Michael Heap

List of Publications by Year
in descending order

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166	8,006	38660	58464
papers	citations	50 h-index	82 g-index

180	180	180	4155
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Time-dependent cracking and brittle creep in crustal rocks: A review. Journal of Structural Geology, 2013, 52, 17-43.	1.0	500
2	Slip on 'weak' faults by the rotation of regional stress in the fracture damage zone. Nature, 2006, 444, 922-925.	13.7	369
3	Timeâ€dependent brittle creep in Darley Dale sandstone. Journal of Geophysical Research, 2009, 114, .	3.3	288
4	Brittle creep in basalt and its application to time-dependent volcano deformation. Earth and Planetary Science Letters, 2011, 307, 71-82.	1.8	206
5	The evolution of elastic moduli with increasing crack damage during cyclic stressing of a basalt from Mt. Etna volcano. Tectonophysics, 2009, 471, 153-160.	0.9	201
6	Microstructural controls on the physical and mechanical properties of edificeâ€forming andesites at VolcÃ¡n de Colima, Mexico. Journal of Geophysical Research: Solid Earth, 2014, 119, 2925-2963.	1.4	155
7	Exploring the scale-dependent permeability of fractured andesite. Earth and Planetary Science Letters, 2016, 447, 139-150.	1.8	152
8	Quantification of microcrack characteristics and implications for stiffness and strength of granite. International Journal of Rock Mechanics and Minings Sciences, 2017, 100, 138-150.	2.6	147
9	Permeability and porosity relationships of edifice-forming andesites: A combined field and laboratory study. Journal of Volcanology and Geothermal Research, 2015, 297, 52-68.	0.8	146
10	Quantifying the evolution of static elastic properties as crystalline rock approaches failure. International Journal of Rock Mechanics and Minings Sciences, 2008, 45, 564-573.	2.6	142
11	Influence of temperature on brittle creep in sandstones. Geophysical Research Letters, 2009, 36, .	1.5	140
12	Elastic moduli evolution and accompanying stress changes with increasing crack damage: implications for stress changes around fault zones and volcanoes during deformation. Geophysical Journal International, 2010, 183, 225-236.	1.0	139
13	Micromechanics of brittle creep in rocks. Journal of Geophysical Research, 2012, 117, .	3.3	131
14	The influence of thermal-stressing (up to 1000Â°C) on the physical, mechanical, and chemical properties of siliceous-aggregate, high-strength concrete. Construction and Building Materials, 2013, 42, 248-265.	3.2	114
15	Thermal Cracking in Westerly Granite Monitored Using Direct Wave Velocity, Coda Wave Interferometry, and Acoustic Emissions. Journal of Geophysical Research: Solid Earth, 2018, 123, 2246-2261.	1.4	107
16	Reconstructing magma failure and the degassing network of dome-building eruptions. Geology, 2013, 41, 515-518.	2.0	106
17	Rateâ€and strainâ€dependent brittle deformation of rocks. Journal of Geophysical Research: Solid Earth, 2014, 119, 1818-1836.	1.4	104
18	The Influence of Water Saturation on the Short- and Long-Term Mechanical Behavior of Red Sandstone. Rock Mechanics and Rock Engineering, 2018, 51, 2669-2687.	2.6	103

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19	Mechanical behaviour and failure modes in the Whakaari (White Island volcano) hydrothermal system, New Zealand. Journal of Volcanology and Geothermal Research, 2015, 295, 26-42.	0.8	101
20	Towards more realistic values of elastic moduli for volcano modelling. Journal of Volcanology and Geothermal Research, 2020, 390, 106684.	0.8	93
21	Modelling the time-dependent rheological behaviour of heterogeneous brittle rocks. Geophysical Journal International, 2012, 189, 1781-1796.	1.0	92
22	A multidisciplinary approach to quantify the permeability of the Whakaari/White Island volcanic hydrothermal system (Taupo Volcanic Zone, New Zealand). Journal of Volcanology and Geothermal Research, 2017, 332, 88-108.	0.8	92
23	Mechanisms of timeâ€dependent deformation in porous limestone. Journal of Geophysical Research: Solid Earth, 2014, 119, 5444-5463.	1.4	91
24	Stylolites in limestones: Barriers to fluid flow?. Geology, 2014, 42, 51-54.	2.0	88
25	Fracture and compaction of andesite in a volcanic edifice. Bulletin of Volcanology, 2015, 77, 55.	1.1	87
26	The permeability and elastic moduli of tuff from Campi Flegrei, Italy: implications for ground deformation modelling. Solid Earth, 2014, 5, 25-44.	1.2	83
27	The influence of pore geometry and orientation on the strength and stiffness of porous rock. Journal of Structural Geology, 2017, 96, 149-160.	1.0	83
28	The influence of porosity and vesicle size on the brittle strength of volcanic rocks and magma. Bulletin of Volcanology, 2014, 76, 1.	1.1	82
29	Thermal weakening of the carbonate basement under Mt. Etna volcano (Italy): Implications for volcano instability. Journal of Volcanology and Geothermal Research, 2013, 250, 42-60.	0.8	81
30	Forecasting volcanic eruptions and other material failure phenomena: An evaluation of the failure forecast method. Geophysical Research Letters, 2011, 38, .	1.5	77
31	Hydrothermal alteration of andesitic lava domes can lead to explosive volcanic behaviour. Nature Communications, 2019, 10, 5063.	5.8	76
32	Tracking the permeable porous network during strain-dependent magmatic flow. Journal of Volcanology and Geothermal Research, 2013, 260, 117-126.	0.8	74
33	Timeâ€dependent compaction band formation in sandstone. Journal of Geophysical Research: Solid Earth, 2015, 120, 4808-4830.	1.4	73
34	The Influence of Temperature on Time-Dependent Deformation and Failure in Granite: A Mesoscale Modeling Approach. Rock Mechanics and Rock Engineering, 2017, 50, 2345-2364.	2.6	73
35	Evidence for the development of permeability anisotropy in lava domes and volcanic conduits. Journal of Volcanology and Geothermal Research, 2016, 323, 163-185.	0.8	69
36	Probing permeability and microstructure: Unravelling the role of a low-permeability dome on the explosivity of Merapi (Indonesia). Journal of Volcanology and Geothermal Research, 2016, 316, 56-71.	0.8	69

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37	The mechanical behaviour and failure modes of volcanic rocks: a review. Bulletin of Volcanology, 2021, 83, 1.	1.1	68
38	Physical property relationships of the Rotokawa Andesite, a significant geothermal reservoir rock in the Taupo Volcanic Zone, New Zealand. Geothermal Energy, 2014, 2, .	0.9	66
39	The Modeling of Time-Dependent Deformation and Fracturing of Brittle Rocks Under Varying Confining and Pore Pressures. Rock Mechanics and Rock Engineering, 2018, 51, 3241-3263.	2.6	65
40	Challenges for forecasting based on accelerating rates of earthquakes at volcanoes and laboratory analogues. Geophysical Journal International, 2011, 185, 718-723.	1.0	63
41	Strength and permeability recovery of tuffisite-bearing andesite. Solid Earth, 2012, 3, 191-198.	1.2	62
42	Timescales for permeability reduction and strength recovery in densifying magma. Earth and Planetary Science Letters, 2015, 429, 223-233.	1.8	61
43	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
44	How tough is tuff in the event of fire?. Geology, 2012, 40, 311-314.	2.0	58
45	Geothermal implications for fracture-filling hydrothermal precipitation. Geothermics, 2016, 64, 235-245.	1.5	58
46	Complex conductivity of volcanic rocks and the geophysical mapping of alteration in volcanoes. Journal of Volcanology and Geothermal Research, 2018, 357, 106-127.	0.8	58
47	Microstructural and petrophysical properties of the Permo-Triassic sandstones (Buntsandstein) from the Soultz-sous-ForÃªts geothermal site (France). Geothermal Energy, 2017, 5, .	0.9	56
48	Mechanical behaviour of the Rotokawa Andesites (New Zealand): Insight into permeability evolution and stress-induced behaviour in an actively utilised geothermal reservoir. Geothermics, 2016, 64, 163-179.	1.5	55
49	Impact of stylolites on the mechanical strength of limestone. Tectonophysics, 2016, 690, 4-20.	0.9	55
50	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
51	Increase in radon emission due to rock failure: An experimental study. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	53
52	A generic model for the shallow velocity structure of volcanoes. Journal of Volcanology and Geothermal Research, 2018, 356, 114-126.	0.8	52
53	Assessing the role of fractures on the permeability of the Permo-Triassic sandstones at the Soultz-sous-ForÃªts (France) geothermal site. Geothermics, 2018, 74, 181-189.	1.5	52
54	Mesoscopic Damage and Fracturing of Heterogeneous Brittle Rocks Based on Three-dimensional Polycrystalline Discrete Element Method. Rock Mechanics and Rock Engineering, 2020, 53, 5389-5409.	2.6	51

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55	Experimental constraints on phreatic eruption processes at Whakaari (White Island volcano). Journal of Volcanology and Geothermal Research, 2015, 302, 150-162.	0.8	47
56	3D electrical conductivity tomography of volcanoes. Journal of Volcanology and Geothermal Research, 2018, 356, 243-263.	0.8	47
57	Experimental generation of volcanic pseudotachylytes: Constraining rheology. Journal of Structural Geology, 2012, 38, 222-233.	1.0	46
58	Quantifying the role of hydrothermal alteration in creating geothermal and epithermal mineral resources: The Ohakuri ignimbrite (TaupÅ•Volcanic Zone, New Zealand). Journal of Volcanology and Geothermal Research, 2020, 390, 106703.	0.8	45
59	Physical and mechanical property relationships of a shallow intrusion and volcanic host rock, Pinnacle Ridge, Mt. Ruapehu, New Zealand. Journal of Volcanology and Geothermal Research, 2018, 359, 1-20.	0.8	44
60	Volcanic edifice weakening via devolatilization reactions. Geophysical Journal International, 2011, 186, 1073-1077.	1.0	43
61	Influence of unloading and loading stress cycles on the creep behavior of Darley Dale Sandstone. International Journal of Rock Mechanics and Minings Sciences, 2018, 112, 55-63.	2.6	43
62	A three-dimensional numerical meso-approach to modeling time-independent deformation and fracturing of brittle rocks. Computers and Geotechnics, 2020, 117, 103274.	2.3	43
63	Mesoscopic time-dependent behavior of rocks based on three-dimensional discrete element grain-based model. Computers and Geotechnics, 2020, 121, 103472.	2.3	43
64	Mechanical behaviour of dacite from Mount St. Helens (USA): A link between porosity and lava dome extrusion mechanism (dome or spine)?. Journal of Volcanology and Geothermal Research, 2016, 328, 159-177.	0.8	41
65	The failure processes analysis of rock slope using numerical modelling techniques. Engineering Failure Analysis, 2017, 79, 999-1016.	1.8	41
66	Rock mass strength and elastic modulus of the Buntsandstein: An important lithostratigraphic unit for geothermal exploitation in the Upper Rhine Graben. Geothermics, 2019, 77, 236-256.	1.5	41
67	Inelastic compaction and permeability evolution in volcanic rock. Solid Earth, 2017, 8, 561-581.	1.2	40
68	Acidâ€Induced Dissolution of Andesite: Evolution of Permeability and Strength. Journal of Geophysical Research: Solid Earth, 2019, 124, 257-273.	1.4	40
69	Does an inter-flaw length control the accuracy of rupture forecasting in geological materials?. Earth and Planetary Science Letters, 2017, 475, 181-189.	1.8	39
70	Influence of alteration on the mechanical behaviour and failure mode of andesite: implications for shallow seismicity and volcano monitoring. Bulletin of Volcanology, 2019, 81, 1.	1.1	38
71	Permeability of volcanic rocks to gas and water. Journal of Volcanology and Geothermal Research, 2018, 354, 29-38.	0.8	37
72	Pressure Controlled Permeability in a Conduit Filled with Fractured Hydrothermal Breccia Reconstructed from Ballistics from Whakaari (White Island), New Zealand. Geosciences (Switzerland), 2020, 10, 138.	1.0	37

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73	Conditions and timescales for welding block-and-ash flow deposits. Journal of Volcanology and Geothermal Research, 2014, 289, 202-209.	0.8	36
74	Hydrothermal alteration can result in pore pressurization and volcano instability. Geology, 2021, 49, 1348-1352.	2.0	36
75	Strainâ€induced permeability increase in volcanic rock. Geophysical Research Letters, 2016, 43, 11,603.	1.5	35
76	Pore pressure embrittlement in a volcanic edifice. Bulletin of Volcanology, 2016, 78, 1.	1.1	35
77	Time-dependent permeability evolution in compacting volcanic fracture systems and implications for gasÂoverpressure. Journal of Volcanology and Geothermal Research, 2017, 339, 81-97.	0.8	35
78	Inelastic Compaction in Highâ€Porosity Limestone Monitored Using Acoustic Emissions. Journal of Geophysical Research: Solid Earth, 2017, 122, 9989.	1.4	35
79	Estimating in situ rock mass strength and elastic modulus of granite from the Soultz-sous-ForÃªts geothermal reservoir (France). Geothermal Energy, 2018, 6, .	0.9	35
80	The permeability of stylolite-bearing limestone. Journal of Structural Geology, 2018, 116, 81-93.	1.0	34
81	Alterationâ€Induced Volcano Instability at La SoufriÃ¨re de Guadeloupe (Eastern Caribbean). Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022514.	1.4	34
82	Closing an open system: Pore pressure changes in permeable edifice rock at high strain rates. Journal of Volcanology and Geothermal Research, 2016, 315, 40-50.	0.8	31
83	The strength of heterogeneous volcanic rocks: A 2D approximation. Journal of Volcanology and Geothermal Research, 2016, 319, 1-11.	0.8	31
84	A three-dimensional mesoscale model for progressive time-dependent deformation and fracturing of brittle rock with application to slope stability. Computers and Geotechnics, 2021, 135, 104160.	2.3	31
85	A general model for welding of ash particles in volcanic systems validated using in situ X-ray tomography. Earth and Planetary Science Letters, 2019, 525, 115726.	1.8	30
86	The Permeability Evolution of Tuffisites and Implications for Outgassing Through Dense Rhyolitic Magma. Journal of Geophysical Research: Solid Earth, 2019, 124, 8281-8299.	1.4	29
87	The thermal properties of porous andesite. Journal of Volcanology and Geothermal Research, 2020, 398, 106901.	0.8	29
88	Characterizing the physical properties of rocks from the Paleozoic to Permo-Triassic transition in the Upper Rhine Graben. Geothermal Energy, 2018, 6, .	0.9	28
89	The influence of water on the strength of Neapolitan Yellow Tuff, the most widely used building stone in Naples (Italy). Bulletin of Volcanology, 2018, 80, 1.	1.1	28
90	Microwave-assisted damage and fracturing of hard rocks and its implications for effective mineral resources recovery. Minerals Engineering, 2021, 160, 106663.	1.8	28

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91	A Numerical Meso-Scale Elasto-Plastic Damage Model for Modeling the Deformation and Fracturing of Sandstone Under Cyclic Loading. Rock Mechanics and Rock Engineering, 2021, 54, 4569-4591.	2.6	27
92	Laboratory simulations of tensile fracture development in a volcanic conduit via cyclic magma pressurisation. Earth and Planetary Science Letters, 2012, 349-350, 231-239.	1.8	26
93	Analysis of capillary water imbibition in sandstone via a combination of nuclear magnetic resonance imaging and numerical DEM modeling. Engineering Geology, 2021, 285, 106070.	2.9	26
94	Experimental investigation of the mechanical properties of synthetic magnesium sulfate hydrates: Implications for the strength of hydrated deposits on Mars. Journal of Geophysical Research, 2010, 115, .	3.3	25
95	Volcanic edifice weakening via decarbonation: A selfâ€limiting process?. Geophysical Research Letters, 2012, 39, .	1.5	24
96	The fire resistance of high-strength concrete containing natural zeolites. Cement and Concrete Composites, 2021, 116, 103897.	4.6	24
97	Gravitational slope-deformation of a resurgent caldera: New insights from the mechanical behaviour of Mt. Nuovo tuffs (Ischia Island, Italy). Journal of Volcanology and Geothermal Research, 2017, 345, 1-20.	0.8	22
98	Hot pressing in conduit faults during lava dome extrusion: Insights from Mount St. Helens 2004â€“2008. Earth and Planetary Science Letters, 2018, 482, 171-180.	1.8	22
99	Mechanical Compaction of Crustal Analogs Made of Sintered Glass Beads: The Influence of Porosity and Grain Size. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021321.	1.4	22
100	Decarbonation and thermal microcracking under magmaticP-T-fâ€‰CO2 conditions: the role of skarn substrata in promoting volcanic instability. Geophysical Journal International, 2013, 195, 369-380.	1.0	21
101	Thermal resilience of microcracked andesitic dome rocks. Journal of Volcanology and Geothermal Research, 2018, 367, 20-30.	0.8	21
102	Time-dependent deformation and failure of granite based on the virtual crack incorporated numerical manifold method. Computers and Geotechnics, 2021, 133, 104070.	2.3	21
103	Numerical Approach to Creep of Rock Based on the Numerical Manifold Method. International Journal of Geomechanics, 2018, 18, .	1.3	20
104	A multi-decadal view of the heat and mass budget of a volcano in unrest: La SoufriÃ¨re de Guadeloupe (French West Indies). Bulletin of Volcanology, 2021, 83, 1.	1.1	20
105	Hidden mechanical weaknesses within lava domes provided by buried high-porosity hydrothermal alteration zones. Scientific Reports, 2022, 12, 3202.	1.6	19
106	Fracture of magma containing overpressurised pores. Journal of Volcanology and Geothermal Research, 2015, 301, 180-190.	0.8	18
107	Heat flow density estimates in the Upper Rhine Graben using laboratory measurements of thermal conductivity on sedimentary rocks. Geothermal Energy, 2019, 7, .	0.9	18
108	A model for permeability evolution during volcanic welding. Journal of Volcanology and Geothermal Research, 2021, 409, 107118.	0.8	18

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109	An auto-detection network to provide an automated real-time early warning of rock engineering hazards using microseismic monitoring. International Journal of Rock Mechanics and Minings Sciences, 2021, 140, 104685.	2.6	18
110	Full-field quantification of time-dependent and -independent deformation and fracturing of double-notch flawed rock using digital image correlation. Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2021, 7, .	1.3	18
111	Volcanic conduit failure as a trigger to magma fragmentation. Bulletin of Volcanology, 2012, 74, 11-13.	1.1	17
112	On the geothermal potential of crustal fault zones: a case study from the Pontgibaud area (French) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.9	16
113	The tensile strength of volcanic rocks: Experiments and models. Journal of Volcanology and Geothermal Research, 2021, 418, 107348.	0.8	16
114	Mechanical and topographic factors influencing lava dome growth and collapse. Journal of Volcanology and Geothermal Research, 2021, 420, 107398.	0.8	15
115	Fire resistance of the Mt. Epomeo Green Tuff, a widely-used building stone on Ischia Island (Italy). Volcanica, 2018, 1, 33-48.	0.6	15
116	Rock mass properties and edifice strength data from Pinnacle Ridge, Mt. Ruapehu, New Zealand. Journal of Volcanology and Geothermal Research, 2018, 367, 46-62.	0.8	14
117	Imaging strain localisation in porous andesite using digital volume correlation. Journal of Volcanology and Geothermal Research, 2020, 404, 107038.	0.8	14
118	The Brittleâ€Ductile Transition in Porous Limestone: Failure Mode, Constitutive Modeling of Inelastic Deformation and Strain Localization. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021602.	1.4	14
119	The thermal properties of hydrothermally altered andesites from La SoufriÃ¨re de Guadeloupe (Eastern) Tj ETQq1 1 0.784314 rgBT /Ov	0.8	14
120	Flank instability assessment at Kick-â€™em-Jenny submarine volcano (Grenada, Lesser Antilles): a multidisciplinary approach using experiments and modeling. Bulletin of Volcanology, 2017, 79, 1.	1.1	13
121	Low surface gravitational acceleration of Mars results in a thick and weak lithosphere: Implications for topography, volcanism, and hydrology. Icarus, 2017, 281, 103-114.	1.1	13
122	Detecting the Onset of Strain Localization Using Twoâ€Dimensional Wavelet Analysis on Sandstone Deformed at Different Effective Pressures. Journal of Geophysical Research: Solid Earth, 2018, 123, 10,460.	1.4	13
123	P- and S-wave velocity of dry, water-saturated, and frozen basalt: Implications for the interpretation of Martian seismic data. Icarus, 2019, 330, 11-15.	1.1	13
124	Crustal Fault Zones (CFZ) as Geothermal Power Systems: A Preliminary 3D THM Model Constrained by a Multidisciplinary Approach. Geofluids, 2021, 2021, 1-24.	0.3	13
125	The tensile strength of hydrothermally altered volcanic rocks. Journal of Volcanology and Geothermal Research, 2022, 428, 107576.	0.8	13
126	Determination of permeability using a classic Darcy water column. American Journal of Physics, 2020, 88, 20-24.	0.3	12

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127	Calculating the cohesion and internal friction angle of volcanic rocks and rock masses. Volcanica, 2021, 4, 279-293.	0.6	12
128	Variability in composition and physical properties of the sedimentary basement of Mt Etna, Italy. Journal of Volcanology and Geothermal Research, 2015, 302, 102-116.	0.8	11
129	Timescales of porosity and permeability loss by solid-state sintering. Earth and Planetary Science Letters, 2020, 549, 116533.	1.8	11
130	A geophysical index to map alteration, permeability, and mechanical properties within volcanoes. Application to the soft volcanic rocks from Whakaari/White Island (New Zealand). Journal of Volcanology and Geothermal Research, 2020, 401, 106945.	0.8	11
131	Petrophysical properties of the Muschelkalk from the Soultz-sous-ForÃªts geothermal site (France), an important lithostratigraphic unit for geothermal exploitation in the Upper Rhine Graben. Geothermal Energy, 2019, 7, .	0.9	11
132	Hot climate inhibits volcanism on Venus: Constraints from rock deformation experiments and argon isotope geochemistry. Physics of the Earth and Planetary Interiors, 2017, 268, 18-34.	0.7	10
133	Strainâ€Dependent Rheology of Silicate Melt Foams: Importance for Outgassing of Silicic Lavas. Journal of Geophysical Research: Solid Earth, 2019, 124, 8167-8186.	1.4	10
134	Friendly fire: Engineering a fort wall in the Iron Age. Journal of Archaeological Science, 2016, 67, 7-13.	1.2	9
135	The influence of hydrothermal brine on the short-term strength and elastic modulus of sandstones from exploration well EPS-1 at Soultz-sous-ForÃªts (France). Geothermal Energy, 2018, 6, .	0.9	9
136	Barite Growth Rates as a Function of Crystallographic Orientation, Temperature, And Solution Saturation State. Crystal Growth and Design, 2020, 20, 3663-3672.	1.4	9
137	Rapid solid-state sintering in volcanic systems. American Mineralogist, 2018, 103, 2028-2031.	0.9	8
138	Insights into lava dome and spine extrusion using analogue sandbox experiments. Earth and Planetary Science Letters, 2020, 551, 116571.	1.8	8
139	Cyclic shear zone cataclasis and sintering during lava dome extrusion: Insights from Chaos Crags, Lassen Volcanic Center (USA). Journal of Volcanology and Geothermal Research, 2020, 401, 106935.	0.8	8
140	Local geology controlled the feasibility of vitrifying Iron Age buildings. Scientific Reports, 2017, 7, 40028.	1.6	7
141	Multiphysics Laboratory Tests for Modelling Gravity-driven Instabilities at Slope Scale. Procedia Engineering, 2017, 191, 142-149.	1.2	7
142	Riding the Right Wavelet: Quantifying Scale Transitions in Fractured Rocks. Geophysical Research Letters, 2017, 44, 11,808.	1.5	7
143	Volcanotectonics: the tectonics and physics of volcanoes and their eruption mechanics. Bulletin of Volcanology, 2022, 84, .	1.1	7
144	The influence of sample geometry on the permeability of a porous sandstone. Geoscientific Instrumentation, Methods and Data Systems, 2019, 8, 55-61.	0.6	6

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145	The Fragility of VolcÃ¡n de Colimaâ€"A Material Constraint. Active Volcanoes of the World, 2019, , 241-266.	1.0	6
146	Petrophysical properties, mechanical behaviour, and failure modes of impact melt-bearing breccia (suevite) from the Ries impact crater (Germany). Icarus, 2020, 349, 113873.	1.1	6
147	The force required to operate the plunger on a French press. American Journal of Physics, 2021, 89, 769-775.	0.3	6
148	A meso-mechanical approach to time-dependent deformation and fracturing of partially saturated sandstone. International Journal of Rock Mechanics and Minings Sciences, 2021, 145, 104840.	2.6	6
149	A proxy for magmatic foams: FOAMGLASÂ®, a closed-cell glass insulation. Journal of Non-Crystalline Solids: X, 2019, 1, 100001.	0.5	5
150	Whole-rock oxygen isotope ratios as a proxy for the strength and stiffness of hydrothermally altered volcanic rocks. Bulletin of Volcanology, 2022, 84, .	1.1	5
151	Mechanics of Time-Dependent Deformation in Crustal Rocks. , 2013, , .		4
152	Conservation and restoration of St. George's church (NÃ¶rdlingen, Germany), a 15th century Gothic church built using suevite from the Ries impact crater. Journal of Cultural Heritage, 2020, 41, 256-263.	1.5	4
153	Petrophysical characterisation of volcanic ejecta to constrain subsurface lithological heterogeneities: implications for edifice stability at basaltic volcanoes. Volcanica, 2021, 4, 41-66.	0.6	4
154	The Permeability of Porous Volcanic Rock Through the Brittleâ€Ductile Transition. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	4
155	A toolbox for identifying the expression of dome-forming volcanism on exoplanets. Planetary and Space Science, 2020, 180, 104762.	0.9	3
156	Understanding Slow Deformation Before Dynamic Failure. , 2009, , 229-247.		3
157	Publishing a Special Issue of Reports from the volcano observatories in Latin America. Volcanica, 2021, 4, i-vi.	0.6	3
158	The Effects of Planetary and Stellar Parameters on Brittle Lithospheric Thickness. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006952.	1.5	3
159	Nanoindentation-based characterization of micromechanical properties of greenish mudstone from deep Fushun West open-pit mine (Fushun city, China). Geomechanics and Geophysics for Geo-Energy and Geo-Resources, 2022, 8, 1.	1.3	3
160	The Brittle-Ductile Transition in Porous Limestone Imaged by X-Ray Computed Tomography and Digital Image Correlation. , 2017, , .		2
161	Coda wave interferometry during the heating of deep geothermal reservoir rocks. Geothermal Energy, 2018, 6, .	0.9	2
162	Thermal impact of dykes on ignimbrite and implications for fluid flow channelisation in a caldera. Volcanica, 2022, 5, 75-93.	0.6	1

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163	Micro-crack propagation and coalescence during time-dependent deformation of granite based on numerical manifold method. IOP Conference Series: Earth and Environmental Science, 2020, 570, 022064.	0.2	0
164	Time Dependent Compaction and Strain Localisation in Porous Sandstone - Implications for Reservoir Compaction. , 2015, , .		0
165	Thermal impact of dykes on ignimbrite and implications for fluid flow compartmentalisation in calderas. Volcanica, 2022, 5, 55-73.	0.6	0
166	High strain rate damage in porous andesite. Journal of Volcanology and Geothermal Research, 2022, 427, 107551.	0.8	0