

Michael Heap

List of Publications by Year in descending order

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166
papers

8,006
citations

38660

50
h-index

58464

82
g-index

180
all docs

180
docs citations

180
times ranked

4155
citing authors

#	ARTICLE	IF	CITATIONS
1	The thermal properties of hydrothermally altered andesites from La Soufrière de Guadeloupe (Eastern Tj ETQq1 1 0.784314 rgBT /Over	0.8	14
2	Thermal impact of dykes on ignimbrite and implications for fluid flow compartmentalisation in calderas. <i>Volcanica</i> , 2022, 5, 55-73.	0.6	0
3	Thermal impact of dykes on ignimbrite and implications for fluid flow channelisation in a caldera. <i>Volcanica</i> , 2022, 5, 75-93.	0.6	1
4	Hidden mechanical weaknesses within lava domes provided by buried high-porosity hydrothermal alteration zones. <i>Scientific Reports</i> , 2022, 12, 3202.	1.6	19
5	Nanoindentation-based characterization of micromechanical properties of greenish mudstone from deep Fushun West open-pit mine (Fushun city, China). <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2022, 8, 1.	1.3	3
6	High strain rate damage in porous andesite. <i>Journal of Volcanology and Geothermal Research</i> , 2022, 427, 107551.	0.8	0
7	The tensile strength of hydrothermally altered volcanic rocks. <i>Journal of Volcanology and Geothermal Research</i> , 2022, 428, 107576.	0.8	13
8	The Permeability of Porous Volcanic Rock Through the Brittle–Ductile Transition. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	4
9	Volcanotectonics: the tectonics and physics of volcanoes and their eruption mechanics. <i>Bulletin of Volcanology</i> , 2022, 84, .	1.1	7
10	Whole-rock oxygen isotope ratios as a proxy for the strength and stiffness of hydrothermally altered volcanic rocks. <i>Bulletin of Volcanology</i> , 2022, 84, .	1.1	5
11	Microwave-assisted damage and fracturing of hard rocks and its implications for effective mineral resources recovery. <i>Minerals Engineering</i> , 2021, 160, 106663.	1.8	28
12	A model for permeability evolution during volcanic welding. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 409, 107118.	0.8	18
13	The fire resistance of high-strength concrete containing natural zeolites. <i>Cement and Concrete Composites</i> , 2021, 116, 103897.	4.6	24
14	A multi-decadal view of the heat and mass budget of a volcano in unrest: La Soufrière de Guadeloupe (French West Indies). <i>Bulletin of Volcanology</i> , 2021, 83, 1.	1.1	20
15	Crustal Fault Zones (CFZ) as Geothermal Power Systems: A Preliminary 3D THM Model Constrained by a Multidisciplinary Approach. <i>Geofluids</i> , 2021, 2021, 1-24.	0.3	13
16	Petrophysical characterisation of volcanic ejecta to constrain subsurface lithological heterogeneities: implications for edifice stability at basaltic volcanoes. <i>Volcanica</i> , 2021, 4, 41-66.	0.6	4
17	Mechanical Compaction of Crustal Analogs Made of Sintered Glass Beads: The Influence of Porosity and Grain Size. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021321.	1.4	22
18	The mechanical behaviour and failure modes of volcanic rocks: a review. <i>Bulletin of Volcanology</i> , 2021, 83, 1.	1.1	68

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19	An auto-detection network to provide an automated real-time early warning of rock engineering hazards using microseismic monitoring. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2021, 140, 104685.	2.6	18
20	Analysis of capillary water imbibition in sandstone via a combination of nuclear magnetic resonance imaging and numerical DEM modeling. <i>Engineering Geology</i> , 2021, 285, 106070.	2.9	26
21	The Brittleâ€Ductile Transition in Porous Limestone: Failure Mode, Constitutive Modeling of Inelastic Deformation and Strain Localization. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021602.	1.4	14
22	Time-dependent deformation and failure of granite based on the virtual crack incorporated numerical manifold method. <i>Computers and Geotechnics</i> , 2021, 133, 104070.	2.3	21
23	A Numerical Meso-Scale Elasto-Plastic Damage Model for Modeling the Deformation and Fracturing of Sandstone Under Cyclic Loading. <i>Rock Mechanics and Rock Engineering</i> , 2021, 54, 4569-4591.	2.6	27
24	Hydrothermal alteration can result in pore pressurization and volcano instability. <i>Geology</i> , 2021, 49, 1348-1352.	2.0	36
25	A three-dimensional mesoscale model for progressive time-dependent deformation and fracturing of brittle rock with application to slope stability. <i>Computers and Geotechnics</i> , 2021, 135, 104160.	2.3	31
26	The force required to operate the plunger on a French press. <i>American Journal of Physics</i> , 2021, 89, 769-775.	0.3	6
27	Alterationâ€Induced Volcano Instability at La SoufriÃˆre de Guadeloupe (Eastern Caribbean). <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2021JB022514.	1.4	34
28	A meso-mechanical approach to time-dependent deformation and fracturing of partially saturated sandstone. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2021, 145, 104840.	2.6	6
29	The tensile strength of volcanic rocks: Experiments and models. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 418, 107348.	0.8	16
30	Mechanical and topographic factors influencing lava dome growth and collapse. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 420, 107398.	0.8	15
31	Full-field quantification of time-dependent and -independent deformation and fracturing of double-notch flawed rock using digital image correlation. <i>Geomechanics and Geophysics for Geo-Energy and Geo-Resources</i> , 2021, 7, .	1.3	18
32	Publishing a Special Issue of Reports from the volcano observatories in Latin America. <i>Volcanica</i> , 2021, 4, i-vi.	0.6	3
33	The Effects of Planetary and Stellar Parameters on Brittle Lithospheric Thickness. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006952.	1.5	3
34	Calculating the cohesion and internal friction angle of volcanic rocks and rock masses. <i>Volcanica</i> , 2021, 4, 279-293.	0.6	12
35	A toolbox for identifying the expression of dome-forming volcanism on exoplanets. <i>Planetary and Space Science</i> , 2020, 180, 104762.	0.9	3
36	A three-dimensional numerical meso-approach to modeling time-independent deformation and fracturing of brittle rocks. <i>Computers and Geotechnics</i> , 2020, 117, 103274.	2.3	43

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37	Conservation and restoration of St. George's church (Nördlingen, Germany), a 15th century Gothic church built using suevite from the Ries impact crater. <i>Journal of Cultural Heritage</i> , 2020, 41, 256-263.	1.5	4
38	Towards more realistic values of elastic moduli for volcano modelling. <i>Journal of Volcanology and Geothermal Research</i> , 2020, 390, 106684.	0.8	93
39	Quantifying the role of hydrothermal alteration in creating geothermal and epithermal mineral resources: The Ohakuri ignimbrite (Taupō Volcanic Zone, New Zealand). <i>Journal of Volcanology and Geothermal Research</i> , 2020, 390, 106703.	0.8	45
40	Determination of permeability using a classic Darcy water column. <i>American Journal of Physics</i> , 2020, 88, 20-24.	0.3	12
41	Imaging strain localisation in porous andesite using digital volume correlation. <i>Journal of Volcanology and Geothermal Research</i> , 2020, 404, 107038.	0.8	14
42	Insights into lava dome and spine extrusion using analogue sandbox experiments. <i>Earth and Planetary Science Letters</i> , 2020, 551, 116571.	1.8	8
43	Micro-crack propagation and coalescence during time-dependent deformation of granite based on numerical manifold method. <i>IOP Conference Series: Earth and Environmental Science</i> , 2020, 570, 022064.	0.2	0
44	Mesoscopic Damage and Fracturing of Heterogeneous Brittle Rocks Based on Three-dimensional Polycrystalline Discrete Element Method. <i>Rock Mechanics and Rock Engineering</i> , 2020, 53, 5389-5409.	2.6	51
45	Timescales of porosity and permeability loss by solid-state sintering. <i>Earth and Planetary Science Letters</i> , 2020, 549, 116533.	1.8	11
46	Cyclic shear zone cataclasis and sintering during lava dome extrusion: Insights from Chaos Crags, Lassen Volcanic Center (USA). <i>Journal of Volcanology and Geothermal Research</i> , 2020, 401, 106935.	0.8	8
47	A geophysical index to map alteration, permeability, and mechanical properties within volcanoes. Application to the soft volcanic rocks from Whakaari/White Island (New Zealand). <i>Journal of Volcanology and Geothermal Research</i> , 2020, 401, 106945.	0.8	11
48	Petrophysical properties, mechanical behaviour, and failure modes of impact melt-bearing breccia (suevite) from the Ries impact crater (Germany). <i>Icarus</i> , 2020, 349, 113873.	1.1	6
49	Mesoscopic time-dependent behavior of rocks based on three-dimensional discrete element grain-based model. <i>Computers and Geotechnics</i> , 2020, 121, 103472.	2.3	43
50	Barite Growth Rates as a Function of Crystallographic Orientation, Temperature, And Solution Saturation State. <i>Crystal Growth and Design</i> , 2020, 20, 3663-3672.	1.4	9
51	Pressure Controlled Permeability in a Conduit Filled with Fractured Hydrothermal Breccia Reconstructed from Ballistics from Whakaari (White Island), New Zealand. <i>Geosciences (Switzerland)</i> , 2020, 10, 138.	1.0	37
52	The thermal properties of porous andesite. <i>Journal of Volcanology and Geothermal Research</i> , 2020, 398, 106901.	0.8	29
53	Strain-Dependent Rheology of Silicate Melt Foams: Importance for Outgassing of Silicic Lavas. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 8167-8186.	1.4	10
54	The Permeability Evolution of Tuffisites and Implications for Outgassing Through Dense Rhyolitic Magma. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 8281-8299.	1.4	29

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55	Influence of alteration on the mechanical behaviour and failure mode of andesite: implications for shallow seismicity and volcano monitoring. <i>Bulletin of Volcanology</i> , 2019, 81, 1.	1.1	38
56	Hydrothermal alteration of andesitic lava domes can lead to explosive volcanic behaviour. <i>Nature Communications</i> , 2019, 10, 5063.	5.8	76
57	A general model for welding of ash particles in volcanic systems validated using in situ X-ray tomography. <i>Earth and Planetary Science Letters</i> , 2019, 525, 115726.	1.8	30
58	P- and S-wave velocity of dry, water-saturated, and frozen basalt: Implications for the interpretation of Martian seismic data. <i>Icarus</i> , 2019, 330, 11-15.	1.1	13
59	The influence of sample geometry on the permeability of a porous sandstone. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2019, 8, 55-61.	0.6	6
60	The Fragility of VolcÃ¡n de Colimaâ€™A Material Constraint. <i>Active Volcanoes of the World</i> , 2019, , 241-266.	1.0	6
61	Acidâ€induced Dissolution of Andesite: Evolution of Permeability and Strength. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 257-273.	1.4	40
62	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
63	Heat flow density estimates in the Upper Rhine Graben using laboratory measurements of thermal conductivity on sedimentary rocks. <i>Geothermal Energy</i> , 2019, 7, .	0.9	18
64	A proxy for magmatic foams: FOAMGLASÂ®, a closed-cell glass insulation. <i>Journal of Non-Crystalline Solids: X</i> , 2019, 1, 100001.	0.5	5
65	Rock mass strength and elastic modulus of the Buntsandstein: An important lithostratigraphic unit for geothermal exploitation in the Upper Rhine Graben. <i>Geothermics</i> , 2019, 77, 236-256.	1.5	41
66	Petrophysical properties of the Muschelkalk from the Soultz-sous-ForÃ¢ts geothermal site (France), an important lithostratigraphic unit for geothermal exploitation in the Upper Rhine Graben. <i>Geothermal Energy</i> , 2019, 7, .	0.9	11
67	Thermal Cracking in Westerly Granite Monitored Using Direct Wave Velocity, Coda Wave Interferometry, and Acoustic Emissions. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 2246-2261.	1.4	107
68	A generic model for the shallow velocity structure of volcanoes. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 356, 114-126.	0.8	52
69	Complex conductivity of volcanic rocks and the geophysical mapping of alteration in volcanoes. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 357, 106-127.	0.8	58
70	Permeability of volcanic rocks to gas and water. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 354, 29-38.	0.8	37
71	Hot pressing in conduit faults during lava dome extrusion: Insights from Mount St. Helens 2004â€2008. <i>Earth and Planetary Science Letters</i> , 2018, 482, 171-180.	1.8	22
72	The Modeling of Time-Dependent Deformation and Fracturing of Brittle Rocks Under Varying Confining and Pore Pressures. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 3241-3263.	2.6	65

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73	The Influence of Water Saturation on the Short- and Long-Term Mechanical Behavior of Red Sandstone. <i>Rock Mechanics and Rock Engineering</i> , 2018, 51, 2669-2687.	2.6	103
74	Assessing the role of fractures on the permeability of the Permo-Triassic sandstones at the Soultz-sous-Forêts (France) geothermal site. <i>Geothermics</i> , 2018, 74, 181-189.	1.5	52
75	3D electrical conductivity tomography of volcanoes. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 356, 243-263.	0.8	47
76	Detecting the Onset of Strain Localization Using Two-Dimensional Wavelet Analysis on Sandstone Deformed at Different Effective Pressures. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 10,460.	1.4	13
77	Estimating in situ rock mass strength and elastic modulus of granite from the Soultz-sous-Forêts geothermal reservoir (France). <i>Geothermal Energy</i> , 2018, 6, .	0.9	35
78	Characterizing the physical properties of rocks from the Paleozoic to Permo-Triassic transition in the Upper Rhine Graben. <i>Geothermal Energy</i> , 2018, 6, .	0.9	28
79	Coda wave interferometry during the heating of deep geothermal reservoir rocks. <i>Geothermal Energy</i> , 2018, 6, .	0.9	2
80	The influence of hydrothermal brine on the short-term strength and elastic modulus of sandstones from exploration well EPS-1 at Soultz-sous-Forêts (France). <i>Geothermal Energy</i> , 2018, 6, .	0.9	9
81	Influence of unloading and loading stress cycles on the creep behavior of Darley Dale Sandstone. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2018, 112, 55-63.	2.6	43
82	Thermal resilience of microcracked andesitic dome rocks. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 367, 20-30.	0.8	21
83	Rock mass properties and edifice strength data from Pinnacle Ridge, Mt. Ruapehu, New Zealand. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 367, 46-62.	0.8	14
84	Numerical Approach to Creep of Rock Based on the Numerical Manifold Method. <i>International Journal of Geomechanics</i> , 2018, 18, .	1.3	20
85	Rapid solid-state sintering in volcanic systems. <i>American Mineralogist</i> , 2018, 103, 2028-2031.	0.9	8
86	Physical and mechanical property relationships of a shallow intrusion and volcanic host rock, Pinnacle Ridge, Mt. Ruapehu, New Zealand. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 359, 1-20.	0.8	44
87	The influence of water on the strength of Neapolitan Yellow Tuff, the most widely used building stone in Naples (Italy). <i>Bulletin of Volcanology</i> , 2018, 80, 1.	1.1	28
88	The permeability of stylolite-bearing limestone. <i>Journal of Structural Geology</i> , 2018, 116, 81-93.	1.0	34
89	Fire resistance of the Mt. Epomeo Green Tuff, a widely-used building stone on Ischia Island (Italy). <i>Volcanica</i> , 2018, 1, 33-48.	0.6	15
90	From rock to magma and back again: The evolution of temperature and deformation mechanism in conduit margin zones. <i>Earth and Planetary Science Letters</i> , 2017, 463, 92-100.	1.8	54

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91	Local geology controlled the feasibility of vitrifying Iron Age buildings. <i>Scientific Reports</i> , 2017, 7, 40028.	1.6	7
92	The influence of pore geometry and orientation on the strength and stiffness of porous rock. <i>Journal of Structural Geology</i> , 2017, 96, 149-160.	1.0	83
93	Hot climate inhibits volcanism on Venus: Constraints from rock deformation experiments and argon isotope geochemistry. <i>Physics of the Earth and Planetary Interiors</i> , 2017, 268, 18-34.	0.7	10
94	Time-dependent permeability evolution in compacting volcanic fracture systems and implications for gas overpressure. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 339, 81-97.	0.8	35
95	The Influence of Temperature on Time-Dependent Deformation and Failure in Granite: A Mesoscale Modeling Approach. <i>Rock Mechanics and Rock Engineering</i> , 2017, 50, 2345-2364.	2.6	73
96	The failure processes analysis of rock slope using numerical modelling techniques. <i>Engineering Failure Analysis</i> , 2017, 79, 999-1016.	1.8	41
97	Flank instability assessment at Kick-â€™em-Jenny submarine volcano (Grenada, Lesser Antilles): a multidisciplinary approach using experiments and modeling. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	1.1	13
98	A multidisciplinary approach to quantify the permeability of the Whakaari/White Island volcanic hydrothermal system (Taupo Volcanic Zone, New Zealand). <i>Journal of Volcanology and Geothermal Research</i> , 2017, 332, 88-108.	0.8	92
99	Porosity evolution at the brittle-ductile transition in the continental crust: Implications for deep hydro-geothermal circulation. <i>Scientific Reports</i> , 2017, 7, 7705.	1.6	60
100	Multiphysics Laboratory Tests for Modelling Gravity-driven Instabilities at Slope Scale. <i>Procedia Engineering</i> , 2017, 191, 142-149.	1.2	7
101	Gravitational slope-deformation of a resurgent caldera: New insights from the mechanical behaviour of Mt. Nuovo tuffs (Ischia Island, Italy). <i>Journal of Volcanology and Geothermal Research</i> , 2017, 345, 1-20.	0.8	22
102	Does an inter-flaw length control the accuracy of rupture forecasting in geological materials?. <i>Earth and Planetary Science Letters</i> , 2017, 475, 181-189.	1.8	39
103	Inelastic Compaction in High Porosity Limestone Monitored Using Acoustic Emissions. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 9989.	1.4	35
104	Riding the Right Wavelet: Quantifying Scale Transitions in Fractured Rocks. <i>Geophysical Research Letters</i> , 2017, 44, 11,808.	1.5	7
105	Quantification of microcrack characteristics and implications for stiffness and strength of granite. <i>International Journal of Rock Mechanics and Minings Sciences</i> , 2017, 100, 138-150.	2.6	147
106	The Brittle-Ductile Transition in Porous Limestone Imaged by X-Ray Computed Tomography and Digital Image Correlation. , 2017, , .		2
107	Low surface gravitational acceleration of Mars results in a thick and weak lithosphere: Implications for topography, volcanism, and hydrology. <i>Icarus</i> , 2017, 281, 103-114.	1.1	13
108	Microstructural and petrophysical properties of the Permo-Triassic sandstones (Buntsandstein) from the Soultz-sous-Forêts geothermal site (France). <i>Geothermal Energy</i> , 2017, 5, .	0.9	56

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109	Inelastic compaction and permeability evolution in volcanic rock. <i>Solid Earth</i> , 2017, 8, 561-581.	1.2	40
110	Geothermal implications for fracture-filling hydrothermal precipitation. <i>Geothermics</i> , 2016, 64, 235-245.	1.5	58
111	Mechanical behaviour of dacite from Mount St. Helens (USA): A link between porosity and lava dome extrusion mechanism (dome or spine)?. <i>Journal of Volcanology and Geothermal Research</i> , 2016, 328, 159-177.	0.8	41
112	Closing an open system: Pore pressure changes in permeable edifice rock at high strain rates. <i>Journal of Volcanology and Geothermal Research</i> , 2016, 315, 40-50.	0.8	31
113	The strength of heterogeneous volcanic rocks: A 2D approximation. <i>Journal of Volcanology and Geothermal Research</i> , 2016, 319, 1-11.	0.8	31
114	Exploring the scale-dependent permeability of fractured andesite. <i>Earth and Planetary Science Letters</i> , 2016, 447, 139-150.	1.8	152
115	Evidence for the development of permeability anisotropy in lava domes and volcanic conduits. <i>Journal of Volcanology and Geothermal Research</i> , 2016, 323, 163-185.	0.8	69
116	Strain-induced permeability increase in volcanic rock. <i>Geophysical Research Letters</i> , 2016, 43, 11,603.	1.5	35
117	Mechanical behaviour of the Rotokawa Andesites (New Zealand): Insight into permeability evolution and stress-induced behaviour in an actively utilised geothermal reservoir. <i>Geothermics</i> , 2016, 64, 163-179.	1.5	55
118	Impact of stylolites on the mechanical strength of limestone. <i>Tectonophysics</i> , 2016, 690, 4-20.	0.9	55
119	Friendly fire: Engineering a fort wall in the Iron Age. <i>Journal of Archaeological Science</i> , 2016, 67, 7-13.	1.2	9
120	Pore pressure embrittlement in a volcanic edifice. <i>Bulletin of Volcanology</i> , 2016, 78, 1.	1.1	35
121	Probing permeability and microstructure: Unravelling the role of a low-permeability dome on the explosivity of Merapi (Indonesia). <i>Journal of Volcanology and Geothermal Research</i> , 2016, 316, 56-71.	0.8	69
122	Timescales for permeability reduction and strength recovery in densifying magma. <i>Earth and Planetary Science Letters</i> , 2015, 429, 223-233.	1.8	61
123	Time-dependent compaction band formation in sandstone. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 4808-4830.	1.4	73
124	Variability in composition and physical properties of the sedimentary basement of Mt Etna, Italy. <i>Journal of Volcanology and Geothermal Research</i> , 2015, 302, 102-116.	0.8	11
125	Fracture and compaction of andesite in a volcanic edifice. <i>Bulletin of Volcanology</i> , 2015, 77, 55.	1.1	87
126	Mechanical behaviour and failure modes in the Whakaari (White Island volcano) hydrothermal system, New Zealand. <i>Journal of Volcanology and Geothermal Research</i> , 2015, 295, 26-42.	0.8	101

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127	Fracture of magma containing overpressurised pores. Journal of Volcanology and Geothermal Research, 2015, 301, 180-190.	0.8	18
128	Experimental constraints on phreatic eruption processes at Whakaari (White Island volcano). Journal of Volcanology and Geothermal Research, 2015, 302, 150-162.	0.8	47
129	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
130	Time Dependent Compaction and Strain Localisation in Porous Sandstone - Implications for Reservoir Compaction. , 2015, , .		0
131	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
132	Rate- and strain-dependent brittle deformation of rocks. Journal of Geophysical Research: Solid Earth, 2014, 119, 1818-1836.	1.4	104
133	Conditions and timescales for welding block-and-ash flow deposits. Journal of Volcanology and Geothermal Research, 2014, 289, 202-209.	0.8	36
134	Stylolites in limestones: Barriers to fluid flow?. Geology, 2014, 42, 51-54.	2.0	88
135	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
136	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
137	Mechanisms of time-dependent deformation in porous limestone. Journal of Geophysical Research: Solid Earth, 2014, 119, 5444-5463.	1.4	91
138	Microstructural controls on the physical and mechanical properties of edifice-forming andesites at Volc��n de Colima, Mexico. Journal of Geophysical Research: Solid Earth, 2014, 119, 2925-2963.	1.4	155
139	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
140	Tracking the permeable porous network during strain-dependent magmatic flow. Journal of Volcanology and Geothermal Research, 2013, 260, 117-126.	0.8	74
141	Time-dependent cracking and brittle creep in crustal rocks: A review. Journal of Structural Geology, 2013, 52, 17-43.	1.0	500
142	The influence of thermal-stressing (up to 1000��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
143	Mechanics of Time-Dependent Deformation in Crustal Rocks. , 2013, , .		4
144	Decarbonation and thermal microcracking under magmatic P-T-fa��CO2 conditions: the role of skarn substrata in promoting volcanic instability. Geophysical Journal International, 2013, 195, 369-380.	1.0	21

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145	Reconstructing magma failure and the degassing network of dome-building eruptions. <i>Geology</i> , 2013, 41, 515-518.	2.0	106
146	Strength and permeability recovery of tuffisite-bearing andesite. <i>Solid Earth</i> , 2012, 3, 191-198.	1.2	62
147	Laboratory simulations of tensile fracture development in a volcanic conduit via cyclic magma pressurisation. <i>Earth and Planetary Science Letters</i> , 2012, 349-350, 231-239.	1.8	26
148	Volcanic edifice weakening via decarbonation: A self-limiting process?. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	24
149	Micromechanics of brittle creep in rocks. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	131
150	How tough is tuff in the event of fire?. <i>Geology</i> , 2012, 40, 311-314.	2.0	58
151	Modelling the time-dependent rheological behaviour of heterogeneous brittle rocks. <i>Geophysical Journal International</i> , 2012, 189, 1781-1796.	1.0	92
152	Experimental generation of volcanic pseudotachylytes: Constraining rheology. <i>Journal of Structural Geology</i> , 2012, 38, 222-233.	1.0	46
153	Volcanic conduit failure as a trigger to magma fragmentation. <i>Bulletin of Volcanology</i> , 2012, 74, 11-13.	1.1	17
154	Increase in radon emission due to rock failure: An experimental study. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	53
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