Martin Ostoja-Starzewski

List of Publications by Year
in descending order

259	8,254	66343	60623
papers	citations	42 h-index	81 g-index

278	278	278	4521
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Elastodynamic problem on tensor random fields with fractal and Hurst effects. Meccanica, 2022, 57, 957-970.	2.0	5
2	Fractional telegraph equation under moving time-harmonic impact. International Journal of Heat and Mass Transfer, 2022, 182, 121958.	4.8	9
3	MRE-based modeling of head trauma. , 2022, , 139-152.		0
4	Lattice and Particle Modeling of Damage Phenomena. , 2022, , 1143-1179.		0
5	Micropolar mechanics of product fractal media. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	2.1	1
6	A convolutional-iterative solver for nonlinear dynamical systems. Applied Mathematics Letters, 2022, 130, 107990.	2.7	2
7	Doppler effect described by the solutions of the Cattaneo telegraph equation. Acta Mechanica, 2021, 232, 725-740.	2.1	9
8	On streamwise velocity spectra models with fractal and long-memory effects. Physics of Fluids, 2021, 33, 035116.	4.0	12
9	Averaging of turbulent micropolar media: turbulent couple-stress, heat flux, and energy. Zeitschrift Fur Angewandte Mathematik Und Physik, 2021, 72, 1.	1.4	1
10	Convolution finite element method: an alternative approach for time integration and time-marching algorithms. Computational Mechanics, 2021, 68, 667-696.	4.0	1
11	Spontaneous Negative Entropy Increments in Granular Flows. Journal of Applied Mechanics, Transactions ASME, 2021, 88, 031010.	2.2	4
12	Spatial Behaviour of Solutions of the Moore-Gibson-Thompson Equation. Journal of Mathematical Fluid Mechanics, 2021, 23, 1.	1.0	20
13	Mach Fronts in Random Media with Fractal and Hurst Effects. Fractal and Fractional, 2021, 5, 229.	3.3	4
14	Scaling in Anti-Plane Elasticity on Random Shear Modulus Fields with Fractal and Hurst Effects. Fractal and Fractional, 2021, 5, 255.	3.3	2
15	Towards stochastic continuum damage mechanics. International Journal of Solids and Structures, 2020, 184, 202-210.	2.7	3
16	RVE Problem: Mathematical aspects and related stochastic mechanics. International Journal of Engineering Science, 2020, 146, 103169.	5.0	11
17	Fracture of beams with random field properties: Fractal and Hurst effects. International Journal of Solids and Structures, 2020, 191-192, 243-253.	2.7	5
18	Modeling and Simulation of Head Trauma Utilizing White Matter Properties from Magnetic Resonance Elastography. Modelling, 2020, 1, 225-241.	1.4	7

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19	Random Fields of Piezoelectricity and Piezomagnetism. SpringerBriefs in Applied Sciences and Technology, 2020, , .	0.4	3
20	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.	3.4	11
21	IBVP for electromagneto-elastic materials: variational approach. Mathematics and Mechanics of Complex Systems, 2020, 8, 47-67.	0.9	4
22	Thermo-poromechanics of fractal media. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190288.	3.4	34
23	Violations of the Clausiusâ€“Duhem inequality in Couette flows of granular media. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, 20200207.	2.1	6
24	Random Fields with Fractal and Hurst Effects in Mechanics. , 2020, , 2118-2126.		1
25	The Choice of a Basis in the Space $${mathsf {V}}_G$$. SpringerBriefs in Applied Sciences and Technology, 2020, , 29-40.	0.4	0
26	Correlation Structures. SpringerBriefs in Applied Sciences and Technology, 2020, , 41-91.	0.4	0
27	Continuum Mechanics with Spontaneous Violations of the Second Law of Thermodynamics. , 2020, , 426-435.		0
28	The Continuum Theory of Piezoelectricity and Piezomagnetism. SpringerBriefs in Applied Sciences and Technology, 2020, , 1-24.	0.4	0
29	Tensor Random Fields in Continuum Mechanics. , 2020, , 2433-2441.		3
30	Thermoelastic Waves. , 2020, , 2478-2486.		0
31	On the Hydrodynamic Stability of a Lennard-Jones Molecular Fluid. Journal of Statistical Physics, 2019, 177, 61-77.	1.2	4
32	Stress field formulation of linear electro-magneto-elastic materials. Mathematics and Mechanics of Solids, 2019, 24, 3806-3822.	2.4	5
33	Thermoelastic waves in helical strands with Maxwellâ€“Cattaneo heat conduction. Theoretical and Applied Mechanics Letters, 2019, 9, 302-307.	2.8	3
34	Finite Element Methods in Human Head Impact Simulations: A Review. Annals of Biomedical Engineering, 2019, 47, 1832-1854.	2.5	65
35	Mechanical and thermal couplings in helical strands*. Journal of Thermal Stresses, 2019, 42, 185-212.	2.0	2
36	Electrostatic and magnetostatic properties of random materials. Physical Review E, 2019, 99, 022120.	2.1	6

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37	Elastodynamics of a multilayered transversely isotropic half-space due to the rigid motion of foundation. Wave Motion, 2019, 88, 106-128.	2.0	7
38	Telegraph equation: two types of harmonic waves, a discontinuity wave, and a spectral finite element. Acta Mechanica, 2019, 230, 1725-1743.	2.1	14
39	Heat conduction in porcine muscle and blood: experiments and time-fractional telegraph equation model. Journal of the Royal Society Interface, 2019, 16, 20190726.	3.4	25
40	Ignaczak equation of elastodynamics. Mathematics and Mechanics of Solids, 2019, 24, 3674-3713.	2.4	15
41	Continuum Homogenization of Fractal Media. , 2019, , 905-935.		5
42	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.	1.3	4
43	Tunneling-percolation model of multicomponent nanocomposites. Journal of Applied Physics, 2018, 123, .	2.5	14
44	Stochastic characteristics and Second Law violations of atomic fluids in Couette flow. Physica A: Statistical Mechanics and Its Applications, 2018, 496, 90-107.	2.6	9
45	Films over topography: from creeping flow to linear stability, theory and experiments, a review. Acta Mechanica, 2018, 229, 1451-1451.	2.1	0
46	Three-dimensional vibrations of a helically wound cable modeled as a Timoshenko rod. Acta Mechanica, 2018, 229, 677-695.	2.1	3
47	Oldroyd fluids with hyperbolic heat conduction. Mechanics Research Communications, 2018, 93, 108-113.	1.8	5
48	Shielding effectiveness and bandgaps of interpenetrating phase composites based on the Schwarz Primitive surface. Journal of Applied Physics, 2018, 124, .	2.5	14
49	Towards Continuum Mechanics with Spontaneous Violations of the Second Law of Thermodynamics. Advanced Structured Materials, 2018, , 633-640.	0.5	0
50	Does a Fractal Microstructure Require a Fractional Viscoelastic Model?. Fractal and Fractional, 2018, 2, 12.	3.3	7
51	Random Fields with Fractal and Hurst Effects in Mechanics. , 2018, , 1-9.		1
52	Tensor Random Fields in Continuum Mechanics. , 2018, , 1-9.		3
53	Random Fields Related to the Symmetry Classes of Second-Order Symmetric Tensors. Springer Proceedings in Mathematics and Statistics, 2018, , 173-185.	0.2	1
54	Thermoelastic Waves. , 2018, , 1-9.		0

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55	Continuum Mechanics with Spontaneous Violations of the Second Law of Thermodynamics. , 2018, , 1-10.		0
56	Peristatic solutions for finite one- and two-dimensional systems. Mathematics and Mechanics of Solids, 2017, 22, 1639-1653.	2.4	19
57	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.	4.2	4
58	Shear-thinning of molecular fluids in Couette flow. Physics of Fluids, 2017, 29, .	4.0	16
59	Scaling of slip avalanches in sheared amorphous materials based on large-scale atomistic simulations. Physical Review E, 2017, 95, 032902.	2.1	17
60	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.	1.6	4
61	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.	2.1	13
62	Continuum Physics with Violations of the Second Law of Thermodynamics. Advanced Structured Materials, 2017, , 181-192.	0.5	2
63	Fractal planetary rings: Energy inequalities and random field model. International Journal of Modern Physics B, 2017, 31, 1750236.	2.0	16
64	Acceleration waves on random fields with fractal and Hurst effects. Wave Motion, 2017, 74, 134-150.	2.0	10
65	Electromagnetic characteristics of systems of prolate and oblate ellipsoids. Journal of Applied Physics, 2017, 122, .	2.5	4
66	A Random Field Formulation of Hookeâ€™s Law in All Elasticity Classes. Journal of Elasticity, 2017, 127, 269-302.	1.9	35
67	Admitting Spontaneous Violations of the Second Law in Continuum Thermomechanics. Entropy, 2017, 19, 78.	2.2	6
68	On the dilatational wave motion in anisotropic fractal solids. Mathematics and Computers in Simulation, 2016, 127, 114-130.	4.4	4
69	A Statistically-Based Homogenization Approach for Particle Random Composites as Micropolar Continua. Advanced Structured Materials, 2016, , 425-441.	0.5	14
70	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.	2.1	11
71	Effect of filler alignment on percolation in polymer nanocomposites using tunneling-percolation model. Journal of Applied Physics, 2016, 120, .	2.5	36
72	Experimental and computational study of shielding effectiveness of polycarbonate carbon nanocomposites. Journal of Applied Physics, 2016, 120, .	2.5	26

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73	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.	2.1	10
74	Continuum mechanics versus violations of the second law of thermodynamics. Journal of Thermal Stresses, 2016, 39, 734-749.	2.0	8
75	Scaling to RVE in Random Media. Advances in Applied Mechanics, 2016, , 111-211.	2.3	45
76	Spectral expansions of homogeneous and isotropic tensor-valued random fields. Zeitschrift Fur Angewandte Mathematik Und Physik, 2016, 67, 1.	1.4	15
77	Local and nonlocal material models, spatial randomness, and impact loading. Archive of Applied Mechanics, 2016, 86, 39-58.	2.2	13
78	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, .	2.2	36
79	Simulation of elastic wave propagation using cellular automata and peridynamics, and comparison with experiments. Wave Motion, 2016, 60, 73-83.	2.0	30
80	Second law violations, continuum mechanics, and permeability. Continuum Mechanics and Thermodynamics, 2016, 28, 489-501.	2.2	16
81	From Second Law Violations to Continuum Mechanics. , 2016, , 175-186.		0
82	Tensor-Valued Random Fields in Continuum Physics. Springer Tracts in Mechanical Engineering, 2016, , 75-87.	0.3	0
83	Tunneling-percolation behavior of polydisperse prolate and oblate ellipsoids. Journal of Applied Physics, 2015, 118, .	2.5	27
84	Electrical properties of random checkerboards at finite scales. AIP Advances, 2015, 5, 017131.	1.3	8
85	Responses of first-order dynamical systems to MatÃ©rn, Cauchy, and Dagum excitations. Mathematics and Mechanics of Complex Systems, 2015, 3, 27-41.	0.9	8
86	Tensor random fields in conductivity and classical or microcontinuum theories. Mathematics and Mechanics of Solids, 2015, 20, 418-432.	2.4	8
87	Elastic Rods and Shear Beams with Random Field Properties under Random Field Loads: Fractal and Hurst Effects. Journal of Engineering Mechanics - ASCE, 2015, 141, .	2.9	13
88	Edges of Saturnâ€™s rings are fractal. SpringerPlus, 2015, 4, 158.	1.2	10
89	Scaling and bounds in thermal conductivity of planar Gaussian correlated microstructures. Journal of Applied Physics, 2015, 117, 104301.	2.5	10
90	Harmonic oscillator driven by random processes having fractal and Hurst effects. Acta Mechanica, 2015, 226, 3653-3672.	2.1	13

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91	Mesoscale bounds in viscoelasticity of random composites. Mechanics Research Communications, 2015, 68, 98-104.	1.8	13
92	Scale-dependent homogenization of random composites as micropolar continua. European Journal of Mechanics, A/Solids, 2015, 49, 396-407.	3.7	127
93	Scale-Dependent Homogenization of Random Hyperbolic Thermoelastic Solids. Journal of Elasticity, 2015, 118, 243-250.	1.9	8
94	Lattice and Particle Modeling of Damage Phenomena. , 2015, , 203-238.		3
95	A three-dimensional model of fine particle retention during percolation through a fiber mat. Tappi Journal, 2015, 14, 546-554.	0.5	1
96	Statistically isotropic tensor random fields: Correlation structures. Mathematics and Mechanics of Complex Systems, 2014, 2, 209-231.	0.9	21
97	Particulate random composites homogenized as micropolar materials. Meccanica, 2014, 49, 2719-2727.	2.0	36
98	The spectral expansion of the elasticity random field. , 2014, , .		5
99	Morphological study of elastic-plastic-brittle transitions in disordered media. Physical Review E, 2014, 90, 042405.	2.1	5
100	Bernoulliâ€“Euler beams with random field properties under random field loads: fractal and Hurst effects. Archive of Applied Mechanics, 2014, 84, 1595-1626.	2.2	19
101	Viscothermoelasticity with finite wave speeds: thermomechanical laws. Acta Mechanica, 2014, 225, 1277-1285.	2.1	7
102	From fractal media to continuum mechanics. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2014, 94, 373-401.	1.6	55
103	Elastic-Plastic-Brittle Transitions and Avalanches in Disordered Media. Physical Review Letters, 2014, 112, 045503.	7.8	27
104	A mechanisms-based model for dynamic behavior and fracture of geomaterials. International Journal of Rock Mechanics and Minings Sciences, 2014, 72, 277-282.	5.8	21
105	Elastodynamics in micropolar fractal solids. Mathematics and Mechanics of Solids, 2014, 19, 117-134.	2.4	10
106	Continuum mechanics beyond the second law of thermodynamics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140531.	2.1	20
107	Fractal Shear Bands at Elastic-Plastic Transitions in Random Mohr-Coulomb Materials. Journal of Engineering Mechanics - ASCE, 2014, 140, 04014072.	2.9	6
108	Comment on â€œHydrodynamics of fractal continuum flowâ€•and â€œMap of fluid flow in fractal porous medium into fractal continuum flowâ€• Physical Review E, 2013, 88, 057001.	2.1	19

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109	Scaling function in conductivity of planar random checkerboards. Computational Materials Science, 2013, 79, 252-261.	3.0	20
110	Stiffness tensor random fields through upscaling of planar random materials. Probabilistic Engineering Mechanics, 2013, 34, 131-156.	2.7	25
111	From Random Fields to Classical or Generalized Continuum Models. Procedia IUTAM, 2013, 6, 31-34.	1.2	2
112	Electromagnetism on anisotropic fractal media. Zeitschrift Fur Angewandte Mathematik Und Physik, 2013, 64, 381-390.	1.4	43
113	Acoustic-elastodynamic interaction in isotropic fractal media. European Physical Journal: Special Topics, 2013, 222, 1951-1960.	2.6	13
114	On Thermodynamic Restrictions in Peridynamics. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	11
115	SCALING AND HOMOGENIZATION IN SPATIALLY RANDOM COMPOSITES. Computational and Experimental Methods in Structures, 2013, , 61-101.	0.3	8
116	Fractal Geometric Characterization of Functionally Graded Materials. Journal of Nanomechanics & Micromechanics, 2013, 3, 04013001.	1.4	10
117	Fracture model for cemented aggregates. AIP Advances, 2013, 3, 012119.	1.3	11
118	Lattice and Particle Modeling of Damage Phenomena. , 2013, , 1-32.		0
119	Shock waves in random viscoelastic media. Acta Mechanica, 2012, 223, 1777-1788.	2.1	4
120	Elasticâ€“plastic transition in three-dimensional random materials: massively parallel simulations, fractal morphogenesis and scaling functions. Philosophical Magazine, 2012, 92, 2733-2758.	1.6	13
121	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.	4.0	3
122	Fractals in thermoelastoplastic materials. Journal of Mechanics of Materials and Structures, 2011, 6, 351-359.	0.6	4
123	Micropolar continuum mechanics of fractal media. International Journal of Engineering Science, 2011, 49, 1302-1310.	5.0	61
124	Dissipation Function in Hyperbolic Thermoelasticity. Journal of Thermal Stresses, 2011, 34, 68-74.	2.0	6
125	Waves in Fractal Media. Journal of Elasticity, 2011, 104, 187-204.	1.9	62
126	Macrohomogeneity condition in dynamics of micropolar media. Archive of Applied Mechanics, 2011, 81, 899-906.	2.2	25

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127	On the wave propagation in isotropic fractal media. Zeitschrift Fur Angewandte Mathematik Und Physik, 2011, 62, 1117-1129.	1.4	14
128	Fractal solids, product measures and fractional wave equations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 1214-1214.	2.1	11
129	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.	2.1	8
130	Quantifying the Anisotropy in Biological Materials. Journal of Applied Mechanics, Transactions ASME, 2011, 78, .	2.2	4
131	Powerless fluxes and forces, and change of scale in irreversible thermodynamics. Journal of Physics A: Mathematical and Theoretical, 2011, 44, 335002.	2.1	10
132	Stochastic finite elements: Where is the physics?. Theoretical and Applied Mechanics, 2011, 38, 379-396.	0.3	14
133	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.	0.9	16
134	Waves in Fractal Media. , 2011, , 187-204.		1
135	MRI-based finite element modeling of head trauma: spherically focusing shear waves. Acta Mechanica, 2010, 213, 155-167.	2.1	84
136	Hybrid Lattice Particle Modelling Approach for Polymeric Materials Subject to High Strain Rate Loads. Polymers, 2010, 2, 3-30.	4.5	8
137	Fractals in elastic-hardening plastic materials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 603-621.	2.1	8
138	Fractal Solids, Product Measures andÂContinuum Mechanics. Advances in Mechanics and Mathematics, 2010, , 315-323.	0.7	15
139	Fractal Pattern Formation at Elastic-Plastic Transition in Heterogeneous Materials. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	2.2	6
140	Towards Poroelasticity of Fractal Materials. , 2010, , 157-164.		1
141	Fractal solids, product measures and fractional wave equations. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2009, 465, 2521-2536.	2.1	111
142	Extremum and variational principles for elastic and inelastic media with fractal geometries. Acta Mechanica, 2009, 205, 161-170.	2.1	58
143	Fractal materials, beams, and fracture mechanics. Zeitschrift Fur Angewandte Mathematik Und Physik, 2009, 60, 1194-1205.	1.4	32
144	A derivation of the Maxwellâ€“Cattaneo equation from the free energy and dissipation potentials. International Journal of Engineering Science, 2009, 47, 807-810.	5.0	43

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145	Towards scaling laws in random polycrystals. International Journal of Engineering Science, 2009, 47, 1322-1330.	5.0	22
146	Continuum mechanics models of fractal porous media: Integral relations and extremum principles. Journal of Mechanics of Materials and Structures, 2009, 4, 901-912.	0.6	40
147	On turbulence in fractal porous media. Zeitschrift Fur Angewandte Mathematik Und Physik, 2008, 59, 1111-1117.	1.4	27
148	Scaling function, anisotropy and the size of RVE in elastic random polycrystals. Journal of the Mechanics and Physics of Solids, 2008, 56, 2773-2791.	4.8	79
149	Universal Elastic Anisotropy Index. Physical Review Letters, 2008, 101, 055504.	7.8	1,754
150	Electric-field-induced displacement of a charged spherical colloid embedded in an elastic Brinkman medium. Physical Review E, 2008, 77, 011404.	2.1	14
151	The Effect of Imperfect Contact on the Homogenization of a Micro-periodic Helix. Mathematics and Mechanics of Solids, 2008, 13, 431-446.	2.4	1
152	Response of a Helix Made of a Fractional Viscoelastic Material. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	2.2	2
153	Scale-Dependent Homogenization of Inelastic Random Polycrystals. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	2.2	17
154	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.	2.1	13
155	Mesoscale conductivity and scaling function in aggregates of cubic, trigonal, hexagonal, and tetragonal crystals. Physical Review B, 2008, 77, .	3.2	24
156	Towards Thermoelasticity of Fractal Media. Journal of Thermal Stresses, 2007, 30, 889-896.	2.0	56
157	Lithic raw material physical properties and use-wear accrual. Journal of Archaeological Science, 2007, 34, 711-722.	2.4	84
158	Scale Effects in Infinitesimal and Finite Thermoelasticity of Random Composites. Journal of Thermal Stresses, 2007, 30, 587-603.	2.0	8
159	Towards thermomechanics of fractal media. Zeitschrift Fur Angewandte Mathematik Und Physik, 2007, 58, 1085-1096.	1.4	46
160	Large eddy simulation of a sheet/cloud cavitation on a NACA0015 hydrofoil. Applied Mathematical Modelling, 2007, 31, 417-447.	4.2	149
161	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.	1.2	50
162	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.	2.1	22

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163	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.	2.1	64
164	Thermoelastic Damping in Nanomechanical Resonators with Finite Wave Speeds. Journal of Thermal Stresses, 2006, 29, 201-216.	2.0	71
165	Particle modeling of dynamic fragmentationâ€"II: Fracture in single- and multi-phase materials. Computational Materials Science, 2006, 35, 116-133.	3.0	15
166	Yield of random elastoplastic materials. Journal of Mechanics of Materials and Structures, 2006, 1, 1055-1073.	0.6	11
167	Mesoscale simulations of atmospheric flow and tracer transport in Phoenix, Arizona. Meteorological Applications, 2006, 13, 235.	2.1	1
168	Material spatial randomness: From statistical to representative volume element. Probabilistic Engineering Mechanics, 2006, 21, 112-132.	2.7	452
169	Particle modeling of random crack patterns in epoxy plates. Probabilistic Engineering Mechanics, 2006, 21, 267-275.	2.7	35
170	Stochastic dynamics of acceleration waves in random media. Mechanics of Materials, 2006, 38, 840-848.	3.2	16
171	On the Size of RVE in Finite Elasticity of Random Composites. Journal of Elasticity, 2006, 85, 153-173.	1.9	114
172	Homogenization of a Micro-Periodic Helix with Parabolic or Hyperbolic Heat Conduction. Journal of Thermal Stresses, 2006, 29, 467-483.	2.0	2
173	On the scaling from statistical to representative volume element in thermoelasticity of random materials. Networks and Heterogeneous Media, 2006, 1, 259-274.	1.1	13
174	Scale effects in plasticity of random media: status and challenges. International Journal of Plasticity, 2005, 21, 1119-1160.	8.8	59
175	Spectral finite element of a helix. Mechanics Research Communications, 2005, 32, 147-152.	1.8	11
176	Homogenization of a micro-periodic helix. Philosophical Magazine, 2005, 85, 4201-4212.	1.6	3
177	On elastic and viscoelastic helices. Philosophical Magazine, 2005, 85, 4213-4230.	1.6	9
178	Particle modeling of dynamic fragmentation-I: theoretical considerations. Computational Materials Science, 2005, 33, 429-442.	3.0	25
179	Modeling of bone at a single lamella level. Biomechanics and Modeling in Mechanobiology, 2004, 3, 67-74.	2.8	35
180	A numerical study of plume dispersion motivated by a mesoscale atmospheric flow over a complex terrain. Applied Mathematical Modelling, 2004, 28, 957-981.	4.2	9

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181	Effects of microscale material randomness on the attainment of optimal structural shapes. Structural and Multidisciplinary Optimization, 2004, 26, 67-76.	3.5	3
182	Friction and scratch resistance of polyamide 6 modified with ionomeric ethylene/methacrylic acid copolymer. Journal of Applied Polymer Science, 2004, 91, 3866-3870.	2.6	8
183	Influence of topography on the Phoenix CO2 dome: a computational study. Atmospheric Science Letters, 2004, 5, 103-107.	1.9	6
184	From Lattices and Composites to Micropolar Continua. ICASE/LaRC Interdisciplinary Series in Science and Engineering, 2004, , 175-212.	0.1	7
185	Fracture of Brittle Microbeams. Journal of Applied Mechanics, Transactions ASME, 2004, 71, 424-427.	2.2	6
186	THERMOELASTIC WAVES IN A HELIX WITH PARABOLIC OR HYPERBOLIC HEAT CONDUCTION. Journal of Thermal Stresses, 2003, 26, 1205-1219.	2.0	11
187	On the distance to blow-up of acceleration waves in random media. Continuum Mechanics and Thermodynamics, 2003, 15, 21-32.	2.2	8
188	Spectral finite elements for vibrating rods and beams with random field properties. Journal of Sound and Vibration, 2003, 268, 779-797.	3.9	24
189	Elasto-plasticity of paper. International Journal of Plasticity, 2003, 19, 2083-2098.	8.8	44
190	ON THE REDUCTION OF CONSTANTS IN PLANAR COSSERAT ELASTICITY WITH EIGENSTRAINS AND EIGENCURVATURES. Journal of Thermal Stresses, 2003, 26, 1221-1228.	2.0	5
191	Random formation, inelastic response and scale effects in paper. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 965-985.	3.4	16
192	Microstructural Randomness Versus Representative Volume Element in Thermomechanics. Journal of Applied Mechanics, Transactions ASME, 2002, 69, 25-35.	2.2	116
193	Towards Stochastic Continuum Thermodynamics. Journal of Non-Equilibrium Thermodynamics, 2002, 27, .	4.2	26
194	Lattice models in micromechanics. Applied Mechanics Reviews, 2002, 55, 35-60.	10.1	419
195	Apparent thermal conductivity of periodic two-dimensional composites. Computational Materials Science, 2002, 25, 329-338.	3.0	74
196	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	49
197	Apparent elastic and elastoplastic behavior of periodic composites. International Journal of Solids and Structures, 2002, 39, 199-212.	2.7	54
198	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.	2.1	3

#	Article	IF	Citations
199	On geometric acoustics in random, locally anisotropic media. Continuum Mechanics and Thermodynamics, 2001, 13, 131-134.	2.2	3
200	Scale and boundary conditions effects in elastic properties of random composites. Acta Mechanica, 2001, 148, 63-78.	2.1	71
201	A micromechanically based coupleâ€“stress model of an elastic two-phase composite. International Journal of Solids and Structures, 2001, 38, 1721-1735.	2.7	77
202	Scale-dependent bounds on effective elastoplastic response of random composites. Journal of the Mechanics and Physics of Solids, 2001, 49, 655-673.	4.8	74
203	Crack patterns in plates with randomly placed holes: A maximum entropy approach. Mechanics Research Communications, 2001, 28, 193-198.	1.8	4
204	Mechanics of Random Materials. , 2001, , 93-161.		9
205	Mechanics of Random Media as a Tool for Scale Effects in Ice Fields. Solid Mechanics and Its Applications, 2001, , 439-448.	0.2	0
206	Particle sieving in a random fiber network. Applied Mathematical Modelling, 2000, 24, 523-534.	4.2	28
207	Random Fiber Networks and Special Elastic Orthotropy of Paper. Journal of Elasticity, 2000, 60, 131-149.	1.9	45
208	Universal material property in conductivity of planar random microstructures. Physical Review B, 2000, 62, 2980-2982.	3.2	13
209	Microstructure-based stochastic finite element methods for elastostatics and elastodynamics. , 2000, , .		0
210	Stochastic finite elements as a bridge between random material microstructure and global response. Computer Methods in Applied Mechanics and Engineering, 1999, 168, 35-49.	6.6	62
211	Couple-stress moduli and characteristics length of a two-phase composite. Mechanics Research Communications, 1999, 26, 387-396.	1.8	66
212	Scale effects in materials with random distributions of needles and cracks. Mechanics of Materials, 1999, 31, 883-893.	3.2	50
213	Fracture of random matrix-inclusion composites: scale effects and statistics. International Journal of Solids and Structures, 1998, 35, 2537-2566.	2.7	37
214	Random field models of heterogeneous materials. International Journal of Solids and Structures, 1998, 35, 2429-2455.	2.7	233
215	Scale and boundary conditions effects in elasticity and damage mechanics of random composites. Studies in Applied Mechanics, 1998, 46, 65-80.	0.4	7
216	Damage patterns and constitutive response of random matrix-inclusion composites. Engineering Fracture Mechanics, 1997, 58, 581-606.	4.3	40

#	Article	IF	Citations
217	Spring network models in elasticity and fracture of composites and polycrystals. Computational Materials Science, 1996, 7, 82-93.	3.0	87
218	The cauchy and characteristic boundary value problems of random rigid-perfectly plastic media. International Journal of Solids and Structures, 1996, 33, 1119-1136.	2.7	11
219	Composites with functionally graded interphases: Mesocontinuum concept and effective transverse conductivity. Acta Materialia, 1996, 44, 2057-2066.	7.9	41
220	Micromechanically based stochastic finite elements: length scales and anisotropy. Probabilistic Engineering Mechanics, 1996, 11, 205-214.	2.7	20
221	Brittle intergranular failure in 2D microstructures: Experiments and computer simulations. Acta Materialia, 1996, 44, 4003-4018.	7.9	64
222	Damage maps of disordered composites: A spring network approach. International Journal of Fracture, 1996, 75, R51-R57.	2.2	16
223	Bounding of effective thermal conductivities of multiscale materials by essential and natural boundary conditions. Physical Review B, 1996, 54, 278-285.	3.2	76
224	Wavefront propagation in a class of random microstructuresâ€"II. Non-Linear elastic grains. International Journal of Non-Linear Mechanics, 1995, 30, 771-781.	2.6	4
225	Linear elasticity of planar Delaunay networks. III: Self-consistent approximations. Acta Mechanica, 1995, 110, 57-72.	2.1	10
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.	1.4	51
227	Micromechanics as a Basis of Continuum Random Fields. Applied Mechanics Reviews, 1994, 47, S221-S230.	10.1	50
228	Models: Micro-Macro. , 1994, , 23-28.		1
229	Micromechanics as a basis of random elastic continuum approximations. Probabilistic Engineering Mechanics, 1993, 8, 107-114.	2.7	38
230	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.	1.4	6
231	Random fields and processes in mechanics of granular materials. Mechanics of Materials, 1993, 16, 55-64.	3.2	21
232	Micromechanics as a Basis of Stochastic Finite Elements and Differences: An Overview. Applied Mechanics Reviews, 1993, 46, S136-S147.	10.1	23
233	Plastic Flow of Random Media: Micromechanics, Markov Property and Slip-Lines. Applied Mechanics Reviews, 1992, 45, S75-S81.	10.1	6
234	Fabrication of two-dimensional microstructures in Fe-3.25%Si Sheet. Scripta Metallurgica Et Materialia, 1992, 26, 429-434.	1.0	1

#	Article	IF	Citations
235	Stochastic Hill's equations for the study of errant rocket burns in orbit. Celestial Mechanics and Dynamical Astronomy, 1992, 54, 295-303.	1.4	1
236	Random Fields and Processes in Mechanics of Granular Materials. Studies in Applied Mechanics, 1992, 31, 71-80.	0.4	2
237	Wavefront propagation in a class of random microstructuresâ€"1. bilinear elastic grains. International Journal of Non-Linear Mechanics, 1991, 26, 655-669.	2.6	10
238	On Wavefront Propagation in Random Nonlinear Media. , 1991, , 687-698.		4
239	Transient Waves in a Class of Random Heterogeneous Media. Applied Mechanics Reviews, 1991, 44, S199-S209.	10.1	9
240	Linear elasticity of planar delaunay networks. Part II: Voigt and Reuss bounds, and modification for centroids. Acta Mechanica, 1990, 84, 47-61.	2.1	34
241	Micromechanics model of ice fields?I: Microscale constitutive laws. Pure and Applied Geophysics, 1990, 132, 781-802.	1.9	2
242	Micromechanics model of ice fields?II: Monte Carlo simulation. Pure and Applied Geophysics, 1990, 133, 229-249.	1.9	8
243	A generalization of thermodynamic orthogonality to random media. Zeitschrift Fur Angewandte Mathematik Und Physik, 1990, 41, 701-712.	1.4	9
244	Bounds on constitutive response for a class of random material microstructures. Computers and Structures, 1990, 37, 163-167.	4.4	8
245	Linear elasticity of planar delaunay networks: Random field characterization of effective moduli. Acta Mechanica, 1989, 80, 61-80.	2.1	67
246	Mechanics of damage in a random granular microstructure: Percolation of inelastic phases. International Journal of Engineering Science, 1989, 27, 315-326.	5.0	6
247	Wavefront propagation in discrete random media via stochastic huygens' minor principle. Journal of the Franklin Institute, 1989, 326, 281-293.	3.4	6
248	A master-slave manipulator for excavation and construction tasks. Robotics and Autonomous Systems, 1989, 4, 333-337.	5.1	37
249	Damage in a Random Microstructure: Size Effects, Fractals, and Entropy Maximization. Applied Mechanics Reviews, 1989, 42, S202-S212.	10.1	17
250	Propagation of Rayleigh, Scholte and Stoneley waves along random boundaries. Probabilistic Engineering Mechanics, 1987, 2, 64-73.	2.7	2
251	Graph approach to the constitutive modelling of heterogeneous solids. Mechanics Research Communications, 1987, 14, 255-262.	1.8	14
252	Rayleigh wave scattering by a wedge: A boundary method approach. Mechanics Research Communications, 1986, 13, 53-58.	1.8	3

#	Article	IF	Citations
253	Probabilistic approach to the wave propagation in structured solids. International Journal of Engineering Science, 1984, 22, 1123-1133.	5.0	2
254	Stress Wave Propagation in Discrete Random Solids. North-Holland Mathematics Studies, 1984, 97, 267-278.	0.2	4
255	PLANE WAVE PROPAGATION IN DISCRETE SOLIDS BY THE MONTE CARLO SIMULATION. , 1984, , 579-584.		2
256	Dynamics of a Flexible Cylinder in Subsonic Axial Flow. AIAA Journal, 1981, 19, 1467-1475.	2.6	32
257	Stochastic Continuum Damage Mechanics Using Spring Lattice Models. Applied Mechanics and Materials, 0, 784, 350-357.	0.2	1
258	Virial theorems and virial stresses of micropolar media. Journal of Micromechanics and Molecular Physics, 0, , 1-4.	1.2	1
259	Equipartition of energy in a helix. Mathematics and Mechanics of Solids, 0, , 108128652210890.	2.4	0