

Chris Marone

List of Publications by Year in descending order

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159
papers

13,662
citations

27035

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171
docs citations

171
times ranked

5739
citing authors

#	ARTICLE	IF	CITATIONS
1	LABORATORY-DERIVED FRICTION LAWS AND THEIR APPLICATION TO SEISMIC FAULTING. Annual Review of Earth and Planetary Sciences, 1998, 26, 643-696.	4.6	1,597
2	Frictional behavior and constitutive modeling of simulated fault gouge. Journal of Geophysical Research, 1990, 95, 7007-7025.	3.3	529
3	Comparison of smectite- and illite-rich gouge frictional properties: application to the updip limit of the seismogenic zone along subduction megathrusts. Earth and Planetary Science Letters, 2003, 215, 219-235.	1.8	476
4	Fault zone fabric and fault weakness. Nature, 2009, 462, 907-910.	13.7	444
5	The depth of seismic faulting and the upper transition from stable to unstable slip regimes. Geophysical Research Letters, 1988, 15, 621-624.	1.5	410
6	Scaling of the critical slip distance for seismic faulting with shear strain in fault zones. Nature, 1993, 362, 618-621.	13.7	375
7	Frictional and hydrologic properties of clay-rich fault gouge. Journal of Geophysical Research, 2009, 114, .	3.3	342
8	The effect of loading rate on static friction and the rate of fault healing during the earthquake cycle. Nature, 1998, 391, 69-72.	13.7	321
9	Particle-size distribution and microstructures within simulated fault gouge. Journal of Structural Geology, 1989, 11, 799-814.	1.0	314
10	Laboratory observations of slow earthquakes and the spectrum of tectonic fault slip modes. Nature Communications, 2016, 7, 11104.	5.8	301
11	On the relation between fault strength and frictional stability. Geology, 2011, 39, 83-86.	2.0	278
12	Influence of grain characteristics on the friction of granular shear zones. Journal of Geophysical Research, 2002, 107, ECV 4-1-ECV 4-9.	3.3	261
13	Weakness of the San Andreas Fault revealed by samples from the active fault zone. Nature Geoscience, 2011, 4, 251-254.	5.4	235
14	Influence of particle characteristics on granular friction. Journal of Geophysical Research, 2005, 110, .	3.3	218
15	Friction of simulated fault gouge for a wide range of velocities and normal stresses. Journal of Geophysical Research, 1999, 104, 28899-28914.	3.3	216
16	Variations in rupture process with recurrence interval in a repeated small earthquake. Nature, 1994, 368, 624-626.	13.7	198
17	Fault healing inferred from time dependent variations in source properties of repeating earthquakes. Geophysical Research Letters, 1995, 22, 3095-3098.	1.5	182
18	Effects of acoustic waves on stick-slip in granular media and implications for earthquakes. Nature, 2008, 451, 57-60.	13.7	179

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19	Effect of hydration state on the frictional properties of montmorillonite-based fault gouge. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	154
20	Shear-induced dilatancy of fluid-saturated faults: Experiment and theory. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	148
21	Laboratory results indicating complex and potentially unstable frictional behavior of smectite clay. <i>Geophysical Research Letters</i> , 2001, 28, 2297-2300.	1.5	134
22	Precursory changes in seismic velocity for the spectrum of earthquake failure modes. <i>Nature Geoscience</i> , 2016, 9, 695-700.	5.4	134
23	Effect of humidity on granular friction at room temperature. <i>Journal of Geophysical Research</i> , 2002, 107, ETG 11-1-ETG 11-13.	3.3	130
24	Laboratory study of fault healing and lithification in simulated fault gouge under hydrothermal conditions. <i>Tectonophysics</i> , 1997, 277, 41-55.	0.9	128
25	Slow Earthquakes, Preseismic Velocity Changes, and the Origin of Slow Frictional Stick-Slip. <i>Science</i> , 2013, 341, 1229-1232.	6.0	124
26	Laboratory observations of permeability enhancement by fluid pressure oscillation of in situ fractured rock. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	123
27	Slip weakening as a mechanism for slow earthquakes. <i>Nature Geoscience</i> , 2013, 6, 468-472.	5.4	121
28	Shear zones in clay-rich fault gouge: A laboratory study of fabric development and evolution. <i>Journal of Structural Geology</i> , 2013, 51, 206-225.	1.0	121
29	Frictional stability and earthquake triggering during fluid pressure stimulation of an experimental fault. <i>Earth and Planetary Science Letters</i> , 2017, 477, 84-96.	1.8	120
30	Breakdown pressure and fracture surface morphology of hydraulic fracturing in shale with H ₂ O, CO ₂ and N ₂ . <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2016, 2, 63-76.	1.3	119
31	Fault zone restrengthening and frictional healing: The role of pressure solution. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	116
32	Effects of normal stress vibrations on frictional healing. <i>Journal of Geophysical Research</i> , 1999, 104, 28859-28878.	3.3	115
33	Fault structure, frictional properties and mixed-mode fault slip behavior. <i>Earth and Planetary Science Letters</i> , 2011, 311, 316-327.	1.8	115
34	Critical evaluation of state evolution laws in rate and state friction: Fitting large velocity steps in simulated fault gouge with time-, slip-, and stress-dependent constitutive laws. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 6365-6385.	1.4	110
35	Acoustic emission and microslip precursors to stick-slip failure in sheared granular material. <i>Geophysical Research Letters</i> , 2013, 40, 5627-5631.	1.5	105
36	Coulomb constitutive laws for friction: Contrasts in frictional behavior for distributed and localized shear. <i>Pure and Applied Geophysics</i> , 1992, 139, 195-214.	0.8	100

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37	Basaltic volcanism and extension near the intersection of the Sierra Madre volcanic province and the Mexican Volcanic Belt. <i>Bulletin of the Geological Society of America</i> , 1994, 106, 383-394.	1.6	100
38	Laboratory evidence for particle mobilization as a mechanism for permeability enhancement via dynamic stressing. <i>Earth and Planetary Science Letters</i> , 2014, 392, 279-291.	1.8	97
39	Similarity of fast and slow earthquakes illuminated by machine learning. <i>Nature Geoscience</i> , 2019, 12, 69-74.	5.4	96
40	Laboratory study of the frictional rheology of sheared till. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	94
41	Frictional strength and healing behavior of phyllosilicate-rich faults. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	93
42	Fabric induced weakness of tectonic faults. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	89
43	Frictional properties and sliding stability of the San Andreas fault from deep drill core. <i>Geology</i> , 2012, 40, 759-762.	2.0	88
44	Evolution of b-value during the seismic cycle: Insights from laboratory experiments on simulated faults. <i>Earth and Planetary Science Letters</i> , 2018, 482, 407-413.	1.8	87
45	Frictional properties of the active San Andreas Fault at SAFOD: Implications for fault strength and slip behavior. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 5273-5289.	1.4	82
46	Laboratory observations of time-dependent frictional strengthening and stress relaxation in natural and synthetic fault gouges. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 1183-1201.	1.4	82
47	Clay fabric intensity in natural and artificial fault gouges: Implications for brittle fault zone processes and sedimentary basin clay fabric evolution. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	80
48	Frictional strength and strain weakening in simulated fault gouge: Competition between geometrical weakening and chemical strengthening. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	79
49	Earthquake nucleation on model faults with rate- and state-dependent friction: Effects of inertia. <i>Journal of Geophysical Research</i> , 1996, 101, 13919-13932.	3.3	75
50	Frictional behavior of materials in the 3D SAFOD volume. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	75
51	Scaling of rock friction constitutive parameters: The effects of surface roughness and cumulative offset on friction of gabbro. <i>Pure and Applied Geophysics</i> , 1994, 143, 359-385.	0.8	74
52	Healing of simulated fault gouges aided by pressure solution: Results from rock analogue experiments. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	74
53	A microphysical interpretation of rate- and state-dependent friction for fault gouge. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 1660-1677.	1.0	69
54	Permeability evolution in sorbing media: analogies between organic-rich shale and coal. <i>Geofluids</i> , 2016, 16, 43-55.	0.3	69

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55	Effects of normal stress variation on the strength and stability of creeping faults. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	67
56	Fractional restrengthening in simulated fault gouge: Effect of shear load perturbations. <i>Journal of Geophysical Research</i> , 2001, 106, 19319-19337.	3.3	66
57	Potential for earthquake triggering from transient deformations. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	65
58	Effects of normal stress perturbations on the frictional properties of simulated faults. <i>Geochemistry, Geophysics, Geosystems</i> , 2005, 6, n/a-n/a.	1.0	61
59	Effect of strain localization on frictional behavior of sheared granular materials. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	61
60	On the evolution of elastic properties during laboratory stick-slip experiments spanning the transition from slow slip to dynamic rupture. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 8569-8594.	1.4	61
61	Effects of loading rate and normal stress on stress drop and stick-slip recurrence interval. <i>Geophysical Monograph Series</i> , 2000, , 187-198.	0.1	60
62	Systematic variations in recurrence interval and moment of repeating aftershocks. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	59
63	A novel and versatile apparatus for brittle rock deformation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2014, 66, 114-123.	2.6	59
64	Influence of shear and deviatoric stress on the evolution of permeability in fractured rock. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	57
65	Estimating Fault Friction From Seismic Signals in the Laboratory. <i>Geophysical Research Letters</i> , 2018, 45, 1321-1329.	1.5	57
66	Fault zone strength and failure criteria. <i>Geophysical Research Letters</i> , 1995, 22, 723-726.	1.5	55
67	Frictional Mechanics of Slow Earthquakes. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 7931-7949.	1.4	54
68	The effect of shear load on frictional healing in simulated fault gouge. <i>Geophysical Research Letters</i> , 1998, 25, 4561-4564.	1.5	53
69	Frictional heterogeneities on carbonate-bearing normal faults: Insights from the Monte Maggio Fault, Italy. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 9062-9076.	1.4	53
70	Physicochemical processes of frictional healing: Effects of water on stick-slip stress drop and friction of granular fault gouge. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 4090-4105.	1.4	53
71	Deformation band formation and strength evolution in unlithified sand: The role of grain breakage. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	52
72	Slip-rate-dependent friction as a universal mechanism for slow slip events. <i>Nature Geoscience</i> , 2020, 13, 705-710.	5.4	51

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73	Microslips as precursors of large slip events in the stick-slip dynamics of sheared granular layers: A discrete element model analysis. <i>Geophysical Research Letters</i> , 2013, 40, 4194-4198.	1.5	50
74	The effect of particle dimensionality on Granular friction in laboratory shear zones. <i>Geophysical Research Letters</i> , 2002, 29, 22-1-22-4.	1.5	49
75	Breakdown pressures due to infiltration and exclusion in finite length boreholes. <i>Journal of Petroleum Science and Engineering</i> , 2015, 127, 329-337.	2.1	49
76	Effects of shear velocity oscillations on stick-slip behavior in laboratory experiments. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	47
77	The effects of entrained debris on the basal sliding stability of a glacier. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 656-666.	1.0	47
78	Friction-Stability-Permeability Evolution of a Fracture in Granite. <i>Water Resources Research</i> , 2018, 54, 9901-9918.	1.7	46
79	Permeability evolution during dynamic stressing of dual permeability media. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	44
80	Linking permeability to crack density evolution in thermally stressed rocks under cyclic loading. <i>Geophysical Research Letters</i> , 2013, 40, 2590-2595.	1.5	43
81	Flow rate dictates permeability enhancement during fluid pressure oscillations in laboratory experiments. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 2037-2055.	1.4	42
82	On the micromechanics of slip events in sheared, fluid-saturated fault gouge. <i>Geophysical Research Letters</i> , 2017, 44, 6101-6108.	1.5	41
83	Three-dimensional discrete element modeling of triggered slip in sheared granular media. <i>Physical Review E</i> , 2014, 89, 042204.	0.8	40
84	On the origin and evolution of electrical signals during frictional stick slip in sheared granular material. <i>Journal of Geophysical Research: Solid Earth</i> , 2014, 119, 4253-4268.	1.4	40
85	Poromechanics of stick-slip frictional sliding and strength recovery on tectonic faults. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 6895-6912.	1.4	39
86	Earthquake Catalog-Based Machine Learning Identification of Laboratory Fault States and the Effects of Magnitude of Completeness. <i>Geophysical Research Letters</i> , 2018, 45, 13,269.	1.5	39
87	Frequency, pressure, and strain dependence of nonlinear elasticity in Berea Sandstone. <i>Geophysical Research Letters</i> , 2016, 43, 3226-3236.	1.5	38
88	Characterizing Acoustic Signals and Searching for Precursors during the Laboratory Seismic Cycle Using Unsupervised Machine Learning. <i>Seismological Research Letters</i> , 2019, 90, 1088-1098.	0.8	38
89	Significant effect of grain size distribution on compaction rates in granular aggregates. <i>Earth and Planetary Science Letters</i> , 2009, 284, 386-391.	1.8	36
90	Evolution of ultrasonic velocity and dynamic elastic moduli with shear strain in granular layers. <i>Granular Matter</i> , 2013, 15, 499-515.	1.1	36

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91	Evolution of shear fabric in granular fault gouge from stable sliding to stick slip and implications for fault slip mode. <i>Geology</i> , 0, , G39033.1.	2.0	36
92	On the role of fluids in stick-slip dynamics of saturated granular fault gouge using a coupled computational fluid dynamics-discrete element approach. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 3689-3700.	1.4	33
93	Influence of vibration amplitude on dynamic triggering of slip in sheared granular layers. <i>Physical Review E</i> , 2013, 87, 012205.	0.8	32
94	Vibration-induced slip in sheared granular layers and the micromechanics of dynamic earthquake triggering. <i>Europhysics Letters</i> , 2011, 96, 14001.	0.7	30
95	Nonlinear dynamical triggering of slow slip on simulated earthquake faults with implications to Earth. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	30
96	Frictional properties of low-angle normal fault gouges and implications for low-angle normal fault slip. <i>Earth and Planetary Science Letters</i> , 2014, 408, 57-65.	1.8	30
97	Stiffness evolution of granular layers and the origin of repetitive, slow, stick-slip frictional sliding. <i>Granular Matter</i> , 2015, 17, 447-457.	1.1	30
98	Friction of sheared granular layers: Role of particle dimensionality, surface roughness, and material properties. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, n/a-n/a.	1.0	29
99	Chapter 6 The Critical Slip Distance for Seismic and Aseismic Fault Zones of Finite Width. <i>International Geophysics</i> , 2009, 94, 135-162.	0.6	29
100	Chapter 7 Scaling of Slip Weakening Distance with Final Slip during Dynamic Earthquake Rupture. <i>International Geophysics</i> , 2009, 94, 163-186.	0.6	29
101	A "slice-and-view" (FIB-SEM) study of clay gouge from the SAFOD creeping section of the San Andreas Fault at 14.7 km depth. <i>Journal of Structural Geology</i> , 2014, 69, 234-244.	1.0	29
102	Acoustically induced slip in sheared granular layers: Application to dynamic earthquake triggering. <i>Geophysical Research Letters</i> , 2015, 42, 9750-9757.	1.5	28
103	Experimental investigation of incipient shear failure in foliated rock. <i>Journal of Structural Geology</i> , 2015, 77, 82-91.	1.0	28
104	Anomalous distribution of microearthquakes in the Newberry Geothermal Reservoir: Mechanisms and implications. <i>Geothermics</i> , 2016, 63, 62-73.	1.5	28
105	Acoustic Energy Release During the Laboratory Seismic Cycle: Insights on Laboratory Earthquake Precursors and Prediction. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018975.	1.4	28
106	Preseismic Fault Creep and Elastic Wave Amplitude Precursors Scale With Lab Earthquake Magnitude for the Continuum of Tectonic Failure Modes. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL086986.	1.5	28
107	Laboratory observation of acoustic fluidization in granular fault gouge and implications for dynamic weakening of earthquake faults. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 1012-1022.	1.0	25
108	The Impact of Frictional Healing on Stick-Slip Recurrence Interval and Stress Drop: Implications for Earthquake Scaling. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 10,102.	1.4	25

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109	Dynamics of geologic CO ₂ storage and plume motion revealed by seismic coda waves. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2464-2469.	3.3	25
110	Rate Dependence of Acoustic Emissions Generated during Shear of Simulated Fault Gouge. Bulletin of the Seismological Society of America, 2007, 97, 1841-1849.	1.1	24
111	Influence of dilatancy on the frictional constitutive behavior of a saturated fault zone under a variety of drainage conditions. Journal of Geophysical Research, 2011, 116, .	3.3	24
112	Frictional strength, rate-dependence, and healing in DFDP-1 borehole samples from the Alpine Fault, New Zealand. Tectonophysics, 2014, 630, 1-8.	0.9	24
113	Evolution of elastic wave speed during shear-induced damage and healing within laboratory fault zones. Journal of Geophysical Research: Solid Earth, 2014, 119, 4821-4840.	1.4	24
114	Frictional State Evolution During Normal Stress Perturbations Probed With Ultrasonic Waves. Journal of Geophysical Research: Solid Earth, 2019, 124, 5469-5491.	1.4	23
115	A note on the stress-dilatancy relation for simulated fault gouge. Pure and Applied Geophysics, 1991, 137, 409-419.	0.8	22
116	Instability of Deformation. Reviews in Mineralogy and Geochemistry, 2002, 51, 181-199.	2.2	22
117	Permeability Evolution of Propped Artificial Fractures in Green River Shale. Rock Mechanics and Rock Engineering, 2017, 50, 1473-1485.	2.6	21
118	Cohesion-Induced Stabilization in Stick-Slip Dynamics of Weakly Wet, Sheared Granular Fault Gouge. Journal of Geophysical Research: Solid Earth, 2018, 123, 2115-2126.	1.4	21
119	Competition between preslip and deviatoric stress modulates precursors for laboratory earthquakes. Earth and Planetary Science Letters, 2021, 553, 116623.	1.8	21
120	Symmetry and the critical slip distance in rate and state friction laws. Journal of Geophysical Research: Solid Earth, 2013, 118, 3728-3741.	1.4	20
121	Dynamically triggered slip leading to sustained fault gouge weakening under laboratory shear conditions. Geophysical Research Letters, 2016, 43, 1559-1565.	1.5	20
122	On the mechanics of granular shear: The effect of normal stress and layer thickness on stick-slip properties. Tectonophysics, 2019, 763, 86-99.	0.9	20
123	The Spatiotemporal Evolution of Granular Microslip Precursors to Laboratory Earthquakes. Geophysical Research Letters, 2020, 47, e2020GL088404.	1.5	20
124	The Effects of Shear Strain, Fabric, and Porosity Evolution on Elastic and Mechanical Properties of Clay-Rich Fault Gouge. Journal of Geophysical Research: Solid Earth, 2019, 124, 10968-10982.	1.4	19
125	Dynamic Stressing of Naturally Fractured Rocks: On the Relation Between Transient Changes in Permeability and Elastic Wave Velocity. Geophysical Research Letters, 2020, 47, e2019GL083557.	1.5	19
126	Application of Constitutive Friction Laws to Glacier Seismicity. Geophysical Research Letters, 2020, 47, e2020GL088964.	1.5	19

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127	The transition from steady frictional sliding to inertia-dominated instability with rate and state friction. <i>Journal of the Mechanics and Physics of Solids</i> , 2019, 122, 116-125.	2.3	18
128	Kinetic Models for Healing of the Subduction Interface Based on Observations of Ancient Accretionary Complexes. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 3431-3449.	1.0	17
129	Bifurcations at the Stability Transition of Earthquake Faulting. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL087985.	1.5	17
130	Learning to read fault-slip behavior from fault-zone structure. <i>Geology</i> , 2010, 38, 767-768.	2.0	16
131	Simulating stick-slip failure in a sheared granular layer using a physics-based constitutive model. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 295-307.	1.4	16
132	The Role of Shear Stress in Fault Healing and Frictional Aging. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 10,479.	1.4	16
133	The Potential for Low-Grade Metamorphism to Facilitate Fault Instability in a Geothermal Reservoir. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093552.	1.5	16
134	Deep Learning Can Predict Laboratory Quakes From Active Source Seismic Data. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL093187.	1.5	16
135	Frictional and Lithological Controls on Shallow Slow Slip at the Northern Hikurangi Margin. <i>Geochemistry, Geophysics, Geosystems</i> , 2022, 23, .	1.0	16
136	Machine Learning Predicts the Timing and Shear Stress Evolution of Lab Earthquakes Using Active Seismic Monitoring of Fault Zone Processes. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021588.	1.4	15
137	Frequency-Magnitude Statistics of Laboratory Foreshocks Vary With Shear Velocity, Fault Slip Rate, and Shear Stress. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022175.	1.4	15
138	Meso-mechanical analysis of deformation characteristics for dynamically triggered slip in a granular medium. <i>Philosophical Magazine</i> , 2012, 92, 3520-3539.	0.7	14
139	Permeability and frictional properties of halite-clay-quartz faults in marine-sediment: The role of compaction and shear. <i>Marine and Petroleum Geology</i> , 2016, 78, 222-235.	1.5	14
140	Laboratory investigation of the frictional behavior of granular volcanic material. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 173, 265-279.	0.8	13
141	Transition from Rolling to Jamming in Thin Granular Layers. <i>Physical Review Letters</i> , 2008, 101, 248001.	2.9	13
142	Evolution of Elastic and Mechanical Properties During Fault Shear: The Roles of Clay Content, Fabric Development, and Porosity. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018612.	1.4	12
143	Experimental constraints on the relationship between clay abundance, clay fabric, and frictional behavior for the Central Deforming Zone of the Scandinavian Fault. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 3865-3881.	1.0	11
144	Frictional controls on the seismogenic zone: Insights from the Apenninic basement, Central Italy. <i>Earth and Planetary Science Letters</i> , 2022, 583, 117444.	1.8	10

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145	Evolution of permeability across the transition from brittle failure to cataclastic flow in porous siltstone. <i>Geochemistry, Geophysics, Geosystems</i> , 2015, 16, 2980-2993.	1.0	9
146	Attention Network Forecasts Timeâ€¢toâ€¢Failure in Laboratory Shear Experiments. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022195.	1.4	9
147	Transformation shear instability and the seismogenic zone for deep earthquakes. <i>Geophysical Research Letters</i> , 1997, 24, 1887-1890.	1.5	8
148	Training machines in Earthly ways. <i>Nature Geoscience</i> , 2018, 11, 301-302.	5.4	8
149	Nonlinear elastodynamic behavior of intact and fractured rock under in-situ stress and saturation conditions. <i>Journal of the Mechanics and Physics of Solids</i> , 2021, 153, 104491.	2.3	8
150	GEOPHYSICS: Do Earthquakes Rupture Piece by Piece or All Together?. <i>Science</i> , 2006, 313, 1748-1749.	6.0	6
151	The Highâ€¢Frequency Signature of Slow and Fast Laboratory Earthquakes. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	6
152	What Triggers Tremor?. <i>Science</i> , 2008, 319, 166-167.	6.0	4
153	Do Fluids Modify the Stick-Slip Behavior of Sheared Granular Media?. , 2017, , .		4
154	The relationship between fault zone structure and frictional heterogeneity, insight from faults in the High Zagros. <i>Tectonophysics</i> , 2019, 762, 109-120.	0.9	4
155	A method for determining absolute ultrasonic velocities and elastic properties of experimental shear zones. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2020, 130, 104306.	2.6	4
156	RESEARCH FOCUS: Connections between fault roughness, dynamic weakening, and fault zone structure. <i>Geology</i> , 2016, 44, 79-80.	2.0	3
157	Imaging Elastodynamic and Hydraulic Properties of In Situ Fractured Rock: An Experimental Investigation Exploring Effects of Dynamic Stressing and Shearing. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021521.	1.4	2
158	Stressed to quaking point. <i>Nature</i> , 2002, 419, 32-32.	13.7	1
159	The Role of Deformation Bands in Dictating Poromechanical Properties of Unconsolidated Sand and Sandstone. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2020GC009143.	1.0	1