

# Burkhard C Schmidt

## List of Publications by Year in descending order

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29  
papers

1,366  
citations

471509

17  
h-index

477307

29  
g-index

30  
all docs

30  
docs citations

30  
times ranked

1427  
citing authors

#	ARTICLE	IF	CITATIONS
1	Aluminum coordination and the densification of high-pressure aluminosilicate glasses. <i>American Mineralogist</i> , 2005, 90, 1218-1222.	1.9	201
2	The replacement of plagioclase feldspars by albite: observations from hydrothermal experiments. <i>Contributions To Mineralogy and Petrology</i> , 2010, 159, 43-59.	3.1	169
3	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
4	Retention of Xenon in Quartz and Earth's Missing Xenon. <i>Science</i> , 2005, 310, 1174-1177.	12.6	99
5	The effect of fluorine, boron and phosphorus on the viscosity of pegmatite forming melts. <i>Chemical Geology</i> , 2013, 346, 184-198.	3.3	74
6	Experimental study of the aragonite to calcite transition in aqueous solution. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 6211-6224.	3.9	72
7	Structural mechanisms of compression and decompression in high-pressure K <sub>2</sub> Si <sub>4</sub> O <sub>9</sub> glasses: an investigation utilizing Raman and NMR spectroscopy of glasses and crystalline materials. <i>Chemical Geology</i> , 2004, 213, 137-151.	3.3	71
8	Quantitative determination of water speciation in aluminosilicate glasses: a comparative NMR and IR spectroscopic study. <i>Chemical Geology</i> , 2001, 174, 195-208.	3.3	67
9	Water solubility in phonolite melts: Influence of melt composition and temperature. <i>Chemical Geology</i> , 2008, 256, 259-268.	3.3	66
10	Equilibrium and disequilibrium degassing of a phonolitic melt (Vesuvius AD 79 "white pumice") simulated by decompression experiments. <i>Journal of Volcanology and Geothermal Research</i> , 2007, 161, 151-164.	2.1	63
11	Experimental evidence for high noble gas solubilities in silicate melts under mantle pressures. <i>Earth and Planetary Science Letters</i> , 2002, 195, 277-290.	4.4	55
12	Hydrothermal replacement of Aragonite by Calcite: interplay between replacement, fracturing and growth. <i>European Journal of Mineralogy</i> , 2013, 25, 123-136.	1.3	39
13	Water speciation in sodium silicate glasses based on NIR and NMR spectroscopy. <i>Chemical Geology</i> , 2008, 256, 231-241.	3.3	36
14	Structural implications of water and boron dissolution in albite glass. <i>Journal of Non-Crystalline Solids</i> , 2004, 337, 207-219.	3.1	28
15	Raman spectroscopic characterisation of disordered alkali feldspars along the join KAlSi <sub>3</sub> O <sub>8</sub> NaAlSi <sub>3</sub> O <sub>8</sub> : application to natural sanidine and anorthoclase. <i>European Journal of Mineralogy</i> , 2008, 20, 1055-1065.	1.3	27
16	Fluorine and chlorine diffusion in phonolitic melt. <i>Chemical Geology</i> , 2013, 346, 162-171.	3.3	21
17	The effect of lithium on the viscosity of pegmatite forming liquids. <i>Chemical Geology</i> , 2015, 410, 1-11.	3.3	21
18	OH defect contents in quartz in a granitic system at 1-5 kbar. <i>Contributions To Mineralogy and Petrology</i> , 2019, 174, 98.	3.1	18

#	ARTICLE	IF	CITATIONS
19	CO <sub>2</sub> –H <sub>2</sub> O solubility in K-rich phonolitic and leucititic melts. Contributions To Mineralogy and Petrology, 2019, 174, 1.	3.1	16
20	BaMn[CO <sub>3</sub> ] <sub>2</sub> – a previously unrecognized double carbonate in low-temperature environments: Structural, spectroscopic, and textural tools for future identification. Chemie Der Erde, 2012, 72, 85-89.	2.0	14
21	Water diffusion in phonolite melts. Geochimica Et Cosmochimica Acta, 2013, 107, 220-230.	3.9	14
22	Constraints on the incorporation mechanism of chlorine in peralkaline and peraluminous Na <sub>2</sub> O-CaO-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> glasses. American Mineralogist, 2014, 99, 1713-1723.	1.9	14
23	Effect of boron on the water speciation in (alumino)silicate melts and glasses. Geochimica Et Cosmochimica Acta, 2004, 68, 5013-5025.	3.9	12
24	Bonding of xenon to oxygen in magmas at depth. Earth and Planetary Science Letters, 2018, 484, 103-110.	4.4	9
25	Organic Compounds and Conditioning Films Within Deep Rock Fractures of the Åspö Hard Rock Laboratory, Sweden. Geomicrobiology Journal, 2015, 32, 231-242.	2.0	6
26	CO <sub>2</sub> -crystal wettability in potassic magmas: implications for eruptive dynamics in light of experimental evidence for heterogeneous nucleation. Geophysical Journal International, 2017, 209, 688-694.	2.4	5
27	Constraints on non-isothermal diffusion modeling: An experimental analysis and error assessment using halogen diffusion in melts. American Mineralogist, 2020, 105, 227-238.	1.9	5
28	The effect of composition, compression, and decompression on the structure of high-pressure aluminosilicate glasses: an investigation utilizing <sup>17</sup> O and <sup>27</sup> Al NMR. , 2005, , 211-240.		3
29	CO <sub>2</sub> bubble nucleation upon pressure release in potassium-rich silicate magmas. Chemical Geology, 2017, 461, 171-181.	3.3	2