Mike R James

List of Publications by Year
in descending order

107 papers	7,158 citations	71061 41 h-index	58549 82 g-index
116 all docs	116 docs citations	116 times ranked	6213 citing authors

#	Article	IF	Citations
1	An Integrated Modeling Approach for Analyzing the Deformation Style of Active Volcanoes: Sommaâ€Vesuvius Case Study. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	3
2	Refining an ensemble of volcanic ash forecasts using satellite retrievals: Raikoke 2019. Atmospheric Chemistry and Physics, 2022, 22, 6115-6134.	1.9	4
3	A novel experimental chamber for the characterization of free-falling particles in volcanic plumes. Review of Scientific Instruments, 2022, 93, .	0.6	2
4	Geodetic Applications to Geomorphology. , 2021, , .		1
5	Correcting for Systematic Underestimation of Topographic Glacier Aerodynamic Roughness Values From Hintereisferner, Austria. Frontiers in Earth Science, 2021, 9, .	0.8	3
6	Pressure-Driven Opening and Filling of a Volcanic Hydrofracture Recorded by Tuffisite at HÃºsafell, Iceland: A Potential Seismic Source. Frontiers in Earth Science, 2021, 9, .	0.8	7
7	Reproducibility, open science and progression in soil erosion research. A reply to â€œResponse to â€˜National-scale geodata describe widespread accelerated soil erosionâ€™ Benaud et al. (2020) Geoderma 271, 114378â€•by Evans and Boardman (2021). Geoderma, 2021, 402, 115181.	2.3	1
8	Analogue experiments on the rise of large bubbles through a solids-rich suspension: A â€œweak plugâ€• model for Strombolian eruptions. Earth and Planetary Science Letters, 2020, 531, 115931.	1.8	34
9	Post-fragmentation vesiculation timescales in hydrous rhyolitic bombs from ChaitÃ©n volcano. Journal of South American Earth Sciences, 2020, 104, 102807.	0.6	8
10	National-scale geodata describe widespread accelerated soil erosion. Geoderma, 2020, 371, 114378.	2.3	39
11	High-resolution monitoring of diffuse (sheet or interrill) erosion using structure-from-motion. Geoderma, 2020, 375, 114477.	2.3	30
12	Glacial Aerodynamic Roughness Estimates: Uncertainty, Sensitivity, and Precision in Field Measurements. Journal of Geophysical Research F: Earth Surface, 2020, 125, e2019JF005167.	1.0	9
13	Current Practices in UAS-based Environmental Monitoring. Remote Sensing, 2020, 12, 1001.	1.8	135
14	Mitigating systematic error in topographic models for geomorphic change detection: accuracy, precision and considerations beyond offâ€•nadir imagery. Earth Surface Processes and Landforms, 2020, 45, 2251-2271.	1.2	67
15	Volcanological applications of unoccupied aircraft systems (UAS): Developments, strategies, and future challenges. Volcanica, 2020, 3, 67-114.	0.6	63
16	Sediment source and volume of soil erosion in a gully system using UAV photogrammetry. Revista Brasileira De Ciencia Do Solo, 2020, 44, .	0.5	8
17	Characterizing beach intertidal bar systems using multiâ€•annual LiDAR data. Earth Surface Processes and Landforms, 2019, 44, 1572-1583.	1.2	18
18	Insights Into PÄhoehoe Lava Emplacement Using Visible and Thermal Structureâ€Fromâ€Motion Photogrammetry. Journal of Geophysical Research: Solid Earth, 2019, 124, 5678-5695.	1.4	12

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19	Guidelines on the use of structureâ€fromâ€motion photogrammetry in geomorphic research. Earth Surface Processes and Landforms, 2019, 44, 2081-2084.	1.2	178
20	Low-budget topographic surveying comes of age: Structure from motion photogrammetry in geography and the geosciences. Progress in Physical Geography, 2019, 43, 163-173.	1.4	49
21	Crowd-sourcing structure-from- motion data for terrain modelling in a real-world disaster scenario: A proof of concept. Progress in Physical Geography, 2019, 43, 236-259.	1.4	4
22	The origin and evolution of breakouts in a cooling-limited rhyolite lava flow. Bulletin of the Geological Society of America, 2019, 131, 137-154.	1.6	11
23	Supraglacial lake drainage at a fast-flowing Greenlandic outlet glacier. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 25468-25477.	3.3	41
24	High precision tracing of soil and sediment movement using fluorescent tracers at hillslope scale. Earth Surface Processes and Landforms, 2019, 44, 1091-1099.	1.2	5
25	Implementing an efficient beach erosion monitoring system for coastal management in Croatia. Ocean and Coastal Management, 2018, 156, 223-238.	2.0	39
26	Using picosatellites for 4-D imaging of volcanic clouds: Proof of concept using ISS photography of the 2009 Sarychev Peak eruption. Remote Sensing of Environment, 2018, 210, 519-530.	4.6	10
27	Structure-from-Motion (SfM) monitoring of nourished gravel beaches in Croatia. , 2018, , .		2
28	The viscosity of pÄhoehoe lava: In situ syn-eruptive measurements from Kilauea, Hawaii. Earth and Planetary Science Letters, 2018, 493, 161-171.	1.8	32
29	Using real time particle tracking to understand soil particle movements during rainfall events. Catena, 2017, 150, 32-38.	2.2	23
30	3â€D uncertaintyâ€based topographic change detection with structureâ€fromâ€motion photogrammetry: precision maps for ground control and directly georeferenced surveys. Earth Surface Processes and Landforms, 2017, 42, 1769-1788.	1.2	322
31	Cameras and settings for aerial surveys in the geosciences. Progress in Physical Geography, 2017, 41, 325-344.	1.4	78
32	The implications of gas slug ascent in a stratified magma for acoustic and ground deformation source mechanisms in Strombolian eruptions. Earth and Planetary Science Letters, 2017, 468, 101-111.	1.8	13
33	Optimising UAV topographic surveys processed with structure-from-motion: Ground control quality, quantity and bundle adjustment. Geomorphology, 2017, 280, 51-66.	1.1	440
34	Thermal photogrammetric imaging: A new technique for monitoring dome eruptions. Journal of Volcanology and Geothermal Research, 2017, 337, 140-145.	0.8	39
35	Testing the utility of structureâ€fromâ€motion photogrammetry reconstructions using small unmanned aerial vehicles and ground photography to estimate the extent of upland soil erosion. Earth Surface Processes and Landforms, 2017, 42, 1860-1871.	1.2	73
36	The dynamics of slug trains in volcanic conduits: Evidence for expansion driven slug coalescence. Journal of Volcanology and Geothermal Research, 2017, 348, 26-35.	0.8	11

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37	Quantifying ice cliff evolution with multi-temporal point clouds on the debris-covered Khumbu Glacier, Nepal. Journal of Glaciology, 2017, 63, 823-837.	1.1	48
38	Emplacing a Cooling-Limited Rhyolite Lava Flow: Similarities with Basaltic Lava Flows. Frontiers in Earth Science, 2017, 5, .	0.8	17
39	Pointcatcher software: analysis of glacial time-lapse photography and integration with multitemporal digital elevation models. Journal of Glaciology, 2016, 62, 159-169.	1.1	22
40	Conduit dynamics and post explosion degassing on Stromboli: A combined UV camera and numerical modeling treatment. Geophysical Research Letters, 2016, 43, 5009-5016.	1.5	21
41	Volcano dome dynamics at Mount St. Helens: Deformation and intermittent subsidence monitored by seismicity and camera imagery pixel offsets. Journal of Geophysical Research: Solid Earth, 2016, 121, 7882-7902.	1.4	26
42	Gas slug ascent in a stratified magma: Implications of flow organisation and instability for Strombolian eruption dynamics. Earth and Planetary Science Letters, 2016, 435, 159-170.	1.8	32
43	Examining rhyolite lava flow dynamics through photo-based 3D reconstructions of the 2011â€“2012 lava flowfield at CordÃ³n-Caulle, Chile. Journal of Volcanology and Geothermal Research, 2015, 304, 336-348.	0.8	50
44	Quantifying Effusion Rates at Active Volcanoes through Integrated Time-Lapse Laser Scanning and Photography. Remote Sensing, 2015, 7, 14967-14987.	1.8	29
45	SF3M software: 3-D photo-reconstruction for non-expert users and its application to a gully network. Soil, 2015, 1, 583-594.	2.2	38
46	Dynamics of mild strombolian activity on Mt. Etna. Journal of Volcanology and Geothermal Research, 2015, 300, 103-111.	0.8	26
47	Viscous plugging can enhance and modulate explosivity of strombolian eruptions. Earth and Planetary Science Letters, 2015, 423, 210-218.	1.8	47
48	Ultraâ€rapid topographic surveying for complex environments: the handâ€held mobile laser scanner (HMLS). Earth Surface Processes and Landforms, 2014, 39, 138-142.	1.2	55
49	Mitigating systematic error in topographic models derived from UAV and groundâ€based image networks. Earth Surface Processes and Landforms, 2014, 39, 1413-1420.	1.2	605
50	Evaluation of structure from motion for soil microtopography measurement. Photogrammetric Record, 2014, 29, 297-316.	0.4	30
51	The normalized topographic method: an automated procedure for gully mapping using GIS. Earth Surface Processes and Landforms, 2014, 39, 2002-2015.	1.2	55
52	Ground-based and UAV-Based photogrammetry: A multi-scale, high-resolution mapping tool for structural geology and paleoseismology. Journal of Structural Geology, 2014, 69, 163-178.	1.0	529
53	Sequential digital elevation models of active lava flows from ground-based stereo time-lapse imagery. ISPRS Journal of Photogrammetry and Remote Sensing, 2014, 97, 160-170.	4.9	63
54	The influence of cross-sectional channel geometry on rheology and flux estimates for active lava flows. Bulletin of Volcanology, 2014, 76, 1.	1.1	23

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55	Chapter 13 AVTIS observations of lava dome growth at SoufriÃ¨re Hills Volcano, Montserrat: 2004 to 2011. Geological Society Memoir, 2014, 39, 229-240.	0.9	6
56	Shallow vent architecture during hybrid explosiveâ€“effusive activity at CordÃ³n Caulle (Chile, 2011â€“12): Evidence from direct observations and pyroclast textures. Journal of Volcanology and Geothermal Research, 2013, 262, 25-37.	0.8	133
57	Topographic and Thermal Mapping of Volcanic Terrain Using the AVTIS Ground-Based 94-GHz Dual-Mode Radar/Radiometric Imager. IEEE Transactions on Geoscience and Remote Sensing, 2013, 51, 455-472.	2.7	15
58	Exceptional mobility of an advancing rhyolitic obsidian flow at CordÃ³n Caulle volcano in Chile. Nature Communications, 2013, 4, 2709.	5.8	110
59	Volcano infrasonic signals and magma degassing: First-order experimental insights and application to Stromboli. Earth and Planetary Science Letters, 2013, 377-378, 169-179.	1.8	20
60	Degassing-driven crystallisation in basalts. Earth-Science Reviews, 2013, 116, 1-16.	4.0	45
61	Topographic and stochastic influences on pÄhoehoe lava lobe emplacement. Bulletin of Volcanology, 2013, 75, 1.	1.1	31
62	Direct observations of degassing-induced crystallization in basalts. Geology, 2013, 41, 243-246.	2.0	37
63	Separating the thermal fingerprints of lava flows and simultaneous lava fountaining using groundâ€based thermal camera and SEVIRI measurements. Geophysical Research Letters, 2013, 40, 5058-5063.	1.5	30
64	Passive and active imaging at 94 GHz for environmental remote sensing. Proceedings of SPIE, 2013, , .	0.8	4
65	Unsteady explosive activity. , 2013, , 107-128.		7
66	Comparing the Accuracy of Several Field Methods for Measuring Gully Erosion. Soil Science Society of America Journal, 2012, 76, 1319-1332.	1.2	170
67	Identification of structural controls in an active lava dome with high resolution DEMs: VolcÃ¡n de Colima, Mexico. Geophysical Research Letters, 2012, 39, .	1.5	106
68	Straightforward reconstruction of 3D surfaces and topography with a camera: Accuracy and geoscience application. Journal of Geophysical Research, 2012, 117, .	3.3	696
69	Relationships between volcano gravitational spreading and magma intrusion. Bulletin of Volcanology, 2012, 74, 743-765.	1.1	42
70	UAV-based remote sensing of the Super-Sauze landslide: Evaluation and results. Engineering Geology, 2012, 128, 2-11.	2.9	509
71	Lava channel roofing, overflows, breaches and switching: insights from the 2008â€“2009 eruption of Mt. Etna. Bulletin of Volcanology, 2012, 74, 107-117.	1.1	34
72	Large-scale experiments on dune erosion processes. Journal of Hydraulic Research/De Recherches Hydrauliques, 2011, 49, 20-30.	0.7	22

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73	Comment on â€œIt takes three to tango: 2. Bubble dynamics in basaltic volcanoes and ramifications for modeling normal Strombolian activityâ€•by J. Suckale, B. H. Hager, L. T. Elkins-Tanton, and J.-C. Nave. Journal of Geophysical Research, 2011, 116, .	3.3	13
74	Electrostatic phenomena in volcanic eruptions. Journal of Physics: Conference Series, 2011, 301, 012004.	0.3	8
75	A comparison of field- and satellite-derived thermal flux at Piton de la Fournaise: implications for the calculation of lava discharge rate. Bulletin of Volcanology, 2010, 72, 341-356.	1.1	25
76	Morphological complexities and hazards during the emplacement of channel-fed `a`Ä•lava flow fields: A study of the 2001 lower flow field on Etna. Bulletin of Volcanology, 2010, 72, 641-656.	1.1	28
77	Imaging short period variations in lava flux. Bulletin of Volcanology, 2010, 72, 671-676.	1.1	16
78	Lava flow superposition: The reactivation of flow units in compound 'a'Ä•flows. Journal of Volcanology and Geothermal Research, 2010, 194, 100-106.	0.8	15
79	Validation of the AVTIS volcano imager radiometry — A comparison of infrared and millimetre wave thermal imagery. , 2010, , .		1
80	Growth of the lava dome and extrusion rates at SoufriÃ¨re Hills Volcano, Montserrat, West Indies: 2005â€“2008. Geophysical Research Letters, 2010, 37, .	1.5	52
81	Seismic source mechanism of degassing bursts at Kilauea Volcano, Hawaii: Results from waveform inversion in the 10â€“50 s band. Journal of Geophysical Research, 2010, 115, .	3.3	94
82	Influence of surface clinker on the crustal structures and dynamics of 'a'Ä•lava flows. Journal of Geophysical Research, 2010, 115, .	3.3	6
83	The assimilation of historic photography and cartography into longterm coastal geomorphological analysis. Procedia Environmental Sciences, 2010, 2, 527-534.	1.3	3
84	Degassing at low magma-viscosity volcanoes: Quantifying the transition between passive bubble-burst and Strombolian eruption. Journal of Volcanology and Geothermal Research, 2009, 180, 81-88.	0.8	67
85	A statistical analysis of eruptive activity on Mount Etna, Sicily. Geophysical Journal International, 2009, 179, 655-666.	1.0	21
86	Detecting the development of active lava flow fields with a veryâ€•longâ€•range terrestrial laser scanner and thermal imagery. Geophysical Research Letters, 2009, 36, .	1.5	45
87	Electrical Charging of Volcanic Plumes. Space Science Reviews, 2008, 137, 399-418.	3.7	76
88	The influence of edifice slope and substrata on volcano spreading. Journal of Volcanology and Geothermal Research, 2008, 177, 925-943.	0.8	58
89	Lava dome growth and mass wasting measured by a time series of groundâ€•based radar and seismicity observations. Journal of Geophysical Research, 2008, 113, .	3.3	43
90	Electrical Charging of Volcanic Plumes. Space Sciences Series of ISSI, 2008, , 399-418.	0.0	7

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91	Modelling the rapid near-surface expansion of gas slugs in low-viscosity magmas. Geological Society Special Publication, 2008, 307, 147-167.	0.8	51
92	Image-based measurement of flux variation in distal regions of active lava flows. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	1.0	60
93	PÄhoehoe flow cooling, discharge, and coverage rates from thermal image chronometry. Geophysical Research Letters, 2007, 34, .	1.5	25
94	Use of a portable topographic mapping millimetre wave radar at an active lava flow. Geophysical Research Letters, 2006, 33, .	1.5	21
95	Gas slug ascent through changes in conduit diameter: Laboratory insights into a volcano-seismic source process in low-viscosity magmas. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	113
96	Oblique photogrammetry with visible and thermal images of active lava flows. Bulletin of Volcanology, 2006, 69, 105-108.	1.1	52
97	AVTIS: A novel millimetre-wave ground based instrument for volcano remote sensing. Journal of Volcanology and Geothermal Research, 2005, 146, 307-318.	0.8	37
98	Pressure changes associated with the ascent and bursting of gas slugs in liquid-filled vertical and inclined conduits. Journal of Volcanology and Geothermal Research, 2004, 129, 61-82.	0.8	128
99	Viscoelastic behaviour of basaltic lavas. Journal of Volcanology and Geothermal Research, 2004, 132, 99-113.	0.8	32
100	Density, construction, and drag coefficient of electrostatic volcanic ash aggregates. Journal of Geophysical Research, 2003, 108, .	3.3	61
101	Internal friction spectroscopy in Li2Oâ€“2SiO2 partially crystallised glasses. Journal of Non-Crystalline Solids, 2003, 319, 44-56.	1.5	9
102	Experimental investigation of volcanic particle aggregation in the absence of a liquid phase. Journal of Geophysical Research, 2002, 107, ECV 4-1-ECV 4-13.	3.3	64
103	Surface temperature measurements of active lava flows on Kilauea volcano, Hawaiâ€²i. Journal of Volcanology and Geothermal Research, 2002, 113, 159-176.	0.8	78
104	Volcanic plume electrification: Experimental investigation of a fracture-charging mechanism. Journal of Geophysical Research, 2000, 105, 16641-16649.	3.3	83
105	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.	1.5	157
106	Volcanic plume monitoring using atmospheric electric potential gradients. Journal of the Geological Society, 1998, 155, 587-590.	0.9	39
107	The Ongoing Eruption in Montserrat. Science, 1997, 276, 371-372.	6.0	20