

Domenik Wolff-Boenisch

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3828974/publications.pdf>

Version: 2024-02-01

51
papers

3,232
citations

201575

27
h-index

206029

48
g-index

51
all docs

51
docs citations

51
times ranked

2671
citing authors

#	ARTICLE	IF	CITATIONS
1	Rapid carbon mineralization for permanent disposal of anthropogenic carbon dioxide emissions. <i>Science</i> , 2016, 352, 1312-1314.	6.0	565
2	The dissolution rates of natural glasses as a function of their composition at pH 4 and 10.6, and temperatures from 25 to 74Å°C. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 4843-4858.	1.6	321
3	Mineral sequestration of carbon dioxide in basalt: A pre-injection overview of the CarbFix project. <i>International Journal of Greenhouse Gas Control</i> , 2010, 4, 537-545.	2.3	294
4	The effect of crystallinity on dissolution rates and CO2 consumption capacity of silicates. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 858-870.	1.6	178
5	An experimental study of crystalline basalt dissolution from 2 $\hat{\text{a}}\text{C}^{1/2}$ pH $\hat{\text{a}}\text{C}^{1/2}$ 11 and temperatures from 5 to 75 Å°C. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 5496-5509.	1.6	158
6	The CarbFix Pilot Projectâ€“Storing carbon dioxide in basalt. <i>Energy Procedia</i> , 2011, 4, 5579-5585.	1.8	101
7	Permanent Carbon Dioxide Storage into Basalt: The CarbFix Pilot Project, Iceland. <i>Energy Procedia</i> , 2009, 1, 3641-3646.	1.8	99
8	The effect of fluoride on the dissolution rates of natural glasses at pH 4 and 25Å°C. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 4571-4582.	1.6	96
9	Solving the carbon-dioxide buoyancy challenge: The design and field testing of a dissolved CO2 injection system. <i>International Journal of Greenhouse Gas Control</i> , 2015, 37, 213-219.	2.3	96
10	Dissolution of basalts and peridotite in seawater, in the presence of ligands, and CO2: Implications for mineral sequestration of carbon dioxide. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 5510-5525.	1.6	92
11	The effect of pH, grain size, and organic ligands on biotite weathering rates. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 164, 127-145.	1.6	86
12	Do carbonate precipitates affect dissolution kinetics? 1: Basaltic glass. <i>Chemical Geology</i> , 2011, 284, 306-316.	1.4	74
13	An experimental study of basaltic glassâ€“H2Oâ€“CO2 interaction at 22 and 50Å°C: Implications for subsurface storage of CO2. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 126, 123-145.	1.6	72
14	Experimental determination of plagioclase dissolution rates as a function of its composition and pH at 22Å°C. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 139, 154-172.	1.6	69
15	Hydrogen wettability of clays: Implications for underground hydrogen storage. <i>International Journal of Hydrogen Energy</i> , 2021, 46, 34356-34361.	3.8	67
16	Spatial variations in chemical weathering and CO2 consumption in Nepalese High Himalayan catchments during the monsoon season. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 3148-3170.	1.6	55
17	Rapid solubility and mineral storage of CO2 in basalt. <i>Energy Procedia</i> , 2014, 63, 4561-4574.	1.8	52
18	A brief history of CarbFix: Challenges and victories of the projectâ€™s pilot phase. <i>Energy Procedia</i> , 2018, 146, 103-114.	1.8	52

#	ARTICLE	IF	CITATIONS
19	Do carbonate precipitates affect dissolution kinetics?. <i>Chemical Geology</i> , 2013, 337-338, 56-66.	1.4	47
20	CarbFix: a CCS pilot project imitating and accelerating natural CO ₂ sequestration. , 2011, 1, 105-118.		46
21	Western Australia basalt-CO ₂ -brine wettability at geo-storage conditions. <i>Journal of Colloid and Interface Science</i> , 2021, 603, 165-171.	5.0	46
22	The role of silicate surfaces on calcite precipitation kinetics. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 135, 231-250.	1.6	40
23	The effect of rock composition on cyanobacterial weathering of crystalline basalt and rhyolite. <i>Geobiology</i> , 2012, 10, 434-444.	1.1	37
24	Flow-through reactor experiments on basalt-(sea)water-CO ₂ reactions at 90 °C and neutral pH. What happens to the basalt pore space under post-injection conditions?. <i>International Journal of Greenhouse Gas Control</i> , 2018, 68, 176-190.	2.3	37
25	Dissolution of diopside and basaltic glass: the effect of carbonate coating. <i>Mineralogical Magazine</i> , 2008, 72, 135-139.	0.6	36
26	Geomorphic and climatic controls on chemical weathering in the High Himalayas of Nepal. <i>Geomorphology</i> , 2010, 122, 205-210.	1.1	36
27	The effect of desferrioxamine B, enterobactin, oxalic acid, and Na-alginate on the dissolution of uranyl-treated goethite at pH 6 and 25 °C. <i>Chemical Geology</i> , 2007, 243, 357-368.	1.4	30
28	Opportunities and challenges for CarbFix: An evaluation of capacities and costs for the pilot scale mineralization sequestration project at Hellisheidi, Iceland and beyond. <i>International Journal of Greenhouse Gas Control</i> , 2011, 5, 1065-1072.	2.3	29
29	An experimental study of basalt-seawater-CO ₂ interaction at 130 °C. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 308, 21-41.	1.6	28
30	A comparative study of the effect of desferrioxamine B, oxalic acid, and Na-alginate on the desorption of U(VI) from goethite at pH 6 and 25 °C. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 4356-4366.	1.6	26
31	The effect of desferrioxamine B on the desorption of U(VI) from Georgia kaolinite KGa-1b and its ligand-promoted dissolution at pH 6 and 25 °C. <i>Chemical Geology</i> , 2007, 242, 278-287.	1.4	24
32	Dissolution rates of crystalline basalt at pH 4 and 10 and 25-75 °C. <i>Mineralogical Magazine</i> , 2008, 72, 155-158.	0.6	23
33	Basalt-CO ₂ -brine wettability at storage conditions in basaltic formations. <i>International Journal of Greenhouse Gas Control</i> , 2020, 102, 103148.	2.3	23
34	Towards establishing a combined rate law of nucleation and crystal growth – The case study of gypsum precipitation. <i>Journal of Crystal Growth</i> , 2018, 485, 28-40.	0.7	19
35	Experimental Studies of Basalt-H ₂ O-CO ₂ Interaction with a High Pressure Column Flow Reactor: the Mobility of Metals. <i>Energy Procedia</i> , 2013, 37, 5823-5833.	1.8	18
36	Review of available fluid sampling tools and sample recovery techniques for groundwater and unconventional geothermal research as well as carbon storage in deep sedimentary aquifers. <i>Journal of Hydrology</i> , 2014, 513, 68-80.	2.3	18

#	ARTICLE	IF	CITATIONS
37	Experimental observations of CO ₂ -water-basaltic glass interaction in a large column reactor experiment at 50 °C. <i>International Journal of Greenhouse Gas Control</i> , 2019, 89, 9-19.	2.3	18
38	Toward Cleaner Geothermal Energy Utilization: Capturing and Sequestering CO ₂ and H ₂ S Emissions from Geothermal Power Plants. <i>Transport in Porous Media</i> , 2015, 108, 61-84.	1.2	17
39	On the buffer capacity of CO ₂ -charged seawater used for carbonation and subsequent mineral sequestration. <i>Energy Procedia</i> , 2011, 4, 3738-3745.	1.8	15
40	Gypsum solubility under pressure conditions relevant to CO ₂ geological storage. <i>International Journal of Greenhouse Gas Control</i> , 2016, 55, 15-22.	2.3	15
41	A novel experimental system for the exploration of CO ₂ -water-rock interactions under conditions relevant to CO ₂ geological storage. <i>Chemical Engineering Journal</i> , 2018, 334, 1206-1213.	6.6	14
42	CO ₂ sequestration in basaltic rocks in Iceland: Development of a piston-type downhole sampler for CO ₂ rich fluids and tracers. <i>Energy Procedia</i> , 2011, 4, 3510-3517.	1.8	12
43	A novel high pressure column flow reactor for experimental studies of CO ₂ mineral storage. <i>Applied Geochemistry</i> , 2013, 30, 91-104.	1.4	11
44	Geochemical modelling of petroleum well data from the Perth Basin. Implications for potential scaling during low enthalpy geothermal exploration from a hot sedimentary aquifer. <i>Applied Geochemistry</i> , 2013, 37, 12-28.	1.4	11
45	A foray into false positive results in mineral dissolution and precipitation studies. <i>Applied Geochemistry</i> , 2016, 71, 9-19.	1.4	7
46	Erratum to Domenik Wolff-Boenisch, Emmanuel J. Gabet, Douglas W. Burbank, Heiko Langner, Jaakko Putkonen (2009) "Spatial variations in chemical weathering and CO ₂ consumption in Nepalese High Himalayan catchments during the monsoon season", <i>Geochimica et Cosmochimica Acta</i> 73, 3148-3170. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 6692-6696.	1.6	5
47	Kinetic control on the distribution of secondary precipitates during CO ₂ -basalt interactions. <i>E3S Web of Conferences</i> , 2019, 98, 04006.	0.2	5
48	Gypsum crystal growth kinetics under conditions relevant to CO ₂ geological storage. <i>International Journal of Greenhouse Gas Control</i> , 2019, 91, 102829.	2.3	5
49	The syringe sampler: An inexpensive alternative borehole sampling technique for CO ₂ -rich fluids during mineral carbon storage. , 2016, 6, 167-177.		4
50	Sorptionsverhalten von 2,4,6-Trinitrotoluol und 1,3-Dinitrobenzol an unterschiedlichen Bodenmodellsubstanzen. <i>Grundwasser</i> , 1996, 1, 63-68.	1.4	3
51	A case study on student perception of online lecturing. , 0, , .		0