Gretchen FrÃ¼h-Green

List of Publications by Year
in descending order

37 papers	5,575 citations	236925 25 h-index	345221 36 g-index
42 all docs	42 docs citations	42 times ranked	3415 citing authors

#	Article	IF	Citations
1	A Serpentinite-Hosted Ecosystem: The Lost City Hydrothermal Field. Science, 2005, 307, 1428-1434.	12.6	1,037
2	An off-axis hydrothermal vent field near the Mid-Atlantic Ridge at 30Â° N. Nature, 2001, 412, 145-149.	27.8	997
3	Abiogenic Hydrocarbon Production at Lost City Hydrothermal Field. Science, 2008, 319, 604-607.	12.6	707
4	30,000 Years of Hydrothermal Activity at the Lost City Vent Field. Science, 2003, 301, 495-498.	12.6	361
5	Mass transfer and fluid flow during detachment faulting and development of an oceanic core complex, Atlantis Massif (MAR 30Â°N). Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	2.5	213
6	Formation and evolution of carbonate chimneys at the Lost City Hydrothermal Field. Geochimica Et Cosmochimica Acta, 2006, 70, 3625-3645.	3.9	207
7	The role of serpentinites in cycling of carbon and sulfur: Seafloor serpentinization and subduction metamorphism. Lithos, 2013, 178, 40-54.	1.4	193
8	Geology of the Atlantis Massif (Mid-Atlantic Ridge, 30Â°â€‰N): Implications for the evolution of an ultramafic oceanic core complex. Marine Geophysical Researches, 2002, 23, 443-469.	1.2	185
9	Isotopic and element exchange during serpentinization and metasomatism at the Atlantis Massif (MAR) Tj ETQq1 1 0.784314 rgBT /Ov	3.9	166
10	Detachment shear zone of the Atlantis Massif core complex, Mid-Atlantic Ridge, 30Â°N. Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	2.5	147
11	Serpentinization of oceanic peridotites: Implications for geochemical cycles and biological activity. Geophysical Monograph Series, 2004, , 119-136.	0.1	137
12	Abiogenic methane in deep-seated mid-ocean ridge environments: Insights from stable isotope analyses. Journal of Geophysical Research, 1999, 104, 10439-10460.	3.3	126
13	Carbon geochemistry of serpentinites in the Lost City Hydrothermal System (30Â°N, MAR). Geochimica Et Cosmochimica Acta, 2008, 72, 3681-3702.	3.9	122
14	Microbial utilization of abiogenic carbon and hydrogen in a serpentinite-hosted system. Geochimica Et Cosmochimica Acta, 2012, 92, 82-99.	3.9	105
15	Serpentinization and carbon sequestration: A study of two ancient peridotite-hosted hydrothermal systems. Chemical Geology, 2013, 351, 115-133.	3.3	96
16	Metagenomic identification of active methanogens and methanotrophs in serpentinite springs of the Voltri Massif, Italy. PeerJ, 2017, 5, e2945.	2.0	91
17	Deeply-sourced formate fuels sulfate reducers but not methanogens at Lost City hydrothermal field. Scientific Reports, 2018, 8, 755.	3.3	81
18	Sr- and Nd-isotope geochemistry of the Atlantis Massif (30Â°N, MAR): Implications for fluid fluxes and lithospheric heterogeneity. Chemical Geology, 2008, 254, 19-35.	3.3	80

#	Article	IF	Citations
19	Volatile lines of descent in submarine plutonic environments: insights from stable isotope and fluid inclusion analyses. Geochimica Et Cosmochimica Acta, 2001, 65, 3325-3346.	3.9	77
20	Sulfur in peridotites and gabbros at Lost City (30Â°N, MAR): Implications for hydrothermal alteration and microbial activity during serpentinization. Geochimica Et Cosmochimica Acta, 2008, 72, 5090-5110.	3.9	66
21	Magmatism, serpentinization and life: Insights through drilling the Atlantis Massif (IODP Expedition) Tj ETQq1 1 0.784314 rgBT /Overlock	1.4	58
22	Sources of organic nitrogen at the serpentiniteâ€hosted <scp>L</scp>ost <scp>C</scp>ity hydrothermal field. Geobiology, 2013, 11, 154-169.	2.4	48
23	Uptake of carbon and sulfur during seafloor serpentinization and the effects of subduction metamorphism in Ligurian peridotites. Chemical Geology, 2012, 322-323, 268-277.	3.3	45
24	Sources and cycling of carbon in continental, serpentinite-hosted alkaline springs in the Voltri Massif, Italy. Lithos, 2013, 177, 226-244.	1.4	35
25	Alteration Heterogeneities in Peridotites Exhumed on the Southern Wall of the Atlantis Massif (IODP) Tj ETQq1 1 0.784314 rgBT /Overlock	2.8	35
26	Record of archaeal activity at the serpentiniteâ€hosted <scp>L</scp>ost <scp>C</scp>ity <scp>H</scp>ydrothermal <scp>F</scp>ield. Geobiology, 2013, 11, 570-592.	2.4	27
27	In-situ oxygen isotope analyses in serpentine minerals: Constraints on serpentinization during tectonic exhumation at slow- and ultraslow-spreading ridges. Lithos, 2018, 323, 156-173.	1.4	25
28	Antigorite crystallization during oceanic retrograde serpentinization of abyssal peridotites. Contributions To Mineralogy and Petrology, 2019, 174, 1.	3.1	18
29	Contamination tracer testing with seabed drills: IODP Expedition 357. Scientific Drilling, 0, 23, 39-46.	0.6	17
30	Microbial Residents of the Atlantis Massifâ€™s Shallow Serpentinite Subsurface. Applied and Environmental Microbiology, 2020, 86, .	3.1	13
31	Carbon Geochemistry of the Active Serpentinization Site at the Wadi Tayin Massif: Insights From the ICDP Oman Drilling Project: Phase II. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022712.	3.4	13
32	Distribution and Sources of Carbon in Serpentinized Mantle Peridotites at the Atlantis Massif (IODP) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	3.4	12
33	Tracking Waterâ€Rock Interaction at the Atlantis Massif (MAR, 30Â°N) Using Sulfur Geochemistry. Geochemistry, Geophysics, Geosystems, 2018, 19, 4561-4583.	2.5	11
34	Activities of ²²³Ra and ²²⁶Ra in Fluids From the Lost City Hydrothermal Field Require Short Fluid Residence Times. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017886.	2.6	9
35	Extensive decentralized hydrogen export from the Atlantis Massif. Geology, 2021, 49, 851-856.	4.4	5
36	Carbonate Mineralogy in Mantle Peridotites of the Atlantis Massif (IODP Expedition 357). Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB021885.	3.4	5

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37	Radiocarbon content of carbon dioxide and methane in hydrothermal fluids of Okinawa Trough vents. Geochemical Journal, 2020, 54, 129-138.	1.0	4