

Martin Ostoja-Starzewski

List of Publications by Year in descending order

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259
papers

8,254
citations

66343

42
h-index

60623

81
g-index

278
all docs

278
docs citations

278
times ranked

4521
citing authors

#	ARTICLE	IF	CITATIONS
1	Universal Elastic Anisotropy Index. <i>Physical Review Letters</i> , 2008, 101, 055504.	7.8	1,754
2	Material spatial randomness: From statistical to representative volume element. <i>Probabilistic Engineering Mechanics</i> , 2006, 21, 112-132.	2.7	452
3	Lattice models in micromechanics. <i>Applied Mechanics Reviews</i> , 2002, 55, 35-60.	10.1	419
4	Random field models of heterogeneous materials. <i>International Journal of Solids and Structures</i> , 1998, 35, 2429-2455.	2.7	233
5	Large eddy simulation of a sheet/cloud cavitation on a NACA0015 hydrofoil. <i>Applied Mathematical Modelling</i> , 2007, 31, 417-447.	4.2	149
6	Scale-dependent homogenization of random composites as micropolar continua. <i>European Journal of Mechanics, A/Solids</i> , 2015, 49, 396-407.	3.7	127
7	Microstructural Randomness Versus Representative Volume Element in Thermomechanics. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2002, 69, 25-35.	2.2	116
8	On the Size of RVE in Finite Elasticity of Random Composites. <i>Journal of Elasticity</i> , 2006, 85, 153-173.	1.9	114
9	Fractal solids, product measures and fractional wave equations. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2009, 465, 2521-2536.	2.1	111
10	Spring network models in elasticity and fracture of composites and polycrystals. <i>Computational Materials Science</i> , 1996, 7, 82-93.	3.0	87
11	Lithic raw material physical properties and use-wear accrual. <i>Journal of Archaeological Science</i> , 2007, 34, 711-722.	2.4	84
12	MRI-based finite element modeling of head trauma: spherically focusing shear waves. <i>Acta Mechanica</i> , 2010, 213, 155-167.	2.1	84
13	Scaling function, anisotropy and the size of RVE in elastic random polycrystals. <i>Journal of the Mechanics and Physics of Solids</i> , 2008, 56, 2773-2791.	4.8	79
14	A micromechanically based couple stress model of an elastic two-phase composite. <i>International Journal of Solids and Structures</i> , 2001, 38, 1721-1735.	2.7	77
15	Bounding of effective thermal conductivities of multiscale materials by essential and natural boundary conditions. <i>Physical Review B</i> , 1996, 54, 278-285.	3.2	76
16	Scale-dependent bounds on effective elastoplastic response of random composites. <i>Journal of the Mechanics and Physics of Solids</i> , 2001, 49, 655-673.	4.8	74
17	Apparent thermal conductivity of periodic two-dimensional composites. <i>Computational Materials Science</i> , 2002, 25, 329-338.	3.0	74
18	Scale and boundary conditions effects in elastic properties of random composites. <i>Acta Mechanica</i> , 2001, 148, 63-78.	2.1	71

#	ARTICLE	IF	CITATIONS
19	Thermoelastic Damping in Nanomechanical Resonators with Finite Wave Speeds. <i>Journal of Thermal Stresses</i> , 2006, 29, 201-216.	2.0	71
20	Linear elasticity of planar delaunay networks: Random field characterization of effective moduli. <i>Acta Mechanica</i> , 1989, 80, 61-80.	2.1	67
21	Couple-stress moduli and characteristics length of a two-phase composite. <i>Mechanics Research Communications</i> , 1999, 26, 387-396.	1.8	66
22	Finite Element Methods in Human Head Impact Simulations: A Review. <i>Annals of Biomedical Engineering</i> , 2019, 47, 1832-1854.	2.5	65
23	Brittle intergranular failure in 2D microstructures: Experiments and computer simulations. <i>Acta Materialia</i> , 1996, 44, 4003-4018.	7.9	64
24	On the size of representative volume element for Darcy law in random media. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2006, 462, 2949-2963.	2.1	64
25	Stochastic finite elements as a bridge between random material microstructure and global response. <i>Computer Methods in Applied Mechanics and Engineering</i> , 1999, 168, 35-49.	6.6	62
26	Waves in Fractal Media. <i>Journal of Elasticity</i> , 2011, 104, 187-204.	1.9	62
27	Micropolar continuum mechanics of fractal media. <i>International Journal of Engineering Science</i> , 2011, 49, 1302-1310.	5.0	61
28	Scale effects in plasticity of random media: status and challenges. <i>International Journal of Plasticity</i> , 2005, 21, 1119-1160.	8.8	59
29	Extremum and variational principles for elastic and inelastic media with fractal geometries. <i>Acta Mechanica</i> , 2009, 205, 161-170.	2.1	58
30	Towards Thermoelasticity of Fractal Media. <i>Journal of Thermal Stresses</i> , 2007, 30, 889-896.	2.0	56
31	From fractal media to continuum mechanics. <i>ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik</i> , 2014, 94, 373-401.	1.6	55
32	Apparent elastic and elastoplastic behavior of periodic composites. <i>International Journal of Solids and Structures</i> , 2002, 39, 199-212.	2.7	54
33	Influence of Random Geometry on Effective Properties and Damage Formation In Composite Materials. <i>Journal of Engineering Materials and Technology, Transactions of the ASME</i> , 1994, 116, 384-391.	1.4	51
34	Micromechanics as a Basis of Continuum Random Fields. <i>Applied Mechanics Reviews</i> , 1994, 47, S221-S230.	10.1	50
35	Scale effects in materials with random distributions of needles and cracks. <i>Mechanics of Materials</i> , 1999, 31, 883-893.	3.2	50
36	Comparisons of the Size of the Representative Volume Element in Elastic, Plastic, Thermoelastic, and Permeable Random Microstructures. <i>International Journal for Multiscale Computational Engineering</i> , 2007, 5, 73-82.	1.2	50

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37	A micromechanically based couple-stress model of an elastic orthotropic two-phase composite. <i>European Journal of Mechanics, A/Solids</i> , 2002, 21, 465-481.	3.7	49
38	Towards thermomechanics of fractal media. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2007, 58, 1085-1096.	1.4	46
39	Random Fiber Networks and Special Elastic Orthotropy of Paper. <i>Journal of Elasticity</i> , 2000, 60, 131-149.	1.9	45
40	Scaling to RVE in Random Media. <i>Advances in Applied Mechanics</i> , 2016, , 111-211.	2.3	45
41	Elasto-plasticity of paper. <i>International Journal of Plasticity</i> , 2003, 19, 2083-2098.	8.8	44
42	A derivation of the Maxwell-Cattaneo equation from the free energy and dissipation potentials. <i>International Journal of Engineering Science</i> , 2009, 47, 807-810.	5.0	43
43	Electromagnetism on anisotropic fractal media. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2013, 64, 381-390.	1.4	43
44	Composites with functionally graded interphases: Mesocontinuum concept and effective transverse conductivity. <i>Acta Materialia</i> , 1996, 44, 2057-2066.	7.9	41
45	Damage patterns and constitutive response of random matrix-inclusion composites. <i>Engineering Fracture Mechanics</i> , 1997, 58, 581-606.	4.3	40
46	Continuum mechanics models of fractal porous media: Integral relations and extremum principles. <i>Journal of Mechanics of Materials and Structures</i> , 2009, 4, 901-912.	0.6	40
47	Micromechanics as a basis of random elastic continuum approximations. <i>Probabilistic Engineering Mechanics</i> , 1993, 8, 107-114.	2.7	38
48	A master-slave manipulator for excavation and construction tasks. <i>Robotics and Autonomous Systems</i> , 1989, 4, 333-337.	5.1	37
49	Fracture of random matrix-inclusion composites: scale effects and statistics. <i>International Journal of Solids and Structures</i> , 1998, 35, 2537-2566.	2.7	37
50	Particulate random composites homogenized as micropolar materials. <i>Meccanica</i> , 2014, 49, 2719-2727.	2.0	36
51	Effect of filler alignment on percolation in polymer nanocomposites using tunneling-percolation model. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	36
52	Finite Element Solutions to the Bending Stiffness of a Single-Layered Helically Wound Cable With Internal Friction. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2016, 83, .	2.2	36
53	Modeling of bone at a single lamella level. <i>Biomechanics and Modeling in Mechanobiology</i> , 2004, 3, 67-74.	2.8	35
54	Particle modeling of random crack patterns in epoxy plates. <i>Probabilistic Engineering Mechanics</i> , 2006, 21, 267-275.	2.7	35

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55	A Random Field Formulation of Hooke's Law in All Elasticity Classes. <i>Journal of Elasticity</i> , 2017, 127, 269-302.	1.9	35
56	Linear elasticity of planar delaunay networks. Part II: Voigt and Reuss bounds, and modification for centroids. <i>Acta Mechanica</i> , 1990, 84, 47-61.	2.1	34
57	Thermo-poromechanics of fractal media. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190288.	3.4	34
58	Dynamics of a Flexible Cylinder in Subsonic Axial Flow. <i>AIAA Journal</i> , 1981, 19, 1467-1475.	2.6	32
59	Fractal materials, beams, and fracture mechanics. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2009, 60, 1194-1205.	1.4	32
60	Simulation of elastic wave propagation using cellular automata and peridynamics, and comparison with experiments. <i>Wave Motion</i> , 2016, 60, 73-83.	2.0	30
61	Particle sieving in a random fiber network. <i>Applied Mathematical Modelling</i> , 2000, 24, 523-534.	4.2	28
62	On turbulence in fractal porous media. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2008, 59, 1111-1117.	1.4	27
63	Elastic-Plastic-Brittle Transitions and Avalanches in Disordered Media. <i>Physical Review Letters</i> , 2014, 112, 045503.	7.8	27
64	Tunneling-percolation behavior of polydisperse prolate and oblate ellipsoids. <i>Journal of Applied Physics</i> , 2015, 118, .	2.5	27
65	Towards Stochastic Continuum Thermodynamics. <i>Journal of Non-Equilibrium Thermodynamics</i> , 2002, 27, .	4.2	26
66	Experimental and computational study of shielding effectiveness of polycarbonate carbon nanocomposites. <i>Journal of Applied Physics</i> , 2016, 120, .	2.5	26
67	Particle modeling of dynamic fragmentation-I: theoretical considerations. <i>Computational Materials Science</i> , 2005, 33, 429-442.	3.0	25
68	Macrohomogeneity condition in dynamics of micropolar media. <i>Archive of Applied Mechanics</i> , 2011, 81, 899-906.	2.2	25
69	Stiffness tensor random fields through upscaling of planar random materials. <i>Probabilistic Engineering Mechanics</i> , 2013, 34, 131-156.	2.7	25
70	Heat conduction in porcine muscle and blood: experiments and time-fractional telegraph equation model. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190726.	3.4	25
71	Spectral finite elements for vibrating rods and beams with random field properties. <i>Journal of Sound and Vibration</i> , 2003, 268, 779-797.	3.9	24
72	Mesoscale conductivity and scaling function in aggregates of cubic, trigonal, hexagonal, and tetragonal crystals. <i>Physical Review B</i> , 2008, 77, .	3.2	24

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73	Micromechanics as a Basis of Stochastic Finite Elements and Differences: An Overview. Applied Mechanics Reviews, 1993, 46, S136-S147.	10.1	23
74	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
75	Towards scaling laws in random polycrystals. International Journal of Engineering Science, 2009, 47, 1322-1330.	5.0	22
76	Random fields and processes in mechanics of granular materials. Mechanics of Materials, 1993, 16, 55-64.	3.2	21
77	Statistically isotropic tensor random fields: Correlation structures. Mathematics and Mechanics of Complex Systems, 2014, 2, 209-231.	0.9	21
78	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
79	Micromechanically based stochastic finite elements: length scales and anisotropy. Probabilistic Engineering Mechanics, 1996, 11, 205-214.	2.7	20
80	Scaling function in conductivity of planar random checkerboards. Computational Materials Science, 2013, 79, 252-261.	3.0	20
81	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
82	Spatial Behaviour of Solutions of the Moore-Gibson-Thompson Equation. Journal of Mathematical Fluid Mechanics, 2021, 23, 1.	1.0	20
83	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.	2.1	19
84	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	19
85	Peristatic solutions for finite one- and two-dimensional systems. Mathematics and Mechanics of Solids, 2017, 22, 1639-1653.	2.4	19
86	Damage in a Random Microstructure: Size Effects, Fractals, and Entropy Maximization. Applied Mechanics Reviews, 1989, 42, S202-S212.	10.1	17
87	Scale-Dependent Homogenization of Inelastic Random Polycrystals. Journal of Applied Mechanics, Transactions ASME, 2008, 75, .	2.2	17
88	Scaling of slip avalanches in sheared amorphous materials based on large-scale atomistic simulations. Physical Review E, 2017, 95, 032902.	2.1	17
89	Damage maps of disordered composites: A spring network approach. International Journal of Fracture, 1996, 75, R51-R57.	2.2	16
90	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

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91	Stochastic dynamics of acceleration waves in random media. <i>Mechanics of Materials</i> , 2006, 38, 840-848.	3.2	16
92	Second law violations, continuum mechanics, and permeability. <i>Continuum Mechanics and Thermodynamics</i> , 2016, 28, 489-501.	2.2	16
93	Shear-thinning of molecular fluids in Couette flow. <i>Physics of Fluids</i> , 2017, 29, .	4.0	16
94	Fractal planetary rings: Energy inequalities and random field model. <i>International Journal of Modern Physics B</i> , 2017, 31, 1750236.	2.0	16
95	On the objective rate of heat and stress fluxes. Connection with micro/nano-scale heat convection. <i>Discrete and Continuous Dynamical Systems - Series B</i> , 2011, 15, 991-998.	0.9	16
96	Particle modeling of dynamic fragmentation: Fracture in single- and multi-phase materials. <i>Computational Materials Science</i> , 2006, 35, 116-133.	3.0	15
97	Fractal Solids, Product Measures and Continuum Mechanics. <i>Advances in Mechanics and Mathematics</i> , 2010, , 315-323.	0.7	15
98	Spectral expansions of homogeneous and isotropic tensor-valued random fields. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2016, 67, 1.	1.4	15
99	Ignaczak equation of elastodynamics. <i>Mathematics and Mechanics of Solids</i> , 2019, 24, 3674-3713.	2.4	15
100	Graph approach to the constitutive modelling of heterogeneous solids. <i>Mechanics Research Communications</i> , 1987, 14, 255-262.	1.8	14
101	Electric-field-induced displacement of a charged spherical colloid embedded in an elastic Brinkman medium. <i>Physical Review E</i> , 2008, 77, 011404.	2.1	14
102	On the wave propagation in isotropic fractal media. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2011, 62, 1117-1129.	1.4	14
103	A Statistically-Based Homogenization Approach for Particle Random Composites as Micropolar Continua. <i>Advanced Structured Materials</i> , 2016, , 425-441.	0.5	14
104	Tunneling-percolation model of multicomponent nanocomposites. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	14
105	Shielding effectiveness and bandgaps of interpenetrating phase composites based on the Schwarz Primitive surface. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	14
106	Telegraph equation: two types of harmonic waves, a discontinuity wave, and a spectral finite element. <i>Acta Mechanica</i> , 2019, 230, 1725-1743.	2.1	14
107	Stochastic finite elements: Where is the physics?. <i>Theoretical and Applied Mechanics</i> , 2011, 38, 379-396.	0.3	14
108	Universal material property in conductivity of planar random microstructures. <i>Physical Review B</i> , 2000, 62, 2980-2982.	3.2	13

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109	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
110	Elastic-plastic transition in three-dimensional random materials: massively parallel simulations, fractal morphogenesis and scaling functions. Philosophical Magazine, 2012, 92, 2733-2758.	1.6	13
111	Acoustic-elastodynamic interaction in isotropic fractal media. European Physical Journal: Special Topics, 2013, 222, 1951-1960.	2.6	13
112	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
113	Harmonic oscillator driven by random processes having fractal and Hurst effects. Acta Mechanica, 2015, 226, 3653-3672.	2.1	13
114	Mesoscale bounds in viscoelasticity of random composites. Mechanics Research Communications, 2015, 68, 98-104.	1.8	13
115	Local and nonlocal material models, spatial randomness, and impact loading. Archive of Applied Mechanics, 2016, 86, 39-58.	2.2	13
116	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
117	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
118	On streamwise velocity spectra models with fractal and long-memory effects. Physics of Fluids, 2021, 33, 035116.	4.0	12
119	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
120	THERMOELASTIC WAVES IN A HELIX WITH PARABOLIC OR HYPERBOLIC HEAT CONDUCTION. Journal of Thermal Stresses, 2003, 26, 1205-1219.	2.0	11
121	Spectral finite element of a helix. Mechanics Research Communications, 2005, 32, 147-152.	1.8	11
122	Yield of random elastoplastic materials. Journal of Mechanics of Materials and Structures, 2006, 1, 1055-1073.	0.6	11
123	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
124	On Thermodynamic Restrictions in Peridynamics. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	11
125	Fracture model for cemented aggregates. AIP Advances, 2013, 3, 012119.	1.3	11
126	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

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127	RVE Problem: Mathematical aspects and related stochastic mechanics. International Journal of Engineering Science, 2020, 146, 103169.	5.0	11
128	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
129	Wavefront propagation in a class of random microstructures ¹ . bilinear elastic grains. International Journal of Non-Linear Mechanics, 1991, 26, 655-669.	2.6	10
130	Linear elasticity of planar Delaunay networks. III: Self-consistent approximations. Acta Mechanica, 1995, 110, 57-72.	2.1	10
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	Fractal Geometric Characterization of Functionally Graded Materials. Journal of Nanomechanics & Micromechanics, 2013, 3, 04013001.	1.4	10
133	Elastodynamics in micropolar fractal solids. Mathematics and Mechanics of Solids, 2014, 19, 117-134.	2.4	10
134	Edges of Saturn's rings are fractal. SpringerPlus, 2015, 4, 158.	1.2	10
135	Scaling and bounds in thermal conductivity of planar Gaussian correlated microstructures. Journal of Applied Physics, 2015, 117, 104301.	2.5	10
136	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
137	Acceleration waves on random fields with fractal and Hurst effects. Wave Motion, 2017, 74, 134-150.	2.0	10
138	A generalization of thermodynamic orthogonality to random media. Zeitschrift Fur Angewandte Mathematik Und Physik, 1990, 41, 701-712.	1.4	9
139	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
140	On elastic and viscoelastic helices. Philosophical Magazine, 2005, 85, 4213-4230.	1.6	9
141	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
142	Doppler effect described by the solutions of the Cattaneo telegraph equation. Acta Mechanica, 2021, 232, 725-740.	2.1	9
143	Fractional telegraph equation under moving time-harmonic impact. International Journal of Heat and Mass Transfer, 2022, 182, 121958.	4.8	9
144	Mechanics of Random Materials. , 2001, , 93-161.		9

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145	Transient Waves in a Class of Random Heterogeneous Media. Applied Mechanics Reviews, 1991, 44, S199-S209.	10.1	9
146	Micromechanics model of ice fields?II: Monte Carlo simulation. Pure and Applied Geophysics, 1990, 133, 229-249.	1.9	8
147	Bounds on constitutive response for a class of random material microstructures. Computers and Structures, 1990, 37, 163-167.	4.4	8
148	On the distance to blow-up of acceleration waves in random media. Continuum Mechanics and Thermodynamics, 2003, 15, 21-32.	2.2	8
149	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
150	Scale Effects in Infinitesimal and Finite Thermoelasticity of Random Composites. Journal of Thermal Stresses, 2007, 30, 587-603.	2.0	8
151	Hybrid Lattice Particle Modelling Approach for Polymeric Materials Subject to High Strain Rate Loads. Polymers, 2010, 2, 3-30.	4.5	8
152	Fractals in elastic-hardening plastic materials. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 603-621.	2.1	8
153	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
154	SCALING AND HOMOGENIZATION IN SPATIALLY RANDOM COMPOSITES. Computational and Experimental Methods in Structures, 2013, , 61-101.	0.3	8
155	Electrical properties of random checkerboards at finite scales. AIP Advances, 2015, 5, 017131.	1.3	8
156	Responses of first-order dynamical systems to MatÅ©rn, Cauchy, and Dagum excitations. Mathematics and Mechanics of Complex Systems, 2015, 3, 27-41.	0.9	8
157	Tensor random fields in conductivity and classical or microcontinuum theories. Mathematics and Mechanics of Solids, 2015, 20, 418-432.	2.4	8
158	Scale-Dependent Homogenization of Random Hyperbolic Thermoelastic Solids. Journal of Elasticity, 2015, 118, 243-250.	1.9	8
159	Continuum mechanics versus violations of the second law of thermodynamics. Journal of Thermal Stresses, 2016, 39, 734-749.	2.0	8
160	Scale and boundary conditions effects in elasticity and damage mechanics of random composites. Studies in Applied Mechanics, 1998, 46, 65-80.	0.4	7
161	From Lattices and Composites to Micropolar Continua. ICASE/LaRC Interdisciplinary Series in Science and Engineering, 2004, , 175-212.	0.1	7
162	Viscothermoelasticity with finite wave speeds: thermomechanical laws. Acta Mechanica, 2014, 225, 1277-1285.	2.1	7

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163	Does a Fractal Microstructure Require a Fractional Viscoelastic Model?. Fractal and Fractional, 2018, 2, 12.	3.3	7
164	Elastodynamics of a multilayered transversely isotropic half-space due to the rigid motion of foundation. Wave Motion, 2019, 88, 106-128.	2.0	7
165	Modeling and Simulation of Head Trauma Utilizing White Matter Properties from Magnetic Resonance Elastography. Modelling, 2020, 1, 225-241.	1.4	7
166	Mechanics of damage in a random granular microstructure: Percolation of inelastic phases. International Journal of Engineering Science, 1989, 27, 315-326.	5.0	6
167	Wavefront propagation in discrete random media via stochastic Huygens' minor principle. Journal of the Franklin Institute, 1989, 326, 281-293.	3.4	6
168	Plastic Flow of Random Media: Micromechanics, Markov Property and Slip-Lines. Applied Mechanics Reviews, 1992, 45, S75-S81.	10.1	6
169	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
170	Influence of topography on the Phoenix CO2 dome: a computational study. Atmospheric Science Letters, 2004, 5, 103-107.	1.9	6
171	Fractal Pattern Formation at Elastic-Plastic Transition in Heterogeneous Materials. Journal of Applied Mechanics, Transactions ASME, 2010, 77, .	2.2	6
172	Dissipation Function in Hyperbolic Thermoelasticity. Journal of Thermal Stresses, 2011, 34, 68-74.	2.0	6
173	Fractal Shear Bands at Elastic-Plastic Transitions in Random Mohr-Coulomb Materials. Journal of Engineering Mechanics - ASCE, 2014, 140, 04014072.	2.9	6
174	Admitting Spontaneous Violations of the Second Law in Continuum Thermomechanics. Entropy, 2017, 19, 78.	2.2	6
175	Electrostatic and magnetostatic properties of random materials. Physical Review E, 2019, 99, 022120.	2.1	6
176	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.	2.1	6
177	Fracture of Brittle Microbeams. Journal of Applied Mechanics, Transactions ASME, 2004, 71, 424-427.	2.2	6
178	ON THE REDUCTION OF CONSTANTS IN PLANAR COSSERAT ELASTICITY WITH EIGENSTRAINS AND EIGENCURVATURES. Journal of Thermal Stresses, 2003, 26, 1221-1228.	2.0	5
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