List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Volcanic Eruptions, Real-Time Forecasting of. , 2021, , 1-16.		4
2	Dataâ€Ðriven Optimization of Seismicity Models Using Diverse Data Sets: Generation, Evaluation, and Ranking Using Inlabru. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020226.	3.4	10
3	Frontiers of seismology. Astronomy and Geophysics, 2020, 61, 4.29-4.35.	0.2	0
4	Digital rock physics in four dimensions: simulating cementation and its effect on seismic velocity. Geophysical Journal International, 2020, 222, 1606-1619.	2.4	11
5	Catastrophic Failure: How and When? Insights From 4â€Ð In Situ Xâ€ r ay Microtomography. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019642.	3.4	33
6	Coda Wave Interferometry for Accurate Simultaneous Monitoring of Velocity and Acoustic Source Locations in Experimental Rock Physics. Journal of Geophysical Research: Solid Earth, 2019, 124, 5629-5655.	3.4	17
7	Effect of disorder on the spatial structure of damage in slowly compressed porous rocks. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2019, 377, 20170393.	3.4	7
8	Impact of recycling and lateral sediment input on grain size fining trends—Implications for reconstructing tectonic and climate forcings in ancient sedimentary systems. Basin Research, 2019, 31, 866-891.	2.7	8
9	Probabilistic identification of earthquake clusters using rescaled nearest neighbour distance networks. Geophysical Journal International, 2019, 217, 487-503.	2.4	15
10	Volcanic Eruption Forecasts From Accelerating Rates of Drumbeat Longâ€Period Earthquakes. Geophysical Research Letters, 2018, 45, 1339-1348.	4.0	22
11	Induced seismicity at the UK †hot dry rock' test site for geothermal energy production. Geophysical Journal International, 2018, 214, 331-344.	2.4	16
12	Accurate estimates of simultaneous seismic velocity changes and interfracture-source distances from coda wave interferometry. , 2018, , .		0
13	Earthquake clustering in modern seismicity and its relationship with strong historical earthquakes around Beijing, China. Geophysical Journal International, 2017, 211, 1005-1018.	2.4	10
14	Predicting mining collapse: Superjerks and the appearance of record-breaking events in coal as collapse precursors. Physical Review E, 2017, 96, 023004.	2.1	38
15	Does an inter-flaw length control the accuracy of rupture forecasting in geological materials?. Earth and Planetary Science Letters, 2017, 475, 181-189.	4.4	39
16	Crackling Noise in Digital and Real Rocks–Implications for Forecasting Catastrophic Failure in Porous Granular Media. Understanding Complex Systems, 2017, , 77-97.	0.6	1
17	Scale-model seismicity—Taking the rough with the smooth. Geology, 2017, 45, 859-860.	4.4	0
18	The Geology and Landscapes of Scotland. Scottish Affairs, 2017, 26, 266-267.	0.3	0

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19	Record-breaking events during the compressive failure of porous materials. Physical Review E, 2016, 93, 033006.	2.1	11
20	Fragmentation and shear band formation by slow compression of brittle porous media. Physical Review E, 2016, 94, 053003.	2.1	12
21	Effects of CO2 on P-wave attenuation in porous media with micro-cracks: A synthetic modelling study. Journal of Applied Geophysics, 2016, 135, 309-316.	2.1	4
22	Mode switching in volcanic seismicity: El Hierro 2011–2013. Geophysical Research Letters, 2016, 43, 4288-4296.	4.0	17
23	Heterogeneity: The key to failure forecasting. Scientific Reports, 2015, 5, 13259.	3.3	94
24	Geological repositories: scientific priorities and potential high-technology transfer from the space and physics sectors. Mineralogical Magazine, 2015, 79, 1651-1664.	1.4	3
25	Detection of change points in underlying earthquake rates, with application to global mega-earthquakes. Geophysical Journal International, 2015, , .	2.4	3
26	Are volcanic seismic b -values high, and if so when?. Journal of Volcanology and Geothermal Research, 2015, 308, 127-141.	2.1	76
27	Seismic attenuation in fractured porous media: insights from a hybrid numerical and analytical model. Journal of Geophysics and Engineering, 2015, 12, 210-219.	1.4	2
28	Volcanic Eruptions, Real-Time Forecasting of. , 2015, , 3892-3906.		1
29	eScience Gateway Stimulating Collaboration in Rock Physics and Volcanology. , 2014, , .		3
30	Acceleration and localization of subcritical crack growth in a natural composite material. Physical Review E, 2014, 90, 052401.	2.1	47
31	Rupture Cascades in a Discrete Element Model of a Porous Sedimentary Rock. Physical Review Letters, 2014, 112, 065501.	7.8	62
32	Statistical Modeling of the 1997-1998 Colfiorito Earthquake Sequence: Locating a Stationary Solution within Parameter Uncertainty. Bulletin of the Seismological Society of America, 2014, 104, 885-897.	2.3	9
33	Pâ€wave attenuation anisotropy in fractured media: A seismic physical modelling study. Geophysical Prospecting, 2013, 61, 420-433.	1.9	39
34	Approach to failure in porous granular materials under compression. Physical Review E, 2013, 88, 062207.	2.1	55
35	The limits of predictability of volcanic eruptions from accelerating rates of earthquakes. Geophysical Journal International, 2013, 194, 1541-1553.	2.4	53
36	Convergence of the frequencyâ€size distribution of global earthquakes. Geophysical Research Letters, 2013, 40, 2585-2589.	4.0	25

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37	Emergent patterns of localized damage as a precursor to catastrophic failure in a random fuse network. Physical Review E, 2013, 87, 042811.	2.1	6
38	Time evolution of damage due to environmentally assisted aging in a fiber bundle model. Physical Review E, 2013, 88, 032802.	2.1	12
39	Little Earthquakes in the Lab. Physics Magazine, 2013, 6, .	0.1	3
40	Damage growth in fibre bundle models with localized load sharing and environmentally-assisted ageing. Journal of Physics: Conference Series, 2013, 410, 012064.	0.4	3
41	Complexity and Extreme Events in Geosciences: An Overview. Geophysical Monograph Series, 2012, , 1-16.	0.1	9
42	The dilatancy–diffusion hypothesis and earthquake predictability. Geological Society Special Publication, 2012, 367, 215-230.	1.3	23
43	On the threshold of flow in a tight natural rock. Geophysical Research Letters, 2012, 39, .	4.0	17
44	Extreme events and predictability of catastrophic failure in composite materials and in the Earth. European Physical Journal: Special Topics, 2012, 205, 183-197.	2.6	12
45	Reply to "Comment on 'Operational Earthquake Forecasting: Status of Knowledge and Guidelines for Implementation by Jordan et al. [2011]' by Stuart Crampin". Annals of Geophysics, 2012, 55, .	1.0	0
46	Masking of earthquake triggering behavior by a high background rate and implications for epidemic-type aftershock sequence inversions. Journal of Geophysical Research, 2011, 116, .	3.3	21
47	Forecasting volcanic eruptions and other material failure phenomena: An evaluation of the failure forecast method. Geophysical Research Letters, 2011, 38, .	4.0	77
48	Brittle creep in basalt and its application to time-dependent volcano deformation. Earth and Planetary Science Letters, 2011, 307, 71-82.	4.4	206
49	Challenges for forecasting based on accelerating rates of earthquakes at volcanoes and laboratory analogues. Geophysical Journal International, 2011, 185, 718-723.	2.4	63
50	Model selection and uncertainty in earthquake hazard analysis. , 2011, , 735-743.		6
51	OPERATIONAL EARTHQUAKE FORECASTING. State of Knowledge and Guidelines for Utilization. Annals of Geophysics, 2011, 54, .	1.0	175
52	Low-cost Monitoring of Inter-well Reservoir Communication Paths Through Correlations in Well Rate Fluctuations: Case Studies from Mature Fields in the North Sea. , 2010, , .		10
53	Comparison of polarity and moment tensor inversion methods for source analysis of acoustic emission data. International Journal of Rock Mechanics and Minings Sciences, 2010, 47, 161-169.	5.8	98
54	Entropy production and self-organized (sub)criticality in earthquake dynamics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2010, 368, 131-144.	3.4	38

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55	Origin and Nonuniversality of the Earthquake Interevent Time Distribution. Physical Review Letters, 2009, 102, 168501.	7.8	90
56	Correlation Between Microstructure and Flow Behavior in Porous Sandstones. Petroleum Science and Technology, 2009, 27, 511-529.	1.5	0
57	Frontiers of Seismology. Astronomy and Geophysics, 2009, 50, 4.31-4.34.	0.2	1
58	Application of complementary methods for more robust characterization of sandstone cores. Marine and Petroleum Geology, 2009, 26, 39-56.	3.3	22
59	Comment on "Relationship between accelerating seismicity and quiescence, two precursors to large earthquakes―by Arnaud Mignan and Rita Di Giovambattista. Geophysical Research Letters, 2009, 36, .	4.0	16
60	Statistical evaluation of characteristic earthquakes in the frequencyâ€magnitude distributions of Sumatra and other subduction zone regions. Geophysical Research Letters, 2009, 36, .	4.0	37
61	Timeâ€dependent brittle creep in Darley Dale sandstone. Journal of Geophysical Research, 2009, 114, .	3.3	288
62	Quantifying uncertainty in mean earthquake interevent times for a finite sample. Journal of Geophysical Research, 2009, 114, .	3.3	11
63	Cell scale self-organisation in the OFC model for earthquake dynamics. European Physical Journal B, 2008, 64, 139-146.	1.5	7
64	Effect of the Sumatran mega-earthquake on the global magnitude cut-off and event rate. Nature Geoscience, 2008, 1, 142-142.	12.9	34
65	A Poisson model for earthquake frequency uncertainties in seismic hazard analysis. Geophysical Research Letters, 2008, 35, .	4.0	36
66	Maximum entropy production and earthquake dynamics. Geophysical Research Letters, 2008, 35, .	4.0	18

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73	Numerical simulation of wave propagation in 2-D fractured media: scattering attenuation at different stages of the growth of a fracture population. Geophysical Journal International, 2007, 171, 865-880.	2.4	37
74	Fault gouge diagenesis at shallow burial depth: Solution–precipitation reactions in well-sorted and poorly sorted powders of crushed sandstone. Earth and Planetary Science Letters, 2006, 243, 607-614.	4.4	20
75	Long-range, critical-point dynamics in oil field flow rate data. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	12
76	Scale in structure and dynamics. Astronomy and Geophysics, 2006, 47, 6.24-6.25.	0.2	0
77	Dual simulations of fluid flow and seismic wave propagation in a fractured network: effects of pore pressure on seismic signature. Geophysical Journal International, 2006, 166, 825-838.	2.4	44
78	A hand on the aftershock trigger. Nature, 2006, 441, 704-705.	27.8	11
79	Predicting the ultimate bending capacity of concrete beams from the "relaxation ratio―analysis of AE signals. Construction and Building Materials, 2005, 19, 746-754.	7.2	88
80	Regional variations in the diffusion of triggered seismicity. Journal of Geophysical Research, 2005, 110,	3.3	17
81	A statistical evaluation of a â€~stress-forecast' earthquake. Geophysical Journal International, 2004, 157, 187-193.	2.4	33
82	Relating flow channelling to tracer dispersion in heterogeneous networks. Advances in Water Resources, 2004, 27, 843-855.	3.8	49
83	Hydromechanical Behavior of Fractured Rocks. International Geophysics, 2004, , 363-421.	0.6	55
84	Loading rate dependence of permeability evolution in porous aeolian sandstones. Journal of Geophysical Research, 2004, 109, .	3.3	15
85	One-dimensional fluid diffusion induced by constant-rate flow injection: Theoretical analysis and application to the determination of fluid permeability and specific storage of a cored rock sample. Journal of Geophysical Research, 2004, 109, .	3.3	24
86	Reply to "Comment on â€~Entropy, energy, and proximity to criticality in global earthquake populations'âŧ by Chien-chih Chen and Chun-Ling Chang. Geophysical Research Letters, 2004, 31, n/a-n/a.	ۥ 4.0	4
87	Strain rate and temperature dependence of Omori law scaling constants of AE data: Implications for earthquake foreshock-aftershock sequences. Geophysical Research Letters, 2004, 31, .	4.0	48
88	Hydromechanical behaviour of fine-grained calcilutite and fault gouge from the Aigion Fault Zone, Greece. Comptes Rendus - Geoscience, 2004, 336, 445-454.	1.2	13
89	Modeling seismic wave propagation during fluid injection in a fractured network: Effects of pore fluid pressure on time-lapse seismic signatures. The Leading Edge, 2004, 23, 778-783.	0.7	8
90	Maximum earthquake magnitudes in the Aegean area constrained by tectonic moment release rates. Geophysical Journal International, 2003, 152, 94-112.	2.4	29

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91	Numerical simulation of wave propagation in media with discrete distributions of fractures: effects of fracture sizes and spatial distributions. Geophysical Journal International, 2003, 152, 649-668.	2.4	95
92	Assessing Damage of Reinforced Concrete Beam Using " b  -value―Analysis of Acoustic Emission Signals. Journal of Materials in Civil Engineering, 2003, 15, 280-286.	2.9	396
93	Anomalous stress diffusion in earthquake triggering: Correlation length, time dependence, and directionality. Journal of Geophysical Research, 2003, 108, .	3.3	71
94	Observation and modeling of the suction pump effect during rapid dilatant slip. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	11
95	Correlation of microseismic and chemical properties of brittle deformation in Locharbriggs sandstone. Journal of Geophysical Research, 2003, 108, .	3.3	31
96	Statistical analysis of daily seismic event rate as a precursor to volcanic eruptions. Geophysical Research Letters, 2003, 30, .	4.0	43
97	Perceptible earthquakes in the broad Aegean area. Tectonophysics, 2003, 371, 175-186.	2.2	9
98	Influence of confining pressure on the mechanical and structural evolution of laboratory deformation bands. Geophysical Research Letters, 2002, 29, 49-1-49-4.	4.0	73
99	Entropy, energy, and proximity to criticality in global earthquake populations. Geophysical Research Letters, 2002, 29, 25-1.	4.0	55
100	Constraints on the frequency-magnitude relation and maximum magnitudes in the UK from observed seismicity and glacio-isostatic recovery rates. Geophysical Journal International, 2002, 137, 535-550.	2.4	32
101	Scaling of fracture systems in geological media. Reviews of Geophysics, 2001, 39, 347-383.	23.0	1,047
102	A constitutive law for low-temperature creep of water-saturated sandstones. Journal of Geophysical Research, 2001, 106, 21811-21826.	3.3	67
103	A Poisson model for identifying characteristic size effects in frequency data: Application to frequency-size distributions for global earthquakes, "starquakesâ€, and fault lengths. Journal of Geophysical Research, 2001, 106, 13473-13484.	3.3	35
104	Influence of open and sealed fractures on fluid flow and water saturation in sandstone cores using Magnetic Resonance Imaging. Geophysical Journal International, 2001, 147, 263-271.	2.4	15
105	Experimental constraints on the mechanical and hydraulic properties of deformation bands in porous sandstones: a review. Geological Society Special Publication, 2001, 186, 43-63.	1.3	18
106	Apparent Breaks in Scaling in the Earthquake Cumulative Frequency-Magnitude Distribution: Fact or Artifact?. Bulletin of the Seismological Society of America, 2000, 90, 86-97.	2.3	87
107	A damage mechanics model for power-law creep and earthquake aftershock and foreshock sequences. Geophysical Journal International, 2000, 142, 151-161.	2.4	198
108	Sequential growth of deformation bands in the laboratory. Journal of Structural Geology, 2000, 22, 25-42.	2.3	191

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109	Fault sealing during deformation-band growth in porous sandstone. Geology, 2000, 28, 1131.	4.4	55
110	Experimental constraints on the diagenetic self-sealing capacity of faults in high porosity rocks. Earth and Planetary Science Letters, 2000, 183, 187-199.	4.4	39
111	Statistical physics of earthquakes: Comparison of distribution exponents for source area and potential energy and the dynamic emergence of log-periodic energy quanta. Journal of Geophysical Research, 2000, 105, 6105-6126.	3.3	31
112	Fault sealing during deformation-band growth in porous sandstone. Geology, 2000, 28, 1131-1134.	4.4	5
113	Applicability of time-to-failure analysis to accelerated strain before earthquakes and volcanic eruptions. Geophysical Journal International, 1999, 139, F1-F6.	2.4	125
114	The thermal evolution of sedimentary basins and its effect on the maturation of hydrocarbons. Geophysical Journal International, 1999, 139, 248-260.	2.4	23
115	Numerical simulation of seismicity due to fluid injection in a brittle poroelastic medium. Geophysical Journal International, 1999, 139, 263-272.	2.4	30
116	One slope or two? Detecting statistically significant breaks of slope in geophysical data, with application to fracture scaling relationships. Geophysical Research Letters, 1999, 26, 2801-2804.	4.0	92
117	Shear-wave anisotropy: spatial and temporal variations in time delays at Parkfield, Central California. Geophysical Journal International, 1997, 130, 771-785.	2.4	67
118	Long odds on prediction. Nature, 1997, 385, 19-20.	27.8	62
119	A lattice BGK model for the diffusion of pore fluid pressure, including anisotropy, heterogeneity, and gravity effects. Geophysical Research Letters, 1996, 23, 13-16.	4.0	15
120	Spatial variations of the fractal properties of seismicity in the Anatolian fault zones. Tectonophysics, 1996, 257, 189-202.	2.2	72
121	Statistical physics, seismogenesis, and seismic hazard. Reviews of Geophysics, 1996, 34, 433-462.	23.0	370
122	A cellular automaton fracture model: the influence of heterogeneity in the failure process. Journal of Structural Geology, 1996, 18, 343-348.	2.3	14
123	Temporal variations in the fractal properties of seismicity in the North Anatolian Fault Zone between 31�E and 41�E. Pure and Applied Geophysics, 1996, 147, 147-159.	1.9	33
124	The nucleation and rupture process of the 1981 Gulf of Corinth earthquakes from deconvolved broad-band data. Geophysical Journal International, 1995, 120, 393-405.	2.4	31
125	Source parameters of earthquakes in the Aleutian Islands subduction zone. Geophysical Journal International, 1995, 120, 419-432.	2.4	1
126	FAULTS IN FOCUS. Terra Nova, 1995, 7, 4-6.	2.1	2

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127	Strength characteristics and shear acoustic anisotropy of rock core subjected to true triaxial compression. International Journal of Rock Mechanics and Mining Sciences, 1995, 32, 189-200.	0.0	26
128	Temporal variations of the fractal properties of seismicity in the western part of the north Anatolian fault zone: possible artifacts due to improvements in station coverage. Nonlinear Processes in Geophysics, 1995, 2, 147-157.	1.3	27
129	A two-layer attenuation model for the upper mantle at short periods. Geophysical Research Letters, 1995, 22, 2561-2564.	4.0	4
130	Earthquakes as critical phenomena: Implications for probabilistic seismic hazard analysis. Bulletin of the Seismological Society of America, 1995, 85, 1299-1308.	2.3	86
131	Self-organised criticality and fluid-rock interactions in the brittle field. Pure and Applied Geophysics, 1994, 142, 529-543.	1.9	11
132	A fracture-mechanical cellular automaton model of seismicity. Pure and Applied Geophysics, 1994, 142, 545-565.	1.9	24
133	Non-universal scaling of fracture length and opening displacement. Nature, 1994, 367, 160-162.	27.8	134
134	Microseismic properties of a homogeneous sandstone during fault nucleation and frictional sliding. Geophysical Journal International, 1994, 119, 219-230.	2.4	32
135	Seismicity in north-eastern Brazil: fractal clustering and the evolution of thebvalue. Geophysical Journal International, 1994, 116, 217-226.	2.4	51
136	Application of a modified Griffith criterion to the evolution of fractal damage during compressional rock failure. Geophysical Journal International, 1993, 115, 367-380.	2.4	91
137	A comparison of seismic and structural measurements of scaling exponents during tensile subcritical crack growth. Journal of Structural Geology, 1993, 15, 1485-1495.	2.3	89
138	Three-dimensional structure and constraints on the nature of the coupled subduction-spreading process in the Aegean area. Tectonophysics, 1992, 201, 199-207.	2.2	3
139	A simple fractureâ€mechanical model for the evolution of seismicity. Geophysical Research Letters, 1992, 19, 365-368.	4.0	25
140	Temporal variations in seismic event rate and b-values from stress corrosion constitutive laws. Tectonophysics, 1992, 211, 233-246.	2.2	75
141	Earthquake scaling. Nature, 1992, 357, 27-28.	27.8	33
142	Role of pore fluids in the generation of seismic precursors to shear fracture. Nature, 1992, 359, 228-230.	27.8	195
143	Damage mechanics with long-range interactions: correlation between the seismicb-value and the fractal two-point correlation dimension. Geophysical Journal International, 1992, 111, 531-541.	2.4	62
144	The evolution of seismicity at Parkfield: observation, experiment and a fracture-mechanical interpretation. Journal of Structural Geology, 1992, 14, 905-913.	2.3	37

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145	Source mechanisms of recent earthquakes in the Hellenic arc from broadband data. Tectonophysics, 1991, 200, 233-248.	2.2	3
146	On the resolving power of tomographic images in the Aegean area. Geophysical Journal International, 1991, 107, 197-203.	2.4	16
147	The use of the CAPE Environment in the simulation of rock fracturing. Concurrency and Computation: Practice and Experience, 1991, 3, 687-698.	0.5	7
148	Quasi-static modelling of stress histories during the earthquake cycle: precursory seismic and aseismic stress release. Geophysical Journal International, 1990, 102, 195-203.	2.4	6
149	3-D structure of the lithosphere in the Aegean region. Geophysical Journal International, 1990, 102, 219-229.	2.4	34
150	Scattering attenuation and the fractal geometry of fracture systems. Pure and Applied Geophysics, 1990, 133, 283-304.	1.9	70
151	Influence of fractal flaw distributions on rock deformation in the brittle field. Geological Society Special Publication, 1990, 54, 81-96.	1.3	30
152	Temporal variations in seismicity during quasi-static and dynamic rock failure. Tectonophysics, 1990, 175, 249-268.	2.2	167
153	Moment—magnitude scaling in the Aegean area. Tectonophysics, 1990, 179, 273-285.	2.2	16
154	Seismotectonics and the earthquake frequency-magnitude distribution in the Aegean area. Geophysical Journal International, 1989, 98, 575-586.	2.4	33
155	A reinterpretation of the precursory seismic b-value anomaly from fracture mechanics. Geophysical Journal International, 1989, 96, 131-138.	2.4	180
156	Classification of earthquake precursors from a fracture mechanics model. Tectonophysics, 1989, 167, 273-283.	2.2	42
157	A characteristic earthquake model of the seismicity preceding the eruption of Mount St. Helens on 18 May 1980. Physics of the Earth and Planetary Interiors, 1987, 49, 283-293.	1.9	40
158	Long-term earthquake recurrence constrained by tectonic seismic moment release rates. Bulletin of the Seismological Society of America, 1986, 76, 297-304.	2.3	38
159	Physical links between crustal deformation, seismic moment and seismic hazard for regions of varying seismicity. Geophysical Journal International, 1984, 79, 469-488.	2.4	23
160	Seismic Risk and the North Sea. , 1983, , 347-364.		7
161	Is the reliable prediction of individual earthquakes a realistic scientific goal?. Nature, 0, , .	27.8	40