The basalt lavas of the Giantâ€s Causeway district of No

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Citation Report

#	Article	IF	Citations
1	The Giant's Causeway. Nature, 1945, 156, 425-426.	27.8	5
2	The Tertiary volcanic succession of the Isle of Rhum, Inverness-shire. Transactions of the Edinburgh Geological Society, 1952, 15, 39-51.	0.7	7
3	A petrochemical study of the Tertiary lavas of north-east Ireland. Geochimica Et Cosmochimica Acta, 1952, 2, 283-299.	3.9	33
4	X.â€"Structure and Igneous Activity in the Creag Strollamus Area of Skye. Transactions of the Royal Society of Edinburgh, 1954, 62, 357-402.	0.3	11
5	A petrochemical study of Tertiary tholeiitic basalts: The middle lavas of the Antrim Plateau. Geochimica Et Cosmochimica Acta, 1955, 8, 173-181.	3.9	31
6	A chemical definition of fractionation stages as a basis for comparison of Hawaiian, Hebridean and other basic lavas. Geochimica Et Cosmochimica Acta, 1956, 9, 217-248.	3.9	39
7	III.â€"A Petrological Study of the Arthur's Seat Volcano. Transactions of the Royal Society of Edinburgh, 1956, 63, 37-70.	0.3	5
8	GEOLOGY OF THE REYDARFJÃ–RDUR AREA, EASTERN ICELAND. Quarterly Journal of the Geological Society of London, 1958, 114, 367-391.	0.5	156
9	XIII.â€"Crystal Growth of Forsteritic Olivine in Magmas and Melts. Transactions of the Royal Society of Edinburgh, 1958, 63, 289-315.	0.3	53
10	XIV.â€"The Tertiary Dolerite Plugs of North-East Irelandâ€"A Survey of their Geology and Geochemistry. Transactions of the Royal Society of Edinburgh, 1958, 63, 317-331.	0.3	7
12	Some Observations on the Antrim Basalts and Associated Dolerite Intrusions. Proceedings of the Geologists Association, 1959, 70, 179-205.	1.1	19
13	The Geology of North-East Ireland. Proceedings of the Geologists Association, 1960, 71, 429-459.	1.1	7
14	A Note on the Origin of Ophitic Texture in the Chilled Olivine Gabbro of the Skaergaard Intrusion. Geological Magazine, 1961, 98, 353-366.	1.5	73
15	VIII.â€" The Islay â€" Jura Dyke Swarm. Transactions of the Geological Society of Glasgow, 1961, 24, 121-137.	0.2	3
16	A search for flow structure in columnar basalt using magnetic anisotropy measurements. Pure and Applied Geophysics, 1964, 57-57, 61-65.	1.9	22
17	Curviplanar (Radial, Bow-Tie, Festoon) and Concentric Jointing in Jurassic Dolerite Mersey Bluff, Tasmania. Journal of Geology, 1965, 73, 255-270.	1.4	2
18	The Role of Cooling Cracks Formed at High Temperatures and of Released Gas in the Formation of Chilled Basic Margins in Net-veined Intrusions. Geological Magazine, 1965, 102, 521-530.	1.5	2
19	Ash-flow deposits of the central king country, New Zealand. New Zealand Journal of Geology, and Geophysics, 1965, 8, 588-610.	1.8	31

#	Article	IF	Citations
20	Contraction Crack Networks in Basalt Flows. Geological Magazine, 1966, 103, 110-114.	1.5	49
21	Flow directions in Columbia River Basalt flows and paleocurrents of interbedded sedimentary rocks, South-Central Washington. Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie, 1967, 56, 992-1020.	1.3	19
22	The Magnetic and Petrologic Properties of a Basalt Column. Geophysical Journal International, 1967, 12, 473-490.	2.4	17
23	A detailed magnetic and opaque petrological study of a thick Palaeogene tholeiite lava flow from Northern Ireland. Earth and Planetary Science Letters, 1971, 11, 113-120.	4.4	11
24	Magnetic anisotropy in rocks. Earth-Science Reviews, 1971, 7, 227-253.	9.1	42
26	Magnitude frequency study of rockfall in Co. Antrim, N. Ireland. Earth Surfaces Processes, 1980, 5, 123-129.	0.7	63
27	Observations on internal structures of chrome alum dehydration nuclei. Nature, 1980, 283, 52-54.	27.8	25
28	Nucleation and growth processes occurring during the dehydration of certain alums: the generation, the development and the function of the reaction interface. Proceedings of the Royal Society of London Series A, Mathematical and Physical Sciences, 1981, 378, 477-505.	1.4	65
29	Igneous rocks. , 1983, , 1-47.		6
30	Volcanic style in the Strand Fiord Formation (Upper Cretaceous), Axel Heiberg Island, Canadian Arctic Archipelago. Polar Research, 1985, 3, 107-122.	1.6	42
31	The petrogenesis of the Tertiary basaltic and intermediate lavas of northeast Ireland. Scottish Journal of Geology, 1985, 21, 71-84.	0.1	22
32	A tholeiitic andesite flow unit among the Causeway Basalts of North Antrim in Northern Ireland. Geological Magazine, 1986, 123, 105-112.	1.5	3
33	Eastern North American quartz tholeiites: geochemistry and petrology. Developments in Geotectonics, 1988, , 579-605.	0.3	12
34	Evoluton of Polygonal Fracture Patterns in Lava Flows. Science, 1988, 239, 471-476.	12.6	147
35	Geology of northeastern New Jersey. , 1989, , 26-38.		0
36	Use of joint-growth directions and rock textures to infer thermal regimes during solidification of basaltic lava flows. Journal of Volcanology and Geothermal Research, 1989, 38, 309-324.	2.1	84
37	A similarity model of incremental fracture growth in submarine hydrothermal systems. Journal of Geophysical Research, 1993, 98, 4173-4182.	3.3	4
38	Geochemistry and volcanology of the Tertiary basalts of the Giant's Causeway area, Northern Ireland. Journal of the Geological Society, 1993, 150, 109-120.	2.1	20

#	Article	IF	Citations
39	Modelling the evolution of columnar joints. Journal of Volcanology and Geothermal Research, 1994, 59, 219-239.	2.1	132
40	Sr isotope data for the Tertiary lavas of Northern Ireland: evidence for open system petrogenesis. Journal of the Geological Society, 1994, 151, 869-877.	2.1	28
41	XIII.â€"Crystal Growth of Forsteritic Olivine in Magmas and Melts. Transactions of the Royal Society of Edinburgh: Earth Sciences, 1995, 86, 61-90.	0.7	12
42	Conductive cooling of lava: columnar joint diameter and stria width as functions of cooling rate and thermal gradient. Journal of Volcanology and Geothermal Research, 1995, 69, 95-103.	2.1	115
43	Geochemistry of the Tertiary volcanism of Northern Ireland. Chemical Geology, 1996, 129, 15-38.	3.3	35
44	Sediment Yield During Late Glacial and Holocene periods in the Lac Chambon Watershed, Massif Central, France. Earth Surface Processes and Landforms, 1997, 22, 473-489.	2.5	30
45	Emplacement of Hebridean Tertiary flood basalts: evidence from an inflated pahoehoe lava flow on Mull, Scotland. Journal of the Geological Society, 1998, 155, 599-607.	2.1	16
46	Subaqueous volcanism in the Etnean area: evidence for hydromagmatic activity and regional uplift inferred from the Castle Rock of Acicastello. Journal of Volcanology and Geothermal Research, 2000, 95, 209-225.	2.1	16
47	Viscoelastic thermal stress in cooling basalt flows. Journal of Geophysical Research, 2000, 105, 23695-23709.	3.3	45
48	Conceptual model of the geometry and physics of water flow in a fractured basalt vadose zone. Water Resources Research, 2000, 36, 3499-3520.	4.2	85
49	The eruption environment of multi-tiered columnar basalt lava flows. Journal of the Geological Society, 2000, 157, 715-722.	2.1	86
50	A deterministic methodology for prediction of fracture distribution in basaltic multiflows. Journal of Geophysical Research, 2001, 106, 6447-6459.	3.3	20
51	Hydrothermal alteration processes of the Tertiary lavas of Northern Ireland. Mineralogical Magazine, 2001, 65, 543-554.	1.4	12
52	On bimodal differentiation by solidification front instability in basaltic magmas, part 1: basic mechanics. Geochimica Et Cosmochimica Acta, 2002, 66, 2211-2229.	3.9	131
53	Millimeter-scale modal layering and the nature of the upper solidification zone in thick flood-basalt flows and other sheets of magma. Journal of Structural Geology, 2002, 24, 1171-1177.	2.3	41
54	Paleo-environmental and volcano-tectonic evolution of the southeastern flank of Mt. Etna during the last 225 ka inferred from the volcanic succession of the â€˜Timpeâ€™, Acireale, Sicily. Journal of Volcanology and Geothermal Research, 2002, 113, 289-306.	2.1	52
55	Morphology and emplacement of flows from the Deccan Volcanic Province, India. Bulletin of Volcanology, 2004, 66, 29-45.	3.0	136
56	Characterization and evolution of fractures in low-volume pahoehoe lava flows, eastern Snake River Plain, Idaho. Bulletin of the Geological Society of America, 2004, 116, 322.	3.3	35

#	Article	IF	Citations
57	Potential for carbon dioxide sequestration in flood basalts. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	309
58	Primary volcanic structures from a type section of Deccan Trap flows around Narsingpur-Harrai-Amarwara, central India: Implications for cooling history. Journal of Earth System Science, 2006, 115, 631-642.	1.3	7
59	Quality ranking of twelve columnar basalt occurrences in the northern portion of the ParanÃ¡ Basinâ€"Brazil. Engineering Geology, 2007, 91, 265-278.	6.3	6
60	Thermalâ€"mechanical modeling of cooling history and fracture development in inflationary basalt lava flows. Journal of Volcanology and Geothermal Research, 2008, 170, 181-197.	2.1	36
61	Scaling of columnar joints in basalt. Journal of Geophysical Research, 2008, 113, .	3.3	94
62	How are saucerâ€shaped sills emplaced? Constraints from the Golden Valley Sill, South Africa. Journal of Geophysical Research, 2008, 113, .	3.3	58
63	How things began: the origins of geological conservation. Geological Society Special Publication, 2008, 300, 7-16.	1.3	6
64	In search of the â€˜true prospectâ€™: making and knowing the Giant's Causeway as a field site in the seventeenth century. British Journal for the History of Science, 2008, 41, 19-41.	0.7	10
65	Hydrovolcanic features on Mars: Preliminary observations from the first Mars year of HiRISE imaging. Icarus, 2010, 205, 211-229.	2.5	78
66	Melt migration in basalt columns driven by crystallization-induced pressure gradients. Nature Communications, 2011, 2, 299.	12.8	31
67	Mapping Slope Instability at the Giantâ€™s Causeway and Causeway Coast World Heritage Site: Implications for Site Management. Geoheritage, 2011, 3, 253-266.	2.8	17
68	Origin of internal flow structures in columnar-jointed basalt from HrepphÃ³lar, Iceland: I. Textural and geochemical characterization. Bulletin of Volcanology, 2012, 74, 1645-1666.	3.0	16
69	Emplacement mechanism of offâ€axis large submarine lava field from the Oman Ophiolite. Journal of Geophysical Research, 2012, 117, .	3.3	17
70	Pseudopillow fracture systems in lavas: Insights into cooling mechanisms and environments from lava flow fractures. Journal of Volcanology and Geothermal Research, 2012, 245-246, 68-80.	2.1	20
71	Geological Background and Three Vulnerable Geosites of the KÄ±zÄ±lcahamamâ€"Ã‡amlÄ±dere Geopark Project in Ankara, Turkey. Geoheritage, 2012, 4, 249-261.	2.8	34
72	Visitor Understanding of the Geodiversity and the Geoconservation Value of the Giantâ€™s Causeway World Heritage Site, Northern Ireland. Geoheritage, 2012, 4, 115-126.	2.8	31
73	Scales of columnar jointing in igneous rocks: field measurements and controlling factors. Bulletin of Volcanology, 2012, 74, 457-482.	3.0	61
74	The formation of columnar joints produced by cooling in basalt at Staffa, Scotland. Bulletin of Volcanology, 2013, 75, 1.	3.0	48

#	Article	IF	Citations
75	Surface Morphology of Basalt Columns at Svartifoss, VatnajÃ¶kulsÃžjÃ³Ã°garÃ°ur, Southern Iceland. Journal of Geological Research, 2013, 2013, 1-8.	0.7	2
76	A Palaeocene intracanyon-style lava emplaced during the early shield-building stage of the Cuillin Volcano, Isle of Skye, NW Scotland. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2013, 104, 205-230.	0.3	5
77	Structural and petrophysical characterization of the upper basement crustal section at ODP/IODP Site 1256 (East Pacific Ocean). Geochemistry, Geophysics, Geosystems, 2013, 14, 2399-2431.	2.5	4
78	Multi-Scale Investigations of Liquid Flow in a Fractured Basalt Vadose Zone. Geophysical Monograph Series, 0, , 161-182.	0.1	8
79	Columnar Joints. , 2014, , 1-7.		1
80	Development of columnar jointing in albite rhyolite in a rapidly cooling volcanic environment (Rupnica, Papuk Geopark, Croatia). Terra Nova, 2014, 26, 102-110.	2.1	3
81	To conserve or not to conserve (mass in numerical models). Terra Nova, 2014, 26, 372-376.	2.1	4
82	Geological and 40Ar/39Ar age constraints on late-stage Deccan rhyolitic volcanism, inter-volcanic sedimentation, and the Panvel flexure from the Dongri area, Mumbai. Journal of Asian Earth Sciences, 2014, 84, 167-175.	2.3	32
83	Formation and Suppression of Strikeâ€“Slip Fault Systems. Pure and Applied Geophysics, 2014, 171, 2899-2918.	1.9	12
84	Entablature: fracture types and mechanisms. Bulletin of Volcanology, 2014, 76, 1.	3.0	33
85	Geochemistry and petrogenesis of lava flows around Linga, Chhindwara area in the Eastern Deccan Volcanic Province (EDVP), India. Journal of Asian Earth Sciences, 2014, 91, 174-193.	2.3	22
86	A new model for Quaternary lava dams in Grand Canyon based on⁴⁰Ar/³⁹Ar dating, basalt geochemistry, and field mapping. , 2015, 11, 1305-1342.		11
87	Intracanyon basalt lavas of the Debed River (northern Armenia), part of a Plioceneâ€“Pleistocene continental flood basalt province in the South Caucasus. Journal of Volcanology and Geothermal Research, 2015, 295, 1-15.	2.1	27
88	Scale selection in columnar jointing: Insights from experiments on cooling stearic acid and numerical simulations. Journal of Geophysical Research: Solid Earth, 2016, 121, 1462-1482.	3.4	7
89	Engineering behavior influence of basaltic rocks on the adsorption of heavy metal ions. Desalination and Water Treatment, 2016, 57, 5089-5099.	1.0	2
90	Anisotropic characteristic of irregular columnar-jointed rock mass based on physical model test. KSCE Journal of Civil Engineering, 2017, 21, 1728-1734.	1.9	19
91	Disclosing the temperature of columnar jointing in lavas. Nature Communications, 2018, 9, 1432.	12.8	38
92	A Model for Crack Initiation in Solidifying Lava. Journal of Geophysical Research: Solid Earth, 2018, 123, 8445-8458.	3.4	4

#	Article	IF	Citations
93	Determination of Strength and Deformation Properties of Columnar Jointed Rock Mass Using Physical Model Tests. KSCE Journal of Civil Engineering, 2018, 22, 3302-3311.	1.9	24
94	Drying colloidal systems: Laboratory models for a wide range of applications. European Physical Journal E, 2018, 41, 94.	1.6	43
95	Mini-columns and ghost columns in Columbia River lava. Journal of Volcanology and Geothermal Research, 2019, 374, 242-251.	2.1	6
96	Thinking about LIPs: A brief history of ideas in Large igneous province research. Tectonophysics, 2019, 760, 229-251.	2.2	29
97	Enigma of Dangoaposi and Jagannathpur Lavas of Singhbhum Craton, Eastern India: Possible Solution. Journal of the Geological Society of India, 2020, 96, 356-362.	1.1	1
98	Analogue experiments on morphological transition from colonnade to entablature of columnar joints. Journal of Volcanology and Geothermal Research, 2020, 402, 106979.	2.1	6
99	Characterising the Bushe-Poladpur Contact across the Western Deccan Traps and Implications for Mapping the K-Pg Boundary?. Journal of the Geological Society of India, 2020, 95, 227-240.	1.1	11
100	Late Cenozoic columnar-jointed basaltic lavas in eastern and southeastern China: morphologies, structures, and formation mechanisms. Bulletin of Volcanology, 2020, 82, 1.	3.0	9
101	Column-normal fracture features of the basaltic joints in Santa Maria Regla, Hidalgo State, Mexico. Journal of South American Earth Sciences, 2020, 101, 102611.	1.4	2
102	Columnar-jointed bentonite below a Doleritic Sill, Tideswell Dale, Derbyshire, UK: formation during prograde contact metamorphism. Geological Magazine, 2020, 157, 1181-1198.	1.5	2
103	Insights into Unloading Relaxation Mechanism of Columnar Jointed Basalt at the Baihetan Left Dam Foundation. Advances in Materials Science and Engineering, 2021, 2021, 1-13.	1.8	0
104	Imperfect comb construction reveals the architectural abilities of honeybees. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	23
105	Subsidence, not erosion: Revisiting the emplacement environment of the Giant's Causeway, Northern Ireland. Proceedings of the Geologists Association, 2021, , .	1.1	2
106	The amygdale minerals in the Tertiary lavas of Ireland. III. Regional distribution. Mineralogical Magazine and Journal of the Mineralogical Society, 1960, 32, 503-527.	0.2	44
107	Assessing hydrofacies and hydraulic properties of basaltic aquifers derived from geophysical logging. Brazilian Journal of Geology, 2020, 50, .	0.7	6
109	Volcanic style in the Strand Fiord Formation (Upper Cretaceous), Axel Heiberg Island, Canadian Arctic Archipelago. Polar Research, 1985, 3, 107-122.	1.6	7
110	Management challenges at a complex geosite: the Giantâ€™s Causeway World Heritage Site, Northern Ireland. Geomorphologie Relief, Processus, Environnement, 2005, 11, 219-226.	0.4	12
113	Igneous rocks. , 1972, , 356-401.		0

#	Article	IF	Citations
115	Columnar Joints. , 2015, , 328-333.		0
116	Structures Formed during Cooling and Solidification of Flood Basalt Lavas. , 2018, , 109-138.		0
117	Some Lava Flows May Not Have Been as Thick as They Appear. Geophysical Research Letters, 2021, 48, .	4.0	1
118	Flood basalt structures and textures as guides to cooling histories and palaeoclimates: the Deccan Traps of Saurashtra, western India. Geological Magazine, 2022, 159, 1415-1436.	1.5	6
119	Strength and deformation behavior of columnar jointed rock masses under different confining pressures. Arabian Journal of Geosciences, 2022, 15, .	1.3	0
120	GeometrÃa y dimensiones de estructuras de disyunciÃ³n columnar en rocas volcÃ¡nicas de Colombia. Boletin De Geologia, 2023, 45, .	0.2	0
121	Early Jurassic Flood Basalt Volcanism on Franz Josef Land Archipelago: Geological and Palynostratigraphical Data. Stratigraphy and Geological Correlation, 2022, 30, S23-S46.	0.8	1
122	Emplacement of lava flows on eroded terrain, part I: The case of the Tiretaine valley (ChaÃ®ne des Puys,) Tj ETQq1 1 0.784314 rgBT /O	2.1	0
123	Columnar Joints. , 2022, , 1-7.		0