Martin Ostoja-Starzewski

List of Publications by Year in Descending Order

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	MRE-based modeling of head trauma **2022**, 139-152		
251	Fractional telegraph equation under moving time-harmonic impact. *International Journal of Heat and Mass Transfer*, **2022**, 182, 121958	4.9	0
250	Lattice and Particle Modeling of Damage Phenomena **2022**, 1143-1179		
249	A convolutional-iterative solver for nonlinear dynamical systems. *Applied Mathematics Letters*, **2022** , 130, 107990	3.5	0
248	Spontaneous Negative Entropy Increments in Granular Flows. *Journal of Applied Mechanics, Transactions ASME*, **2021**, 88, 031010	2.7	2
247	Mach Fronts in Random Media with Fractal and Hurst Effects. *Fractal and Fractional*, **2021**, 5, 229	3	1
246	Spatial Behaviour of Solutions of the Moore-Gibson-Thompson Equation. *Journal of Mathematical Fluid Mechanics*, **2021**, 23, 1	1.4	3
245	On streamwise velocity spectra models with fractal and long-memory effects. *Physics of Fluids*, **2021**, 33, 035116	4.4	6
244	Averaging of turbulent micropolar media: turbulent couple-stress, heat flux, and energy. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2021**, 72, 1	1.6	1
243	Convolution finite element method: an alternative approach for time integration and time-marching algorithms. *Computational Mechanics*, **2021**, 68, 667-696	4	0
242	Doppler effect described by the solutions of the Cattaneo telegraph equation. *Acta Mechanica*, **2021**, 232, 725-740	2.1	4
241	Scaling in Anti-Plane Elasticity on Random Shear Modulus Fields with Fractal and Hurst Effects. *Fractal and Fractional*, **2021**, 5, 255	3	1
240	Modeling and Simulation of Head Trauma Utilizing White Matter Properties from Magnetic Resonance Elastography. *Modelling*, **2020**, 1, 225-241	2.5	6
239	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
238	IBVP for electromagneto-elastic materials: variational approach. *Mathematics and Mechanics of Complex Systems*, **2020**, 8, 47-67	3.2	1
237	Thermo-poromechanics of fractal media. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2020**, 378, 20190288	3	23
236	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

235	RVE Problem: Mathematical aspects and related stochastic mechanics. *International Journal of Engineering Science*, **2020**, 146, 103169	5.7	6
234	Fracture of beams with random field properties: Fractal and Hurst effects. *International Journal of Solids and Structures*, **2020**, 191-192, 243-253	3.1	3
233	Towards stochastic continuum damage mechanics. *International Journal of Solids and Structures*, **2020**, 184, 202-210	3.1	1
232	Finite Element Methods in Human Head Impact Simulations: A Review. *Annals of Biomedical Engineering*, **2019**, 47, 1832-1854	4.7	38
231	Mechanical and thermal couplings in helical strands*. *Journal of Thermal Stresses*, **2019**, 42, 185-212	2.2	2
230	Electrostatic and magnetostatic properties of random materials. *Physical Review E*, **2019**, 99, 022120	2.4	4
229	On the Hydrodynamic Stability of a Lennard-Jones Molecular Fluid. *Journal of Statistical Physics*, **2019**, 177, 61-77	1.5	4
228	Stress field formulation of linear electro-magneto-elastic materials. *Mathematics and Mechanics of Solids*, **2019**, 24, 3806-3822	2.3	2
227	Thermoelastic waves in helical strands with Maxwell–Cattaneo heat conduction. *Theoretical and Applied Mechanics Letters*, **2019**, 9, 302-307	1.8	2
226	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
225	Continuum Homogenization of Fractal Media **2019**, 905-935		5
224	Tensor-Valued Random Fields for Continuum Physics **2019**,		14
223	Elastodynamics of a multilayered transversely isotropic half-space due to the rigid motion of foundation. *Wave Motion*, **2019**, 88, 106-128	1.8	6
222	Telegraph equation: two types of harmonic waves, a discontinuity wave, and a spectral finite element. *Acta Mechanica*, **2019**, 230, 1725-1743	2.1	5
221	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
220	Ignaczak equation of elastodynamics. *Mathematics and Mechanics of Solids*, **2019**, 24, 3674-3713	2.3	10
219	Tunneling-percolation model of multicomponent nanocomposites. *Journal of Applied Physics*, **2018**, 123, 085104	2.5	11
218	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

217	Towards Continuum Mechanics with Spontaneous Violations of the Second Law of Thermodynamics. *Advanced Structured Materials*, **2018**, 633-640	0.6	
216	Does a Fractal Microstructure Require a Fractional Viscoelastic Model?. *Fractal and Fractional*, **2018**, 2, 12	3	6
215	Random Fields Related to the Symmetry Classes of Second-Order Symmetric Tensors. *Springer Proceedings in Mathematics and Statistics*, **2018**, 173-185	0.2	1
214	Three-dimensional vibrations of a helically wound cable modeled as a Timoshenko rod. *Acta Mechanica*, **2018**, 229, 677-695	2.1	3
213	Oldroyd fluids with hyperbolic heat conduction. *Mechanics Research Communications*, **2018**, 93, 108-113	2.2	2
212	Shielding effectiveness and bandgaps of interpenetrating phase composites based on the Schwarz Primitive surface. *Journal of Applied Physics*, **2018**, 124, 175102	2.5	12
211	Peristatic solutions for finite one- and two-dimensional systems. *Mathematics and Mechanics of Solids*, **2017**, 22, 1639-1653	2.3	12
210	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
209	Shear-thinning of molecular fluids in Couette flow. *Physics of Fluids*, **2017**, 29, 023103	4.4	12
208	Scaling of slip avalanches in sheared amorphous materials based on large-scale atomistic simulations. *Physical Review E*, **2017**, 95, 032902	2.4	10
207	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
206	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
205	Continuum Physics with Violations of the Second Law of Thermodynamics. *Advanced Structured Materials*, **2017**, 181-192	0.6	1
204	Fractal planetary rings: Energy inequalities and random field model. *International Journal of Modern Physics B*, **2017**, 31, 1750236	1.1	8
203	Acceleration waves on random fields with fractal and Hurst effects. *Wave Motion*, **2017**, 74, 134-150	1.8	8
202	Electromagnetic characteristics of systems of prolate and oblate ellipsoids. *Journal of Applied Physics*, **2017**, 122, 185101	2.5	4
201	A Random Field Formulation of Hooke's Law in All Elasticity Classes. *Journal of Elasticity*, **2017**, 127, 269-302	1.9	25
200	Admitting Spontaneous Violations of the Second Law in Continuum Thermomechanics. *Entropy*, **2017**, 19, 78	2.8	2

199	Second law violations, continuum mechanics, and permeability. *Continuum Mechanics and Thermodynamics*, **2016**, 28, 489-501	3.5	11
198	On the dilatational wave motion in anisotropic fractal solids. *Mathematics and Computers in Simulation*, **2016**, 127, 114-130	3.3	4
197	Scaling to RVE in Random Media. *Advances in Applied Mechanics*, **2016**, 111-211	10	33
196	Spectral expansions of homogeneous and isotropic tensor-valued random fields. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2016**, 67, 1	1.6	11
195	Local and nonlocal material models, spatial randomness, and impact loading. *Archive of Applied Mechanics*, **2016**, 86, 39-58	2.2	11
194	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
193	Simulation of elastic wave propagation using cellular automata and peridynamics, and comparison with experiments. *Wave Motion*, **2016**, 60, 73-83	1.8	21
192	From Second Law Violations to Continuum Mechanics **2016**, 175-186		
191	Tensor-Valued Random Fields in Continuum Physics. *Springer Tracts in Mechanical Engineering*, **2016**, 75-87	0.3	
190	Continuum Homogenization of Fractal Media **2016**, 1-31		1
189	A Statistically-Based Homogenization Approach for Particle Random Composites as Micropolar Continua. *Advanced Structured Materials*, **2016**, 425-441	0.6	13
188	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
187	Effect of filler alignment on percolation in polymer nanocomposites using tunneling-percolation model. *Journal of Applied Physics*, **2016**, 120, 045105	2.5	34
186	Experimental and computational study of shielding effectiveness of polycarbonate carbon nanocomposites. *Journal of Applied Physics*, **2016**, 120, 145103	2.5	18
185	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
184	Continuum mechanics versus violations of the second law of thermodynamics. *Journal of Thermal Stresses*, **2016**, 39, 734-749	2.2	6
183	Tensor random fields in conductivity and classical or microcontinuum theories. *Mathematics and Mechanics of Solids*, **2015**, 20, 418-432	2.3	6
182	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

181	Edges of Saturn's rings are fractal. *SpringerPlus*, **2015**, 4, 158		6
180	Scaling and bounds in thermal conductivity of planar Gaussian correlated microstructures. *Journal of Applied Physics*, **2015**, 117, 104301	2.5	8
179	Harmonic oscillator driven by random processes having fractal and Hurst effects. *Acta Mechanica*, **2015**, 226, 3653-3672	2.1	9
178	Mesoscale bounds in viscoelasticity of random composites. *Mechanics Research Communications*, **2015**, 68, 98-104	2.2	11
177	Stochastic Continuum Damage Mechanics Using Spring Lattice Models. *Applied Mechanics and Materials*, **2015**, 784, 350-357	0.3	1
176	Scale-dependent homogenization of random composites as micropolar continua. *European Journal of Mechanics, A/Solids*, **2015**, 49, 396-407	3.7	101
175	Scale-Dependent Homogenization of Random Hyperbolic Thermoelastic Solids. *Journal of Elasticity*, **2015**, 118, 243-250	1.5	4
174	Tunneling-percolation behavior of polydisperse prolate and oblate ellipsoids. *Journal of Applied Physics*, **2015**, 118, 154306	2.5	27
173	Electrical properties of random checkerboards at finite scales. *AIP Advances*, **2015**, 5, 017131	1.5	6
172	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
171	A three-dimensional model of fine particle retention during percolation through a fiber mat. *Tappi Journal*, **2015**, 14, 546-554	0.5	1
170	Lattice and Particle Modeling of Damage Phenomena **2015**, 203-238		3
169	Viscothermoelasticity with finite wave speeds: thermomechanical laws. *Acta Mechanica*, **2014**, 225, 1277-1285	2.1	3
168	From fractal media to continuum mechanics. *ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik*, **2014**, 94, 373-401	1	42
167	Elastic-plastic-brittle transitions and avalanches in disordered media. *Physical Review Letters*, **2014**, 112, 045503	7.4	20
166	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
165	Elastodynamics in micropolar fractal solids. *Mathematics and Mechanics of Solids*, **2014**, 19, 117-134	2.3	7
164	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

163	Fractal Shear Bands at Elastic-Plastic Transitions in Random Mohr-Coulomb Materials. *Journal of Engineering Mechanics - ASCE*, **2014**, 140, 04014072	2.4	4
162	Statistically isotropic tensor random fields: Correlation structures. *Mathematics and Mechanics of Complex Systems*, **2014**, 2, 209-231	3.2	15
161	Particulate random composites homogenized as micropolar materials. *Meccanica*, **2014**, 49, 2719-2727	2.1	27
160	The spectral expansion of the elasticity random field **2014**,		3
159	Morphological study of elastic-plastic-brittle transitions in disordered media. *Physical Review E*, **2014**, 90, 042405	2.4	5
158	BernoulliEuler beams with random field properties under random field loads: fractal and Hurst effects. *Archive of Applied Mechanics*, **2014**, 84, 1595-1626	2.2	14
157	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
156	Scaling function in conductivity of planar random checkerboards. *Computational Materials Science*, **2013**, 79, 252-261	3.2	17
155	Stiffness tensor random fields through upscaling of planar random materials. *Probabilistic Engineering Mechanics*, **2013**, 34, 131-156	2.6	19
154	From Random Fields to Classical or Generalized Continuum Models. *Procedia IUTAM*, **2013**, 6, 31-34		1
153	Electromagnetism on anisotropic fractal media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2013**, 64, 381-390	1.6	24
152	Acoustic-elastodynamic interaction in isotropic fractal media. *European Physical Journal: Special Topics*, **2013**, 222, 1951-1960	2.3	8
151	On Thermodynamic Restrictions in Peridynamics. *Journal of Applied Mechanics, Transactions ASME*, **2013**, 80,	2.7	8
150	SCALING AND HOMOGENIZATION IN SPATIALLY RANDOM COMPOSITES. *Computational and Experimental Methods in Structures*, **2013**, 61-101		5
149	Fractal Geometric Characterization of Functionally Graded Materials. *Journal of Nanomechanics & Micromechanics*, **2013**, 3, 04013001		8
148	Fracture model for cemented aggregates. *AIP Advances*, **2013**, 3, 012119	1.5	6
147	Lattice and Particle Modeling of Damage Phenomena **2013**, 1-32		
146	Shock waves in random viscoelastic media. *Acta Mechanica*, **2012**, 223, 1777-1788	2.1	4

145	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
144	New classes of spectral densities for lattice processes and random fields built from simple univariate margins. *Stochastic Environmental Research and Risk Assessment*, **2012**, 26, 479-490	3.5	2
143	Fractals in thermoelastoplastic materials. *Journal of Mechanics of Materials and Structures*, **2011**, 6, 351-359	1.2	3
142	Micropolar continuum mechanics of fractal media. *International Journal of Engineering Science*, **2011**, 49, 1302-1310	5.7	43
141	Dissipation Function in Hyperbolic Thermoelasticity. *Journal of Thermal Stresses*, **2011**, 34, 68-74	2.2	5
140	Waves in Fractal Media. *Journal of Elasticity*, **2011**, 104, 187-204	1.5	41
139	Macrohomogeneity condition in dynamics of micropolar media. *Archive of Applied Mechanics*, **2011**, 81, 899-906	2.2	23
138	On the wave propagation in isotropic fractal media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2011**, 62, 1117-1129	1.6	13
137	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
136	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
135	Quantifying the Anisotropy in Biological Materials. *Journal of Applied Mechanics, Transactions ASME*, **2011**, 78,	2.7	4
134	Powerless fluxes and forces, and change of scale in irreversible thermodynamics. *Journal of Physics A: Mathematical and Theoretical*, **2011**, 44, 335002	2	9
133	Stochastic finite elements: Where is the physics?. *Theoretical and Applied Mechanics*, **2011**, 38, 379-396	0.4	11
132	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
131	Waves in Fractal Media **2011**, 187-204		0
130	Hybrid Lattice Particle Modelling Approach for Polymeric Materials Subject to High Strain Rate Loads. *Polymers*, **2010**, 2, 3-30	4.5	7
129	Fractals in elastic-hardening plastic materials. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2010**, 466, 603-621	2.4	6
128	Fractal Solids, Product Measures and Continuum Mechanics. *Advances in Mechanics and Mathematics*, **2010**, 315-323	0.2	9

127	Fractal Pattern Formation at Elastic-Plastic Transition in Heterogeneous Materials. *Journal of Applied Mechanics, Transactions ASME*, **2010**, 77,	2.7	6
126	MRI-based finite element modeling of head trauma: spherically focusing shear waves. *Acta Mechanica*, **2010**, 213, 155-167	2.1	69
125	Towards Poroelasticity of Fractal Materials **2010**, 157-164		1
124	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
123	Extremum and variational principles for elastic and inelastic media with fractal geometries. *Acta Mechanica*, **2009**, 205, 161-170	2.1	47
122	Fractal materials, beams, and fracture mechanics. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2009**, 60, 1194-1205	1.6	23
121	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
120	Towards scaling laws in random polycrystals. *International Journal of Engineering Science*, **2009**, 47, 1322-1330	5.7	17
119	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
118	Thermoelasticity with Finite Wave Speeds **2009**,		125
117	Universal elastic anisotropy index. *Physical Review Letters*, **2008**, 101, 055504	7.4	1259
116	Electric-field-induced displacement of a charged spherical colloid embedded in an elastic Brinkman medium. *Physical Review E*, **2008**, 77, 011404	2.4	11
115	The Effect of Imperfect Contact on the Homogenization of a Micro-periodic Helix. *Mathematics and Mechanics of Solids*, **2008**, 13, 431-446	2.3	0
114	Response of a Helix Made of a Fractional Viscoelastic Material. *Journal of Applied Mechanics, Transactions ASME*, **2008**, 75,	2.7	2
113	Scale-Dependent Homogenization of Inelastic Random Polycrystals. *Journal of Applied Mechanics, Transactions ASME*, **2008**, 75,	2.7	11
112	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
111	Mesoscale conductivity and scaling function in aggregates of cubic, trigonal, hexagonal, and tetragonal crystals. *Physical Review B*, **2008**, 77,	3.3	18
110	On turbulence in fractal porous media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2008**, 59, 1111-1117	1.6	19

109	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
108	Scale Effects in Infinitesimal and Finite Thermoelasticity of Random Composites. *Journal of Thermal Stresses*, **2007**, 30, 587-603	2.2	6
107	Towards thermomechanics of fractal media. *Zeitschrift Fur Angewandte Mathematik Und Physik*, **2007**, 58, 1085-1096	1.6	40
106	Large eddy simulation of a sheet/cloud cavitation on a NACA0015 hydrofoil. *Applied Mathematical Modelling*, **2007**, 31, 417-447	4.5	125
105	Towards Thermoelasticity of Fractal Media. *Journal of Thermal Stresses*, **2007**, 30, 889-896	2.2	45
104	Lithic raw material physical properties and use-wear accrual. *Journal of Archaeological Science*, **2007** , 34, 711-722	2.9	73
103	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
102	Homogenization of a Micro-Periodic Helix with Parabolic or Hyperbolic Heat Conduction. *Journal of Thermal Stresses*, **2006**, 29, 467-483	2.2	2
101	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
100	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
99	Thermoelastic Damping in Nanomechanical Resonators with Finite Wave Speeds. *Journal of Thermal Stresses*, **2006**, 29, 201-216	2.2	61
98	Particle modeling of dynamic fragmentation□: Fracture in single- and multi-phase materials. *Computational Materials Science*, **2006**, 35, 116-133	3.2	13
97	Yield of random elastoplastic materials. *Journal of Mechanics of Materials and Structures*, **2006**, 1, 1055-1073	1.2	11
96	Mesoscale simulations of atmospheric flow and tracer transport in Phoenix, Arizona. *Meteorological Applications*, **2006**, 13, 235	2.1	
95	Material spatial randomness: From statistical to representative volume element. *Probabilistic Engineering Mechanics*, **2006**, 21, 112-132	2.6	380
94	Particle modeling of random crack patterns in epoxy plates. *Probabilistic Engineering Mechanics*, **2006**, 21, 267-275	2.6	31
93	Stochastic dynamics of acceleration waves in random media. *Mechanics of Materials*, **2006**, 38, 840-848	3.3	13
92	On the Size of RVE in Finite Elasticity of Random Composites. *Journal of Elasticity*, **2006**, 85, 153-173	1.5	99

91	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
90	On elastic and viscoelastic helices. *Philosophical Magazine*, **2005**, 85, 4213-4230	1.6	9
89	Particle modeling of dynamic fragmentation-I: theoretical considerations. *Computational Materials Science*, **2005**, 33, 429-442	3.2	22
88	Scale effects in plasticity of random media: status and challenges. *International Journal of Plasticity*, **2005**, 21, 1119-1160	7.6	50
87	Spectral finite element of a helix. *Mechanics Research Communications*, **2005**, 32, 147-152	2.2	9
86	Homogenization of a micro-periodic helix. *Philosophical Magazine*, **2005**, 85, 4201-4212	1.6	3
85	Modeling of bone at a single lamella level. *Biomechanics and Modeling in Mechanobiology*, **2004**, 3, 67-74	3.8	31
84	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
83	Effects of microscale material randomness on the attainment of optimal structural shapes. *Structural and Multidisciplinary Optimization*, **2004**, 26, 67-76	3.6	3
82	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
81	Influence of topography on the Phoenix CO2 dome: a computational study. *Atmospheric Science Letters*, **2004**, 5, 103-107	2.4	5
80	From Lattices and Composites to Micropolar Continua. *ICASE/LaRC Interdisciplinary Series in Science and Engineering*, **2004**, 175-212		6
79	Fracture of Brittle Microbeams. *Journal of Applied Mechanics, Transactions ASME*, **2004**, 71, 424-427	2.7	6
78	Random formation, inelastic response and scale effects in paper. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2003**, 361, 965-85	3	14
77	THERMOELASTIC WAVES IN A HELIX WITH PARABOLIC OR HYPERBOLIC HEAT CONDUCTION. *Journal of Thermal Stresses*, **2003**, 26, 1205-1219	2.2	9
76	On the distance to blow-up of acceleration waves in random media. *Continuum Mechanics and Thermodynamics*, **2003**, 15, 21-32	3.5	6
75	Spectral finite elements for vibrating rods and beams with random field properties. *Journal of Sound and Vibration*, **2003**, 268, 779-797	3.9	20
74	Elasto-plasticity of paper. *International Journal of Plasticity*, **2003**, 19, 2083-2098	7.6	37

73	ON THE REDUCTION OF CONSTANTS IN PLANAR COSSERAT ELASTICITY WITH EIGENSTRAINS AND EIGENCURVATURES. *Journal of Thermal Stresses*, **2003**, 26, 1221-1228	2.2	5
72	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
71	Apparent elastic and elastoplastic behavior of periodic composites. *International Journal of Solids and Structures*, **2002**, 39, 199-212	3.1	49
70	Microstructural Randomness Versus Representative Volume Element in Thermomechanics. *Journal of Applied Mechanics, Transactions ASME*, **2002**, 69, 25-35	2.7	94
69	Towards Stochastic Continuum Thermodynamics. *Journal of Non-Equilibrium Thermodynamics*, **2002**, 27,	3.8	21
68	Lattice models in micromechanics. *Applied Mechanics Reviews*, **2002**, 55, 35-60	8.6	337
67	Apparent thermal conductivity of periodic two-dimensional composites. *Computational Materials Science*, **2002**, 25, 329-338	3.2	69
66	On geometric acoustics in random, locally anisotropic media. *Continuum Mechanics and Thermodynamics*, **2001**, 13, 131-134	3.5	3
65	Scale and boundary conditions effects in elastic properties of random composites. *Acta Mechanica*, **2001**, 148, 63-78	2.1	64
64	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
63	Scale-dependent bounds on effective elastoplastic response of random composites. *Journal of the Mechanics and Physics of Solids*, **2001**, 49, 655-673	5	64
62	Crack patterns in plates with randomly placed holes: A maximum entropy approach. *Mechanics Research Communications*, **2001**, 28, 193-198	2.2	3
61	Michell trusses in the presence of microscale material randomness: limitation of optimality. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, **2001**, 457, 1787-1797	2.4	3
60	Mechanics of Random Media as a Tool for Scale Effects in Ice Fields. *Solid Mechanics and Its Applications*, **2001**, 439-448	0.4	
59	Mechanics of Random Materials **2001**, 93-161		9
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