

# Chris Marone

## List of Publications by Citations

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155  
papers

10,599  
citations

54  
h-index

100  
g-index

171  
ext. papers

12,127  
ext. citations

7.5  
avg, IF

6.7  
L-index

#	Paper	IF	Citations
155	LABORATORY-DERIVED FRICTION LAWS AND THEIR APPLICATION TO SEISMIC FAULTING. <i>Annual Review of Earth and Planetary Sciences</i> , <b>1998</b> , 26, 643-696	15.3	1277
154	Frictional behavior and constitutive modeling of simulated fault gouge. <i>Journal of Geophysical Research</i> , <b>1990</b> , 95, 7007		435
153	Comparison of smectite- and illite-rich gouge frictional properties: application to the updip limit of the seismogenic zone along subduction megathrusts. <i>Earth and Planetary Science Letters</i> , <b>2003</b> , 215, 219-235	5.3	402
152	Fault zone fabric and fault weakness. <i>Nature</i> , <b>2009</b> , 462, 907-10	50.4	362
151	Scaling of the critical slip distance for seismic faulting with shear strain in fault zones. <i>Nature</i> , <b>1993</b> , 362, 618-621	50.4	319
150	The depth of seismic faulting and the upper transition from stable to unstable slip regimes. <i>Geophysical Research Letters</i> , <b>1988</b> , 15, 621-624	4.9	305
149	Frictional and hydrologic properties of clay-rich fault gouge. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		277
148	Particle-size distribution and microstructures within simulated fault gouge. <i>Journal of Structural Geology</i> , <b>1989</b> , 11, 799-814	3	269
147	The effect of loading rate on static friction and the rate of fault healing during the earthquake cycle. <i>Nature</i> , <b>1998</b> , 391, 69-72	50.4	260
146	On the relation between fault strength and frictional stability. <i>Geology</i> , <b>2011</b> , 39, 83-86	5	216
145	Laboratory observations of slow earthquakes and the spectrum of tectonic fault slip modes. <i>Nature Communications</i> , <b>2016</b> , 7, 11104	17.4	213
144	Influence of grain characteristics on the friction of granular shear zones. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ECV 4-1-ECV 4-9		213
143	Weakness of the San Andreas Fault revealed by samples from the active fault zone. <i>Nature Geoscience</i> , <b>2011</b> , 4, 251-254	18.3	192
142	Friction of simulated fault gouge for a wide range of velocities and normal stresses. <i>Journal of Geophysical Research</i> , <b>1999</b> , 104, 28899-28914		185
141	Influence of particle characteristics on granular friction. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		177
140	Variations in rupture process with recurrence interval in a repeated small earthquake. <i>Nature</i> , <b>1994</b> , 368, 624-626	50.4	161
139	Effects of acoustic waves on stick-slip in granular media and implications for earthquakes. <i>Nature</i> , <b>2008</b> , 451, 57-60	50.4	153

138	Fault healing inferred from time dependent variations in source properties of repeating earthquakes. <i>Geophysical Research Letters</i> , <b>1995</b> , 22, 3095-3098	4.9	145
137	Effect of hydration state on the frictional properties of montmorillonite-based fault gouge. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		130
136	Laboratory study of fault healing and lithification in simulated fault gouge under hydrothermal conditions. <i>Tectonophysics</i> , <b>1997</b> , 277, 41-55	3.1	111
135	Shear-induced dilatancy of fluid-saturated faults: Experiment and theory. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		110
134	Laboratory results indicating complex and potentially unstable frictional behavior of smectite clay. <i>Geophysical Research Letters</i> , <b>2001</b> , 28, 2297-2300	4.9	109
133	Effect of humidity on granular friction at room temperature. <i>Journal of Geophysical Research</i> , <b>2002</b> , 107, ETG 11-1-ETG 11-13		101
132	Slow earthquakes, preseismic velocity changes, and the origin of slow frictional stick-slip. <i>Science</i> , <b>2013</b> , 341, 1229-32	33.3	98
131	Effects of normal stress vibrations on frictional healing. <i>Journal of Geophysical Research</i> , <b>1999</b> , 104, 28859-28878		97
130	Laboratory observations of permeability enhancement by fluid pressure oscillation of in situ fractured rock. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		96
129	Fault zone restrengthening and frictional healing: The role of pressure solution. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		96
128	Breakdown pressure and fracture surface morphology of hydraulic fracturing in shale with H <sub>2</sub> O, CO <sub>2</sub> and N <sub>2</sub> . <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , <b>2016</b> , 2, 63-76	3.8	95
127	Slip weakening as a mechanism for slow earthquakes. <i>Nature Geoscience</i> , <b>2013</b> , 6, 468-472	18.3	95
126	Shear zones in clay-rich fault gouge: A laboratory study of fabric development and evolution. <i>Journal of Structural Geology</i> , <b>2013</b> , 51, 206-225	3	93
125	Precursory changes in seismic velocity for the spectrum of earthquake failure modes. <i>Nature Geoscience</i> , <b>2016</b> , 9, 695-700	18.3	90
124	Fault structure, frictional properties and mixed-mode fault slip behavior. <i>Earth and Planetary Science Letters</i> , <b>2011</b> , 311, 316-327	5.3	88
123	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> , <b>2015</b> , 120, 6365-6385	3.6	82
122	Laboratory study of the frictional rheology of sheared till. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		81
121	Frictional stability and earthquake triggering during fluid pressure stimulation of an experimental fault. <i>Earth and Planetary Science Letters</i> , <b>2017</b> , 477, 84-96	5.3	80

120	Coulomb constitutive laws for friction: Contrasts in frictional behavior for distributed and localized shear. <i>Pure and Applied Geophysics</i> , <b>1992</b> , 139, 195-214	2.2	80
119	Acoustic emission and microslip precursors to stick-slip failure in sheared granular material. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 5627-5631	4.9	78
118	Laboratory evidence for particle mobilization as a mechanism for permeability enhancement via dynamic stressing. <i>Earth and Planetary Science Letters</i> , <b>2014</b> , 392, 279-291	5.3	76
117	Fabric induced weakness of tectonic faults. <i>Geophysical Research Letters</i> , <b>2010</b> , 37, n/a-n/a	4.9	74
116	Frictional properties and sliding stability of the San Andreas fault from deep drill core. <i>Geology</i> , <b>2012</b> , 40, 759-762	5	71
115	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> , <b>1994</b> , 106, 383-394	3.9	71
114	Frictional strength and strain weakening in simulated fault gouge: Competition between geometrical weakening and chemical strengthening. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		70
113	Frictional strength and healing behavior of phyllosilicate-rich faults. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117,		68
112	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> , <b>2009</b> , 114,		67
111	Healing of simulated fault gouges aided by pressure solution: Results from rock analogue experiments. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		66
110	Earthquake nucleation on model faults with rate- and state-dependent friction: Effects of inertia. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 13919-13932		66
109	Scaling of rock friction constitutive parameters: The effects of surface roughness and cumulative offset on friction of gabbro. <i>Pure and Applied Geophysics</i> , <b>1994</b> , 143, 359-385	2.2	62
108	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> , <b>2015</b> , 120, 5273-5289	3.6	61
107	Frictional behavior of materials in the 3D SAFOD volume. <i>Geophysical Research Letters</i> , <b>2009</b> , 36,	4.9	60
106	Permeability evolution in sorbing media: analogies between organic-rich shale and coal. <i>Geofluids</i> , <b>2016</b> , 16, 43-55	1.5	57
105	Fractional restrengthening in simulated fault gouge: Effect of shear load perturbations. <i>Journal of Geophysical Research</i> , <b>2001</b> , 106, 19319-19337		56
104	Laboratory observations of time-dependent frictional strengthening and stress relaxation in natural and synthetic fault gouges. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2016</b> , 121, 1183-1201	3.6	55
103	A microphysical interpretation of rate- and state-dependent friction for fault gouge. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2016</b> , 17, 1660-1677	3.6	54

102	Similarity of fast and slow earthquakes illuminated by machine learning. <i>Nature Geoscience</i> , <b>2019</b> , 12, 69-74	18.3	54
101	Effects of normal stress perturbations on the frictional properties of simulated faults. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2005</b> , 6, n/a-n/a	3.6	50
100	Evolution of b-value during the seismic cycle: Insights from laboratory experiments on simulated faults. <i>Earth and Planetary Science Letters</i> , <b>2018</b> , 482, 407-413	5.3	50
99	Systematic variations in recurrence interval and moment of repeating aftershocks. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	49
98	Effect of strain localization on frictional behavior of sheared granular materials. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		48
97	A novel and versatile apparatus for brittle rock deformation. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2014</b> , 66, 114-123	6	47
96	Effects of normal stress variation on the strength and stability of creeping faults. <i>Journal of Geophysical Research</i> , <b>2004</b> , 109,		44
95	Potential for earthquake triggering from transient deformations. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		43
94	Effects of loading rate and normal stress on stress drop and stick-slip recurrence interval. <i>Geophysical Monograph Series</i> , <b>2000</b> , 187-198	1.1	43
93	Frictional heterogeneities on carbonate-bearing normal faults: Insights from the Monte Maggio Fault, Italy. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2014</b> , 119, 9062-9076	3.6	42
92	Influence of shear and deviatoric stress on the evolution of permeability in fractured rock. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		42
91	Fault zone strength and failure criteria. <i>Geophysical Research Letters</i> , <b>1995</b> , 22, 723-726	4.9	42
90	Deformation band formation and strength evolution in unlithified sand: The role of grain breakage. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		41
89	The effect of shear load on frictional healing in simulated fault gouge. <i>Geophysical Research Letters</i> , <b>1998</b> , 25, 4561-4564	4.9	41
88	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> , <b>2013</b> , 40, 4194-4198	4.9	40
87	Breakdown pressures due to infiltration and exclusion in finite length boreholes. <i>Journal of Petroleum Science and Engineering</i> , <b>2015</b> , 127, 329-337	4.4	39
86	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> , <b>2014</b> , 119, 4090-4105	3.6	38
85	The effect of particle dimensionality on Granular friction in laboratory shear zones. <i>Geophysical Research Letters</i> , <b>2002</b> , 29, 22-1-22-4	4.9	38

84	Permeability evolution during dynamic stressing of dual permeability media. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		37
83	Linking permeability to crack density evolution in thermally stressed rocks under cyclic loading. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 2590-2595	4.9	37
82	Flow rate dictates permeability enhancement during fluid pressure oscillations in laboratory experiments. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 2037-2055	3.6	35
81	The effects of entrained debris on the basal sliding stability of a glacier. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2013</b> , 118, 656-666	3.8	34
80	Effects of shear velocity oscillations on stick-slip behavior in laboratory experiments. <i>Journal of Geophysical Research</i> , <b>2007</b> , 112,		34
79	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> , <b>2016</b> , 121, 8569-8594	3.6	34
78	Poromechanics of stick-slip frictional sliding and strength recovery on tectonic faults. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 6895-6912	3.6	33
77	Significant effect of grain size distribution on compaction rates in granular aggregates. <i>Earth and Planetary Science Letters</i> , <b>2009</b> , 284, 386-391	5.3	33
76	Estimating Fault Friction From Seismic Signals in the Laboratory. <i>Geophysical Research Letters</i> , <b>2018</b> , 45, 1321-1329	4.9	32
75	On the origin and evolution of electrical signals during frictional stick slip in sheared granular material. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2014</b> , 119, 4253-4268	3.6	31
74	On the micromechanics of slip events in sheared, fluid-saturated fault gouge. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 6101-6108	4.9	30
73	Three-dimensional discrete element modeling of triggered slip in sheared granular media. <i>Physical Review E</i> , <b>2014</b> , 89, 042204	2.4	30
72	Frequency, pressure, and strain dependence of nonlinear elasticity in Berea Sandstone. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 3226-3236	4.9	29
71	Evolution of ultrasonic velocity and dynamic elastic moduli with shear strain in granular layers. <i>Granular Matter</i> , <b>2013</b> , 15, 499-515	2.6	29
70	Frictional Mechanics of Slow Earthquakes. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2018</b> , 123, 7931-7949	3.6	27
69	Friction of sheared granular layers: Role of particle dimensionality, surface roughness, and material properties. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2007</b> , 8, n/a-n/a	3.6	27
68	Influence of vibration amplitude on dynamic triggering of slip in sheared granular layers. <i>Physical Review E</i> , <b>2013</b> , 87, 012205	2.4	26
67	Vibration-induced slip in sheared granular layers and the micromechanics of dynamic earthquake triggering. <i>Europhysics Letters</i> , <b>2011</b> , 96, 14001	1.6	26

66	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> , <b>2017</b> , 122, 3689-3700	3.6	25
65	Chapter 6 The Critical Slip Distance for Seismic and Aseismic Fault Zones of Finite Width. <i>International Geophysics</i> , <b>2009</b> , 94, 135-162		25
64	Anomalous distribution of microearthquakes in the Newberry Geothermal Reservoir: Mechanisms and implications. <i>Geothermics</i> , <b>2016</b> , 63, 62-73	4.3	24
63	Stiffness evolution of granular layers and the origin of repetitive, slow, stick-slip frictional sliding. <i>Granular Matter</i> , <b>2015</b> , 17, 447-457	2.6	24
62	Friction-Stability-Permeability Evolution of a Fracture in Granite. <i>Water Resources Research</i> , <b>2018</b> , 54, 9901-9918	5.4	24
61	Characterizing Acoustic Signals and Searching for Precursors during the Laboratory Seismic Cycle Using Unsupervised Machine Learning. <i>Seismological Research Letters</i> , <b>2019</b> , 90, 1088-1098	3	23
60	Frictional properties of low-angle normal fault gouges and implications for low-angle normal fault slip. <i>Earth and Planetary Science Letters</i> , <b>2014</b> , 408, 57-65	5.3	23
59	Acoustically induced slip in sheared granular layers: Application to dynamic earthquake triggering. <i>Geophysical Research Letters</i> , <b>2015</b> , 42, 9750-9757	4.9	23
58	Laboratory observation of acoustic fluidization in granular fault gouge and implications for dynamic weakening of earthquake faults. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2013</b> , 14, 1012-1022	3.6	23
57	Chapter 7 Scaling of Slip Weakening Distance with Final Slip during Dynamic Earthquake Rupture. <i>International Geophysics</i> , <b>2009</b> , 94, 163-186		23
56	A three-and-view(FIBSEM) study of clay gouge from the SAFOD creeping section of the San Andreas Fault at ~2.7km depth. <i>Journal of Structural Geology</i> , <b>2014</b> , 69, 234-244	3	21
55	Experimental investigation of incipient shear failure in foliated rock. <i>Journal of Structural Geology</i> , <b>2015</b> , 77, 82-91	3	21
54	Frictional strength, rate-dependence, and healing in DFDP-1 borehole samples from the Alpine Fault, New Zealand. <i>Tectonophysics</i> , <b>2014</b> , 630, 1-8	3.1	20
53	Nonlinear dynamical triggering of slow slip on simulated earthquake faults with implications to Earth. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		20
52	Influence of dilatancy on the frictional constitutive behavior of a saturated fault zone under a variety of drainage conditions. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		20
51	Rate Dependence of Acoustic Emissions Generated during Shear of Simulated Fault Gouge. <i>Bulletin of the Seismological Society of America</i> , <b>2007</b> , 97, 1841-1849	2.3	20
50	A note on the stress-dilatancy relation for simulated fault gouge. <i>Pure and Applied Geophysics</i> , <b>1991</b> , 137, 409-419	2.2	20
49	Slip-rate-dependent friction as a universal mechanism for slow slip events. <i>Nature Geoscience</i> , <b>2020</b> , 13, 705-710	18.3	20

48	Earthquake Catalog-Based Machine Learning Identification of Laboratory Fault States and the Effects of Magnitude of Completeness. <i>Geophysical Research Letters</i> , <b>2018</b> , 45, 13,269	4.9	20
47	Evolution of shear fabric in granular fault gouge from stable sliding to stick slip and implications for fault slip mode. <i>Geology</i> , <b>2017</b> , G39033.1	5	19
46	Dynamics of geologic CO storage and plume motion revealed by seismic coda waves. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 2464-2469	11.5	18
45	Instability of Deformation. <i>Reviews in Mineralogy and Geochemistry</i> , <b>2002</b> , 51, 181-199	7.1	18
44	Permeability Evolution of Propped Artificial Fractures in Green River Shale. <i>Rock Mechanics and Rock Engineering</i> , <b>2017</b> , 50, 1473-1485	5.7	17
43	Cohesion-Induced Stabilization in Stick-Slip Dynamics of Weakly Wet, Sheared Granular Fault Gouge. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2018</b> , 123, 2115-2126	3.6	17
42	Evolution of elastic wave speed during shear-induced damage and healing within laboratory fault zones. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2014</b> , 119, 4821-4840	3.6	17
41	Symmetry and the critical slip distance in rate and state friction laws. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2013</b> , 118, 3728-3741	3.6	17
40	Frictional State Evolution During Normal Stress Perturbations Probed With Ultrasonic Waves. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2019</b> , 124, 5469-5491	3.6	15
39	Dynamically triggered slip leading to sustained fault gouge weakening under laboratory shear conditions. <i>Geophysical Research Letters</i> , <b>2016</b> , 43, 1559-1565	4.9	15
38	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> , <b>2017</b> , 122, 10,102	3.6	15
37	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> , <b>2020</b> , 47, e2020GL086986	4.9	14
36	Simulating stick-slip failure in a sheared granular layer using a physics-based constitutive model. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2017</b> , 122, 295-307	3.6	13
35	Learning to read fault-slip behavior from fault-zone structure. <i>Geology</i> , <b>2010</b> , 38, 767-768	5	13
34	Laboratory investigation of the frictional behavior of granular volcanic material. <i>Journal of Volcanology and Geothermal Research</i> , <b>2008</b> , 173, 265-279	2.8	13
33	Permeability and frictional properties of halite-clay-quartz faults in marine-sediment: The role of compaction and shear. <i>Marine and Petroleum Geology</i> , <b>2016</b> , 78, 222-235	4.7	13
32	Meso-mechanical analysis of deformation characteristics for dynamically triggered slip in a granular medium. <i>Philosophical Magazine</i> , <b>2012</b> , 92, 3520-3539	1.6	12
31	Dynamic Stressing of Naturally Fractured Rocks: On the Relation Between Transient Changes in Permeability and Elastic Wave Velocity. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2019GL083557	4.9	12

30	Experimental constraints on the relationship between clay abundance, clay fabric, and frictional behavior for the Central Deforming Zone of the San Andreas Fault. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2016</b> , 17, 3865-3881	3.6	10
29	The Effects of Shear Strain, Fabric, and Porosity Evolution on Elastic and Mechanical Properties of Clay-Rich Fault Gouge. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2019</b> , 124, 10968-10982	3.6	10
28	Transition from rolling to jamming in thin granular layers. <i>Physical Review Letters</i> , <b>2008</b> , 101, 248001	7.4	10
27	Application of Constitutive Friction Laws to Glacier Seismicity. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2020GL088964	4.9	10
26	Acoustic Energy Release During the Laboratory Seismic Cycle: Insights on Laboratory Earthquake Precursors and Prediction. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2020</b> , 125, e2019JB018975	3.6	10
25	Kinetic Models for Healing of the Subduction Interface Based on Observations of Ancient Accretionary Complexes. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2019</b> , 20, 3431-3449	3.6	9
24	On the mechanics of granular shear: The effect of normal stress and layer thickness on stick-slip properties. <i>Tectonophysics</i> , <b>2019</b> , 763, 86-99	3.1	9
23	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> , <b>2019</b> , 122, 116-125	5	9
22	Evolution of permeability across the transition from brittle failure to cataclastic flow in porous siltstone. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2015</b> , 16, 2980-2993	3.6	8
21	The Spatiotemporal Evolution of Granular Microslip Precursors to Laboratory Earthquakes. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2020GL088404	4.9	8
20	The Role of Shear Stress in Fault Healing and Frictional Aging. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2018</b> , 123, 10,479-10,495	3.6	8
19	Transformation shear instability and the seismogenic zone for deep earthquakes. <i>Geophysical Research Letters</i> , <b>1997</b> , 24, 1887-1890	4.9	7
18	Competition between preslip and deviatoric stress modulates precursors for laboratory earthquakes. <i>Earth and Planetary Science Letters</i> , <b>2021</b> , 553, 116623	5.3	7
17	Geophysics. Do earthquakes rupture piece by piece or all together?. <i>Science</i> , <b>2006</b> , 313, 1748-9	33.3	5
16	The relationship between fault zone structure and frictional heterogeneity, insight from faults in the High Zagros. <i>Tectonophysics</i> , <b>2019</b> , 762, 109-120	3.1	4
15	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> , <b>2020</b> , 125, e2019JB018612	3.6	4
14	Do Fluids Modify the Stick-Slip Behavior of Sheared Granular Media? <b>2017</b> ,		4
13	Geophysics. What triggers tremor?. <i>Science</i> , <b>2008</b> , 319, 166-7	33.3	4

12	Bifurcations at the Stability Transition of Earthquake Faulting. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2020GL087985	4.9	4
11	Deep Learning Can Predict Laboratory Quakes From Active Source Seismic Data. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL093187	4.9	4
10	RESEARCH FOCUS: Connections between fault roughness, dynamic weakening, and fault zone structure. <i>Geology</i> , <b>2016</b> , 44, 79-80	5	3
9	The Potential for Low-Grade Metamorphism to Facilitate Fault Instability in a Geothermal Reservoir. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL093552	4.9	3
8	A method for determining absolute ultrasonic velocities and elastic properties of experimental shear zones. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2020</b> , 130, 104306	6	2
7	Attention Network Forecasts Time-to-Failure in Laboratory Shear Experiments. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2021</b> , 126, e2021JB022195	3.6	1
6	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> , <b>2021</b> , 126, e2020JB021588	3.6	1
5	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> , <b>2021</b> , 153, 104491	5	1
4	Frequency-Magnitude Statistics of Laboratory Foreshocks Vary With Shear Velocity, Fault Slip Rate, and Shear Stress. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2021</b> , 126, e2021JB022175	3.6	0
3	Frictional controls on the seismogenic zone: Insights from the Apenninic basement, Central Italy. <i>Earth and Planetary Science Letters</i> , <b>2022</b> , 583, 117444	5.3	0
2	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> , e2020JB021521	3.6	
1	The Role of Deformation Bands in Dictating Poromechanical Properties of Unconsolidated Sand and Sandstone. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2020</b> , 21, e2020GC009143	3.6	