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	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
2	Effect of water on the frictional behavior of cohesive rocks during earthquakes. Geology, 2014, 42, 27-30.	2.0	72
3	The mechanical behaviour and failure modes of volcanic rocks: a review. Bulletin of Volcanology, 2021, 83, 1.	1.1	68
4	Fast-moving dislocations trigger flash weakening in carbonate-bearing faults during earthquakes. Scientific Reports, 2015, 5, 16112.	1.6	61
5	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
6	Scaling in natural and laboratory earthquakes. Geophysical Research Letters, 2016, 43, 1504-1510.	1.5	59
7	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
8	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
9	Clumped isotope fractionation during phosphoric acid digestion of carbonates at 70 Â°C. Chemical Geology, 2017, 449, 1-14.	1.4	56
10	Thermo-mechanical pressurization of experimental faults in cohesive rocks during seismic slip. Earth and Planetary Science Letters, 2015, 429, 1-10.	1.8	54
11	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
12	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
13	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
14	Dynamic weakening during earthquakes controlled by fluid thermodynamics. Nature Communications, 2018, 9, 3074.	5.8	48
15	Initial effective stress controls the nature of earthquakes. Nature Communications, 2020, 11, 5132.	5.8	47
16	Mechanical behaviour of fluid-lubricated faults. Nature Communications, 2019, 10, 1274.	5.8	46
17	G: Fracture energy, friction and dissipation in earthquakes. Journal of Seismology, 2016, 20, 1187-1205.	0.6	42
18	An empirically based steady state friction law and implications for fault stability. Geophysical Research Letters, 2016, 43, 3263-3271.	1.5	35

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19	Frictional Properties of Opalinus Clay: Implications for Nuclear Waste Storage. Journal of Geophysical Research: Solid Earth, 2018, 123, 157-175.	1.4	31
20	High temperature instruments and methods developed for supercritical geothermal reservoir characterisation and exploitationâ€"The HiTI project. Geothermics, 2014, 49, 90-98.	1.5	27
21	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
22	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
23	Can Precursory Moment Release Scale With Earthquake Magnitude? A View From the Laboratory. Geophysical Research Letters, 2019, 46, 12927-12937.	1.5	22
24	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
25	Pore space properties in carbonate fault rocks of peninsular Italy. Journal of Structural Geology, 2020, 130, 103913.	1.0	21
26	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
27	Effect of glass on the frictional behavior of basalts at seismic slip rates. Geophysical Research Letters, 2014, 41, 348-355.	1.5	20
28	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
29	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
30	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
31	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
32	Earthquake Nucleation Along Faults With Heterogeneous Weakening Rate. Geophysical Research Letters, 2021, 48, e2021GL094901.	1.5	17
33	Effect of Fluid Viscosity on Fault Reactivation and Coseismic Weakening. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018883.	1.4	16
34	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
35	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
36	Do scaly clays control seismicity on faulted shale rocks?. Earth and Planetary Science Letters, 2018, 488, 59-67.	1.8	14

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37	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
38	Brittle Faulting of Ductile Rock Induced by Pore Fluid Pressure Buildâ€Up. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021331.	1.4	13
39	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
40	Electrical conductivity in a partially molten crust from measurements on metasedimentary enclaves. Tectonophysics, 2013, 586, 84-94.	0.9	11
41	Effect of Fluid Viscosity on Earthquake Nucleation. Geophysical Research Letters, 2020, 47, e2020GL087854.	1.5	10
42	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
43	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
44	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
45	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
46	Dislocation Motion and the Microphysics of Flash Heating and Weakening of Faults during Earthquakes. Crystals, 2016, 6, 83.	1.0	6
47	The Influence of Loading Path on Fault Reactivation: A Laboratory Perspective. Geophysical Research Letters, 2021, 48, e2020GL091466.	1.5	5
48	Parametric analysis of the elastohydrodynamic lubrication efficiency on induced seismicity. Geophysical Journal International, 2020, 222, 517-525.	1.0	4
49	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
50	The Permeability of Porous Volcanic Rock Through the Brittleâ€Ductile Transition. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	4
51	The Effects of Planetary and Stellar Parameters on Brittle Lithospheric Thickness. Journal of Geophysical Research É: Planets, 2021, 126, e2021JE006952.	1.5	3
52	Physical characterization of fault rocks within the Opalinus Clay formation. Scientific Reports, 2022, 12, 4389.	1.6	3
53	Constitutive Laws for Etnean Basement and Edifice Lithologies. Journal of Geophysical Research: Solid Earth, 2019, 124, 10074-10088.	1.4	1
54	Experimental Plastic Reactivation of Pseudotachylyteâ€Filled Shear Zones. Geophysical Research Letters, 2021, 48, e2020GL091538.	1.5	1

#	Article	IF	Citations
55	Special Issue on Injection Induced Seismicity. Geomechanics for Energy and the Environment, 2020, 24, 100200.	1.2	0