Carolyn Boulton

List of Publications by Year
in descending order

30 papers	998 citations	394421 19 h-index	501196 28 g-index
36 all docs	36 docs citations	36 times ranked	850 citing authors

#	Article	IF	Citations
1	Temporal velocity variations in the northern Hikurangi margin and the relation to slow slip. Earth and Planetary Science Letters, 2022, 584, 117443.	4.4	4
2	Regionalâ€Scale Lowâ€Angle Normal Fault Friction and Cohesion Constrained From Mohrâ€Coulomb Models of Active and Abandoned Rangeâ€Front Faults in Papua New Guinea. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	0
3	Using Syntectonic Calcite Veins to Reconstruct the Strength Evolution of an Active Lowâ€Angle Normal Fault, Woodlark Rift, SE Papua New Guinea. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021916.	3.4	4
4	Mechanical Implications of Creep and Partial Coupling on the World's Fastest Slipping Lowâ€Angle Normal Fault in Southeastern Papua New Guinea. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB020117.	3.4	15
5	Slowâ€toâ€Fast Deformation in Mafic Fault Rocks on an Active Lowâ€Angle Normal Fault, Woodlark Rift, SE Papua New Guinea. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009171.	2.5	11
6	Hydration of the crust and upper mantle of the Hikurangi Plateau as it subducts at the southern Hikurangi margin. Earth and Planetary Science Letters, 2020, 541, 116271.	4.4	11
7	The contemporary force balance in a wide accretionary wedge: numerical models of the southcentral Hikurangi margin of New Zealand. Geophysical Journal International, 2019, 219, 776-795.	2.4	6
8	Evolution of a rapidly slipping, active low-angle normal fault, Suckling-Dayman metamorphic core complex, SE Papua New Guinea. Bulletin of the Geological Society of America, 2019, 131, 1333-1363.	3.3	26
9	Temperature-dependent frictional properties of heterogeneous Hikurangi Subduction Zone input sediments, ODP Site 1124. Tectonophysics, 2019, 757, 123-139.	2.2	26
10	Textural changes of graphitic carbon by tectonic and hydrothermal processes in an active plate boundary fault zone, Alpine Fault, New Zealand. Geological Society Special Publication, 2018, 453, 205-223.	1.3	19
11	Pore Fluid Pressure Development in Compacting Fault Gouge in Theory, Experiments, and Nature. Journal of Geophysical Research: Solid Earth, 2018, 123, 226-241.	3.4	84
12	Frictional properties and 3-D stress analysis of the southern Alpine Fault, New Zealand. Journal of Structural Geology, 2018, 114, 43-54.	2.3	17
13	Geochemical and microstructural evidence for interseismic changes in fault zone permeability and strength, <scp>A</scp>lpine <scp>F</scp>ault, <scp>N</scp>ew <scp>Z</scp>ealand. Geochemistry, Geophysics, Geosystems, 2017, 18, 238-265.	2.5	20
14	High-velocity frictional properties of Alpine Fault rocks: Mechanical data, microstructural analysis, and implications for rupture propagation. Journal of Structural Geology, 2017, 97, 71-92.	2.3	48
15	Extreme hydrothermal conditions at an active plate-bounding fault. Nature, 2017, 546, 137-140.	27.8	84
16	How phyllosilicate mineral structure affects fault strength in Mgâ€rich fault systems. Geophysical Research Letters, 2017, 44, 5457-5467.	4.0	20
17	Bedrock geology of DFDP-2B, central Alpine Fault, New Zealand. New Zealand Journal of Geology, and Geophysics, 2017, 60, 497-518.	1.8	24
18	Fracturing, fluid-rock interaction and mineralisation during the seismic cycle along the Alpine Fault. Journal of Structural Geology, 2017, 103, 151-166.	2.3	22

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19	Permeability and seismic velocity and their anisotropy across the Alpine Fault, New Zealand: An insight from laboratory measurements on core from the Deep Fault Drilling Project phase 1 (DFDPâ€1). Journal of Geophysical Research: Solid Earth, 2017, 122, 6160-6179.	3.4	19
20	Petrophysical, Geochemical, and Hydrological Evidence for Extensive Fractureâ€Mediated Fluid and Heat Transport in the Alpine Fault's Hangingâ€Wall Damage Zone. Geochemistry, Geophysics, Geosystems, 2017, 18, 4709-4732.	2.5	31
21	Largeâ€displacement, hydrothermal frictional properties of DFDPâ€1 fault rocks, Alpine Fault, New Zealand: Implications for deep rupture propagation. Journal of Geophysical Research: Solid Earth, 2016, 121, 624-647.	3.4	40
22	Mylonites as shales? Experimental observations of P-wave anisotropy dependence on mineralogy, layering and scale. , 2016, , .		1
23	Fault rock lithologies and architecture of the central Alpine fault, New Zealand, revealed by DFDP-1 drilling. Lithosphere, 2015, 7, 155-173.	1.4	70
24	Frictional properties of exhumed fault gouges in DFDPâ€1 cores, Alpine Fault, New Zealand. Geophysical Research Letters, 2014, 41, 356-362.	4.0	65
25	Slip localization on the southern Alpine Fault, New Zealand. Tectonics, 2013, 32, 620-640.	2.8	55
26	Lateâ€interseismic state of a continental plateâ€bounding fault: Petrophysical results from DFDPâ€1 wireline logging and core analysis, Alpine Fault, New Zealand. Geochemistry, Geophysics, Geosystems, 2013, 14, 3801-3820.	2.5	43
27	Drilling reveals fluid control on architecture and rupture of the Alpine fault, New Zealand. Geology, 2012, 40, 1143-1146.	4.4	121
28	Physical properties of surface outcrop cataclastic fault rocks, Alpine Fault, New Zealand. Geochemistry, Geophysics, Geosystems, 2012, 13, .	2.5	71
29	Elastic strain energy release from fragmenting grains: Effects on fault rupture. Journal of Structural Geology, 2012, 38, 265-277.	2.3	31
30	The frictional strength of granular fault gouge: application of theory to the mechanics of low-angle normal faults. Geological Society Special Publication, 2009, 321, 9-31.	1.3	6