Andrea Koschinsky

List of Publications by Year in descending order

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106 papers

6,696 citations

39 h-index 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. Ore Geology Reviews, 2013, 51, 1-14.	2.7	700
2	Comparison of the partitioning behaviours of yttrium, rare earth elements, and titanium between hydrogenetic marine ferromanganese crusts and seawater. Geochimica Et Cosmochimica Acta, 1996, 60, 1709-1725.	3.9	504
3	Uptake of elements from seawater by ferromanganese crusts: solid-phase associations and seawater speciation. Marine Geology, 2003, 198, 331-351.	2.1	376
4	Discriminating between different genetic types of marine ferro-manganese crusts and nodules based on rare earth elements and yttrium. Chemical Geology, 2014, 381, 1-9.	3.3	363
5	Sequential leaching of marine ferromanganese precipitates: Genetic implications. Geochimica Et Cosmochimica Acta, 1995, 59, 5113-5132.	3.9	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. Geochemical Journal, 2009, 43, 37-47.	1.0	302
7	Metal flux from hydrothermal vents increased by organic complexation. Nature Geoscience, 2011, 4, 145-150.	12.9	265
8	Geochemistry of hydrothermal fluids from the ultramafic-hosted Logatchev hydrothermal field, 15°N on the Mid-Atlantic Ridge: Temporal and spatial investigation. Chemical Geology, 2007, 242, 1-21.	3 . 3	246
9	Deep-ocean polymetallic nodules as a resource for critical materials. Nature Reviews Earth & Environment, 2020, 1, 158-169.	29.7	179
10	Pb and Nd isotopes in NE Atlantic Fe–Mn crusts: Proxies for trace metal paleosources and paleocean circulation. Geochimica Et Cosmochimica Acta, 1999, 63, 1489-1505.	3.9	164
11	Hydrothermal venting at pressure-temperature conditions above the critical point of seawater, 5°S on the Mid-Atlantic Ridge. Geology, 2008, 36, 615.	4.4	155
12	Effects of phosphatization on the geochemical and mineralogical composition of marine ferromanganese crusts. Geochimica Et Cosmochimica Acta, 1997, 61, 4079-4094.	3.9	147
13	Global occurrence of tellurium-rich ferromanganese crusts and a model for the enrichment of tellurium. Geochimica Et Cosmochimica Acta, 2003, 67, 1117-1127.	3.9	146
14	Iron and manganese oxide mineralization in the Pacific. Geological Society Special Publication, 1997, 119, 123-138.	1.3	145
15	Rare earth elements in mussel shells of the Mytilidae family as tracers for hidden and fossil high-temperature hydrothermal systems. Earth and Planetary Science Letters, 2010, 299, 310-316.	4.4	110
16	Efficient removal of recalcitrant deep-ocean dissolved organic matter during hydrothermalÂcirculation. Nature Geoscience, 2015, 8, 856-860.	12.9	104
17	Fluid elemental and stable isotope composition of the Nibelungen hydrothermal field (8°18â€2S,) Tj ETQq1 1 0 Geology, 2011, 280, 1-18.	0.784314 r _. 3.3	rgBT /Overlock 89
18	Young volcanism and related hydrothermal activity at 5°S on the slowâ€spreading southern Midâ€Atlantic Ridge. Geochemistry, Geophysics, Geosystems, 2007, 8, .	2.5	83

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19	The influence of ultramafic rocks on microbial communities at the Logatchev hydrothermal field, located 15Ã,°N on the Mid-Atlantic Ridge. FEMS Microbiology Ecology, 2007, 61, 97-109.	2.7	81
20	Onboard-ship redox speciation of chromium in diffuse hydrothermal fluids from the North Fiji Basin. Marine Chemistry, 2000, 71, 83-102.	2.3	72
21	Microbial CO2fixation and sulfur cycling associated with low-temperature emissions at the Lilliput hydrothermal field, southern Mid-Atlantic Ridge ($9\hat{A}^{\circ}S$). Environmental Microbiology, 2007, 9, 1186-1201.	3.8	64
22	Marine Ferromanganese Encrustations: Archives of Changing Oceans. Elements, 2017, 13, 177-182.	0.5	64
23	Deepâ€sea mining: Interdisciplinary research on potential environmental, legal, economic, and societal implications. Integrated Environmental Assessment and Management, 2018, 14, 672-691.	2.9	63
24	Organic complexation of copper in deep-sea hydrothermal vent systems. Environmental Chemistry, 2007, 4, 81.	1.5	61
25	Hafnium and neodymium isotopes in seawater and in ferromanganese crusts: The "element perspective― Earth and Planetary Science Letters, 2006, 241, 952-961.	4.4	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. Marine Chemistry, 2015, 173, 78-92.	2.3	60
27	Marine Phosphorites as Potential Resources for Heavy Rare Earth Elements and Yttrium. Minerals (Basel, Switzerland), 2016, 6, 88.	2.0	57
28	Thermally altered marine dissolved organic matter in hydrothermal fluids. Organic Geochemistry, 2017, 110, 73-86.	1.8	57
29	Fractionation of the geochemical twins Zr–Hf and Nb–Ta during scavenging from seawater by hydrogenetic ferromanganese crusts. Geochimica Et Cosmochimica Acta, 2014, 140, 468-487.	3.9	56
30	Importance of different types of marine particles for the scavenging of heavy metals in the deep-sea bottom water. Applied Geochemistry, 2003, 18, 693-710.	3.0	55
31	Diking, young volcanism and diffuse hydrothermal activity on the southern Mid-Atlantic Ridge: The Lilliput field at 9°33′S. Marine Geology, 2009, 266, 52-64.	2.1	55
32	Simultaneous Determination of Cadmium, Lead, Copper, and Thallium in Highly Saline Samples by Anodic Stripping Voltammetry (ASV) Using Mercuryâ€Film and Bismuthâ€Film Electrodes. Electroanalysis, 2007, 19, 1719-1726.	2.9	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. Geochimica Et Cosmochimica Acta, 2010, 74, 4058-4077.	3.9	51
34	Ferromanganese crusts as indicators for paleoceanographic events in the NE Atlantic. Geologische Rundschau: Zeitschrift Fur Allgemeine Geologie, 1996, 85, 567-576.	1.3	49
35	Enrichment of Mo in hydrothermal Mn precipitates: possible Mo sources, formation process and phase associations. Chemical Geology, 2003, 199, 29-43.	3.3	46
36	Shortâ€term microbial and physicoâ€chemical variability in lowâ€temperature hydrothermal fluids near 5°S on the Midâ€Atlantic Ridge. Environmental Microbiology, 2009, 11, 2526-2541.	3.8	44

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37	Linking geology, fluid chemistry, and microbial activity of basalt―and ultramaficâ€hosted deepâ€sea hydrothermal vent environments. Geobiology, 2013, 11, 340-355.	2.4	44
38	Calcium phosphate control of REY patterns of siliceous-ooze-rich deep-sea sediments from the central equatorial Pacific. Geochimica Et Cosmochimica Acta, 2019, 251, 56-72.	3.9	42
39	Geochemistry of diffuse low-temperature hydrothermal fluids in the North Fiji basin. Geochimica Et Cosmochimica Acta, 2002, 66, 1409-1427.	3.9	40
40	Phase associations and potential selective extraction methods for selected high-tech metals from ferromanganese nodules and crusts with siderophores. Applied Geochemistry, 2014, 43, 13-21.	3.0	38
41	Geochemical characterization of highly diverse hydrothermal fluids from volcanic vent systems of the Kermadec intraoceanic arc. Chemical Geology, 2019, 528, 119289.	3.3	38
42	Sequential leaching of Peru Basin surface sediment for the assessment of aged and fresh heavy metal associations and mobility. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 3683-3699.	1.4	37
43	First investigations of massive ferromanganese crusts in the NE Atlantic in comparison with hydrogenetic pacific occurrences. Marine Georesources and Geotechnology, 1995, 13, 375-391.	2.1	34
44	Experiments on the influence of sediment disturbances on the biogeochemistry of the deep-sea environment. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 3629-3651.	1.4	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. Biogeosciences, 2016, 13, 751-760.	3.3	34
46	Voltammetric Investigation of Hydrothermal Iron Speciation. Frontiers in Marine Science, 2016, 3, .	2.5	34
47	The ratio of tellurium and selenium in geological material as a possible paleo-redox proxy. Chemical Geology, 2014, 376, 44-51.	3.3	33
48	Heavy metal distributions in Peru Basin surface sediments in relation to historic, present and disturbed redox environments. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 3757-3777.	1.4	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. Geochimica Et Cosmochimica Acta, 2017, 207, 185-209.	3.9	31
50	Platinum enrichment and phase associations in marine ferromanganese crusts and nodules based on a multi-method approach. Chemical Geology, 2020, 539, 119426.	3.3	31
51	Concentrations and distributions of dissolved amino acids in fluids from Mid-Atlantic Ridge hydrothermal vents. Geochemical Journal, 2010, 44, 387-397.	1.0	29
52	Quantifying the controlling mineral phases of rare-earth elements in deep-sea pelagic sediments. Chemical Geology, 2022, 595, 120792.	3.3	29
53	Recording changes in ENADW composition over the last 340 ka using high-precision lead isotopes in a Fe–Mn crust. Earth and Planetary Science Letters, 2001, 188, 73-89.	4.4	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). Marine Chemistry, 2015, 173, 244-252.	2.3	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. Frontiers in Marine Science, 2018, 5, .	2.5	27
56	Quantifying the fuel consumption, greenhouse gas emissions and air pollution of a potential commercial manganese nodule mining operation. Marine Policy, 2020, 114, 103678.	3.2	27
57	Geochemistry of vent fluid particles formed during initial hydrothermal fluid-seawater mixing along the Mid-Atlantic Ridge. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	26
58	Leaching of soilâ€derived major and trace elements in an arable topsoil after the addition of biochar. European Journal of Soil Science, 2015, 66, 823-834.	3.9	26
59	Submarine hydrothermal venting related to volcanism in the Lesser Antilles: Evidence from ferromanganese precipitates. Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	2.5	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. Frontiers in Marine Science, 2016, 3, .	2.5	25
61	Determination of Ti, Zr, Nb, V, W and Mo in seawater by a new online-preconcentration method and subsequent ICP–MS analysis. Deep-Sea Research Part I: Oceanographic Research Papers, 2015, 98, 83-93.	1.4	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. Marine Geology, 2010, 271, 187-197.	2.1	23
63	Voltammetric determination of Se(IV) and Se(VI) in saline samplesâ€"Studies with seawater, hydrothermal and hemodialysis fluids. Analytica Chimica Acta, 2009, 648, 162-166.	5.4	21
64	Redox speciation of chromium in the oceanic water column of the Lesser Antilles and offshore Otago Peninsula, New Zealand. Marine and Freshwater Research, 2003, 54, 745.	1.3	20
65	Amelioration of free copper by hydrothermal vent microbes as a response to high copper concentrations. Chemistry and Ecology, 2012, 28, 405-420.	1.6	19
66	Inorganic and organic iron and copper species of the subterranean estuary: Origins and fate. Geochimica Et Cosmochimica Acta, 2019, 259, 211-232.	3.9	19
67	The different diffusive transport behaviours of some metals in layers of Peru Basin surface sediment. Deep-Sea Research Part II: Topical Studies in Oceanography, 2001, 48, 3653-3681.	1.4	18
68	Geochemical characteristics, speciation and size-fractionation of iron (Fe) in two marine shallow-water hydrothermal systems, Dominica, Lesser Antilles. Chemical Geology, 2017, 454, 44-53.	3.3	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. Biogeosciences, 2019, 16, 4829-4849.	3.3	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. Biogeosciences, 2020, 17, 1113-1131.	3.3	18
71	An experimental study on the mixing behavior of Ti, Zr, V and Mo in the Elbe, Rhine and Weser estuaries. Estuarine, Coastal and Shelf Science, 2016, 170, 34-44.	2.1	16
72	Metal concentrations in the tissues of the hydrothermal vent mussel Bathymodiolus: Reflection of different metal sources. Marine Environmental Research, 2014, 95, 62-73.	2.5	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. Geochimica Et Cosmochimica Acta, 2005, 69, 4845-4854.	3.9	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 CO2 Fixation and 16S Tags of the Transcriptome in Incubation Experiments. Frontiers in Microbiology, 2019, 10, 2296.	3.5	14
75	Post-depositional manganese mobilization during the last glacial period in sediments of the eastern Clarion-Clipperton Zone, Pacific Ocean. Earth and Planetary Science Letters, 2020, 532, 116012.	4.4	13
76	The influence of magmatic fluids and phase separation on B systematics in submarine hydrothermal vent fluids from back-arc basins. Geochimica Et Cosmochimica Acta, 2018, 232, 140-162.	3.9	12
77	Dissolved concentrations and organic speciation of copper in the Amazon River estuary and mixing plume. Marine Chemistry, 2021, 234, 104005.	2.3	12
78	Distribution and size fractionation of nickel and cobalt species along the Amazon estuary and mixing plume. Marine Chemistry, 2021, 236, 104019.	2.3	11
79	Reactions of the Heavy Metal Cycle to Industrial Activities in the Deep Sea: An Ecological Assessment. International Review of Hydrobiology, 2003, 88, 102-127.	0.9	10
80	Voltammetric Determination of Lowâ€Molecularâ€Weight Sulfur Compounds in Hydrothermal Vent Fluids – Studies with Hydrogen Sulfide, Methanethiol, Ethanethiol and Propanethiol. Electroanalysis, 2010, 22, 1066-1071.	2.9	10
81	Near-field hydrothermal plume dynamics at Brothers Volcano (Kermadec Arc): A short-lived radium isotope study. Chemical Geology, 2020, 533, 119379.	3.3	10
82	Determination of Zirconium and Vanadium in Natural Waters by Adsorptive Stripping Voltammetry in the Presence of Cupferron, Oxalic Acid and 1,3â€Diphenylguanidine. Electroanalysis, 2015, 27, 1864-1870.	2.9	9
83	Depth distribution of Zr and Nb in seawater: The potential role of colloids or organic complexation to explain non-scavenging-type behavior. Marine Chemistry, 2017, 188, 18-32.	2.3	9
84	Processes affecting the isotopic composition of dissolved iron in hydrothermal plumes: A case study from the Vanuatu back-arc. Chemical Geology, 2018, 476, 70-84.	3.3	9
85	Submarine Hydrothermal Discharge and Fluxes of Dissolved Fe and Mn, and He Isotopes at Brothers Volcano Based on Radium Isotopes. Minerals (Basel, Switzerland), 2020, 10, 969.	2.0	9
86	Crystal Chemistry of Thallium in Marine Ferromanganese Deposits. ACS Earth and Space Chemistry, 2022, 6, 1269-1285.	2.7	9
87	Hydrothermal fluid emanations from the submarine Kick'em Jenny volcano, Lesser Antilles island arc. Marine Geology, 2007, 244, 129-141.	2.1	8
88	Sources and Forms of Trace Metals Taken Up by Hydrothermal Vent Mussels, and Possible Adaption and Mitigation Strategies. Handbook of Environmental Chemistry, 2016, , 97-122.	0.4	8
89	Effects of Phosphatization on the Mineral Associations and Speciation of Pb in Ferromanganese Crusts. ACS Earth and Space Chemistry, 2020, 4, 1515-1526.	2.7	8
90	Trace Metal Dynamics in Shallow Hydrothermal Plumes at the Kermadec Arc. Frontiers in Marine Science, 2022, 8, .	2.5	8

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91	Deep-sea hydrothermal microplume generation - a case study from the North Fiji Basin. Geo-Marine Letters, 2001, 21, 94-102.	1.1	7
92	Imprint of Kairei and Pelagia deep-sea hydrothermal systems (Indian Ocean) on marine dissolved organic matter. Organic Geochemistry, 2021, 152, 104141.	1.8	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. Scientific Reports, 2021, 11, 18425.	3.3	7
94	Sequential Determination of 13 Elements in Complex Matrices by Stripping Voltammetry with Mixed Complexing Electrolytes. Electroanalysis, 2015, 27, 1625-1635.	2.9	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. Biogeosciences, 2021, 18, 4965-4984.	3.3	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. Frontiers in Earth Science, 2021, 9, .	1.8	6
97	Fossil Bioapatites with Extremely High Concentrations of Rare Earth Elements and Yttrium from Deep-Sea Pelagic Sediments. ACS Earth and Space Chemistry, 2022, 6, 2093-2103.	2.7	6
98	Determination of the Natural Dissolved Concentration of Zirconium in Seawater by Adsorptive Stripping Voltammetry. Electroanalysis, 2013, 25, 1628-1634.	2.9	5
99	Geochemical time series of hydrothermal fluids from the slow-spreading Mid-Atlantic Ridge: Implications of medium-term stability. Chemical Geology, 2020, 552, 119760.	3.3	5
100	Mercury- and Silver-Rich Ferromanganese Oxides, Southern California Borderland: Deposit Model and Environmental Implications. Economic Geology, 2005, 100, 1151-1168.	3.8	5
101	Clay Minerals and Sr-Nd Isotope Compositions of Core CG 1601 in the Northwest Pacific: Implications for Material Source and Rare Earth Elements Enrichments. Minerals (Basel, Switzerland), 2022, 12, 287.	2.0	5
102	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. Geochimica Et Cosmochimica Acta, 2022, 332, 103-123.	3.9	5
103	Inâ€situ enrichment of heavy metals from deepâ€sea water by an ionâ€exchange pump system. Marine Georesources and Geotechnology, 1996, 14, 297-314.	2.1	2
104	Dynamic behavior of dissolved and soluble titanium along the salinity gradients in the ParÃ; and Amazon estuarine system and associated plume. Marine Chemistry, 2022, 238, 104067.	2.3	2
105	Hydrothermal Vent Fluids (Seafloor). Encyclopedia of Earth Sciences Series, 2016, , 339-344.	0.1	0
106	Geochemische Experimente zur Bindung von gelĶsten Spurenmetallen an marine Feststoffe. , 2001, , 167-187.		0