Marie E S Violay

List of Publications by Year
in descending order

55 papers	1,486 citations	331259 21 h-index	329751 37 g-index
63 all docs	63 docs citations	63 times ranked	1381 citing authors

#	Article	IF	Citations
1	Physical characterization of fault rocks within the Opalinus Clay formation. Scientific Reports, 2022, 12, 4389.	1.6	3
2	On the scale dependence in the dynamics of frictional rupture: Constant fracture energy versus size-dependent breakdown work. Earth and Planetary Science Letters, 2022, 584, 117442.	1.8	14
3	The Permeability of Porous Volcanic Rock Through the Brittleâ€Ductile Transition. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	4
4	Determination of Parameters Characteristic of Dynamic Weakening Mechanisms During Seismic Faulting in Cohesive Rocks. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	7
5	HighSTEPS: A High Strain Temperature Pressure and Speed Apparatus to Study Earthquake Mechanics. Rock Mechanics and Rock Engineering, 2021, 54, 2039-2052.	2.6	10
6	Experimental Plastic Reactivation of Pseudotachylyteâ€Filled Shear Zones. Geophysical Research Letters, 2021, 48, e2020GL091538.	1.5	1
7	Brittle Faulting of Ductile Rock Induced by Pore Fluid Pressure Buildâ€Up. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021331.	1.4	13
8	The mechanical behaviour and failure modes of volcanic rocks: a review. Bulletin of Volcanology, 2021, 83, 1.	1.1	68
9	The Influence of Loading Path on Fault Reactivation: A Laboratory Perspective. Geophysical Research Letters, 2021, 48, e2020GL091466.	1.5	5
10	Thermal Weakening Friction During Seismic Slip: Experiments and Models With Heat Sources and Sinks. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020652.	1.4	8
11	Origin of the Coâ€Seismic Variations of Elastic Properties in the Crust: Insight From the Laboratory. Geophysical Research Letters, 2021, 48, e2021GL093619.	1.5	4
12	Effect of water on sandstone's fracture toughness and frictional parameters: Brittle strength constraints. International Journal of Rock Mechanics and Minings Sciences, 2021, 147, 104916.	2.6	21
13	Earthquake Nucleation Along Faults With Heterogeneous Weakening Rate. Geophysical Research Letters, 2021, 48, e2021GL094901.	1.5	17
14	The Effects of Planetary and Stellar Parameters on Brittle Lithospheric Thickness. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006952.	1.5	3
15	Electrical conductivity of Icelandic deep geothermal reservoirs up to supercritical conditions: Insight from laboratory experiments. Journal of Volcanology and Geothermal Research, 2020, 391, 106364.	0.8	15
16	Pore space properties in carbonate fault rocks of peninsular Italy. Journal of Structural Geology, 2020, 130, 103913.	1.0	21
17	Effect of Fluid Viscosity on Fault Reactivation and Coseismic Weakening. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018883.	1.4	16
18	Initial effective stress controls the nature of earthquakes. Nature Communications, 2020, 11, 5132.	5.8	47

#	Article	IF	Citations
19	Hydraulic Transport Through Calcite Bearing Faults With Customized Roughness: Effects of Normal and Shear Loading. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019767.	1.4	17
20	Mechanical and hydraulic transport properties of transverse-isotropic Gneiss deformed under deep reservoir stress and pressure conditions. International Journal of Rock Mechanics and Minings Sciences, 2020, 130, 104235.	2.6	15
21	Effect of Fluid Viscosity on Earthquake Nucleation. Geophysical Research Letters, 2020, 47, e2020GL087854.	1.5	10
22	Special Issue on Injection Induced Seismicity. Geomechanics for Energy and the Environment, 2020, 24, 100200.	1.2	0
23	Parametric analysis of the elastohydrodynamic lubrication efficiency on induced seismicity. Geophysical Journal International, 2020, 222, 517-525.	1.0	4
24	Effect of water and rock composition on re-strengthening of cohesive faults during the deceleration phase of seismic slip pulses. Earth and Planetary Science Letters, 2019, 522, 55-64.	1.8	20
25	Fault Reactivation During Fluid Pressure Oscillations: Transition From Stable to Unstable Slip. Journal of Geophysical Research: Solid Earth, 2019, 124, 10940-10953.	1.4	50
26	Can Precursory Moment Release Scale With Earthquake Magnitude? A View From the Laboratory. Geophysical Research Letters, 2019, 46, 12927-12937.	1.5	22
27	Constitutive Laws for Etnean Basement and Edifice Lithologies. Journal of Geophysical Research: Solid Earth, 2019, 124, 10074-10088.	1.4	1
28	Variations in Elastic and Electrical Properties of Crustal Rocks With Varying Degree of Microfracturation. Journal of Geophysical Research: Solid Earth, 2019, 124, 6376-6396.	1.4	12
29	Mechanical behaviour of fluid-lubricated faults. Nature Communications, 2019, 10, 1274.	5.8	46
30	Contrasting Mechanical and Hydraulic Properties of Wet and Dry Fault Zones in a Proposed Shaleâ€Hosted Nuclear Waste Repository. Geophysical Research Letters, 2019, 46, 1357-1366.	1.5	21
31	Timeâ€Dependent Deformations of Sandstone During Pore Fluid Pressure Oscillations: Implications for Natural and Induced Seismicity. Journal of Geophysical Research: Solid Earth, 2019, 124, 801-821.	1.4	27
32	Do scaly clays control seismicity on faulted shale rocks?. Earth and Planetary Science Letters, 2018, 488, 59-67.	1.8	14
33	Frictional Properties of Opalinus Clay: Implications for Nuclear Waste Storage. Journal of Geophysical Research: Solid Earth, 2018, 123, 157-175.	1.4	31
34	Anomalous V_p/V_s Ratios at Seismic Frequencies Might Evidence Highly Damaged Rocks in Subduction Zones. Geophysical Research Letters, 2018, 45, 12,210.	1.5	19
35	Dynamic weakening during earthquakes controlled by fluid thermodynamics. Nature Communications, 2018, 9, 3074.	5.8	48
36	Clumped isotope fractionation during phosphoric acid digestion of carbonates at 70 Â°C. Chemical Geology, 2017, 449, 1-14.	1.4	56

#	Article	IF	Citations
37	From rock to magma and back again: The evolution of temperature and deformation mechanism in conduit margin zones. Earth and Planetary Science Letters, 2017, 463, 92-100.	1.8	54
38	Porosity evolution at the brittle-ductile transition in the continental crust: Implications for deep hydro-geothermal circulation. Scientific Reports, 2017, 7, 7705.	1.6	60
39	Dislocation Motion and the Microphysics of Flash Heating and Weakening of Faults during Earthquakes. Crystals, 2016, 6, 83.	1.0	6
40	G: Fracture energy, friction and dissipation in earthquakes. Journal of Seismology, 2016, 20, 1187-1205.	0.6	42
41	Frictional evolution, acoustic emissions activity, and offâ€fault damage in simulated faults sheared at seismic slip rates. Journal of Geophysical Research: Solid Earth, 2016, 121, 7490-7513.	1.4	56
42	Scaling in natural and laboratory earthquakes. Geophysical Research Letters, 2016, 43, 1504-1510.	1.5	59
43	An empirically based steady state friction law and implications for fault stability. Geophysical Research Letters, 2016, 43, 3263-3271.	1.5	35
44	Brittle versus ductile deformation as the main control of the deep fluid circulation in oceanic crust. Geophysical Research Letters, 2015, 42, 2767-2773.	1.5	51
45	Fast-moving dislocations trigger flash weakening in carbonate-bearing faults during earthquakes. Scientific Reports, 2015, 5, 16112.	1.6	61
46	Thermo-mechanical pressurization of experimental faults in cohesive rocks during seismic slip. Earth and Planetary Science Letters, 2015, 429, 1-10.	1.8	54
47	Ductile flow in sub-volcanic carbonate basement as the main control for edifice stability: New experimental insights. Earth and Planetary Science Letters, 2015, 430, 533-541.	1.8	22
48	Effect of glass on the frictional behavior of basalts at seismic slip rates. Geophysical Research Letters, 2014, 41, 348-355.	1.5	20
49	High temperature instruments and methods developed for supercritical geothermal reservoir characterisation and exploitationâ€"The HiTI project. Geothermics, 2014, 49, 90-98.	1.5	27
50	Effect of water on the frictional behavior of cohesive rocks during earthquakes. Geology, 2014, 42, 27-30.	2.0	72
51	Electrical conductivity in a partially molten crust from measurements on metasedimentary enclaves. Tectonophysics, 2013, 586, 84-94.	0.9	11
52	Pore fluid in experimental calcite-bearing faults: Abrupt weakening and geochemical signature of co-seismic processes. Earth and Planetary Science Letters, 2013, 361, 74-84.	1.8	58
53	An experimental study of the brittleâ€ductile transition of basalt at oceanic crust pressure and temperature conditions. Journal of Geophysical Research, 2012, 117, .	3.3	82
54	A New Cell for Electrical Conductivity Measurement on Saturated Samples at Upper Crust Conditions. Transport in Porous Media, 2012, 91, 303-318.	1.2	7

#	Article	IF	Citations
55	Petrophysical properties of the root zone of sheeted dikes in the ocean crust: A case study from Hole ODP/IODP 1256D, Eastern Equatorial Pacific. Tectonophysics, 2010, 493, 139-152.	0.9	18