Hannes B Mattsson

List of Publications by Year
in descending order

37	1,151	331670 21	395702 33
papers	citations	h-index	g-index

37	37	37	1206
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Element Partitioning between Immiscible Carbonatite and Silicate Melts for Dry and H2O-bearing Systems at 1â€“3 GPa. Journal of Petrology, 2013, 54, 2301-2338.	2.8	138
2	A common origin of carbonatite magmas. Geology, 2017, 45, 507-510.	4.4	83
3	Ice nucleation properties of volcanic ash from EyjafjallajÃ¶kull. Atmospheric Chemistry and Physics, 2011, 11, 9911-9926.	4.9	75
4	Scales of columnar jointing in igneous rocks: field measurements and controlling factors. Bulletin of Volcanology, 2012, 74, 457-482.	3.0	61
5	Fundamental changes in the activity of the natrocarbonatite volcano Oldoinyo Lengai, Tanzania. Bulletin of Volcanology, 2010, 72, 893-912.	3.0	54
6	Element partitioning between immiscible carbonatiteâ€“kamafugite melts with application to the Italian ultrapotassic suite. Chemical Geology, 2012, 320-321, 96-112.	3.3	53
7	Fractional crystallization of Si-undersaturated alkaline magmas leading to unmixing of carbonatites on Brava Island (Cape Verde) and a general model of carbonatite genesis in alkaline magma suites. Contributions To Mineralogy and Petrology, 2016, 171, 1.	3.1	51
8	Petrogenesis of the melilititic and nephelinitic rock suites in the Lake Natronâ€“Engaruka monogenetic volcanic field, northern Tanzania. Lithos, 2013, 179, 175-192.	1.4	43
9	Voluminous lava flows at Oldoinyo Lengai in 2006: chronology of events and insights into the shallow magmatic system. Bulletin of Volcanology, 2008, 70, 1069-1086.	3.0	38
10	Fundamental changes in the activity of the natrocarbonatite volcano Oldoinyo Lengai, Tanzania. Bulletin of Volcanology, 2010, 72, 913-931.	3.0	38
11	Depositional characteristics and volcanic landforms in the Lake Natronâ€“Engaruka monogenetic field, northern Tanzania. Journal of Volcanology and Geothermal Research, 2011, 203, 23-34.	2.1	37
12	Petrogenesis of alkaline basalts at the tip of a propagating rift: Evidence from the Heimaey volcanic centre, south Iceland. Journal of Volcanology and Geothermal Research, 2005, 147, 245-267.	2.1	36
13	Textural variation in juvenile pyroclasts from an emergent, Surtseyan-type, volcanic eruption: The Capelas tuff cone, SÃ£o Miguel (Azores). Journal of Volcanology and Geothermal Research, 2010, 189, 81-91.	2.1	35
14	Dynamics of Magma Mixing in Partially Crystallized Magma Chambers: Textural and Petrological Constraints from the Basal Complex of the Austurhorn Intrusion (SE Iceland). Journal of Petrology, 2014, 55, 1865-1903.	2.8	35
15	Growth of an emergent tuff cone: Fragmentation and depositional processes recorded in the Capelas tuff cone, SÃ£o Miguel, Azores. Journal of Volcanology and Geothermal Research, 2007, 159, 246-266.	2.1	32
16	Melt migration in basalt columns driven by crystallization-induced pressure gradients. Nature Communications, 2011, 2, 299.	12.8	31
17	Geology of the Heimaey volcanic centre, south Iceland: early evolution of a central volcano in a propagating rift?. Journal of Volcanology and Geothermal Research, 2003, 127, 55-71.	2.1	27
18	Ash fall impact on vegetation: a remote sensing approach of the Oldoinyo Lengai 2007â€“08 eruption. Journal of Applied Volcanology, 2015, 4, .	2.0	26

#	Article	IF	Citations
19	Rapid magma ascent and short eruption durations in the Lake Natronâ€“Engaruka monogenetic volcanic field (Tanzania): A case study of the olivine melilititic Pello Hill scoria cone. Journal of Volcanology and Geothermal Research, 2012, 247-248, 16-25.	2.1	25
20	Mineralogical and geochemical characterization of ashes from an early phase of the explosive September 2007 eruption of Oldoinyo Lengai (Tanzania). Journal of African Earth Sciences, 2010, 58, 752-763.	2.0	21
21	Contemporaneous phreatomagmatic and effusive activity along the Hverfjall eruptive fissure, north Iceland: Eruption chronology and resulting deposits. Journal of Volcanology and Geothermal Research, 2011, 201, 241-252.	2.1	21
22	Internal flow structures in columnar jointed basalt from HrepphÃ³lar, Iceland: II. Magnetic anisotropy and rock magnetic properties. Bulletin of Volcanology, 2012, 74, 1667-1681.	3.0	21
23	Magma mixing and forced exsolution of CO2 during the explosive 2007â€“2008 eruption of Oldoinyo Lengai (Tanzania). Journal of Volcanology and Geothermal Research, 2014, 285, 229-246.	2.1	19
24	Eruption reconstruction, formation of flow-lobe tumuli and eruption duration in the 5900 BP Helgafell lava field (Heimaey), south Iceland. Journal of Volcanology and Geothermal Research, 2005, 147, 157-172.	2.1	18
25	Geochemistry and eruptive behaviour of the Finca la Nava maar volcano (Campo de Calatrava,) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.8	18
26	Origin of internal flow structures in columnar-jointed basalt from HrepphÃ³lar, Iceland: I. Textural and geochemical characterization. Bulletin of Volcanology, 2012, 74, 1645-1666.	3.0	16
27	Emplacement and inflation of natrocarbonatitic lava flows during the Marchâ€“April 2006 eruption of Oldoinyo Lengai, Tanzania. Bulletin of Volcanology, 2009, 71, 301-311.	3.0	13
28	The Lake Natron Footprint Tuff (northern Tanzania): volcanic source, depositional processes and age constraints from field relations. Journal of Quaternary Science, 2016, 31, 526-537.	2.1	13
29	Magma ascent, fragmentation and depositional characteristics of â€œdryâ€•maar volcanoes: Similarities with vent-facies kimberlite deposits. Journal of Volcanology and Geothermal Research, 2013, 252, 53-72.	2.1	12
30	Origin of the compositional diversity in the basalt-to-dacite series erupted along the HeiÃ°arsporÃ°ur ridge, NE Iceland. Journal of Volcanology and Geothermal Research, 2015, 301, 116-127.	2.1	10
31	Experimental constraints on the crystallization of natrocarbonatitic lava flows. Bulletin of Volcanology, 2009, 71, 1179-1193.	3.0	9
32	Leaching of lava and tephra from the Oldoinyo Lengai volcano (Tanzania): Remobilization of fluorine and other potentially toxic elements into surface waters of the Gregory Rift. Journal of Volcanology and Geothermal Research, 2017, 332, 14-25.	2.1	9
33	Mineral resorption triggers explosive mixed silicateâ€“carbonatite eruptions. Earth and Planetary Science Letters, 2019, 510, 219-230.	4.4	9
34	Crustal xenoliths in the 6220 BP SÃ¦fell tuff-cone, south Iceland: Evidence for a deep, diatreme-forming, Surtseyan eruption. Journal of Volcanology and Geothermal Research, 2005, 145, 234-248.	2.1	7
35	New tephrostratigraphic data from Lake Emakat (northern Tanzania): Implications for the eruptive history of the Oldoinyo Lengai volcano. Journal of African Earth Sciences, 2018, 147, 374-382.	2.0	6
36	The role of mafic dykes in the petrogenesis of the Archean SiilinjÃ¤rvi carbonatite complex, east-central Finland. Lithos, 2019, 342-343, 468-479.	1.4	6

#	Article	IF	Citations
37	In-situ garnet 238U-230Th geochronology of Holocene silica-undersaturated volcanic tuffs at millennial-scale precision. Quaternary Geochronology, 2019, 50, 1-7.	1.4	5