Abdessattar Abdelkefi

List of Publications by Year in Descending Order

260 papers	6,224 citations	44 h-index	70 g-index
301 ext. papers	7,824 ext. citations	3.9 avg, IF	6.97 L-index

#	Paper	IF	Citations
260	Uncertainty Quantification and Effectiveness of Cantilevered Pipeline Conveying Fluid with Constraints. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 63-66	0.3	
259	Comparative Analysis of Mechanical and Magnetic Amplitude Stoppers in an Energy Harvesting Absorber. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 109-112	0.3	
258	Nonlinear Dynamics and Characterization of Beam-Based Systems with Contact/Impact Boundaries. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 119-122	0.3	
257	Bifurcation Analysis of a Piecewise-Smooth Freeplay System. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 75-77	0.3	
256	Insights on the Bifurcation Behavior of a Freeplay System with Piecewise and Continuous Representations. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 79-81	0.3	
255	Parameter Uncertainty Effects on the Buckling Characteristics of Cylindrical Structures in a Thermal Environment. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 77-80	0.3	
254	Uncertainty Quantification of Axially Loaded Beams with Boundary Condition Imperfections. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 73-76	0.3	
253	Experimental hydrodynamic investigations on the effectiveness of inverted flag-based piezoelectric energy harvester in the wake of bluff body. *Ocean Engineering*, **2022**, 245, 110454	3.9	0
252	Nonlinear modeling and efficacy of VIV-based energy harvesters: Monostable and bistable designs. *Mechanical Systems and Signal Processing*, **2022**, 169, 108775	7.8	0
251	Nonlinear Analysis and Characterization of Piezoaeroelastic Energy Harvesters with Discontinuous Nonlinearities. *Conference Proceedings of the Society for Experimental Mechanics*, **2022**, 231-234	0.3	
250	Characterization and interaction of geometric and contact/impact nonlinearities in dynamical systems. *Mechanical Systems and Signal Processing*, **2022**, 167, 108481	7.8	0
249	Effective design and characterization of flutter-based piezoelectric energy harvesters with discontinuous nonlinearities. *Energy*, **2022**, 238, 121662	7.9	2
248	Hydrokinetic power scavenging from galloping phenomenon with two juxtaposed bluff bodies. *Applied Ocean Research*, **2022**, 121, 103109	3.4	1
247	Applicability and efficacy of Galerkin-based approximation for solving the buckling and dynamics of nanobeams with higher-order boundary conditions. *European Journal of Mechanics, A/Solids*, **2022**, 94, 104596	3.7	0
246	Wake Propagation and Characteristics of a Multi-Rotor Unmanned Vehicle in Forward Flight. *Drones* , **2022**, 6, 130	5.4	
245	Nonlocal Timoshenko modeling effectiveness for carbon nanotube-based mass sensors. *European Journal of Mechanics, A/Solids*, **2021**, 104462	3.7	0
244	Effect of periodic metamaterial structures with different arrangement patterns on the effectiveness of hydroelastic energy harvesters: Computational investigation. *Ocean Engineering*, **2021**, 244, 110229	3.9	0

243	Numerical modeling of porous functionally graded shells response in large deflection. *Computers and Mathematics With Applications*, **2021**, 104, 59-70	2.7	
242	Nonlinear Analysis and Bifurcation Characteristics of Whirl Flutter in Unmanned Aerial Systems. *Drones*, **2021**, 5, 122	5.4	0
241	Multi-rotor wake propagation and flow development modeling: A review. *Progress in Aerospace Sciences*, **2021**, 127, 100762	8.8	2
240	Enhancement of Fixed-Wing Space Drone Performance Through Thermoelectric Power Generation. *Lecture Notes in Mechanical Engineering*, **2021**, 194-199	0.4	
239	Uncertainty analysis and stochastic characterization of carbon nanotube-based mass sensor with multiple deposited nanoparticles. *Sensors and Actuators A: Physical*, **2021**, 332, 113182	3.9	0
238	Insights on the crack modeling and effectiveness of piezoelectric energy harvesters. *Smart Materials and Structures*, **2021**, 30, 015030	3.4	
237	Aerodynamic analysis and structural integrity for optimal performance of sweeping and spanning morphing unmanned air vehicles. *Aerospace Science and Technology*, **2021**, 110, 106458	4.9	2
236	Enhancing piezoelectric energy harvesting from the flow-induced vibration of a circular cylinder using dual splitters. *Smart Materials and Structures*, **2021**, 30, 05LT01	3.4	3
235	Nonlocal elasticity and boundary condition paradoxes: a review. *Journal of Nanoparticle Research*, **2021**, 23, 1	2.3	5
234	Investigations on the performance of piezoelectric-flexoelectric energy harvesters. *Applied Energy*, **2021**, 288, 116611	10.7	3
233	Insights on the potential of vibratory actuation mechanism for enhanced performance of flapping-wing drones. *Meccanica*, **2021**, 56, 2153	2.1	1
232	Crack severity and size dependent effects on the effectiveness and operability of micro/nanogyroscopes. *International Journal of Solids and Structures*, **2021**, 216, 94-107	3.1	0
231	Presence of Longitudinal Roll Structures during Synoptic Forced Conditions in Complex Terrain. *Atmosphere*, **2021**, 12, 737	2.7	
230	Stochastic analysis of a galloping-random wind energy harvesting performance on a buoy platform. *Energy Conversion and Management*, **2021**, 238, 114174	10.6	21
229	Piezoelectric energy harvesting from flow-induced vibrations of a square cylinder at various angles of attack. *Smart Materials and Structures*, **2021**, 30, 08LT02	3.4	6
228	Comparative experimental investigation and effectiveness of sphere- and cylinder-based piezoelectric energy harvesters. *Smart Materials and Structures*, **2021**, 30, 08LT01	3.4	0
227	On the Aerodynamic Analysis and Conceptual Design of Bioinspired Multi-Flapping-Wing Drones. *Drones*, **2021**, 5, 64	5.4	2
226	Nonlocal Timoshenko representation and analysis of multi-layered functionally graded nanobeams. *Microsystem Technologies*, **2021**, 27, 893-911	1.7	6

225	Comparative analysis between surrounding viscoelastic media on the buckling characteristics of nanobeams. *Microsystem Technologies*, **2021**, 27, 3007-3024	1.7	1
224	Comparative investigations of multi-fidelity modeling on performance of electrostatically-actuated cracked micro-beams. *International Journal of Mechanical Sciences*, **2021**, 192, 106139	5.5	3
223	Hydrodynamic energy harvesting analysis of two piezoelectric tandem flags under influence of upstream body wakes. *Applied Energy*, **2021**, 282, 116173	10.7	6
222	Nonlinear modeling and vibration mitigation of combined vortex-induced and base vibrations through energy harvesting absorbers. *Communications in Nonlinear Science and Numerical Simulation*, **2021**, 95, 105655	3.7	3
221	Comparative design, hydrodynamic analysis, and physical performance of fish-like robots. *Applied Ocean Research*, **2021**, 106, 102443	3.4	2
220	Thermoelastic modeling and comparative analysis of biomass sensors under rippling deformation and magnetic field. *Applied Mathematical Modelling*, **2021**, 92, 196-222	4.5	3
219	Experimental electro-hydrodynamic investigation of flag-based energy harvesting in the wake of inverted C-shape cylinder. *Energy*, **2021**, 215, 119195	7.9	13
218	Observations on the general nonlocal theory applied to axially loaded nanobeams. *Microsystem Technologies*, **2021**, 27, 739-761	1.7	3
217	Importance of Event Detection and Nonlinear Characterization of Dynamical Systems with Discontinuity Boundary **2021**,		2
216	Three-dimensional computational fluid dynamics investigation on size effect of small-scale wind turbine blades. **2021**,		1
215	Role of Electromechanical Coupling, Locomotion Type and Damping on the Effectiveness of Fish-Like Robot Energy Harvesters. *Energies*, **2021**, 14, 693	3.1	2
214	Probabilistic uncertainty and sensitivity analysis of a vibratory-based actuation mechanism for a bio-inspired flapping-wing system. *Acta Mechanica*, **2021**, 232, 3669-3685	2.1	
213	Piezoelectric property degradation and cracking impacts on the lifetime performance of energy harvesters. *Mechanical Systems and Signal Processing*, **2021**, 156, 107697	7.8	5
212	Airfoil type and blade size effects on the aerodynamic performance of small-scale wind turbines: Computational fluid dynamics investigation. *Energy*, **2021**, 229, 120739	7.9	5
211	Relationship between the contact force strength and numerical inaccuracies in piecewise-smooth systems. *International Journal of Mechanical Sciences*, **2021**, 210, 106729	5.5	2
210	Effectiveness and nonlinear characterization of vibro-impact energy harvesting absorbers in controlling base-excited systems. *Smart Materials and Structures*, **2021**, 30, 095028	3.4	2
209	Usefulness of inclined circular cylinders for designing ultra-wide bandwidth piezoelectric energy harvesters: experiments and computational investigations. *Energy*, **2021**, 122203	7.9	4
208	Application of sensitivity analysis and uncertainty quantification methods on the dynamic response of general nonlocal beams. *Applied Mathematical Modelling*, **2021**, 97, 322-343	4.5	2

207	Piezoelectric energy harvesting from vortex-induced vibration of a circular cylinder: Effect of Reynolds number. *Ocean Engineering*, **2021**, 235, 109378	3.9	7
206	Role of Active Morphing in the Aerodynamic Performance of Flapping Wings in Formation Flight. *Drones*, **2021**, 5, 90	5.4	1
205	Considerations for increasing the survivability of Gannet-inspired drones during diving. *Ocean Engineering*, **2021**, 238, 109681	3.9	
204	Predefined angle of attack and corner shape effects on the effectiveness of square-shaped galloping energy harvesters. *Applied Energy*, **2021**, 302, 117522	10.7	2
203	Enhancing energy harvesting from flow-induced vibrations of a circular cylinder using a downstream rectangular plate: An experimental study. *International Journal of Mechanical Sciences*, **2021**, 211, 106781	5.5	4
202	Fatigue in piezoelectric ceramic vibrational energy harvesting: A review. *Applied Energy*, **2020**, 270, 115161	10.7	19
201	Wind-induced vibration of structural cables. *Nonlinear Dynamics*, **2020**, 100, 351-421	5	22
200	Nonlinear dynamical responses of forced carbon nanotube-based mass sensors under the influence of thermal loadings. *Nonlinear Dynamics*, **2020**, 100, 1013-1035	5	9
199	Computational modeling and optimization of small-scale wind turbines for low-power applications. **2020**,		2
198	Investigations on the buckling and dynamics of diving-inspired systems when entering water. *Bioinspiration and Biomimetics*, **2020**, 15, 036015	2.6	2
197	Scale bridging damage model for quasi-brittle metals informed with crack evolution statistics. *Journal of the Mechanics and Physics of Solids*, **2020**, 138, 103921	5	6
196	Surface integrity and size dependent modeling and performance of non-uniform flexoelectric energy harvesters. *Microsystem Technologies*, **2020**, 26, 3629-3656	1.7	1
195	Comparative Study of Piezoelectric Vortex-Induced Vibration-Based Energy Harvesters with Multi-Stability Characteristics. *Energies*, **2020**, 13, 71	3.1	18
194	On the onset of bifurcation and nonlinear characterization of vortex-induced vibrations under varying initial conditions. *Nonlinear Dynamics*, **2020**, 99, 575-592	5	3
193	Nonlinear size dependent analysis and effectiveness of nanocrystalline micro/nanogyroscopes. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 117, 113808	3	9
192	Nonlinear modeling and performance analysis of cracked beam microgyroscopes. *International Journal of Mechanical Sciences*, **2020**, 188, 105965	5.5	6
191	Size-dependent modeling and performance enhancement of functionally graded piezoelectric energy harvesters. *Journal of Nanoparticle Research*, **2020**, 22, 1	2.3	3
190	Modeling and Investigations on Surface Colors of Wings on the Performance of Albatross-Inspired Mars Drones and Thermoelectric Generation Capabilities. *Drones*, **2020**, 4, 43	5.4	1

189	Towards Bio-Inspiration, Development, and Manufacturing of a Flapping-Wing Micro Air Vehicle. *Drones*, **2020**, 4, 39	5.4	1
188	Multifidelity modeling and comparative analysis of electrically coupled microbeams under squeeze-film damping effect. *Nonlinear Dynamics*, **2020**, 99, 445-460	5	7
187	Theoretical modeling and nonlinear analysis of piezoelectric energy harvesters with different stoppers. *International Journal of Mechanical Sciences*, **2020**, 166, 105233	5.5	18
186	An investigation into the electrostatic force representation for electrically actuated microelectromechanical systems. *Microsystem Technologies*, **2020**, 26, 3685-3704	1.7	
185	Buckling response of functionally graded nanoplates under combined thermal and mechanical loadings. *Journal of Nanoparticle Research*, **2020**, 22, 1	2.3	
184	Nonlinear analysis of a piezoelectric energy harvester in body undulatory caudal fin aquatic unmanned vehicles. *Applied Energy*, **2020**, 263, 114627	10.7	7
183	Enhanced design considerations on the buckling and dynamics of Gannet-inspired systems during water entry. *Bioinspiration and Biomimetics*, **2020**,	2.6	1
182	Neutral axis modeling and effectiveness of functionally graded piezoelectric energy harvesters. *Composite Structures*, **2019**, 213, 25-36	5.3	9
181	Insights into Sensitivity of Wing Shape and Kinematic Parameters Relative to Aerodynamic Performance of Flapping Wing Nano Air Vehicles. *Drones*, **2019**, 3, 49	5.4	4
180	Sizing process, aerodynamic analysis, and experimental assessment of a biplane flapping wing nano air vehicle. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **2019**, 233, 5618-5636	0.9	6
179	Effects of thermal loads representations on the dynamics and characteristics of carbon nanotubes-based mass sensors. *Smart Materials and Structures*, **2019**, 28, 074003	3.4	12
178	Impacts of stopper type and material on the broadband characteristics and performance of energy harvesters. *AIP Advances*, **2019**, 9, 035228	1.5	10
177	Reduced-order modeling and usefulness of non-uniform beams for flexoelectric energy harvesting applications. *Acta Mechanica*, **2019**, 230, 2339-2361	2.1	12
176	Nonlinear size dependent modeling and performance analysis of flexoelectric energy harvesters. *Microsystem Technologies*, **2019**, 25, 3899-3921	1.7	8
175	Nonlinear analysis and characteristics of electrically-coupled microbeams under mechanical shock. *Microsystem Technologies*, **2019**, 25, 829-843	1.7	7
174	Nonlinear performance analysis of forced carbon nanotube-based bio-mass sensors. *International Journal of Mechanics and Materials in Design*, **2019**, 15, 291-315	2.5	10
173	Theoretical modeling, wind tunnel measurements, and realistic environment testing of galloping-based electromagnetic energy harvesters. *Applied Energy*, **2019**, 254, 113737	10.7	29
172	Numerical and experimental comparative performance analysis of emerging spherical-caged drones. *Aerospace Science and Technology*, **2019**, 95, 105512	4.9	7

171	Nonlinear Analysis and Performance of Electret-Based Microcantilever Energy Harvesters. *Energies*, **2019**, 12, 4249	3.1	5
170	Solving Large Dynamical Systems by Constraint Sampling. *Communications in Computer and Information Science*, **2019**, 3-15	0.3	2
169	Towards Improved Hybrid Actuation Mechanisms for Flapping Wing Micro Air Vehicles: Analytical and Experimental Investigations. *Drones*, **2019**, 3, 73	5.4	8
168	A review on the modeling, materials, and actuators of aquatic unmanned vehicles. *Ocean Engineering*, **2019**, 172, 257-285	3.9	28
167	Nonlinear modeling and experimental verification of Gannet-inspired beam systems during diving. *Bioinspiration and Biomimetics*, **2019**, 14, 026002	2.6	2
166	Conceptual design and optimization of a tilt-rotor micro air vehicle. *Chinese Journal of Aeronautics*, **2019**, 32, 369-381	3.7	22
165	Experimental investigation of aerodynamic energy harvester with different interference cylinder cross-sections. *Energy*, **2019**, 167, 970-981	7.9	55
164	Characteristics and comparative analysis of piezoelectric-electromagnetic energy harvesters from vortex-induced oscillations. *Nonlinear Dynamics*, **2019**, 95, 3309-3333	5	18
163	Sizing and aerodynamic analysis of biplane flapping wing nano air vehicle: theory and experiments **2019**,		1
162	Nonlinear reduced-order modeling and effectiveness of electrically-actuated microbeams for bio-mass sensing applications. *International Journal of Mechanics and Materials in Design*, **2019**, 15, 125-143	2.5	12
161	Insights on the thermal impacts of wing colorization of migrating birds on their skin friction drag and the choice of their flight route. *Journal of Thermal Biology*, **2018**, 72, 81-93	2.9	23
160	Higher power generation from torsion-dominant mode in a zigzag shaped two-dimensional energy harvester. *Applied Energy*, **2018**, 216, 494-503	10.7	14
159	Morphing and growing micro unmanned air vehicle: Sizing process and stability. *Aerospace Science and Technology*, **2018**, 78, 130-146	4.9	29
158	Insights on the point of contact analysis and characterization of constrained pipelines conveying fluid. *Nonlinear Dynamics*, **2018**, 93, 1261-1275	5	4
157	Sizing and performance analysis of albatross-inspired tilt-wing unmanned air vehicle **2018**,		5
156	Significance of size dependent and material structure coupling on the characteristics and performance of nanocrystalline micro/nano gyroscopes. *Physica E: Low-Dimensional Systems and Nanostructures*, **2018**, 99, 169-181	3	19
155	Evolution of space drones for planetary exploration: A review. *Progress in Aerospace Sciences*, **2018**, 97, 61-105	8.8	65
154	Investigation on the planform and kinematic optimization of bio-inspired nano air vehicles for hovering applications. *Meccanica*, **2018**, 53, 2273-2286	2.1	7

153	Analysis and optimization of a tilt rotor unmanned air vehicle for long distances delivery and payload transportation **2018**,		5
152	Characteristics and comparative analysis of monostable and bistable piezomagnetoelastic energy harvesters under vortex-induced vibrations **2018**,		2
151	Buckling characteristics of nanocrystalline nano-beams. *International Journal of Mechanics and Materials in Design*, **2018**, 14, 71-89	2.5	10
150	Nonlocal buckling analysis of functionally graded nano-plates subjected to biaxial linearly varying forces. *Microsystem Technologies*, **2018**, 24, 1935-1948	1.7	6
149	Nonlinear analysis of hybrid galloping energy harvesting system integrated with a nonlinear torsional spring **2018**,		1
148	Impact of albatross wing colors on their skin friction drag: thermal analysis and blasius boundary layer solution **2018**,		1
147	Performance analysis of fixed wing space drones in different solar system bodies. *Acta Astronautica* , **2018**, 152, 27-48	2.9	14
146	Experimental investigation on the efficiency of circular cylinder-based wind energy harvester with different rod-shaped attachments. *Applied Energy*, **2018**, 226, 682-689	10.7	88
145	Modeling and Performance Enhancement of Low-Frequency Energy Harvesters **2018**, 826-862		
144	Exact modes for post-buckling characteristics of nonlocal nanobeams in a longitudinal magnetic field. *Applied Mathematical Modelling*, **2018**, 55, 758-775	4.5	41
143	Nonlinear analysis and characteristics of inductive galloping energy harvesters. *Communications in Nonlinear Science and Numerical Simulation*, **2018**, 59, 580-591	3.7	29
142	Role of wing color and seasonal changes in ambient temperature and solar irradiation on predicted flight efficiency of the Albatross. *Journal of Thermal Biology*, **2018**, 71, 112-122	2.9	24
141	Classification of biological and bioinspired aquatic systems: A review. *Ocean Engineering*, **2018**, 148, 75-114	3.9	62
140	Role of the galloping force and moment of inertia of inclined square cylinders on the performance of hybrid galloping energy harvesters. *Applied Energy*, **2018**, 231, 259-276	10.7	33
139	Shock response of electrostatically coupled microbeams under the squeeze-film damping effect. *Acta Mechanica*, **2018**, 229, 5051-5065	2.1	4
138	Aerodynamic performance of albatross-inspired wing shape for marine unmanned air vehicles **2018**,		6
137	Role and significance of thermal loading on the performance of carbon nanotube-based mass sensors. *Materials and Design*, **2018**, 160, 229-250	8.1	11
136	Optimal design and energy harvesting performance of carangiform fish-like robotic system. *Smart Materials and Structures*, **2018**, 27, 075045	3.4	9

135	Design, manufacturing, and flight testing of a fixed wing micro air vehicle with Zimmerman planform. *Meccanica*, **2017**, 52, 1265-1282	2.1	33
134	Vortex-induced vibrations mitigation through a nonlinear energy sink. *Communications in Nonlinear Science and Numerical Simulation*, **2017**, 42, 22-36	3.7	56
133	Optimal design of insect wing shape for hovering nano air vehicles **2017**,		3
132	On the potential of monostable piezomagnetoelastic energy harvesting from vortex-induced vibrations **2017**,		1
131	Characteristics and control of base-excited dynamical system through a vibration absorber energy harvester **2017**,		1
130	Novel growing micro unmanned air vehicle: sizing process and spanning actuation **2017**,		3
129	Effects of birds wing color on their flight performance for biomimetics purposes **2017**,		1
128	On the nonlinear dynamics and performance of hybrid piezoelectric-inductive energy harvesters subjected to vortex-induced vibrations **2017**,		1
127	Free vibration analysis of cantilever open-hole composite plates. *Meccanica*, **2017**, 52, 2819-2836	2.1	12
126	Defining a conceptual design for a tilt-rotor micro air vehicle for a well-defined mission **2017**,		6
125	Conceptual design and analysis of separation flight for an unmaned air vehicle to five micro air vehicles **2017**,		10
124	Forward flight capabilities and performances of bio-inspired flapping wing nano air vehicles **2017**,		2
123	User subroutine for fatigue modeling of wing structure of flapping micro air vehicle **2017**,		1
122	Towards control of cross-flow-induced vibrations based on energy harvesting. *Nonlinear Dynamics*, **2017**, 88, 2329-2346	5	15
121	Impacts of the aerodynamic force representation on the stability and performance of a galloping-based energy harvester. *Journal of Sound and Vibration*, **2017**, 400, 213-226	3.9	32
120	Classifications, applications, and design challenges of drones: A review. *Progress in Aerospace Sciences*, **2017**, 91, 99-131	8.8	471
119	Reporting the sensitivities and resolutions of CNT-based resonators for mass sensing. *Materials and Design*, **2017**, 114, 591-598	8.1	27
118	Modeling and assessment of a thermochemical energy storage using salt hydrates. *International Journal of Energy Research*, **2017**, 41, 2149-2161	4.5	9

117	Wing shape and dynamic twist design of bio-inspired nano air vehicles for forward flight purposes. *Aerospace Science and Technology*, **2017**, 68, 518-529	4.9	29
116	Nonlinear dynamics of cantilevered pipes conveying fluid: Towards a further understanding of the effect of loose constraints. *International Journal of Non-Linear Mechanics*, **2017**, 95, 19-29	2.8	29
115	Investigations on the presence of electrical frequency on the characteristics of energy harvesters under base and galloping excitations. *Nonlinear Dynamics*, **2017**, 89, 2461-2479	5	11
114	Piezomagnetoelastic energy harvesting from vortex-induced vibrations using monostable characteristics. *Applied Energy*, **2017**, 203, 142-153	10.7	104
113	Thermal impact of migrating birds' wing color on their flight performance: Possibility of new generation of biologically inspired drones. *Journal of Thermal Biology*, **2017**, 66, 27-32	2.9	33
112	Nonlinear analysis of rotating nanocrystalline silicon microbeams for microgyroscope applications. *Microsystem Technologies*, **2017**, 23, 5931-5946	1.7	22
111	Nonlocal modeling and buckling features of cracked nanobeams with von Karman nonlinearity. *Applied Physics A: Materials Science and Processing*, **2017**, 123, 1	2.6	12
110	Frequency and mode veering phenomena of axially functionally graded non-uniform beams with nonlocal residuals. *Composite Structures*, **2017**, 163, 280-292	5.3	28
109	New insights on the applicability of Eringen's nonlocal theory. *International Journal of Mechanical Sciences*, **2017**, 121, 67-75	5.5	60
108	Novel design of microgyroscopes employing electrostatic actuation and resistance-change based sensing. *Journal of Sound and Vibration*, **2017**, 411, 278-288	3.9	11
107	Improving the performance of aeroelastic energy harvesters by an interference cylinder. *Applied Physics Letters*, **2017**, 111, 073904	3.4	52
106	Performance analysis of differential-frequency microgyroscopes made of nanocrystalline material. *International Journal of Mechanical Sciences*, **2017**, 133, 495-503	5.5	11
105	Geometrical influence of a deposited particle on the performance of bridged carbon nanotube-based mass detectors. *Physica E: Low-Dimensional Systems and Nanostructures*, **2017**, 94, 31-46	3	14
104	Design and experimental analysis of broadband energy harvesting from vortex-induced vibrations. *Journal of Sound and Vibration*, **2017**, 408, 210-219	3.9	75
103	Accurate modeling, comparative analysis, and performance enhancement of broadband piezoelectric energy harvesters with single and dual magnetic forces. *International Journal of Non-Linear Mechanics*, **2017**, 95, 355-363	2.8	12
102	Low-frequency Zigzag energy harvesters operating in torsion-dominant mode. *Applied Energy*, **2017**, 204, 413-419	10.7	36
101	Review of marine animals and bioinspired robotic vehicles: Classifications and characteristics. *Progress in Aerospace Sciences*, **2017**, 93, 95-119	8.8	18
100	Control of base-excited dynamical systems through piezoelectric energy harvesting absorber. *Smart Materials and Structures*, **2017**, 26, 095013	3.4	15

99	Predictions of the frequencies of bending-torsion coupled laminated composite plates with discontinuities: Novel analytical modeling and experimental validation. *Composite Structures*, **2017**, 180, 334-350	5.3	2
98	Methodologies for weight estimation of fixed and flapping wing micro air vehicles. *Meccanica*, **2017** , 52, 2047-2068	2.1	24
97	A novel methodology for wing sizing of bio-inspired flapping wing micro air vehicles: theory and prototype. *Acta Mechanica*, **2017**, 228, 1097-1113	2.1	46
96	Material structure and size effects on the nonlinear dynamics of electrostatically-actuated nano-beams. *International Journal of Non-Linear Mechanics*, **2017**, 89, 25-42	2.8	21
95	Modeling and Design Enhancement of Differential-Frequency Microgyroscopes Made of Nanocrystalline Material **2017**,		1
94	Nonlinear analysis and power improvement of broadband low-frequency piezomagnetoelastic energy harvesters. *Nonlinear Dynamics*, **2016**, 83, 41-56	5	33
93	Unsteady aeroelastic behaviors of rigid airfoils with preset angles of attack. *JVC/Journal of Vibration and Control*, **2016**, 22, 1010-1022	2	7
92	Modeling of mechanical resonators used for nanocrystalline materials characterization and disease diagnosis of HIVs. *Microsystem Technologies*, **2016**, 22, 305-318	1.7	36
91	Nonlinear aeroelastic characterization of wind turbine blades. *JVC/Journal of Vibration and Control*, **2016**, 22, 621-631	2	9
90	Size dependent and micromechanical modeling of strain gradient-based nanoparticle composite plates with surface elasticity. *European Journal of Mechanics, A/Solids*, **2016**, 58, 54-68	3.7	20
89	Representation and comparative study of electromagnetic-piezoelectric galloping energy harvesters **2016**,		1
88	Piezoaeroelastic investigation on the control and energy harvesting of galloping systems **2016**,		1
87	Usefulness of passive non-linear energy sinks in controlling galloping vibrations. *International Journal of Non-Linear Mechanics*, **2016**, 81, 83-94	2.8	22
86	The potential of electrical impedance on the performance of galloping systems for energy harvesting and control applications. *Journal of Sound and Vibration*, **2016**, 370, 191-208	3.9	36
85	Airfoil control surface discontinuous nonlinearity experimental assessment and numerical model validation. *JVC/Journal of Vibration and Control*, **2016**, 22, 1633-1644	2	11
84	An improved stability characterization for aeroelastic energy harvesting applications. *Communications in Nonlinear Science and Numerical Simulation*, **2016**, 36, 252-265	3.7	26
83	Aeroelastic energy harvesting: A review. *International Journal of Engineering Science*, **2016**, 100, 112-135	5.7	293
82	Effective design of flapping wing actuation mechanisms: theory and experiments **2016**,		14

81	Theoretical analysis and experimental verification for sizing of flapping wing micro air vehicles **2016**,		2
80	On a second-order rotation gradient theory for linear elastic continua. *International Journal of Engineering Science*, **2016**, 100, 74-98	5.7	31
79	Design and Experimental Verification of Torsion-Bending Low-Frequency Piezoelectric Energy Harvesters **2016**,		1
78	Reporting buckling strength and elastic properties of nanowires. *Journal of Applied Physics*, **2016**, 120, 235104	2.5	12
77	Orientation of bluff body for designing efficient energy harvesters from vortex-induced vibrations. *Applied Physics Letters*, **2016**, 108, 053902	3.4	87
76	Bridged single-walled carbon nanotube-based atomic-scale mass sensors. *Applied Physics A: Materials Science and Processing*, **2016**, 122, 1	2.6	18
75	Modeling and Vibration Characteristics of Cracked Nano-Beams Made of Nanocrystalline Materials. *International Journal of Mechanical Sciences*, **2016**, 115-116, 574-585	5.5	46
74	Modeling and performance of electromagnetic energy harvesting from galloping oscillations. *Smart Materials and Structures*, **2015**, 24, 045012	3.4	88
73	Modeling the material structure and couple stress effects of nanocrystalline silicon beams for pull-in and bio-mass sensing applications. *International Journal of Mechanical Sciences*, **2015**, 101-102, 280-291	5.5	47
72	Preloaded freeplay wide-bandwidth low-frequency piezoelectric harvesters. *Applied Physics Letters*, **2015**, 107, 023902	3.4	11
71	Phenomena and characterization of grazing□sliding bifurcations in aeroelastic systems with discontinuous impact effects. *Journal of Sound and Vibration*, **2015**, 358, 315-323	3.9	7
70	Ultra-wide bandwidth improvement of piezoelectric energy harvesters through electrical inductance coupling. *European Physical Journal: Special Topics*, **2015**, 224, 2733-2753	2.3	23
69	Time-delay feedback controller for amplitude reduction in vortex-induced vibrations. *Nonlinear Dynamics*, **2015**, 80, 59-70	5	26
68	On nonlinear behavior and buckling of fluid-transporting nanotubes. *International Journal of Engineering Science*, **2015**, 87, 13-22	5.7	39
67	Nonlinear dynamical analysis of an aeroelastic system with multi-segmented moment in the pitch degree-of-freedom. *Communications in Nonlinear Science and Numerical Simulation*, **2015**, 20, 324-334	3.7	19
66	Two-dimensional concentrated-stress low-frequency piezoelectric vibration energy harvesters. *Applied Physics Letters*, **2015**, 107, 093901	3.4	40
65	Pull-in instability of multi-phase nanocrystalline silicon beams under distributed electrostatic force. *International Journal of Engineering Science*, **2015**, 90, 58-75	5.7	47
64	Nonlinear dynamics and comparative analysis of hybrid piezoelectric-inductive energy harvesters subjected to galloping vibrations. *European Physical Journal: Special Topics*, **2015**, 224, 2929-2948	2.3	23

63	Modeling and Characterization of a Piezoelectric Energy Harvester Under Combined Aerodynamic and Base Excitations. *Journal of Vibration and Acoustics, Transactions of the ASME*, **2015**, 137,	1.6	79
62	Modeling and Performance Enhancement of Low-Frequency Energy Harvesters. *Advances in Environmental Engineering and Green Technologies Book Series*, **2015**, 159-196	0.4	2
61	Nonlinear Dynamics and Design of Aeroelastic Energy Harvesters. *Advances in Environmental Engineering and Green Technologies Book Series*, **2015**, 341-379	0.4	
60	Piezoelectric energy harvesting from concurrent vortex-induced vibrations and base excitations. *Nonlinear Dynamics*, **2014**, 77, 967-981	5	145
59	Nonlinear characterization of concurrent energy harvesting from galloping and base excitations. *Nonlinear Dynamics*, **2014**, 77, 1171-1189	5	58
58	Nonlinear analysis and enhancement of wing-based piezoaeroelastic energy harvesters. *Journal of Sound and Vibration*, **2014**, 333, 166-177	3.9	31
57	Linear and nonlinear active feedback controls for vortex-induced vibrations of circular cylinders. *JVC/Journal of Vibration and Control*, **2014**, 20, 1137-1147	2	37
56	Design and performance of variable-shaped piezoelectric energy harvesters. *Journal of Intelligent Material Systems and Structures*, **2014**, 25, 174-186	2.3	96
55	Performance analysis of galloping-based piezoaeroelastic energy harvesters with different cross-section geometries. *Journal of Intelligent Material Systems and Structures*, **2014**, 25, 246-256	2.3	85
54	Comparative modeling of low-frequency piezomagnetoelastic energy harvesters. *Journal of Intelligent Material Systems and Structures*, **2014**, 25, 1771-1785	2.3	70
53	Modeling, validation, and performance of low-frequency piezoelectric energy harvesters. *Journal of Intelligent Material Systems and Structures*, **2014**, 25, 1429-1444	2.3	46
52	Piezoelectric energy harvesting from hybrid vibrations. *Smart Materials and Structures*, **2014**, 23, 025026	3.4	47
51	Control of cross-flow-induced vibrations of square cylinders using linear and nonlinear delayed feedbacks. *Nonlinear Dynamics*, **2014**, 78, 907-919	5	21
50	Theoretical modeling and nonlinear analysis of piezoelectric energy harvesting from vortex-induced vibrations. *Journal of Intelligent Material Systems and Structures*, **2014**, 25, 1861-1874	2.3	112
49	Grazing bifurcation in aeroelastic systems with freeplay nonlinearity. *Communications in Nonlinear Science and Numerical Simulation*, **2014**, 19, 1611-1625	3.7	32
48	Modeling and nonlinear dynamics of fluid-conveying risers under hybrid excitations. *International Journal of Engineering Science*, **2014**, 81, 1-14	5.7	47
47	Nonlinear Dynamics Characterization of Piezoelectric Energy Harvesters from Hybrid Vibrations **2014**,		2
46	Modeling and Identification of Circular Cylinder-based Piezoaeroelastic Energy Harvesters. *Energy Procedia*, **2014**, 61, 2818-2821	2.3	5

45	Incident flow effects on the performance of piezoelectric energy harvesters from galloping vibrations. *Theoretical and Applied Mechanics Letters*, **2014**, 4, 022002	1.8	26
44	Comparative Analysis of One-Dimensional and Two-Dimensional Cantilever Piezoelectric Energy Harvesters. *Energy Harvesting and Systems*, **2014**, 1,	4.4	13
43	Modeling and nonlinear analysis of piezoelectric energy harvesting from transverse galloping. *Smart Materials and Structures*, **2013**, 22, 025016	3.4	102
42	Modeling and performance analysis of cambered wing-based piezoaeroelastic energy harvesters. *Smart Materials and Structures*, **2013**, 22, 095029	3.4	55
41	Temperature impact on the performance of galloping-based piezoaeroelastic energy harvesters. *Smart Materials and Structures*, **2013**, 22, 055026	3.4	27
40	An analytical and experimental investigation into limit-cycle oscillations of an aeroelastic system. *Nonlinear Dynamics*, **2013**, 71, 159-173	5	63
39	Piezoelectric energy harvesting from vortex-induced vibrations of circular cylinder. *Journal of Sound and Vibration*, **2013**, 332, 4656-4667	3.9	178
38	Piezoelectric energy harvesting from transverse galloping of bluff bodies. *Smart Materials and Structures*, **2013**, 22, 015014	3.4	122
37	Nonlinear dynamics of galloping-based piezoaeroelastic energy harvesters. *European Physical Journal: Special Topics*, **2013**, 222, 1483-1501	2.3	13
36	Piezoelectric energy harvesting from morphing wing motions for micro air vehicles. *Theoretical and Applied Mechanics Letters*, **2013**, 3, 052004	1.8	37
35	Performance enhancement of piezoelectric energy harvesters from wake galloping. *Applied Physics Letters*, **2013**, 103, 033903	3.4	106
34	Performance analysis and validation of thermoelectric energy harvesters. *Smart Materials and Structures*, **2013**, 22, 095014	3.4	14
33	Performance enhancement of wing-based piezoaeroelastic energy harvesting through freeplay nonlinearity. *Theoretical and Applied Mechanics Letters*, **2013**, 3, 041001	1.8	30
32	Power Generation from Galloping-based Piezoaeroelastic Energy Harvesters for Different Cross-Section Geometries **2013**,		2
31	Modeling and identification of freeplay nonlinearity. *Journal of Sound and Vibration*, **2012**, 331, 1898-1907	3.9	47
30	Representation and analysis of control surface freeplay nonlinearity. *Journal of Fluids and Structures*, **2012**, 31, 79-91	3.1	52
29	Modeling and analysis of piezoaeroelastic energy harvesters. *Nonlinear Dynamics*, **2012**, 67, 925-939	5	139
28	Global nonlinear distributed-parameter model of parametrically excited piezoelectric energy harvesters. *Nonlinear Dynamics*, **2012**, 67, 1147-1160	5	120

27	Effects of nonlinear piezoelectric coupling on energy harvesters under direct excitation. *Nonlinear Dynamics*, **2012**, 67, 1221-1232	5	69
26	Piezoelectric energy harvesting from an oscillating wing **2012**,		1
25	Power harvesting from transverse galloping of square cylinder. *Nonlinear Dynamics*, **2012**, 70, 1355-1363	5	99
24	Phenomena and modeling of piezoelectric energy harvesting from freely oscillating cylinders. *Nonlinear Dynamics*, **2012**, 70, 1377-1388	5	89
23	Aeroelastic analysis and nonlinear dynamics of an elastically mounted wing. *Journal of Sound and Vibration*, **2012**, 331, 5774-5787	3.9	16
22	Sensitivity analysis of piezoaeroelastic energy harvesters. *Journal of Intelligent Material Systems and Structures*, **2012**, 23, 1523-1531	2.3	46
21	Energy harvesting from a multifrequency response of a tuned bending–torsion system. *Smart Materials and Structures*, **2012**, 21, 075029	3.4	38
20	Uncertainty Quantification of Piezoelectric Energy Harvesters from Aeroelastic Vibrations. *MATEC Web of Conferences*, **2012**, 1, 03007	0.3	2
19	Camber Effects on the Power Harvesting from Piezoaeroelastic Systems. *MATEC Web of Conferences*, **2012**, 1, 03008	0.3	
18	Design of piezoaeroelastic energy harvesters. *Nonlinear Dynamics*, **2012**, 68, 519-530	5	89
17	Enhancement of power harvesting from piezoaeroelastic systems. *Nonlinear Dynamics*, **2012**, 68, 531-541	5	65
16	Bifurcation analysis of an aeroelastic system with concentrated nonlinearities. *Nonlinear Dynamics*, **2012**, 69, 57-70	5	24
15	Control Surface Freeplay Nonlinearity: Modeling and Experimental Validation **2012**,		2
14	Experimental Identification of Concentrated Nonlinearity in Aeroelastic System. *MATEC Web of Conferences*, **2012**, 1, 03001	0.3	
13	An energy harvester using piezoelectric cantilever beams undergoing coupled bending–torsion vibrations. *Smart Materials and Structures*, **2011**, 20, 115007	3.4	130
12	Shape improvement for piezoelectric energy harvesting applications **2009**,		7
11	Sensitive parameter identification and uncertainty quantification for the stability of pipeline conveying fluid. *International Journal of Mechanics and Materials in Design*,1	2.5	0
10	Investigations on the interactions between structural and aerodynamic nonlinearities and unsteadiness for aeroelastic systems. *Nonlinear Dynamics*,1	5	0

9	Nonlinear size-dependent modeling and dynamics of nanocrystalline arc resonators. *International Journal of Mechanics and Materials in Design*,1	2.5	
8	Insights on the continuous representations of piecewise-smooth nonlinear systems: limits of applicability and effectiveness. *Nonlinear Dynamics*,1	5	4
7	Insights on the unsteadiness and stall effects on the characteristics and responses of continuous wing-based systems. *Nonlinear Dynamics*,1	5	2
6	A review on vibrating beam-based micro/nano-gyroscopes. *Microsystem Technologies*,1	1.7	5
5	Use of half-cylinder obstacle for enhancing aeroelastic energy harvesting. *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*,1-15	1.6	
4	Investigations on the stability and effectiveness of wing-based piezoaeroelastic systems with combined nonlinearities. *European Physical Journal: Special Topics*,1	2.3	1
3	Effective design of vibro-impact energy harvesting absorbers with asymmetric stoppers. *European Physical Journal: Special Topics*,1	2.3	1
2	Vortex-induced vibration of a circular cylinder with nonlinear stiffness: prediction using forced vibration data. *Nonlinear Dynamics*,1	5	4
1	Unsteady aerodynamic analysis and effectiveness of bio-inspired flapping wings in V-formation flight. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*,095441002211030	0.9	