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List of Publications by Year in descending order

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65 papers	6,876 citations	61984 43 h-index	106344 65 g-index
68 all docs	68 docs citations	68 times ranked	4275 citing authors

#	Article	IF	Citations
1	Solubility of water in the Î±, Î² and Î³ phases of (Mg,Fe) 2 SiO 4. Contributions To Mineralogy and Petrology, 1996, 123, 345-357.	3.1	861
2	Constraints from partitioning experiments on the composition of subduction-zone fluids. Nature, 1996, 380, 237-240.	27.8	683
3	Partitioning of Cu, Sn, Mo, W, U, and Th between melt and aqueous fluid in the systems haplogranite-H2O?HCl and haplogranite-H2O?HF. Contributions To Mineralogy and Petrology, 1991, 109, 139-150.	3.1	360
4	Complete miscibility between silicate melts and hydrous fluids in the upper mantle: experimental evidence and geochemical implications. Earth and Planetary Science Letters, 1999, 165, 187-196.	4.4	325
5	Columbite solubility in granitic melts: consequences for the enrichment and fractionation of Nb and Ta in the Earth's crust. Contributions To Mineralogy and Petrology, 1997, 128, 213-227.	3.1	324
6	Influence of fluorine on the enrichment of high field strength trace elements in granitic rocks. Contributions To Mineralogy and Petrology, 1993, 114, 479-488.	3.1	310
7	Direct observation of complete miscibility in the albiteâ€“H2O system. Nature, 1997, 385, 710-712.	27.8	201
8	Role of fluids in transport and fractionation of uranium and thorium in magmatic processes. Nature, 1990, 348, 531-533.	27.8	200
9	Carbon solubility in olivine and the mode of carbon storage in the Earth's mantle. Nature, 2003, 424, 414-416.	27.8	173
10	Electrical conductivity of hydrous basaltic melts: implications for partial melting in the upper mantle. Contributions To Mineralogy and Petrology, 2011, 162, 637-650.	3.1	173
11	Carbon solubility in mantle minerals. Earth and Planetary Science Letters, 2006, 245, 730-742.	4.4	160
12	Infrared spectroscopy of hydrous silicate melts to 1000 degrees C and 10 kbar; direct observation of H₂O speciation in a diamond-anvil cell. American Mineralogist, 1995, 80, 1335-1338.	1.9	158
13	Fluorine in silicate glasses: A multinuclear nuclear magnetic resonance study. Geochimica Et Cosmochimica Acta, 1992, 56, 701-707.	3.9	144
14	Partitioning of Nb and Ta between rutile and felsic melt and the fractionation of Nb/Ta during partial melting of hydrous metabasalt. Geochimica Et Cosmochimica Acta, 2011, 75, 1673-1692.	3.9	143
15	Solubility of rutile in subduction zone fluids, as determined by experiments in the hydrothermal diamond anvil cell. Earth and Planetary Science Letters, 2005, 232, 393-402.	4.4	140
16	The origin of the negative niobium tantalum anomaly in subduction zone magmas. Earth and Planetary Science Letters, 2008, 267, 290-300.	4.4	133
17	The mobility of W and Mo in subduction zone fluids and the Moâ€“Wâ€“Thâ€“U systematics of island arc magmas. Earth and Planetary Science Letters, 2012, 351-352, 195-207.	4.4	115
18	Viscosity of Fluids in Subduction Zones. Science, 2004, 303, 513-516.	12.6	113

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19	Optical Absorption and Radiative Thermal Conductivity of Silicate Perovskite to 125 Gigapascals. Science, 2008, 322, 1529-1532.	12.6	105
20	Experimental Evidence for the Source of Excess Sulfur in Explosive Volcanic Eruptions. Science, 1999, 284, 1652-1654.	12.6	102
21	Carbon in Silicate Melts. Reviews in Mineralogy and Geochemistry, 2013, 75, 251-287.	4.8	102
22	Nitrogen speciation in mantle and crustal fluids. Geochimica Et Cosmochimica Acta, 2014, 129, 13-32.	3.9	97
23	Nitrogen solubility in upper mantle minerals. Earth and Planetary Science Letters, 2013, 377-378, 311-323.	4.4	95
24	Experimental constraints on rutile saturation during partial melting of metabasalt at the amphibolite to eclogite transition, with applications to TTG genesis. American Mineralogist, 2009, 94, 1175-1186.	1.9	86
25	Solubility of tin in (Cl, F)-bearing aqueous fluids at 700Â°C, 140MPa: A LA-ICP-MS study on synthetic fluid inclusions. Geochimica Et Cosmochimica Acta, 2007, 71, 3323-3335.	3.9	81
26	The mobility of U and Th in subduction zone fluids: an indicator of oxygen fugacity and fluid salinity. Contributions To Mineralogy and Petrology, 2011, 161, 597-613.	3.1	76
27	Electrical conductivity of NaCl-bearing aqueous fluids to 600ÂÂ°C and 1ÂGPa. Contributions To Mineralogy and Petrology, 2017, 172, 1.	3.1	72
28	Optical absorption spectra of ferropericlase to 84 GPa. American Mineralogist, 2007, 92, 433-436.	1.9	68
29	The distribution of sulfur between haplogranitic melts and aqueous fluids. Geochimica Et Cosmochimica Acta, 2010, 74, 645-660.	3.9	68
30	Fluids and trace element transport in subduction zones. American Mineralogist, 2017, 102, 5-20.	1.9	66
31	Monazite and xenotime solubility in granitic melts and the origin of the lanthanide tetrad effect. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	63
32	Partitioning of halogens between mantle minerals and aqueous fluids: implications for the fluid flow regime in subduction zones. Contributions To Mineralogy and Petrology, 2013, 165, 117-128.	3.1	62
33	Compositional re-equilibration of fluid inclusions in quartz. Contributions To Mineralogy and Petrology, 1995, 119, 1-15.	3.1	59
34	Water solubility in nominally anhydrous minerals measured by FTIR and 1 H MAS NMR: the effect of sample preparation. Physics and Chemistry of Minerals, 2000, 27, 371-376.	0.8	58
35	Zircon solubility in aqueous fluids at high temperatures and pressures. Geochimica Et Cosmochimica Acta, 2013, 119, 178-187.	3.9	56
36	Experimental evidence for high noble gas solubilities in silicate melts under mantle pressures. Earth and Planetary Science Letters, 2002, 195, 277-290.	4.4	55

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37	Distribution of chloride between aqueous fluids and felsic melts at 2 kbar and 800Â°C. European Journal of Mineralogy, 1994, 6, 913-924.	1.3	52
38	The speciation of Ni and Co in silicate melts from optical absorption spectra to 1500Â°C. Chemical Geology, 1999, 158, 105-115.	3.3	51
39	Nitrogen isotope fractionation during terrestrial core-mantle separation. Geochemical Perspectives Letters, 2016, , 138-147.	5.0	49
40	Nitrogen distribution between aqueous fluids and silicate melts. Earth and Planetary Science Letters, 2015, 411, 218-228.	4.4	48
41	Electrical Conductivity of NaClâ€Bearing Aqueous Fluids to 900ÂÂ°C and 5ÂGPa. Journal of Geophysical Research: Solid Earth, 2019, 124, 1397-1411.	3.4	48
42	The influence of the fluid phase composition on the solidus temperatures in the haplogranite system NaAlSi3O8-KAlSi3O8-SiO2-H2O-CO2. Contributions To Mineralogy and Petrology, 1989, 102, 321-327.	3.1	45
43	Electrical conductivity of dry and hydrous NaAlSi3O8 glasses and liquids at high pressures. Contributions To Mineralogy and Petrology, 2011, 162, 501-513.	3.1	44
44	Nitrogen solubility in the deep mantle and the origin of Earth's primordial nitrogen budget. Earth and Planetary Science Letters, 2018, 488, 134-143.	4.4	41
45	The oxidation state of sulfur in magmatic fluids. Earth and Planetary Science Letters, 2011, 301, 190-198.	4.4	39
46	Fluid-melt partitioning of sulfur in differentiated arc magmas and the sulfur yield of explosive volcanic eruptions. Geochimica Et Cosmochimica Acta, 2016, 176, 26-43.	3.9	39
47	Optical and near infrared spectra of ringwoodite to 21.5 GPa: Implications for radiative heat transport in the mantle. American Mineralogist, 2005, 90, 1209-1212.	1.9	37
48	Anhydrite solubility in differentiated arc magmas. Geochimica Et Cosmochimica Acta, 2015, 158, 79-102.	3.9	35
49	The speciation of carbon dioxide in silicate melts. Contributions To Mineralogy and Petrology, 2014, 167, 1.	3.1	33
50	The composition of subduction zone fluids and the origin of the trace element enrichment in arc magmas. Contributions To Mineralogy and Petrology, 2021, 176, 1.	3.1	32
51	The speciation of carbon monoxide in silicate melts and glasses. American Mineralogist, 2015, 100, 1641-1644.	1.9	23
52	Carbon solubility in silicate melts in equilibrium with a CO-CO2 gas phase and graphite. Geochimica Et Cosmochimica Acta, 2019, 259, 129-143.	3.9	22
53	In-situ Raman spectroscopic study of sulfur speciation in oxidized magmatic-hydrothermal fluids. American Mineralogist, 2012, 97, 1348-1353.	1.9	20
54	Adsorption of sulfur dioxide on volcanic ashes. American Mineralogist, 2014, 99, 1085-1094.	1.9	17

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55	The Relative Raman Scattering Cross Sections of H₂O and D₂O, with Implications for In Situ Studies of Isotope Fractionation. ACS Earth and Space Chemistry, 2018, 2, 925-934.	2.7	17
56	Anhydrite stability and the effect of Ca on the behavior of sulfur in felsic magmas. American Mineralogist, 2015, 100, 257-266.	1.9	16
57	The partitioning of sulfur between multicomponent aqueous fluids and felsic melts. Contributions To Mineralogy and Petrology, 2018, 173, 1.	3.1	16
58	Electrical conductivity measurements of aqueous fluids under pressure with a hydrothermal diamond anvil cell. Review of Scientific Instruments, 2014, 85, 115107.	1.3	15
59	Electrical Conductivity in Texturally Equilibrated Fluidâ€Bearing Forsterite Aggregates at 800Â°C and 1ÂGPa: Implications for the High Electrical Conductivity Anomalies in Mantle Wedges. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB021343.	3.4	13
60	Trace element fractionation between biotite, allanite, and granitic melt. Contributions To Mineralogy and Petrology, 2021, 176, 1.	3.1	12
61	The adsorption of HCl on volcanic ash. Earth and Planetary Science Letters, 2016, 438, 66-74.	4.4	8
62	Electrical conductivity of HCl-bearing aqueous fluids to 700ÂÂºC and 1ÂGPa. Contributions To Mineralogy and Petrology, 2020, 175, 1.	3.1	6
63	A systematic assessment of the diamond trap method for measuring fluid compositions in high-pressure experiments. American Mineralogist, 2021, 106, 28-37.	1.9	3
64	Electrical Conductivity of KClâ€H₂O Fluids in the Crust and Lithospheric Mantle. Journal of Geophysical Research: Solid Earth, 2022, 127, .	3.4	3
65	Comment on â€œExperimentally-determined carbon isotope fractionation in and between methane-bearing melt and fluid to upper mantle temperatures and pressuresâ€•by Mysen. Earth and Planetary Science Letters, 2017, 479, 387-388.	4.4	2