Roderic Lakes

List of Publications by Year
in descending order

184 papers	12,831 citations	30070 54 h-index	27406 106 g-index
189 all docs	189 docs citations	189 times ranked	9461 citing authors

#	Article	IF	Citations
1	Poisson's ratio and modern materials. Nature Materials, 2011, 10, 823-837.	27.5	1,612
2	Materials with structural hierarchy. Nature, 1993, 361, 511-515.	27.8	1,197
3	Extreme damping in composite materials with negative-stiffness inclusions. Nature, 2001, 410, 565-567.	27.8	422
4	Advances in negative Poisson's ratio materials. Advanced Materials, 1993, 5, 293-296.	21.0	418
5	Fracture toughness of re-entrant foam materials with a negative Poisson's ratio: experiment and analysis. International Journal of Fracture, 1996, 80, 73-83.	2.2	337
6	Negative Poisson's ratio polymeric and metallic foams. Journal of Materials Science, 1988, 23, 4406-4414.	3.7	332
7	Negative-Poisson's-Ratio Materials: Auxetic Solids. Annual Review of Materials Research, 2017, 47, 63-81.	9.3	299
8	Nonlinear Ligament Viscoelasticity. Annals of Biomedical Engineering, 2001, 29, 908-914.	2.5	222
9	Extreme Damping in Composite Materials with a Negative Stiffness Phase. Physical Review Letters, 2001, 86, 2897-2900.	7.8	201
10	Cellular solids with tunable positive or negative thermal expansion of unbounded magnitude. Applied Physics Letters, 2007, 90, 221905.	3.3	188
11	Viscoelastic properties of wet cortical boneâ€”I. Torsional and biaxial studies. Journal of Biomechanics, 1979, 12, 657-678.	2.1	164
12	Noncentrosymmetry in micropolar elasticity. International Journal of Engineering Science, 1982, 20, 1161-1167.	5.0	162
13	Viscoelastic measurement techniques. Review of Scientific Instruments, 2004, 75, 797-810.	1.3	162
14	On Poissonâ€™s Ratio in Linearly Viscoelastic Solids. Journal of Elasticity, 2006, 85, 45-63.	1.9	162
15	Composite Materials with Viscoelastic Stiffness Greater Than Diamond. Science, 2007, 315, 620-622.	12.6	160
16	Cosserat micromechanics of human bone: Strain redistribution by a hydration sensitive constituent. Journal of Biomechanics, 1986, 19, 385-397.	2.1	149
17	Strong re-entrant cellular structures with negative Poissonâ€™s ratio. Journal of Materials Science, 2018, 53, 3493-3499.	3.7	149
18	Size effects due to Cosserat elasticity and surface damage in closed-cell polymethacrylimide foam. Journal of Materials Science, 1994, 29, 6413-6419.	3.7	148

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19	Extreme damping in compliant composites with a negative-stiffness phase. Philosophical Magazine Letters, 2001, 81, 95-100.	1.2	141
20	Application of nonlinear viscoelastic models to describe ligament behavior. Biomechanics and Modeling in Mechanobiology, 2002, 1, 45-57.	2.8	133
21	Enhanced dielectric and piezoelectric properties of xBaZrO3-(1â^'x)BaTiO3 ceramics. Journal of Applied Physics, 2012, 111, .	2.5	121
22	Chiral threeâ€dimensional isotropic lattices with negative Poisson's ratio. Physica Status Solidi (B): Basic Research, 2016, 253, 1243-1251.	1.5	121
23	Design Considerations for Materials with Negative Poissonâ€™s Ratios. Journal of Mechanical Design, Transactions of the ASME, 1993, 115, 696-700.	2.9	119
24	Elastic and viscoelastic behavior of chiral materials. International Journal of Mechanical Sciences, 2001, 43, 1579-1589.	6.7	117
25	Chiral three-dimensional lattices with tunable Poissonâ€™s ratio. Smart Materials and Structures, 2016, 25, 054005.	3.5	117
26	Controllable thermal expansion of large magnitude in chiral negative Poisson's ratio lattices. Physica Status Solidi (B): Basic Research, 2015, 252, 1431-1434.	1.5	115
27	Viscoelastic properties of wet cortical boneâ€”II. Relaxation mechanisms. Journal of Biomechanics, 1979, 12, 679-687.	2.1	107
28	Extreme stiffness systems due to negative stiffness elements. American Journal of Physics, 2004, 72, 40-50.	0.7	99
29	Viscoelastic Relaxation and Recovery of Tendon. Annals of Biomedical Engineering, 2009, 37, 1131-1140.	2.5	99
30	Composites with Inclusions of Negative Bulk Modulus: Extreme Damping and Negative Poissonâ€™s Ratio. Journal of Composite Materials, 2005, 39, 1645-1657.	2.4	96
31	Strong, Ductile Magnesium-Zinc Nanocomposites. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 3038-3045.	2.2	93
32	Viscoelastic Dissipation in Compact Bone: Implications for Stress-Induced Fluid Flow in Bone. Journal of Biomechanical Engineering, 2000, 122, 166-172.	1.3	90
33	Nonlinear Viscoelasticity in Rabbit Medial Collateral Ligament. Annals of Biomedical Engineering, 2004, 32, 306-312.	2.5	90
34	Resonant ultrasound spectroscopy for measurement of mechanical damping: Comparison with broadband viscoelastic spectroscopy. Review of Scientific Instruments, 2000, 71, 2855-2861.	1.3	89
35	Interrelation of Creep and Relaxation: A Modeling Approach for Ligaments. Journal of Biomechanical Engineering, 1999, 121, 612-615.	1.3	81
36	Micromechanically Based Poroelastic Modeling of Fluid Flow in Haversian Bone. Journal of Biomechanical Engineering, 2003, 125, 25-37.	1.3	81

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37	Mechanical Instabilities of Individual Multiwalled Carbon Nanotubes under Cyclic Axial Compression. Nano Letters, 2007, 7, 1149-1154.	9.1	76
38	Advanced damper with high stiffness and high hysteresis damping based on negative structural stiffness. International Journal of Solids and Structures, 2013, 50, 2416-2423.	2.7	76
39	Transient Study of Couple Stress Effects in Compact Bone: Torsion. Journal of Biomechanical Engineering, 1981, 103, 275-279.	1.3	75
40	Composite Materials Which Exhibit High Stiffness and High Viscoelastic Damping. Journal of Composite Materials, 1995, 29, 1823-1833.	2.4	73
41	Stiff, strong, zero thermal expansion lattices via material hierarchy. Composite Structures, 2014, 107, 654-663.	5.8	69
42	Negative Poisson's ratio polyethylene foams. Journal of Materials Science, 2001, 36, 5885-5893.	3.7	66
43	Fracture mechanics of bone with short cracks. Journal of Biomechanics, 1990, 23, 967-975.	2.1	65
44	On the torsional properties of single osteons. Journal of Biomechanics, 1995, 28, 1409-1410.	2.1	65
45	Extreme thermal expansion, piezoelectricity, and other coupled field properties in composites with a negative stiffness phase. Journal of Applied Physics, 2001, 90, 6458-6465.	2.5	65
46	Modeling Deformation-Induced Fluid Flow in Cortical Bone?s Canalicular?Lacunar System. Annals of Biomedical Engineering, 2005, 33, 7-25.	2.5	65
47	Experimental Cosserat elasticity in open-cell polymer foam. Philosophical Magazine, 2016, 96, 93-111.	1.6	65
48	Stress relaxation and recovery in tendon and ligament: Experiment and modeling. Biorheology, 2010, 47, 1-14.	0.4	64
49	Cubic negative stiffness lattice structure for energy absorption: Numerical and experimental studies. International Journal of Solids and Structures, 2019, 178-179, 127-135.	2.7	61
50	Dynamical Study of Couple Stress Effects in Human Compact Bone. Journal of Biomechanical Engineering, 1982, 104, 6-11.	1.3	60
51	Earlywood and latewood elastic properties in loblolly pine. Holzforschung, 2005, 59, 531-538.	1.9	60
52	Viscoelastic properties of wet cortical boneâ€”III. A non-linear constitutive equation. Journal of Biomechanics, 1979, 12, 689-698.	2.1	58
53	Softening of bulk modulus and negative Poisson ratio in barium titanate ceramic near the Curie point. Philosophical Magazine Letters, 2010, 90, 23-33.	1.2	58
54	Isothermal viscoelastic properties of PMMA and LDPE over 11 decades of frequency and time: a test of timeâ€“temperature superposition. Rheologica Acta, 2008, 47, 777-786.	2.4	55

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55	Strong Cosserat Elasticity in a Transversely Isotropic Polymer Lattice. Physical Review Letters, 2018, 120, 065501.	7.8	55
56	Numerical analysis on mechanical behaviors of hierarchical cellular structures with negative Poissonâ€™s ratio. Smart Materials and Structures, 2017, 26, 025014.	3.5	53
57	Apparatus for measuring viscoelastic properties over ten decades: Refinements. Review of Scientific Instruments, 1995, 66, 5292-5297.	1.3	52
58	Negative incremental bulk modulus in foams. Philosophical Magazine Letters, 2006, 86, 651-659.	1.2	52
59	Quantification of collagen organization using fractal dimensions and Fourier transforms. Acta Histochemica, 2012, 114, 140-144.	1.8	52
60	Anisotropic polyurethane foam with Poisson'sratio greater than 1. Journal of Materials Science, 1997, 32, 2397-2401.	3.7	51
61	Size effects in the elasticity and viscoelasticity of bone. Biomechanics and Modeling in Mechanobiology, 2003, 1, 295-301.	2.8	50
62	Influence of Cell Size on Re-Entrant Transformation of Negative Poisson's Ratio Reticulated Polyurethane Foams. Frontiers in Forests and Global Change, 2001, 20, 373-385.	1.1	48
63	Bending of a Cosserat Elastic Bar of Square Cross Section: Theory and Experiment. Journal of Applied Mechanics, Transactions ASME, 2015, 82, .	2.2	48
64	A unit cell structure with tunable Poisson's ratio from positive to negative. Materials Letters, 2016, 164, 456-459.	2.6	48
65	Stable extremely-high-damping discrete viscoelastic systems due to negative stiffness elements. Applied Physics Letters, 2004, 84, 4451-4453.	3.3	46
66	Stiff lattices with zero thermal expansion and enhanced stiffness via rib cross section optimization. International Journal of Mechanics and Materials in Design, 2013, 9, 213-225.	3.0	46
67	Effect of Age and Exercise on the Viscoelastic Properties of Rat Tail Tendon. Annals of Biomedical Engineering, 2013, 41, 1120-1128.	2.5	46
68	Design of an Artificial Intervertebral Disc Exhibiting a Negative Poisson's Ratio. Frontiers in Forests and Global Change, 2005, 24, 127-138.	1.1	45
69	A bi-material structure with Poisson's ratio tunable from positive to negative via temperature control. Materials Letters, 2016, 181, 285-288.	2.6	45
70	Viscoelastic behaviour in indium-tin alloys over a wide range of frequencies and times. Philosophical Magazine Letters, 1996, 74, 227-232.	1.2	42
71	Creep of conventional and microfilled dental composites. Journal of Biomedical Materials Research Part B, 1984, 18, 15-24.	3.1	41
72	Cosserat elasticity of negative Poissonâ€™s ratio foam: experiment. Smart Materials and Structures, 2016, 25, 054004.	3.5	41

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73	Stability of elastic material with negative stiffness and negative Poisson's ratio. Physica Status Solidi (B): Basic Research, 2007, 244, 1008-1026.	1.5	40
74	Interrelation of creep and relaxation for nonlinearly viscoelastic materials: application to ligament and metal. Rheologica Acta, 2003, 42, 557-568.	2.4	39
75	Column dampers with negative stiffness: high damping at small amplitude. Smart Materials and Structures, 2013, 22, 084013.	3.5	39
76	A Broadband Viscoelastic Spectroscopic Study of Bovine Bone: Implications for Fluid Flow. Annals of Biomedical Engineering, 2001, 29, 719-728.	2.5	38
77	Physical meaning of elastic constants in Cosserat, void, and microstretch elasticity. Journal of Mechanics of Materials and Structures, 2016, 11, 217-229.	0.6	38
78	Apparatus for Determining the Viscoelastic Properties of Materials Over Ten Decades of Frequency and Time. Journal of Rheology, 1989, 33, 1231-1249.	2.6	37
79	Viscoelastic properties of bamboo. Journal of Materials Science, 1997, 32, 2693-2697.	3.7	37
80	The properties of copper foams with negative Poisson's ratio via resonant ultrasound spectroscopy. Physica Status Solidi (B): Basic Research, 2013, 250, 1983-1987.	1.5	37
81	Negative Poissonâ€™s ratio in 2D Voronoi cellular solids by biaxial compression: a numerical study. Journal of Materials Science, 2016, 51, 7029-7037.	3.7	37
82	Characterization of hot extruded Mg/SiC nanocomposites fabricated by casting. Journal of Materials Science, 2011, 46, 2991-2997.	3.7	36
83	Stiff lattices with zero thermal expansion. Journal of Intelligent Material Systems and Structures, 2012, 23, 1263-1268.	2.5	36
84	Negative stiffness-induced extreme viscoelastic mechanical properties: stability and dynamics. Philosophical Magazine, 2004, 84, 3785-3801.	1.6	35
85	Composites and Metamaterials. , 2020, , .		35
86	Creep of posterior dental composites. Journal of Biomedical Materials Research Part B, 1985, 19, 85-95.	3.1	34
87	Stiff square structure with a negative Poisson's ratio. Materials Letters, 2017, 188, 149-151.	2.6	34
88	Negative stiffness and enhanced damping of individual multiwalled carbon nanotubes. Physical Review B, 2008, 77, .	3.2	33
89	Interrelationships among the viscoelastic functions for anisotropic solids: Application to calcified tissues and related systems. Journal of Biomechanics, 1974, 7, 259-270.	2.1	31
90	Temperature insensitive negative Poisson's ratios in isotropic alloys near a morphotropic phase boundary. Applied Physics Letters, 2012, 101, .	3.3	31

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91	Response : Negative Poisson's Ratio Materials. Science, 1987, 238, 551-551.	12.6	31
92	Threeâ€Dimensional Stiff Cellular Structures With Negative Poisson's Ratio. Physica Status Solidi (B): Basic Research, 2017, 254, 1600785.	1.5	30
93	Experimental Study of Elastic Constants of a Dense Foam with Weak Cosserat Coupling. Journal of Elasticity, 2019, 137, 101-115.	1.9	30
94	Holographic study of conventional and negative Poisson's ratio metallic foams: elasticity, yield and micro-deformation. Journal of Materials Science, 1991, 26, 5397-5402.	3.7	29
95	Constitutive equations for ligament and other soft tissue: evaluation by experiment. Acta Mechanica, 2009, 205, 23-33.	2.1	29
96	Damage Mechanics of Porcine Flexor Tendon: Mechanical Evaluation and Modeling. Annals of Biomedical Engineering, 2012, 40, 1692-1707.	2.5	29
97	Wood Moisture-Induced Swelling at the Cellular Scaleâ€"Ab Intra. Forests, 2019, 10, 996.	2.1	29
98	Investigation of bovine bone by resonant ultrasound spectroscopy and transmission ultrasound. Biomechanics and Modeling in Mechanobiology, 2002, 1, 165-175.	2.8	28
99	Internal friction due to negative stiffness in the indiumâ€"thallium martensitic phase transformation. Philosophical Magazine, 2006, 86, 4285-4303.	1.6	26
100	Study of Bolt Load Loss in Bolted Aluminum Joints. Journal of Engineering Materials and Technology, Transactions of the ASME, 2007, 129, 48-54.	1.4	26
101	Stability of negative stiffness viscoelastic systems. Quarterly of Applied Mathematics, 2004, 63, 34-55.	0.7	25
102	Holographic screening method for microelastic solids. Journal of Materials Science, 1985, 20, 2882-2888.	3.7	24
103	Resonant ultrasound spectroscopy in shear mode. Review of Scientific Instruments, 2003, 74, 1371-1373.	1.3	23
104	Viscoelastic characterization of selected foods over an extended frequency range. Rheologica Acta, 2006, 46, 131-142.	2.4	23
105	Stiff, strong zero thermal expansion lattices via the Poisson effect. Journal of Materials Research, 2013, 28, 2499-2508.	2.6	23
106	Cosserat elastic lattices. Meccanica, 2019, 54, 1983-1999.	2.0	22
107	Anelastic anomalies and negative Poissonâ€™s ratio in tetragonal BaTiO3 ceramics. Applied Physics Letters, 2010, 96, 141904.	3.3	21
108	The two-dimensional elasticity of a chiral hinge lattice metamaterial. International Journal of Solids and Structures, 2018, 141-142, 254-263.	2.7	21

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109	Saint-Venant End Effects for Materials With Negative Poissonâ€™s Ratios. Journal of Applied Mechanics, Transactions ASME, 1992, 59, 744-746.	2.2	20
110	Torsion of a Cosserat elastic bar with square cross section: theory and experiment. Zeitschrift Fur Angewandte Mathematik Und Physik, 2018, 69, 1.	1.4	20
111	Simulations of thermoelastic triangular cell lattices with bonded joints by finite element analysis. Extreme Mechanics Letters, 2017, 12, 101-107.	4.1	18
112	Extreme Cosserat elastic cube structure with large magnitude of negative Poissonâ€™s ratio. Journal of Mechanics of Materials and Structures, 2018, 13, 93-101.	0.6	18
113	Large stiffness thermoformed open cell foams with auxeticity. Applied Materials Today, 2020, 20, 100775.	4.3	18
114	Holographic study of conventional and negative Poisson's ratio metallic foams: elasticity, yield and micro-deformation. Journal of Materials Science, 1991, 26, 5397-5402.	3.7	17
115	Analysis of High Volume Fraction Irregular Particulate Damping Composites. Journal of Engineering Materials and Technology, Transactions of the ASME, 2002, 124, 174-178.	1.4	17
116	Shear load transfer in high and low stress tendons. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 45, 109-120.	3.1	17
117	Stability of Cosserat solids: size effects, ellipticity and waves. Journal of Mechanics of Materials and Structures, 2018, 13, 83-91.	0.6	17
118	Anelastic instability in composites with negative stiffness inclusions. Philosophical Magazine Letters, 2004, 84, 803-810.	1.2	16
119	Buckling Mode Jump at Very Close Load Values in Unattached Flat-End Columns: Theory and Experiment. Journal of Applied Mechanics, Transactions ASME, 2014, 81, .	2.2	16
120	Temperature and Substrate Dependence of Piezoelectric Sensitivity for PVDF Films. Ferroelectrics, 2015, 481, 1-9.	0.6	16
121	Nonclassical Chiral Elasticity of the Gyroid Lattice. Physical Review Letters, 2020, 125, 205502.	7.8	16
122	Viscoelastic Properties of Cortical Bone. , 2001, , 11-1-11-15.		16
123	Creep Behavior of Al-Si Die-Cast Alloys. Journal of Engineering Materials and Technology, Transactions of the ASME, 2004, 126, 378-383.	1.4	15
124	Anomalies in stiffness and damping of a 2D discrete viscoelastic system due to negative stiffness components. Thin Solid Films, 2007, 515, 3171-3178.	1.8	15
125	Chiral behavior in rat tail tendon fascicles. Journal of Biomechanics, 2017, 64, 206-211.	2.1	15
126	Generalized solution for predicting relaxation from creep in soft tissue: Application to ligament. International Journal of Mechanical Sciences, 2006, 48, 662-673.	6.7	14

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127	Observation of Cosserat Elastic Effects in a Tetragonal Negative Poisson's Ratio Lattice. Physica Status Solidi (B): Basic Research, 2017, 254, 1600840.	1.5	14
128	Observation of Squeezeâ€“Twist Coupling in a Chiral 3D Isotropic Lattice. Physica Status Solidi (B): Basic Research, 2020, 257, 1900140.	1.5	14
129	Characterization of high-loss viscoelastic elastomers. Journal of Materials Science, 1988, 23, 3660-3665.	3.7	13
130	Viscoelastic sigmoid anomalies in BaZrO₃â€“BaTiO₃ near phase transformations due to negative stiffness heterogeneity. Journal of Materials Research, 2011, 26, 1446-1452.	2.6	13
131	Shear loads induce cellular damage in tendon fascicles. Journal of Biomechanics, 2015, 48, 3299-3305.	2.1	13
132	Strong Cosserat elastic effects in a unidirectional composite. Zeitschrift Fur Angewandte Mathematik Und Physik, 2017, 68, 1.	1.4	13
133	Two-dimensional viscoelastic discrete triangular system with negative-stiffness components. Philosophical Magazine Letters, 2006, 86, 99-112.	1.2	12
134	Flexible Cube Tilt Lattice with Anisotropic Cosserat Effects and Negative Poisson's Ratio. Physica Status Solidi (B): Basic Research, 2019, 256, 1800512.	1.5	12
135	Cosserat Effects in Achiral and Chiral Cubic Lattices. Journal of Applied Mechanics, Transactions ASME, 2019, 86, .	2.2	12
136	Viscoelastic behaviour in indium alloys: InSn, InBi, InCd and InSnCd. Journal of Materials Science, 1996, 31, 6577-6581.	3.7	11
137	Viscoelastic behavior of 80In15Pb5Ag and 50Sn50Pb alloys: Experiment and modeling. Journal of Applied Physics, 2000, 87, 1135-1140.	2.5	11
138	Internal Friction Study of a Composite with a Negative Stiffness Constituent. Journal of Materials Research, 2005, 20, 2523-2533.	2.6	11
139	A sensitive piezoelectric composite lattice: Experiment. Physica Status Solidi (B): Basic Research, 2014, 251, 349-353.	1.5	11
140	Moisture ingression in honeycomb core sandwich panels. Journal of Materials Engineering and Performance, 1997, 6, 732-736.	2.5	9
141	The viscoelastic behavior of Î²-In3Sn and the nature of the high-temperature background. Journal of Materials Science, 2003, 38, 2747-2754.	3.7	9
142	Stable singular or negative stiffness systems in the presence of energy flux. Philosophical Magazine Letters, 2012, 92, 226-234.	1.2	9
143	Piezoelectric composite lattices with high sensitivity. Philosophical Magazine Letters, 2014, 94, 37-44.	1.2	9
144	Softening of Cosserat sensitivity in a foam: Warp effects. International Journal of Mechanical Sciences, 2021, 192, 106125.	6.7	9

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145	Dielectric and viscoelastic properties of KNbO3 doped BaTiO3. Journal of Applied Physics, 2011, 109, .	2.5	8
146	The properties of copper foams with negative Poisson's ratio via resonant ultrasound spectroscopy. Physica Status Solidi (B): Basic Research, 2013, 250, .	1.5	8
147	Poisson's Ratio and Modulus of Gyroid Lattices. Physica Status Solidi (B): Basic Research, 2021, 258, 2100081.	1.5	8
148	Creep and creep recovery of cast aluminum alloys. Mechanics of Time-Dependent Materials, 2009, 13, 303-315.	4.4	7
149	Mechanical Compromise of Partially Lacerated Flexor Tendons. Journal of Biomechanical Engineering, 2013, 135, 011001.	1.3	7
150	Third-rank piezoelectricity in isotropic chiral solids. Applied Physics Letters, 2015, 106, .	3.3	7
151	Viscoelastic properties of fused filament fabrication parts. Additive Manufacturing, 2019, 28, 704-710.	3.0	7
152	Note: Measurement of Normal Stresses. Journal of Rheology, 1971, 15, 189-192.	0.6	6
153	Viscoelastic, dielectric, and thermal properties of BaTiO₃â€3%KNbO₃. Physica Status Solidi (B): Basic Research, 2011, 248, 158-166.	1.5	6
154	Enhancement in piezoelectric sensitivity via negative structural stiffness. Journal of Intelligent Material Systems and Structures, 2016, 27, 2568-2573.	2.5	6
155	Extreme anelastic responses in Zn80Al20 matrix composite materials containing BaTiO3 inclusion. Scripta Materialia, 2011, 65, 288-291.	5.2	5
156	Giant anelastic responses in (BaZrO ₃ -ZnO)-BaTiO ₃ composite materials. Europhysics Letters, 2011, 93, 66003.	2.0	5
157	Time-Dependent Ultrasound Echo Changes Occur in Tendon During Viscoelastic Testing. Journal of Biomechanical Engineering, 2012, 134, 111006.	1.3	5
158	Resonant ultrasound spectroscopy of cubes over the full range of Poisson's ratio. Review of Scientific Instruments, 2012, 83, 113902.	1.3	5
159	The resonant ultrasound spectroscopy method for determining the Poisson×³s ratio of spheres over the full range. Materials Letters, 2015, 143, 31-34.	2.6	5
160	Lumped negative stiffness damper for absorption of flexural waves in a rod. Smart Materials and Structures, 2017, 26, 045022.	3.5	5
161	Creep and Relaxation in Ligament: Theory, Methods and Experiment. , 2006, , 379-397.		4
162	Broadband viscoelastic spectroscopy measurement of mechanical loss and modulus of polycrystalline BaTiO₃ vs. temperature and frequency. Physica Status Solidi (B): Basic Research, 2008, 245, 2422-2432.	1.5	4

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163	Broadband Viscoelastic Spectroscopy: A New Technique for Characterizing Rheological Behavior of Solid Foods. International Journal of Food Properties, 2009, 12, 102-113.	3.0	4
164	Sharp low frequency dissipative effects in tetragonal BaTiO3 ceramics. Journal of Applied Physics, 2010, 107, 023514.	2.5	4
165	Reduced warp in torsion of reticulated foam due to Cosserat elasticity: experiment. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	1.4	4
166	Observation of the retina using the tandem scanning confocal microscope. Scanning, 1996, 18, 362-366.	1.5	3
167	Reciprocity failure in piezoelectric polymer composite. Physica Scripta, 2015, 90, 085807.	2.5	3
168	Extremal hinged lattices do not obey the theory of elasticity. Zeitschrift Fur Angewandte Mathematik Und Physik, 2022, 73, 1.	1.4	3
169	Cosserat shape effects in the bending of foams. Mechanics of Advanced Materials and Structures, 0, , 1-5.	2.6	3
170	Prediction of anelastic loss in piezoelectric solids: Effect of geometry. Applied Physics Letters, 1979, 34, 729-730.	3.3	2
171	Development of stress/strain curves for 80In15Pb5Ag. Journal of Electronic Materials, 1999, 28, 1084-1087.	2.2	2
172	Development of a low-cycle fatigue life curve for 80In15Pb5Ag. Journal of Electronic Materials, 2000, 29, 1084-1089.	2.2	2
173	Application of Nonlinear Superposition to Creep and Relaxation of Commercial Die-Casting Aluminum Alloys. Mechanics of Time-Dependent Materials, 2004, 8, 385-402.	4.4	2
174	Static and dynamic effects of chirality in dielectric media. Modern Physics Letters B, 2016, 30, 1650319.	1.9	2
175	Constitutive Relations. , 0, , 14-54.		1
176	Giant enhancement in effective piezoelectric sensitivity by pyroelectric coupling. Europhysics Letters, 2012, 98, 47001.	2.0	1
177	Measurement of the stiffening parameter for stimuli-responsive hydrogels. Acta Mechanica, 2018, 229, 3715-3725.	2.1	1
178	Experimental tests of rotation sensitivity in Cosserat elasticity and in gravitation. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	1
179	Non-linear properties of metallic cellular materials with a negative Poisson's ratio. Journal of Materials Science, 1992, 27, 5375-5381.	3.7	1
180	Logarithmic pulse generator for long-term creep and relaxation testing. Review of Scientific Instruments, 2005, 76, 056102.	1.3	0

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181	Viscoelastic Stress and Deformation Analysis. , 0, , 111-144.		0
182	The effects of composition, temperature, and annealing on the rheological properties of InZn in situ composites. Rheologica Acta, 2016, 55, 335-341.	2.4	0
183	The corner element in classical elasticity and Cosserat elasticity. Journal of Mechanics of Materials and Structures, 2021, 16, 225-235.	0.6	0
184	Viscoelastic damping and wave cut off of titanium alloy and lattices. Advanced Engineering Materials, 0, , .	3.5	0