

Andrea Koschinsky

List of Publications by Year in descending order

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105
papers

6,696
citations

81839

39
h-index

62565

80
g-index

109
all docs

109
docs citations

109
times ranked

4916
citing authors

#	ARTICLE	IF	CITATIONS
1	Deep-ocean mineral deposits as a source of critical metals for high- and green-technology applications: Comparison with land-based resources. <i>Ore Geology Reviews</i> , 2013, 51, 1-14.	1.1	700
2	Comparison of the partitioning behaviours of yttrium, rare earth elements, and titanium between hydrogenetic marine ferromanganese crusts and seawater. <i>Geochimica Et Cosmochimica Acta</i> , 1996, 60, 1709-1725.	1.6	504
3	Uptake of elements from seawater by ferromanganese crusts: solid-phase associations and seawater speciation. <i>Marine Geology</i> , 2003, 198, 331-351.	0.9	376
4	Discriminating between different genetic types of marine ferro-manganese crusts and nodules based on rare earth elements and yttrium. <i>Chemical Geology</i> , 2014, 381, 1-9.	1.4	363
5	Sequential leaching of marine ferromanganese precipitates: Genetic implications. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 5113-5132.	1.6	311
6	Oxidative scavenging of cerium on hydrous Fe oxide: Evidence from the distribution of rare earth elements and yttrium between Fe oxides and Mn oxides in hydrogenetic ferromanganese crusts. <i>Geochemical Journal</i> , 2009, 43, 37-47.	0.5	302
7	Metal flux from hydrothermal vents increased by organic complexation. <i>Nature Geoscience</i> , 2011, 4, 145-150.	5.4	265
8	Geochemistry of hydrothermal fluids from the ultramafic-hosted Logatchev hydrothermal field, 15°N on the Mid-Atlantic Ridge: Temporal and spatial investigation. <i>Chemical Geology</i> , 2007, 242, 1-21.	1.4	246
9	Deep-ocean polymetallic nodules as a resource for critical materials. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 158-169.	12.2	179
10	Pb and Nd isotopes in NE Atlantic Fe-Mn crusts: Proxies for trace metal paleosources and paleocean circulation. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 1489-1505.	1.6	164
11	Hydrothermal venting at pressure-temperature conditions above the critical point of seawater, 5°S on the Mid-Atlantic Ridge. <i>Geology</i> , 2008, 36, 615.	2.0	155
12	Effects of phosphatization on the geochemical and mineralogical composition of marine ferromanganese crusts. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 4079-4094.	1.6	147
13	Global occurrence of tellurium-rich ferromanganese crusts and a model for the enrichment of tellurium. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 1117-1127.	1.6	146
14	Iron and manganese oxide mineralization in the Pacific. <i>Geological Society Special Publication</i> , 1997, 119, 123-138.	0.8	145
15	Rare earth elements in mussel shells of the Mytilidae family as tracers for hidden and fossil high-temperature hydrothermal systems. <i>Earth and Planetary Science Letters</i> , 2010, 299, 310-316.	1.8	110
16	Efficient removal of recalcitrant deep-ocean dissolved organic matter during hydrothermal circulation. <i>Nature Geoscience</i> , 2015, 8, 856-860.	5.4	104
17	Fluid elemental and stable isotope composition of the Nibelungen hydrothermal field (8°18'S), Tj ETQq1 1 0.784314 rgBT /Overlock <i>Geology</i> , 2011, 280, 1-18.	1.4	89
18	Young volcanism and related hydrothermal activity at 5°S on the slow-spreading southern Mid-Atlantic Ridge. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, .	1.0	83

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19	The influence of ultramafic rocks on microbial communities at the Logatchev hydrothermal field, located 15°N on the Mid-Atlantic Ridge. <i>FEMS Microbiology Ecology</i> , 2007, 61, 97-109.	1.3	81
20	Onboard-ship redox speciation of chromium in diffuse hydrothermal fluids from the North Fiji Basin. <i>Marine Chemistry</i> , 2000, 71, 83-102.	0.9	72
21	Microbial CO ₂ fixation and sulfur cycling associated with low-temperature emissions at the Lilliput hydrothermal field, southern Mid-Atlantic Ridge (9°S). <i>Environmental Microbiology</i> , 2007, 9, 1186-1201.	1.8	64
22	Marine Ferromanganese Encrustations: Archives of Changing Oceans. <i>Elements</i> , 2017, 13, 177-182.	0.5	64
23	Deep-sea mining: Interdisciplinary research on potential environmental, legal, economic, and societal implications. <i>Integrated Environmental Assessment and Management</i> , 2018, 14, 672-691.	1.6	63
24	Organic complexation of copper in deep-sea hydrothermal vent systems. <i>Environmental Chemistry</i> , 2007, 4, 81.	0.7	61
25	Hafnium and neodymium isotopes in seawater and in ferromanganese crusts: The element perspective. <i>Earth and Planetary Science Letters</i> , 2006, 241, 952-961.	1.8	60
26	Investigating the potential of solid-phase extraction and Fourier-transform ion cyclotron resonance mass spectrometry (FT-ICR-MS) for the isolation and identification of dissolved metal-organic complexes from natural waters. <i>Marine Chemistry</i> , 2015, 173, 78-92.	0.9	60
27	Marine Phosphorites as Potential Resources for Heavy Rare Earth Elements and Yttrium. <i>Minerals (Basel, Switzerland)</i> , 2016, 6, 88.	0.8	57
28	Thermally altered marine dissolved organic matter in hydrothermal fluids. <i>Organic Geochemistry</i> , 2017, 110, 73-86.	0.9	57
29	Fractionation of the geochemical twins Zr-Hf and Nb-Ta during scavenging from seawater by hydrogenetic ferromanganese crusts. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 140, 468-487.	1.6	56
30	Importance of different types of marine particles for the scavenging of heavy metals in the deep-sea bottom water. <i>Applied Geochemistry</i> , 2003, 18, 693-710.	1.4	55
31	Diking, young volcanism and diffuse hydrothermal activity on the southern Mid-Atlantic Ridge: The Lilliput field at 9°33'S. <i>Marine Geology</i> , 2009, 266, 52-64.	0.9	55
32	Simultaneous Determination of Cadmium, Lead, Copper, and Thallium in Highly Saline Samples by Anodic Stripping Voltammetry (ASV) Using Mercury-Film and Bismuth-Film Electrodes. <i>Electroanalysis</i> , 2007, 19, 1719-1726.	1.5	53
33	Rare earth element distribution in >400°C hot hydrothermal fluids from 5°S, MAR: The role of anhydrite in controlling highly variable distribution patterns. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4058-4077.	1.6	51
34	Ferromanganese crusts as indicators for paleoceanographic events in the NE Atlantic. <i>Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie</i> , 1996, 85, 567-576.	1.3	49
35	Enrichment of Mo in hydrothermal Mn precipitates: possible Mo sources, formation process and phase associations. <i>Chemical Geology</i> , 2003, 199, 29-43.	1.4	46
36	Short-term microbial and physico-chemical variability in low-temperature hydrothermal fluids near 5°S on the Mid-Atlantic Ridge. <i>Environmental Microbiology</i> , 2009, 11, 2526-2541.	1.8	44

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37	Linking geology, fluid chemistry, and microbial activity of basalt- and ultramafic-hosted deep-sea hydrothermal vent environments. <i>Geobiology</i> , 2013, 11, 340-355.	1.1	44
38	Calcium phosphate control of REY patterns of siliceous-ooze-rich deep-sea sediments from the central equatorial Pacific. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 251, 56-72.	1.6	42
39	Geochemistry of diffuse low-temperature hydrothermal fluids in the North Fiji basin. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 1409-1427.	1.6	40
40	Phase associations and potential selective extraction methods for selected high-tech metals from ferromanganese nodules and crusts with siderophores. <i>Applied Geochemistry</i> , 2014, 43, 13-21.	1.4	38
41	Geochemical characterization of highly diverse hydrothermal fluids from volcanic vent systems of the Kermadec intraoceanic arc. <i>Chemical Geology</i> , 2019, 528, 119289.	1.4	38
42	Sequential leaching of Peru Basin surface sediment for the assessment of aged and fresh heavy metal associations and mobility. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2001, 48, 3683-3699.	0.6	37
43	First investigations of massive ferromanganese crusts in the NE Atlantic in comparison with hydrogenetic pacific occurrences. <i>Marine Georesources and Geotechnology</i> , 1995, 13, 375-391.	1.2	34
44	Experiments on the influence of sediment disturbances on the biogeochemistry of the deep-sea environment. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2001, 48, 3629-3651.	0.6	34
45	Mussel shells of <i>Mytilus edulis</i> as bioarchives of the distribution of rare earth elements and yttrium in seawater and the potential impact of pH and temperature on their partitioning behavior. <i>Biogeosciences</i> , 2016, 13, 751-760.	1.3	34
46	Voltammetric Investigation of Hydrothermal Iron Speciation. <i>Frontiers in Marine Science</i> , 2016, 3, .	1.2	34
47	The ratio of tellurium and selenium in geological material as a possible paleo-redox proxy. <i>Chemical Geology</i> , 2014, 376, 44-51.	1.4	33
48	Heavy metal distributions in Peru Basin surface sediments in relation to historic, present and disturbed redox environments. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2001, 48, 3757-3777.	0.6	31
49	Boiling vapour-type fluids from the Nifonea vent field (New Hebrides Back-Arc, Vanuatu, SW Pacific): Geochemistry of an early-stage, post-eruptive hydrothermal system. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 207, 185-209.	1.6	31
50	Platinum enrichment and phase associations in marine ferromanganese crusts and nodules based on a multi-method approach. <i>Chemical Geology</i> , 2020, 539, 119426.	1.4	31
51	Concentrations and distributions of dissolved amino acids in fluids from Mid-Atlantic Ridge hydrothermal vents. <i>Geochemical Journal</i> , 2010, 44, 387-397.	0.5	29
52	Quantifying the controlling mineral phases of rare-earth elements in deep-sea pelagic sediments. <i>Chemical Geology</i> , 2022, 595, 120792.	1.4	29
53	Recording changes in ENADW composition over the last 340 ka using high-precision lead isotopes in a Fe-Mn crust. <i>Earth and Planetary Science Letters</i> , 2001, 188, 73-89.	1.8	28
54	Organic Cu-complexation at the shallow marine hydrothermal vent fields off the coast of Milos (Greece), Dominica (Lesser Antilles) and the Bay of Plenty (New Zealand). <i>Marine Chemistry</i> , 2015, 173, 244-252.	0.9	28

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55	Biogeochemical Regeneration of a Nodule Mining Disturbance Site: Trace Metals, DOC and Amino Acids in Deep-Sea Sediments and Pore Waters. <i>Frontiers in Marine Science</i> , 2018, 5, .	1.2	27
56	Quantifying the fuel consumption, greenhouse gas emissions and air pollution of a potential commercial manganese nodule mining operation. <i>Marine Policy</i> , 2020, 114, 103678.	1.5	27
57	Geochemistry of vent fluid particles formed during initial hydrothermal fluid-seawater mixing along the Mid-Atlantic Ridge. <i>Geochemistry, Geophysics, Geosystems</i> , 2011, 12, n/a-n/a.	1.0	26
58	Leaching of soil-derived major and trace elements in an arable topsoil after the addition of biochar. <i>European Journal of Soil Science</i> , 2015, 66, 823-834.	1.8	26
59	Submarine hydrothermal venting related to volcanism in the Lesser Antilles: Evidence from ferromanganese precipitates. <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a.	1.0	25
60	Fe- and Cu-Complex Formation with Artificial Ligands Investigated by Ultra-High Resolution Fourier-Transform ion Cyclotron Resonance Mass Spectrometry (FT-ICR-MS): Implications for Natural Metal-Organic Complex Studies. <i>Frontiers in Marine Science</i> , 2016, 3, .	1.2	25
61	Determination of Ti, Zr, Nb, V, W and Mo in seawater by a new online-preconcentration method and subsequent ICP-MS analysis. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2015, 98, 83-93.	0.6	24
62	Geochemical and physical structure of the hydrothermal plume at the ultramafic-hosted Logatchev hydrothermal field at 14°45'N on the Mid-Atlantic Ridge. <i>Marine Geology</i> , 2010, 271, 187-197.	0.9	23
63	Voltammetric determination of Se(IV) and Se(VI) in saline samples—Studies with seawater, hydrothermal and hemodialysis fluids. <i>Analytica Chimica Acta</i> , 2009, 648, 162-166.	2.6	21
64	Redox speciation of chromium in the oceanic water column of the Lesser Antilles and offshore Otago Peninsula, New Zealand. <i>Marine and Freshwater Research</i> , 2003, 54, 745.	0.7	20
65	Amelioration of free copper by hydrothermal vent microbes as a response to high copper concentrations. <i>Chemistry and Ecology</i> , 2012, 28, 405-420.	0.6	19
66	Inorganic and organic iron and copper species of the subterranean estuary: Origins and fate. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 259, 211-232.	1.6	19
67	The different diffusive transport behaviours of some metals in layers of Peru Basin surface sediment. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2001, 48, 3653-3681.	0.6	18
68	Geochemical characteristics, speciation and size-fractionation of iron (Fe) in two marine shallow-water hydrothermal systems, Dominica, Lesser Antilles. <i>Chemical Geology</i> , 2017, 454, 44-53.	1.4	18
69	Small-scale heterogeneity of trace metals including rare earth elements and yttrium in deep-sea sediments and porewaters of the Peru Basin, southeastern equatorial Pacific. <i>Biogeosciences</i> , 2019, 16, 4829-4849.	1.3	18
70	Impact of small-scale disturbances on geochemical conditions, biogeochemical processes and element fluxes in surface sediments of the eastern Clarion-Clipperton Zone, Pacific Ocean. <i>Biogeosciences</i> , 2020, 17, 1113-1131.	1.3	18
71	An experimental study on the mixing behavior of Ti, Zr, V and Mo in the Elbe, Rhine and Weser estuaries. <i>Estuarine, Coastal and Shelf Science</i> , 2016, 170, 34-44.	0.9	16
72	Metal concentrations in the tissues of the hydrothermal vent mussel <i>Bathymodiolus</i> : Reflection of different metal sources. <i>Marine Environmental Research</i> , 2014, 95, 62-73.	1.1	15

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73	U-Th chronology and paleoceanographic record in a Fe-Mn crust from the NE Atlantic over the last 700 ka. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 4845-4854.	1.6	14
74	Parameters Governing the Community Structure and Element Turnover in Kermadec Volcanic Ash and Hydrothermal Fluids as Monitored by Inorganic Electron Donor Consumption, Autotrophic CO ₂ Fixation and 16S Tags of the Transcriptome in Incubation Experiments. <i>Frontiers in Microbiology</i> , 2019, 10, 2296.	1.5	14
75	Post-depositional manganese mobilization during the last glacial period in sediments of the eastern Clarion-Clipperton Zone, Pacific Ocean. <i>Earth and Planetary Science Letters</i> , 2020, 532, 116012.	1.8	13
76	The influence of magmatic fluids and phase separation on B systematics in submarine hydrothermal vent fluids from back-arc basins. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 232, 140-162.	1.6	12
77	Dissolved concentrations and organic speciation of copper in the Amazon River estuary and mixing plume. <i>Marine Chemistry</i> , 2021, 234, 104005.	0.9	12
78	Distribution and size fractionation of nickel and cobalt species along the Amazon estuary and mixing plume. <i>Marine Chemistry</i> , 2021, 236, 104019.	0.9	11
79	Reactions of the Heavy Metal Cycle to Industrial Activities in the Deep Sea: An Ecological Assessment. <i>International Review of Hydrobiology</i> , 2003, 88, 102-127.	0.5	10
80	Voltammetric Determination of Low-Molecular-Weight Sulfur Compounds in Hydrothermal Vent Fluids – Studies with Hydrogen Sulfide, Methanethiol, Ethanethiol and Propanethiol. <i>Electroanalysis</i> , 2010, 22, 1066-1071.	1.5	10
81	Near-field hydrothermal plume dynamics at Brothers Volcano (Kermadec Arc): A short-lived radium isotope study. <i>Chemical Geology</i> , 2020, 533, 119379.	1.4	10
82	Determination of Zirconium and Vanadium in Natural Waters by Adsorptive Stripping Voltammetry in the Presence of Cupferron, Oxalic Acid and 1,3-Diphenylguanidine. <i>Electroanalysis</i> , 2015, 27, 1864-1870.	1.5	9
83	Depth distribution of Zr and Nb in seawater: The potential role of colloids or organic complexation to explain non-scavenging-type behavior. <i>Marine Chemistry</i> , 2017, 188, 18-32.	0.9	9
84	Processes affecting the isotopic composition of dissolved iron in hydrothermal plumes: A case study from the Vanuatu back-arc. <i>Chemical Geology</i> , 2018, 476, 70-84.	1.4	9
85	Submarine Hydrothermal Discharge and Fluxes of Dissolved Fe and Mn, and He Isotopes at Brothers Volcano Based on Radium Isotopes. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 969.	0.8	9
86	Crystal Chemistry of Thallium in Marine Ferromanganese Deposits. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 1269-1285.	1.2	9
87	Hydrothermal fluid emanations from the submarine Kick'em Jenny volcano, Lesser Antilles island arc. <i>Marine Geology</i> , 2007, 244, 129-141.	0.9	8
88	Sources and Forms of Trace Metals Taken Up by Hydrothermal Vent Mussels, and Possible Adaption and Mitigation Strategies. <i>Handbook of Environmental Chemistry</i> , 2016, , 97-122.	0.2	8
89	Effects of Phosphatization on the Mineral Associations and Speciation of Pb in Ferromanganese Crusts. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1515-1526.	1.2	8
90	Trace Metal Dynamics in Shallow Hydrothermal Plumes at the Kermadec Arc. <i>Frontiers in Marine Science</i> , 2022, 8, .	1.2	8

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91	Deep-sea hydrothermal micropilume generation - a case study from the North Fiji Basin. <i>Geo-Marine Letters</i> , 2001, 21, 94-102.	0.5	7
92	Imprint of Kairei and Pelagia deep-sea hydrothermal systems (Indian Ocean) on marine dissolved organic matter. <i>Organic Geochemistry</i> , 2021, 152, 104141.	0.9	7
93	Copper-binding ligands in deep-sea pore waters of the Pacific Ocean and potential impacts of polymetallic nodule mining on the copper cycle. <i>Scientific Reports</i> , 2021, 11, 18425.	1.6	7
94	Sequential Determination of 13 Elements in Complex Matrices by Stripping Voltammetry with Mixed Complexing Electrolytes. <i>Electroanalysis</i> , 2015, 27, 1625-1635.	1.5	6
95	Geochemical consequences of oxygen diffusion from the oceanic crust into overlying sediments and its significance for biogeochemical cycles based on sediments of the northeast Pacific. <i>Biogeosciences</i> , 2021, 18, 4965-4984.	1.3	6
96	Trace Element and Isotope Systematics in Vent Fluids and Sulphides From Maka Volcano, North Eastern Lau Spreading Centre: Insights Into Three-Component Fluid Mixing. <i>Frontiers in Earth Science</i> , 2021, 9, .	0.8	6
97	Fossil Bioapatites with Extremely High Concentrations of Rare Earth Elements and Yttrium from Deep-Sea Pelagic Sediments. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 2093-2103.	1.2	6
98	Determination of the Natural Dissolved Concentration of Zirconium in Seawater by Adsorptive Stripping Voltammetry. <i>Electroanalysis</i> , 2013, 25, 1628-1634.	1.5	5
99	Geochemical time series of hydrothermal fluids from the slow-spreading Mid-Atlantic Ridge: Implications of medium-term stability. <i>Chemical Geology</i> , 2020, 552, 119760.	1.4	5
100	Clay Minerals and Sr-Nd Isotope Compositions of Core CG 1601 in the Northwest Pacific: Implications for Material Source and Rare Earth Elements Enrichments. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 287.	0.8	5
101	Hydrothermal activity and associated subsurface processes at Niuatahi rear-arc volcano, North East Lau Basin, SW Pacific: Implications from trace elements and stable isotope systematics in vent fluids. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 332, 103-123.	1.6	5
102	In-situ enrichment of heavy metals from deep-sea water by an ion-exchange pump system. <i>Marine Georesources and Geotechnology</i> , 1996, 14, 297-314.	1.2	2
103	Dynamic behavior of dissolved and soluble titanium along the salinity gradients in the Par� and Amazon estuarine system and associated plume. <i>Marine Chemistry</i> , 2022, 238, 104067.	0.9	2
104	Hydrothermal Vent Fluids (Seafloor). <i>Encyclopedia of Earth Sciences Series</i> , 2016, , 339-344.	0.1	0
105	Geochemische Experimente zur Bindung von gel�sten Spurenmetallen an marine Feststoffe. , 2001, , 167-187.		0