Martin Ostoja-Starzewski

List of Publications by Citations

252 papers	6,465 citations	39 h-index	73 g-index
278 ext. papers	7,359 ext. citations	2.8 avg, IF	6.59 L-index

#	Paper	IF	Citations
252	Universal elastic anisotropy index. *Physical Review Letters*, **2008**, 101, 055504	7.4	1259
251	Material spatial randomness: From statistical to representative volume element. *Probabilistic Engineering Mechanics*, **2006**, 21, 112-132	2.6	380
250	Lattice models in micromechanics. *Applied Mechanics Reviews*, **2002**, 55, 35-60	8.6	337
249	Random field models of heterogeneous materials. *International Journal of Solids and Structures*, **1998**, 35, 2429-2455	3.1	202
248	Large eddy simulation of a sheet/cloud cavitation on a NACA0015 hydrofoil. *Applied Mathematical Modelling*, **2007**, 31, 417-447	4.5	125
247	Thermoelasticity with Finite Wave Speeds **2009**,		125
246	Microstructural Randomness and Scaling in Mechanics of Materials		110
245	Scale-dependent homogenization of random composites as micropolar continua. *European Journal of Mechanics, A/Solids*, **2015**, 49, 396-407	3.7	101
244	On the Size of RVE in Finite Elasticity of Random Composites. *Journal of Elasticity*, **2006**, 85, 153-173	1.5	99
243	Microstructural Randomness Versus Representative Volume Element in Thermomechanics. *Journal of Applied Mechanics, Transactions ASME*, **2002**, 69, 25-35	2.7	94
242	Fractal solids, product measures and fractional wave equations. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2009**, 465, 2521-2536	2.4	82
241	Lithic raw material physical properties and use-wear accrual. *Journal of Archaeological Science*, **2007** , 34, 711-722	2.9	73
240	Spring network models in elasticity and fracture of composites and polycrystals. *Computational Materials Science*, **1996**, 7, 82-93	3.2	73
239	A micromechanically based couple-stress model of an elastic two-phase composite. *International Journal of Solids and Structures*, **2001**, 38, 1721-1735	3.1	70
238	MRI-based finite element modeling of head trauma: spherically focusing shear waves. *Acta Mechanica*, **2010**, 213, 155-167	2.1	69
237	Apparent thermal conductivity of periodic two-dimensional composites. *Computational Materials Science*, **2002**, 25, 329-338	3.2	69
236	Bounding of effective thermal conductivities of multiscale materials by essential and natural boundary conditions. *Physical Review B*, **1996**, 54, 278-285	3.3	66

235	Scale and boundary conditions effects in elastic properties of random composites. *Acta Mechanica*, **2001**, 148, 63-78	2.1	64
234	Scale-dependent bounds on effective elastoplastic response of random composites. *Journal of the Mechanics and Physics of Solids*, **2001**, 49, 655-673	5	64
233	Thermoelastic Damping in Nanomechanical Resonators with Finite Wave Speeds. *Journal of Thermal Stresses*, **2006**, 29, 201-216	2.2	61
232	Scaling function, anisotropy and the size of RVE in elastic random polycrystals. *Journal of the Mechanics and Physics of Solids*, **2008**, 56, 2773-2791	5	60
231	Linear elasticity of planar delaunay networks: Random field characterization of effective moduli. *Acta Mechanica*, **1989**, 80, 61-80	2.1	59
230	Couple-stress moduli and characteristics length of a two-phase composite. *Mechanics Research Communications*, **1999**, 26, 387-396	2.2	58
229	Brittle intergranular failure in 2D microstructures: Experiments and computer simulations. *Acta Materialia*, **1996**, 44, 4003-4018	8.4	58
228	Stochastic finite elements as a bridge between random material microstructure and global response. *Computer Methods in Applied Mechanics and Engineering*, **1999**, 168, 35-49	5.7	52
227	Scale effects in plasticity of random media: status and challenges. *International Journal of Plasticity*, **2005**, 21, 1119-1160	7.6	50
226	Influence of Random Geometry on Effective Properties and Damage Formation In Composite Materials. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **1994**, 116, 384-391	1.8	50
225	On the size of representative volume element for Darcy law in random media. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2006**, 462, 2949-2963	2.4	49
224	Apparent elastic and elastoplastic behavior of periodic composites. *International Journal of Solids and Structures*, **2002**, 39, 199-212	3.1	49
223	Extremum and variational principles for elastic and inelastic media with fractal geometries. *Acta Mechanica*, **2009**, 205, 161-170	2.1	47
222	Micromechanics as a Basis of Continuum Random Fields. *Applied Mechanics Reviews*, **1994**, 47, S221-S230	8.6	47
221	A micromechanically based couple-stress model of an elastic orthotropic two-phase composite. *European Journal of Mechanics, A/Solids*, **2002**, 21, 465-481	3.7	46
220	Towards Thermoelasticity of Fractal Media. *Journal of Thermal Stresses*, **2007**, 30, 889-896	2.2	45
219	Scale effects in materials with random distributions of needles and cracks. *Mechanics of Materials*, **1999**, 31, 883-893	3.3	44
218	Micropolar continuum mechanics of fractal media. *International Journal of Engineering Science*, **2011**, 49, 1302-1310	5.7	43

217	From fractal media to continuum mechanics. *ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik*, **2014**, 94, 373-401	1	42
216	Waves in Fractal Media. *Journal of Elasticity*, **2011**, 104, 187-204	1.5	41
215	Towards thermomechanics of fractal media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2007**, 58, 1085-1096	1.6	40
214	Random Fiber Networks and Special Elastic Orthotropy of Paper. *Journal of Elasticity*, **2000**, 60, 131-149	1.5	40
213	Comparisons of the Size of the Representative Volume Element in Elastic, Plastic, Thermoelastic, and Permeable Random Microstructures. *International Journal for Multiscale Computational Engineering*, **2007**, 5, 73-82	2.4	39
212	Finite Element Methods in Human Head Impact Simulations: A Review. *Annals of Biomedical Engineering*, **2019**, 47, 1832-1854	4.7	38
211	Elasto-plasticity of paper. *International Journal of Plasticity*, **2003**, 19, 2083-2098	7.6	37
210	Fracture of random matrix-inclusion composites: scale effects and statistics. *International Journal of Solids and Structures*, **1998**, 35, 2537-2566	3.1	35
209	Micromechanics as a basis of random elastic continuum approximations. *Probabilistic Engineering Mechanics*, **1993**, 8, 107-114	2.6	35
208	Composites with functionally graded interphases: Mesocontinuum concept and effective transverse conductivity. *Acta Materialia*, **1996**, 44, 2057-2066	8.4	34
207	Effect of filler alignment on percolation in polymer nanocomposites using tunneling-percolation model. *Journal of Applied Physics*, **2016**, 120, 045105	2.5	34
206	Scaling to RVE in Random Media. *Advances in Applied Mechanics*, **2016**, 111-211	10	33
205	Damage patterns and constitutive response of random matrix-inclusion composites. *Engineering Fracture Mechanics*, **1997**, 58, 581-606	4.2	33
204	Particle modeling of random crack patterns in epoxy plates. *Probabilistic Engineering Mechanics*, **2006**, 21, 267-275	2.6	31
203	Modeling of bone at a single lamella level. *Biomechanics and Modeling in Mechanobiology*, **2004**, 3, 67-74	3.8	31
202	Linear elasticity of planar delaunay networks. Part II: Voigt and Reuss bounds, and modification for centroids. *Acta Mechanica*, **1990**, 84, 47-61	2.1	31
201	A derivation of the Maxwell–Cattaneo equation from the free energy and dissipation potentials. *International Journal of Engineering Science*, **2009**, 47, 807-810	5.7	30
200	Continuum mechanics models of fractal porous media: Integral relations and extremum principles. *Journal of Mechanics of Materials and Structures*, **2009**, 4, 901-912	1.2	28

199	A master-slave manipulator for excavation and construction tasks. *Robotics and Autonomous Systems*, **1989**, 4, 333-337	3.5	28
198	Tunneling-percolation behavior of polydisperse prolate and oblate ellipsoids. *Journal of Applied Physics*, **2015**, 118, 154306	2.5	27
197	Particulate random composites homogenized as micropolar materials. *Meccanica*, **2014**, 49, 2719-2727	2.1	27
196	A Random Field Formulation of Hooke Law in All Elasticity Classes. *Journal of Elasticity*, **2017**, 127, 269-302	1.9	25
195	Particle sieving in a random fiber network. *Applied Mathematical Modelling*, **2000**, 24, 523-534	4.5	25
194	Dynamics of a Flexible Cylinder in Subsonic Axial Flow. *AIAA Journal*, **1981**, 19, 1467-1475	2.1	25
193	Finite Element Solutions to the Bending Stiffness of a Single-Layered Helically Wound Cable With Internal Friction. *Journal of Applied Mechanics, Transactions ASME*, **2016**, 83,	2.7	24
192	Electromagnetism on anisotropic fractal media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2013**, 64, 381-390	1.6	24
191	Thermo-poromechanics of fractal media. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190288	3	23
190	Macrohomogeneity condition in dynamics of micropolar media. *Archive of Applied Mechanics*, **2011**, 81, 899-906	2.2	23
189	Fractal materials, beams, and fracture mechanics. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2009**, 60, 1194-1205	1.6	23
188	Particle modeling of dynamic fragmentation-I: theoretical considerations. *Computational Materials Science*, **2005**, 33, 429-442	3.2	22
187	Micromechanics as a Basis of Stochastic Finite Elements and Differences: An Overview. *Applied Mechanics Reviews*, **1993**, 46, S136-S147	8.6	22
186	Simulation of elastic wave propagation using cellular automata and peridynamics, and comparison with experiments. *Wave Motion*, **2016**, 60, 73-83	1.8	21
185	Towards Stochastic Continuum Thermodynamics. *Journal of Non-Equilibrium Thermodynamics*, **2002**, 27,	3.8	21
184	Elastic-plastic-brittle transitions and avalanches in disordered media. *Physical Review Letters*, **2014**, 112, 045503	7.4	20
183	Spectral finite elements for vibrating rods and beams with random field properties. *Journal of Sound and Vibration*, **2003**, 268, 779-797	3.9	20
182	Stiffness tensor random fields through upscaling of planar random materials. *Probabilistic Engineering Mechanics*, **2013**, 34, 131-156	2.6	19

181	On turbulence in fractal porous media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2008**, 59, 1111-1117	1.6	19
180	Random fields and processes in mechanics of granular materials. *Mechanics of Materials*, **1993**, 16, 55-64	3.3	19
179	Mesoscale conductivity and scaling function in aggregates of cubic, trigonal, hexagonal, and tetragonal crystals. *Physical Review B*, **2008**, 77,	3.3	18
178	Experimental and computational study of shielding effectiveness of polycarbonate carbon nanocomposites. *Journal of Applied Physics*, **2016**, 120, 145103	2.5	18
177	Continuum mechanics beyond the second law of thermodynamics. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2014**, 470, 20140531	2.4	17
176	Scaling function in conductivity of planar random checkerboards. *Computational Materials Science*, **2013**, 79, 252-261	3.2	17
175	Towards scaling laws in random polycrystals. *International Journal of Engineering Science*, **2009**, 47, 1322-1330	5.7	17
174	Mesoscale bounds in finite elasticity and thermoelasticity of random composites. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2006**, 462, 1167-1180	2.4	17
173	Micromechanically based stochastic finite elements: length scales and anisotropy. *Probabilistic Engineering Mechanics*, **1996**, 11, 205-214	2.6	17
172	A mechanisms-based model for dynamic behavior and fracture of geomaterials. *International Journal of Rock Mechanics and Minings Sciences*, **2014**, 72, 277-282	6	16
171	Statistically isotropic tensor random fields: Correlation structures. *Mathematics and Mechanics of Complex Systems*, **2014**, 2, 209-231	3.2	15
170	Damage maps of disordered composites: A spring network approach. *International Journal of Fracture*, **1996**, 75, R51-R57	2.3	15
169	Damage in a Random Microstructure: Size Effects, Fractals, and Entropy Maximization. *Applied Mechanics Reviews*, **1989**, 42, S202-S212	8.6	15
168	On the objective rate of heat and stress fluxes. Connection with micro/nano-scale heat convection. *Discrete and Continuous Dynamical Systems - Series B*, **2011**, 15, 991-998	1.3	15
167	Bernoulli-Euler beams with random field properties under random field loads: fractal and Hurst effects. *Archive of Applied Mechanics*, **2014**, 84, 1595-1626	2.2	14
166	Random formation, inelastic response and scale effects in paper. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2003**, 361, 965-85	3	14
165	Graph approach to the constitutive modelling of heterogeneous solids. *Mechanics Research Communications*, **1987**, 14, 255-262	2.2	14
164	Tensor-Valued Random Fields for Continuum Physics **2019**,		14

163	Heat conduction in porcine muscle and blood: experiments and time-fractional telegraph equation model. *Journal of the Royal Society Interface*, **2019**, 16, 20190726	4.1	14
162	On the wave propagation in isotropic fractal media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2011**, 62, 1117-1129	1.6	13
161	Particle modeling of dynamic fragmentation□: Fracture in single- and multi-phase materials. *Computational Materials Science*, **2006**, 35, 116-133	3.2	13
160	Stochastic dynamics of acceleration waves in random media. *Mechanics of Materials*, **2006**, 38, 840-848	3.3	13
159	A Statistically-Based Homogenization Approach for Particle Random Composites as Micropolar Continua. *Advanced Structured Materials*, **2016**, 425-441	0.6	13
158	Peristatic solutions for finite one- and two-dimensional systems. *Mathematics and Mechanics of Solids*, **2017**, 22, 1639-1653	2.3	12
157	Shear-thinning of molecular fluids in Couette flow. *Physics of Fluids*, **2017**, 29, 023103	4.4	12
156	Comment on "Hydrodynamics of fractal continuum flow" and "Map of fluid flow in fractal porous medium into fractal continuum flow". *Physical Review E*, **2013**, 88, 057001	2.4	12
155	On the scaling from statistical to representative volume element in thermoelasticity of random materials. *Networks and Heterogeneous Media*, **2006**, 1, 259-274	1.6	12
154	Shielding effectiveness and bandgaps of interpenetrating phase composites based on the Schwarz Primitive surface. *Journal of Applied Physics*, **2018**, 124, 175102	2.5	12
153	Second law violations, continuum mechanics, and permeability. *Continuum Mechanics and Thermodynamics*, **2016**, 28, 489-501	3.5	11
152	Elastic Rods and Shear Beams with Random Field Properties under Random Field Loads: Fractal and Hurst Effects. *Journal of Engineering Mechanics - ASCE*, **2015**, 141, 04015002	2.4	11
151	Mesoscale bounds in viscoelasticity of random composites. *Mechanics Research Communications*, **2015**, 68, 98-104	2.2	11
150	Tunneling-percolation model of multicomponent nanocomposites. *Journal of Applied Physics*, **2018**, 123, 085104	2.5	11
149	Spectral expansions of homogeneous and isotropic tensor-valued random fields. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2016**, 67, 1	1.6	11
148	Local and nonlocal material models, spatial randomness, and impact loading. *Archive of Applied Mechanics*, **2016**, 86, 39-58	2.2	11
147	Electric-field-induced displacement of a charged spherical colloid embedded in an elastic Brinkman medium. *Physical Review E*, **2008**, 77, 011404	2.4	11
146	Scale-Dependent Homogenization of Inelastic Random Polycrystals. *Journal of Applied Mechanics, Transactions ASME*, **2008**, 75,	2.7	11

145	Yield of random elastoplastic materials. *Journal of Mechanics of Materials and Structures*, **2006**, 1, 1055-1073	0.7	11
144	Stochastic finite elements: Where is the physics?. *Theoretical and Applied Mechanics*, **2011**, 38, 379-396	0.4	11
143	Scaling of slip avalanches in sheared amorphous materials based on large-scale atomistic simulations. *Physical Review E*, **2017**, 95, 032902	2.4	10
142	Effect of cerebrospinal fluid modeling on spherically convergent shear waves during blunt head trauma. *International Journal for Numerical Methods in Biomedical Engineering*, **2017**, 33, e2881	2.6	10
141	Elastic–plastic transition in three-dimensional random materials: massively parallel simulations, fractal morphogenesis and scaling functions. *Philosophical Magazine*, **2012**, 92, 2733-2758	1.6	10
140	Universal material property in conductivity of planar random microstructures. *Physical Review B*, **2000**, 62, 2980-2982	3.3	10
139	Ignaczak equation of elastodynamics. *Mathematics and Mechanics of Solids*, **2019**, 24, 3674-3713	2.3	10
138	Harmonic oscillator driven by random processes having fractal and Hurst effects. *Acta Mechanica*, **2015**, 226, 3653-3672	2.1	9
137	Impact force and moment problems on random mass density fields with fractal and Hurst effects. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190591	3	9
136	Fractal Solids, Product Measures and Continuum Mechanics. *Advances in Mechanics and Mathematics*, **2010**, 315-323	0.2	9
135	Powerless fluxes and forces, and change of scale in irreversible thermodynamics. *Journal of Physics A: Mathematical and Theoretical*, **2011**, 44, 335002	2	9
134	On the geodesic property of strain field patterns in elastoplastic composites. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2008**, 464, 1217-1227	2.4	9
133	On elastic and viscoelastic helices. *Philosophical Magazine*, **2005**, 85, 4213-4230	1.6	9
132	THERMOELASTIC WAVES IN A HELIX WITH PARABOLIC OR HYPERBOLIC HEAT CONDUCTION. *Journal of Thermal Stresses*, **2003**, 26, 1205-1219	2.2	9
131	Spectral finite element of a helix. *Mechanics Research Communications*, **2005**, 32, 147-152	2.2	9
130	The cauchy and characteristic boundary value problems of random rigid-perfectly plastic media. *International Journal of Solids and Structures*, **1996**, 33, 1119-1136	3.1	9
129	Mechanics of Random Materials **2001**, 93-161		9
128	Scaling and bounds in thermal conductivity of planar Gaussian correlated microstructures. *Journal of Applied Physics*, **2015**, 117, 104301	2.5	8

127	Fractal planetary rings: Energy inequalities and random field model. *International Journal of Modern Physics B*, **2017**, 31, 1750236	1.1	8
126	Acceleration waves on random fields with fractal and Hurst effects. *Wave Motion*, **2017**, 74, 134-150	1.8	8
125	Acoustic-elastodynamic interaction in isotropic fractal media. *European Physical Journal: Special Topics*, **2013**, 222, 1951-1960	2.3	8
124	On Thermodynamic Restrictions in Peridynamics. *Journal of Applied Mechanics, Transactions ASME*, **2013**, 80,	2.7	8
123	Fractal Geometric Characterization of Functionally Graded Materials. *Journal of Nanomechanics & Micromechanics*, **2013**, 3, 04013001		8
122	A numerical study of plume dispersion motivated by a mesoscale atmospheric flow over a complex terrain. *Applied Mathematical Modelling*, **2004**, 28, 957-981	4.5	8
121	Linear elasticity of planar Delaunay networks. III: Self-consistent approximations. *Acta Mechanica*, **1995**, 110, 57-72	2.1	8
120	Wavefront propagation in a class of random microstructures□. bilinear elastic grains. *International Journal of Non-Linear Mechanics*, **1991**, 26, 655-669	2.8	8
119	Bounds on constitutive response for a class of random material microstructures. *Computers and Structures*, **1990**, 37, 163-167	4.5	8
118	Transient Waves in a Class of Random Heterogeneous Media. *Applied Mechanics Reviews*, **1991**, 44, S199-S209		8
117	Lamb's problem on random mass density fields with fractal and Hurst effects. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2016**, 472, 20160638	2.4	8
116	Frequency-dependent scaling from mesoscale to macroscale in viscoelastic random composites. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2016**, 472, 20150801	2.4	8
115	Elastodynamics in micropolar fractal solids. *Mathematics and Mechanics of Solids*, **2014**, 19, 117-134	2.3	7
114	Hybrid Lattice Particle Modelling Approach for Polymeric Materials Subject to High Strain Rate Loads. *Polymers*, **2010**, 2, 3-30	4.5	7
113	Fractal solids, product measures and fractional wave equations. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2011**, 467, 1214-1214	2.4	7
112	Micromechanics model of ice fields□: Monte Carlo simulation. *Pure and Applied Geophysics*, **1990**, 133, 229-249	2.2	7
111	Tensor random fields in conductivity and classical or microcontinuum theories. *Mathematics and Mechanics of Solids*, **2015**, 20, 418-432	2.3	6
110	Edges of Saturn's rings are fractal. *SpringerPlus*, **2015**, 4, 158		6

109	Modeling and Simulation of Head Trauma Utilizing White Matter Properties from Magnetic Resonance Elastography. *Modelling*, **2020**, 1, 225-241	2.5	6
108	Does a Fractal Microstructure Require a Fractional Viscoelastic Model?. *Fractal and Fractional*, **2018**, 2, 12	3	6
107	Electrical properties of random checkerboards at finite scales. *AIP Advances*, **2015**, 5, 017131	1.5	6
106	Responses of first-order dynamical systems to Matérn, Cauchy, and Dagum excitations. *Mathematics and Mechanics of Complex Systems*, **2015**, 3, 27-41	3.2	6
105	Fracture model for cemented aggregates. *AIP Advances*, **2013**, 3, 012119	1.5	6
104	Fractals in elastic-hardening plastic materials. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2010**, 466, 603-621	2.4	6
103	Fractal Pattern Formation at Elastic-Plastic Transition in Heterogeneous Materials. *Journal of Applied Mechanics, Transactions ASME*, **2010**, 77,	2.7	6
102	Scale Effects in Infinitesimal and Finite Thermoelasticity of Random Composites. *Journal of Thermal Stresses*, **2007**, 30, 587-603	2.2	6
101	Friction and scratch resistance of polyamide 6 modified with ionomeric ethylene/methacrylic acid copolymer. *Journal of Applied Polymer Science*, **2004**, 91, 3866-3870	2.9	6
100	From Lattices and Composites to Micropolar Continua. *ICASE/LaRC Interdisciplinary Series in Science and Engineering*, **2004**, 175-212		6
99	On the distance to blow-up of acceleration waves in random media. *Continuum Mechanics and Thermodynamics*, **2003**, 15, 21-32	3.5	6
98	Scale and boundary conditions effects in elasticity and damage mechanics of random composites. *Studies in Applied Mechanics*, **1998**, 46, 65-80		6
97	Plastic Flow of Random Media: Micromechanics, Markov Property and Slip-Lines. *Applied Mechanics Reviews*, **1992**, 45, S75-S81	8.6	6
96	A generalization of thermodynamic orthogonality to random media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **1990**, 41, 701-712	1.6	6
95	Fracture of Brittle Microbeams. *Journal of Applied Mechanics, Transactions ASME*, **2004**, 71, 424-427	2.7	6
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93	On streamwise velocity spectra models with fractal and long-memory effects. *Physics of Fluids*, **2021**, 33, 035116	4.4	6
92	Continuum mechanics versus violations of the second law of thermodynamics. *Journal of Thermal Stresses*, **2016**, 39, 734-749	2.2	6

91	Elastodynamics of a multilayered transversely isotropic half-space due to the rigid motion of foundation. *Wave Motion*, **2019**, 88, 106-128	1.8	6
90	Stochastic characteristics and Second Law violations of atomic fluids in Couette flow. *Physica A: Statistical Mechanics and Its Applications*, **2018**, 496, 90-107	3.3	5
89	Morphological study of elastic-plastic-brittle transitions in disordered media. *Physical Review E*, **2014**, 90, 042405	2.4	5
88	SCALING AND HOMOGENIZATION IN SPATIALLY RANDOM COMPOSITES. *Computational and Experimental Methods in Structures*, **2013**, 61-101		5
87	Dissipation Function in Hyperbolic Thermoelasticity. *Journal of Thermal Stresses*, **2011**, 34, 68-74	2.2	5
86	Stress and couple-stress invariance in non-centrosymmetric micropolar planar elasticity. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2011**, 467, 2896-2911	2.4	5
85	Influence of topography on the Phoenix CO2 dome: a computational study. *Atmospheric Science Letters*, **2004**, 5, 103-107	2.4	5
84	ON THE REDUCTION OF CONSTANTS IN PLANAR COSSERAT ELASTICITY WITH EIGENSTRAINS AND EIGENCURVATURES. *Journal of Thermal Stresses*, **2003**, 26, 1221-1228	2.2	5
83	On the critical amplitudes of acceleration wave to shock wave transition in white noise random media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **1993**, 44, 865-879	1.6	5
82	Wavefront propagation in discrete random media via stochastic huygens' minor principle. *Journal of the Franklin Institute*, **1989**, 326, 281-293	4	5
81	Continuum Homogenization of Fractal Media **2019**, 905-935		5
80	Telegraph equation: two types of harmonic waves, a discontinuity wave, and a spectral finite element. *Acta Mechanica*, **2019**, 230, 1725-1743	2.1	5
79	Dynamic interaction of plates in an inhomogeneous transversely isotropic space weakened by a crack. *ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik*, **2017**, 97, 1338-1357	1	4
78	Electrostatic and magnetostatic properties of random materials. *Physical Review E*, **2019**, 99, 022120	2.4	4
77	Scale-Dependent Homogenization of Random Hyperbolic Thermoelastic Solids. *Journal of Elasticity*, **2015**, 118, 243-250	1.5	4
76	On the dilatational wave motion in anisotropic fractal solids. *Mathematics and Computers in Simulation*, **2016**, 127, 114-130	3.3	4
75	On the Hydrodynamic Stability of a Lennard-Jones Molecular Fluid. *Journal of Statistical Physics*, **2019**, 177, 61-77	1.5	4
74	Fractal Shear Bands at Elastic-Plastic Transitions in Random Mohr-Coulomb Materials. *Journal of Engineering Mechanics - ASCE*, **2014**, 140, 04014072	2.4	4

73	Electromagnetic characteristics of systems of prolate and oblate ellipsoids. *Journal of Applied Physics*, **2017**, 122, 185101	2.5	4
72	Shock waves in random viscoelastic media. *Acta Mechanica*, **2012**, 223, 1777-1788	2.1	4
71	Quantifying the Anisotropy in Biological Materials. *Journal of Applied Mechanics, Transactions ASME*, **2011**, 78,	2.7	4
70	Wavefront propagation in a class of random microstructures□. Non-Linear elastic grains. *International Journal of Non-Linear Mechanics*, **1995**, 30, 771-781	2.8	4
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68	Anti-plane shear Lamb's problem on random mass density fields with fractal and Hurst effects. *Evolution Equations and Control Theory*, **2019**, 8, 231-246	2	4
67	Violations of the Clausius-Duhem inequality in Couette flows of granular media. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2020**, 476, 20200207	2.4	4
66	Doppler effect described by the solutions of the Cattaneo telegraph equation. *Acta Mechanica*, **2021**, 232, 725-740	2.1	4
65	Representing stochastic damage evolution in disordered media as a jump Markov process using the fiber bundle model. *International Journal of Damage Mechanics*, **2017**, 26, 147-161	3	3
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62	Fractals in thermoelastoplastic materials. *Journal of Mechanics of Materials and Structures*, **2011**, 6, 351-359	1.2	3
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