

# Geoffrey Wadge

## List of Publications by Year in descending order

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49  
papers

2,058  
citations

218677  
26  
h-index

233421  
45  
g-index

49  
all docs

49  
docs citations

49  
times ranked

1570  
citing authors

#	ARTICLE	IF	CITATIONS
1	The variation of magma discharge during basaltic eruptions. Journal of Volcanology and Geothermal Research, 1981, 11, 139-168.	2.1	255
2	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.	4.0	157
3	Steady state volcanism: Evidence from eruption histories of polygenetic volcanoes. Journal of Geophysical Research, 1982, 87, 4035-4049.	3.3	134
4	Chapter 1 An overview of the eruption of Soufrière Hills Volcano, Montserrat from 2000 to 2010. Geological Society Memoir, 2014, 39, 1-40.	1.7	114
5	Atmospheric models, GPS and InSAR measurements of the tropospheric water vapour field over Mount Etna. Geophysical Research Letters, 2002, 29, 11-1-11-4.	4.0	101
6	Inferring the lithology of borehole rocks by applying neural network classifiers to downhole logs: an example from the Ocean Drilling Program. Geophysical Journal International, 1999, 136, 477-491.	2.4	85
7	Measuring large topographic change with InSAR: Lava thicknesses, extrusion rate and subsidence rate at Santiaguito volcano, Guatemala. Earth and Planetary Science Letters, 2012, 335-336, 216-225.	4.4	82
8	Lava production at Soufrière Hills Volcano, Montserrat: 1995–2009. Geophysical Research Letters, 2010, 37, .	4.0	69
9	Rapid topographic change measured by high-resolution satellite radar at Soufriere Hills Volcano, Montserrat, 2008–2010. Journal of Volcanology and Geothermal Research, 2011, 199, 142-152.	2.1	68
10	Simple stochastic modelling of the eruption history of a basaltic volcano: Nyamuragira, Zaire. Bulletin of Volcanology, 1994, 56, 87-97.	3.0	66
11	Growth of the lava dome and extrusion rates at Soufrière Hills Volcano, Montserrat, West Indies: 2005–2008. Geophysical Research Letters, 2010, 37, .	4.0	52
12	The magma budget of Volcan Arenal, Costa Rica from 1968 to 1980. Journal of Volcanology and Geothermal Research, 1983, 19, 281-302.	2.1	48
13	Ground deformation at Soufrière Hills Volcano, Montserrat during 1998–2000 measured by radar interferometry and GPS. Journal of Volcanology and Geothermal Research, 2006, 152, 157-173.	2.1	46
14	Stress field control of eruption dynamics at a rift volcano: Nyamuragira, D.R.Congo. Journal of Volcanology and Geothermal Research, 2011, 207, 1-15.	2.1	45
15	Lava dome growth and mass wasting measured by a time series of ground-based radar and seismicity observations. Journal of Geophysical Research, 2008, 113, .	3.3	43
16	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.	9.1	42
17	The magma budget of Volcán Arenal, Costa Rica from 1980 to 2004. Journal of Volcanology and Geothermal Research, 2006, 157, 60-74.	2.1	41
18	Decaying Lava Extrusion Rate at El Reventador Volcano, Ecuador, Measured Using High-Resolution Satellite Radar. Journal of Geophysical Research: Solid Earth, 2017, 122, 9966-9988.	3.4	41

#	ARTICLE	IF	CITATIONS
19	Insights into processes and deposits of hazardous vulcanian explosions at Soufrière Hills Volcano during 2008 and 2009 (Montserrat, West Indies). <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	40
20	The application of imaging spectrometry data to mapping alteration zones associated with gold mineralization in southern Spain. <i>International Journal of Remote Sensing</i> , 1996, 17, 331-350.	2.9	39
21	Historical Volcanism and the State of Stress in the East African Rift System. <i>Frontiers in Earth Science</i> , 2016, 4, .	1.8	37
22	Chapter 2 Cyclic phenomena at the Soufrière Hills Volcano, Montserrat. <i>Geological Society Memoir</i> , 2014, 39, 41-60.	1.7	34
23	The effects of vegetation on the ability to map soils using imaging spectrometer data. <i>International Journal of Remote Sensing</i> , 1994, 15, 63-86.	2.9	32
24	The potential of GIS modelling of gravity flows and slope instabilities. <i>International Journal of Geographical Information Science</i> , 1988, 2, 143-152.	4.8	30
25	Numerical modelling of the growth dynamics of a simple silicic lava dome. <i>Geophysical Research Letters</i> , 2003, 30, .	4.0	28
26	Towards Operational Repeat-Pass SAR Interferometry at Active Volcanoes. <i>Natural Hazards</i> , 2004, 33, 47-76.	3.4	27
27	Using satellite radar amplitude imaging for monitoring syn-eruptive changes in surface morphology at an ice-capped stratovolcano. <i>Remote Sensing of Environment</i> , 2018, 209, 480-488.	11.0	26
28	Post-emplacement lava subsidence and the accuracy of ERS InSAR digital elevation models of volcanoes. <i>International Journal of Remote Sensing</i> , 2001, 22, 819-828.	2.9	23
29	Spaceborne radar measurements of the eruption of Soufrière Hills Volcano, Montserrat. <i>Geological Society Memoir</i> , 2002, 21, 583-594.	1.7	23
30	Use of a portable topographic mapping millimetre wave radar at an active lava flow. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	21
31	Pulsatory andesite lava flow at Bagana Volcano. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	2.5	21
32	Dome growth, collapse, and valley fill at Soufrière Hills Volcano, Montserrat, from 1995 to 2013: Contributions from satellite radar measurements of topographic change. , 2016, 12, 1300-1315.		21
33	Identification and analysis of the alignments of point-like features in remotely-sensed imagery: Volcanic cones in the Pinacate Volcanic Field, Mexico. <i>International Journal of Remote Sensing</i> , 1989, 10, 455-474.	2.9	18
34	Evaporation of groundwater from arid playas measured by c-band sar. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2003, 41, 1641-1650.	6.3	18
35	Coupled subdaily and multiweek cycles during the lava dome eruption of Soufrière Hills Volcano, Montserrat. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 1895-1903.	3.4	17
36	Modeling the backscatter response due to salt crust development. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2001, 39, 2307-2310.	6.3	16

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37	A strategy for the observation of volcanism on Earth from space. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2003, 361, 145-156.	3.4	16
38	Lava flow morphology at an erupting andesitic stratovolcano: A satellite perspective on El Reventador, Ecuador. Journal of Volcanology and Geothermal Research, 2019, 372, 34-47.	2.1	14
39	Monitoring playa sedimentation using sequential radar images. Terra Nova, 1994, 6, 391-396.	2.1	12
40	Persistent growth of a young andesite lava cone: Bagana volcano, Papua New Guinea. Journal of Volcanology and Geothermal Research, 2018, 356, 304-315.	2.1	11
41	An objective method for mapping hazardous flow deposits from the stratigraphic record of stratovolcanoes: a case example from Montagne Pelée. Bulletin of Volcanology, 2001, 63, 98-111.	3.0	8
42	Multi-year Satellite Observations of Sulfur Dioxide Gas Emissions and Lava Extrusion at Bagana Volcano, Papua New Guinea. Frontiers in Earth Science, 2019, 7, .	1.8	8
43	The Variability of Refractivity in the Atmospheric Boundary Layer of a Tropical Island Volcano Measured by Ground-Based Interferometric Radar. Boundary-Layer Meteorology, 2016, 161, 309-333.	2.3	7
44	Chapter 13 AVTIS observations of lava dome growth at Soufrière Hills Volcano, Montserrat: 2004 to 2011. Geological Society Memoir, 2014, 39, 229-240.	1.7	6
45	Mapping water vapour variability over a mountainous tropical island using InSAR and an atmospheric model for geodetic observations. Remote Sensing of Environment, 2020, 237, 111560.	11.0	5
46	Imaging a growing lava dome with a portable radar. Eos, 2006, 87, 226.	0.1	4
47	Geological Lineament Detection Using The Hough Transform. , 0, , .		3
48	Geological remote sensing of rocky coasts. Geological Magazine, 1988, 125, 495-505.	1.5	3
49	Simple stochastic modelling of the eruption history of a basaltic volcano: Nyamuragira, Zaire. Bulletin of Volcanology, 1994, 56, 87-97.	3.0	1