

# Christophe Monnin

## List of Publications by Year in descending order

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66  
papers

2,679  
citations

159585

30  
h-index

189892

50  
g-index

70  
all docs

70  
docs citations

70  
times ranked

2585  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fluid and geochemical transport through oceanic crust: a transect across the eastern flank of the Juan de Fuca Ridge. <i>Earth and Planetary Science Letters</i> , 1999, 172, 151-165.	4.4	205
2	The marine barite saturation state of the world's oceans. <i>Marine Chemistry</i> , 1999, 65, 253-261.	2.3	167
3	A thermodynamic model for the solubility of barite and celestite in electrolyte solutions and seawater to 200°C and to 1 kbar. <i>Chemical Geology</i> , 1999, 153, 187-209.	3.3	164
4	Ba distribution in surface Southern Ocean sediments and export production estimates. <i>Paleoceanography</i> , 2002, 17, 1-1-1-20.	3.0	123
5	Characterization of hyperalkaline fluids produced by low-temperature serpentinization of mantle peridotites in the Oman and Ligurian ophiolites. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 2496-2522.	2.5	104
6	Chemical composition of basement fluids within an oceanic ridge flank: Implications for along-strike and across-strike hydrothermal circulation. <i>Journal of Geophysical Research</i> , 2000, 105, 13437-13447.	3.3	97
7	Barium accumulation in the Arabian Sea: controls on barite preservation in marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 1545-1556.	3.9	93
8	Thermodynamics of the LiCl + H <sub>2</sub> O System. <i>Journal of Chemical &amp; Engineering Data</i> , 2002, 47, 1331-1336.	1.9	81
9	An ion interaction model for the volumetric properties of natural waters: Density of the solution and partial molal volumes of electrolytes to high concentrations at 25°C. <i>Geochimica Et Cosmochimica Acta</i> , 1989, 53, 1177-1188.	3.9	79
10	Fluid chemistry of the low temperature hyperalkaline hydrothermal system of Prony Bay (New Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 382	3.3	79
11	The influence of pressure on the activity coefficients of the solutes and on the solubility of minerals in the system Na-Ca-Cl-SO <sub>4</sub> -H <sub>2</sub> O to 200°C and 1 kbar and to high NaCl concentration. <i>Geochimica Et Cosmochimica Acta</i> , 1990, 54, 3265-3282.	3.9	75
12	The saturation state of the world's ocean with respect to (Ba,Sr)SO <sub>4</sub> solid solutions. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 3290-3298.	3.9	73
13	The solubility of celestite and barite in electrolyte solutions and natural waters at 25°C: A thermodynamic study. <i>Chemical Geology</i> , 1988, 71, 283-296.	3.3	71
14	Determination of the solubility products of sodium carbonate minerals and an application to trona deposition in Lake Magadi (Kenya). <i>Geochimica Et Cosmochimica Acta</i> , 1984, 48, 571-581.	3.9	70
15	Spatial distribution of microbial communities in the shallow submarine alkaline hydrothermal field of the Prony Bay, New Caledonia. <i>Environmental Microbiology Reports</i> , 2014, 6, 665-674.	2.4	64
16	Longitudinal distributions of dissolved barium, silica and alkalinity in the western and southern Indian Ocean. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1996, 43, 1-31.	1.4	63
17	Determinations of water, hydrates and pH in fluid inclusions by micro-Raman spectrometry. <i>European Journal of Mineralogy</i> , 1992, 4, 885-894.	1.3	61
18	Geochemistry of brines of the chott El Jerid in southern Tunisia – Application of Pitzer's equations. <i>Chemical Geology</i> , 1983, 39, 165-178.	3.3	58

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19	Mineralogical assemblages forming at hyperalkaline warm springs hosted on ultramafic rocks: A case study of Oman and Ligurian ophiolites. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 2474-2495.	2.5	58
20	Mesopelagic organic carbon remineralization in the Kerguelen Plateau region tracked by biogenic particulate Ba. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2008, 55, 868-879.	1.4	57
21	Barium in twilight zone suspended matter as a potential proxy for particulate organic carbon remineralization: Results for the North Pacific. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2008, 55, 1673-1683.	1.4	53
22	Microbial diversity in a submarine carbonate edifice from the serpentinizing hydrothermal system of the Prony Bay (New Caledonia) over a 6-year period. <i>Frontiers in Microbiology</i> , 2015, 6, 857.	3.5	53
23	Endolithic microbial communities in carbonate precipitates from serpentinite-hosted hyperalkaline springs of the Voltri Massif (Ligurian Alps, Northern Italy). <i>Environmental Science and Pollution Research</i> , 2015, 22, 13613-13624.	5.3	42
24	Chlorine stable isotopic composition of basement fluids of the eastern flank of the Juan de Fuca Ridge (ODP Leg 168). <i>Earth and Planetary Science Letters</i> , 2007, 260, 10-22.	4.4	41
25	Mineralizing Filamentous Bacteria from the Prony Bay Hydrothermal Field Give New Insights into the Functioning of Serpentinization-Based Subseafloor Ecosystems. <i>Frontiers in Microbiology</i> , 2017, 8, 57.	3.5	40
26	Density calculation and concentration scale conversions for natural waters. <i>Computers and Geosciences</i> , 1994, 20, 1435-1445.	4.2	39
27	A comparison between water circulation and terrestrially-driven dissolved silica fluxes to the Mediterranean Sea traced using radium isotopes. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 238, 496-515.	3.9	35
28	Detailed determination of palaeofluid chemistry: an integrated study of sulphate-volatile rich brines and aquo-carbonic fluids in quartz veins from Ouro Fino (Brazil). <i>Chemical Geology</i> , 1999, 154, 179-192.	3.3	34
29	Densities and apparent molal volumes of aqueous CaCl <sub>2</sub> and MgCl <sub>2</sub> solutions. <i>Journal of Solution Chemistry</i> , 1987, 16, 1035-1048.	1.2	33
30	Geochemical dynamics of the Atlantis II Deep (Red Sea): II. Composition of metalliferous sediment pore waters. <i>Geochimica Et Cosmochimica Acta</i> , 2000, 64, 3995-4006.	3.9	32
31	Distribution of barium in the Weddell Gyre: Impact of circulation and biogeochemical processes. <i>Marine Chemistry</i> , 2010, 122, 118-129.	2.3	31
32	Investigation of the H <sub>2</sub> O-NaCl-LiCl System: A Synthetic Fluid Inclusion Study and Thermodynamic Modeling from -50Å to +100ÅC and up to 12 mol/kg. <i>Economic Geology</i> , 2010, 105, 329-338.	3.8	29
33	The anhydrite saturation index of the ponded brines and sediment pore waters of the Red Sea deeps. <i>Chemical Geology</i> , 1996, 127, 141-159.	3.3	27
34	Barium geochemistry in sediment pore waters and formation waters of the oceanic crust on the eastern flank of the Juan de Fuca Ridge (ODP Leg 168). <i>Geochemistry, Geophysics, Geosystems</i> , 2001, 2, n/a-n/a.	2.5	26
35	Fluid-sediment interactions related to hydrothermal circulation in the Eastern Flank of the Juan de Fuca Ridge. <i>Chemical Geology</i> , 2001, 175, 343-360.	3.3	25
36	Metagenomic and PCR-Based Diversity Surveys of [FeFe]-Hydrogenases Combined with Isolation of Alkaliphilic Hydrogen-Producing Bacteria from the Serpentinite-Hosted Prony Hydrothermal Field, New Caledonia. <i>Frontiers in Microbiology</i> , 2016, 7, 1301.	3.5	24

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37	Thermodynamics of the LiOH + H <sub>2</sub> O System. <i>Journal of Chemical &amp; Engineering Data</i> , 2005, 50, 1109-1113.	1.9	23
38	The stability of gypsum in marine sediments using the entire ODP/IODP porewater composition database. <i>Marine Geology</i> , 2011, 279, 87-97.	2.1	23
39	Barium and carbon fluxes in the Canadian Arctic Archipelago. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	21
40	Temporal variability of lagoon sea water exchange and seawater circulation through a Mediterranean barrier beach. <i>Limnology and Oceanography</i> , 2019, 64, 2059-2080.	3.1	20
41	Thermodynamic Properties of the Na-K-Ca-Ba-Cl-H <sub>2</sub> O System to 473.15 K and Solubility of Barium Chloride Hydrates. <i>Journal of Chemical &amp; Engineering Data</i> , 1995, 40, 828-832.	1.9	19
42	Heat flow, morphology, pore fluids and hydrothermal circulation in a typical Mid-Atlantic Ridge flank near Oceanographer Fracture Zone. <i>Earth and Planetary Science Letters</i> , 2018, 482, 423-433.	4.4	17
43	A thermodynamic investigation of barium and calcium sulfate stability in sediments at an oceanic ridge axis (Juan de Fuca, ODP legs 139 and 169). <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 2965-2976.	3.9	15
44	A study of celestine equilibrium in marine sediments using the entire ODP/IODP porewater data base. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3925-3937.	3.9	15
45	Dolomitic concretions in the Eocene Sobrarbe delta (Spanish Pyrenees): Fluid circulation above a submarine slide scar infilling. <i>Marine and Petroleum Geology</i> , 2009, 26, 724-737.	3.3	14
46	A high resolution and quasi-zonal transect of dissolved Ba in the Mediterranean Sea. <i>Marine Chemistry</i> , 2016, 178, 1-7.	2.3	14
47	Chapter 9 Mineral resources and prospectivity of non-ultramafic rocks of New Caledonia. <i>Geological Society Memoir</i> , 2020, 51, 215-245.	1.7	10
48	<i>Alkalicella caledoniensis</i> gen. nov., sp. nov., a novel alkaliphilic anaerobic bacterium isolated from La Crouen alkaline thermal spring, New Caledonia. <i>International Journal of Systematic and Evolutionary Microbiology</i> , 2021, 71, .	1.7	10
49	The Chemistry of Hyperalkaline Springs in Serpentinizing Environments: 1. The Composition of Free Gases in New Caledonia Compared to Other Springs Worldwide. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2021, 126, e2021JG006243.	3.0	10
50	Thermodynamics of the CsCl-H <sub>2</sub> O system at low temperatures. <i>European Journal of Mineralogy</i> , 1999, 11, 477-482.	1.3	9
51	Burial Diagenesis of the Eocene Sobrarbe Delta (Ainsa Basin, Spain) Inferred From Dolomitic Concretions. <i>Journal of Sedimentary Research</i> , 2015, 85, 1037-1057.	1.6	6
52	Freshening of a Coastal Karst Aquifer Revealed by the Temporal Changes in a Spring Water Composition (La Palme, Southern France). <i>Hydrology</i> , 2019, 6, 45.	3.0	6
53	Characterization of the submarine disposal of a Bayer effluent (Gardanne alumina plant, southern) Tj ETQq1 1 0.784314 rgBT /Overlock outfall. <i>Chemosphere</i> , 2021, 263, 127695.	8.2	6
54	Procaryotic Diversity and Hydrogenotrophic Methanogenesis in an Alkaline Spring (La Crouen, New) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	8.6	5

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55	Using $^{226}\text{Ra}$ and $^{228}\text{Ra}$ isotopes to distinguish water mass distribution in the Canadian Arctic Archipelago. <i>Biogeosciences</i> , 2020, 17, 4937-4959.	3.3	5
56	Chemical equilibrium between aqueous fluids and minerals in the marine environment. , 0, , 227-258.		3
57	Comments on "Low temperature thermodynamic model for the system $\text{Na}_2\text{CO}_3\text{-MgCO}_3\text{-CaCO}_3\text{-H}_2\text{O}$ " by K�nigsberger et al. ( <i>GCA</i> , 63, 3105-3119, 1999). <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 181-182.	3.9	2
58	Abiogenic formation of $\text{H}_2$ , light hydrocarbons and other short-chain organic compounds within the serpentinite mud volcanoes of the Marianna Trench. <i>E3S Web of Conferences</i> , 2019, 98, 02011.	0.5	1
59	Characterization of the submarine disposal of a Bayer effluent (Gardanne alumina plant, southern) Tj ETQq1 1 0.784314 rgBT /Overlooked concretions formed by its discharge in the Mediterranean Sea. <i>Environmental Advances</i> , 2021, 5, 100087.	4.8	1
60	Fractionation of $^{226}\text{Ra}$ and Ba in the Upper North Pacific Ocean. <i>Frontiers in Marine Science</i> , 0, 9, .	2.5	1
61	Circulation hydrothermale dans le flanc est de la ride de Juan de Fuca. R�sultats du Leg ODP 168. <i>Comptes Rendus De L'Acad�mie Des Sciences Earth &amp; Planetary Sciences S�rie II, Sciences De La Terre Et Des Plan�tes</i> =, 1998, 326, 201-206.	0.2	0
62	Thermodynamics of the $\text{LiCl} + \text{H}_2\text{O}$ System. <i>ChemInform</i> , 2003, 34, no.	0.0	0
63	Thermodynamics of the $\text{LiOH} + \text{H}_2\text{O}$ System. <i>ChemInform</i> , 2005, 36, no.	0.0	0
64	Chemical Equilibrium between Minerals and Natural Waters. , 1987, , 429-440.		0
65	New Insights on Trace Metals Behavior in the Industrial Impacted Submarine Cassidaigne Canyon. , 2020, , .		0
66	The concentration of organic compounds in high-pH waters of serpentinizing environments determined by $^1\text{H}$ NMR: continental sites (Oman, Liguria, New Caledonia, Portugal) and a marine environment (Marianna mud volcanoes: IODP Exp 366, ODP Legs 125 and 195). , 2021, , .		0