Rolf S Arvidson

List of Publications by Year
in descending order

33	2,939	331670	395702
papers	citations	21 h-index	33 g-index

34	34	34	3315
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The role of crystal heterogeneity in alkali feldspar dissolution kinetics. Geochimica Et Cosmochimica Acta, 2021, 309, 329-351.	3.9	17
2	Kinetic concepts for quantitative prediction of fluid-solid interactions. Chemical Geology, 2019, 504, 216-235.	3.3	42
3	Temporal Evolution of Calcite Surface Dissolution Kinetics. Minerals (Basel, Switzerland), 2018, 8, 256.	2.0	31
4	The effect of crystal size variation on the rate of dissolution â€“ A kinetic Monte Carlo study. Geochimica Et Cosmochimica Acta, 2017, 212, 167-175.	3.9	53
5	Calcite Dissolution Kinetics. Aquatic Geochemistry, 2015, 21, 415-422.	1.3	12
6	The Sensitivity of the Phanerozoic Inorganic Carbon System to the Onset of Pelagic Sedimentation. Aquatic Geochemistry, 2014, 20, 343-362.	1.3	9
7	Lateral Resolution Enhancement of Vertical Scanning Interferometry by Sub-Pixel Sampling. Microscopy and Microanalysis, 2014, 20, 90-98.	0.4	15
8	Fundamental Controls of Dissolution Rate Spectra: Comparisons of Model and Experimental Results. Procedia Earth and Planetary Science, 2013, 7, 537-540.	0.6	16
9	Geologic history of seawater: A MAGic approach to carbon chemistry and ocean ventilation. Chemical Geology, 2013, 362, 287-304.	3.3	39
10	Does the stepwave model predict mica dissolution kinetics?. Geochimica Et Cosmochimica Acta, 2012, 97, 120-130.	3.9	32
11	How predictable are dissolution rates of crystalline material?. Geochimica Et Cosmochimica Acta, 2012, 98, 177-185.	3.9	169
12	Landâ€“sea carbon and nutrient fluxes and coastal ocean CO2 exchange and acidification: Past, present, and future. Applied Geochemistry, 2011, 26, S298-S302.	3.0	12
13	Dolomite Controls on Phanerozoic Seawater Chemistry. Aquatic Geochemistry, 2011, 17, 735-747.	1.3	25
14	Reactions at Surfaces: A New Approach Integrating Interferometry and Kinetic Simulations. Journal of the American Ceramic Society, 2010, 93, 3519-3530.	3.8	43
15	Fluorite dissolution at acidic pH: In situ AFM and ex situ VSI experiments and Monte Carlo simulations. Geochimica Et Cosmochimica Acta, 2010, 74, 4298-4311.	3.9	33
16	Mineral dissolution kinetics as a function of distance from equilibrium â€“ New experimental results. Chemical Geology, 2010, 269, 79-88.	3.3	103
17	Biological and Geochemical Forcings to Phanerozoic Change in Seawater, Atmosphere, and Carbonate Precipitate Composition. , 2007, , 377-403.		10
18	Calcium Carbonate Formation and Dissolution. Chemical Reviews, 2007, 107, 342-381.	47.7	862

#	Article	IF	Citations
19	Kinetic inhibition of calcite (104) dissolution by aqueous manganese(II). Journal of Crystal Growth, 2007, 307, 116-125.	1.5	44
20	Surface Area Measurement of Functionalized Single-Walled Carbon Nanotubes. Journal of Physical Chemistry B, 2006, 110, 24812-24815.	2.6	47
21	Magnesium inhibition of calcite dissolution kinetics. Geochimica Et Cosmochimica Acta, 2006, 70, 583-594.	3.9	98
22	The control of Phanerozoic atmosphere and seawater composition by basaltâ€“seawater exchange reactions. Journal of Geochemical Exploration, 2006, 88, 412-415.	3.2	5
23	Phosphonate mediated surface reaction and reorganization: implications for the mechanism controlling cement hydration inhibition. Chemical Communications, 2005, , 2354.	4.1	18
24	Modeling the Mutualistic Interactions between Tubeworms and Microbial Consortia. PLoS Biology, 2005, 3, e77.	5.6	102
25	The sulfur biogeochemistry of chemosynthetic cold seep communities, gulf of Mexico, USA. Marine Chemistry, 2004, 87, 97-119.	2.3	75
26	Single-crystal plagioclase feldspar dissolution rates measured by vertical scanning interferometry. American Mineralogist, 2004, 89, 51-56.	1.9	49
27	Variation in calcite dissolution rates:. Geochimica Et Cosmochimica Acta, 2003, 67, 1623-1634.	3.9	317
28	The dissolution kinetics of major sedimentary carbonate minerals. Earth-Science Reviews, 2002, 58, 51-84.	9.1	544
29	Pyritization of Iron in Sediments from the Continental Slope of the Northern Gulf of Mexico. Aquatic Geochemistry, 2002, 8, 3-13.	1.3	12
30	Temperature Dependence of Mineral Precipitation Rates Along the CaCO3â€“MgCO3 Join. Aquatic Geochemistry, 2000, 6, 249-256.	1.3	28
31	Tentative kinetic model for dolomite precipitation rate and its application to dolomite distribution. Aquatic Geochemistry, 1997, 2, 273-298.	1.3	64
32	Dolomites: A Volume in Honor of Dolomieu. Eos, 1996, 77, 135-135.	0.1	2
33	Tentative kinetic model for dolomite precipitation rate and its application to dolomite distribution. Aquatic Geochemistry, 1996, 2, 273-298.	1.3	9