Bertrand Fritz

List of Publications by Year
in descending order

23 papers	610 citations	516681 16 h-index	642715 23 g-index
23 all docs	23 docs citations	23 times ranked	469 citing authors

#	ARTICLE	IF	CITATIONS
1	An ideal solid solution model for calculating solubility of clay minerals. Clay Minerals, 1981, 16, 361-373.	0.6	100
2	Modelling the long term alteration of the engineered bentonite barrier in an underground radioactive waste repository. Applied Clay Science, 2010, 47, 82-90.	5.2	81
3	Modelling of long-term diffusion–reaction in a bentonite barrier for radioactive waste confinement. Applied Clay Science, 2005, 30, 181-198.	5.2	49
4	Simulation of the nucleation and growth of simple clay minerals in weathering processes: The NANOKIN code. Geochimica Et Cosmochimica Acta, 2009, 73, 1340-1358.	3.9	39
5	Interactions of corrosion products and bentonite: An extended multicomponent reactive transport model. Physics and Chemistry of the Earth, 2011, 36, 1661-1668.	2.9	33
6	Nucleation, growth and ageing scenarios in closed systems I: A unified mathematical framework for precipitation, condensation and crystallization. Journal of Crystal Growth, 2006, 297, 180-186.	1.5	29
7	Numerical validation of a Eulerian hydrochemical code using a 1D multisolute mass transport system involving heterogeneous kinetically controlled reactions. Journal of Contaminant Hydrology, 1998, 30, 201-216.	3.3	27
8	Modeling of transport and reaction in an engineered barrier for radioactive waste confinement. Applied Clay Science, 2005, 29, 155-171.	5.2	26
9	Modelling acid stimulation in the enhanced geothermal system of Soultz-sous-Forêts (Alsace, France). Geothermics, 2020, 85, 101772.	3.4	26
10	Nucleation, growth and ageing scenarios in closed systems II: Dynamics of a new phase formation. Journal of Crystal Growth, 2006, 297, 187-198.	1.5	25
11	Coupled transport-reaction modeling of the long-term interaction between iron, bentonite and Callovo-Oxfordian claystone in radioactive waste confinement systems. Applied Clay Science, 2014, 101, 430-443.	5.2	21
12	Precipitation mechanism of amorphous silica nanoparticles: A simulation approach. Journal of Colloid and Interface Science, 2015, 448, 553-563.	9.4	21
13	Simulation of the nucleation and growth of binary solid solutions in aqueous solutions. Chemical Geology, 2010, 269, 89-99.	3.3	20
14	Calcite formation by hydrothermal carbonation of portlandite: complementary insights from experiment and simulation. CrystEngComm, 2013, 15, 3392.	2.6	18
15	Hydrogeochemical modeling (KIRMAT) of spring and deep borehole water compositions in the small granitic Ringelbach catchment (Vosges Mountains, France). Applied Geochemistry, 2017, 87, 1-21.	3.0	17
16	Monitoring and reactive-transport modeling of the spatial and temporal variations of the Strengbach spring hydrochemistry. Geochimica Et Cosmochimica Acta, 2018, 225, 17-35.	3.9	17
17	Crossing hydrological and geochemical modeling to understand the spatiotemporal variability of water chemistry in a headwater catchment (Strengbach, France). Hydrology and Earth System Sciences, 2020, 24, 3111-3133.	4.9	12
18	Kinetic modeling of interactions between iron, clay and water: Comparison with data from batch experiments. Applied Geochemistry, 2015, 53, 13-26.	3.0	11

#	Article	IF	Citations
19	Modeling the impact of temperature on the saturation state and behavior of minerals in the Soultz-sous-Forêts geothermal system. Geothermics, 2016, 64, 196-208.	3.4	11
20	Investigating the role of deep weathering in critical zone evolution by reactive transport modeling of the geochemical composition of deep fracture water. Geochimica Et Cosmochimica Acta, 2021, 312, 257-278.	3.9	11
21	Kinetics of precipitation of non-ideal solid-solutions in a liquid environment. Chemical Geology, 2016, 431, 20-35.	3.3	9
22	Theoretical analysis of the kinetics of precipitation of lizardite and magnesite from olivine alteration. Chemical Geology, 2018, 497, 18-26.	3.3	6
23	Modelling the precipitation of nanoparticles in a closed medium in the presence of seeds: Application to amorphous silica synthesis. Journal of Colloid and Interface Science, 2021, 601, 843-852.	9.4	1