

Fabio Dioguardi

List of Publications by Year in descending order

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Version: 2024-02-01

30
papers

586
citations

687363

13
h-index

610901

24
g-index

33
all docs

33
docs citations

33
times ranked

524
citing authors

#	ARTICLE	IF	CITATIONS
1	A new shape dependent drag correlation formula for non-spherical rough particles. Experiments and results. <i>Powder Technology</i> , 2015, 277, 222-230.	4.2	111
2	A New One-€Equation Model of Fluid Drag for Irregularly Shaped Particles Valid Over a Wide Range of Reynolds Number. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 144-156.	3.4	69
3	Experimental evidence links volcanic particle characteristics to pyroclastic flow hazard. <i>Earth and Planetary Science Letters</i> , 2010, 295, 314-320.	4.4	47
4	Volcanic jets, plumes, and collapsing fountains: evidence from large-scale experiments, with particular emphasis on the entrainment rate. <i>Bulletin of Volcanology</i> , 2014, 76, 1.	3.0	44
5	Conduit flow experiments help constraining the regime of explosive eruptions. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	38
6	The terminal velocity of volcanic particles with shape obtained from 3D X-ray microtomography. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 329, 41-53.	2.1	27
7	Integration of a new shape-dependent particle-€fluid drag coefficient law in the multiphase Eulerian-€Lagrangian code MFIX-DEM. <i>Powder Technology</i> , 2014, 260, 68-77.	4.2	26
8	Hazard of pyroclastic density currents at the Campi Flegrei Caldera (Southern Italy) as deduced from the combined use of facies architecture, physical modeling and statistics of the impact parameters. <i>Journal of Volcanology and Geothermal Research</i> , 2015, 299, 35-53.	2.1	24
9	Local impact of dust storms around a suburban building in arid and semi-arid regions: numerical simulation examples from Dubai and Riyadh, Arabian Peninsula. <i>Arabian Journal of Geosciences</i> , 2015, 8, 7359-7369.	1.3	23
10	The rate of sedimentation from turbulent suspension: An experimental model with application to pyroclastic density currents and discussion on the grain-€size dependence of flow runout. <i>Sedimentology</i> , 2019, 66, 129-145.	3.1	21
11	PYFLOW: A computer code for the calculation of the impact parameters of Dilute Pyroclastic Density Currents (DPDC) based on field data. <i>Computers and Geosciences</i> , 2014, 66, 200-210.	4.2	18
12	REFIR- A multi-parameter system for near real-time estimates of plume-height and mass eruption rate during explosive eruptions. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 360, 61-83.	2.1	15
13	The Impact of Eruption Source Parameter Uncertainties on Ash Dispersion Forecasts During Explosive Volcanic Eruptions. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2020JD032717.	3.3	15
14	A new method for the determination of the specific kinetic energy (SKE) released to pyroclastic particles at magmatic fragmentation: theory and first experimental results. <i>Bulletin of Volcanology</i> , 2012, 74, 895-902.	3.0	14
15	Total grain size distribution of components of fallout deposits and implications for magma fragmentation mechanisms: examples from Campi Flegrei caldera (Italy). <i>Bulletin of Volcanology</i> , 2020, 82, 1.	3.0	12
16	The impact of pyroclastic density currents duration on humans: the case of the AD 79 eruption of Vesuvius. <i>Scientific Reports</i> , 2021, 11, 4959.	3.3	12
17	PYFLOW_2.0: a computer program for calculating flow properties and impact parameters of past dilute pyroclastic density currents based on field data. <i>Bulletin of Volcanology</i> , 2018, 80, 1.	3.0	10
18	The grain size dependency of vesicular particle shapes strongly affects the drag of particles. First results from microtomography investigations of Campi Flegrei fallout deposits. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 353, 18-24.	2.1	10

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19	Integration of large-scale experiments and numerical simulations for the calibration of friction laws in volcanic conduit flows. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 250, 75-90.	2.1	9
20	A discriminatory diagram of massive versus stratified deposits based on the sedimentation and bedload transportation rates. Experimental investigation and application to pyroclastic density currents. <i>Sedimentology</i> , 2020, 67, 2013-2039.	3.1	8
21	Investigating Source Conditions and Controlling Parameters of Explosive Eruptions: Some Experimental-Observational- Modelling Case Studies. , 0, , .		7
22	Testing gas dispersion modelling: A case study at La Soufrière volcano (Guadeloupe, Lesser Antilles). <i>Journal of Volcanology and Geothermal Research</i> , 2021, 417, 107312.	2.1	6
23	The Entrainment Rate of Non-Boussinesq Hazardous Geophysical Gas-Particle Flows: An Experimental Model With Application to Pyroclastic Density Currents. <i>Geophysical Research Letters</i> , 2019, 46, 12851-12861.	4.0	5
24	Shallow-water models for volcanic granular flows: A review of strengths and weaknesses of TITAN2D and FLO2D numerical codes. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 410, 107146.	2.1	4
25	A study on the influence of internal structures on the shape of pyroclastic particles by X-ray microtomography investigations. <i>Annals of Geophysics</i> , 2018, 61, .	1.0	4
26	Inverting sediment bedforms for evaluating the hazard of dilute pyroclastic density currents in the field. <i>Scientific Reports</i> , 2021, 11, 21024.	3.3	3
27	VIGIL: A Python tool for automatized probabilistic Volcanic Gas dispersion modelling. <i>Annals of Geophysics</i> , 2022, 65, DM107.	1.0	3
28	Reply to Comment by G. Bagheri and C. Bonadonna on "A New One-Equation Model of Fluid Drag for Irregularly Shaped Particles Valid Over a Wide Range of Reynolds Number". <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 10265-10269.	3.4	1
29	PREFACE SPECIAL ISSUE: NEW ANALYTICAL TECHNIQUES FOR UNDERSTANDING VOLCANIC SYSTEMS, FROM MAGMA GENERATION TO THE EMPLACEMENT OF VOLCANIC PRODUCTS. <i>Annals of Geophysics</i> , 2019, 61, .	1.0	0
30	Drag forces at the ice-sheet bed and resistance of hard-rock obstacles: the physics of glacial ripping. <i>Journal of Glaciology</i> , 0, , 1-17.	2.2	0