Dominique J Tobler

List of Publications by Year
in descending order

58 papers	1,988 citations	257450 24 h-index	254184 43 g-index
58 all docs	58 docs citations	58 times ranked	2338 citing authors

#	Article	IF	Citations
1	A Field and Modeling Study of Fractured Rock Permeability Reduction Using Microbially Induced Calcite Precipitation. Environmental Science & Technology, 2013, 47, 13637-13643.	10.0	178
2	Comparison of rates of ureolysis between Sporosarcina pasteurii and an indigenous groundwater community under conditions required to precipitate large volumes of calcite. Geochimica Et Cosmochimica Acta, 2011, 75, 3290-3301.	3.9	152
3	Quantification of initial steps of nucleation and growth of silica nanoparticles: An in-situ SAXS and DLS study. Geochimica Et Cosmochimica Acta, 2009, 73, 5377-5393.	3.9	135
4	Microbially mediated plugging of porous media and the impact of differing injection strategies. Ecological Engineering, 2012, 42, 270-278.	3.6	109
5	The Structure of Sulfidized Zero-Valent Iron by One-Pot Synthesis: Impact on Contaminant Selectivity and Long-Term Performance. Environmental Science & Technology, 2019, 53, 4389-4396.	10.0	99
6	Controls on the rate of ureolysis and the morphology of carbonate precipitated by S. Pasteurii biofilms and limits due to bacterial encapsulation. Ecological Engineering, 2012, 41, 32-40.	3.6	94
7	Citrate Effects on Amorphous Calcium Carbonate (ACC) Structure, Stability, and Crystallization. Advanced Functional Materials, 2015, 25, 3081-3090.	14.9	84
8	Effect of pH on Amorphous Calcium Carbonate Structure and Transformation. Crystal Growth and Design, 2016, 16, 4500-4508.	3.0	76
9	Community Structure of Subsurface Biofilms in the Thermal Sulfidic Caves of Acquasanta Terme, Italy. Applied and Environmental Microbiology, 2010, 76, 5902-5910.	3.1	72
10	<i>Inâ€situ</i> grown silica sinters in Icelandic geothermal areas. Geobiology, 2008, 6, 481-502.	2.4	65
11	Bacterial diversity in five Icelandic geothermal waters: temperature and sinter growth rate effects. Extremophiles, 2011, 15, 473-485.	2.3	64
12	The Effect of Aspartic Acid and Glycine on Amorphous Calcium Carbonate (ACC) Structure, Stability and Crystallization. Procedia Earth and Planetary Science, 2014, 10, 143-148.	0.6	61
13	In situ and time resolved nucleation and growth of silica nanoparticles forming under simulated geothermal conditions. Geochimica Et Cosmochimica Acta, 2013, 114, 156-168.	3.9	50
14	Adsorption and Reduction of Arsenate during the Fe²⁺-Induced Transformation of Ferrihydrite. ACS Earth and Space Chemistry, 2019, 3, 884-894.	2.7	50
15	Bone Char Mediated Dechlorination of Trichloroethylene by Green Rust. Environmental Science & Technology, 2020, 54, 3643-3652.	10.0	44
16	Microscale Analysis of Fractured Rock Sealed With Microbially Induced CaCO₃ Precipitation: Influence on Hydraulic and Mechanical Performance. Water Resources Research, 2018, 54, 8295-8308.	4.2	42
17	Transport of Sporosarcina pasteurii in sandstone and its significance for subsurface engineering technologies. Applied Geochemistry, 2014, 42, 38-44.	3.0	40
18	Effect of Aspartic Acid and Glycine on Calcite Growth. Crystal Growth and Design, 2016, 16, 4813-4821.	3.0	36

#	ARTICLE	IF	CITATIONS
19	Structural transformation of sulfidized zerovalent iron and its impact on long-term reactivity. Environmental Science: Nano, 2019, 6, 3422-3430.	4.3	31
20	Calcite Growth Kinetics: Dependence on Saturation Index, Ca²⁺:CO₃^{2â€“} Activity Ratio, and Surface Atomic Structure. Crystal Growth and Design, 2016, 16, 3602-3612.	3.0	30
21	A Silicate/Glycine Switch To Control the Reactivity of Layered Iron(II)â€“Iron(III) Hydroxides for Dechlorination of Carbon Tetrachloride. Environmental Science & Technology, 2018, 52, 7876-7883.	10.0	30
22	Controlled biomineralization of magnetite (Fe₃O₄) by <i>Magnetospirillum gryphiswaldense</i>. Mineralogical Magazine, 2008, 72, 333-336.	1.4	28
23	Monitoring bacterially induced calcite precipitation in porous media using magnetic resonance imaging and flow measurements. Journal of Contaminant Hydrology, 2013, 152, 35-43.	3.3	26
24	Direct Visualization of Arsenic Binding on Green Rust Sulfate. Environmental Science & Technology, 2020, 54, 3297-3305.	10.0	26
25	A Microkinetic Model of Calcite Step Growth. Angewandte Chemie - International Edition, 2016, 55, 11086-11090.	13.8	24
26	Effects of common groundwater ions on the transformation and reactivity of sulfidized nanoscale zerovalent iron. Chemosphere, 2020, 249, 126137.	8.2	24
27	Competition between chloride and sulphate during the reformation of calcined hydrotalcite. Applied Clay Science, 2016, 132-133, 650-659.	5.2	23
28	Arsenic removal from natural groundwater using â€˜green rustâ€™: Solid phase stability and contaminant fate. Journal of Hazardous Materials, 2021, 401, 123327.	12.4	23
29	Impact of Citrate Ions on the Nucleation and Growth of Anhydrous CaCO₃. Crystal Growth and Design, 2017, 17, 5269-5275.	3.0	22
30	Sulfidation extent of nanoscale zerovalent iron controls selectivity and reactivity with mixed chlorinated hydrocarbons in natural groundwater. Journal of Hazardous Materials, 2022, 431, 128534.	12.4	20
31	A Microkinetic Model of Calcite Step Growth. Angewandte Chemie, 2016, 128, 11252-11256.	2.0	18
32	Can or cannot green rust reduce chlorinated ethenes?. Energy Procedia, 2018, 146, 173-178.	1.8	16
33	Mechanism of Saponite Crystallization from a Rapidly Formed Amorphous Intermediate. Crystal Growth and Design, 2020, 20, 3365-3373.	3.0	16
34	Enhanced sorption of perfluorooctane sulfonate and perfluorooctanoate by hydrotalcites. Environmental Technology and Innovation, 2021, 21, 101231.	6.1	16
35	Sorption of chlorinated hydrocarbons from synthetic and natural groundwater by organo-hydrotalcites: Towards their applications as remediation nanoparticles. Chemosphere, 2019, 236, 124369.	8.2	13
36	Immobilization of Cr(VI) by sulphate green rust and sulphidized nanoscale zerovalent iron in sand media: batch and column studies. Geochemical Transactions, 2020, 21, 8.	0.7	13

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37	Mechanism of silicaâ€"lysozyme composite formation unravelled by in situ fast SAXS. Beilstein Journal of Nanotechnology, 2019, 10, 182-197.	2.8	12
38	Extent of natural attenuation of chlorinated ethenes at a contaminated site in Denmark. Energy Procedia, 2018, 146, 188-193.	1.8	11
39	Formation of Silica-Lysozyme Composites Through Co-Precipitation and Adsorption. Frontiers in Materials, 2018, 5, .	2.4	11
40	Prebiotic RNA polymerisation: energetics of nucleotide adsorption and polymerisation on clay mineral surfaces. Chemical Communications, 2017, 53, 12700-12703.	4.1	10
41	Hematite Crystallization in the Presence of Organic Matter: Impact on Crystal Properties and Bacterial Dissolution. ACS Earth and Space Chemistry, 2019, 3, 510-518.	2.7	10
42	Silica and Alumina Nanophases: Natural Processes and Industrial Applications. , 2017, , 293-316.		10
43	How Short-Lived Ikaite Affects Calcite Crystallization. Crystal Growth and Design, 2017, 17, 6224-6230.	3.0	9
44	Effects of metal cation substitution on hexavalent chromium reduction by green rust. Geochemical Transactions, 2020, 21, 2.	0.7	9
45	Intercalation of aromatic sulfonates in â€˜green rustâ€™ via ion exchange. Energy Procedia, 2018, 146, 179-187.	1.8	8
46	Fatty Acid Preservation in Modern and Relict Hot-Spring Deposits in Iceland, with Implications for Organics Detection on Mars. Astrobiology, 2021, 21, 60-82.	3.0	8
47	Siderite nucleation pathways as a function of aqueous solution saturation state at 25ÂÂ°C. Chemical Geology, 2021, 559, 119947.	3.3	7
48	Arsenic species delay structural ordering during green rust sulfate crystallization from ferrihydrite. Environmental Science: Nano, 2021, 8, 2950-2963.	4.3	6
49	Formation of Formaldehyde and Other Byproducts by TiO2 Photocatalyst Materials. Sustainability, 2021, 13, 4821.	3.2	6
50	Immobilization of nanoparticles by occlusion into microbial calcite. Chemical Geology, 2017, 453, 72-79.	3.3	4
51	Chlorinated solvent degradation in groundwater by green rustâ€"bone char composite: solute interactions and chlorinated ethylene competition. Environmental Science: Water Research and Technology, 2021, 7, 2043-2053.	2.4	4
52	Order and Disorder in Layered Double Hydroxides: Lessons Learned from the Green Rust Sulfateâ"€Nikischerite Series. ACS Earth and Space Chemistry, 2022, 6, 322-332.	2.7	3
53	The metagenomics of biosilicification: causes and effects. Mineralogical Magazine, 2008, 72, 221-225.	1.4	2
54	The size and polydispersity of silica nanoparticles under simulated hot spring conditions. Mineralogical Magazine, 2008, 72, 287-290.	1.4	2

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55	Hydrotalcite stability during long-term exposure to natural environmental conditions. Environmental Science and Pollution Research, 2020, 27, 23801-23811.	5.3	2
56	A density functional theory study of Fe(II)/Fe(III) distribution in single layer green rust: a cluster approach. Geochemical Transactions, 2021, 22, 3.	0.7	2
57	A novel, direct-push approach for detecting sulfidated nanoparticulate zero valent iron (S-nZVI) in sediments using reactive and non-reactive fluorophores. Journal of Contaminant Hydrology, 2021, 243, 103896.	3.3	1
58	Fine-tuning green rustÂâˆ'Âbone char composite synthesis for efficient chlorinated ethylene remediation. Chemical Engineering Journal, 2022, 446, 136770.	12.7	1