

# Chloe Michaut

## List of Publications by Year in descending order

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Version: 2024-02-01

41  
papers

1,982  
citations

257450

24  
h-index

302126

39  
g-index

41  
all docs

41  
docs citations

41  
times ranked

1827  
citing authors

#	ARTICLE	IF	CITATIONS
1	Initial results from the InSight mission on Mars. <i>Nature Geoscience</i> , 2020, 13, 183-189.	12.9	274
2	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. <i>Nature Geoscience</i> , 2020, 13, 213-220.	12.9	207
3	Thickness and structure of the martian crust from InSight seismic data. <i>Science</i> , 2021, 373, 438-443.	12.6	140
4	Upper mantle structure of Mars from InSight seismic data. <i>Science</i> , 2021, 373, 434-438.	12.6	105
5	Petrological constraints on the density of the Martian crust. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 1707-1727.	3.6	91
6	Dynamics of magmatic intrusions in the upper crust: Theory and applications to laccoliths on Earth and the Moon. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	88
7	Thermal evolution of cratonic roots. <i>Lithos</i> , 2009, 109, 47-60.	1.4	78
8	Crustal and time-varying magnetic fields at the InSight landing site on Mars. <i>Nature Geoscience</i> , 2020, 13, 199-204.	12.9	68
9	Two-phase dynamics of volcanic eruptions: compaction, compression and the conditions for choking. <i>Geophysical Journal International</i> , 0, 182, 843-864.	2.4	65
10	Domes, pits, and small chaos on Europa produced by water sills. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 550-573.	3.6	62
11	Formation of lenticulae on Europa by saucer-shaped sills. <i>Icarus</i> , 2017, 286, 261-269.	2.5	56
12	Eruption cyclicity at silicic volcanoes potentially caused by magmatic gas waves. <i>Nature Geoscience</i> , 2013, 6, 856-860.	12.9	54
13	Transient geotherms in Archean continental lithosphere: New constraints on thickness and heat production of the subcontinental lithospheric mantle. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	51
14	Ultra-rapid formation of large volumes of evolved magma. <i>Earth and Planetary Science Letters</i> , 2006, 250, 38-52.	4.4	47
15	InSight Constraints on the Global Character of the Martian Crust. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	45
16	Evolution of the protolunar disk: Dynamics, cooling timescale and implantation of volatiles onto the Earth. <i>Icarus</i> , 2015, 260, 440-463.	2.5	44
17	Crust stratigraphy and heterogeneities of the first kilometers at the dichotomy boundary in western Elysium Planitia and implications for InSight lander. <i>Icarus</i> , 2020, 338, 113511.	2.5	40
18	Anomalous elastic properties of coesite at high pressure and implications for the upper mantle X-discontinuity. <i>Earth and Planetary Science Letters</i> , 2015, 412, 42-51.	4.4	39

#	ARTICLE	IF	CITATIONS
19	Secular cooling and thermal structure of continental lithosphere. <i>Earth and Planetary Science Letters</i> , 2007, 257, 83-96.	4.4	38
20	Ascent and compaction of gas rich magma and the effects of hysteretic permeability. <i>Earth and Planetary Science Letters</i> , 2009, 282, 258-267.	4.4	38
21	Two-phase dynamics of volcanic eruptions: Particle size distribution and the conditions for choking. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 1503-1522.	3.4	34
22	The EChO science case. <i>Experimental Astronomy</i> , 2015, 40, 329-391.	3.7	31
23	A model for the dynamics of crater-centered intrusion: Application to lunar floor-fractured craters. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 286-312.	3.6	29
24	Two models for the formation of magma reservoirs by small increments. <i>Tectonophysics</i> , 2011, 500, 34-49.	2.2	28
25	Scaling laws of convection for cooling planets in a stagnant lid regime. <i>Physics of the Earth and Planetary Interiors</i> , 2019, 286, 138-153.	1.9	28
26	Gravitational signatures of lunar floor-fractured craters. <i>Earth and Planetary Science Letters</i> , 2015, 424, 269-279.	4.4	26
27	Hemispheric Dichotomy in Lithosphere Thickness on Mars Caused by Differences in Crustal Structure and Composition. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 823-848.	3.6	24
28	Nonequilibrium temperatures and cooling rates in thick continental lithosphere. <i>Geophysical Research Letters</i> , 2004, 31, .	4.0	20
29	Magma Ascent and Eruption Triggered by Cratering on the Moon. <i>Geophysical Research Letters</i> , 2018, 45, 6408-6416.	4.0	19
30	Analyzing Low Frequency Seismic Events at Cerberus Fossae as Long Period Volcanic Quakes. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006518.	3.6	19
31	Elastic-plated gravity currents with a temperature-dependent viscosity. <i>Journal of Fluid Mechanics</i> , 2016, 805, 88-117.	3.4	16
32	The impact origin and evolution of Chryse Planitia on Mars revealed by buried craters. <i>Nature Communications</i> , 2019, 10, 4257.	12.8	15
33	Magmatic intrusions and deglaciation at mid-latitude in the northern plains of Mars. <i>Icarus</i> , 2013, 225, 602-613.	2.5	14
34	Volcanic tremors and magma wagging: gas flux interactions and forcing mechanism. <i>Geophysical Journal International</i> , 2013, 195, 1001-1022.	2.4	13
35	Uplift of an elastic membrane by a viscous flow. <i>Physical Review E</i> , 2019, 99, 043102.	2.1	9
36	Magma ascent at floor-fractured craters diagnoses the lithospheric stress state on the Moon. <i>Earth and Planetary Science Letters</i> , 2020, 530, 115889.	4.4	8

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37	A model for the spreading and compaction of two-phase viscous gravity currents. <i>Journal of Fluid Mechanics</i> , 2009, 630, 299-329.	3.4	6
38	Formation of the Lunar Primary Crust From a Long-Lived Slushy Magma Ocean. <i>Geophysical Research Letters</i> , 2022, 49, .	4.0	6
39	Insights into mare basalt thicknesses on the Moon from intrusive magmatism. <i>Physics of the Earth and Planetary Interiors</i> , 2016, 257, 187-192.	1.9	4
40	Magma ascent and emplacement below floor fractured craters on the Moon from floor uplift and fracture length. <i>Physics of the Earth and Planetary Interiors</i> , 2021, 312, 106658.	1.9	3
41	The Effects of Degassing on Magmatic Gas Waves and Long Period Eruptive Precursors at Silicic Volcanoes. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB019755.	3.4	0