Guilherme A R Gualda

List of Publications by Year
in descending order

46 papers	3,328 citations	218677 26 h-index	276875 41 g-index
48 all docs	48 docs citations	48 times ranked	2380 citing authors

#	Article	IF	Citations
1	Rhyolite-MELTS: a Modified Calibration of MELTS Optimized for Silica-rich, Fluid-bearing Magmatic Systems. Journal of Petrology, 2012, 53, 875-890.	2.8	1,001
2	An H2Oâ€“CO2 mixed fluid saturation model compatible with rhyolite-MELTS. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	423
3	An introduction to the application of X-ray microtomography to the three-dimensional study of igneous rocks. Lithos, 2012, 148, 262-276.	1.4	182
4	<scp>MELTS</scp>_<scp>E</scp>xcel: <scp>A</scp><scp>M</scp>icrosoft <scp>E</scp>xcelâ€based <scp>MELTS</scp> interface for research and teaching of magma properties and evolution. Geochemistry, Geophysics, Geosystems, 2015, 16, 315-324.	2.5	166
5	Low-Pressure Origin of High-Silica Rhyolites and Granites. Journal of Geology, 2013, 121, 537-545.	1.4	122
6	A method for estimating the activity of titania in magmatic liquids from the compositions of coexisting rhombohedral and cubic ironâ€“titanium oxides. Contributions To Mineralogy and Petrology, 2013, 165, 73-81.	3.1	120
7	Timescales of Quartz Crystallization and the Longevity of the Bishop Giant Magma Body. PLoS ONE, 2012, 7, e37492.	2.5	97
8	Quantitative 3D petrography using x-ray tomography: Application to Bishop Tuff pumice clasts. Journal of Volcanology and Geothermal Research, 2006, 154, 48-62.	2.1	90
9	The Bishop Tuff giant magma body: an alternative to the Standard Model. Contributions To Mineralogy and Petrology, 2013, 166, 755-775.	3.1	85
10	Sphene and zircon in the Highland Range volcanic sequence (Miocene, southern Nevada, USA): elemental partitioning, phase relations, and influence on evolution of silicic magma. Mineralogy and Petrology, 2011, 102, 29-50.	1.1	76
11	Phase-equilibrium geobarometers for silicic rocks based on rhyolite-MELTS. Part 1: Principles, procedures, and evaluation of the method. Contributions To Mineralogy and Petrology, 2014, 168, 1.	3.1	73
12	Allanite and chevkinite in A-type granites and syenites of the Graciosa Province, southern Brazil. Lithos, 2007, 97, 98-121.	1.4	71
13	The Evolution of the Peach Spring Giant Magma Body: Evidence from Accessory Mineral Textures and Compositions, Bulk Pumice and Glass Geochemistry, and Rhyolite-MELTS Modeling. Journal of Petrology, 2013, 54, 1109-1148.	2.8	70
14	Crystal Size Distributions Derived from 3D Datasets: Sample Size Versus Uncertainties. Journal of Petrology, 2006, 47, 1245-1254.	2.8	43
15	Experimental constraints on rhyolite-MELTS and the Late Bishop Tuff magma body. Contributions To Mineralogy and Petrology, 2014, 168, 1.	3.1	42
16	Magnetite scavenging and the buoyancy of bubbles in magmas. Part 2: Energetics of crystal-bubble attachment in magmas. Contributions To Mineralogy and Petrology, 2007, 154, 479-490.	3.1	39
17	Quantitative 3D petrography using X-ray tomography 3: Documenting accessory phases with differential absorption tomography. , 2010, 6, 782-792.		38
18	Magnetite scavenging and the buoyancy of bubbles in magmas. Part 1: Discovery of a pre-eruptive bubble in Bishop rhyolite. Contributions To Mineralogy and Petrology, 2007, 153, 733-742.	3.1	37

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19	The Year Leading to a Supereruption. PLoS ONE, 2016, 11, e0159200.	2.5	37
20	Phase-equilibrium geobarometers for silicic rocks based on rhyolite-MELTSâ€"Part 3: Application to the Peach Spring Tuff (Arizonaâ€"Californiaâ€"Nevada, USA). Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	35
21	Climbing the crustal ladder: Magma storage-depth evolution during a volcanic flare-up. Science Advances, 2018, 4, eaap7567.	10.3	35
22	Phase-equilibrium geobarometers for silicic rocks based on rhyolite-MELTS. Part 2: application to Taupo Volcanic Zone rhyolites. Contributions To Mineralogy and Petrology, 2014, 168, 1.	3.1	34
23	Internal triggering of volcanic eruptions: tracking overpressure regimes for giant magma bodies. Earth and Planetary Science Letters, 2017, 472, 142-151.	4.4	33
24	The Serra da Graciosa A-type granites and syenites, southern Brazil. Part 1: regional setting and geological characterization. Anais Da Academia Brasileira De Ciencias, 2007, 79, 405-430.	0.8	31
25	Crystallization ages of the A-type magmatism of the Graciosa Province (Southern Brazil): Constraints from zircon U-Pb (ID-TIMS) dating of coeval K-rich gabbro-dioritic rocks. Journal of South American Earth Sciences, 2011, 32, 407-415.	1.4	31
26	Crystallization Stages of the Bishop Tuff Magma Body Recorded in Crystal Textures in Pumice Clasts. Journal of Petrology, 2012, 53, 589-609.	2.8	31
27	The Serra da Graciosa A-type Granites and Syenites, southern Brazil. Lithos, 2007, 93, 310-327.	1.4	29
28	Architecture of a Super-sized Magma Chamber and Remobilization of its Basal Cumulate (Peach Spring) Tj ETQq0 0 0 rgBT /Overlock 10	2.8	29
29	Fragmentation, nucleation and migration of crystals and bubbles in the Bishop Tuff rhyolitic magma. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2004, 95, 375-390.	0.3	28
30	High-Ti, bright-CL rims in volcanic quartz: a result of very rapid growth. Contributions To Mineralogy and Petrology, 2016, 171, 1.	3.1	27
31	Stoichiometry-based estimates of ferric iron in calcic, sodic-calcic and sodic amphiboles: a comparison of various methods. Anais Da Academia Brasileira De Ciencias, 2005, 77, 521-534.	0.8	23
32	Quantitative 3D petrography using X-ray tomography 2: Combining information at various resolutions. , 2010, 6, 775-781.		23
33	Magma extraction pressures and the architecture of volcanic plumbing systems. Earth and Planetary Science Letters, 2019, 522, 118-124.	4.4	22
34	The Serra da Graciosa A-type Granites and Syenites, southern Brazil. Part 3: Magmatic evolution and post-magmatic breakdown of amphiboles of the alkaline association. Lithos, 2007, 93, 328-339.	1.4	20
35	Magma residence and eruption at the Taupo Volcanic Center (Taupo Volcanic Zone, New Zealand): insights from rhyolite-MELTS geobarometry, diffusion chronometry, and crystal textures. Contributions To Mineralogy and Petrology, 2020, 175, 1.	3.1	16
36	Phase-equilibrium geobarometers for silicic rocks based on rhyolite-MELTS. Part 4: Plagioclase, orthopyroxene, clinopyroxene, glass geobarometer, and application to Mt. Ruapehu, New Zealand. Contributions To Mineralogy and Petrology, 2018, 173, 1.	3.1	13

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37	DISSOLUTION OF OPHIUROID OSSICLES ON THE SHALLOW ANTARCTIC SHELF: IMPLICATIONS FOR THE FOSSIL RECORD AND OCEAN ACIDIFICATION. Palaios, 2013, 28, 317-332.	1.3	11
38	Repetitive Duality of Rhyolite Compositions, Timescales, and Storage and Extraction Conditions for Pleistocene Caldera-forming Eruptions, Hokkaido, Japan. Journal of Petrology, 2021, 62, .	2.8	9
39	Introduction: Advances in 3D imaging and analysis of geomaterials. , 2010, 6, 468-469.		7
40	Rhyolite-MELTS vs DERPâ€"Newer Does not Make it Better: a Comment on â€˜The Effect of Anorthite Content and Water on Quartzâ€"Feldspar Cotectic Compositions in the Rhyolitic System and Implications for Geobarometryâ€™ by Wilke et al. (2017; Journal of Petrology, 58, 789â€"818). Journal of Petrology, 2019, 60, 855-864.	2.8	7
41	Rhyolite-MELTS and the storage and extraction of large-volume crystal-poor rhyolitic melts at the TaupÅ•Volcanic Center: a reply to Wilson et al. (2021). Contributions To Mineralogy and Petrology, 2021, 176, 1.	3.1	6
42	On the origin of alkali feldspar megacrysts in granitoids: the case against textural coarsening. Contributions To Mineralogy and Petrology, 2019, 174, 1.	3.1	5
43	Comment on 'A Metamodel for Crustal Magmatism: Phase Equilibria of Giant Ignimbrites' by S. J. Fowler and F. J. Spera. Journal of Petrology, 2011, 52, 431-434.	2.8	4
44	Hydrothermal Cooling as a Requirement for Short Storage of Silicic Magmas. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009794.	2.5	4
45	Fragmentation, nucleation and migration of crystals and bubbles in the Bishop Tuff rhyolitic magma. , 2004, , .		2
46	Geology and petrography of the graciosa granites (Southern Brazil). Anais Da Academia Brasileira De Ciencias, 2001, 73, 467-467.	0.8	0