

# benoit Cordonnier

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

1,709  
citations

304743

22  
h-index

289244

40  
g-index

43  
all docs

43  
docs citations

43  
times ranked

1322  
citing authors

#	ARTICLE	IF	CITATIONS
1	Predicting Fracture Network Development in Crystalline Rocks. <i>Pure and Applied Geophysics</i> , 2022, 179, 275-299.	1.9	6
2	4D Synchrotron X-ray Imaging of Grain Scale Deformation Mechanisms in a Seismogenic Gas Reservoir Sandstone During Axial Compaction. <i>Rock Mechanics and Rock Engineering</i> , 2022, 55, 4697-4715.	5.4	4
3	The influence of spatial resolution and noise on fracture network properties calculated from X-ray microtomography data. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2021, 147, 104922.	5.8	6
4	Creep Burst Coincident With Faulting in Marble Observed in 4D Synchrotron X-Ray Imaging Triaxial Compression Experiments. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB020354.	3.4	9
5	Real Time 3D Observations of Portland Cement Carbonation at CO <sub>2</sub> Storage Conditions. <i>Environmental Science &amp; Technology</i> , 2020, 54, 8323-8332.	10.0	21
6	Permeability Profiles Across the Crust-Mantle Sections in the Oman Drilling Project Inferred From Dry and Wet Resistivity Data. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB018698.	3.4	16
7	Competition between slow slip and damage on and off faults revealed in 4D synchrotron imaging experiments. <i>Tectonophysics</i> , 2020, 782-783, 228437.	2.2	5
8	A new plesiosaurian from the Jurassic-Cretaceous transitional interval of the Slottsmåya Member (Volgian), with insights into the cranial anatomy of cryptoclidids using computed tomography. <i>PeerJ</i> , 2020, 8, e8652.	2.0	14
9	Volumetric and shear processes in crystalline rock approaching faulting. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16234-16239.	7.1	56
10	Synchrotron X-ray imaging in 4D: Multiscale failure and compaction localization in triaxially compressed porous limestone. <i>Earth and Planetary Science Letters</i> , 2019, 528, 115831.	4.4	35
11	Isolating the Factors That Govern Fracture Development in Rocks Throughout Dynamic In Situ X-Ray Tomography Experiments. <i>Geophysical Research Letters</i> , 2019, 46, 11127-11135.	4.0	13
12	Dynamics of Microscale Precursors During Brittle Compressive Failure in Carrara Marble. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 6121-6139.	3.4	39
13	The evolving energy budget of experimental faults within continental crust: Insights from in situ dynamic X-ray microtomography. <i>Journal of Structural Geology</i> , 2019, 123, 42-53.	2.3	11
14	Mixed-Mode Strain Localization Generated by Hydration Reaction at Crustal Conditions. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 4507-4522.	3.4	15
15	Volumetric and Shear Strain Localization in Mt. Etna Basalt. <i>Geophysical Research Letters</i> , 2019, 46, 2425-2433.	4.0	19
16	Neutron Imaging of Cadmium Sorption and Transport in Porous Rocks. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	7
17	Dynamic In Situ Three-Dimensional Imaging and Digital Volume Correlation Analysis to Quantify Strain Localization and Fracture Coalescence in Sandstone. <i>Pure and Applied Geophysics</i> , 2019, 176, 1083-1115.	1.9	57
18	Critical Evolution of Damage Toward System-Size Failure in Crystalline Rock. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 1969-1986.	3.4	66

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19	Investigating the Onset of Strain Localization Within Anisotropic Shale Using Digital Volume Correlation of Time-Resolved X-Ray Microtomography Images. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 7509-7528.	3.4	42
20	Effects of Confinement on Reaction-Induced Fracturing During Hydration of Periclase. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 2661-2672.	2.5	35
21	Localized slip controlled by dehydration embrittlement of partly serpentized dunites, Leka Ophiolite Complex, Norway. <i>Earth and Planetary Science Letters</i> , 2017, 463, 277-285.	4.4	11
22	Microscale characterization of rupture nucleation unravels precursors to faulting in rocks. <i>Earth and Planetary Science Letters</i> , 2017, 476, 69-78.	4.4	64
23	Conclusion: recommendations and findings of the RED SEED working group. <i>Geological Society Special Publication</i> , 2016, 426, 567-648.	1.3	12
24	A deformation rig for synchrotron microtomography studies of geomaterials under conditions down to 10 km depth in the Earth. <i>Journal of Synchrotron Radiation</i> , 2016, 23, 1030-1034.	2.4	63
25	Rheological flow laws for multiphase magmas: An empirical approach. <i>Journal of Volcanology and Geothermal Research</i> , 2016, 321, 158-170.	2.1	37
26	Rapid laccolith intrusion driven by explosive volcanic eruption. <i>Nature Communications</i> , 2016, 7, 13585.	12.8	70
27	Effects of crystallization and bubble nucleation on the seismic properties of magmas. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 602-615.	2.5	11
28	Benchmarking lava-flow models. <i>Geological Society Special Publication</i> , 2016, 426, 425-445.	1.3	39
29	The Viscous to Brittle Transition in Crystal- and Bubble-Bearing Magmas. <i>Frontiers in Earth Science</i> , 2015, 3, .	1.8	25
30	Gas-driven filter pressing in magmas: Insights into in-situ melt segregation from crystal mushes. <i>Geology</i> , 2015, 43, 699-702.	4.4	88
31	Groundmass crystallisation and cooling rates of lava-like ignimbrites: the Grey's Landing ignimbrite, southern Idaho, USA. <i>Bulletin of Volcanology</i> , 2015, 77, 1.	3.0	18
32	Viscous heating in silicate melts: An experimental and numerical comparison. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	35
33	The role of melt-fracture degassing in defusing explosive rhyolite eruptions at volcano Chaitán. <i>Earth and Planetary Science Letters</i> , 2012, 333-334, 63-69.	4.4	125
34	The viscous-brittle transition of crystal-bearing silicic melt: Direct observation of magma rupture and healing. <i>Geology</i> , 2012, 40, 611-614.	4.4	113
35	Influence of decompression rate on fragmentation processes: An experimental study. <i>Journal of Volcanology and Geothermal Research</i> , 2010, 193, 182-188.	2.1	16
36	Rheological properties of dome lavas: Case study of Unzen volcano. <i>Earth and Planetary Science Letters</i> , 2009, 279, 263-272.	4.4	101

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37	Seismogenic lavas and explosive eruption forecasting. <i>Nature</i> , 2008, 453, 507-510.	27.8	161
38	Viscous heating in rhyolite: An in situ experimental determination. <i>Earth and Planetary Science Letters</i> , 2008, 275, 121-126.	4.4	46
39	High-load, high-temperature deformation apparatus for synthetic and natural silicate melts. <i>Review of Scientific Instruments</i> , 2007, 78, 075102.	1.3	28
40	Non-Newtonian rheological law for highly crystalline dome lavas. <i>Geology</i> , 2007, 35, 843.	4.4	164
41	Synchrotron 4D X-Ray Imaging Reveals Strain Localization at the Onset of System-Size Failure in Porous Reservoir Rocks. <i>Pure and Applied Geophysics</i> , 0, , .	1.9	6