

# Caroline Martel

## List of Publications by Year in descending order

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29  
papers

1,594  
citations

430874

18  
h-index

477307

29  
g-index

29  
all docs

29  
docs citations

29  
times ranked

1033  
citing authors

#	ARTICLE	IF	CITATIONS
1	Physical conditions, structure, and dynamics of a zoned magma chamber: Mount Pelée (Martinique). <i>Journal of Petrology</i> , 2001, 22, 107-124.	3.3	187
2	Effects of O <sub>2</sub> and H <sub>2</sub> O on andesite phase relations between 2 and 4 kbar. <i>Journal of Geophysical Research</i> , 1999, 104, 29453-29470.	3.3	185
3	Amphibole as an archivist of magmatic crystallization conditions: problems, potential, and implications for inferring magma storage prior to the paroxysmal 2010 eruption of Mount Merapi, Indonesia. <i>Contributions To Mineralogy and Petrology</i> , 2014, 167, 1.	3.1	167
4	Magma storage conditions and control of eruption regime in silicic volcanoes: experimental evidence from Mt. Pelée. <i>Earth and Planetary Science Letters</i> , 1998, 156, 89-99.	4.4	141
5	Decompression experiments as an insight into ascent rates of silicic magmas. <i>Contributions To Mineralogy and Petrology</i> , 2003, 144, 397-415.	3.1	127
6	Eruption Dynamics Inferred from Microlite Crystallization Experiments: Application to Plinian and Dome-forming Eruptions of Mt. Pelee (Martinique, Lesser Antilles). <i>Journal of Petrology</i> , 2012, 53, 699-725.	2.8	90
7	Equilibration Scales in Silicic to Intermediate Magmas Implications for Experimental Studies. <i>Journal of Petrology</i> , 2007, 48, 1955-1972.	2.8	89
8	Probing permeability and microstructure: Unravelling the role of a low-permeability dome on the explosivity of Merapi (Indonesia). <i>Journal of Volcanology and Geothermal Research</i> , 2016, 316, 56-71.	2.1	69
9	Basalt-inherited microlites in silicic magmas: Evidence from Mount Pelée (Martinique, French West Indies). <i>Journal of Petrology</i> , 2001, 22, 107-124.	4.4	62
10	In situ confirmation of permeability development in shearing bubble-bearing melts and implications for volcanic outgassing. <i>Earth and Planetary Science Letters</i> , 2017, 458, 315-326.	4.4	58
11	Textures, water content and degassing of silicic andesites from recent plinian and dome-forming eruptions at Mount Pelée volcano (Martinique, Lesser Antilles arc). <i>Journal of Volcanology and Geothermal Research</i> , 2000, 96, 191-206.	2.1	53
12	Decompression-induced Crystallization in Hydrated Silica-rich Melts: Empirical Models of Experimental Plagioclase Nucleation and Growth Kinetics. <i>Journal of Petrology</i> , 2012, 53, 1743-1766.	2.8	51
13	Trachyte Phase Relations and Implication for Magma Storage Conditions in the Chaîne des Puys (French Massif Central). <i>Journal of Petrology</i> , 2013, 54, 1071-1107.	2.8	47
14	Diversity of eruptive styles inferred from the microlites of Mt Pelée andesite (Martinique, Lesser Antilles). <i>Journal of Petrology</i> , 2001, 22, 107-124.	2.1	38
15	Timescales of bubble coalescence, outgassing, and foam collapse in decompressed rhyolitic melts. <i>Earth and Planetary Science Letters</i> , 2015, 412, 173-185.	4.4	39
16	In situ bubble vesiculation in silicic magmas. <i>American Mineralogist</i> , 2011, 96, 111-124.	1.9	33
17	Structure of the Plumbing System at Tungurahua Volcano, Ecuador: Insights from Phase Equilibrium Experiments on July-August 2006 Eruption Products. <i>Journal of Petrology</i> , 2017, 58, 1249-1278.	2.8	32
18	In situ high-pressure and high-temperature bubble growth in silicic melts. <i>Earth and Planetary Science Letters</i> , 2001, 191, 115-127.	4.4	25

#	ARTICLE	IF	CITATIONS
19	Deep pre-eruptive storage of silicic magmas feeding Plinian and dome-forming eruptions of central and northern Dominica (Lesser Antilles) inferred from volatile contents of melt inclusions. <i>Contributions To Mineralogy and Petrology</i> , 2018, 173, 1.	3.1	17
20	Revised chronostratigraphy of recurrent ignimbritic eruptions in Dominica (Lesser Antilles arc): Implications on the behavior of the magma plumbing system. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 343, 135-154.	2.1	16
21	Storage conditions of the mafic and silicic magmas at Cotopaxi, Ecuador. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 354, 74-86.	2.1	14
22	Petrological and experimental constraints on magma storage for large pumiceous eruptions in Dominica island (Lesser Antilles). <i>Bulletin of Volcanology</i> , 2019, 81, 1.	3.0	13
23	A System Dynamics Approach to Understanding the deep Magma Plumbing System Beneath Dominica (Lesser Antilles). <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	11
24	Experimental Simulations of Magma Storage and Ascent. <i>Advances in Volcanology</i> , 2017, , 101-110.	1.1	7
25	Theoretical Models of Decompression-Induced Plagioclase Nucleation and Growth in Hydrated Silica-Rich Melts. <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	7
26	Experimental Constraints on the Crystallization of Silica Phases in Silicic Magmas. <i>Journal of Petrology</i> , 2021, 62, .	2.8	6
27	The intermediate step in fractionation trends of mildly alkaline volcanic suites: An experimental insight from the Pavin trachyandesite (Massif Central, France). <i>Comptes Rendus - Geoscience</i> , 2019, 351, 525-539.	1.2	5
28	Evidence for an Active, Transcrustal Magma System in the Last 6000 years and Eruptive Degassing Budget (H <sub>2</sub> O, CO <sub>2</sub> , S, F, Cl, Br): The Case of Dominica. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2020GC009050.	2.5	3
29	Syn-Eruptive Conditions of the AD 1530 Sub-Plinian Eruption of La Soufrière of Guadeloupe (Lesser Antilles). <i>Journal of Petrology</i> , 2021, 62, .	1.8	1