Phononic Crystal Lens for Underwater Acoustic Wave Focusing. Physical Review Applied, 2020, 13, .	1.5	52
40	Topological Edge States in Quasiperiodic Locally Resonant Metastructures. Physical Review Applied, 2020, 13, .	1.5	41
41	Nonreciprocal piezoelectric metamaterial framework and circuit strategies. Physical Review B, 2020, 102, .	1.1	36
42	Characterization of a Multifunctional Bioinspired Piezoelectric Swimmer and Energy Harvester. , 2020, , .		1
43	Ultrasonic Communication through a Metallic Barrier: Transmission Modeling and Crosstalk Minimization. , 2020, , .		0
44	Matrix Pencil Estimation of Guided Waves Dispersion in a Human Skull. , 2020, , .		2
45	Tunable elastic metamaterials using rotatable coupled dual-beam resonators. Journal of Applied Physics, 2019, 126, 035107.	1.1	10
46	3D-printed phononic crystal lens for elastic wave focusing and energy harvesting. Additive Manufacturing, 2019, 29, 100780.	1.7	44
47	Programmable mode conversion and bandgap formation for surface acoustic waves using piezoelectric metamaterials. Applied Physics Letters, 2019, 115, .	1.5	23
48	Vibration attenuation in a nonlinear flexible structure via nonlinear switching circuits and energy harvesting implications. Journal of Intelligent Material Systems and Structures, 2019, 30, 965-976.	1.4	11
49	Time-Periodic Stiffness Modulation in Elastic Metamaterials for Selective Wave Filtering: Theory and Experiment. Physical Review Letters, 2019, 122, 124301.	2.9	129
50	Dramatic bandwidth enhancement in nonlinear metastructures via bistable attachments. Applied Physics Letters, 2019, 114, .	1.5	49
51	An analytical framework for Kirchhoff plate-type locally resonant piezoelectric metastructures. , 2019, , .		1
52	Aspect ratio effects in wind energy harvesting using piezoelectric inverted flags. , 2019, , .		3
53	Comparison of various models for piezoelectric receivers in wireless acoustic power transfer. , 2019, , .		2
54	Nonlinearities in resonant dynamics of piezoelectric macro-fiber composite cantilevers. , 2019, , .		1

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55	Characterization of a bio-inspired piezoelectric swimmer in a quiescent water and under imposed flow. , 2019, , .		0
56	10.1063/1.5099324.1. , 2019, , .		0
57	10.1063/1.5110701.2. , 2019, , .		0
58	10.1063/1.5110701.1. , 2019, , .		0
59	Merging mechanical and electromechanical bandgaps in locally resonant metamaterials and metastructures. Journal of the Mechanics and Physics of Solids, 2018, 116, 323-333.	2.3	83
60	Soft and Hard Piezoelectric Ceramics and Single Crystals for Random Vibration Energy Harvesting. Energy Technology, 2018, 6, 935-942.	1.8	28
61	Nonlinear elastodynamics of piezoelectric macro-fiber composites with interdigitated electrodes for resonant actuation. Composite Structures, 2018, 187, 137-143.	3.1	33
62	Analysis of multifunctional piezoelectric metastructures for low-frequency bandgap formation and energy harvesting. Journal Physics D: Applied Physics, 2018, 51, 215103.	1.3	79
63	Resonant nonlinearities of piezoelectric macro-fiber composite cantilevers with interdigitated electrodes in energy harvesting. Nonlinear Dynamics, 2018, 92, 1935-1945.	2.7	24
64	An experimentally validated model for geometrically nonlinear plucking-based frequency up-conversion in energy harvesting. Smart Materials and Structures, 2018, 27, 015024.	1.8	45
65	Selective Wave Filtering in Time-Modulated Elastic Metamaterials. , 2018, , .		0
66	Tunable metamaterial beam with shape memory alloy resonators: Theory and experiment. Applied Physics Letters, 2018, 113, .	1.5	58
67	Combined piezoelectric and flexoelectric effects in resonant dynamics of nanocantilevers. Journal of Intelligent Material Systems and Structures, 2018, 29, 3949-3959.	1.4	9
68	An experimentally validated piezoelectric nonlinear energy sink for wideband vibration attenuation. Journal of Sound and Vibration, 2018, 437, 68-78.	2.1	34
69	On the electrode segmentation for piezoelectric energy harvesting from nonlinear limit cycle oscillations in axial flow. Journal of Fluids and Structures, 2018, 82, 492-504.	1.5	22
70	Equivalent electrical circuit framework for nonlinear and high quality factor piezoelectric structures. Mechatronics, 2018, 54, 133-143.	2.0	15
71	Adaptive locally resonant metamaterials leveraging shape memory alloys. Journal of Applied Physics, 2018, 124, .	1.1	36
72	Stretchable quaternary phasic PVDF-HFP nanocomposite films containing graphene-titania-SrTiO3 for mechanical energy harvesting. Emergent Materials, 2018, 1, 55-65.	3.2	105

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73	Design and Analysis of Piezoelectric Metamaterial Beams With Synthetic Impedance Shunt Circuits. IEEE/ASME Transactions on Mechatronics, 2018, 23, 2144-2155.	3.7	58
74	On the coupling of nonlinear macro-fiber composite piezoelectric cantilever dynamics with hydrodynamic loads. , 2018, , .		4
75	Varying cross-section and axial strain-gradient effects in flexoelectric cantilevers at submicron thickness levels. , 2018, , .		0
76	Dispersion tailoring in varying-inductance piezoelectric metamaterials. , 2018, , .		0
77	Effects of a piezoelectric based nonlinear energy sink on the behavior of an electromechanically coupled beam. , 2018, , .		0
78	Locally resonant metamaterials with shape-memory alloy springs. , 2018, , .		0
79	Electroelastodynamics of flexoelectric energy conversion and harvesting in elastic dielectrics. Journal of Applied Physics, 2017, 121, .	1.1	40
80	Ceramic-Based Polymer Nanocomposites as Piezoelectric Materials. Springer Series on Polymer and Composite Materials, 2017, , 77-93.	0.5	13
81	Self-bending elastic waves and obstacle circumventing in wireless power transfer. Applied Physics Letters, 2017, 110, .	1.5	16
82	Energy harvesting from acoustic fields for self-powered sensors in pumped fluid systems. Proceedings of SPIE, 2017, , .	0.8	4
83	Evaluation of human-scale motion energy harvesting for wearable electronics. Proceedings of SPIE, 2017, , .	0.8	0
84	Metamaterial piezoelectric beam with synthetic impedance shunts. Proceedings of SPIE, 2017, , .	0.8	1
85	Size effects in piezoelectric cantilevers at submicron thickness levels due to flexoelectricity. Proceedings of SPIE, 2017, , .	0.8	1
86	Toward structurally integrated locally resonant metamaterials for vibration attenuation. , 2017, , .		2
87	On the efficiency of piezoelectric energy harvesters. Extreme Mechanics Letters, 2017, 15, 26-37.	2.0	141
88	Omni-directional lens for structure-borne wave focusing and energy harvesting. , 2017, , .		1
89	A general theory for bandgap estimation in locally resonant metastructures. Journal of Sound and Vibration, 2017, 406, 104-123.	2.1	176
90	3D-printed lens for structure-borne wave focusing and energy harvesting. , 2017, , .		1

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91	Modeling and Characterization of a Curved Piezoelectric Energy Harvester for Smart Paver Tiles. Procedia Computer Science, 2017, 109, 1060-1066.	1.2	9
92	Low-Frequency Elastic Wave Focusing and Harvesting via Locally Resonant Metamaterials. , 2017, , .		3
93	Multifunctional Energy Harvesting Locally Resonant Metastructures. , 2017, , .		3
94	Nonlinear Structural Dynamics of Macro-Fiber Composite Cantilevers for Resonant Actuation. , 2017, , .		2
95	Dynamics of Hybrid Mechanical-Electromechanical Locally Resonant Piezoelectric Metastructures. , 2017, , .		3
96	Resonant Nonlinearities of Macro-Fiber Composite Cantilevers in Energy Harvesting. , 2017, , .		1
97	On the Origin of the Nonclassical Softening Nonlinearity in MEMS/NEMS Cantilevers. , 2017, , .		1
98	Structurally embedded reflectors and mirrors for elastic wave focusing and energy harvesting. Journal of Applied Physics, 2017, 122, .	1.1	22
99	Phononic crystal Luneburg lens for omnidirectional elastic wave focusing and energy harvesting. Applied Physics Letters, 2017, 111, .	1.5	133
100	Coupling of experimentally validated electroelastic dynamics and mixing rules formulation for macro-fiber composite piezoelectric structures. Journal of Intelligent Material Systems and Structures, 2017, 28, 1575-1588.	1.4	33
101	An investigation of electroelastic bandgap formation in locally resonant piezoelectric metastructures. Smart Materials and Structures, 2017, 26, 055029.	1.8	98
102	Embedded elastic wave mirrors for enhanced energy harvesting. , 2016, , .		2
103	Electroelastic Bandgap Formation in Locally Resonant Metamaterial Beams With Piezoelectric Shunts: A Modal Analysis Approach. , 2016, , .		0
104	Dramatic Enhancement of Elastic Wave Energy Harvesting Using a Gradient-Index Phononic Crystal Lens. , 2016, , .		2
105	Gradient-index phononic crystal lens-based enhancement of elastic wave energy harvesting. Applied Physics Letters, 2016, 109, .	1.5	127
106	On the mechanism of bandgap formation in locally resonant finite elastic metamaterials. Journal of Applied Physics, 2016, 120, .	1.1	182
107	A Distributed-Parameter Flexoelectric Energy Harvester Model Accounting for Two-Way Coupling and Size Effects. , 2016, , .		2
108	On the Optimal Piezoelectric Material Distribution in Energy Harvesting From a Nonlinear Beam Under Axial Flow. , 2016, , .		0

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109	Suppression of Nonlinear Bifurcations in Flexible Structures Using Nonlinear Switching Shunt Damping Circuits. , 2016, , .		0
110	Dramatic effect of fluid damping on the performance of a nonlinear M-shaped broadband energy harvester. , 2016, , .		0
111	Multiple piezo-patch energy harvesters integrated to a thin plate with AC-DC conversion: analytical modeling and numerical validation. Proceedings of SPIE, 2016, , .	0.8	1
112	Equivalent circuit modeling of a piezo-patch energy harvester on a thin plate with ACâ€“DC conversion. Smart Materials and Structures, 2016, 25, 055015.	1.8	33
113	Exploiting material softening in hard PZTs for resonant bandwidth enhancement. , 2016, , .		0
114	Power conditioning for low-voltage piezoelectric stack energy harvesters. , 2016, , .		3
115	In vacuo elastodynamics of a flexible cantilever for wideband energy harvesting. , 2016, , .		0
116	Electrohydroelastic Eulerâ€“Bernoulliâ€“Morison model for underwater resonant actuation of macro-fiber composite piezoelectric cantilevers. Smart Materials and Structures, 2016, 25, 105007.	1.8	35
117	Figure of merit comparison of PP-based electret and PVDF-based piezoelectric polymer energy harvesters. Proceedings of SPIE, 2016, , .	0.8	5
118	Random vibration energy harvesting on thin plates using multiple piezopatches. Journal of Intelligent Material Systems and Structures, 2016, 27, 2744-2756.	1.4	27
119	Piezoelectric power extraction from bending waves: Electroelastic modeling, experimental validation, and performance enhancement. Wave Motion, 2016, 60, 20-34.	1.0	7
120	Hydrodynamic Thrust Generation and Power Consumption Investigations for Piezoelectric Fins With Different Aspect Ratios. , 2015, , .		1
121	Nonlinear Two-to-One Internal Resonance for Broadband Energy Harvesting. , 2015, , .		0
122	Hydrodynamic thrust generation and power consumption investigations for piezoelectric fins with different aspect ratios. European Physical Journal: Special Topics, 2015, 224, 3419-3434.	1.2	16
123	Experimentally Validated Nonlinear Electrohydroelastic Euler-Bernoulli-Morison Model for Macro-Fiber Composites With Different Aspect Ratios. , 2015, , .		5
124	Macro-Fiber Composite Actuated Piezoelectric Robotic Fish. Springer Tracts in Mechanical Engineering, 2015, , 255-283.	0.1	11
125	Hydraulic pressure energy harvester enhanced by Helmholtz resonator. Proceedings of SPIE, 2015, , .	0.8	3
126	Harmonic Balance Analysis and Experimental Validation of a Nonlinear Broadband Piezoelectric Energy Harvester for Low Ambient Vibrations. , 2015, , .		1

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127	Equivalent Circuit Modeling of Patch-Based Piezoelectric Energy Harvesting on Plate-Like Structures With AC-DC Conversion. , 2015, , .		1
128	Fourier transform-based design of a patterned piezoelectric energy harvester integrated with an elastoacoustic mirror. Applied Physics Letters, 2015, 106, .	1.5	32
129	Nonlinear M-shaped broadband piezoelectric energy harvester for very low base accelerations: primary and secondary resonances. Smart Materials and Structures, 2015, 24, 055021.	1.8	95
130	Modeling and identification of nonlinear electroelastic and dissipative parameters for PZT-5A and PZT-5H bimorphs: a dynamical systems approach. Proceedings of SPIE, 2015, , .	0.8	3
131	An experimentally validated contactless acoustic energy transfer model with resistive-reactive electrical loading. Proceedings of SPIE, 2015, , .	0.8	4
132	Unified electrohydroelastic investigation of underwater energy harvesting and dynamic actuation by incorporating Morison's equation. , 2015, , .		2
133	Bimorph disk piezoelectric energy harvester under base excitation: electroelastic modeling and experimental validation. Proceedings of SPIE, 2015, , .	0.8	4
134	Broadband performance of a patterned piezoelectric energy harvester integrated with a continuous elastoacoustic mirror. , 2015, , .		0
135	Ultrasonic power transfer from a spherical acoustic wave source to a free-free piezoelectric receiver: Modeling and experiment. Journal of Applied Physics, 2015, 117, .	1.1	49
136	Internal resonance for nonlinear vibration energy harvesting. European Physical Journal: Special Topics, 2015, 224, 2867-2880.	1.2	104
137	Three-Degree-of-Freedom Hybrid Piezoelectric-Inductive Aeroelastic Energy Harvester Exploiting a Control Surface. AIAA Journal, 2015, 53, 394-404.	1.5	48
138	Unified nonlinear electroelastic dynamics of a bimorph piezoelectric cantilever for energy harvesting, sensing, and actuation. Nonlinear Dynamics, 2015, 79, 1727-1743.	2.7	151
139	Electrohydroelastic dynamics of macro-fiber composites for underwater energy harvesting from base excitation. Proceedings of SPIE, 2014, , .	0.8	4
140	Contactless Ultrasonic Energy Transfer: Acoustic-Piezoelectric Structure Interaction Modeling and Performance Enhancement. , 2014, , .		0
141	Design and Modeling of Hydraulic Pressure Energy Harvesters for Low Dynamic Pressure Environments. , 2014, , .		1
142	Closure to â€œDiscussion of â€˜On the Role of Nonlinearities in Energy Harvesting: A Critical Review and Discussionâ€™â€•(Daqaq, M., Masana, R., Erturk, A., and Quinn, D. D., 2014, ASME Appl. Mech. Rev., 66(4), p.) Tj ET q0 0 0 rg BT /Overl		
143	Modeling and Characterization of Elastic, Coupling, and Dissipative Nonlinearities in PZT Bimorphs for Vibration Energy Harvesting. , 2014, , .		2
144	Underwater Dynamic Actuation of Macro-Fiber Composite Flaps With Different Aspect Ratios: Electrohydroelastic Modeling, Testing, and Characterization. , 2014, , .		6

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145	Nonlinear Dissipative Electroelastic Dynamics of an M-Shaped Broadband Piezoelectric Energy Harvester. , 2014, , .		0
146	On the Role of Nonlinearities in Vibratory Energy Harvesting: A Critical Review and Discussion. Applied Mechanics Reviews, 2014, 66, .	4.5	632
147	Contactless ultrasonic energy transfer for wireless systems: acoustic-piezoelectric structure interaction modeling and performance enhancement. Smart Materials and Structures, 2014, 23, 125032.	1.8	49
148	Analytical modeling and experimental validation of a structurally integrated piezoelectric energy harvester on a thin plate. Smart Materials and Structures, 2014, 23, 045039.	1.8	69
149	Optimal piezoelectric energy harvesting using elastoacoustic mirrors by frequency-wavenumber domain investigation. , 2014, , .		1
150	Modeling and enhancement of piezoelectric power extraction from one-dimensional bending waves. , 2014, , .		0
151	Nonlinear modeling, strength-based design, and testing of flexible piezoelectric energy harvesters under large dynamic loads for rotorcraft applications. , 2014, , .		0
152	Global nonlinear electroelastic dynamics of a bimorph piezoelectric cantilever for energy harvesting, sensing, and actuation. , 2014, , .		0
153	Broadband and band-limited random vibration energy harvesting using a piezoelectric patch on a thin plate. , 2014, , .		1
154	Ultrasound acoustic wave energy transfer and harvesting. Proceedings of SPIE, 2014, , .	0.8	1
155	Deterministic and band-limited stochastic energy harvesting from uniaxial excitation of a multilayer piezoelectric stack. Sensors and Actuators A: Physical, 2014, 214, 58-65.	2.0	77
156	Power performance improvements for high pressure ripple energy harvesting. Smart Materials and Structures, 2014, 23, 104011.	1.8	28
157	Piezoelectret foamâ€“based vibration energy harvesting. Journal of Intelligent Material Systems and Structures, 2014, 25, 1681-1692.	1.4	91
158	Multiple patchâ€“based broadband piezoelectric energy harvesting on plate-based structures. Journal of Intelligent Material Systems and Structures, 2014, 25, 1664-1680.	1.4	32
159	M-shaped asymmetric nonlinear oscillator for broadband vibration energy harvesting: Harmonic balance analysis and experimental validation. Journal of Sound and Vibration, 2014, 333, 6209-6223.	2.1	115
160	Nanoscale flexoelectric energy harvesting. International Journal of Solids and Structures, 2014, 51, 3218-3225.	1.3	289
161	Bio-inspired aquatic robotics by untethered piezohydroelastic actuation. Bioinspiration and Biomimetics, 2013, 8, 016006.	1.5	85
162	Transduction as energy conversion; harvesting of acoustic energy in hydraulic systems. Proceedings of Meetings on Acoustics, 2013, , .	0.3	6

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163	Numerical and experimental comparison of bistable and monostable vibration energy harvesters under broadband random excitation. , 2013, , .		1
164	Advances in Energy Harvesting Methods. , 2013, , .		191
165	Electroaeroelastic analysis of airfoil-based wind energy harvesting using piezoelectric transduction and electromagnetic induction. Journal of Intelligent Material Systems and Structures, 2013, 24, 846-854.	1.4	78
166	Introduction and Methods of Mechanical Energy Harvesting. , 2013, , 3-14.		9
167	Airfoil-Based Linear and Nonlinear Electroaeroelastic Energy Harvesting. , 2013, , 269-294.		1
168	Design and performance enhancement of hydraulic pressure energy harvesting systems. Proceedings of SPIE, 2013, , .	0.8	3
169	Energy harvesting from hydraulic pressure fluctuations. Smart Materials and Structures, 2013, 22, 025036.	1.8	74
170	Hybrid piezoelectric-inductive flow energy harvesting and dimensionless electroaeroelastic analysis for scaling. Applied Physics Letters, 2013, 102, .	1.5	78
171	Enhanced broadband piezoelectric energy harvesting using rotatable magnets. Applied Physics Letters, 2013, 102, .	1.5	297
172	Electroaeroelastic modeling and analysis of a hybrid piezoelectric-inductive flow energy harvester. , 2013, , .		2
173	Electroelastic modeling and experimental validations of piezoelectric energy harvesting from broadband random vibrations of cantilevered bimorphs. Smart Materials and Structures, 2013, 22, 015002.	1.8	84
174	Metamaterial-inspired structures and concepts for elastoacoustic wave energy harvesting. Smart Materials and Structures, 2013, 22, 065004.	1.8	179
175	Energy harvesting from harmonic and noise excitation of multilayer piezoelectric stacks: modeling and experiment. Proceedings of SPIE, 2013, , .	0.8	9
176	Harvesting of Bending Waves in One-Dimensional Infinite Beams Using Resistive-Reactive Circuits. , 2013, , .		2
177	An Experimental Investigation Into the Performance of a T-Shaped Piezoelectric Flow Energy Harvester. , 2013, , .		0
178	Power Density Performance Improvements for High Pressure Ripple Energy Harvesting. , 2013, , .		1
179	Electroelastic Finite Element Modeling and Experimental Validation of Structurally-Integrated Piezoelectric Energy Harvester. , 2013, , .		0
180	Adaptive and active materials: selected papers from the ASME 2012 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS 12) (Stone Mountain, GA, USA, 19â€“21 September) Tj ETQq1 0 0 rgBT /Overlock	1.8	0

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181	On the stochastic excitation of monostable and bistable electroelastic power generators: Relative advantages and tradeoffs in a physical system. Applied Physics Letters, 2013, 102, .	1.5	102
182	Multifunctional double-bimorph piezoelectric composite for bending-twisting actuation, adaptive stiffness change, and energy harvesting. , 2013, , .		1
183	Dimensionless analysis and scaling of a hybrid 3DOF airfoil-based piezoelectric-inductive aeroelastic energy harvester. , 2013, , .		0
184	Design Tool for Prediction of Thermal Synchronous Instability. , 2013, , .		3
185	Vibration of Bending-Torsion Coupled Resonance in a Rotor. , 2013, , .		1
186	Mathematical Insights of Mode Localization in Nearly Cyclic Symmetric Rotors With Mistune. , 2013, , .		0
187	Multiple Patch-Based Piezoelectric Energy Harvesting From Multiple Vibration Modes of Thin Plates. , 2013, , .		0
188	Dramatic enhancement of structure-borne wave energy harvesting using an elliptical acoustic mirror. Applied Physics Letters, 2012, 100, .	1.5	75
189	Multifunctional Unmanned Aerial Vehicle Wing Spar for Low-Power Generation and Storage. Journal of Aircraft, 2012, 49, 292-301.	1.7	55
190	Energy Harvesting From Broadband Random Vibrations: Comparison of Single-Mode and Multi-Mode Electroelastic Solutions. , 2012, , .		0
191	Comparative Investigation of the Electroelastic Dynamics of Piezoceramics With Interdigitated and Uniform Electrodes. , 2012, , .		2
192	Electroelastic Modeling and Experimental Validation of Piezoelectric Energy Harvesting From Broadband Random Vibrations. , 2012, , .		1
193	Metamaterial Concepts for Structure-Borne Wave Energy Harvesting: Focusing, Funneling, and Localization. , 2012, , .		1
194	Energy Harvesting From Hydraulic Pressure Fluctuations. , 2012, , .		4
195	Fish-Like Self Propulsion Using Flexible Piezoelectric Composites. , 2012, , .		2
196	Bending strength of piezoelectric ceramics and single crystals for multifunctional load-bearing applications. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1085-1092.	1.7	37
197	Nonlinear nonconservative behavior and modeling of piezoelectric energy harvesters including proof mass effects. Journal of Intelligent Material Systems and Structures, 2012, 23, 183-199.	1.4	115
198	Piezoelectric, solar and thermal energy harvesting for hybrid low-power generator systems with thin-film batteries. Measurement Science and Technology, 2012, 23, 015101.	1.4	53

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199	Assumed-modes modeling of piezoelectric energy harvesters: Eulerâ€“Bernoulli, Rayleigh, and Timoshenko models with axial deformations. Computers and Structures, 2012, 106-107, 214-227.	2.4	94
200	Two Architectures for Bending-Twisting Flapping Using Macro-Fiber Composites. , 2012, , .		0
201	Parameter identification and optimization in piezoelectric energy harvesting: analytical relations, asymptotic analyses, and experimental validations. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2011, 225, 485-496.	0.7	15
202	Enhanced aeroelastic energy harvesting by exploiting combined nonlinearities: theory and experiment. Smart Materials and Structures, 2011, 20, 094007.	1.8	109
203	Modeling and Analysis of Piezoelectric Energy Harvesting From Aeroelastic Vibrations Using the Doublet-Lattice Method. Journal of Vibration and Acoustics, Transactions of the ASME, 2011, 133, .	1.0	85
204	Frequency Domain Solution of a Piezo-aero-elastic Wing for Energy Harvesting. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 247-259.	0.3	0
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