David Dolejs

List of Publications by Year in descending order

47 papers	1,677 citations	218677 26 h-index	289244 40 g-index
49 all docs	49 docs citations	49 times ranked	1716 citing authors

#	Article	IF	Citations
1	Experimental determination of the effect of H2O on the 410-km seismic discontinuity. Earth and Planetary Science Letters, 2007, 256, 182-195.	4.4	104
2	Deciphering the petrogenesis of deeply buried granites: whole-rock geochemical constraints on the origin of largely undepleted felsic granulites from the Moldanubian Zone of the Bohemian Massif. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2004, 95, 141-159.	0.3	92
3	Thermodynamic modeling of non-ideal mineralâ€“fluid equilibria in the system Siâ€“Alâ€“Feâ€“Mgâ€“Caâ€“Naâ€“Kâ€“Hâ€“Oâ€“Cl at elevated temperatures and pressures: Implications for hydrothermal mass transfer in granitic rocks. Geochimica Et Cosmochimica Acta, 2008, 72, 526-553.	3.9	75
4	Magmatic anhydrite and calcite in the ore-forming quartz-monzodiorite magma at Santa Rita, New Mexico (USA): genetic constraints on porphyry-Cu mineralization. Lithos, 2004, 72, 147-161.	1.4	71
5	Molybdenite Saturation in Silicic Magmas: Occurrence and Petrological Implications. Journal of Petrology, 2011, 52, 891-904.	2.8	68
6	Incipient eclogite facies metamorphism in the Moldanubian granulites revealed by mineral inclusions in garnet. Lithos, 2010, 114, 54-69.	1.4	66
7	Thermodynamic model for mineral solubility in aqueous fluids: theory, calibration and application to model fluidâ€flow systems. Geofluids, 2010, 10, 20-40.	0.7	65
8	Thermodynamic analysis of the system Na2O-K2O-CaO-Al2O3-SiO2-H2O-F2Oâ‹1: Stability of fluorine-bearing minerals in felsic igneous suites. Contributions To Mineralogy and Petrology, 2004, 146, 762-778.	3.1	63
9	Liquidus Equilibria in the System K2O-Na2O-Al2O3-SiO2-F2O-1-H2O to 100 MPa: II. Differentiation Paths of Fluorosilicic Magmas in Hydrous Systems. Journal of Petrology, 2007, 48, 807-828.	2.8	63
10	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
11	Large scale melt synthesis in an open crucible of Na-fluorohectorite with superb charge homogeneity and particle size. Applied Clay Science, 2010, 48, 39-45.	5.2	58
12	Liquidus Equilibria in the System K2O-Na2O-Al2O3-SiO2-F2O-1-H2O to 100 MPa: I. Silicate-Fluoride Liquid Immiscibility in Anhydrous Systems. Journal of Petrology, 2007, 48, 785-806.	2.8	56
13	Zircon solubility in aqueous fluids at high temperatures and pressures. Geochimica Et Cosmochimica Acta, 2013, 119, 178-187.	3.9	56
14	Solubility of molybdenite (MoS2) in aqueous fluids at 600â€“800Â°C, 200MPa: A synthetic fluid inclusion study. Geochimica Et Cosmochimica Acta, 2012, 77, 175-185.	3.9	52
15	A mineralogical model for density and elasticity of the Earth's mantle. Geochemistry, Geophysics, Geosystems, 2007, 8, .	2.5	43
16	Partitioning of boron among melt, brine and vapor in the system haplograniteâ€“H2Oâ€“NaCl at 800 Â°C and 100 MPa. Chemical Geology, 2004, 210, 135-147.	3.3	42
17	Magnetic fabric and rheology of co-mingled magmas in the Nasavrky Plutonic Complex (E Bohemia): implications for intrusive strain regime and emplacement mechanism. Tectonophysics, 1999, 307, 93-111.	2.2	39
18	Garnet exsolution in pyroxene from clinopyroxenites in the Moldanubian zone: constraining the early preâ€convergence history of ultramafic rocks in the Variscan orogen. Journal of Metamorphic Geology, 2009, 27, 655-671.	3.4	39

#	Article	IF	Citations
19	High-pressure partial melting and melt loss in felsic granulites in the KutnÃ¡ Hora complex, Bohemian Massif (Czech Republic). Lithos, 2011, 125, 641-658.	1.4	37
20	Phase formation during liquid phase sintering of ZnO ceramics. Ceramics International, 2009, 35, 3313-3320.	4.8	35
21	Fluorite solubility in hydrous haplogranitic melts at 100 MPa. Chemical Geology, 2006, 225, 40-60.	3.3	33
22	Halogens in Silicic Magmas and Their Hydrothermal Systems. Springer Geochemistry, 2018, , 431-543.	0.1	33
23	Magmatic-hydrothermal transition of Mo-W-mineralized granite-pegmatite-greisen system recorded by trace elements in quartz: Krupka district, Eastern KruÅ¡nÃ© hory/Erzgebirge. Chemical Geology, 2019, 523, 179-202.	3.3	33
24	Iron-carbon interactions at high temperatures and pressures. Applied Physics Letters, 2008, 92, .	3.3	32
25	Thermodynamics of Aqueous Species at High Temperatures and Pressures: Equations of State and Transport Theory. Reviews in Mineralogy and Geochemistry, 2013, 76, 35-79.	4.8	32
26	Garnet as a major carrier of the Y and REE in the granitic rocks: An example from the layered anorogenic granite in the Brno Batholith, Czech Republic. American Mineralogist, 2014, 99, 1922-1941.	1.9	27
27	MMAâ€EoS: A Computational Framework for Mineralogical Thermodynamics. Journal of Geophysical Research: Solid Earth, 2017, 122, 9881-9920.	3.4	24
28	Thermodynamic modeling of melts in the system Na2O-NaAlO2-SiO2-F2Oâ^'1. Geochimica Et Cosmochimica Acta, 2005, 69, 5537-5556.	3.9	23
29	Heterogeneous nucleation as the predominant mode of crystallization in natural magmas: numerical model and implications for crystalâ€“melt interaction. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	22
30	Calculation of Time-dependent Nucleation and Growth Rates from Quantitative Textural Data: Inversion of Crystal Size Distribution. Journal of Petrology, 2013, 54, 913-931.	2.8	20
31	Textural evidence of magma decompression, devolatilization and disequilibrium quenching: an example from the Western KruÅ¡nÃ© hory/Erzgebirge granite pluton. Contributions To Mineralogy and Petrology, 2007, 155, 93-109.	3.1	19
32	Solubility of molybdenite in hydrous granitic melts at 800Â°C, 100â€“200MPa. Geochimica Et Cosmochimica Acta, 2014, 131, 393-401.	3.9	19
33	Late Variscan calc-alkaline lamprophyres in the Krupka ore district, Eastern KruÅ¡nÃ© hory/Erzgebirge: their relationship to Sn-W mineralization. Journal of Geosciences (Czech Republic), 2014, , 41-68.	0.6	18
34	Solubility of gold in oxidized, sulfur-bearing fluids at 500â€“850â€Â°C and 200â€“230â€MPa: A synthetic fluid inclusion study. Geochimica Et Cosmochimica Acta, 2018, 222, 655-670.	3.9	17
35	Deciphering the petrogenesis of deeply buried granites: whole-rock geochemical constraints on the origin of largely undepleted felsic granulites from the Moldanubian Zone of the Bohemian Massif. , 2004, , .		16
36	Phase transitions and volumetric properties of cryolite, Na3AlF6: Differential thermal analysis to 100 MPa. American Mineralogist, 2006, 91, 97-103.	1.9	16

#	Article	IF	Citations
37	The composition and redox state of bridgmanite in the lower mantle as a function of oxygen fugacity. Geochimica Et Cosmochimica Acta, 2021, 303, 110-136.	3.9	16
38	Kinetic model of nucleation and growth in silicate melts: Implications for igneous textures and their quantitative description. Geochimica Et Cosmochimica Acta, 2014, 131, 164-183.	3.9	12
39	Origin of earthquake swarms in the western Bohemian Massif: Is the mantle CO2 degassing, followed by the Cheb Basin subsidence, an essential driving force?. Tectonophysics, 2016, 668-669, 42-51.	2.2	12
40	Melting phase relations in the systems Mg2SiO4â€“H2O and MgSiO3â€“H2O and the formation of hydrous melts in the upper mantle. Geochimica Et Cosmochimica Acta, 2017, 204, 68-82.	3.9	12
41	Melt extraction from crystal mushes: Numerical model of texture evolution and calibration of crystallinity-ordering relationships. Lithos, 2015, 239, 19-32.	1.4	11
42	Thermal effects of variable material properties and metamorphic reactions in a threeâ€component subducting slab. Journal of Geophysical Research: Solid Earth, 2015, 120, 6823-6845.	3.4	10
43	Petrology and geochemistry of Variscan dykes from the JÃ¡chymov (Joachimsthal) ore district, Czech Republic. Journal of Geosciences (Czech Republic), 2012, , 65-104.	0.6	6
44	Multiple tectonic-magmatic Mo-enrichment events in Yuleken porphyry Cu-Mo deposit, NW China and itsâ€™ implications for the formation of giant porphyry Mo deposit. Ore Geology Reviews, 2021, 139, 104401.	2.7	6
45	Rb-Sr isotopic composition of granites in the Western KruÅ¡nÃ© hory/Erzgebirge pluton, Central Europe: record of variations in source lithologies, mafic magma input and postmagmatic hydrothermal events. Mineralogy and Petrology, 2016, 110, 601-622.	1.1	4
46	3. Thermodynamics of Aqueous Species at High Temperatures and Pressures: Equations of State and Transport Theory. , 2013, , 35-80.		2
47	Ions surprise in Earth's deep fluids. Nature, 2016, 539, 362-364.	27.8	2