Statistical models of fracture

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Citation Report

#	Article	IF	CITATIONS
1	Morphology of two-dimensional fracture surfaces. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, L10002-L10002.	0.9	23
2	Aging dynamics of non-linear elastic interfaces: the Kardar–Parisi–Zhang equation. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P10002-P10002.	0.9	18
3	Fracture strength in randomly perforated plates. Journal of Applied Physics, 2007, 101, 104911.	1.1	4
4	A thermodynamical fibre bundle model for the fracture of disordered materials. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P04009-P04009.	0.9	5
5	Fatigue failure of disordered materials. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P02003-P02003.	0.9	31
6	Shear faults in a model brittle solid. Chaos, 2007, 17, 041105.	1.0	5
7	Out-of-equilibrium relaxation of the Edwards–Wilkinson elastic line. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P09008-P09008.	0.9	21
8	Effect of disorder and notches on crack roughness. Physical Review E, 2007, 76, 056111.	0.8	6
9	Discrepancy between Subcritical and Fast Rupture Roughness: A Cumulant Analysis. Physical Review Letters, 2007, 98, 255502.	2.9	21
10	Creep of a Fracture Line in Paper Peeling. Physical Review Letters, 2007, 99, 145504.	2.9	30
11	Dynamics ofk-core percolation. Journal of Physics A: Mathematical and Theoretical, 2007, 40, F581-F587.	0.7	13
12	Computer simulation of fatigue under diametrical compression. Physical Review E, 2007, 75, 046115.	0.8	25
13	Training-Induced Criticality in Martensites. Physical Review Letters, 2007, 99, 075501.	2.9	45
14	How materials get tired. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, N04001.	0.9	3
15	Analysis and Numerics for Rate-Independent Processes. Oberwolfach Reports, 2007, 4, 591-666.	0.0	0
16	Evolution of bond fractures in a randomly distributed fiber network. International Journal of Solids and Structures, 2007, 44, 6135-6147.	1.3	22
17	Slow crack growth: Models and experiments. European Physical Journal: Special Topics, 2007, 146, 341-356.	1.2	18
18	Multi-scale interaction potentials (F â^' r) for describing fracture of brittle disordered materials like cement and concrete. International Journal of Fracture, 2007, 143, 41-78.	1.1	33

ARTICLE IF CITATIONS # Fracture in three-dimensional random fuse model: recent advances through high-performance 19 0.7 6 computing. Journal of Computer-Aided Materials Design, 2007, 14, 25-35. Roughness of a mode I in-plane crack front propagating along a heterogeneous cohesive interface. Journal of Computer-Aided Materials Design, 2007, 14, 15-24. Planar Line Processes for Void and Density Statistics in Thin Stochastic Fibre Networks. Journal of 21 0.5 3 Statistical Physics, 2007, 129, 311-322. Line creep in paper peeling. International Journal of Fracture, 2008, 151, 281-297. Interaction between cracking, delamination and buckling in brittle elastic thin films. International 23 1.1 17 Journal of Fracture, 2008, 154, 195-209. Fracture of fiber-reinforced cement composites: effects of fiber dispersion. International Journal of 1.1 Fracture, 2008, 154, 73-86. Anomalous roughness of fracture surfaces in 2D fuse models. International Journal of Fracture, 25 1.1 5 2008, 154, 119-130. Fracture size effects from disordered lattice models. International Journal of Fracture, 2008, 154, 1.1 16 51-59. 27 Line creep in paper peeling. International Journal of Fracture, 2008, 154, 147-158. 1.1 2 Influence of particle density on 3D size effects in the fracture of (numerical) concrete. Mechanics of 1.7 Materials, 2008, 40, 470-486. Structural reinforcement in a spring-block model of stress-induced fracture propagation. Computer 29 3 3.0Physics Communications, 2008, 178, 635-646. Propagation of Mechanical Stress through the Actin Cytoskeleton toward Focal Adhesions: Model and Experiment. Biophysical Journal, 2008, 94, 1470-1482. Collective behavior of earthquakes and faults: Continuumâ€discrete transitions, progressive $\mathbf{31}$ 9.0 387 evolutionary changes, and different dynamic regimes. Reviews of Geophysics, 2008, 46, . Fracture through cavitation in a metallic glass. Europhysics Letters, 2008, 83, 66006. Exactly solvable model of avalanches dynamics for Barkhausen crackling noise. Advances in Physics, 33 35.9 93 2008, 57, 287-359. Damage process of a fiber bundle with a strain gradient. Physical Review E, 2008, 77, 016608. Crackling Dynamics in Material Failure as the Signature of a Self-Organized Dynamic Phase Transition. 35 2.9 168 Physical Review Letters, 2008, 101, 045501. Universality class of fiber bundles with strong heterogeneities. Europhysics Letters, 2008, 81, 54005.

#	ARTICLE Thermal rounding of the depinning transition. Europhysics Letters, 2008, 81, 26005.	IF 0.7	CITATIONS
38	Discrete fracture model with anisotropic load sharing. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P01004.	0.9	9
39	Attractive and repulsive cracks in a heterogeneous material. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P10022.	0.9	14
40	Energy dissipation statistics in the random fuse model. Physical Review E, 2008, 77, 046114.	0.8	8
41	Driving-Induced Crossover: From Classical Criticality to Self-Organized Criticality. Physical Review Letters, 2008, 101, 230601.	2.9	61
42	Role of Disorder in the Size Scaling of Material Strength. Physical Review Letters, 2008, 100, 055502.	2.9	42
43	Continuous damage fiber bundle model for strongly disordered materials. Physical Review E, 2008, 77, 046102.	0.8	24
44	Crack Propagation through Phase-Separated Glasses: Effect of the Characteristic Size of Disorder. Physical Review Letters, 2008, 101, 255501.	2.9	31
45	Crack roughness in the two-dimensional random threshold beam model. Physical Review E, 2008, 78, 046105.	0.8	19
46	Universality behind Basquin's Law of Fatigue. Physical Review Letters, 2008, 100, 094301.	2.9	131
47	Critical ruptures in a bundle of slowly relaxing fibers. Physical Review E, 2008, 77, 036102.	0.8	20
48	Subcritical Crack Growth: The Microscopic Origin of Paris' Law. Physical Review Letters, 2008, 100, 195503.	2.9	16
49	Crack propagation, arrest and statistics in heterogeneous materials. Journal of Statistical Mechanics: Theory and Experiment, 2008, 2008, P04011.	0.9	8
50	Probabilistic Upscaling of Material Failure Using Random Field Models – A Preliminary Investigation. Algorithms, 2009, 2, 750-763.	1.2	3
51	Avalanche dynamics of fiber bundle models. Physical Review E, 2009, 80, 051108.	0.8	40
52	Universal Nonstationary Dynamics at the Depinning Transition. Physical Review Letters, 2009, 103, 160602.	2.9	22
53	Far-from-Equilibrium State in a Weakly Dissipative Model. Physical Review Letters, 2009, 102, 160601.	2.9	8
54	Nucleation of cracks in a brittle sheet. Physical Review E, 2009, 80, 066109.	0.8	6

	CITATION R	EPORT	
#	Article	IF	CITATIONS
55	Optimization and Plasticity in Disordered Media. Physical Review Letters, 2009, 103, 225502.	2.9	13
56	EFFECT OF MEMORY AND REINFORCEMENT ON THE PROPAGATION AND MORPHOLOGY OF FRACTURE IN A TWO-DIMENSIONAL MASS-SPRING SYSTEM. International Journal of Modern Physics C, 2009, 20, 1049-1062.	0.8	3
57	Explicit representation of physical processes in concrete fracture. Journal Physics D: Applied Physics, 2009, 42, 214002.	1.3	54
58	Crackling noise in sub-critical fracture of heterogeneous materials. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P01021.	0.9	18
59	Crackling noise and its dynamics in fracture of disordered media. Journal Physics D: Applied Physics, 2009, 42, 214013.	1.3	22
60	Coulombic faulting from the grain scale to the geophysical scale: lessons from ice. Journal Physics D: Applied Physics, 2009, 42, 214017.	1.3	54
61	Roughening and pinning of interface cracks in shear delamination of thin films. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P11009.	0.9	6
62	Nucleation of interfacial shear cracks in thin films on disordered substrates. Journal of Statistical Mechanics: Theory and Experiment, 2009, 2009, P02047.	0.9	5
63	Intermittency and roughening in the failure of brittle heterogeneous materials. Journal Physics D: Applied Physics, 2009, 42, 214014.	1.3	63
64	Thermal effects in the dynamics of disordered elastic systems. Physica B: Condensed Matter, 2009, 404, 444-446.	1.3	6
65	Burst distribution in noisy fiber bundles and fuse models. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 4593-4599.	1.2	1
66	Crack front pinning by design in planar heterogeneous interfaces. Journal of the Mechanics and Physics of Solids, 2009, 57, 446-457.	2.3	48
67	Micromechanical Model for Deformation in Solids with Universal Predictions for Stress-Strain Curves and Slip Avalanches. Physical Review Letters, 2009, 102, 175501.	2.9	282
68	Fiber bundle model for multiscale modeling of hydromechanical triggering of shallow landslides. Water Resources Research, 2009, 45, .	1.7	65
69	IUTAM Symposium on Scaling in Solid Mechanics. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , .	0.1	3
70	Depinning Transition in the Failure of Inhomogeneous Brittle Materials. Physical Review Letters, 2009, 103, 055501.	2.9	55
71	Size effects in statistical fracture. Journal Physics D: Applied Physics, 2009, 42, 214012.	1.3	54
72	Growing correlations and aging of an elastic line in a random potential. Physical Review B, 2009, 80, .	1.1	46

	CITATION	CITATION REPORT	
#	Article	IF	CITATIONS
73	Creep dynamics of elastic manifolds via exact transition pathways. Physical Review B, 2009, 79, .	1.1	77
74	Some semi-phenomenological approaches to description of microcrack formation in solids. , 2009, , .		0
75	Modelling snow failure with a fibre bundle model. Journal of Glaciology, 2009, 55, 997-1002.	1.1	42
76	Breakdown of fiber bundles with stochastic load-redistribution. Chemical Physics, 2010, 375, 591-599.	0.9	13
77	Overview of statistical models of fracture for nonirradiated nuclear-graphite components. Nuclear Engineering and Design, 2010, 240, 1-29.	0.8	18
78	Improved sequentially linear solution procedure. Engineering Fracture Mechanics, 2010, 77, 2263-2276.	2.0	31
79	Material point method modeling of porous semi-brittle materials. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012093.	0.3	5
80	Slip avalanches in a fiber bundle model. Europhysics Letters, 2010, 89, 26008.	0.7	14
81	Fluctuations and Scaling in Creep Deformation. Physical Review Letters, 2010, 105, 100601.	2.9	45
82	Stochastic load-redistribution model for cascading failure propagation. Physical Review E, 2010, 81, 031129.	0.8	45
83	Random-manifold to random-periodic depinning of an elastic interface. Physical Review B, 2010, 82, .	1.1	23
84	A parallel multigrid preconditioner for the simulation of large fracture networks. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P03029.	0.9	1
85	Scaling response of the amorphous alloy surface on loading and extrinsic crystallization. Europhysics Letters, 2010, 90, 26007.	0.7	6
86	Failure as a critical phenomenon in a progressive damage model. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P01013.	0.9	49
87	Statistics of acoustic emission in paper fracture: precursors and criticality. Journal of Statistical Mechanics: Theory and Experiment, 2010, 2010, P02016.	0.9	22
88	Fracture toughness and maximum stress in a disordered lattice system. Physical Review E, 2010, 82, 016106.	0.8	16
89	Fracture roughness in three-dimensional beam lattice systems. Physical Review E, 2010, 82, 026103.	0.8	16
90	Scaling of surface roughness in perfectly plastic disordered media. Physical Review E, 2010, 82, 056116.	0.8	7

		CITATION RE	PORT	
#	Article		IF	CITATION
91	Fracture roughness scaling: A case study on planar cracks. Europhysics Letters, 2010, 9	2, 44001.	0.7	53
92	Failure processes in elastic fiber bundles. Reviews of Modern Physics, 2010, 82, 499-555	5.	16.4	283
93	A random neighbour model for yielding. Journal of Statistical Mechanics: Theory and Exp 2010, 2010, P03011.	periment,	0.9	5
94	An algorithm for simulating fracture of cohesive–frictional materials. Journal of Statist Mechanics: Theory and Experiment, 2010, 2010, P11004.	tical	0.9	1
95	From Brittle to Ductile Fracture in Disordered Materials. Physical Review Letters, 2010,	105, 155502.	2.9	29
96	Stress Field of the Earth's Crust. , 2010, , .			179
97	<i>Colloquium</i> : Failure of molecules, bones, and the Earth itself. Reviews of Modern 82, 1459-1487.	Physics, 2010,	16.4	42
98	Recent progress in adaptive multiscale molecular dynamics simulations of soft matter. F Chemistry Chemical Physics, 2010, 12, 12401.	Physical	1.3	127
99	Crossed-ratchet effects and domain wall geometrical pinning. Physical Review B, 2011,	83, .	1.1	12
100	4D imaging of fracturing in organic-rich shales during heating. Journal of Geophysical Re 116, .	search, 2011,	3.3	87
101	Stress concentration and size effect in fracture of notched heterogeneous material. Phy E, 2011, 83, 015101.	rsical Review	0.8	28
102	8. Statistical aspects of failure of paper products. , 2011, , 139-160.			0
103	Geometry-Induced Transport Properties of Two Dimensional Networks. , 2011, , .			3
104	Nonextensive statistical analysis of the data on the high-speed impact fracture of solids 2011, 94, 378-381.	. JETP Letters,	0.4	9
105	Damage distribution and size effect in numerical concrete from lattice analyses. Cemen Composites, 2011, 33, 867-880.	t and Concrete	4.6	96
106	The resistance curve for subcritical cracks near the threshold. International Journal of Fr 2011, 167, 147-155.	acture,	1.1	4
107	Coplanar perturbation of a crack lying on the mid-plane of a plate. International Journal 2011, 170, 67-82.	of Fracture,	1.1	26
108	A Unifying Phase Diagram for the Dynamics of Sheared Solids and Granular Materials. Po Geophysics, 2011, 168, 2221-2237.	ure and Applied	0.8	28

#	Article	IF	Citations
109	A statistical model of fracture for a 2D hexagonal mesh: The Cell Network Model of Fracture for the bamboo Guadua angustifolia. Computer Physics Communications, 2011, 182, 188-191.	3.0	19
110	Finite element modeling of hydraulic fracturing on a reservoir scale in 2D. Journal of Petroleum Science and Engineering, 2011, 77, 274-285.	2.1	67
111	Crack formation in composites through a spring model. Physica A: Statistical Mechanics and Its Applications, 2011, 390, 731-740.	1.2	15
112	Failure of heterogeneous materials: A dynamic phase transition?. Physics Reports, 2011, 498, 1-44.	10.3	161
113	Size distribution and waiting times for the avalanches of the Cell Network Model of Fracture. Computer Physics Communications, 2011, 182, 1824-1827.	3.0	0
114	Non-local energetics of random heterogeneous lattices. Journal of the Mechanics and Physics of Solids, 2011, 59, 1214-1230.	2.3	5
115	Disorder-induced brittle–to–quasi-brittle transition in fiber bundles. Europhysics Letters, 2011, 95, 16004.	0.7	12
116	Size scaling of strength in thin film delamination. Journal of Statistical Mechanics: Theory and Experiment, 2011, 2011, P02024.	0.9	1
117	Dielectric Breakdown and Avalanches at Nonequilibrium Metal-Insulator Transitions. Physical Review Letters, 2011, 107, 276401.	2.9	16
118	Effect of disorder on temporal fluctuations in drying-induced cracking. Physical Review E, 2011, 84, 041114.	0.8	4
119	Equation of state from the Potts-percolation model of a solid. Physical Review E, 2011, 84, 051106.	0.8	4
120	Average crack-front velocity during subcritical fracture propagation in a heterogeneous medium. Physical Review E, 2011, 84, 036104.	0.8	33
121	Crackling noise in three-point bending of heterogeneous materials. Physical Review E, 2011, 83, 046115.	0.8	7
122	Microstructure of damage in thermally activated fracture of Lennard-Jones systems. Physical Review E, 2011, 83, 066108.	0.8	7
123	Maximum relative height of elastic interfaces in random media. Physical Review E, 2011, 84, 041131.	0.8	8
124	Local dynamics of a randomly pinned crack front during creep and forced propagation: An experimental study. Physical Review E, 2011, 83, 046108.	0.8	53
125	Fibre bundle models for creep rupture analysis of polymer matrix composites. , 2011, , 327-349.		1
126	Time-dependent failure criteria for lifetime prediction of polymer matrix composite structures. , 2011, , 366-405.		2

		CITATION RE	PORT	
#	Article		IF	CITATIONS
127	Analysis of power-law exponents by maximum-likelihood maps. Physical Review E, 2012	2, 85, 066121.	0.8	49
128	Thermal rounding exponent of the depinning transition of an elastic string in a random Physical Review E, 2012, 85, 021144.	medium.	0.8	28
129	Damage-Cluster Distributions and Size Effect on Strength in Compressive Failure. Phys Letters, 2012, 108, 225502.	ical Review	2.9	38
130	Force-induced breakdown of flexible polymerized membrane. Physical Review E, 2012,	85, 021805.	0.8	4
131	Static friction and the dynamics of interfacial rupture. Physical Review B, 2012, 86, .		1.1	46
132	Flooding transition in the topography of toppling surfaces of stochastic and rotational models. Physical Review E, 2012, 85, 031111.	sandpile	0.8	5
133	Strong anisotropy in two-dimensional surfaces with generic scale invariance: Gaussian models. Physical Review E, 2012, 86, 051611.	and related	0.8	11
134	Subcritical fatigue in fuse networks. Europhysics Letters, 2012, 100, 36006.		0.7	6
135	The avalanche process of the multilinear fiber bundles model. Journal of Statistical Mec Theory and Experiment, 2012, 2012, P10008.	hanics:	0.9	8
136	Fracturing Highly Disordered Materials. Physical Review Letters, 2012, 109, 255701.		2.9	48
137	A statistical model for predicting the mechanical properties of nanostructured metals v grain size distribution. Acta Materialia, 2012, 60, 5762-5772.	vith bimodal	3.8	57
138	Structure of drying fronts in three-dimensional porous media. Physical Review E, 2012,	85, 066312.	0.8	32
139	Nonuniversality of roughness exponent of quasistatic fracture surfaces. Physical Review 021121.	w E, 2012, 85,	0.8	12
140	Thermal rounding of the depinning transition in ultrathin Pt/Co/Pt films. Physical Review	w B, 2012, 85, .	1.1	26
141	Simulation study on the avalanche process of the fiber bundles with strong heterogene A: Statistical Mechanics and Its Applications, 2012, 391, 4686-4691.	eities. Physica	1.2	0
142	Evidence of frost-cracking inferred from acoustic emissions in a high-alpine rock-wall. E Planetary Science Letters, 2012, 341-344, 86-93.	arth and	1.8	75
143	Second-order coplanar perturbation of a semi-infinite crack in an infinite body. Enginee Mechanics, 2012, 90, 129-142.	ring Fracture	2.0	18
144	Depinning transition in disorder media: a fractional approach. European Physical Journa	al B, 2012, 85, 1.	0.6	1

#	Article	IF	CITATIONS
145	Current challenges for statistical physics in fracture and plasticity. European Physical Journal B, 2012, 85, 1.	0.6	11
146	Roughness of fault surfaces over nine decades of length scales. Journal of Geophysical Research, 2012, 117, .	3.3	251
147	Modeling the effect of composition and thermal quenching on the fracture behavior of borosilicate glass. Journal of Non-Crystalline Solids, 2012, 358, 3268-3279.	1.5	30
149	Fracture Strength of Disordered Media: Universality, Interactions, and Tail Asymptotics. Physical Review Letters, 2012, 108, 065504.	2.9	39
150	Microfracturation in rocks: from microtomography images to processes. EPJ Applied Physics, 2012, 60, 24203.	0.3	19
151	Boiling Crisis as a Critical Phenomenon. Physical Review Letters, 2012, 108, 215701.	2.9	47
152	Simulation Study on the Avalanche Process of Continuous Damage Fiber Bundle Model with Strong Disorder. Journal of Statistical Physics, 2012, 146, 1203-1212.	0.5	4
153	Sources and characteristics of acoustic emissions from mechanically stressed geologic granular media — A review. Earth-Science Reviews, 2012, 112, 97-114.	4.0	133
154	A statistical damage model with implications for precursory seismicity. Acta Geophysica, 2012, 60, 638-663.	1.0	1
155	Dragon-kings: Mechanisms, statistical methods and empirical evidence. European Physical Journal: Special Topics, 2012, 205, 1-26.	1.2	184
156	Black swans, power laws, and dragon-kings: Earthquakes, volcanic eruptions, landslides, wildfires, floods, and SOC models. European Physical Journal: Special Topics, 2012, 205, 167-182.	1.2	49
157	Variability in the power-law distributions of rupture events. European Physical Journal: Special Topics, 2012, 205, 199-215.	1.2	84
158	Finite-Element and Effective-Medium Calculations of the Electrical Behaviour Near the Vortex–Antivortex Binding Transition of Planar Superconductors with Critical Temperature Inhomogeneities. Journal of Superconductivity and Novel Magnetism, 2013, 26, 3065-3068.	0.8	1
159	Finite element modeling of hydraulic fracturing in 3D. Computational Geosciences, 2013, 17, 647-659.	1.2	37
160	Rupture Dynamics of Macromolecules. Lecture Notes in Applied and Computational Mechanics, 2013, , 1-42.	2.0	0
161	Temporal and Spacial Evolution of Bursts in Creep Rupture. Physical Review Letters, 2013, 111, 084302.	2.9	23
162	Marginal Material Stability. Journal of Nonlinear Science, 2013, 23, 891-969.	1.0	15
163	Numerical approaches on driven elastic interfaces in random media. Comptes Rendus Physique, 2013, 14, 641-650.	0.3	47

#	Article	IF	CITATIONS
164	Drainage fracture networks in elastic solids with internal fluid generation. Europhysics Letters, 2013, 102, 66002.	0.7	18
165	Non-Gaussian Nature of Fracture and the Survival of Fat-Tail Exponents. Physical Review Letters, 2013, 110, 145501.	2.9	28
166	Approach to failure in porous granular materials under compression. Physical Review E, 2013, 88, 062207.	0.8	55
167	Long-time damage under creep experiments in disordered materials: Transition from exponential to logarithmic fracture dynamics. European Physical Journal E, 2013, 36, 9847.	0.7	3
168	Statistics of ductile fracture surfaces: the effect of material parameters. International Journal of Fracture, 2013, 184, 137-149.	1.1	13
169	Two-Dimensional Discrete Damage Models: Discrete Element Methods, Particle Models, and Fractal Theories. , 2013, , 1-27.		0
170	A geometrically nonlinear analysis of coplanar crack propagation in some heterogeneous medium. International Journal of Solids and Structures, 2013, 50, 371-378.	1.3	20
171	Time correlation of crack formation during impact fracture of rocks. Russian Geology and Geophysics, 2013, 54, 231-236.	0.3	7
172	Numerical simulation of acoustic emission in brittle rocks by two-dimensional finite-discrete element analysis. Geophysical Journal International, 2013, 195, 423-443.	1.0	164
173	Statistical Similarity between the Compression of a Porous Material and Earthquakes. Physical Review Letters, 2013, 110, 088702.	2.9	213
174	<i>Colloquium</i> : Modeling friction: From nanoscale to mesoscale. Reviews of Modern Physics, 2013, 85, 529-552.	16.4	436
175	From Damage Percolation to Crack Nucleation Through Finite Size Criticality. Physical Review Letters, 2013, 110, 185505.	2.9	101
176	The Breaking of Brittle Materials. Physics Magazine, 2013, 6, .	0.1	1
177	Strength statistics and the distribution of earthquake interevent times. Physica A: Statistical Mechanics and Its Applications, 2013, 392, 485-496.	1.2	15
178	A model of fracture nucleation, growth and arrest, and consequences for fracture density and scaling. Journal of Geophysical Research: Solid Earth, 2013, 118, 1393-1407.	1.4	82
179	Study on the possibility of increasing the maximum allowable stresses in fibre-reinforced plastics. Journal of Composite Materials, 2013, 47, 1931-1941.	1.2	5
180	Avalanche process of the fiber-bundle model with stick-slip dynamics and a variable Young modulus. Physical Review E, 2013, 87, 042126.	0.8	9
181	Effect of inertia on sheared disordered solids: Critical scaling of avalanches in two and three dimensions. Physical Review E, 2013, 88, 062206.	0.8	83

#	Article	IF	CITATIONS
182	Brittle-to-ductile transition in a fiber bundle with strong heterogeneity. Physical Review E, 2013, 87, 042816.	0.8	20
183	Role of the sample thickness in planar crack propagation. Physical Review E, 2013, 88, 042411.	0.8	5
184	Emergent patterns of localized damage as a precursor to catastrophic failure in a random fuse network. Physical Review E, 2013, 87, 042811.	0.8	6
185	Time evolution of damage due to environmentally assisted aging in a fiber bundle model. Physical Review E, 2013, 88, 032802.	0.8	12
186	Cooperativity in Thermal and Force-Induced Protein Unfolding: Integration of Crack Propagation and Network Elasticity Models. Physical Review Letters, 2013, 110, 138101.	2.9	29
187	Nonsteady relaxation and critical exponents at the depinning transition. Physical Review E, 2013, 87, .	0.8	52
188	Quantitative Prediction of Effective Toughness at Random Heterogeneous Interfaces. Physical Review Letters, 2013, 110, 165507.	2.9	40
189	Slow crack propagation through a disordered medium: Critical transition and dissipation. Europhysics Letters, 2013, 101, 16005.	0.7	6
190	Numerical simulation of acoustic emission in rocks using FEM/DEM. , 2013, , 149-159.		1
191	Record breaking bursts in a fiber bundle model of creep rupture. Frontiers in Physics, 2014, 2, .	1.0	10
192	Discrete element modeling of brittle crack roughness in three dimensions. Frontiers in Physics, 2014, 2, .	1.0	1
193	Nominally brittle cracks in inhomogeneous solids: from microstructural disorder to continuum-level scale. Frontiers in Physics, 2014, 2, .	1.0	13
194	From fracture to fragmentation: Discrete element modeling. European Physical Journal: Special Topics, 2014, 223, 2369-2382.	1.2	15
195	Fluctuations of Global Energy Release and Crackling in Nominally Brittle Heterogeneous Fracture. Physical Review Letters, 2014, 113, 264301.	2.9	30
196	Mechano-Electrochemical Model for Acoustic Emission Characterization in Intercalation Electrodes. Journal of the Electrochemical Society, 2014, 161, F3123-F3136.	1.3	23
197	(Finite) statistical size effects on compressive strength. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6231-6236.	3.3	47
198	Damage accumulation in quasibrittle fracture. Physical Review E, 2014, 90, 012408.	0.8	8
199	Simulating acoustic emission: The noise of collapsing domains. Physical Review B, 2014, 90, .	1.1	42

#	Article	IF	CITATIONS
200	Fracture Strength: Stress Concentration, Extreme Value Statistics, and the Fate of the Weibull Distribution. Physical Review Applied, 2014, 2, .	1.5	39
201	Morphological study of elastic-plastic-brittle transitions in disordered media. Physical Review E, 2014, 90, 042405.	0.8	5
202	Statistics of ductile fracture surfaces: the effect of material parameters. , 2014, , 137-149.		0
203	Creep dynamics of viscoelastic interfaces. Europhysics Letters, 2014, 105, 46003.	0.7	5
204	The Krajcinovic approach to model size dependent fracture in quasi-brittle solids. Mechanics of Materials, 2014, 71, 21-33.	1.7	5
205	Rupture Cascades in a Discrete Element Model of a Porous Sedimentary Rock. Physical Review Letters, 2014, 112, 065501.	2.9	62
206	Viscoelastic Effects in Avalanche Dynamics: A Key to Earthquake Statistics. Physical Review Letters, 2014, 112, 174301.	2.9	62
207	Finite-size effects on return interval distributions for weakest-link-scaling systems. Physical Review E, 2014, 89, 052142.	0.8	18
208	Elastic-Plastic-Brittle Transitions and Avalanches in Disordered Media. Physical Review Letters, 2014, 112, 045503.	2.9	27
210	Flaw tolerance promoted by dissipative deformation mechanisms between material building blocks. Philosophical Magazine Letters, 2014, 94, 592-600.	0.5	0
211	Crossover behavior in the avalanche process of the fiber bundle model in local load sharing. Physica A: Statistical Mechanics and Its Applications, 2014, 416, 135-141.	1.2	3
212	Quasi-brittle Fracture of Heterogeneous Materials: A Nonlocal Damage Model. , 2014, 3, 1878-1883.		2
213	Physical Mechanisms of Fatigue in Neat Polyamide 6,6. Macromolecules, 2014, 47, 3880-3894.	2.2	23
214	A Continuum Damage–Breakage Faulting Model and Solid-Granular Transitions. Pure and Applied Geophysics, 2014, 171, 3099-3123.	0.8	26
215	Nanostructural scaling effect in fracturing homogeneous solids. International Journal of Fracture, 2014, 187, 269-275.	1.1	0
216	Nonuniversality of Critical Exponents in a Fractional Quenched Kardar–Parisi–Zhang Equation. Journal of Statistical Physics, 2014, 154, 1228-1240.	0.5	0
217	Strong anisotropy in two-dimensional surfaces with generic scale invariance: Nonlinear effects. Physical Review E, 2014, 89, 042407.	0.8	7
218	Metal wire network based transparent conducting electrodes fabricated using interconnected crackled layer as template. Materials Research Express, 2014, 1, 026301.	0.8	58

#	Article	IF	CITATIONS
219	The asymptotic stochastic strength of bundles of elements exhibiting general stress–strain laws. Probabilistic Engineering Mechanics, 2014, 36, 1-7.	1.3	13
220	Nucleation versus percolation: Scaling criterion for failure in disordered solids. Physical Review E, 2015, 91, 050105.	0.8	25
221	Strength distribution of planar local load-sharing bundles. Physical Review E, 2015, 92, 022125.	0.8	10
222	Time-dependent statistical failure of fiber networks. Physical Review E, 2015, 92, 042158.	0.8	9
223	Avalanches in Wood Compression. Physical Review Letters, 2015, 115, 055501.	2.9	68
224	Creep rupture of fiber bundles: A molecular dynamics investigation. Physical Review E, 2015, 92, 022405.	0.8	9
225	Stick-slip behavior in a continuum-granular experiment. Physical Review E, 2015, 92, 060201.	0.8	26
226	Heterogeneity: The key to failure forecasting. Scientific Reports, 2015, 5, 13259.	1.6	94
228	The random loading problem in fuse networks. European Physical Journal B, 2015, 88, 1.	0.6	1
230	A Hierarchical Lattice Spring Model to Simulate the Mechanics of 2-D Materials-Based Composites. Frontiers in Materials, 2015, 2, .	1.2	24
231	Foreshock and Aftershocks in Simple Earthquake Models. Physical Review Letters, 2015, 114, 088501.	2.9	11
232	Joint modeling of thermal creep and radiation damage interaction with gas permeability and release dynamics: The role of percolation. Physica A: Statistical Mechanics and Its Applications, 2015, 436, 538-546.	1.2	1
233	Avalanching glacier instabilities: Review on processes and early warning perspectives. Reviews of Geophysics, 2015, 53, 203-224.	9.0	78
234	Turbulent Fracture Surfaces: A Footprint of Damage Percolation?. Physical Review Letters, 2015, 114, 215501.	2.9	24
235	Crack phantoms: localized damage correlations and failure in network models of disordered materials. Journal of Statistical Mechanics: Theory and Experiment, 2015, 2015, P08029.	0.9	3
236	Strain intermittency in shape-memory alloys. Physical Review B, 2015, 91, .	1.1	32
237	Mixed-mode translaminar fracture of woven composites using a heterogeneous spring network. Mechanics of Materials, 2015, 91, 64-75.	1.7	11
238	Monte Carlo simulations of mesoscale fracture of concrete with random aggregates and pores: a size effect study. Construction and Building Materials, 2015, 80, 262-272.	3.2	144

	CITATION REPORT	
ARTICLE Failure criterion for materials with spatially correlated mechanical properties. Physical Review E,	IF	CITATIONS
2015, 91, 032134. The fracture of bulk metallic glasses. Progress in Materials Science, 2015, 74, 211-307.	16.0	421
Repulsion and Attraction between a Pair of Cracks in a Plastic Sheet. Physical Review Letters, 2015 205501.	i, 114, 2.9	15
Reduced Order Modeling of Mechanical Degradation Induced Performance Decay in Lithium-Ion Battery Porous Electrodes. Journal of the Electrochemical Society, 2015, 162, A1751-A1771.	1.3	40
Weakest-Link Scaling and Extreme Events in Finite-Sized Systems. Entropy, 2015, 17, 1103-1122.	1.1	11
Feedback-Induced Phase Transitions in Active Heterogeneous Conductors. Physical Review Letters, 2015, 114, 134501.	2.9	7
Influence of initial flaws on the mechanical properties of nacre. Journal of the Mechanical Behavior of Biomedical Materials, 2015, 46, 168-175.	1.5	8
Applications of extreme value statistics in physics. Journal of Physics A: Mathematical and Theoreti 2015, 48, 183001.	cal, 0.7	45
Theory of fracture formation in a heterogeneous fibrillar membrane. Journal of Physics Condensed Matter, 2015, 27, 325103.	0.7	4
Fast Physically Accurate Rendering of Multimodal Signatures of Distributed Fracture in Heterogeneous Materials. IEEE Transactions on Visualization and Computer Graphics, 2015, 21, 44	43-451. ^{2.9}	2
Statistical features of magnetic noise in mixed-type impact fracture. Applied Physics Letters, 2015, 064102.	, 106, 1.5	3
Stochastic Continuum Damage Mechanics Using Spring Lattice Models. Applied Mechanics and Materials, 0, 784, 350-357.	0.2	1
Exact Results for a Toy Model Exhibiting Dynamic Criticality. Annales Henri Poincare, 2015, 16, 2837-2879.	0.8	4
Spatial Heterogeneity in Earthquake Fault-Like Systems. Pure and Applied Geophysics, 2015, 172, 3	2167-2177. 0.8	3
Soft-Clamp Fiber Bundle Model and Interfacial Crack Propagation: Comparison Using a Non-linear Imposed Displacement. Frontiers in Physics, 2016, 4, .	1.0	7
Discrete element model for quasiâ€brittle rupture under tensile and compressive loading. Internati Journal for Numerical and Analytical Methods in Geomechanics, 2016, 40, 2339-2352.	onal 1.7	3
Stochastics of diffusion induced damage in intercalation materials. Materials Research Express, 20 3, 104001.	16, 0.8	8

256	Splitting fracture in bovine bone using a porosity-based spring network model. Journal of the Royal Society Interface, 2016, 13, 20160809.	1.5	15
-----	--	-----	----

#

#	Article	IF	CITATIONS
257	Parabolic temporal profiles of non-spanning avalanches and their importance for ferroic switching. Applied Physics Letters, 2016, 108, .	1.5	16
258	Itinerant Conductance in Fuse-Antifuse Networks. Physical Review Letters, 2016, 117, 275702.	2.9	6
259	Predicting sample lifetimes in creep fracture of heterogeneous materials. Physical Review E, 2016, 94, 023002.	0.8	28
260	Mechano-Electrochemical Interaction Gives Rise to Strain Relaxation in Sn Electrodes. Journal of the Electrochemical Society, 2016, 163, A3022-A3035.	1.3	36
261	Simulation study on the avalanche process of the mixed brittle–plastic fiber bundle model. Physica A: Statistical Mechanics and Its Applications, 2016, 441, 237-244.	1.2	4
262	A phase-field approach to model multi-axial and microstructure dependent fracture in nuclear grade graphite. Journal of Nuclear Materials, 2016, 475, 200-208.	1.3	15
263	The role of rigidity in controlling material failure. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10813-10817.	3.3	51
264	A statistical approach to scaling size effect on strength of concrete incorporating spatial distribution of flaws. Construction and Building Materials, 2016, 122, 702-713.	3.2	12
265	Statistical aspects in crack growth phenomena: how the fluctuations reveal the failure mechanisms. International Journal of Fracture, 2016, 201, 11-27.	1.1	26
266	Probabilistic model of waiting times between large failures in sheared media. Physical Review E, 2016, 93, 013003.	0.8	6
267	Shearing a glass and the role of pinning delay in models of interface depinning. Physical Review E, 2016, 93, 032610.	0.8	10
268	Blending stiffness and strength disorder can stabilize fracture. Physical Review E, 2016, 93, 033002.	0.8	1
269	Fiber bundle model under fluid pressure. Physical Review E, 2016, 93, 033003.	0.8	12
270	Record-breaking events during the compressive failure of porous materials. Physical Review E, 2016, 93, 033006.	0.8	11
271	Acoustic Emission from Breaking a Bamboo Chopstick. Physical Review Letters, 2016, 116, 035501.	2.9	13
272	Fracture process of a fiber bundle with strong disorder. Journal of Statistical Mechanics: Theory and Experiment, 2016, 2016, 073211.	0.9	15
273	Mesoscopic approach to subcritical fatigue crack growth. Physical Review E, 2016, 94, 043003.	0.8	1
274	Codetection of acoustic emissions during failure of heterogeneous media: New perspectives for natural hazard early warning. Geophysical Research Letters, 2016, 43, 1075-1083.	1.5	27

#	Article	IF	Citations
275	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.	2.4	4
276	A fiber-bundle model for the continuum deformation of brittle material. International Journal of Fracture, 2017, 204, 225-237.	1.1	7
277	The avalanche process of the fiber bundle model with defect. Physica A: Statistical Mechanics and Its Applications, 2017, 472, 77-85.	1.2	7
278	Failure process in heterogeneous materials with randomly oriented fibers. Physica A: Statistical Mechanics and Its Applications, 2017, 476, 84-90.	1.2	10
280	Deformation of Crystals: Connections with Statistical Physics. Annual Review of Materials Research, 2017, 47, 217-246.	4.3	61
281	Analysis of crackling noise using the maximum-likelihood method: Power-law mixing and exponential damping. Physical Review E, 2017, 96, 042122.	0.8	56
282	Size scaling of failure strength with fat-tailed disorder in a fiber bundle model. Physical Review E, 2017, 96, 033001.	0.8	12
283	Fishnet statistics for probabilistic strength and scaling of nacreous imbricated lamellar materials. Journal of the Mechanics and Physics of Solids, 2017, 109, 264-287.	2.3	26
284	Intermittent crack growth in fatigue. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 073401.	0.9	4
285	Damage cluster distributions in numerical concrete at the mesoscale. Physical Review E, 2017, 95, 043002.	0.8	2
286	Scaling characteristics of one-dimensional fractional diffusion processes in the presence of power-law distributed random noise. Physical Review E, 2017, 96, 022113.	0.8	2
287	Riding the Right Wavelet: Quantifying Scale Transitions in Fractured Rocks. Geophysical Research Letters, 2017, 44, 11,808.	1.5	7
288	Strength distribution of large unidirectional composite patches with realistic load sharing. Physical Review E, 2017, 96, 043002.	0.8	11
289	Time-dependent breakdown of fiber networks: Uncertainty of lifetime. Physical Review E, 2017, 95, 053005.	0.8	9
290	Spatiotemporal Patterns in Ultraslow Domain Wall Creep Dynamics. Physical Review Letters, 2017, 118, 147208.	2.9	36
291	Deformation and fracture of echinoderm collagen networks. Journal of the Mechanical Behavior of Biomedical Materials, 2017, 65, 42-52.	1.5	21
292	Damage spreading in quasi-brittle disordered solids: I. Localization and failure. Journal of the Mechanics and Physics of Solids, 2017, 102, 101-124.	2.3	12
293	Role of matrix behavior in compressive fracture of bovine cortical bone. Physical Review E, 2017, 96, 053001.	0.8	8

#	Article	IF	CITATIONS
294	Simulation study of critically loaded arrays of pillars. , 2017, , .		0
295	Self-Healing Polymeric Composite Material Design, Failure Analysis and Future Outlook: A Review. Polymers, 2017, 9, 535.	2.0	58
296	Critical Evolution of Damage Toward System‣ize Failure in Crystalline Rock. Journal of Geophysical Research: Solid Earth, 2018, 123, 1969-1986.	1.4	66
297	Role of porosity and matrix behavior on compressive fracture of Haversian bone using random spring network model. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 83, 108-119.	1.5	5
298	Laser Speckle Strain Imaging reveals the origin of delayed fracture in a soft solid. Science Advances, 2018, 4, eaar1926.	4.7	38
299	Universal avalanche statistics and triggering close to failure in a mean-field model of rheological fracture. Physical Review E, 2018, 97, 033002.	0.8	15
300	Simulation of finite size effects of the fiber bundle model. Physica A: Statistical Mechanics and Its Applications, 2018, 490, 338-346.	1.2	8
301	Discrete-element modeling of nacre-like materials: Effects of random microstructures on strain localization and mechanical performance. Journal of the Mechanics and Physics of Solids, 2018, 112, 385-402.	2.3	71
302	A physically motivated model for fatigue damage of concrete. International Journal of Damage Mechanics, 2018, 27, 1192-1212.	2.4	39
303	Crack growth and energy dissipation in paper. Scientific Reports, 2018, 8, 17334.	1.6	1
304	A temperature- and stress-controlled failure criterion for ice-filled permafrost rock joints. Cryosphere, 2018, 12, 3333-3353.	1.5	34
305	Discontinuous Dynamics of Mode-I Crack Propagation in Single Crystals. Zairyo/Journal of the Society of Materials Science, Japan, 2018, 67, 222-228.	0.1	0
306	Deformation and flow of amorphous solids: Insights from elastoplastic models. Reviews of Modern Physics, 2018, 90, .	16.4	290
307	Memristors for the Curious Outsiders. Technologies, 2018, 6, 118.	3.0	37
308	Mechanics of disordered auxetic metamaterials. European Physical Journal B, 2018, 91, 1.	0.6	19
309	Depinning Dynamics of Crack Fronts. Physical Review Letters, 2018, 121, 235501.	2.9	15
310	Shock Compression of Porous Ceramics. , 2018, , .		1
311	Acoustic emission signatures prior to snow failure. Journal of Glaciology, 2018, 64, 543-554.	1.1	12

	CHANON		
#	Article	IF	CITATIONS
312	Avalanche precursors of failure in hierarchical fuse networks. Scientific Reports, 2018, 8, 12090.	1.6	18
313	Fiber-bundle model with time-dependent healing mechanisms to simulate progressive failure of snow. Physical Review E, 2018, 98, 023002.	0.8	12
314	Avalanche dynamics in higher-dimensional fiber bundle models. Physical Review E, 2018, 98, .	0.8	7
315	Time-dependent fracture under unloading in a fiber bundle model. Physical Review E, 2018, 98, 023004.	0.8	1
316	Damage Accumulation in Silica Glass Nanofibers. Nano Letters, 2018, 18, 4100-4106.	4.5	18
317	The avalanche process of the fiber bundle model with defect in local loading sharing. Physica A: Statistical Mechanics and Its Applications, 2018, 505, 1095-1102.	1.2	8
318	Acoustic and Microseismic Characterization in Steep Bedrock Permafrost on Matterhorn (CH). Journal of Geophysical Research F: Earth Surface, 2018, 123, 1363-1385.	1.0	22
319	Size effects on the fracture of microscale and nanoscale materials. Nature Reviews Materials, 2018, 3, 211-224.	23.3	72
320	Mode-III interfacial crack propagation in heterogeneous media. Physical Review E, 2018, 97, 063004.	0.8	1
321	Revisiting statistical size effects on compressive failure of heterogeneous materials, with a special focus on concrete. Journal of the Mechanics and Physics of Solids, 2018, 121, 47-70.	2.3	29
322	Two episodes of structural fractures: Numerical simulation of Yanchang Oilfield in the Ordos basin, northern China. Marine and Petroleum Geology, 2018, 97, 223-240.	1.5	8
323	A fast algorithm for the elastic fields due to interacting fibre breaks in a periodic fibre composite. International Journal of Fracture, 2018, 211, 295-303.	1.1	4
324	Statistics of zero crossings in rough interfaces with fractional elasticity. Physical Review E, 2018, 97, 042129.	0.8	0
325	Experimental Evidence of Accelerated Seismic Release without Critical Failure in Acoustic Emissions of Compressed Nanoporous Materials. Physical Review Letters, 2018, 120, 245501.	2.9	34
326	Forecasting failure locations in 2-dimensional disordered lattices. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16742-16749.	3.3	21
327	Seismiclike organization of avalanches in a driven long-range elastic string as a paradigm of brittle cracks. Physical Review E, 2019, 100, 023001.	0.8	9
328	Faceted patterns and anomalous surface roughening driven by long-range temporally correlated noise. Physical Review E, 2019, 99, 062139.	0.8	9
329	The fracture process in quasiâ€brittle materials simulated using a lattice dynamical model. Fatigue and Fracture of Engineering Materials and Structures, 2019, 42, 2709-2724.	1.7	14

#	Article	IF	CITATIONS
330	Graph theoretical approaches for the characterization of damage in hierarchical materials. European Physical Journal B, 2019, 92, 1.	0.6	4
331	A fast algorithm to simulate the failure of a periodic elastic fibre composite. International Journal of Fracture, 2019, 217, 127-135.	1.1	4
332	Role of the Crystal Lattice Structure in Predicting Fracture Toughness. Physical Review Letters, 2019, 123, 205503.	2.9	5
333	Network analysis predicts failure of materials and structures. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 16666-16668.	3.3	9
334	Dynamics of Microscale Precursors During Brittle Compressive Failure in Carrara Marble. Journal of Geophysical Research: Solid Earth, 2019, 124, 6121-6139.	1.4	39
335	Mechanical Stress Induced Current Focusing and Fracture in Grain Boundaries. Journal of the Electrochemical Society, 2019, 166, A1752-A1762.	1.3	78
336	Bond-slip parameter estimation in fiber reinforced concrete at failure using inverse stochastic model. Engineering Failure Analysis, 2019, 104, 84-95.	1.8	22
337	Crackling to periodic dynamics in granular media. Physical Review E, 2019, 99, 040901.	0.8	16
338	Formation of desiccation crack patterns in electric fields: a review. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170398.	1.6	8
339	Parameters controlling the strength of stochastic fibrous materials. International Journal of Solids and Structures, 2019, 168, 194-202.	1.3	32
340	Predicting Creep Failure from Cracks in a Heterogeneous Material using Acoustic Emission and Speckle Imaging. Physical Review Applied, 2019, 11, .	1.5	10
341	Statistics of the separation between sliding rigid rough surfaces: Simulations and extreme value theory approach. Physical Review E, 2019, 99, 023004.	0.8	6
342	Avalanche mixing and the simultaneous collapse of two media under uniaxial stress. Physical Review E, 2019, 99, 023002.	0.8	10
343	Implications of Realistic Fracture Criteria on Crack Morphology. Frontiers in Physics, 2019, 7, .	1.0	2
344	Equilibrium unzipping at finite temperature. Archive of Applied Mechanics, 2019, 89, 535-544.	1.2	5
345	Statistical physics perspective of fracture in brittle and quasi-brittle materials. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170396.	1.6	8
346	Compressive Failure as a Critical Transition: Experimental Evidence and Mapping onto the Universality Class of Depinning. Physical Review Letters, 2019, 122, 015502.	2.9	32
347	Dynamic Rupture and Seismic Radiation in a Damage–Breakage Rheology Model. Pure and Applied Geophysics, 2019, 176, 1003-1020	0.8	18

#	Article	IF	CITATIONS
348	Mapping heterogeneities through avalanche statistics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170388.	1.6	3
349	Statistical physics of fracture and earthquakes. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20180202.	1.6	2
350	Fatigue deterioration of quasi-brittle materials. International Journal of Fatigue, 2019, 118, 185-191.	2.8	8
351	Numerical DEM simulation of the evolution of damage and AE preceding failure of structural components. Engineering Fracture Mechanics, 2019, 210, 247-256.	2.0	14
352	Fractal Characterization on Anisotropy and Fractal Reconstruction of Rough Surface of Granite Under Orthogonal Shear. Rock Mechanics and Rock Engineering, 2020, 53, 1225-1242.	2.6	11
353	A Beam Network Model Approach to Strength Optimization of Disordered Fibrous Materials. Advanced Engineering Materials, 2020, 22, 1901013.	1.6	4
354	A fundamental method for prediction of failure of strain hardening cementitious composites without prior information. Cement and Concrete Composites, 2020, 114, 103745.	4.6	15
355	Stressâ€Dependent Magnitudes of Induced Earthquakes in the Groningen Gas Field. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020013.	1.4	11
356	The role of temperature in the rigidity-controlled fracture of elastic networks. Soft Matter, 2020, 16, 9975-9985.	1.2	4
357	Studying Snow Failure With Fiber Bundle Models. Frontiers in Physics, 2020, 8, .	1.0	10
358	Scaling law in avalanche breaking of composite materials. Multidiscipline Modeling in Materials and Structures, 2020, 17, 391-400.	0.6	8
359	Non-trivial avalanches triggered by shear banding in compression of metallic glass foams. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2020, 476, .	1.0	3
360	Damage and Failure in a Statistical Crack Model. Applied Sciences (Switzerland), 2020, 10, 8700.	1.3	2
361	Role of spatial patterns in fracture of disordered multiphase materials. Physical Review E, 2020, 102, 053002.	0.8	4
362	Impact-induced transition from damage to perforation. Physical Review E, 2020, 102, 042116.	0.8	0
363	Ferroelastic domain walls as templates for multiferroic devices. Journal of Applied Physics, 2020, 128, 164104.	1.1	14
364	Microstructural inelastic fingerprints and data-rich predictions of plasticity and damage in solids. Computational Mechanics, 2020, 66, 141-154.	2.2	9
365	St. Petersburg Paradox and Failure Probability. Physical Review Letters, 2020, 124, 245501.	2.9	9

#	Article	IF	CITATIONS
366	Stochastic properties of bond-slip parameters at fibre pull-out. Engineering Failure Analysis, 2020, 111, 104478.	1.8	14
367	Connectivity and plasticity determine collagen network fracture. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8326-8334.	3.3	44
368	Three-dimensional imaging of fracture propagation in tight sandstones of the Upper Triassic Chang 7 member, Ordos Basin, Northern China. Marine and Petroleum Geology, 2020, 120, 104501.	1.5	6
369	Crossover from mean-field compression to collective phenomena in low-density foam-formed fiber material. Soft Matter, 2020, 16, 6819-6825.	1.2	7
370	Enhanced strength of cyclically preloaded arrays of pillars. Acta Mechanica, 2020, 231, 3145-3155.	1.1	2
372	Experimental realization of disorder influence on the breakdown process of a random fuse network. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 013302.	0.9	0
373	The emergence of small-scale self-affine surface roughness from deformation. Science Advances, 2020, 6, eaax0847.	4.7	48
374	Athermal Fracture of Elastic Networks: How Rigidity Challenges the Unavoidable Size-Induced Brittleness. Physical Review Letters, 2020, 124, 018002.	2.9	15
375	Rigidity-Controlled Crossover: From Spinodal to Critical Failure. Physical Review Letters, 2020, 124, 015501.	2.9	13
376	Surface super-roughening driven by spatiotemporally correlated noise. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 033210.	0.9	4
377	Evolutionary Algorithm Optimization of Staggered Biological or Biomimetic Composites Using the Random Fuse Model. Physical Review Applied, 2020, 13, .	1.5	5
378	Adaptive hard and tough mechanical response in single-crystal B1 VNx ceramics via control of anion vacancies. Acta Materialia, 2020, 192, 78-88.	3.8	46
379	Fracture dynamics of correlated percolation on ionomer networks. Physical Review E, 2020, 101, 042603.	0.8	0
380	Space bricks: From LSS to machinable structures via MICP. Ceramics International, 2021, 47, 14892-14898.	2.3	24
381	Factors affecting the results of concrete compression testing: A review. Ain Shams Engineering Journal, 2021, 12, 205-221.	3.5	40
382	Earthquake source properties from analysis of dynamic ruptures and far-field seismic waves in a damage-breakage model. Geophysical Journal International, 2021, 224, 1793-1810.	1.0	6
383	Phase diagram of brittle fracture in the semi-grand-canonical ensemble. Physical Review E, 2021, 103, 013003.	0.8	2
384	Heterogeneous excitable systems exhibit Griffiths phases below hybrid phase transitions. Physical Review Research, 2021, 3, .	1.3	13

#	Article	IF	CITATIONS
385	A Stochastic Model Based on Fiber Breakage and Matrix Creep for the Stress-Rupture Failure of Unidirectional Continuous Fiber Composites 2. Non-linear Matrix Creep Effects. Frontiers in Physics, 2021, 9, .	1.0	4
386	The duration-energy-size enigma for acoustic emission. Scientific Reports, 2021, 11, 5590.	1.6	26
387	The complex dynamics of earthquake fault systems: new approaches to forecasting and nowcasting of earthquakes. Reports on Progress in Physics, 2021, 84, 076801.	8.1	47
388	Yielding in an amorphous solid subject to constant stress at finite temperatures. Physical Review E, 2021, 103, 052604.	0.8	2
389	Crossover of Failure Time Distributions in a Model of Time-Dependent Fracture. Frontiers in Physics, 2021, 9, .	1.0	0
391	Accurately approximating extreme value statistics. Journal of Physics A: Mathematical and Theoretical, 2021, 54, 315205.	0.7	3
392	Continuous and discrete methods based on X-ray computed-tomography to model the fragmentation process in brittle solids over a wide range of strain-rates - application to three brittle materials. Journal of the Mechanics and Physics of Solids, 2021, 152, 104412.	2.3	10
393	Clusters and avalanches of fibre breaks in a model of an impregnated unidirectional fibre bundle under tension. International Journal of Solids and Structures, 2021, 225, 111061.	1.3	10
394	Effective toughness of disordered brittle solids: A homogenization framework. Journal of the Mechanics and Physics of Solids, 2021, 153, 104463.	2.3	22
395	What Controls the Presence and Characteristics of Aftershocks in Rock Fracture in the Lab?. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022539.	1.4	13
396	Acoustic Emission Spectroscopy: Applications in Geomaterials and Related Materials. Applied Sciences (Switzerland), 2021, 11, 8801.	1.3	9
397	Mean field fracture in disordered solids: Statistics of fluctuations. Journal of the Mechanics and Physics of Solids, 2021, , 104646.	2.3	2
398	Beam network model for fracture of materials with hierarchical microstructure. International Journal of Fracture, 2021, 227, 243-257.	1.1	8
399	Disordered Elastic Media. , 2009, , 2019-2038.		11
400	Fractal and Multifractal Scaling of Electrical Conduction in Random Resistor Networks. , 2009, , 3737-3754.		9
401	Branching Processes. , 2009, , 644-657.		2
403	Multimodal Rendering of Walking Over Virtual Grounds. , 2013, , 263-295.		5
404	Fractal and Multifractal Scaling of Electrical Conduction in Random Resistor Networks. , 2012, , 446-462.		1

# 405	ARTICLE Lattice and Particle Modeling of Damage Phenomena. , 2015, , 203-238.	IF	Citations 3
406	Advances in Statistical Damage Mechanics (SDM): New Modeling Strategies. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2011, , 105-224.	0.3	18
407	Crack propagation in disordered materials: how to decipher fracture surfaces. Annales De Physique, 2007, 32, 1-120.	0.2	23
408	Random fuse model in the presence of self-healing. New Journal of Physics, 2020, 22, 033005.	1.2	5
409	Two dimensional soliton in tumor induced angiogenesis. Journal of Statistical Mechanics: Theory and Experiment, 2020, 2020, 083402.	0.9	3
410	Fiber networks below the isostatic point: Fracture without stress concentration. Physical Review Materials, 2017, 1, .	0.9	24
411	Rigidity percolation control of the brittle-ductile transition in disordered networks. Physical Review Materials, 2019, 3, .	0.9	16
412	Role of fluctuations in the yielding transition of two-dimensional glasses. Physical Review Research, 2020, 2, .	1.3	24
413	The Role of Local Inhomogeneities on Dendrite Growth in LLZO-Based Solid Electrolytes. Journal of the Electrochemical Society, 2020, 167, 100537.	1.3	51
414	Depinning as a coagulation process. Europhysics Letters, 2016, 115, 46003.	0.7	1
415	Vibration Influences Haptic Perception of Surface Compliance During Walking. PLoS ONE, 2011, 6, e17697.	1.1	47
416	Anisotropic finite-size scaling of an elastic string at the depinning threshold in a random-periodic medium. Papers in Physics, 0, 2, 020008.	0.2	6
417	Modeling acoustic emissions in heterogeneous rocks during tensile fracture with the Discrete Element Method. Open Geomechanics, 0, 2, 1-19.	0.0	4
418	Avalanche Distribution of Fiber Bundle Model with Random Displacement. Journal of the Physical Society of Japan, 2019, 88, 023002.	0.7	2
419	Universal Effective Toughness Distribution for Heterogeneous Brittle Materials. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2009, , 1-10.	0.1	0
420	Dragon-Kings: Mechanisms, Statistical Methods and Empirical Evidence. SSRN Electronic Journal, 0, , .	0.4	2
421	Computational Approaches and Simulation. Springer Series in Materials Science, 2012, , 213-263.	0.4	0
422	Branching Processes. , 2012, , 285-297.		1

#	Article	IF	CITATIONS
424	Lattice and Particle Modeling of Damage Phenomena. , 2013, , 1-32.		0
425	PRACE DECI (Distributed European Computing Initiative) Minisymposium. Lecture Notes in Computer Science, 2013, , 43-60.	1.0	0
426	Statistics of Critical Avalanches in Vertical Nanopillar Arrays. Lecture Notes in Electrical Engineering, 2014, , 1-11.	0.3	4
427	Two-Dimensional Discrete Damage Models: Discrete Element Methods, Particle Models, and Fractal Theories. , 2015, , 273-303.		1
428	- Polymer Electrolyte Membranes. , 2014, , 100-195.		0
429	Branching Processes. , 2015, , 1-18.		0
431	Elastic Interfaces Driven in Disordered Media. Springer Theses, 2016, , 67-112.	0.0	0
433	Degradation of Polymer Coatings in Service: How Properties Deteriorate Due to Stochastic Damage. , 2017, , 427-450.		1
434	Statistics of Critical Load in Arrays of Nanopillars on Nonrigid Substrates. , 2019, , 17-29.		1
435	Numerical simulation of melting dynamic process and surface scale properties of two-dimensional honeycomb lattice. Wuli Xuebao/Acta Physica Sinica, 2019, 68, 050301.	0.2	0
436	Roughness of fracture surfaces in numerical models and laboratory experiments. Solid Earth, 2021, 12, 2407-2424.	1.2	6
437	Deformation and Failure Onset of Random Elastic Beam Networks Generated From the Same Type of Random Graph. Advanced Structured Materials, 2020, , 393-408.	0.3	1
438	Nonlinear Mechanics of Colloidal Gels: Creep, Fatigue, and Shear-Induced Yielding. , 2020, , 1-24.		2
439	From Nucleation to Percolation: The Effect of System Size when Disorder and Stress Localization Compete. Frontiers in Physics, 2021, 9, .	1.0	2
440	Scale-free features of temporal localization of deformation in late stages of creep failure. Physical Review Materials, 2020, 4, .	0.9	2
441	Fatigue crack growth in an aluminum alloy: Avalanches and coarse graining to growth laws. Physical Review Research, 2021, 3, .	1.3	2
442	Multiple Avalanche Processes in Acoustic Emission Spectroscopy: Multibranching of the Energyâ^'Amplitude Scaling. Physica Status Solidi (B): Basic Research, 2022, 259, 2100465.	0.7	11
443	Unified scenario for the morphology of crack paths in two-dimensional disordered solids. Physical Review E, 2021, 104, 055003.	0.8	3

# 444	ARTICLE A model for the size distribution of marine microplastics: A statistical mechanics approach. PLoS ONE, 2021, 16, e0259781.	IF 1.1	CITATIONS
445	Survivability of Suddenly Loaded Arrays of Micropillars. Materials, 2021, 14, 7173.	1.3	1
446	Molecular-Dynamics Simulations of the Emergence of Surface Roughness in a Polymer under Compression. Materials, 2021, 14, 7327.	1.3	4
447	Porosity in minerals. AIMS Materials Science, 2021, 9, 1-8.	0.7	1
448	Lattice and Particle Modeling of Damage Phenomena. , 2022, , 1143-1179.		0
450	Recent progress on crushing-strength-energy dissipation of coarse granular soil and biocementation at contacts. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2022, 52, 999-1021.	0.3	1
451	Statistical aspects of interface adhesion and detachment of hierarchically patterned structures. Journal of Statistical Mechanics: Theory and Experiment, 2022, 2022, 023301.	0.9	3
452	Long-Range Correlations and Natural Time Series Analyses from Acoustic Emission Signals. Applied Sciences (Switzerland), 2022, 12, 1980.	1.3	10
453	Crack-path bifurcation, arrest, and renucleation in porous 3 <i>C</i> -SiC. Journal of Applied Physics, 2022, 131, 115105.	1.1	2
454	Quantitative matching of forensic evidence fragments utilizing <scp>3D</scp> microscopy analysis of fracture surface replicas. Journal of Forensic Sciences, 2022, 67, 899-910.	0.9	3
455	Geometric partitioning schemes to reduce modeling bias in statistical volume elements smaller than the scale of isotropic and homogeneous size limits. Computer Methods in Applied Mechanics and Engineering, 2022, 393, 114772.	3.4	3
456	Stretchy and disordered: Toward understanding fracture in soft network materials via mesoscopic computer simulations. Journal of Chemical Physics, 2022, 156, 160901.	1.2	8
457	Damage spreading in quasi-brittle disordered solids: II. What the statistics of precursors teach us about compressive failure. Journal of the Mechanics and Physics of Solids, 2022, 162, 104826.	2.3	7
458	Analysis of Acoustic Emission Activity during Progressive Failure in Heterogeneous Materials: Experimental and Numerical Investigation. Applied Sciences (Switzerland), 2022, 12, 3918.	1.3	10
460	An irregular lattice spring model: uniform elasticity, grid refinement and isotropic crack propagation. Modelling and Simulation in Materials Science and Engineering, 2022, 30, 055002.	0.8	2
461	Nonlinear Mechanics of Colloidal Gels: Creep, Fatigue, and Shear-Induced Yielding. , 2022, , 313-336.		2
462	Interplay between disorder and hardening during tensile fracture of a quasi-brittle solid. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2022, 478, .	1.0	1
463	Edge betweenness centrality as a failure predictor in network models of structurally disordered materials. Scientific Reports, 2022, 12, .	1.6	6

#	Article	IF	CITATIONS
464	Yield precursor in primary creep of colloidal gels. Soft Matter, 2022, 18, 7612-7620.	1.2	5
465	MendNet: Restoration of Fractured Shapes Using Learned Occupancy Functions. Computer Graphics Forum, 2022, 41, 65-78.	1.8	2
466	Pore–microcrack interaction governs failure in bioconsolidated space bricks. Ceramics International, 2022, 48, 35874-35882.	2.3	1
467	Spatially resolved roughness exponent in polymer fracture. Physical Review Materials, 2022, 6, .	0.9	1
468	Hierarchical Slice Patterns Inhibit Crack Propagation in Brittle Sheets. Physical Review Applied, 2022, 18, .	1.5	4
469	Effect of Non-uniform Stiffness on Tensile Avalanche Process of Fibrous Materials. Journal of Statistical Physics, 2023, 190, .	0.5	0
470	Intermittency of Rock Fractured Surfaces: A Power Law. Water (Switzerland), 2022, 14, 3662.	1.2	1
471	Predicting creep failure by machine learning - which features matter?. Forces in Mechanics, 2022, 9, 100141.	1.3	2
472	Disordered Elastic Media. , 2009, , 165-189.		0
473	Topological defects and nanoholes in graphene oxide/hexagonal boron nitride heterostructures: stress buildup and accumulation. RSC Advances, 2022, 12, 33988-34005.	1.7	3
474	Fluctuation-based fracture mechanics of heterogeneous materials. Physical Review E, 2022, 106, .	0.8	0
475	The statistical fracture properties of spatially correlated networks. Physica A: Statistical Mechanics and Its Applications, 2023, 618, 128700.	1.2	2
476	Shear-band cavitation determines the shape of the stress-strain curve of metallic glasses. Physical Review Materials, 2023, 7, .	0.9	0
477	Thermal effects on fracture and the brittle-to-ductile transition. Physical Review E, 2023, 107, .	0.8	4
478	Ubiquity of avalanches: Crackling noise in kidney stones and porous materials. APL Materials, 2023, 11, .	2.2	3
479	Fracture Mechanics ofÂHeterogeneous Materials: Effective Toughness andÂFluctuations. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2023, , 207-254.	0.3	1
480	Truss-like Discrete Element Method Applied to Damage Process Simulation in Quasi-Brittle Materials. Applied Sciences (Switzerland), 2023, 13, 5119.	1.3	2