Oleg Gendelman

List of Publications by Year
in descending order

186 papers	6,084 citations	61857 43 h-index	85405 71 g-index
193 all docs	193 docs citations	193 times ranked	2905 citing authors

#	Article	IF	Citations
1	Effect of supramolecular structure on polymer nanofibre elasticity. Nature Nanotechnology, 2007, 2, 59-62.	15.6	339
2	Transition of Energy to a Nonlinear Localized Mode in a Highly Asymmetric System of Two Oscillators. Nonlinear Dynamics, 2001, 25, 237-253.	2.7	220
3	Normal Heat Conductivity of the One-Dimensional Lattice with Periodic Potential of Nearest-Neighbor Interaction. Physical Review Letters, 2000, 84, 2381-2384.	2.9	189
4	Vibration absorption in systems with a nonlinear energy sink: Nonlinear damping. Journal of Sound and Vibration, 2009, 324, 916-939.	2.1	173
5	Strongly modulated response in forced 2DOF oscillatory system with essential mass and potential asymmetry. Physica D: Nonlinear Phenomena, 2008, 237, 1719-1733.	1.3	164
6	Attractors of harmonically forced linear oscillator with attached nonlinear energy sink I: Description of response regimes. Nonlinear Dynamics, 2007, 51, 31-46.	2.7	136
7	Analytic treatment of a system with a vibro-impact nonlinear energy sink. Journal of Sound and Vibration, 2012, 331, 4599-4608.	2.1	132
8	Bifurcations of Nonlinear Normal Modes of Linear Oscillator with Strongly Nonlinear Damped Attachment. Nonlinear Dynamics, 2004, 37, 115-128.	2.7	128
9	Resonance captures and targeted energy transfers in an inertially-coupled rotational nonlinear energy sink. Nonlinear Dynamics, 2012, 69, 1693-1704.	2.7	125
10	Quasiperiodic energy pumping in coupled oscillators under periodic forcing. Journal of Sound and Vibration, 2006, 294, 651-662.	2.1	114
11	Compact localized states and flat-band generators in one dimension. Physical Review B, 2017, 95, .	1.1	114
12	Targeted energy transfer in systems with non-polynomial nonlinearity. Journal of Sound and Vibration, 2008, 315, 732-745.	2.1	113
13	Attractors of harmonically forced linear oscillator with attached nonlinear energy sink. II: Optimization of a nonlinear vibration absorber. Nonlinear Dynamics, 2007, 51, 47-57.	2.7	109
14	Janus Droplets: Liquid Marbles Coated with Dielectric/Semiconductor Particles. Langmuir, 2011, 27, 7-10.	1.6	107
15	Targeted energy transfer in mechanical systems by means of non-smooth nonlinear energy sink. Acta Mechanica, 2011, 221, 175-200.	1.1	105
16	Dynamics of forced system with vibro-impact energy sink. Journal of Sound and Vibration, 2015, 358, 301-314.	2.1	104
17	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.	2.1	99
18	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.	2.1	98

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19	Dynamics of an Eccentric Rotational Nonlinear Energy Sink. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	1.1	98
20	Dynamics of a strongly nonlinear vibration absorber coupled to a harmonically excited two-degree-of-freedom system. Journal of Sound and Vibration, 2008, 312, 234-256.	2.1	97
21	Response regimes of linear oscillator coupled to nonlinear energy sink with harmonic forcing and frequency detuning. Journal of Sound and Vibration, 2008, 315, 746-765.	2.1	89
22	Dynamics of linear oscillator coupled to strongly nonlinear attachment with multiple states of equilibrium. Chaos, Solitons and Fractals, 2005, 24, 501-509.	2.5	85
23	Enhanced passive targeted energy transfer in strongly nonlinear mechanical oscillators. Journal of Sound and Vibration, 2011, 330, 1-8.	2.1	81
24	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.	0.8	80
25	Heat conduction in one-dimensional lattices with on-site potential. Physical Review E, 2003, 67, 041205.	0.8	75
26	Quasi-Periodic Response Regimes of Linear Oscillator Coupled to Nonlinear Energy Sink Under Periodic Forcing. Journal of Applied Mechanics, Transactions ASME, 2007, 74, 325-331.	1.1	70
27	Dynamics of coupled linear and essentially nonlinear oscillators with substantially different masses. Journal of Sound and Vibration, 2005, 286, 1-19.	2.1	68
28	Composite non-stick droplets and their actuation with electric field. Applied Physics Letters, 2012, 100, .	1.5	65
29	A floating self-propelling liquid marble containing aqueous ethanol solutions. RSC Advances, 2015, 5, 101006-101012.	1.7	65
30	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.	1.0	64
31	Complex dynamics and targeted energy transfer in linear oscillators coupled to multi-degree-of-freedom essentially nonlinear attachments. Nonlinear Dynamics, 2007, 48, 285-318.	2.7	60
32	Targeted energy transfer in systems with external and self-excitation. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2011, 225, 2007-2043.	1.1	58
33	Superhydrophobicity of Lotus Leaves versus Birds Wings: Different Physical Mechanisms Leading to Similar Phenomena. Langmuir, 2012, 28, 14992-14997.	1.6	58
34	Nonlinear targeted energy transfer: state of the art and new perspectives. Nonlinear Dynamics, 2022, 108, 711-741.	2.7	58
35	Self-assembly in evaporated polymer solutions: Influence of the solution concentration. Journal of Colloid and Interface Science, 2006, 297, 534-540.	5.0	56
36	Mesoscopic Patterning in Thin Polymer Films Formed under the Fast Dip-Coating Process. Macromolecular Materials and Engineering, 2005, 290, 114-121.	1.7	55

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37	Bifurcations of self-excitation regimes in a Van der Pol oscillator with a nonlinear energy sink. Physica D: Nonlinear Phenomena, 2010, 239, 220-229.	1.3	51
38	Nonreciprocity in the dynamics of coupled oscillators with nonlinearity, asymmetry, and scale hierarchy. Physical Review E, 2018, 97, 012219.	0.8	49
39	Transitions from Strongly to Weakly Nonlinear Motions of Damped Nonlinear Oscillators. Nonlinear Dynamics, 1999, 20, 99-114.	2.7	47
40	Mesoscopic and submicroscopic patterning in thin polymer films: Impact of the solvent. Materials Letters, 2005, 59, 2461-2464.	1.3	47
41	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.	1.7	47
42	Elastic properties of liquid marbles. Colloid and Polymer Science, 2015, 293, 2157-2164.	1.0	47
43	Nonlinear Resonances Leading to Strong Pulse Attenuation in Granular Dimer Chains. Journal of Nonlinear Science, 2013, 23, 363-392.	1.0	45
44	Alternation of regular and chaotic dynamics in a simple two-degree-of-freedom system with nonlinear inertial coupling. Chaos, 2012, 22, 013118.	1.0	43
45	Self-assembled honeycomb polycarbonate films deposited on polymer piezoelectric substrates and their applications. Polymers for Advanced Technologies, 2005, 16, 299-304.	1.6	41
46	Interaction of nonlinear energy sink with a two degrees of freedom linear system: Internal resonance. Journal of Sound and Vibration, 2010, 329, 1836-1852.	2.1	40
47	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.	1.3	39
48	A Portrait of Copper Processed by Equal Channel Angular Pressing. Materials Transactions, 2008, 49, 31-37.	0.4	39
49	Tuned pendulum as nonlinear energy sink for broad energy range. JVC/Journal of Vibration and Control, 2017, 23, 373-388.	1.5	38
50	Simple â€œKinkâ€•Model of Melt Intercalation in Polymer-Clay Nanocomposites. Physical Review Letters, 2001, 86, 5073-5075.	2.9	36
51	On the mechanism of patterning in rapidly evaporated polymer solutions: Is temperature-gradient-driven Marangoni instability responsible for the large-scale patterning?. Journal of Colloid and Interface Science, 2010, 343, 602-607.	5.0	36
52	Tractable Models of Solid Mechanics. Foundations in Engineering Mechanics, 2011, , .	0.0	36
53	Discrete breathers in vibroimpact chains: Analytic solutions. Physical Review E, 2008, 78, 026609.	0.8	35
54	Low voltage reversible electrowetting exploiting lubricated polymer honeycomb substrates. Applied Physics Letters, 2014, 104, .	1.5	34

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55	Acoustic diode: Wave non-reciprocity in nonlinearly coupled waveguides. Wave Motion, 2018, 83, 49-66.	1.0	34
56	Modeling of inelastic impacts with the help of smooth-functions. Chaos, Solitons and Fractals, 2006, 28, 522-526.	2.5	33
57	Dynamic responses and mitigation of limit cycle oscillations in Van der Polâ€"Duffing oscillator with nonlinear energy sink. Journal of Sound and Vibration, 2013, 332, 5489-5507.	2.1	33
58	Transitions from localization to nonlocalization in strongly nonlinear damped oscillators. Chaos, Solitons and Fractals, 2000, 11, 1535-1542.	2.5	32
59	Grain size distribution and heat conductivity of copper processed by equal channel angular pressing. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2006, 434, 88-94.	2.6	32
60	Heat Conduction in a One-Dimensional Chain of Hard Disks with Substrate Potential. Physical Review Letters, 2004, 92, 074301.	2.9	31
61	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.	1.4	31
62	Title is missing!. Nonlinear Dynamics, 2003, 33, 1-10.	2.7	29
63	Response regimes in forced system with non-linear energy sink: quasi-periodic and random forcing. Nonlinear Dynamics, 2011, 64, 177-195.	2.7	28
64	Shear Transformation Zones: State determined or protocol dependent?. Europhysics Letters, 2015, 109, 16002.	0.7	28
65	Escape of a harmonically forced particle from an infinite-range potential well: a transient resonance. Nonlinear Dynamics, 2018, 93, 79-88.	2.7	28
66	Nonstationary heat conduction in one-dimensional chains with conserved momentum. Physical Review E, 2010, 81, 020103.	0.8	27
67	Capture into slow-invariant-manifold in the fluidâ€"structure dynamics of a sprung cylinder with a nonlinear rotator. Journal of Fluids and Structures, 2016, 63, 155-173.	1.5	26
68	Formation of Films on Water Droplets Floating on a Polymer Solution Surface. Macromolecular Chemistry and Physics, 2007, 208, 702-709.	1.1	25
69	Impulsive periodic and quasi-periodic orbits of coupled oscillators with essential stiffness nonlinearity. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 959-978.	1.7	25
70	Interaction of elastic system with snap-through vibration absorber. International Journal of Non-Linear Mechanics, 2009, 44, 81-89.	1.4	24
71	Exact solutions for discrete breathers in a forced-damped chain. Physical Review E, 2013, 87, 062911.	0.8	24
72	Forced System with Vibro-impact Energy Sink: Chaotic Strongly Modulated Responses. Procedia IUTAM, 2016, 19, 53-64.	1.2	24

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73	Normal heat conductivity in chains capable of dissociation. Europhysics Letters, 2014, 106, 34004.	0.7	23
74	Breather arrest, localization, and acoustic non-reciprocity in dissipative nonlinear lattices. Journal of the Acoustical Society of America, 2019, 146, 826-842.	0.5	23
75	Robustness of nonlinear targeted energy transfer in coupled oscillators to changes of initial conditions. Nonlinear Dynamics, 2007, 47, 377-387.	2.7	22
76	Response regimes in linear oscillator with 2DOF nonlinear energy sink under periodic forcing. Nonlinear Dynamics, 2012, 69, 1889-1902.	2.7	22
77	Dynamical behavior of a mechanical system including Saint-Venant component coupled to a non-linear energy sink. International Journal of Non-Linear Mechanics, 2014, 63, 10-18.	1.4	21
78	Oscillatory Instabilities in Frictional Granular Matter. Physical Review Letters, 2019, 123, 098003.	2.9	21
79	Vibration mitigation in partially liquid-filled vessel using passive energy absorbers. Journal of Sound and Vibration, 2017, 406, 51-73.	2.1	20
80	On interaction of vibrating beam with essentially nonlinear absorber. Meccanica, 2010, 45, 355-365.	1.2	19
81	Bifurcations of attractors in forced system with nonlinear energy sink: the effect of mass asymmetry. Nonlinear Dynamics, 2010, 59, 711-731.	2.7	19
82	Nonlinear energy sink with combined nonlinearities: Enhanced mitigation of vibrations and amplitude locking phenomenon. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2016, 230, 21-33.	1.1	19
83	Nonstationary heat conduction in one-dimensional models with substrate potential. Physical Review E, 2012, 85, 011105.	0.8	18
84	Dynamics of self-excited oscillators with neutral delay coupling. Nonlinear Dynamics, 2013, 72, 683-694.	2.7	18
85	Response regimes in equivalent mechanical model of strongly nonlinear liquid sloshing. International Journal of Non-Linear Mechanics, 2017, 94, 146-159.	1.4	18
86	Toward an Understanding of Magnetic Displacement of Floating Diamagnetic Bodies, I: Experimental Findings. Langmuir, 2018, 34, 6388-6395.	1.6	18
87	Rapid non-resonant intermodal targeted energy transfer (IMTET) caused by vibro-impact nonlinearity. Nonlinear Dynamics, 2020, 101, 2087-2106.	2.7	18
88	Mode complexity in a harmonically forced string with a local spring–damper and transitions from vibrations to waves. Journal of Sound and Vibration, 2015, 334, 282-295.	2.1	17
89	Internal resonances and dynamic responses in equivalent mechanical model of partially liquid-filled vessel. Journal of Sound and Vibration, 2016, 379, 191-212.	2.1	17
90	Energy Exchange and Localization in Essentially Nonlinear Oscillatory Systems: Canonical Formalism. Journal of Applied Mechanics, Transactions ASME, 2017, 84, .	1.1	16

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91	Basic mechanisms of escape of a harmonically forced classical particle from a potential well. Nonlinear Dynamics, 2019, 98, 2775-2792.	2.7	16
92	Effect of 1:3 resonance on the steady-state dynamics of a forced strongly nonlinear oscillator with a linear light attachment. Archive of Applied Mechanics, 2014, 84, 1189-1203.	1.2	15
93	Analytical, experimental and finite element analysis of elliptical cross-section helical spring with small helix angle under static load. International Journal of Mechanical Sciences, 2017, 130, 476-486.	3.6	15
94	Dynamics of a hybrid vibroâ€impact nonlinear energy sink. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2021, 101, e201800341.	0.9	15
95	Dynamics and stability of a discrete breather in a harmonically excited chain with vibro-impact on-site potential. Physica D: Nonlinear Phenomena, 2015, 292-293, 8-28.	1.3	14
96	Study of the displacement of floating diamagnetic bodies by a magnetic field. Surface Innovations, 2019, 7, 194-202.	1.4	14
97	Effect of asymmetric cooling of sessile droplets on orientation of the freezing tip. Journal of Colloid and Interface Science, 2022, 620, 179-186.	5.0	14
98	Hydrophilization and hydrophobic recovery in polymers obtained by casting of polymer solutions on water surface. Journal of Colloid and Interface Science, 2014, 435, 192-197.	5.0	13
99	Extreme intermodal energy transfers through vibro-impacts for highly effective and rapid blast mitigation. Communications in Nonlinear Science and Numerical Simulation, 2021, 103, 106012.	1.7	13
100	Oscillatory models of vibro-impact type for essentially non-linear systems. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 2007-2043.	1.1	12
101	Elastic Properties of Liquid Surfaces Coated with Colloidal Particles. Advances in Condensed Matter Physics, 2015, 2015, 1-6.	0.4	12
102	Response regimes in equivalent mechanical model of moderately nonlinear liquid sloshing. Nonlinear Dynamics, 2018, 92, 1517-1538.	2.7	12
103	Escape of a forced-damped particle from weakly nonlinear truncated potential well. Nonlinear Dynamics, 2021, 103, 63-78.	2.7	12
104	Solitonic mechanism of structural transition in polymerâ€"clay nanocomposites. Journal of Chemical Physics, 2003, 119, 1066-1069.	1.2	11
105	On the effect of microalloying on the mechanical properties of metallic glasses. Acta Materialia, 2014, 63, 209-215.	3.8	11
106	Discrete breathers in an array of self-excited oscillators: Exact solutions and stability. Chaos, 2016, 26, 103112.	1.0	11
107	Accelerating oscillatory fronts in a nonlinear sonic vacuum with strong nonlocal effects. Physical Review E, 2016, 93, 032216.	0.8	11
108	Noise amplification in frictional systems: Oscillatory instabilities. Physical Review E, 2019, 100, 042901.	0.8	11

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109	The Carnot engine based on the small thermodynamic system: Its efficiency and the ergodic hypothesis. American Journal of Physics, 2007, 75, 911-915.	0.3	10
110	Front propagation in a bistable system: How the energy is released. Physical Review E, 2014, 89, 050901.	0.8	10
111	Normal heat conductivity in two-dimensional scalar lattices. Europhysics Letters, 2016, 113, 24003.	0.7	10
112	Introduction to a topical issue â€˜nonlinear energy transfer in dynamical and acoustical Systems'. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170129.	1.6	10
113	Reflection of short rectangular pulses in the ideal string attached to strongly nonlinear oscillator. Chaos, Solitons and Fractals, 2000, 11, 2473-2477.	2.5	9
114	Selfâ€Assembly in Evaporated Polymer Solutions: Patterning on Two Scales. Israel Journal of Chemistry, 2007, 47, 319-328.	1.0	9
115	Response regimes of integrable damped strongly nonlinear oscillator under impact periodic forcing. Chaos, Solitons and Fractals, 2007, 32, 405-414.	2.5	9
116	Emergent interparticle interactions in thermal amorphous solids. Physical Review E, 2016, 94, 051001.	0.8	9
117	Localization in finite vibroimpact chains: Discrete breathers and multibreathers. Physical Review E, 2016, 94, 032204.	0.8	9
118	Flat bands and compactons in mechanical lattices. Physical Review E, 2017, 96, 052208.	0.8	9
119	Mixed global dynamics of forced vibro-impact oscillator with Coulomb friction. Chaos, 2019, 29, 113116.	1.0	9
120	Kapitza thermal resistance in linear and nonlinear chain models: Isotopic defect. Physical Review E, 2021, 103, 052113.	0.8	9
121	Propagation of transition front in bi-stable nondegenerate chains: Model dependence and universality. Journal of the Mechanics and Physics of Solids, 2017, 104, 144-156.	2.3	8
122	Escape dynamics of a forcedâ€damped classical particle in an infiniteâ€range potential well. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2019, 101, e201800298.	0.9	8
123	Nucleation and propagation of excitation fronts in self-excited systems. Physica D: Nonlinear Phenomena, 2020, 401, 132176.	1.3	8
124	Kapitza resistance in basic chain models with isolated defects. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126220.	0.9	7
125	The description of polyethylene crystal as a continuum with internal degrees of freedom. International Journal of Solids and Structures, 1996, 33, 1781-1798.	1.3	6
126	Mechanisms of mesoscopic patterning in evaporated polymer films deposited on tilted and vertical substrates. Journal of Materials Science, 2006, 41, 455-461.	1.7	6

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127	A generalized electrowetting equation: Its derivation and consequences. Chemical Physics Letters, 2014, 599, 139-141.	1.2	6
128	Spreading plastic failure as a mechanism for the shear modulus reduction in amorphous solids. Europhysics Letters, 2015, 110, 48001.	0.7	6
129	Nonlinear dynamics of hidden modes in a system with internal symmetry. Journal of Sound and Vibration, 2016, 377, 185-215.	2.1	6
130	Flow in a Curved Pipe With a Sudden Expansion. Journal of Fluids Engineering, Transactions of the ASME, 2016, 138, .	0.8	6
131	Propagation of transition fronts in nonlinear chains with non-degenerate on-site potentials. Chaos, 2018, 28, 023104.	1.0	6
132	Universal scaling laws for shear induced dilation in frictional granular media. Granular Matter, 2019, 21, 1.	1.1	6
133	Giant amplification of small perturbations in frictional amorphous solids. Physical Review E, 2020, 101, 062902.	0.8	6
134	Cherenkov-Like Surface Thermal Waves Emerging from Self-Propulsion of a Liquid Marble. Journal of Physical Chemistry B, 2020, 124, 695-699.	1.2	6
135	New model of plastic deformation of disordered systems. Journal of Physics Condensed Matter, 1993, 5, 1633-1642.	0.7	5
136	Method of Complex Amplitudes: Harmonically Excited Oscillator With Strong Cubic Nonlinearity. , 2003, , 2355.		5
137	Nonlinear normal modes in homogeneous system with time delays. Nonlinear Dynamics, 2008, 52, 367-376.	2.7	5
138	Essentially nonlinear vibration absorber in a parametrically excited system. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2008, 88, 573-596.	0.9	5
139	Submerged (Under-Liquid) Floating of Light Objects. Langmuir, 2013, 29, 10700-10704.	1.6	5
140	Heat conduction in a chain of dissociating particles: Effect of dimensionality. Physical Review E, 2015, 91, 032127.	0.8	5
141	Transient dynamics in strongly nonlinear systems: optimization of initial conditions on the resonant manifold. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170131.	1.6	5
142	On solid-liquid transition in plane disc systems. Journal of Physics Condensed Matter, 1999, 11, 4583-4596.	0.7	4
143	Response Regimes of Linear Oscillator Coupled to Nonlinear Energy Sink Under Periodic Forcing: Account of Detuning. , 2007, , 1591.		4
144	Forced oscillations of beam with essentially nonlinear absorber. Strength of Materials, 2009, 41, 310-317.	0.2	4

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145	Boundary for Complete Set of Attractors for Forced–Damped Essentially Nonlinear Systems. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	1.1	4
146	Heat conduction in a chain of colliding particles with a stiff repulsive potential. Physical Review E, 2016, 94, 052137.	0.8	4
147	Discrete Breathers in Forced Chains of Oscillators with Cubic Nonlinearities. Procedia IUTAM, 2016, 19, 236-243.	1.2	4
148	Energy transmission by impact in a system of two discrete oscillators. Nonlinear Dynamics, 2020, 100, 135-145.	2.7	4
149	On the escape of a resonantly excited couple of particles from a potential well. Nonlinear Dynamics, 2021, 104, 91-102.	2.7	4
150	Applicability and Limitations of Simplified Elastic Shell Theories for Vibration Modelling of Double-Walled Carbon Nanotubes. Journal of Carbon Research, 2021, 7, 61.	1.4	4
151	Analytic exploration of safe basins in a benchmark problem of forced escape. Nonlinear Dynamics, 2021, 106, 1573-1589.	2.7	4
152	A model of plastic deformation and localized vibration modes in 3D glass. Journal of Physics Condensed Matter, 1995, 7, 6993-7004.	0.7	3
153	Self–assembly of domain wall of molecular twist defects in polyethylene crystal. Macromolecular Symposia, 1996, 106, 31-39.	0.4	3
154	Linear and nonlinear excitations in a polyethylene crystal, 2. Nonhomogeneous states and nonlinear excitations. Macromolecular Theory and Simulations, 1998, 7, 591-598.	0.6	3
155	Stability of an evaporating thin polymer film. International Communications in Heat and Mass Transfer, 2006, 33, 564-570.	2.9	3
156	Quasiperiodic forced vibrations of a beam interacting with a nonlinear spring. Acta Mechanica, 2007, 192, 17-35.	1.1	3
157	Instability of a Curved Pipe Flow With a Sudden Expansion. Journal of Fluids Engineering, Transactions of the ASME, 2017, 139, .	0.8	3
158	Localization in Finite Asymmetric Vibro-Impact Chains. SIAM Journal on Applied Dynamical Systems, 2018, 17, 1961-1988.	0.7	3
159	Kinks in chains with on-site bistable nondegenerate potential: Beyond traveling waves. Physical Review E, 2018, 98, 012220.	0.8	3
160	Modal synchronization of coupled bistable van der Pol oscillators. Chaos, Solitons and Fractals, 2021, 143, 110555.	2.5	3
161	Breather arrest in a chain of damped oscillators with Hertzian contact. Wave Motion, 2021, 106, 102779.	1.0	3
162	On the applicability of the equipartition theorem. Thermal Science, 2010, 14, 855-858.	0.5	3

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163	Kapitza resistance at a domain boundary in linear and nonlinear chains. Physical Review E, 2021, 104, 054119.	0.8	3
164	Applicability and limitations of Donnell shell theory for vibration modelling of double-walled carbon nanotubes. Thin-Walled Structures, 2022, 178, 109532.	2.7	3
165	DEGENERATE BIFURCATION SCENARIOS IN THE DYNAMICS OF COUPLED OSCILLATORS WITH SYMMETRIC NONLINEARITIES. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2006, 16, 169-178.	0.7	2
166	Mechanical control of heat conductivity in molecular chains. Physical Review E, 2014, 89, 012134.	0.8	2
167	Heat conduction in diatomic chains with correlated disorder. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 145-152.	0.9	2
168	Stability of compact breathers in translationally-invariant nonlinear chains with flat dispersion bands. Chaos, Solitons and Fractals, 2020, 132, 109526.	2.5	2
169	Linear and nonlinear excitations in a polyethylene crystal, 2. Nonhomogeneous states and nonlinear excitations. , 1998, 7, 591.		2
170	Asymptotic study of damped one-dimensional oscillator with close to impact potential. , 1999, , 159-166.		2
171	Approximation of potential function in the problem of forced escape. Journal of Sound and Vibration, 2022, 526, 116765.	2.1	2
172	Resonance and energy transfer in forced vibro-impact systems with linear compliance. International Journal of Non-Linear Mechanics, 2022, 145, 104104.	1.4	2
173	From Chaos to Ordering: New Studies in the Shannon Entropy of 2D Patterns. Entropy, 2022, 24, 802.	1.1	2
174	Linear and nonlinear excitations in a polyethylene crystal, 1. Vibrational modes and linear equations. Macromolecular Theory and Simulations, 1998, 7, 579-589.	0.6	1
175	Elasticity and plasticity in stiff and flexible oligomeric glasses. Physical Review E, 2014, 90, 042315.	0.8	1
176	Gendelman <i>et al.</i> Reply:. Physical Review Letters, 2016, 117, 159802.	2.9	1
177	Internal Resonances and Dynamic Responses in Equivalent Mechanical Model of Partially Liquid-Filled Vessel. Procedia Engineering, 2017, 199, 3440-3443.	1.2	1
178	Edge states and frequency response in nonlinear forced-damped model of valve spring. Nonlinear Dynamics, 2020, 99, 661-678.	2.7	1
179	Targeted Energy Transfer in Systems with Periodic Excitations. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2010, , 53-128.	0.3	1
180	Relativistic Wetting Effects for Sessile Drops. Journal of Adhesion Science and Technology, 2011, 25, 1403-1410.	1.4	0

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181	An Eccentric Rotator as a Novel Design of a Nonlinear Energy Sink. , 2011, , .		0
182	Effect of Finite Vessel Stiffness on Transition from Two-Dimensional Liquid Sloshing to Swirling: Reduced-Order Modeling. Advanced Structured Materials, 2021, , 243-261.	0.3	0
183	Discrete Finite Systems. Foundations in Engineering Mechanics, 2011, , 13-165.	0.0	0
184	Infinite Discrete Systems. Foundations in Engineering Mechanics, 2011, , 167-236.	0.0	0
185	Shockwaves and Kinks in Exothermic Nonlinear Chains. Advanced Structured Materials, 2019, , 333-366.	0.3	0
186	Weakly Nonlinear Liquid Sloshing: Modelling and Exploration of Response Regimes. , 2020, , 187-195.		0