R Stephen J Sparks

List of Publications by Citations

175 papers	15,798 citations	67 h-index	123 g-index
179 ext. papers	17,595 ext. citations	6.1 avg, IF	6.75 L-index

#	Paper	IF	Citations
175	The Genesis of Intermediate and Silicic Magmas in Deep Crustal Hot Zones. *Journal of Petrology*, **2006**, 47, 505-539	3.9	1225
174	The Generation of Granitic Magmas by Intrusion of Basalt into Continental Crust. *Journal of Petrology*, **1988**, 29, 599-624	3.9	915
173	Thermal and mechanical constraints on mixing between mafic and silicic magmas. *Journal of Volcanology and Geothermal Research*, **1986**, 29, 99-124	2.8	516
172	Explosive volcanic eruptions -- IV. The control of magma properties and conduit geometry on eruption column behaviour. *Geophysical Journal International*, **1980**, 63, 117-148	2.6	516
171	Quantitative models of the fallout and dispersal of tephra from volcanic eruption columns. *Bulletin of Volcanology*, **1986**, 48, 109-125	2.4	493
170	Effects of repetitive emplacement of basaltic intrusions on thermal evolution and melt generation in the crust. *Earth and Planetary Science Letters*, **2002**, 203, 937-955	5.3	433
169	Grain size variations in ignimbrites and implications for the transport of pyroclastic flows. *Sedimentology*, **1976**, 23, 147-188	3.3	431
168	Vertically extensive and unstable magmatic systems: A unified view of igneous processes. *Science*, **2017**, 355,	33.3	428
167	Remobilization of Andesite Magma by Intrusion of Mafic Magma at the Soufriere Hills Volcano, Montserrat, West Indies. *Journal of Petrology*, **2000**, 41, 21-42	3.9	380
166	Nonlinear dynamics of lava dome extrusion. *Nature*, **1999**, 402, 37-41	50.4	368
165	Forecasting volcanic eruptions. *Earth and Planetary Science Letters*, **2003**, 210, 1-15	5.3	337
164	Causes and consequences of pressurisation in lava dome eruptions. *Earth and Planetary Science Letters*, **1997**, 150, 177-189	5.3	294
163	Mineral disequilibrium in lavas explained by convective self-mixing in open magma chambers. *Nature*, **2001**, 411, 1037-9	50.4	287
162	Dynamical constraints on kimberlite volcanism. *Journal of Volcanology and Geothermal Research*, **2006**, 155, 18-48	2.8	274
161	Magma flow instability and cyclic activity at soufriere hills volcano, montserrat, british west indies. *Science*, **1999**, 283, 1138-42	33.3	243
160	Petrogenesis of Mafic Inclusions in Granitoids of the Adamello Massif, Italy. *Journal of Petrology*, **1992**, 33, 1039-1104	3.9	204
159	Komatiites I: Eruption and Flow. *Journal of Petrology*, **1985**, 26, 694-725	3.9	197

158	Magma Evolution and Open-System Processes at Shiveluch Volcano: Insights from Phenocryst Zoning. *Journal of Petrology*, **2006**, 47, 2303-2334	3.9	189
157	Experimental studies of the fluidization of layered sediments and the formation of fluid escape structures. *Sedimentology*, **1994**, 41, 233-253	3.3	178
156	Experimental phase equilibria constraints on pre-eruptive storage conditions of the Soufriere Hills magma. *Geophysical Research Letters*, **1998**, 25, 3437-3440	4.9	169
155	Entrainment into two-dimensional and axisymmetric turbulent gravity currents. *Journal of Fluid Mechanics*, **1996**, 308, 289-311	3.7	152
154	How volcanoes work: A 25 year perspective. *Bulletin of the Geological Society of America*, **2013**, 125, 664-690	3.9	148
153	Basanite-Phonolite Lineages of the Teide-Pico Viejo Volcanic Complex, Tenerife, Canary Islands. *Journal of Petrology*, **1998**, 39, 905-936	3.9	147
152	Construction and evolution of igneous bodies: Towards an integrated perspective of crustal magmatism. *Lithos*, **2015**, 230, 206-221	2.9	146
151	The role of magma mixing in triggering the current eruption at the Soufriere Hills Volcano, Montserrat, West Indies. *Geophysical Research Letters*, **1998**, 25, 3433-3436	4.9	145
150	Geophysics. Monitoring volcanoes. *Science*, **2012**, 335, 1310-1	33.3	142
149	Postcumulus processes in layered intrusions. *Geological Magazine*, **1985**, 122, 555-568	2	142
148	Degassing during magma ascent in the Mule Creek vent (USA). *Bulletin of Volcanology*, **1996**, 58, 117-130	2.4	141
147	Periodic behavior in lava dome eruptions. *Earth and Planetary Science Letters*, **2002**, 199, 173-184	5.3	131
146	Magma production and growth of the lava dome of the Soufriere Hills Volcano, Montserrat, West Indies: November 1995 to December 1997. *Geophysical Research Letters*, **1998**, 25, 3421-3424	4.9	131
145	Melt Segregation in Deep Crustal Hot Zones: a Mechanism for Chemical Differentiation, Crustal Assimilation and the Formation of Evolved Magmas. *Journal of Petrology*, **2012**, 53, 1999-2026	3.9	126
144	Global link between deformation and volcanic eruption quantified by satellite imagery. *Nature Communications*, **2014**, 5, 3471	17.4	125
143	Pyroclastic flows generated by gravitational instability of the 1996-97 Lava Dome of Soufriere Hills Volcano, Montserrat. *Geophysical Research Letters*, **1998**, 25, 3425-3428	4.9	124
142	Controls on conduit magma flow dynamics during lava dome building eruptions. *Journal of Geophysical Research*, **2005**, 110,		122
141	The 1984 to 1996 cyclic activity of Lascar Volcano, northern Chile: cycles of dome growth, dome subsidence, degassing and explosive eruptions. *Bulletin of Volcanology*, **1997**, 59, 72-82	2.4	121

140	Chemical differentiation, cold storage and remobilization of magma in the Earth's crust. *Nature*, **2018**, 564, 405-409	50.4	116
139	Geomorphological evolution of Montserrat (West Indies): importance of flank collapse and erosional processes. *Journal of the Geological Society*, **2004**, 161, 147-160	2.7	115
138	The 1975 sub-terminal lavas, mount etna: a case history of the formation of a compound lava field. *Journal of Volcanology and Geothermal Research*, **1976**, 1, 167-182	2.8	115
137	The 1999 and 2000 eruptions of Mount Cameroon: eruption behaviour and petrochemistry of lava. *Bulletin of Volcanology*, **2003**, 65, 267-281	2.4	112
136	Petrologic evidence for pre-eruptive pressure-temperature conditions, and recent reheating, of andesitic magma erupting at the Soufriere Hills Volcano, Montserrat, W.I.. *Geophysical Research Letters*, **1998**, 25, 3669-3672	4.9	105
135	Charge measurements on particle fallout from a volcanic plume. *Nature*, **1991**, 349, 598-600	50.4	105
134	Convection and crystallization in magma cooled from above. *Earth and Planetary Science Letters*, **1990**, 101, 78-89	5.3	102
133	Experimental simulations of explosive degassing of magma. *Nature*, **1994**, 372, 85-88	50.4	101
132	Post-emplacement serpentinization and related hydrothermal metamorphism in a kimberlite from Venetia, South Africa. *Journal of Metamorphic Geology*, **2006**, 24, 515-534	4.4	99
131	Dynamics of magma flow inside volcanic conduits with bubble overpressure buildup and gas loss through permeable magma. *Journal of Volcanology and Geothermal Research*, **2005**, 143, 53-68	2.8	97
130	Petrologic constraints on the decompression history of magma prior to Vulcanian explosions at the Soufrière Hills volcano, Montserrat. *Journal of Volcanology and Geothermal Research*, **2007**, 161, 261-274	2.8	96
129	The nature of erupting kimberlite melts. *Lithos*, **2009**, 112, 429-438	2.9	91
128	Control of magma flow in dykes on cyclic lava dome extrusion. *Geophysical Research Letters*, **2007**, 34,	4.9	91
127	Sedimentation from gravity currents generated by turbulent plumes. *Sedimentology*, **1991**, 38, 839-856	3.3	89
126	Controls of conduit geometry and wallrock elasticity on lava dome eruptions. *Earth and Planetary Science Letters*, **2007**, 260, 137-151	5.3	88
125	Submarine pyroclastic deposits formed at the Soufrière Hills volcano, Montserrat (1995–2003): What happens when pyroclastic flows enter the ocean?. *Geology*, **2006**, 34, 549	5	87
124	The explosive eruption of Soufriere Hills Volcano, Montserrat, West Indies, 17 September, 1996. *Geophysical Research Letters*, **1998**, 25, 3429-3432	4.9	86
123	Dense welding caused by volatile resorption. *Journal of the Geological Society*, **1999**, 156, 217-225	2.7	86

122	Erosion by pyroclastic flows on Lascar Volcano, Chile. *Bulletin of Volcanology*, **1997**, 58, 557-565	2.4	85
121	The 1973 Heimaey Strombolian Scoria deposit, Iceland. *Geological Magazine*, **1974**, 111, 539-548	2	84
120	Chapter 1 An overview of the eruption of Soufrière Hills Volcano, Montserrat from 2000 to 2010. *Geological Society Memoir*, **2014**, 39, 1.1-40	0.4	83
119	Formation and dynamics of magma reservoirs. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2019**, 377, 20180019	3	82
118	On the variations of flow rate in non-explosive lava eruptions. *Earth and Planetary Science Letters*, **1993**, 114, 505-516	5.3	81
117	Crustal-scale degassing due to magma system destabilization and magma-gas decoupling at Soufrière Hills Volcano, Montserrat. *Geochemistry, Geophysics, Geosystems*, **2015**, 16, 2797-2811	3.6	79
116	Entrainment in turbulent gravity currents. *Nature*, **1993**, 362, 829-831	50.4	79
115	Kimberlite Volcanism. *Annual Review of Earth and Planetary Sciences*, **2013**, 41, 497-528	15.3	78
114	Thermodynamics and fluid dynamics of effusive subglacial eruptions. *Bulletin of Volcanology*, **1997**, 59, 219-230	2.4	77
113	Unprecedented pressure increase in deep magma reservoir triggered by lava-dome collapse. *Geophysical Research Letters*, **2006**, 33,	4.9	75
112	The volcanic evolution of Montserrat using 40Ar/39Ar geochronology. *Geological Society Memoir*, **2002**, 21, 93-113	0.4	75
111	The volcanological significance of deep-sea ash layers associated with ignimbrites. *Geological Magazine*, **1980**, 117, 425-436	2	72
110	The role of fluidisation in the formation of volcaniclastic kimberlite: Grain size observations and experimental investigation. *Journal of Volcanology and Geothermal Research*, **2006**, 155, 119-137	2.8	71
109	Dynamics of magma degassing. *Geological Society Special Publication*, **2003**, 213, 5-22	1.7	67
108	Morphological, structural and textural variations in the 1988–1990 andesite lava of Lonquimay Volcano, Chile. *Geological Magazine*, **1992**, 129, 657-678	2	67
107	Temperature changes in ascending kimberlite magma. *Earth and Planetary Science Letters*, **2009**, 286, 404-413	5.3	65
106	Sedimentation of particles from a convecting fluid. *Nature*, **1990**, 343, 447-450	50.4	65
105	The Los Chocoyos Ash, Guatemala: A Major Stratigraphic Marker in Middle America and in Three Ocean Basins. *Quaternary Research*, **1980**, 13, 327-345	1.9	65

104	The volatile content of hypabyssal kimberlite magmas: some constraints from experiments on natural rock compositions. *Bulletin of Volcanology*, **2011**, 73, 959-981	2.4	62
103	The 1995–1998 eruption of the Soufrière Hills volcano, Montserrat, WI. *Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences*, **2000**, 358, 1619-1637	3	61
102	Distribution of volcanoes in active margins. *Journal of Geophysical Research*, **1995**, 100, 20421-20432		60
101	Modelling ground deformation caused by oscillating overpressure in a dyke conduit at Soufrière Hills Volcano, Montserrat. *Tectonophysics*, **2009**, 471, 87-95	3.1	59
100	The eruption of Soufrière Hills Volcano, Montserrat (1995-1999): overview of scientific results. *Geological Society Memoir*, **2002**, 21, 45-69	0.4	59
99	Magma chamber properties from integrated seismic tomography and thermal modeling at Montserrat. *Geochemistry, Geophysics, Geosystems*, **2012**, 13, n/a-n/a	3.6	56
98	The 2001–2004 dome-forming eruption of Shiveluch volcano, Kamchatka: Observation, petrological investigation and numerical modelling. *Journal of Volcanology and Geothermal Research*, **2006**, 155, 201-226	2.8	56
97	Upper crustal structure of an active volcano from refraction/reflection tomography, Montserrat, Lesser Antilles. *Geophysical Journal International*, **2010**, 180, 685-696	2.6	55
96	Thermal models of dyke intrusion during development of continent–ocean transition. *Earth and Planetary Science Letters*, **2014**, 385, 145-153	5.3	53
95	Shallow-level decompression crystallisation and deep magma supply at Shiveluch Volcano. *Contributions To Mineralogy and Petrology*, **2007**, 155, 45-61	3.5	53
94	The sources of granitic melt in Deep Hot Zones. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **2008**, 97, 297-309		50
93	Bifurcation of volcanic plumes in a crosswind. *Bulletin of Volcanology*, **1994**, 56, 159-169	2.4	50
92	Origin of rhyolite and rhyodacite lavas and associated mafic inclusions of Cape Akrotiri, Santorini: the role of wet basalt in generating calcalkaline silicic magmas. *Contributions To Mineralogy and Petrology*, **2004**, 146, 397-413	3.5	49
91	Petrology and geochemistry of the Loch Ba ring-dyke, Mull (N.W. Scotland): an example of the extreme differentiation of tholeiitic magmas. *Contributions To Mineralogy and Petrology*, **1988**, 100, 446-461	3.5	48
90	Gas-fluidisation in an experimental tapered bed: Insights into processes in diverging volcanic conduits. *Journal of Volcanology and Geothermal Research*, **2008**, 174, 49-56	2.8	45
89	Effect of mechanical heterogeneity in arc crust on volcano deformation with application to Soufrière Hills Volcano, Montserrat, West Indies. *Journal of Geophysical Research*, **2010**, 115,		44
88	Evolution of major and trace element composition during melt migration through crystalline mush: Implications for chemical differentiation in the crust. *Numerische Mathematik*, **2014**, 314, 895-939	5.3	43
87	Eruption of kimberlite magmas: physical volcanology, geomorphology and age of the youngest kimberlitic volcanoes known on earth (the Upper Pleistocene/Holocene Igwisi Hills volcanoes, Tanzania). *Bulletin of Volcanology*, **2012**, 74, 1621-1643	2.4	43

86	Revised estimates for the volume of the Late Bronze Age Minoan eruption, Santorini, Greece. *Journal of the Geological Society*, **2014**, 171, 583-590	2.7	42
85	From Vulcanian explosions to sustained explosive eruptions: The role of diffusive mass transfer in conduit flow dynamics. *Journal of Volcanology and Geothermal Research*, **2006**, 153, 148-165	2.8	42
84	Behaviour of particle-laden flows into the ocean: experimental simulation and geological implications. *Sedimentology*, **1999**, 46, 523-536	3.3	42
83	Mechanically disrupted and chemically weakened zones in segmented dike systems cause vent localization: Evidence from kimberlite volcanic systems. *Geology*, **2007**, 35, 815	5	41
82	Long term exposure to respirable volcanic ash on Montserrat: a time series simulation. *Bulletin of Volcanology*, **2006**, 68, 266-284	2.4	39
81	The differentiation of the Skaergaard intrusion. *Contributions To Mineralogy and Petrology*, **1990**, 104, 248-251	3.5	39
80	Fiamme formed by diagenesis and burial-compaction in soils and subaqeuous sediments. *Journal of the Geological Society*, **1990**, 147, 919-922	2.7	39
79	The role of gas-fluidisation in the formation of massive volcaniclastic kimberlite. *Lithos*, **2009**, 112, 439-451	2.9	37
78	Geology of a complex kimberlite pipe (K2 pipe, Venetia Mine, South Africa): insights into conduit processes during explosive ultrabasic eruptions. *Bulletin of Volcanology*, **2009**, 71, 95-112	2.4	37
77	The dynamics of xenolith assimilation. *Contributions To Mineralogy and Petrology*, **1998**, 132, 21-33	3.5	37
76	Hornblende dehydration reactions during magma ascent at Soufrière Hills Volcano, Montserrat. *Contributions To Mineralogy and Petrology*, **2006**, 151, 121-140	3.5	37
75	Three-dimensional seismic velocity tomography of Montserrat from the SEA-CALIPSO offshore/onshore experiment. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	36
74	The Ground Surge Deposit: a Third Type of Pyroclastic Rock. *Nature: Physical Science*, **1973**, 241, 62-64		35
73	Synthesis: PLUTONS: Investigating the relationship between pluton growth and volcanism in the Central Andes **2018**, 14, 954-982		34
72	Cyclic activity at Soufrière Hills Volcano, Montserrat: degassing-induced pressurization and stick-slip extrusion. *Geological Society Special Publication*, **2008**, 307, 169-188	1.7	33
71	Physical characteristics of tephra layers in the deep sea realm: the Campanian Ignimbrite eruption. *Geological Society Special Publication*, **2014**, 398, 47-64	1.7	32
70	Evolution of crust- and core-dominated lava flows using scaling analysis. *Bulletin of Volcanology*, **2013**, 75, 1	2.4	32
69	On the Welding of Pyroclasts from Very Low-Viscosity Magmas: Examples from Kimberlite Volcanoes. *Journal of Geology*, **2008**, 116, 354-374	2	31

68	Non-explosive, constructional evolution of the ice-filled caldera at Volcán Sollipulli, Chile. *Bulletin of Volcanology*, **1996**, 58, 67-83	2.4	31
67	Similarities and differences in the historical records of lava dome-building volcanoes: Implications for understanding magmatic processes and eruption forecasting. *Earth-Science Reviews*, **2016**, 160, 240-263	10.2	31
66	Hydrothermal alteration of kimberlite by convective flows of external water. *Contributions To Mineralogy and Petrology*, **2014**, 168, 1038	3.5	30
65	An objective method for the production of isopach maps and implications for the estimation of tephra deposit volumes and their uncertainties. *Bulletin of Volcanology*, **2015**, 77, 61	2.4	29
64	The global magnitude–frequency relationship for large explosive volcanic eruptions. *Earth and Planetary Science Letters*, **2018**, 482, 621-629	5.3	29
63	A stress-controlled mechanism for the intensity of very large magnitude explosive eruptions. *Earth and Planetary Science Letters*, **2011**, 310, 161-166	5.3	28
62	Perovskite from the Dutoitspan kimberlite, Kimberley, South Africa: implications for magmatic processes. *Mineralogical Magazine*, **2009**, 73, 915-928	1.7	27
61	Strain field analysis on Montserrat (W.I.) as tool for assessing permeable flow paths in the magmatic system of Soufrière Hills Volcano. *Geochemistry, Geophysics, Geosystems*, **2014**, 15, 676-690	3.6	26
60	Risk perceptions and trust following the 2010 and 2011 Icelandic volcanic ash crises. *Risk Analysis*, **2015**, 35, 332-43	3.9	26
59	KIMBERLITE SILLS AND DYKES ASSOCIATED WITH THE WESSELTON KIMBERLITE PIPE, KIMBERLEY, SOUTH AFRICA. *South African Journal of Geology*, **2012**, 115, 1-32	1.6	26
58	Variations of olivine abundance and grain size in the Snap Lake kimberlite intrusion, Northwest Territories, Canada: A possible proxy for diamonds. *Lithos*, **2009**, 112, 23-35	2.9	26
57	Growth of bultfonteinite and hydrogarnet in metasomatized basalt xenoliths in the B/K9 kimberlite, Damtshaa, Botswana: insights into hydrothermal metamorphism in kimberlite pipes. *Contributions To Mineralogy and Petrology*, **2010**, 160, 533-550	3.5	26
56	Global volcanic hazard and risk81-172		25
55	Degassing structures in volcaniclastic kimberlite: Examples from southern African kimberlite pipes. *Journal of Volcanology and Geothermal Research*, **2008**, 174, 186-194	2.8	25
54	Melting of a sphere in hot fluid. *Journal of Fluid Mechanics*, **1996**, 327, 393-409	3.7	24
53	Magma Emplacement Rates and Porphyry Copper Deposits: Thermal Modeling of the Yerington Batholith, Nevada. *Economic Geology*, **2017**, 112, 1653-1672	4.3	23
52	Vertically Extensive Magma Reservoir Revealed From Joint Inversion and Quantitative Interpretation of Seismic and Gravity Data. *Journal of Geophysical Research: Solid Earth*, **2019**, 124, 11170-11191	3.6	23
51	Timing, origin and emplacement dynamics of mass flows offshore of SE Montserrat in the last 110 ka: Implications for landslide and tsunami hazards, eruption history, and volcanic island evolution. *Geochemistry, Geophysics, Geosystems*, **2013**, 14, 385-406	3.6	23

50	Depositional processes in a kimberlite crater: the Upper Cretaceous Orapa South Pipe (Botswana). *Sedimentology*, **2009**, 56, 623-643	3.3	22
49	Scientists□views about lay perceptions of volcanic hazard and risk. *Journal of Applied Volcanology*, **2014**, 3,	2.6	19
48	Degassing in kimberlite: Oxygen isotope ratios in perovskites from explosive and hypabyssal kimberlites. *Earth and Planetary Science Letters*, **2011**, 312, 291-299	5.3	19
47	Explosion dynamics from strainmeter and microbarometer observations, Soufri□e Hills Volcano, Montserrat: 2008□2009. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	19
46	Dynamics of co-ignimbrite plumes generated from pyroclastic flows of Mount St. Helens (7 August 1980). *Bulletin of Volcanology*, **1997**, 58, 432-440	2.4	19
45	Petrology, geochemistry and low-temperature alteration of lavas and pyroclastic rocks of the kimberlitic Igwisi Hills volcanoes, Tanzania. *Chemical Geology*, **2015**, 405, 82-101	4.2	18
44	Emplacement temperatures of pyroclastic and volcaniclastic deposits in kimberlite pipes in southern Africa. *Bulletin of Volcanology*, **2011**, 73, 1063-1083	2.4	18
43	Pyroclastic flow deposits from a kimberlite eruption: The Orapa South Crater, Botswana. *Lithos*, **2009**, 112, 566-578	2.9	17
42	Rapid emergency assessment of ash and gas hazard for future eruptions at Santorini Volcano, Greece. *Journal of Applied Volcanology*, **2015**, 4,	2.6	16
41	Contrasts in morphology and deformation offshore Montserrat: New insights from the SEA-CALIPSO marine cruise data. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	16
40	The Gravitational Stability of Lenses in Magma Mushes: Confined Rayleigh-Taylor Instabilities. *Journal of Geophysical Research: Solid Earth*, **2018**, 123, 3593-3607	3.6	15
39	Quantification of the Intrusive Magma Fluxes during Magma Chamber Growth at Soufri□e Hills Volcano (Montserrat, Lesser Antilles). *Journal of Petrology*, **2014**, 55, 529-548	3.9	15
38	Unique strainmeter observations of Vulcanian explosions, Soufri□e Hills Volcano, Montserrat, July 2003. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	15
37	Geology of the Snap Lake kimberlite intrusion, Northwest Territories, Canada: field observations and their interpretation. *Journal of the Geological Society*, **2012**, 169, 1-16	2.7	15
36	Transtensional deformation of Montserrat revealed by shear wave splitting. *Earth and Planetary Science Letters*, **2015**, 425, 179-186	5.3	14
35	Morphology and structure of the 1999 lava flows at Mount Cameroon Volcano (West Africa) and their bearing on the emplacement dynamics of volume-limited flows. *Geological Magazine*, **2011**, 148, 22-34	2	14
34	Lesions associated with mineral deposition in the lymph node and lung of the dog. *Veterinary Pathology*, **1996**, 33, 29-42	2.8	13
33	Kimberlite ascent and eruption. *Nature*, **2007**, 450, E21; discussion E22	50.4	12

32	The ~2 ka subplinian eruption of Montaña Blanca, Tenerife. *Bulletin of Volcanology*, **1995**, 57, 337-355	2.4	12
31	Problems with an in-vent column collapse model for the emplacement of massive volcaniclastic kimberlite. A discussion of 'In-vent column collapse as an alternative model for massive volcaniclastic kimberlite emplacement: An example from the Fox kimberlite, Ekati Diamond Mine, NWT, Canada' by Porritt et al. [J. Volcanol. Geotherm. Res. 174, 90-102]. *Journal of Volcanology and*	2.8	11
30	Causes of fragmented crystals in ignimbrites: a case study of the Cardones ignimbrite, Northern Chile. *Bulletin of Volcanology*, **2018**, 80, 1	2.4	10
29	Risk and uncertainty assessment of volcanic hazards364-397		10
28	Understanding causality and uncertainty in volcanic observations: An example of forecasting eruptive activity on Soufrière Hills Volcano, Montserrat. *Journal of Volcanology and Geothermal Research*, **2017**, 341, 287-300	2.8	9
27	Petrogenesis of the Large-volume Cardones Ignimbrite, Chile; Development and Destabilization of a Complex Magma Mush System. *Journal of Petrology*, **2017**, 58, 1975-2006	3.9	9
26	An introduction to global volcanic hazard and risk1-80		9
25	The economic potential of metalliferous sub-volcanic brines. *Royal Society Open Science*, **2021**, 8, 202192	3.3	9
24	Geology of the Don Manuel igneous complex, central Chile: Implications for igneous processes in porphyry copper systems. *Bulletin of the Geological Society of America*, **2017**, 129, 920-946	3.9	8
23	Using ignimbrites to quantify structural relief growth and understand deformation processes: Implications for the development of the Western Andean Slope, northernmost Chile. *Lithosphere*, **2017**, 9, 29-45	2.7	8
22	Risk perception at a persistently active volcano: warnings and trust at Popocatépetl volcano in Mexico, 2012–2014. *Bulletin of Volcanology*, **2018**, 80, 1	2.4	8
21	Fracture and surface crust development in a Holocene pahoehoe lava flow on the Island of Tenerife, Canaries. *Journal of Structural Geology*, **2001**, 23, 165-182	3	7
20	Kimberlite Volcanology: Transport, Ascent, and Eruption. *Elements*, **2019**, 15, 405-410	3.8	7
19	Timescales of magma degassing Insights from U-series disequilibria, Mount Cameroon, West Africa. *Journal of Volcanology and Geothermal Research*, **2013**, 262, 38-46	2.8	6
18	Petrogenesis and Assembly of the Don Manuel Igneous Complex, Miocene–Pliocene Porphyry Copper Belt, Central Chile. *Journal of Petrology*, **2018**, 59, 1067-1108	3.9	5
17	Quantifying threat from COVID-19 infection hazard in Primary Schools in England		5
16	New insights into source and dispersal of Mediterranean S1 tephra, an early Holocene marker horizon erupted at Mt. Erciyes (Turkey). *Quaternary Science Reviews*, **2020**, 249, 106606	3.9	5
15	Geology of the BK9 kimberlite (Damtshaa, Botswana): implications for the formation of dark volcaniclastic kimberlite. *Bulletin of Volcanology*, **2011**, 73, 1029-1045	2.4	4

List of Publications

14	Comment on: The structure and petrogenesis of the Trallval and Ruinsival areas of the Rhum ultrabasic pluton by J. A. Volker and B. G. J. Upton. *Transactions of the Royal Society of Edinburgh: Earth Sciences*, **1991**, 82, 389-390		4
13	Chapter 15 The SEA-CALIPSO volcano imaging experiment at Montserrat: plans, campaigns at sea and on land, scientific results, and lessons learned. *Geological Society Memoir*, **2014**, 39, 253-289	0.4	3
12	A novel approach for evaluating contact patterns and risk mitigation strategies for COVID-19 in English primary schools with application of structured expert judgement. *Royal Society Open Science*, **2021**, 8, 201566	3.3	3
11	Origen y emplazamiento del Domo Tinto, volcán Guallatiri, Norte de Chile.. *Andean Geology*, **2014**, 41,	2.4	2
10	Opportunities for Innovative Publishing in the Electronic Age?. *Eos*, **2013**, 94, 116-116	1.5	1
9	Columnar-jointed bentonite below a Doleritic Sill, Tideswell Dale, Derbyshire, UK: formation during prograde contact metamorphism. *Geological Magazine*, **2020**, 157, 1181-1198	2	1
8	Analysis of alternative Covid-19 mitigation measures in school classrooms: an agent-based model of SARS-CoV-2 transmission		1
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