Claudia Romano

List of Publications by Year
in descending order

74 papers	3,422 citations	126907 33 h-index	144013 57 g-index
75 all docs	75 docs citations	75 times ranked	2373 citing authors

#	Article	IF	Citations
1	The effect of water on the viscosity of a haplogranitic melt under P-T-X conditions relevant to silicic volcanism. Contributions To Mineralogy and Petrology, 1996, 124, 19-28.	3.1	211
2	Near-infrared spectroscopic determination of water species in glasses of the system MAlSi3O8 (M = Li,) Tj ETQq0 0 0 rgBT /Overlock 10	3.3	204
3	The rheology of crystal-bearing basaltic magmas from Stromboli and Etna. Geochimica Et Cosmochimica Acta, 2011, 75, 3214-3236.	3.9	166
4	Electrical conductivity anisotropy of dry and hydrous olivine at 8 GPa. Physics of the Earth and Planetary Interiors, 2010, 181, 103-111.	1.9	163
5	Diagenetic thermal evolution of organic matter by Raman spectroscopy. Organic Geochemistry, 2017, 106, 57-67.	1.8	140
6	The combined effects of water and fluorine on the viscosity of silicic magmas. Geochimica Et Cosmochimica Acta, 2004, 68, 5159-5168.	3.9	135
7	An expanded non-Arrhenian model for silicate melt viscosity: A treatment for metaluminous, peraluminous and peralkaline liquids. Chemical Geology, 2006, 229, 42-56.	3.3	126
8	24 h stability of thick multilayer silicene in air. 2D Materials, 2014, 1, 021003.	4.4	122
9	Extremely fluid behavior of hydrous peralkaline rhyolites. Earth and Planetary Science Letters, 1998, 158, 31-38.	4.4	85
10	The viscosity of trachytes, and comparison with basalts, phonolites, and rhyolites. Chemical Geology, 2004, 213, 49-61.	3.3	83
11	The dry and hydrous viscosities of alkaline melts from Vesuvius and Phlegrean Fields. Chemical Geology, 2003, 202, 23-38.	3.3	80
12	The viscosities of dry and hydrous XAlSi3O8 (X=Li, Na, K, Ca0.5, Mg0.5) melts. Chemical Geology, 2001, 174, 115-132.	3.3	77
13	The effects of undercooling and deformation rates on the crystallization kinetics of Stromboli and Etna basalts. Contributions To Mineralogy and Petrology, 2013, 166, 491-509.	3.1	76
14	Electrical conductivities of pyrope-almandine garnets up to 19 GPa and 1700 ÂC. American Mineralogist, 2006, 91, 1371-1377.	1.9	73
15	Compression mechanisms in aluminosilicate melts: Raman and XANES spectroscopy of glasses quenched from pressures up to 10 GPa. Chemical Geology, 2001, 174, 21-31.	3.3	70
16	X-ray absorption study of Ti-bearing silicate glasses. Physics and Chemistry of Minerals, 1994, 21, 501.	0.8	68
17	Effect of iron and nanolites on Raman spectra of volcanic glasses: A reassessment of existing strategies to estimate the water content. Chemical Geology, 2017, 475, 76-86.	3.3	67
18	Experimental solidification of anhydrous latitic and trachytic melts at different cooling rates: The role of nucleation kinetics. Chemical Geology, 2008, 253, 91-101.	3.3	66

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19	Viscosity and glass transition temperature of hydrous melts in the system CaAl2Si2O8â€“CaMgSi2O6. Chemical Geology, 2008, 256, 203-215.	3.3	61
20	Raman and XANES spectroscopy of permanently densified vitreous silica. Journal of Non-Crystalline Solids, 2004, 341, 162-169.	3.1	60
21	The rheology of peralkaline rhyolites from Pantelleria Island. Journal of Volcanology and Geothermal Research, 2013, 249, 201-216.	2.1	59
22	Viscosity of a Teide phonolite in the welding interval. Journal of Volcanology and Geothermal Research, 2000, 103, 239-245.	2.1	56
23	Pre-eruptive volatile (H2O, F, Cl and S) contents of phonolitic magmas feeding the 3550-year old Avellino eruption from Vesuvius, southern Italy. Journal of Volcanology and Geothermal Research, 1999, 93, 237-256.	2.1	51
24	Rheological properties of magma from the 1538 eruption of Monte Nuovo (Phlegrean Fields, Italy): An experimental study. Chemical Geology, 2008, 256, 158-171.	3.3	48
25	Viscosity data for hydrous peraluminous granitic melts; comparison with a metaluminous model. American Mineralogist, 1998, 83, 236-239.	1.9	45
26	The rheological evolution of alkaline Vesuvius magmas and comparison with alkaline series from the Phlegrean Fields, Etna, Stromboli and Teide. Geochimica Et Cosmochimica Acta, 2009, 73, 6613-6630.	3.9	44
27	The influence of trace amounts of water on the viscosity of rhyolites. Bulletin of Volcanology, 1998, 60, 89-97.	3.0	42
28	Volatile element zonation in Campanian Ignimbrite magmas (Phlegrean Fields, Italy): evidence from the study of glass inclusions and matrix glasses. Contributions To Mineralogy and Petrology, 2001, 140, 543-553.	3.1	42
29	Geochemistry of the mantle source and magma feeding system beneath Turrialba volcano, Costa Rica. Lithos, 2015, 232, 319-335.	1.4	42
30	Crystallization kinetics and rheology of leucite-bearing tephriphonolite magmas from the Colli Albani volcano (Italy). Chemical Geology, 2016, 424, 12-29.	3.3	40
31	The temperature dependence of the speciation of water in NaAlSi 3 O 8 -KAlSi 3 O 8 melts: an application of fictive temperatures derived from synthetic fluid-inclusions. Contributions To Mineralogy and Petrology, 1995, 122, 1-10.	3.1	39
32	Tensile strengths of hydrous vesicular glasses; an experimental study. American Mineralogist, 1996, 81, 1148-1154.	1.9	39
33	Heat capacity, configurational heat capacity and fragility of hydrous magmas. Geochimica Et Cosmochimica Acta, 2014, 142, 314-333.	3.9	37
34	Numerical modelling of stress generation and microfracturing of vesicle walls in glassy rocks. Journal of Volcanology and Geothermal Research, 1996, 73, 33-46.	2.1	33
35	The multiphase rheology of magmas from Monte Nuovo (Campi Flegrei, Italy). Chemical Geology, 2013, 346, 213-227.	3.3	33
36	Influence of composition and thermal history of volcanic glasses on water content as determined by micro-Raman spectrometry. Applied Geochemistry, 2006, 21, 802-812.	3.0	32

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37	Evidence for Al/Si tetrahedral network in aluminosilicate glasses from AlK-edge x-ray-absorption spectroscopy. Physical Review B, 1999, 60, 9216-9219.	3.2	31
38	The effect of CO2 and H2O on Etna and Fondo Riccio (Phlegrean Fields) liquid viscosity, glass transition temperature and heat capacity. Chemical Geology, 2014, 377, 72-86.	3.3	30
39	Dynamics of magma ascent and fragmentation in trachytic versus rhyolitic eruptions. Journal of Volcanology and Geothermal Research, 2004, 131, 93-108.	2.1	29
40	Confort 15 model of conduit dynamics: applications to Pantelleria Green Tuff and Etna 122 BC eruptions. Contributions To Mineralogy and Petrology, 2016, 171, 1.	3.1	29
41	Electrical conductivity of hydrous wadsleyite. European Journal of Mineralogy, 2009, 21, 615-622.	1.3	28
42	Water diffusion in natural potassic melts. Geological Society Special Publication, 2003, 213, 53-62.	1.3	27
43	Raman spectra of Martian glass analogues: A tool to approximate their chemical composition. Journal of Geophysical Research E: Planets, 2016, 121, 740-752.	3.6	27
44	Compositional dependence of H2O solubility along the joins NaAlSi3O8-KAlsi3O8, NaAlSi3O8-LiAlSi3O8, and KAlSi3O8-LiAlSi3O8. American Mineralogist, 1996, 81, 452-461.	1.9	26
45	High-temperature viscosity measurements of hydrous albite liquid using in-situ falling-sphere viscometry at 2.5 GPa. Chemical Geology, 2006, 229, 2-9.	3.3	25
46	79AD Vesuvius PDC deposits' temperatures inferred from optical analysis on woods charred in-situ in the Villa dei Papiri at Herculaneum (Italy). Journal of Volcanology and Geothermal Research, 2014, 289, 14-25.	2.1	25
47	Thermal interactions of the AD79 Vesuvius pyroclastic density currents and their deposits at Villa dei Papiri (Herculaneum archaeological site, Italy). Earth and Planetary Science Letters, 2018, 490, 180-192.	4.4	22
48	The effect of H2O on the viscosity of K-trachytic melts at magmatic temperatures. Chemical Geology, 2006, 235, 124-137.	3.3	21
49	High-temperature deformation of volcanic materials in the presence of water. American Mineralogist, 2008, 93, 74-80.	1.9	20
50	Models for viscosity and shear localization in bubble-rich magmas. Earth and Planetary Science Letters, 2016, 449, 26-38.	4.4	20
51	Electrical conductivity of a phonotephrite from Mt. Vesuvius: The importance of chemical composition on the electrical conductivity of silicate melts. Chemical Geology, 2008, 256, 193-202.	3.3	19
52	The complex rheology of megacryst-rich magmas: The case of the mugearitic â€œcicirarаâ€•lavas of Mt. Etna volcano. Chemical Geology, 2017, 458, 48-67.	3.3	18
53	An integrated platform for thermal maturity assessment of polyphase, long-lasting sedimentary basins, from classical to brand-new thermal parameters and models: An example from the on-shore Baltic Basin (Poland). Marine and Petroleum Geology, 2020, 122, 104547.	3.3	17
54	Hyaloclastite fragmentation below the glass transition: An example from El Barronal submarine volcanic complex (Spain). Geology, 2014, 42, 87-90.	4.4	16

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55	Application of multiple scattering calculation to the study of local geometry in silicate glasses of geological interest. Physica B: Condensed Matter, 1995, 208-209, 351-353.	2.7	14
56	Neutron diffraction study of feldspar glasses. Mixed alkali effect. Journal of Non-Crystalline Solids, 1995, 191, 124-131.	3.1	14
57	Mixed electrical conduction in a hydrous pantellerite glass. Chemical Geology, 2012, 320-321, 140-146.	3.3	14
58	Modelling and physico-chemical constraints to the 4.5 ka Agnano-Monte Spina Plinian eruption (Campi) Tj ETQq0 0 0 rgBT /Overlock 10	3.3	14
59	Viscosities of granitic (sensu lato) melts: Influence of the anorthite component. American Mineralogist, 2000, 85, 1342-1348.	1.9	13
60	Kinetic partitioning of major and trace cations between clinopyroxene and phonotephritic melt under convective stirring conditions: New insights into clinopyroxene sector zoning and concentric zoning. Chemical Geology, 2021, 584, 120531.	3.3	13
61	Heat capacity of hydrous trachybasalt from Mt Etna: comparison with CaAl2Si2O8 (An)â€“CaMgSi2O6 (Di) as basaltic proxy compositions. Contributions To Mineralogy and Petrology, 2015, 170, 1.	3.1	12
62	An Extended Rheological Map of PÄhoehoeâ€"â€˜Aâ€˜Ä•Transition. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022035.	3.4	12
63	A comprehensive database of crystal-bearing magmas for the calibration of a rheological model. Scientific Data, 2022, 9, .	5.3	9
64	Unsteady magma discharge during the â€œEl Retiroâ€•subplinian eruption (Turrialba volcano, Costa Rica): Insights from textural and petrological analyses. Journal of Volcanology and Geothermal Research, 2019, 371, 101-115.	2.1	8
65	Viscosity of Palmas-type magmas of the ParanÃ¡ Magmatic Province (Rio Grande do Sul State, Brazil): Implications for high-temperature silicic volcanism. Chemical Geology, 2021, 560, 119981.	3.3	8
66	Raman Spectral Shifts in Naturally Faulted Rocks. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009923.	2.5	8
67	Ascent velocity and dynamics of the Fiumicino mud eruption, Rome, Italy. Geophysical Research Letters, 2015, 42, 6244-6252.	4.0	7
68	Linking magma texture, rheology and eruptive style during the 472ÂAD Pollena Subplinian eruption (Somma-Vesuvius). Lithos, 2020, 370-371, 105658.	1.4	6
69	Determination of cooling rates of glasses over four orders of magnitude. Contributions To Mineralogy and Petrology, 2022, 177, 1.	3.1	6
70	The Viscosity and Atomic Structure of Volatile-Bearing Melilititic Melts at High Pressure and Temperature and the Transport of Deep Carbon. Minerals (Basel, Switzerland), 2020, 10, 267.	2.0	5
71	Micro-Raman water calibration in ultrapotassic silicate glasses: Application to phono-tephrites and K-foidites of Colli Albani Volcanic District (Central Italy). Chemical Geology, 2022, 597, 120816.	3.3	5
72	Calibrating Carbonization Temperatures of Wood Fragments Embedded within Pyroclastic Density Currents through Raman Spectroscopy. Minerals (Basel, Switzerland), 2022, 12, 203.	2.0	4

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73	The effect of pores (fluid-filled vs. drained) on magma rheology. Chemical Geology, 2021, 569, 120147.	3.3	3
74	Editorial for the Special Issue â€œProperties of Melt and Minerals at High Pressures and High Temperatureâ€• Minerals (Basel, Switzerland), 2020, 10, 723.	2.0	1