

# Chiara Daraio

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

218  
papers

10,288  
citations

54  
h-index

92  
g-index

230  
ext. papers

11,893  
ext. citations

6.7  
avg, IF

6.78  
L-index

#	Paper	IF	Citations
218	Mechanical cloak via data-driven aperiodic metamaterial design.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2122185119	11.5	2
217	Biological matrix composites from cultured plant cells.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2119523119	11.5	0
216	Capacitive temperature sensing via displacement amplification. <i>IEEE Sensors Journal</i> , <b>2022</b> , 1-1	4	
215	Effective continuum models for the buckling of non-periodic architected sheets that display quasi-mechanism behaviors. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2022</b> , 104934	5	3
214	Rayleigh wave propagation in nonlinear metasurfaces. <i>Journal of Sound and Vibration</i> , <b>2021</b> , 116599	3.9	2
213	Poroelastic microlattices for underwater wave focusing. <i>Extreme Mechanics Letters</i> , <b>2021</b> , 49, 101499	3.9	1
212	Prestrain-induced bandgap tuning in 3D-printed tensegrity-inspired lattice structures. <i>Extreme Mechanics Letters</i> , <b>2021</b> , 44, 101236	3.9	1
211	Nonlinear localized modes in two-dimensional hexagonally-packed magnetic lattices. <i>New Journal of Physics</i> , <b>2021</b> , 23, 043008	2.9	5
210	Robotic surfaces with reversible, spatiotemporal control for shape morphing and object manipulation. <i>Science Robotics</i> , <b>2021</b> , 6,	18.6	23
209	A micromechanical-based model of stimulus responsive liquid crystal elastomers. <i>International Journal of Solids and Structures</i> , <b>2021</b> , 219-220, 92-105	3.1	10
208	Systematic two-scale image analysis of extreme deformations in soft architected sheets. <i>International Journal of Mechanical Sciences</i> , <b>2021</b> , 194, 106205	5.5	1
207	Experimental realization of phonon demultiplexing in three-dimensions. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 091901	3.4	2
206	Structured fabrics with tunable mechanical properties. <i>Nature</i> , <b>2021</b> , 596, 238-243	50.4	36
205	Photosynthesis-assisted remodeling of three-dimensional printed structures. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	6
204	A Flexible Spiraling-Metasurface as a Versatile Haptic Interface. <i>Advanced Materials Technologies</i> , <b>2020</b> , 5, 2000181	6.8	14
203	Nonreciprocity in acoustic and elastic materials. <i>Nature Reviews Materials</i> , <b>2020</b> , 5, 667-685	73.3	92
202	Programming temporal morphing of self-actuated shells. <i>Nature Communications</i> , <b>2020</b> , 11, 237	17.4	38

201	Neural networks for trajectory evaluation in direct laser writing. <i>International Journal of Advanced Manufacturing Technology</i> , <b>2020</b> , 107, 2563-2577	3.2	3
200	Enhancement of Deep-Subwavelength Band Gaps in Flat Spiral-Based Phononic Metamaterials Using the Trampoline Phenomena. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2020</b> , 87,	2.7	6
199	Temperature-induced shape morphing of bi-metallic structures. <i>International Journal of Solids and Structures</i> , <b>2020</b> , 190, 22-32	3.1	11
198	Surface wave non-reciprocity via time-modulated metamaterials. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2020</b> , 145, 104181	5	10
197	Compliant morphing structures from twisted bulk metallic glass ribbons. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2020</b> , 145, 104129	5	4
196	Structure and Biomechanics during Xylem Vessel Transdifferentiation in. <i>Plants</i> , <b>2020</b> , 9,	4.5	5
195	Untethered soft robotic matter with passive control of shape morphing and propulsion. <i>Science Robotics</i> , <b>2019</b> , 4,	18.6	150
194	Architected lattices with adaptive energy absorption. <i>Extreme Mechanics Letters</i> , <b>2019</b> , 33, 100557	3.9	24
193	Nonreciprocal Wave Propagation in a Continuum-Based Metamaterial with Space-Time Modulated Resonators. <i>Physical Review Applied</i> , <b>2019</b> , 11,	4.3	44
192	Acoustic Non-Reciprocity in Lattices With Nonlinearity, Internal Hierarchy, and Asymmetry: Computational Study. <i>Journal of Vibration and Acoustics, Transactions of the ASME</i> , <b>2019</b> , 141,	1.6	12
191	Tuning of Surface-Acoustic-Wave Dispersion via Magnetically Modulated Contact Resonances. <i>Physical Review Applied</i> , <b>2019</b> , 11,	4.3	13
190	Characterization of Vertically Aligned Carbon Nanotube Forests Grown on Stainless Steel Surfaces. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	10
189	Bandgap widening by disorder in rainbow metamaterials. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 091903	3.4	62
188	Locally addressable material properties in 3D micro-architectures. <i>Extreme Mechanics Letters</i> , <b>2019</b> , 28, 31-36	3.9	13
187	Energy Absorption Properties of Periodic and Stochastic 3D Lattice Materials. <i>Advanced Theory and Simulations</i> , <b>2019</b> , 2, 1900081	3.5	25
186	Design and impact response of 3D-printable tensegrity-inspired structures. <i>Materials and Design</i> , <b>2019</b> , 182, 107966	8.1	15
185	Nonlinear excitations in magnetic lattices with long-range interactions. <i>New Journal of Physics</i> , <b>2019</b> , 21, 063032	2.9	12
184	Autonomous Deployment of a Solar Panel Using Elastic Origami and Distributed Shape-Memory-Polymer Actuators. <i>Physical Review Applied</i> , <b>2019</b> , 11,	4.3	51

183	Effect of glycerol on the mechanical and temperature-sensing properties of pectin films. <i>Applied Physics Letters</i> , <b>2019</b> , 115, 193702	3.4	4
182	Breathers and other time-periodic solutions in an array of cantilevers decorated with magnets. <i>Mathematics in Engineering</i> , <b>2019</b> , 1, 489-507	1.2	1
181	Metamaterials with engineered failure load and stiffness. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 23960-23965	11.5	8
180	Designing perturbative metamaterials from discrete models. <i>Nature Materials</i> , <b>2018</b> , 17, 323-328	27	83
179	Tunable, synchronized frequency down-conversion in magnetic lattices with defects. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2018</b> , 376,	3	8
178	Acoustic properties of porous microlattices from effective medium to scattering dominated regimes. <i>Journal of the Acoustical Society of America</i> , <b>2018</b> , 144, 319	2.2	7
177	Accordion-like metamaterials with tunable ultra-wide low-frequency band gaps. <i>New Journal of Physics</i> , <b>2018</b> , 20, 073051	2.9	37
176	Tuning frequency band gaps of tensegrity mass-spring chains with local and global prestress. <i>International Journal of Solids and Structures</i> , <b>2018</b> , 155, 47-56	3.1	39
175	Shape-morphing architected sheets with non-periodic cut patterns. <i>Soft Matter</i> , <b>2018</b> , 14, 9744-9749	3.6	49
174	Observation of Nonreciprocal Wave Propagation in a Dynamic Phononic Lattice. <i>Physical Review Letters</i> , <b>2018</b> , 121, 194301	7.4	94
173	Architected Lattices for Simultaneous Broadband Attenuation of Airborne Sound and Mechanical Vibrations in All Directions. <i>Physical Review Applied</i> , <b>2018</b> , 10,	4.3	32
172	Experimental realization of on-chip topological nanoelectromechanical metamaterials. <i>Nature</i> , <b>2018</b> , 564, 229-233	50.4	97
171	Electrical tuning of elastic wave propagation in nanomechanical lattices at MHz frequencies. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 1016-1020	28.7	53
170	Spiral-Based Phononic Plates: From Wave Beaming to Topological Insulators. <i>Physical Review Letters</i> , <b>2018</b> , 120, 205501	7.4	53
169	Hybridization of Guided Surface Acoustic Modes in Unconsolidated Granular Media by a Resonant Metasurface. <i>Physical Review Applied</i> , <b>2018</b> , 9,	4.3	29
168	Harnessing bistability for directional propulsion of soft, untethered robots. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 5698-5702	11.5	171
167	Design of Engineered Elastomeric Substrate for Stretchable Active Devices and Sensors. <i>Advanced Functional Materials</i> , <b>2018</b> , 28, 1705132	15.6	29
166	Highly porous microlattices as ultrathin and efficient impact absorbers. <i>International Journal of Impact Engineering</i> , <b>2018</b> , 120, 138-149	4	30

165	Biomimetic temperature-sensing layer for artificial skins. <i>Science Robotics</i> , <b>2017</b> , 2,	18.6	30
164	Deployable micro-traps to sequester motile bacteria. <i>Scientific Reports</i> , <b>2017</b> , 7, 45897	4.9	24
163	Impact absorption properties of carbon fiber reinforced bucky sponges. <i>Nanotechnology</i> , <b>2017</b> , 28, 184002	9.4	3
162	Bistable metamaterial for switching and cascading elastic vibrations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 4603-4606	11.5	90
161	Intrinsically Polar Elastic Metamaterials. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700540	24	34
160	Stress relaxation in polymeric microlattice materials. <i>Materials and Design</i> , <b>2017</b> , 130, 433-441	8.1	13
159	Reprogrammable Phononic Metasurfaces. <i>Advanced Materials</i> , <b>2017</b> , 29, 1700628	24	70
158	Nonlinear coherent structures in granular crystals. <i>Journal of Physics Condensed Matter</i> , <b>2017</b> , 29, 413003	3.8	49
157	Harnessing Photochemical Shrinkage in Direct Laser Writing for Shape Morphing of Polymer Sheets. <i>Advanced Materials</i> , <b>2017</b> , 29, 1703024	24	46
156	Complete delocalization in a defective periodic structure. <i>Physical Review E</i> , <b>2017</b> , 96, 042219	2.4	2
155	Direct observation of impact propagation and absorption in dense colloidal monolayers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 12150-12155	11.5	16
154	Wave propagation in one-dimensional microscopic granular chains. <i>Physical Review E</i> , <b>2016</b> , 94, 052907	2.4	10
153	Universal energy transport law for dissipative and diffusive phase transitions. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	24
152	Extreme stiffness tunability through the excitation of nonlinear defect modes. <i>Physical Review E</i> , <b>2016</b> , 93, 010901	2.4	7
151	Nonlinear vibrational-state excitation and piezoelectric energy conversion in harmonically driven granular chains. <i>Physical Review E</i> , <b>2016</b> , 93, 052203	2.4	7
150	Unidirectional Transition Waves in Bistable Lattices. <i>Physical Review Letters</i> , <b>2016</b> , 116, 244501	7.4	99
149	Mechanical Autonomous Stochastic Heat Engine. <i>Physical Review Letters</i> , <b>2016</b> , 117, 010602	7.4	27
148	Rate-sensitive strain localization and impact response of carbon nanotube foams with microscale heterogeneous bands. <i>Carbon</i> , <b>2016</b> , 101, 184-190	10.4	7

147	Visco-thermal effects in acoustic metamaterials: from total transmission to total reflection and high absorption. <i>New Journal of Physics</i> , <b>2016</b> , 18, 033003	2.9	64
146	Composite 3D-printed metastructures for low-frequency and broadband vibration absorption. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 8386-90	11.5	209
145	Seismic surface waves attenuation by buried resonators <b>2016</b> ,		3
144	Microlattice Metamaterials for Tailoring Ultrasonic Transmission with Elastoacoustic Hybridization. <i>Physical Review Applied</i> , <b>2016</b> , 6,	4.3	19
143	Engineered metabarrier as shield from seismic surface waves. <i>Scientific Reports</i> , <b>2016</b> , 6, 39356	4.9	120
142	Stable propagation of mechanical signals in soft media using stored elastic energy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 9722-7	11.5	162
141	Mechanical properties of parts fabricated with inkjet 3D printing through efficient experimental design. <i>Materials and Design</i> , <b>2015</b> , 86, 902-912	8.1	92
140	Wave propagation in granular chains with local resonances. <i>Physical Review E</i> , <b>2015</b> , 91, 033208	2.4	54
139	Anomalous impact and strain responses in helical carbon nanotube foams. <i>RSC Advances</i> , <b>2015</b> , 5, 29306-293119	3.7	27
138	Plant nanobionic materials with a giant temperature response mediated by pectin-Ca <sup>2+</sup> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 4541-5	11.5	32
137	Microstructures to control elasticity in 3D printing. <i>ACM Transactions on Graphics</i> , <b>2015</b> , 34, 1-13	7.6	213
136	Acoustic metamaterial for subwavelength edge detection. <i>Nature Communications</i> , <b>2015</b> , 6, 8037	17.4	70
135	Shock formation and rate effects in impacted carbon nanotube foams. <i>Carbon</i> , <b>2015</b> , 84, 390-398	10.4	24
134	Guided Impact Mitigation in 2D and 3D Granular Crystals. <i>Procedia Engineering</i> , <b>2015</b> , 103, 52-59		24
133	Solitary wave-based delamination detection in composite plates using a combined granular crystal sensor and actuator. <i>Smart Materials and Structures</i> , <b>2015</b> , 24, 125004	3.4	27
132	Granular crystals: Nonlinear dynamics meets materials engineering. <i>Physics Today</i> , <b>2015</b> , 68, 44-50	0.9	84
131	Dynamic Behavior of Vertically Aligned Carbon Nanotube Foams With Patterned Microstructure. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 1470-1479	3.5	4
130	Nonlinear resonances and energy transfer in finite granular chains. <i>Physical Review E</i> , <b>2015</b> , 91, 023208	2.4	41

129	Wide band-gap seismic metastructures. <i>Extreme Mechanics Letters</i> , <b>2015</b> , 4, 111-117	3.9	157
128	Elastic-Plastic Wave Propagation in Uniform and Periodic Granular Chains. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2015</b> , 82,	2.7	32
127	Self-Assembled Recyclable Hierarchical Bucky Aerogels. <i>Advanced Engineering Materials</i> , <b>2015</b> , 17, 990-994	3.5	5
126	Strain-rate-dependent model for the dynamic compression of elastoplastic spheres. <i>Physical Review E</i> , <b>2014</b> , 89, 032203	2.4	15
125	Wave transmission in time- and space-variant helicoidal phononic crystals. <i>Physical Review E</i> , <b>2014</b> , 90, 053201	2.4	20
124	Granular acoustic switches and logic elements. <i>Nature Communications</i> , <b>2014</b> , 5, 5311	17.4	124
123	Local to extended transitions of resonant defect modes. <i>Physical Review Letters</i> , <b>2014</b> , 113, 185503	7.4	19
122	Thin films with ultra-low thermal expansion. <i>Advanced Materials</i> , <b>2014</b> , 26, 3076-80	2.4	62
121	Wave mitigation in ordered networks of granular chains. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2014</b> , 73, 103-117	5	29
120	Traveling waves in 2D hexagonal granular crystal lattices. <i>Granular Matter</i> , <b>2014</b> , 16, 531-542	2.6	38
119	Geometry-Induced Mechanical Properties of Carbon Nanotube Foams. <i>Advanced Engineering Materials</i> , <b>2014</b> , 16, 1026-1031	3.5	7
118	An Experimental Technique for the Dynamic Characterization of Soft Complex Materials. <i>Experimental Mechanics</i> , <b>2014</b> , 54, 1319-1328	2.6	15
117	Exponential stress mitigation in structured granular composites. <i>Extreme Mechanics Letters</i> , <b>2014</b> , 1, 23-28	3.9	15
116	Multiscale Mass-Spring Model for High-Rate Compression of Vertically Aligned Carbon Nanotube Foams. <i>Journal of Applied Mechanics, Transactions ASME</i> , <b>2014</b> , 81,	2.7	12
115	Effect of fluid medium on mechanical behavior of carbon nanotube foam. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 221910	3.4	7
114	Acoustic Fresnel lenses with extraordinary transmission. <i>Applied Physics Letters</i> , <b>2014</b> , 105, 114109	3.4	80
113	Experimental realization of a nonlinear acoustic lens with a tunable focus. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 014103	3.4	52
112	Dynamics of periodic mechanical structures containing bistable elastic elements: from elastic to solitary wave propagation. <i>Physical Review E</i> , <b>2014</b> , 90, 023204	2.4	89



111	Solitary waves in a chain of repelling magnets. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 184901	2.5	35
110	Damped-driven granular chains: an ideal playground for dark breathers and multibreathers. <i>Physical Review E</i> , <b>2014</b> , 89, 032924	2.4	41
109	Site-Specific Diagnostic Evaluation of Hard Biological Tissues Using Solitary Waves. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2014</b> , 185-189	0.3	2
108	Fabrication and Characterization of Bi-metallic, Structured Films with Ultra-low Thermal Expansion. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2014</b> , 85-88	0.3	
107	Pressure-activated microsyringe composite scaffold of poly(L-lactic acid) and carbon nanotubes for bone tissue engineering. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 129, 528-536	2.9	29
106	Thin and Thermally Stable Periodic Metastructures. <i>Experimental Mechanics</i> , <b>2013</b> , 53, 1735-1742	2.6	34
105	Directional Wave Propagation in a Highly Nonlinear Square Packing of Spheres. <i>Experimental Mechanics</i> , <b>2013</b> , 53, 327-337	2.6	55
104	Frequency- and Amplitude-Dependent Transmission of Stress Waves in Curved One-Dimensional Granular Crystals Composed of Diatomic Particles. <i>Experimental Mechanics</i> , <b>2013</b> , 53, 469-483	2.6	17
103	Effect of morphology on the strain recovery of vertically aligned carbon nanotube arrays: An in situ study. <i>Carbon</i> , <b>2013</b> , 63, 303-316	10.4	18
102	Granular metamaterials for vibration mitigation. <i>Journal of Applied Physics</i> , <b>2013</b> , 114, 093514	2.5	51
101	Control of microstructural heterogeneities in carbon nanotube foams. <i>Carbon</i> , <b>2013</b> , 52, 193-200	10.4	8
100	Directed ratchet transport in granular chains. <i>Physical Review E</i> , <b>2013</b> , 88, 052202	2.4	11
99	Dark breathers in granular crystals. <i>Physical Review E</i> , <b>2013</b> , 87, 042202	2.4	22
98	Equation-free Computations as DDDAS Protocols in the Study of Engineered Granular Crystals. <i>Procedia Computer Science</i> , <b>2013</b> , 18, 2638-2642	1.6	1
97	Energy equipartition in two-dimensional granular systems with spherical intruders. <i>Physical Review E</i> , <b>2013</b> , 87,	2.4	31
96	Interaction of traveling waves with mass-with-mass defects within a Hertzian chain. <i>Physical Review E</i> , <b>2013</b> , 87, 042911	2.4	27
95	Rate-independent dissipation and loading direction effects in compressed carbon nanotube arrays. <i>Nanotechnology</i> , <b>2013</b> , 24, 255707	3.4	18
94	Propagation of highly nonlinear solitary waves in a curved granular chain. <i>Granular Matter</i> , <b>2013</b> , 15, 357-366	3.6	14



93	Modeling microscale instabilities in compressed carbon nanotube bundles using multistable spring models. <i>Composite Structures</i> , <b>2013</b> , 96, 745-750	5.3	6
92	Highly nonlinear solitary waves in chains of hollow spherical particles. <i>Granular Matter</i> , <b>2013</b> , 15, 149-155.	5.6	24
91	Frequency bands of strongly nonlinear homogeneous granular systems. <i>Physical Review E</i> , <b>2013</b> , 88, 012206	20.6	22
90	Multiscale Mass-Spring Models of Carbon Nanotube Arrays Accounting for Mullins-like Behavior and Permanent Deformation. <i>Multiscale Modeling and Simulation</i> , <b>2013</b> , 11, 545-565	1.8	4
89	Hysteresis loops and multi-stability: From periodic orbits to chaotic dynamics (and back) in diatomic granular crystals. <i>Europhysics Letters</i> , <b>2013</b> , 101, 44003	1.6	23
88	Nonlinear Periodic Phononic Structures and Granular Crystals. <i>Springer Series in Solid-state Sciences</i> , <b>2013</b> , 217-251	0.4	23
87	Dynamics of Multilayered Structures of VACNTs with Metallic Inter-layers. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2013</b> , 463-465	0.3	
86	Interaction of highly nonlinear solitary waves with thin plates. <i>International Journal of Solids and Structures</i> , <b>2012</b> , 49, 1463-1471	3.1	41
85	Solitary waves on tensegrity lattices. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2012</b> , 60, 1137-1144	5	88
84	Highly nonlinear solitary waves in chains of cylindrical particles. <i>Granular Matter</i> , <b>2012</b> , 14, 63-69	2.6	48
83	Tunable phononic crystals based on cylindrical Hertzian contact. <i>Applied Physics Letters</i> , <b>2012</b> , 101, 171903	3.4	23
82	Effects of weak disorder on stress-wave anisotropy in centered square nonlinear granular crystals. <i>Physical Review E</i> , <b>2012</b> , 86, 031305	2.4	21
81	Dynamic Behavior of Periodic Structures Consisting of Vertically Aligned Carbon Nanotubes and Rigid Interlayers		1
80	Continuum limits of bistable spring models of carbon nanotube arrays accounting for material damage. <i>Mechanics Research Communications</i> , <b>2012</b> , 45, 58-63	2.2	28
79	Monitoring the hydration of cement using highly nonlinear solitary waves. <i>NDT and E International</i> , <b>2012</b> , 52, 76-85	4.1	64
78	Stress wave anisotropy in centered square highly nonlinear granular systems. <i>Physical Review Letters</i> , <b>2012</b> , 108, 214301	7.4	63
77	Amplitude-dependent attenuation of compressive waves in curved granular crystals constrained by elastic guides. <i>Acta Mechanica</i> , <b>2012</b> , 223, 549-562	2.1	27
76	In situ synthesis of metal oxides in carbon nanotube arrays and mechanical properties of the resulting structures. <i>Carbon</i> , <b>2012</b> , 50, 4432-4440	10.4	10

75	Site-specific quantification of bone quality using highly nonlinear solitary waves. <i>Journal of Biomechanical Engineering</i> , <b>2012</b> , 134, 101001	2.1	34
74	Nondestructive evaluation of orthopaedic implant stability in THA using highly nonlinear solitary waves. <i>Smart Materials and Structures</i> , <b>2012</b> , 21, 012002	3.4	42
73	Wave propagation in square granular crystals with spherical interstitial intruders. <i>Physical Review E</i> , <b>2012</b> , 86, 061306	2.4	19
72	Defect modes in one-dimensional granular crystals. <i>Physical Review E</i> , <b>2012</b> , 85, 037601	2.4	29
71	Highly nonlinear solitary wave propagation in Y-shaped granular crystals with variable branch angles. <i>Physical Review E</i> , <b>2012</b> , 85, 036602	2.4	33
70	Mesoscopic approach to granular crystal dynamics. <i>Physical Review E</i> , <b>2012</b> , 85, 016604	2.4	13
69	Nonlinear viscoelasticity of freestanding and polymer-anchored vertically aligned carbon nanotube foams. <i>Journal of Applied Physics</i> , <b>2012</b> , 111, 074314	2.5	15
68	Synthesis and Patterning Methods for Nanostructures Useful for Biological Applications. <i>Fundamental Biomedical Technologies</i> , <b>2012</b> , 27-44		16
67	Bifurcation-based acoustic switching and rectification. <i>Nature Materials</i> , <b>2011</b> , 10, 665-8	27	408
66	Highly nonlinear solitary waves in chains of ellipsoidal particles. <i>Physical Review E</i> , <b>2011</b> , 84, 026610	2.4	20
65	Synthesis and characterization of carbon nanotube-polymer multilayer structures. <i>ACS Nano</i> , <b>2011</b> , 5, 7713-21	16.7	44
64	Tailoring the microstructure and mechanical properties of arrays of aligned multiwall carbon nanotubes by utilizing different hydrogen concentrations during synthesis. <i>Carbon</i> , <b>2011</b> , 49, 3631-3638 <sup>10.4</sup>		47
63	Modeling and in situ identification of material parameters for layered structures based on carbon nanotube arrays. <i>Composite Structures</i> , <b>2011</b> , 93, 3013-3018	5.3	45
62	Multiscale mass-spring models of carbon nanotube foams. <i>Journal of the Mechanics and Physics of Solids</i> , <b>2011</b> , 59, 89-102	5	58
61	Effect of density variation and non-covalent functionalization on the compressive behavior of carbon nanotube arrays. <i>Nanotechnology</i> , <b>2011</b> , 22, 425705	3.4	26
60	Interaction of highly nonlinear solitary waves with linear elastic media. <i>Physical Review E</i> , <b>2011</b> , 83, 046604	2.4	72
59	Actuators for the generation of highly nonlinear solitary waves. <i>Review of Scientific Instruments</i> , <b>2011</b> , 82, 034902	1.7	23
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