Christopher W Hamilton

List of Publications by Year
in descending order

33 papers	867 citations	430874 18 h-index	477307 29 g-index
35 all docs	35 docs citations	35 times ranked	965 citing authors

#	Article	IF	Citations
1	Widespread crater-related pitted materials on Mars: Further evidence for the role of target volatiles during the impact process. Icarus, 2012, 220, 348-368.	2.5	85
2	Fluvial geomorphology on Earth-like planetary surfaces: A review. Geomorphology, 2015, 245, 149-182.	2.6	70
3	The vanishing cryovolcanoes of Ceres. Geophysical Research Letters, 2017, 44, 1243-1250.	4.0	56
4	Explosive lavaâ€"water interactions I: architecture and emplacement chronology of volcanic rootless cone groups in the 1783â€"1784 Laki lava flow, Iceland. Bulletin of Volcanology, 2010, 72, 449-467.	3.0	55
5	Identification of volcanic rootless cones, ice mounds, and impact craters on Earth and Mars: Using spatial distribution as a remote sensing tool. Journal of Geophysical Research, 2006, 111, .	3.3	52
6	Lavaâ€"ground ice interactions in Elysium Planitia, Mars: Geomorphological and geospatial analysis of the Tartarus Colles cone groups. Journal of Geophysical Research, 2011, 116, .	3.3	48
7	Construction dynamics of a lava channel. Bulletin of Volcanology, 2009, 71, 459-474.	3.0	42
8	Brine Migration and Impactâ€Induced Cryovolcanism on Europa. Geophysical Research Letters, 2020, 47, e2020GL090797.	4.0	39
9	Evidence for geologically recent explosive volcanism in Elysium Planitia, Mars. Icarus, 2021, 365, 114499.	2.5	39
10	Explosive lavaâ€"water interactions II: self-organization processes among volcanic rootless eruption sites in the 1783â€"1784 Laki lava flow, Iceland. Bulletin of Volcanology, 2010, 72, 469-485.	3.0	37
11	Explosive lavaâ€water interactions in Elysium Planitia, Mars: Geologic and thermodynamic constraints on the formation of the Tartarus Colles cone groups. Journal of Geophysical Research, 2010, 115, .	3.3	36
12	Topographic and stochastic influences on pÄhoehoe lava lobe emplacement. Bulletin of Volcanology, 2013, 75, 1.	3.0	31
13	Volume, Effusion Rate, and Lava Transport During the 2021 Fagradalsfjall Eruption: Results From Near Realâ€Time Photogrammetric Monitoring. Geophysical Research Letters, 2022, 49, .	4.0	30
14	Investigating the volcanic versus aqueous origin of the surficial deposits in Eastern Elysium Planitia, Mars. Icarus, 2018, 309, 389-410.	2.5	29
15	Viscous flow rates of icy topography on the north polar layered deposits of Mars. Geophysical Research Letters, 2016, 43, 541-549.	4.0	26
16	Episodes of Aqueous Flooding and Effusive Volcanism Associated With Hrad Vallis, Mars. Journal of Geophysical Research E: Planets, 2018, 123, 1484-1510.	3.6	26
17	Plateaus and sinuous ridges as the fingerprints of lava flow inflation in the Eastern Tharsis Plains of Mars. Journal of Volcanology and Geothermal Research, 2017, 342, 29-46.	2.1	21
18	Episodes of fluvial and volcanic activity in Mangala Valles, Mars. Icarus, 2015, 245, 333-347.	2.5	18

#	Article	IF	Citations
19	Fragmentation mechanisms associated with explosive lavaâ€"water interactions in a lacustrine environment. Bulletin of Volcanology, 2017, 79, 1.	3.0	17
20	Geomorphological characterization of the 2014â€"2015 Holuhraun lava flow-field in Iceland. Journal of Volcanology and Geothermal Research, 2021, 419, 107278.	2.1	17
21	Rootless tephra stratigraphy and emplacement processes. Bulletin of Volcanology, 2017, 79, 11.	3.0	16
22	Lavaâ€Rise Plateaus and Inflation Pits in the McCartys Lava Flow Field, New Mexico: An Analog for PÄhoehoeâ€Like Lava Flows on Planetary Surfaces. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE005975.	3.6	15
23	Rheological investigation of lunar highland and mare impact melt simulants. Icarus, 2019, 317, 307-323.	2.5	13
24	Revealing Active Mars with HiRISE Digital Terrain Models. Remote Sensing, 2022, 14, 2403.	4.0	11
25	Analysis and experimental investigation of Apollo sample 12032,366â€18, a chemically evolved basalt from the Moon. Meteoritics and Planetary Science, 2022, 57, 794-816.	1.6	9
26	Surface roughness characterization of the 2014â€"2015 Holuhraun lava flow-field in Iceland: implications for facies mapping and remote sensing. Bulletin of Volcanology, 2021, 83, 1.	3.0	7
27	A Bayesian Approach to Subkilometer Crater Shape Analysis Using Individual HiRISE Images. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 5802-5812.	6.3	6
28	Lavaâ€"water interaction and hydrothermal activity within the 2014â€"2015 Holuhraun Lava Flow Field, Iceland. Journal of Volcanology and Geothermal Research, 2020, 408, 107100.	2.1	6
29	Emplacement conditions of lunar impact melt flows. Icarus, 2021, 369, 114578.	2.5	4
30	Remote sensing evidence of lavaâ€"ground ice interactions associated with the Lost Jim Lava Flow, Seward Peninsula, Alaska. Bulletin of Volcanology, 2017, 79, 1.	3.0	2
31	Sinuous channels east of Olympus Mons, Mars: Implications for volcanic, hydrological, and tectonic processes. Icarus, 2021, 374, 114798.	2.5	2
32	Reexamining the Potential to Classify Lava Flows From the Fractality of Their Margins. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020949.	3.4	1
33	Differentiating Fissureâ€Fed Lava Flow Types and Facies Using RADAR and LiDAR: An Example from the 2014â€"2015 Holuhraun Lava Flowâ€field. Journal of Geophysical Research: Solid Earth, 0, , .	3.4	1