Alexander F Vakakis

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Past, present and future of nonlinear system identification in structural dynamics. Mechanical Systems and Signal Processing, 2006, 20, 505-592.	8.0	912
2	The Method of Proper Orthogonal Decomposition for Dynamical Characterization and Order Reduction of Mechanical Systems: An Overview. Nonlinear Dynamics, 2005, 41, 147-169.	5.2	706
3	Nonlinear normal modes, Part I: A useful framework for the structural dynamicist. Mechanical Systems and Signal Processing, 2009, 23, 170-194.	8.0	571
4	Energy Pumping in Nonlinear Mechanical Oscillators: Part II—Resonance Capture. Journal of Applied Mechanics, Transactions ASME, 2001, 68, 42-48.	2.2	525
5	Energy Pumping in Nonlinear Mechanical Oscillators: Part l—Dynamics of the Underlying Hamiltonian Systems. Journal of Applied Mechanics, Transactions ASME, 2001, 68, 34-41.	2.2	502
6	Inducing Passive Nonlinear Energy Sinks in Vibrating Systems. Journal of Vibration and Acoustics, Transactions of the ASME, 2001, 123, 324-332.	1.6	338
7	NON-LINEAR NORMAL MODES (NNMs) AND THEIR APPLICATIONS IN VIBRATION THEORY: AN OVERVIEW. Mechanical Systems and Signal Processing, 1997, 11, 3-22.	8.0	228
8	Experimental study of non-linear energy pumping occurring at a single fast frequency. International Journal of Non-Linear Mechanics, 2005, 40, 891-899.	2.6	211
9	Simulation of dynamics of beam structures with bolted joints using adjusted Iwan beam elements. Journal of Sound and Vibration, 2004, 273, 249-276.	3.9	210
10	Complicated dynamics of a linear oscillator with a light, essentially nonlinear attachment. Physica D: Nonlinear Phenomena, 2005, 204, 41-69.	2.8	205
11	Targeted energy transfers in vibro-impact oscillators for seismic mitigation. Nonlinear Dynamics, 2007, 50, 651-677.	5.2	201
12	Dynamics of linear discrete systems connected to local, essentially non-linear attachments. Journal of Sound and Vibration, 2003, 264, 559-577.	3.9	197
13	PROPER ORTHOGONAL DECOMPOSITION (POD) OF A CLASS OF VIBROIMPACT OSCILLATIONS. Journal of Sound and Vibration, 2001, 240, 859-889.	3.9	180
14	Suppression Aeroelastic Instability Using Broadband Passive Targeted Energy Transfers, Part 1: Theory. AIAA Journal, 2007, 45, 693-711.	2.6	179
15	Breaking Lorentz reciprocity to overcome the time-bandwidth limit in physics and engineering. Science, 2017, 356, 1260-1264.	12.6	174
16	Title is missing!. Nonlinear Dynamics, 2003, 33, 87-102.	5.2	160
17	Irreversible Passive Energy Transfer in Coupled Oscillators with Essential Nonlinearity. SIAM Journal on Applied Mathematics, 2005, 66, 648-679.	1.8	155
18	Periodic orbits, damped transitions and targeted energy transfers in oscillators with vibro-impact attachments. Physica D: Nonlinear Phenomena, 2009, 238, 1868-1896.	2.8	142

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19	Suppressing Aeroelastic Instability Using Broadband Passive Targeted Energy Transfers, Part 2: Experiments. AIAA Journal, 2007, 45, 2391-2400.	2.6	141
20	Numerical and experimental investigation of a highly effective single-sided vibro-impact non-linear energy sink for shock mitigation. International Journal of Non-Linear Mechanics, 2013, 52, 96-109.	2.6	133
21	Resonance captures and targeted energy transfers in an inertially-coupled rotational nonlinear energy sink. Nonlinear Dynamics, 2012, 69, 1693-1704.	5.2	125
22	Dynamics of a linear beam with an attached local nonlinear energy sink. Communications in Nonlinear Science and Numerical Simulation, 2007, 12, 643-651.	3.3	120
23	Application of broadband nonlinear targeted energy transfers for seismic mitigation of a shear frame: Experimental results. Journal of Sound and Vibration, 2008, 313, 57-76.	3.9	120
24	New family of solitary waves in granular dimer chains with no precompression. Physical Review E, 2011, 83, 036606.	2.1	105
25	Efficiency of targeted energy transfers in coupled nonlinear oscillators associated with 1:1 resonance captures: Part II, analytical study. Journal of Sound and Vibration, 2009, 325, 297-320.	3.9	99
26	Comparing Linear and Essentially Nonlinear Vibration-Based Energy Harvesting. Journal of Vibration and Acoustics, Transactions of the ASME, 2011, 133, .	1.6	99
27	Efficiency of targeted energy transfers in coupled nonlinear oscillators associated with 1:1 resonance captures: Part I. Journal of Sound and Vibration, 2008, 311, 1228-1248.	3.9	98
28	Dynamics of an Eccentric Rotational Nonlinear Energy Sink. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	98
29	Effective Stiffening and Damping Enhancement of Structures With Strongly Nonlinear Local Attachments. Journal of Vibration and Acoustics, Transactions of the ASME, 2012, 134, .	1.6	98
30	Experimental investigation of targeted energy transfers in strongly and nonlinearly coupled oscillators. Journal of the Acoustical Society of America, 2005, 118, 791-799.	1.1	89
31	Traveling waves and localized modes in one-dimensional homogeneous granular chains with no precompression. Physical Review E, 2010, 82, 026603.	2.1	89
32	Passive damping enhancement of a two-degree-of-freedom system through a strongly nonlinear two-degree-of-freedom attachment. Journal of Sound and Vibration, 2012, 331, 5393-5407.	3.9	89
33	Dynamics of a Linear Oscillator Coupled to a Bistable Light Attachment: Analytical Study. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	88
34	Normal modes and global dynamics of a two-degree-of-freedom non-linear system—I. Low energies. International Journal of Non-Linear Mechanics, 1992, 27, 861-874.	2.6	87
35	Theoretical and Experimental Study of Multimodal Targeted Energy Transfer in a System of Coupled Oscillators. Nonlinear Dynamics, 2006, 47, 285-309.	5.2	87
36	Nonlinear Vibrations and Multiple Resonances of Fluid-Filled, Circular Shells, Part 1: Equations of Motion and Numerical Results. Journal of Vibration and Acoustics, Transactions of the ASME, 2000, 122, 346-354.	1.6	86

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37	Experimental study of non-linear effects in a typical shear lap joint configuration. Journal of Sound and Vibration, 2004, 277, 327-351.	3.9	83
38	Large-scale experimental evaluation and numerical simulation of a system of nonlinear energy sinks for seismic mitigation. Engineering Structures, 2014, 77, 34-48.	5.3	83
39	Experimental demonstration of transient resonance capture in a system of two coupled oscillators with essential stiffness nonlinearity. Journal of Sound and Vibration, 2007, 299, 822-838.	3.9	81
40	Enhanced passive targeted energy transfer in strongly nonlinear mechanical oscillators. Journal of Sound and Vibration, 2011, 330, 1-8.	3.9	81
41	Asymptotic Analysis of Passive Nonlinear Suppression of Aeroelastic Instabilities of a Rigid Wing in Subsonic Flow. SIAM Journal on Applied Mathematics, 2010, 70, 1655-1677.	1.8	80
42	Non-similar normal oscillations in a strongly non-linear discrete system. Journal of Sound and Vibration, 1992, 158, 341-361.	3.9	76
43	Using passive nonlinear targeted energy transfer to stabilize drill-string systems. Mechanical Systems and Signal Processing, 2009, 23, 148-169.	8.0	76
44	Vibration reduction in unbalanced hollow rotor systems with nonlinear energy sinks. Nonlinear Dynamics, 2015, 79, 527-538.	5.2	76
45	Nonlinear normal modes and band zones in granular chains with no pre-compression. Nonlinear Dynamics, 2011, 63, 359-385.	5.2	75
46	Nonlinear system identification of frictional effects in a beam with a bolted joint connection. Mechanical Systems and Signal Processing, 2013, 39, 245-264.	8.0	74
47	Toward a Fundamental Understanding of the Hilbert-Huang Transform in Nonlinear Structural Dynamics. JVC/Journal of Vibration and Control, 2008, 14, 77-105.	2.6	73
48	Suppression of limit cycle oscillations in the van der Pol oscillator by means of passive non-linear energy sinks. Structural Control and Health Monitoring, 2006, 13, 41-75.	4.0	72
49	Numerical and experimental investigations of a rotating nonlinear energy sink. Meccanica, 2017, 52, 763-779.	2.0	72
50	Mode Localization in a Class of Multidegree-of-Freedom Nonlinear Systems with Cyclic Symmetry. SIAM Journal on Applied Mathematics, 1993, 53, 265-282.	1.8	71
51	Enhancing the Robustness of Aeroelastic Instability Suppression Using Multi-Degree-of-Freedom Nonlinear Energy Sinks. AIAA Journal, 2008, 46, 1371-1394.	2.6	70
52	Response attenuation in a large-scale structure subjected to blast excitation utilizing a system of essentially nonlinear vibration absorbers. Journal of Sound and Vibration, 2017, 389, 52-72.	3.9	68
53	A Multiple-Scales Analysis of Nonlinear, Localized Modes in a Cyclic Periodic System. Journal of Applied Mechanics, Transactions ASME, 1993, 60, 388-397.	2.2	67
54	Application of broadband nonlinear targeted energy transfers for seismic mitigation of a shear frame: Computational results. Journal of Sound and Vibration, 2010, 329, 2973-2994.	3.9	67

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55	An Energy-Based Formulation for Computing Nonlinear Normal Modes in Undamped Continuous Systems. Journal of Vibration and Acoustics, Transactions of the ASME, 1994, 116, 332-340.	1.6	66
56	Tunable, Broadband Nonlinear Nanomechanical Resonator. Nano Letters, 2010, 10, 1793-1798.	9.1	66
57	An "Interesting" Strange Attractor in the Dynamics of a Hopping Robot. International Journal of Robotics Research, 1991, 10, 606-618.	8.5	65
58	Nonlinear wave transmission in a monocoupled elastic periodic system. Journal of the Acoustical Society of America, 1995, 98, 1534-1546.	1.1	65
59	Physics-Based Foundation for Empirical Mode Decomposition. AIAA Journal, 2009, 47, 2938-2963.	2.6	65
60	Isolated Resonance Captures and Resonance Capture Cascades Leading to Single- or Multi-Mode Passive Energy Pumping in Damped Coupled Oscillators. Journal of Vibration and Acoustics, Transactions of the ASME, 2004, 126, 235-244.	1.6	64
61	Experimental Testing and Numerical Simulation of a Six-Story Structure Incorporating Two-Degree-of-Freedom Nonlinear Energy Sink. Journal of Structural Engineering, 2014, 140, .	3.4	62
62	Complex dynamics and targeted energy transfer in linear oscillators coupled to multi-degree-of-freedom essentially nonlinear attachments. Nonlinear Dynamics, 2007, 48, 285-318.	5.2	60
63	A study on torsional vibration attenuation in automotive drivetrains using absorbers with smooth and non-smooth nonlinearities. Applied Mathematical Modelling, 2017, 46, 674-690.	4.2	59
64	Energy Transfers in a System of Two Coupled Oscillators with Essential Nonlinearity: 1:1 Resonance Manifold and Transient Bridging Orbits. Nonlinear Dynamics, 2005, 42, 283-303.	5.2	58
65	Dynamic instabilities in coupled oscillators induced by geometrically nonlinear damping. Nonlinear Dynamics, 2012, 67, 807-827.	5.2	58
66	Wavelet-bounded empirical mode decomposition for measured time series analysis. Mechanical Systems and Signal Processing, 2018, 99, 14-29.	8.0	58
67	Nonlinear targeted energy transfer: state of the art and new perspectives. Nonlinear Dynamics, 2022, 108, 711-741.	5.2	58
68	Dynamics of a nonlinear periodic structure with cyclic symmetry. Acta Mechanica, 1992, 95, 197-226.	2.1	57
69	Normal modes and global dynamics of a two-degree-of-freedom non-linear system—II. High energies. International Journal of Non-Linear Mechanics, 1992, 27, 875-888.	2.6	56
70	Experimental system identification of the dynamics of a vibro-impact beam with a view towards structural health monitoring and damage detection. Mechanical Systems and Signal Processing, 2014, 46, 91-113.	8.0	56
71	Nonlinear hardening and softening resonances in micromechanical cantilever-nanotube systems originated from nanoscale geometric nonlinearities. International Journal of Solids and Structures, 2012, 49, 2059-2065.	2.7	55
72	A new way to introduce geometrically nonlinear stiffness and damping with an application to vibration suppression. Nonlinear Dynamics, 2019, 96, 1819-1845.	5.2	55

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73	Forced localization in a periodic chain of non-linear oscillators. International Journal of Non-Linear Mechanics, 1994, 29, 429-447.	2.6	53
74	Strongly Nonlinear Beat Phenomena and Energy Exchanges in Weakly Coupled Granular Chains on Elastic Foundations. SIAM Journal on Applied Mathematics, 2012, 72, 337-361.	1.8	52
75	High-frequency vibration energy harvesting from impulsive excitation utilizing intentional dynamic instability caused by strong nonlinearity. Journal of Sound and Vibration, 2016, 370, 259-279.	3.9	51
76	Non-linear dynamics of a system of coupled oscillators with essential stiffness non-linearities. International Journal of Non-Linear Mechanics, 2004, 39, 1079-1091.	2.6	50
77	Targeted energy transfer and modal energy redistribution in automotive drivetrains. Nonlinear Dynamics, 2017, 87, 169-190.	5.2	50
78	Vibration energy harvesting from impulsive excitations via a bistable nonlinear attachment. International Journal of Non-Linear Mechanics, 2017, 94, 84-97.	2.6	49
79	Nonreciprocity in the dynamics of coupled oscillators with nonlinearity, asymmetry, and scale hierarchy. Physical Review E, 2018, 97, 012219.	2.1	49
80	IDENTIFICATION OF BOLTED JOINTS THROUGH LASER VIBROMETRY. Journal of Sound and Vibration, 2001, 246, 441-460.	3.9	48
81	Shock Isolation Through the Use of Nonlinear Energy Sinks. JVC/Journal of Vibration and Control, 2003, 9, 79-93.	2.6	48
82	Passive non-linear targeted energy transfer and its applications to vibration absorption: A review. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2008, 222, 77-134.	0.8	48
83	Vibro-impact attachments as shock absorbers. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 1899-1908.	2.1	48
84	Targeted Energy Transfer Between a Model Flexible Wing and Nonlinear Energy Sink. Journal of Aircraft, 2010, 47, 1918-1931.	2.4	48
85	Rotary-oscillatory nonlinear energy sink of robust performance. International Journal of Non-Linear Mechanics, 2019, 117, 103249.	2.6	48
86	Study of a class of subharmonic motions using a non-smooth temporal transformation (NSTT). Physica D: Nonlinear Phenomena, 1997, 100, 145-164.	2.8	47
87	Numerical and experimental analysis of a continuous overhung rotor undergoing vibro-impacts. International Journal of Non-Linear Mechanics, 1999, 34, 415-435.	2.6	47
88	Transitions from Strongly to Weakly Nonlinear Motions of Damped Nonlinear Oscillators. Nonlinear Dynamics, 1999, 20, 99-114.	5.2	47
89	Reduced-order model for laminar vortex-induced vibration of a rigid circular cylinder with an internal nonlinear absorber. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 1916-1930.	3.3	47
90	Transient and chaotic low-energy transfers in a system with bistable nonlinearity. Chaos, 2015, 25, 053109.	2.5	47

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91	Subharmonic travelling waves in a geometrically non-linear circular plate. International Journal of Non-Linear Mechanics, 1994, 29, 233-245.	2.6	46
92	SHOCK ISOLATION THROUGH PASSIVE ENERGY PUMPING CAUSED BY NONSMOOTH NONLINEARITIES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 1989-2001.	1.7	46
93	Nonlinear targeted energy transfer and macroscopic analog of the quantum Landau–Zener effect in coupled granular chains. Physica D: Nonlinear Phenomena, 2013, 252, 46-58.	2.8	46
94	On the effect of multiple parallel nonlinear absorbers in palliation of torsional response of automotive drivetrain. International Journal of Non-Linear Mechanics, 2017, 96, 22-35.	2.6	46
95	Nonlinear Resonances Leading to Strong Pulse Attenuation in Granular Dimer Chains. Journal of Nonlinear Science, 2013, 23, 363-392.	2.1	45
96	Vortex-induced vibration of a linearly sprung cylinder with an internal rotational nonlinear energy sink in turbulent flow. Nonlinear Dynamics, 2020, 99, 593-609.	5.2	45
97	Broadband non-reciprocity with robust signal integrity in a triangle-shaped nonlinear 1D metamaterial. Nonlinear Dynamics, 2020, 100, 1-13.	5.2	44
98	Energy Harvesting From Impulsive Loads Using Intentional Essential Nonlinearities. Journal of Vibration and Acoustics, Transactions of the ASME, 2011, 133, .	1.6	43
99	Alternation of regular and chaotic dynamics in a simple two-degree-of-freedom system with nonlinear inertial coupling. Chaos, 2012, 22, 013118.	2.5	43
100	Passive targeted energy transfers and strong modal interactions in the dynamics of a thin plate with strongly nonlinear attachments. International Journal of Solids and Structures, 2009, 46, 2330-2353.	2.7	42
101	A global-local approach to nonlinear system identification: A review. Structural Control and Health Monitoring, 2010, 17, 742-760.	4.0	42
102	An Energy-Based Approach to Computing Resonant Nonlinear Normal Modes. Journal of Applied Mechanics, Transactions ASME, 1996, 63, 810-819.	2.2	41
103	Interaction Between Slow and Fast Oscillations in an Infinite Degree-of-Freedom Linear System Coupled to a Nonlinear Subsystem: Theory and Experiment. Journal of Applied Mechanics, Transactions ASME, 1999, 66, 448-459.	2.2	41
104	NON-LINEAR NORMAL MODES AND NON-PARAMETRIC SYSTEM IDENTIFICATION OF NON-LINEAR OSCILLATORS. Mechanical Systems and Signal Processing, 2000, 14, 37-48.	8.0	40
105	Shock Mitigation by Means of Low- to High-Frequency Nonlinear Targeted Energy Transfers in a Large-Scale Structure. Journal of Computational and Nonlinear Dynamics, 2016, 11, .	1.2	40
106	The effect of a viscously damped dynamic absorber on a linear multi-degree-of-freedom system. Journal of Sound and Vibration, 1986, 105, 49-60.	3.9	39
107	Dynamic interaction of a semi-infinite linear chain of coupled oscillators with a strongly nonlinear end attachment. Physica D: Nonlinear Phenomena, 2003, 178, 1-18.	2.8	39
108	Scattering of Solitary Waves and Excitation of Transient Breathers in Granular Media by Light Intruders and No Precompression. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.2	39

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109	Strong geometric softening–hardening nonlinearities in an oscillator composed of linear stiffness and damping elements. International Journal of Non-Linear Mechanics, 2018, 107, 94-111.	2.6	39
110	Acoustic nonreciprocity in a lattice incorporating nonlinearity, asymmetry, and internal scale hierarchy: Experimental study. Physical Review E, 2018, 97, 052211.	2.1	39
111	Nonlinear Vibrations and Multiple Resonances of Fluid-Filled, Circular Shells, Part 2: Perturbation Analysis. Journal of Vibration and Acoustics, Transactions of the ASME, 2000, 122, 355-364.	1.6	38
112	Experimental Study of Strongly Nonlinear Resonances and Anti-Resonances in Granular Dimer Chains. Experimental Mechanics, 2013, 53, 861-870.	2.0	38
113	Analytical study of similar normal modes and their bifurcations in a class of strongly non-linear systems. International Journal of Non-Linear Mechanics, 1990, 25, 521-533.	2.6	37
114	A time-domain nonlinear system identification method based on multiscale dynamic partitions. Meccanica, 2011, 46, 625-649.	2.0	37
115	Atomic force microscope infrared spectroscopy on 15 nm scale polymer nanostructures. Review of Scientific Instruments, 2013, 84, 023709.	1.3	37
116	Analytical characterization of damping in gear teeth dynamics under hydrodynamic conditions. Mechanism and Machine Theory, 2015, 94, 141-147.	4.5	37
117	Methodology for model updating of mechanical components with local nonlinearities. Journal of Sound and Vibration, 2015, 357, 331-348.	3.9	37
118	Utilizing intentional internal resonance to achieve multi-harmonic atomic force microscopy. Nanotechnology, 2016, 27, 125501.	2.6	37
119	Modeling and Measurement of Geometrically Nonlinear Damping in a Microcantilever–Nanotube System. ACS Nano, 2013, 7, 8547-8553.	14.6	36
120	Energy equipartition in two-dimensional granular systems with spherical intruders. Physical Review E, 2013, 87, .	2.1	36
121	Rotary-impact nonlinear energy sink for shock mitigation: analytical and numerical investigations. Archive of Applied Mechanics, 2020, 90, 495-521.	2.2	36
122	A method for examining steady state solutions of forced discrete systems with strong non-linearities. International Journal of Non-Linear Mechanics, 1991, 26, 89-103.	2.6	35
123	Transient resonant interactions of finite linear chains with essentially nonlinear end attachments leading to passive energy pumping. International Journal of Solids and Structures, 2004, 41, 6505-6528.	2.7	35
124	Multi-frequency Atomic Force Microscopy based on enhanced internal resonance of an inner-paddled cantilever. Sensors and Actuators A: Physical, 2018, 273, 206-220.	4.1	35
125	Passive nonlinear targeted energy transfer. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170132.	3.4	35
126	Tunable Acoustic Nonreciprocity in Strongly Nonlinear Waveguides with Asymmetry. Physical Review Applied, 2019, 12, .	3.8	35

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127	Non-linear system identification of the dynamics of aeroelastic instability suppression based on targeted energy transfers. Aeronautical Journal, 2010, 114, 61-82.	1.6	34
128	Design, simulation, and largeâ€scale testing of an innovative vibration mitigation device employing essentially nonlinear elastomeric springs. Earthquake Engineering and Structural Dynamics, 2014, 43, 1829-1851.	4.4	34
129	Acoustic diode: Wave non-reciprocity in nonlinearly coupled waveguides. Wave Motion, 2018, 83, 49-66.	2.0	34
130	Broadband passive nonlinear acoustic diode. Physical Review B, 2019, 99, .	3.2	34
131	Karhunen-Loe`ve Modes of a Truss: Transient Response Reconstruction and Experimental Verification. AIAA Journal, 2001, 39, 687-696.	2.6	33
132	Broadband passive targeted energy pumping from a linear dispersive rod to a lightweight essentially non-linear end attachment. International Journal of Non-Linear Mechanics, 2007, 42, 773-788.	2.6	33
133	Frequency bands of strongly nonlinear homogeneous granular systems. Physical Review E, 2013, 88, 012206.	2.1	33
134	Realization of a Strongly Nonlinear Vibration-Mitigation Device Using Elastomeric Bumpers. Journal of Engineering Mechanics - ASCE, 2014, 140, .	2.9	33
135	Experimental study of nonlinear acoustic bands and propagating breathers in ordered granular media embedded in matrix. Granular Matter, 2015, 17, 49-72.	2.2	33
136	Transitions from localization to nonlocalization in strongly nonlinear damped oscillators. Chaos, Solitons and Fractals, 2000, 11, 1535-1542.	5.1	32
137	Multi-frequency nonlinear energy transfer from linear oscillators to mdof essentially nonlinear attachments. Journal of Sound and Vibration, 2005, 285, 483-490.	3.9	32
138	Interactions of propagating waves in a one-dimensional chain of linear oscillators with a strongly nonlinear local attachment. Meccanica, 2014, 49, 2375-2397.	2.0	32
139	Title is missing!. Nonlinear Dynamics, 1998, 15, 245-257.	5.2	31
140	Nonlinear low-to-high-frequency energy cascades in diatomic granular crystals. Physical Review E, 2015, 92, 062201.	2.1	31
141	Effect of an internal nonlinear rotational dissipative element on vortex shedding and vortex-induced vibration of a sprung circular cylinder. Journal of Fluid Mechanics, 2017, 828, 196-235.	3.4	31
142	DIRECT AND INVERSE PROBLEMS ENCOUNTERED IN VIBRO-IMPACT OSCILLATIONS OF A DISCRETE SYSTEM. Journal of Sound and Vibration, 1998, 216, 227-250.	3.9	30
143	Triggering mechanisms of limit cycle oscillations due to aeroelastic instability. Journal of Fluids and Structures, 2005, 21, 485-529.	3.4	30
144	Nonlinear system identification of the dynamics of a vibro-impact beam: numerical results. Archive of Applied Mechanics, 2012, 82, 1461-1479.	2.2	30

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145	Computational study of vortex-induced vibration of a sprung rigid circular cylinder with a strongly nonlinear internal attachment. Journal of Fluids and Structures, 2013, 40, 214-232.	3.4	30
146	Targeted Energy Transfer Between a Swept Wing and Winglet-Housed Nonlinear Energy Sink. AIAA Journal, 2014, 52, 2633-2651.	2.6	30
147	Strongly nonlinear beats in the dynamics of an elastic system with a strong local stiffness nonlinearity: Analysis and identification. Journal of Sound and Vibration, 2014, 333, 2054-2072.	3.9	30
148	A micromechanical mass sensing method based on amplitude tracking within an ultra-wide broadband resonance. Nonlinear Dynamics, 2018, 92, 287-304.	5.2	30
149	Passive spatial confinement of impulsive responses in coupled nonlinear beams. AIAA Journal, 1994, 32, 1902-1910.	2.6	29
150	Resonant oscillations of a weakly coupled, nonlinear layered system. Acta Mechanica, 1998, 128, 59-80.	2.1	29
151	Study of the Oscillations of a Nonlinearly Supported String Using Nonsmooth Transformations. Journal of Vibration and Acoustics, Transactions of the ASME, 1998, 120, 434-440.	1.6	29
152	Karhunen-Lo-ccedil;ve Decomposition of the Transient Dynamics of a Multibay Truss. AIAA Journal, 1999, 37, 939-946.	2.6	29
153	Title is missing!. Nonlinear Dynamics, 2003, 33, 1-10.	5.2	29
154	Methodology for nonlinear quantification of a flexible beam with a local, strong nonlinearity. Journal of Sound and Vibration, 2017, 388, 298-314.	3.9	29
155	Frequency–energy plots of steady-state solutions for forced and damped systems, and vibration isolation by nonlinear mode localization. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 2905-2917.	3.3	28
156	Vibration energy harvesting from impulsive excitations via a bistable nonlinear attachment—Experimental study. Mechanical Systems and Signal Processing, 2019, 125, 185-201.	8.0	28
157	Dynamic interactions of traveling waves propagating in a linear chain with an local essentially nonlinear attachment. Wave Motion, 2009, 46, 174-188.	2.0	27
158	Current efforts towards a non-linear system identification methodology of broad applicability. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 2497-2515.	2.1	27
159	Transonic Aeroelastic Instability Suppression for a Swept Wing by Targeted Energy Transfer. Journal of Aircraft, 2014, 51, 1467-1482.	2.4	27
160	Fundamental and subharmonic resonances in a system with a ?1-1? internal resonance. Nonlinear Dynamics, 1992, 3, 123-143.	5.2	26
161	Application of Nonlinear Localization to the Optimization of a Vibration Isolation System. AIAA Journal, 1997, 35, 1378-1386.	2.6	26
162	Multi-scaled analysis of the damped dynamics of an elastic rod with an essentially nonlinear end attachment. International Journal of Solids and Structures, 2007, 44, 6256-6278.	2.7	26

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163	Capture into slow-invariant-manifold in the fluid–structure dynamics of a sprung cylinder with a nonlinear rotator. Journal of Fluids and Structures, 2016, 63, 155-173.	3.4	26
164	Nonreciprocal acoustics and dynamics in the in-plane oscillations of a geometrically nonlinear lattice. Physical Review E, 2016, 94, 032214.	2.1	26
165	Numerical and Experimental Study of Nonlinear Localization in a Flexible Structure with Vibro-Impacts. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 1997, 77, 527-541.	1.6	25
166	Impulsive periodic and quasi-periodic orbits of coupled oscillators with essential stiffness nonlinearity. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 959-978.	3.3	25
167	Strongly nonlinear traveling waves in granular dimer chains. Mechanical Systems and Signal Processing, 2013, 39, 91-107.	8.0	25
168	Influence of system parameters on dynamic behavior of gear pair with stochastic backlash. Meccanica, 2014, 49, 429-440.	2.0	25
169	Use of non-linear localization for isolating structures from earthquake-induced motions. Earthquake Engineering and Structural Dynamics, 1999, 28, 21-36.	4.4	24
170	Improved atomic force microscope infrared spectroscopy for rapid nanometer-scale chemical identification. Nanotechnology, 2013, 24, 444007.	2.6	24
171	Non-reciprocity in nonlinear elastodynamics. Journal of Sound and Vibration, 2018, 412, 326-335.	3.9	24
172	Exponentially Small Splittings of Manifolds in a Rapidly Forced Duffing System. Journal of Sound and Vibration, 1994, 170, 119-129.	3.9	23
173	Free and Forced Dynamics of a Class of Periodic Elastic Systems. Journal of Sound and Vibration, 1994, 172, 23-46.	3.9	23
174	Solitary waves in a general class of granular dimer chains. Journal of Applied Physics, 2012, 112, .	2.5	23
175	Breather arrest, localization, and acoustic non-reciprocity in dissipative nonlinear lattices. Journal of the Acoustical Society of America, 2019, 146, 826-842.	1.1	23
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177	A Theorem on the Exact Nonsimilar Steady-State Motions of a Nonlinear Oscillator. Journal of Applied Mechanics, Transactions ASME, 1992, 59, 418-424.	2.2	21
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