

Stefano Zapperi

List of Publications by Year in descending order

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242
papers

10,693
citations

41627

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95
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253
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253
docs citations

253
times ranked

7555
citing authors

#	ARTICLE	IF	CITATIONS
1	Evidence of a SARS-CoV-2 double Spike mutation D614G/S939F potentially affecting immune response of infected subjects. Computational and Structural Biotechnology Journal, 2022, 20, 733-744.	1.9	6
2	Universal density of low-frequency states in silica glass at finite temperatures. Physical Review E, 2022, 105, .	0.8	3
3	Predicting the failure of two-dimensional silica glasses. Nature Communications, 2022, 13, .	5.8	15
4	Classification of triple negative breast cancer by epithelial mesenchymal transition and the tumor immune microenvironment. Scientific Reports, 2022, 12, .	1.6	10
5	Digital strategies for structured and architected materials design. APL Materials, 2021, 9, .	2.2	15
6	Extreme value theory and the St. Petersburg paradox in the failure statistics of wires. Journal of Statistical Mechanics: Theory and Experiment, 2021, 2021, 053401.	0.9	0
7	Classification of triple-negative breast cancers through a Boolean network model of the epithelial-mesenchymal transition. Cell Systems, 2021, 12, 457-462.e4.	2.9	11
8	Role of body temperature variations in bat immune response to viral infections. Journal of the Royal Society Interface, 2021, 18, 20210211.	1.5	5
9	From mechanism-based to data-driven approaches in materials science. Materials Theory, 2021, 5, .	2.2	5
10	Automatic design of chiral mechanical metamaterials. APL Materials, 2021, 9, .	2.2	3
11	Oral mucositis: the hidden side of cancer therapy. Journal of Experimental and Clinical Cancer Research, 2020, 39, 210.	3.5	146
12	Chromatin and Cytoskeletal Tethering Determine Nuclear Morphology in Progerin-Expressing Cells. Biophysical Journal, 2020, 118, 2319-2332.	0.2	17
13	Estimating the Binding of Sars-CoV-2 Peptides to HLA Class I in Human Subpopulations Using Artificial Neural Networks. Cell Systems, 2020, 11, 412-417.e2.	2.9	27
14	MicroRNA-222 Regulates Melanoma Plasticity. Journal of Clinical Medicine, 2020, 9, 2573.	1.0	10
15	Cell-cell adhesion and 3D matrix confinement determine jamming transitions in breast cancer invasion. Nature Cell Biology, 2020, 22, 1103-1115.	4.6	209
16	Phase transitions in cell migration. Nature Reviews Physics, 2020, 2, 516-517.	11.9	15
17	Automatic design of mechanical metamaterial actuators. Nature Communications, 2020, 11, 4162.	5.8	44
18	Universal Low-Frequency Vibrational Modes in Silica Glasses. Physical Review Letters, 2020, 125, 085501.	2.9	25

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19	Comparative analysis of metabolic and transcriptomic features of <i>Nothobranchius furzeri</i> . Journal of the Royal Society Interface, 2020, 17, 20200217.	1.5	2
20	Blood Flow Contributions to Cancer Metastasis. IScience, 2020, 23, 101073.	1.9	20
21	Oscillatory instabilities in three-dimensional frictional granular matter. Physical Review E, 2020, 101, 052902.	0.8	2
22	Identifying inhibitors of epithelial-mesenchymal plasticity using a network topology-based approach. Npj Systems Biology and Applications, 2020, 6, 15.	1.4	80
23	Unjamming of active rotators. Soft Matter, 2020, 16, 5478-5486.	1.2	2
24	Phenotypic plasticity: the emergence of cancer stem cells and collective cell migration. , 2020, , 639-649.		1
25	Exaptation in Physics and Materials Science. The Frontiers Collection, 2020, , 35-45.	0.1	1
26	Protein-driven lipid domain nucleation in biological membranes. Physical Review E, 2019, 100, 042410.	0.8	8
27	Metamaterial architecture from a self-shaping carnivorous plant. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18777-18782.	3.3	21
28	Molecular mechanisms of heterogeneous oligomerization of huntingtin proteins. Scientific Reports, 2019, 9, 7615.	1.6	21
29	Density scaling in the mechanics of a disordered mechanical meta-material. Applied Physics Letters, 2019, 114, .	1.5	15
30	Cross-Talk Between circRNAs and mRNAs Modulates MiRNA-mediated Circuits and Affects Melanoma Plasticity. Cancer Microenvironment, 2019, 12, 95-104.	3.1	12
31	Elementary plastic events in amorphous silica. Physical Review E, 2019, 100, 060602.	0.8	18
32	Statistical Features of Collective Cell Migration. Advances in Experimental Medicine and Biology, 2019, 1146, 67-78.	0.8	2
33	Strain Modulation of Graphene by Nanoscale Substrate Curvatures: A Molecular View. Nano Letters, 2018, 18, 2098-2104.	4.5	62
34	Regeneration in distantly related species: common strategies and pathways. Npj Systems Biology and Applications, 2018, 4, 5.	1.4	23
35	From jamming to collective cell migration through a boundary induced transition. Soft Matter, 2018, 14, 3774-3782.	1.2	32
36	Gene expression signature of obesity in monozygotic twins. Physiological Measurement, 2018, 39, 044008.	1.2	4

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37	Mechanics of disordered auxetic metamaterials. <i>European Physical Journal B</i> , 2018, 91, 1.	0.6	19
38	Irreversible transition of amorphous and polycrystalline colloidal solids under cyclic deformation. <i>Physical Review E</i> , 2018, 98, .	0.8	6
39	Topography of epithelialâ€mesenchymal plasticity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 5902-5907.	3.3	108
40	Damage Accumulation in Silica Glass Nanofibers. <i>Nano Letters</i> , 2018, 18, 4100-4106.	4.5	18
41	Impact of the cross-talk between circular and messenger RNAs on cell regulation. <i>Journal of Theoretical Biology</i> , 2018, 454, 386-395.	0.8	7
42	Size effects on the fracture of microscale and nanoscale materials. <i>Nature Reviews Materials</i> , 2018, 3, 211-224.	23.3	72
43	Explaining the dynamics of tumor aggressiveness: At the crossroads between biology, artificial intelligence and complex systems. <i>Seminars in Cancer Biology</i> , 2018, 53, 42-47.	4.3	19
44	Complexity in cancer stem cells and tumor evolution: Toward precision medicine. <i>Seminars in Cancer Biology</i> , 2017, 44, 3-9.	4.3	34
45	Cholesterol impairment contributes to neuroserpin aggregation. <i>Scientific Reports</i> , 2017, 7, 43669.	1.6	11
46	Probing spermiogenesis: a digital strategy for mouse acrosome classification. <i>Scientific Reports</i> , 2017, 7, 3748.	1.6	2
47	Deformation of Crystals: Connections with Statistical Physics. <i>Annual Review of Materials Research</i> , 2017, 47, 217-246.	4.3	61
48	Atomic-Scale Front Propagation at the Onset of Frictional Sliding. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 5438-5443.	2.1	4
49	Modeling mechanical control of spindle orientation of intestinal crypt stem cells. <i>Journal of Theoretical Biology</i> , 2017, 430, 103-108.	0.8	5
50	Direct Observation of Percolation in the Yielding Transition of Colloidal Glasses. <i>Physical Review Letters</i> , 2017, 118, 148001.	2.9	49
51	Irreversibility transition of colloidal polycrystals under cyclic deformation. <i>Scientific Reports</i> , 2017, 7, 45550.	1.6	11
52	Universal features of amorphous plasticity. <i>Nature Communications</i> , 2017, 8, 15928.	5.8	59
53	Integrative analysis of pathway deregulation in obesity. <i>Npj Systems Biology and Applications</i> , 2017, 3, 18.	1.4	16
54	Deformation and fracture of echinoderm collagen networks. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2017, 65, 42-52.	1.5	21

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55	Excitation Spectra in Crystal Plasticity. <i>Physical Review Letters</i> , 2017, 119, 265501.	2.9	11
56	Fluctuations in Protein Aggregation: Design of Preclinical Screening for Early Diagnosis of Neurodegenerative Disease. <i>Physical Review Applied</i> , 2016, 6, .	1.5	0
57	Bursts of activity in collective cell migration. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 11408-11413.	3.3	51
58	Glassy features of crystal plasticity. <i>Physical Review B</i> , 2016, 94, .	1.1	26
59	Biophysical processes in fibrosis. <i>Physics of Life Reviews</i> , 2016, 17, 103-104.	1.5	1
60	Temperature-Dependent Adhesion of Graphene Suspended on a Trench. <i>Nano Letters</i> , 2016, 16, 387-391.	4.5	17
61	Crossover behavior in interface depinning. <i>Physical Review E</i> , 2015, 92, 022146.	0.8	11
62	Overshoot during phenotypic switching of cancer cell populations. <i>Scientific Reports</i> , 2015, 5, 15464.	1.6	31
63	Avalanches, loading and finite size effects in 2D amorphous plasticity: results from a finite element model. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015, 2015, P02011.	0.9	24
64	Scalar model for frictional precursors dynamics. <i>Scientific Reports</i> , 2015, 5, 8086.	1.6	14
65	Navigation Strategies of Motor Proteins on Decorated Tracks. <i>PLoS ONE</i> , 2015, 10, e0136945.	1.1	5
66	Role of the Number of Microtubules in Chromosome Segregation during Cell Division. <i>PLoS ONE</i> , 2015, 10, e0141305.	1.1	9
67	Volume Changes During Active Shape Fluctuations in Cells. <i>Physical Review Letters</i> , 2015, 114, 208101.	2.9	34
68	Fracture Size Effects in Nanoscale Materials: The Case of Graphene. <i>Physical Review Applied</i> , 2015, 4, .	1.5	11
69	Wrinkle motifs in thin films. <i>Scientific Reports</i> , 2015, 5, 8938.	1.6	11
70	Osmotic stress affects functional properties of human melanoma cell lines. <i>European Physical Journal Plus</i> , 2015, 130, 1.	1.2	22
71	Deformation and failure of curved colloidal crystal shells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 14545-14550.	3.3	18
72	The role of pressure in cancer growth. <i>European Physical Journal Plus</i> , 2015, 130, 1.	1.2	186

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73	Mechanical Properties of Growing Melanocytic Nevi and the Progression to Melanoma. PLoS ONE, 2014, 9, e94229.	1.1	22
74	Avalanches in 2D Dislocation Systems: Plastic Yielding Is Not Depinning. Physical Review Letters, 2014, 112, 235501.	2.9	111
75	Dislocation mutual interactions mediated by mobile impurities and the conditions for plastic instabilities. Physical Review E, 2014, 89, 022403.	0.8	5
76	Damage accumulation in quasibrittle fracture. Physical Review E, 2014, 90, 012408.	0.8	8
77	Fracture Strength: Stress Concentration, Extreme Value Statistics, and the Fate of the Weibull Distribution. Physical Review Applied, 2014, 2, .	1.5	39
78	Crackling noise in plasticity. European Physical Journal: Special Topics, 2014, 223, 2353-2367.	1.2	32
79	Conformational Mechanism for the Stability of Microtubule-Kinetochore Attachments. Biophysical Journal, 2014, 107, 289-300.	0.2	5
80	Universality classes and crossover scaling of Barkhausen noise in thin films. Physical Review B, 2014, 89, .	1.1	12
81	Protein accumulation in the endoplasmic reticulum as a non-equilibrium phase transition. Nature Communications, 2014, 5, 3620.	5.8	14
82	Human breast and melanoma cancer stem cells biomarkers. Cancer Letters, 2013, 338, 69-73.	3.2	22
83	<i>Colloquium</i>: Modeling friction: From nanoscale to mesoscale. Reviews of Modern Physics, 2013, 85, 529-552.	16.4	436
84	From Damage Percolation to Crack Nucleation Through Finite Size Criticality. Physical Review Letters, 2013, 110, 185505.	2.9	101
85	Growth and form of melanoma cell colonies. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P02032.	0.9	11
86	Avalanche localization and crossover scaling in amorphous plasticity. Physical Review E, 2013, 88, 062403.	0.8	58
87	Role of the sample thickness in planar crack propagation. Physical Review E, 2013, 88, 042411.	0.8	5
88	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
89	Size effects in dislocation depinning models for plastic yield. Journal of Statistical Mechanics: Theory and Experiment, 2013, 2013, P04029.	0.9	4
90	Do cancer cells undergo phenotypic switching? The case for imperfect cancer stem cell markers. Scientific Reports, 2012, 2, 441.	1.6	35

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91	Triggering Frictional Slip by Mechanical Vibrations. Tribology Letters, 2012, 48, 95-102.	1.2	18
92	Current challenges for statistical physics in fracture and plasticity. European Physical Journal B, 2012, 85, 1.	0.6	11
93	Fracture Strength of Disordered Media: Universality, Interactions, and Tail Asymptotics. Physical Review Letters, 2012, 108, 065504.	2.9	39
94	Quasi-periodic events in crystal plasticity and the self-organized avalanche oscillator. Nature, 2012, 490, 517-521.	13.7	129
95	Senescent Cells in Growing Tumors: Population Dynamics and Cancer Stem Cells. PLoS Computational Biology, 2012, 8, e1002316.	1.5	45
96	Dynamic Instability of a Growing Adsorbed Polymorphic Filament. Biophysical Journal, 2011, 101, 267-275.	0.2	8
97	Laminar Flow of a Sheared Vortex Crystal: Scars in Flat Geometry. Physical Review Letters, 2011, 106, 245501.	2.9	10
98	Avalanche spatial structure and multivariable scaling functions: Sizes, heights, widths, and views through windows. Physical Review E, 2011, 84, 061103.	0.8	30
99	Friction memory in the stick-slip of a sheared granular bed. Journal of Non-Crystalline Solids, 2011, 357, 749-753.	1.5	6
100	Barkhausen instabilities from labyrinthine magnetic domains. Physical Review B, 2011, 84, .	1.1	22
101	Thermally activated domain wall dynamics in a disordered magnetic nanostrip. Journal of Applied Physics, 2011, 109, 07D345.	1.1	2
102	Modeling thermally activated domain wall dynamics in thin magnetic strips with disorder. Journal of Physics: Conference Series, 2011, 292, 012008.	0.3	0
103	Universality beyond power laws and the average avalanche shape. Nature Physics, 2011, 7, 316-320.	6.5	185
104	Dielectric Breakdown and Avalanches at Nonequilibrium Metal-Insulator Transitions. Physical Review Letters, 2011, 107, 276401.	2.9	16
105	Effect of Dipolar Interactions for Domain-Wall Dynamics in Magnetic Thin Films. IEEE Transactions on Magnetics, 2010, 46, 228-230.	1.2	15
106	Modeling Domain Wall Dynamics in Thin Magnetic Strips With Disorder. IEEE Transactions on Magnetics, 2010, 46, 262-265.	1.2	9
107	Looking at How Things Slip. Science, 2010, 330, 184-185.	6.0	4
108	Onset of frictional slip by domain nucleation in adsorbed monolayers. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1311-1316.	3.3	32

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109	Avalanches and clusters in planar crack front propagation. <i>Physical Review E</i> , 2010, 81, 046116.	0.8	87
110	Roughness and multiscaling of planar crack fronts. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2010, 2010, P11014.	0.9	7
111	Fracture roughness in three-dimensional beam lattice systems. <i>Physical Review E</i> , 2010, 82, 026103.	0.8	16
112	From Brittle to Ductile Fracture in Disordered Materials. <i>Physical Review Letters</i> , 2010, 105, 155502.	2.9	29
113	Visualization of avalanches in magnetic thin films: temporal processing. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2009, 2009, P01020.	0.9	5
114	Suppression of Friction by Mechanical Vibrations. <i>Physical Review Letters</i> , 2009, 103, 085502.	2.9	68
115	Slip Line Growth as a Critical Phenomenon. <i>Physical Review Letters</i> , 2009, 102, 115502.	2.9	3
116	Hysteresis and noise in ferromagnetic materials with parallel domain walls. <i>Physical Review B</i> , 2009, 79, .	1.1	11
117	Optimization and Plasticity in Disordered Media. <i>Physical Review Letters</i> , 2009, 103, 225502.	2.9	13
118	The Connection between Size Effects and Strain Bursts in Microscale Plasticity. , 2009, , .		0
119	Size effects in statistical fracture. <i>Journal Physics D: Applied Physics</i> , 2009, 42, 214012.	1.3	54
120	Anomalous roughness of fracture surfaces in 2D fuse models. <i>International Journal of Fracture</i> , 2008, 154, 119-130.	1.1	5
121	Fracture size effects from disordered lattice models. <i>International Journal of Fracture</i> , 2008, 154, 51-59.	1.1	16
122	Dipolar interactions in ferromagnetic systems: Dynamic hysteresis from parallel domain walls. <i>Physica B: Condensed Matter</i> , 2008, 403, 422-424.	1.3	1
123	Stochastic dynamics of a sheared granular medium. <i>European Physical Journal B</i> , 2008, 64, 531-535.	0.6	29
124	Discrete fracture model with anisotropic load sharing. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2008, 2008, P01004.	0.9	9
125	Role of Disorder in the Size Scaling of Material Strength. <i>Physical Review Letters</i> , 2008, 100, 055502.	2.9	42
126	Crack roughness in the two-dimensional random threshold beam model. <i>Physical Review E</i> , 2008, 78, 046105.	0.8	19

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127	Rheology of colloidal microphases in a model with competing interactions. Physical Review E, 2008, 78, 021402.	0.8	31
128	Comment on "Self-organized criticality and absorbing states: Lessons from the Ising model". Physical Review E, 2008, 77, 048101; discussion 048102.	0.8	9
129	Grain boundary diffusion in a Peierls-Nabarro potential. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P12004-P12004.	0.9	2
130	Fatigue failure of disordered materials. Journal of Statistical Mechanics: Theory and Experiment, 2007, 2007, P02003-P02003.	0.9	31
131	Effect of disorder and notches on crack roughness. Physical Review E, 2007, 76, 056111.	0.8	6
132	Dynamic hysteresis from zigzag domain walls: Discrete model and Monte Carlo simulations. Physical Review B, 2007, 75, .	1.1	32
133	Eddy current damping of a moving domain wall: Beyond the quasistatic approximation. Physical Review B, 2007, 76, .	1.1	11
134	Dislocation Avalanches, Strain Bursts, and the Problem of Plastic Forming at the Micrometer Scale. Science, 2007, 318, 251-254.	6.0	506
135	Reverse age discrimination. Nature Physics, 2007, 3, 582-583.	6.5	2
136	Loss separation for dynamic hysteresis in magnetic thin films. Journal of Magnetism and Magnetic Materials, 2007, 316, e549-e551.	1.0	1
137	Signature of negative domain wall mass in soft magnetic materials. Journal of Magnetism and Magnetic Materials, 2007, 316, 436-441.	1.0	9
138	Dipolar interactions in ferromagnetic thin films. European Physical Journal: Special Topics, 2007, 143, 265-267.	1.2	0
139	Fracture in three-dimensional random fuse model: recent advances through high-performance computing. Journal of Computer-Aided Materials Design, 2007, 14, 25-35.	0.7	6
140	Granular Shearing and Barkhausen Noise. , 2007, , 91-100.		1
141	Brownian Forces in Sheared Granular Matter. Physical Review Letters, 2006, 96, 118002.	2.9	45
142	Statistical models of fracture. Advances in Physics, 2006, 55, 349-476.	35.9	507
143	The Barkhausen Effect. , 2006, , 181-267.		82
144	Morphology of two-dimensional fracture surfaces. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, L10002-L10002.	0.9	23

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145	Jamming and Yielding of Dislocations: from Crystal Plasticity to Superconducting Vortex Flow. , 2006, , 189-205.		3
146	Fracture statistics in the three-dimensional random fuse model. International Journal of Fracture, 2006, 140, 99-111.	1.1	11
147	Effects of thickness on the statistical properties of the Barkhausen noise in amorphous films. Physica B: Condensed Matter, 2006, 384, 144-146.	1.3	26
148	Barkhausen noise from zigzag domain walls. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P08020-P08020.	0.9	8
149	The role of stationarity in magnetic crackling noise. Journal of Statistical Mechanics: Theory and Experiment, 2006, 2006, P01002-P01002.	0.9	39
150	MATERIALS SCIENCE: Fluctuations in Plasticity at the Microscale. Science, 2006, 312, 1151-1152.	6.0	29
151	Loss Separation for Dynamic Hysteresis in Ferromagnetic Thin Films. Physical Review Letters, 2006, 97, 257203.	2.9	21
152	Crack surface roughness in three-dimensional random fuse networks. Physical Review E, 2006, 74, 026105.	0.8	16
153	Jamming and Yielding of Dislocations: from Crystal Plasticity to Superconducting Vortex Flow. , 2006, , 189-205.		0
154	Two dimensional models for Barkhausen noise. , 2005, , .		0
155	Power spectra of self-organized critical sandpiles. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, L11001-L11001.	0.9	37
156	Crack avalanches in the three-dimensional random fuse model. Physica A: Statistical Mechanics and Its Applications, 2005, 357, 129-133.	1.2	23
157	Statistical dynamics of dislocations in simple models of plastic deformation: Phase transitions and related phenomena. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2005, 400-401, 191-198.	2.6	10
158	Signature of effective mass in crackling-noise asymmetry. Nature Physics, 2005, 1, 46-49.	6.5	113
159	Statistical properties of dislocation mutual interactions. Journal of Statistical Mechanics: Theory and Experiment, 2005, 2005, P04011.	0.9	1
160	Statistical properties of fracture in a random spring model. Physical Review E, 2005, 71, 066106.	0.8	53
161	Ground-state optimization and hysteretic demagnetization: The random-field Ising model. Physical Review B, 2005, 71, .	1.1	18
162	Crack roughness and avalanche precursors in the random fuse model. Physical Review E, 2005, 71, 026106.	0.8	58

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163	Grain boundaries in vortex matter. <i>Physical Review B</i> , 2005, 72, .	1.1	14
164	Percolation and localization in the random fuse model. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2004, 2004, P08001.	0.9	26
165	Growth of a Vortex Polycrystal in Type II Superconductors. <i>Physical Review Letters</i> , 2004, 92, 257004.	2.9	13
166	Phase Transitions in a Disordered System in and out of Equilibrium. <i>Physical Review Letters</i> , 2004, 92, 257203.	2.9	18
167	Critical hysteresis from random anisotropy. <i>Physical Review B</i> , 2004, 69, .	1.1	6
168	Depinning transition of dislocation assemblies: Pileups and low-angle grain boundaries. <i>Physical Review B</i> , 2004, 69, .	1.1	73
169	Investigation of scaling properties of hysteresis in Finemet thin films. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E913-E914.	1.0	4
170	Vortex nucleation and flux front propagation in type II superconductors. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2004, 342, 383-387.	1.2	2
171	Shape of a Barkhausen pulse. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E533-E534.	1.0	17
172	Is demagnetization an efficient optimization method?. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, E1009-E1010.	1.0	3
173	Time asymmetry of magnetic noise. , 2004, , .		0
174	Dynamic fracture model for acoustic emission. <i>European Physical Journal B</i> , 2003, 36, 203-207.	0.6	38
175	Tearing transition and plastic flow in superconducting thin films. <i>Nature Materials</i> , 2003, 2, 477-481.	13.3	54
176	Dynamic hysteresis in finemet thin films. <i>IEEE Transactions on Magnetics</i> , 2003, 39, 2666-2668.	1.2	22
177	EFFECT OF DAMAGE ON THE ROUGHNESS OF PLANAR CRACKS: THE CASE OF THE RANDOM FUSE MODEL. <i>Fractals</i> , 2003, 11, 327-332.	1.8	1
178	Universality and scaling in the Barkhausen noise. , 2003, , .		0
179	The Plastic Phase of Driven Vortex Crystals. <i>AIP Conference Proceedings</i> , 2003, , .	0.3	0
180	Deblocking of interacting particle assemblies: from pinning to jamming. <i>Brazilian Journal of Physics</i> , 2003, 33, 557-572.	0.7	12

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181	Boundary effects on flux penetration in disordered superconductors. <i>Physical Review B</i> , 2002, 66, .	1.1	9
182	Low-field hysteresis in disordered ferromagnets. <i>Physical Review B</i> , 2002, 65, .	1.1	34
183	Rayleigh loops in the random-field Ising model on the Bethe lattice. <i>Physical Review B</i> , 2002, 65, .	1.1	13
184	Dislocation Jamming and Andrade Creep. <i>Physical Review Letters</i> , 2002, 89, 165501.	2.9	128
185	On the power spectrum of magnetization noise. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 1085-1088.	1.0	30
186	Microscopic foundations of the Rayleigh law of hysteresis. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 987-992.	1.0	17
187	Complex dynamics of magnetic domain walls. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2002, 314, 230-234.	1.2	2
188	New perspectives for the Barkhausen effect. <i>Computational Materials Science</i> , 2001, 20, 436-442.	1.4	16
189	Depinning of a dislocation: the influence of long-range interactions. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 309-310, 348-351.	2.6	44
190	Complexity in dislocation dynamics: experiments. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 309-310, 360-364.	2.6	53
191	Complexity in dislocation dynamics: model. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2001, 309-310, 324-327.	2.6	41
192	Intermittent dislocation flow in viscoplastic deformation. <i>Nature</i> , 2001, 410, 667-671.	13.7	466
193	Force fluctuation in a driven elastic chain. <i>Physical Review B</i> , 2001, 63, .	1.1	21
194	Flux Front Penetration in Disordered Superconductors. <i>Physical Review Letters</i> , 2001, 86, 3622-3625.	2.9	41
195	Critical behavior of a one-dimensional fixed-energy stochastic sandpile. <i>Physical Review E</i> , 2001, 64, 056104.	0.8	70
196	Avalanches and Damage Clusters in Fracture Processes. <i>Lecture Notes in Physics</i> , 2001, , 452-459.	0.3	2
197	Damage in fiber bundle models. <i>European Physical Journal B</i> , 2000, 17, 269-279.	0.6	122
198	Dilatancy and friction in sheared granular media. <i>European Physical Journal E</i> , 2000, 2, 181.	0.7	35

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199	Effect of impact energy on the shape of granular heaps. <i>Granular Matter</i> , 2000, 2, 97-100.	1.1	13
200	Paths to self-organized criticality. <i>Brazilian Journal of Physics</i> , 2000, 30, 27-41.	0.7	244
201	Universality and size effects in the Barkhausen noise. <i>Journal of Applied Physics</i> , 2000, 87, 7031-7033.	1.1	10
202	Depinning of interacting particles in random media. <i>Physical Review B</i> , 2000, 61, 14791-14794.	1.1	4
203	Scaling Exponents for Barkhausen Avalanches in Polycrystalline and Amorphous Ferromagnets. <i>Physical Review Letters</i> , 2000, 84, 4705-4708.	2.9	192
204	Absorbing-state phase transitions in fixed-energy sandpiles. <i>Physical Review E</i> , 2000, 62, 4564-4582.	0.8	149
205	Planar cracks in the fuse model. <i>European Physical Journal B</i> , 2000, 17, 131-136.	0.6	26
206	Scaling behavior in crackle sound during lung inflation. <i>Physical Review E</i> , 1999, 60, 4659-4663.	0.8	26
207	Avalanche and spreading exponents in systems with absorbing states. <i>Physical Review E</i> , 1999, 59, 6175-6179.	0.8	167
208	Barkhausen noise in soft amorphous magnetic materials under applied stress. <i>Journal of Applied Physics</i> , 1999, 85, 5196-5198.	1.1	31
209	Zapperiet al.Reply:. <i>Physical Review Letters</i> , 1999, 83, 1484-1484.	2.9	0
210	Universality in sandpiles. <i>Physical Review E</i> , 1999, 59, R12-R15.	0.8	84
211	Dynamical real space renormalization group applied to sandpile models. <i>Physical Review E</i> , 1999, 60, 1239-1251.	0.8	9
212	Fluctuations and Correlations in Sandpile Models. <i>Physical Review Letters</i> , 1999, 83, 1962-1965.	2.9	11
213	Analysis of damage clusters in fracture processes. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999, 270, 57-62.	1.2	20
214	Critical exponents in stochastic sandpile models. <i>Computer Physics Communications</i> , 1999, 121-122, 299-302.	3.0	29
215	Avalanches in breakdown and fracture processes. <i>Physical Review E</i> , 1999, 59, 5049-5057.	0.8	102
216	Life-support system benefits from noise. <i>Nature</i> , 1998, 393, 127-128.	13.7	223

#	ARTICLE	IF	CITATIONS
217	Mathematical Modeling of the First Inflation of Degassed Lungs. <i>Annals of Biomedical Engineering</i> , 1998, 26, 608-617.	1.3	30
218	Dynamics of a ferromagnetic domain wall: Avalanches, depinning transition, and the Barkhausen effect. <i>Physical Review B</i> , 1998, 58, 6353-6366.	1.1	338
219	How self-organized criticality works: A unified mean-field picture. <i>Physical Review E</i> , 1998, 57, 6345-6362.	0.8	195
220	Driving, Conservation, and Absorbing States in Sandpiles. <i>Physical Review Letters</i> , 1998, 81, 5676-5679.	2.9	144
221	Asymmetric Flow in Symmetric Branched Structures. <i>Physical Review Letters</i> , 1998, 81, 926-929.	2.9	55
222	Mean-field behavior of the sandpile model below the upper critical dimension. <i>Physical Review E</i> , 1998, 57, R6241-R6244.	0.8	29
223	Self-organized criticality as an absorbing-state phase transition. <i>Physical Review E</i> , 1998, 57, 5095-5105.	0.8	161
224	Dynamically Driven Renormalization Group Applied to Self-Organized Critical Systems. <i>International Journal of Modern Physics B</i> , 1998, 12, 1407-1417.	1.0	1
225	New elements for a theory of the Barkhausen effect. <i>European Physical Journal Special Topics</i> , 1998, 08, Pr2-319-Pr2-322.	0.2	3
226	Loreto et al Reply:. <i>Physical Review Letters</i> , 1997, 78, 1393-1393.	2.9	1
227	Order Parameter and Scaling Fields in Self-Organized Criticality. <i>Physical Review Letters</i> , 1997, 78, 4793-4796.	2.9	99
228	First-Order Transition in the Breakdown of Disordered Media. <i>Physical Review Letters</i> , 1997, 78, 1408-1411.	2.9	207
229	Volume distributions of avalanches in lung inflation: A statistical mechanical approach. <i>Physical Review E</i> , 1997, 56, 3385-3394.	0.8	14
230	Universality and Scale Invariant Dynamics in Laplacian Fractal Growth. <i>International Journal of Modern Physics B</i> , 1997, 11, 3595-3619.	1.0	0
231	Dynamics of a Ferromagnetic Domain Wall and the Barkhausen Effect. <i>Physical Review Letters</i> , 1997, 79, 4669-4672.	2.9	117
232	Plasticity and avalanche behaviour in microfracturing phenomena. <i>Nature</i> , 1997, 388, 658-660.	18.7	197
233	Dynamically driven renormalization group. <i>Journal of Statistical Physics</i> , 1997, 88, 47-79.	0.5	17
234	Renormalization of Nonequilibrium Systems with Critical Stationary States. <i>Physical Review Letters</i> , 1996, 77, 4560-4563.	2.9	27

#	ARTICLE	IF	CITATIONS
235	Self-organized branching processes: Avalanche models with dissipation. Physical Review E, 1996, 54, 2483-2488.	0.8	59
236	Sandpile model on the Sierpinski gasket fractal. Physical Review E, 1996, 54, 272-277.	0.8	32
237	Renormalization scheme for forest-fire models. Journal of Physics A, 1996, 29, 2981-3004.	1.6	17
238	Renormalization Group Approach to the Critical Behavior of the Forest-Fire Model. Physical Review Letters, 1995, 75, 465-468.	2.9	56
239	Self-Organized Branching Processes: Mean-Field Theory for Avalanches. Physical Review Letters, 1995, 75, 4071-4074.	2.9	253
240	Renormalization approach to the self-organized critical behavior of sandpile models. Physical Review E, 1995, 51, 1711-1724.	0.8	85
241	Local Rigidity and Self-Organized Criticality for Avalanches. Europhysics Letters, 1995, 29, 111-116.	0.7	33
242	Renormalization scheme for self-organized criticality in sandpile models. Physical Review Letters, 1994, 72, 1690-1693.	2.9	131