

# Mark Rehkämper

## List of Publications by Year in descending order

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118  
papers

7,765  
citations

30070

54  
h-index

53230

85  
g-index

121  
all docs

121  
docs citations

121  
times ranked

5635  
citing authors

#	ARTICLE	IF	CITATIONS
1	ZnO Nanomaterials and Ionic Zn Partition within Wastewater Sludge Investigated by Isotopic Labeling. <i>Global Challenges</i> , 2022, 6, 2100091.	3.6	2
2	New methods for determination of the mass-independent and mass-dependent platinum isotope compositions of iron meteorites by MC-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2022, 37, 783-794.	3.0	3
3	The dissipation of the solar nebula constrained by impacts and core cooling in planetesimals. <i>Nature Astronomy</i> , 2022, 6, 812-818.	10.1	4
4	Zinc stable isotopes in urine as diagnostic for cancer of secretory organs. <i>Metallomics</i> , 2021, 13, .	2.4	12
5	Zinc stable isotope analysis reveals Zn dyshomeostasis in benign tumours, breast cancer, and adjacent histologically normal tissue. <i>Metallomics</i> , 2021, 13, .	2.4	12
6	Cold-water corals as archives of seawater Zn and Cu isotopes. <i>Chemical Geology</i> , 2021, 578, 120304.	3.3	10
7	Evaluation of Optimized Procedures for High-Precision Lead Isotope Analyses of Seawater by Multiple Collector Inductively Coupled Plasma Mass Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 11232-11241.	6.5	8
8	Rhenium-Based Complexes and in Vivo Testing: A Brief History. <i>ChemBioChem</i> , 2020, 21, 2111-2115.	2.6	37
9	Postprandial zinc stable isotope response in human blood serum. <i>Metallomics</i> , 2020, 12, 1380-1388.	2.4	7
10	Cadmium isotope fractionation reveals genetic variation in Cd uptake and translocation by <i>Theobroma cacao</i> and role of natural resistance-associated macrophage protein 5 and heavy metal ATPase-family transporters. <i>Horticulture Research</i> , 2020, 7, 71.	6.3	39
11	Using isotopes to trace freshly applied cadmium through mineral phosphorus fertilization in soil-fertilizer-plant systems. <i>Science of the Total Environment</i> , 2019, 648, 779-786.	8.0	46
12	Assessment of coupled Zn concentration and natural stable isotope analyses of urine as a novel probe of Zn status. <i>Metallomics</i> , 2019, 11, 1506-1517.	2.4	11
13	Corrigendum to "Isotopic evidence for complex biogeochemical cycling of Cd in the eastern tropical South Pacific" [Earth Planet. Sci. Lett. 512 (2019) 134-146]. <i>Earth and Planetary Science Letters</i> , 2019, 524, 115752.	4.4	0
14	Stable isotope labeling of metal/metal oxide nanomaterials for environmental and biological tracing. <i>Nature Protocols</i> , 2019, 14, 2878-2899.	12.0	25
15	High-sensitivity tracing of stable isotope labeled Ag nanoparticles in environmental samples using MC-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2019, 34, 1173-1183.	3.0	5
16	Isotopic evidence for complex biogeochemical cycling of Cd in the eastern tropical South Pacific. <i>Earth and Planetary Science Letters</i> , 2019, 512, 134-146.	4.4	32
17	Cadmium isotope fractionation in the soil " cacao systems of Ecuador: a pilot field study. <i>RSC Advances</i> , 2019, 9, 34011-34022.	3.6	36
18	Towards an understanding of the Cd isotope fractionation during transfer from the soil to the cereal grain. <i>Environmental Pollution</i> , 2019, 244, 834-844.	7.5	51

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19	Variable Tl, Pb, and Cd concentrations and isotope compositions of enstatite and ordinary chondrites—Evidence for volatile element mobilization and decay of extinct $^{205}\text{Pb}$ . <i>Meteoritics and Planetary Science</i> , 2018, 53, 167-186.	1.6	21
20	Fate of Cd in Agricultural Soils: A Stable Isotope Approach to Anthropogenic Impact, Soil Formation, and Soil-Plant Cycling. <i>Environmental Science &amp; Technology</i> , 2018, 52, 1919-1928.	10.0	117
21	Thallium Mass Fraction and Stable Isotope Ratios of Sixteen Geological Reference Materials. <i>Geostandards and Geoanalytical Research</i> , 2018, 42, 339-360.	3.1	11
22	The distribution of lead concentrations and isotope compositions in the eastern Tropical Atlantic Ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 225, 36-51.	3.9	21
23	Determination of major and trace element variability in healthy human urine by ICP-QMS and specific gravity normalisation. <i>RSC Advances</i> , 2018, 8, 38022-38035.	3.6	14
24	The GEOTRACES Intermediate Data Product 2017. <i>Chemical Geology</i> , 2018, 493, 210-223.	3.3	257
25	Inter-calibration of a proposed new primary reference standard AA-ETH Zn for zinc isotopic analysis. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 415-419.	3.0	86
26	Investigation and Application of Thallium Isotope Fractionation. <i>Reviews in Mineralogy and Geochemistry</i> , 2017, 82, 759-798.	4.8	70
27	High Precision Zinc Stable Isotope Measurement of Certified Biological Reference Materials Using the Double Spike Technique and Multiple Collector-ICP-MS. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 2941-2950.	3.7	28
28	The Cd isotope composition of atmospheric aerosols from the Tropical Atlantic Ocean. <i>Geophysical Research Letters</i> , 2017, 44, 2932-2940.	4.0	32
29	Novel Multi-isotope Tracer Approach To Test ZnO Nanoparticle and Soluble Zn Bioavailability in Joint Soil Exposures. <i>Environmental Science &amp; Technology</i> , 2017, 51, 12756-12763.	10.0	21
30	Nucleosynthetic molybdenum isotope anomalies in iron meteorites—new evidence for thermal processing of solar nebula material. <i>Earth and Planetary Science Letters</i> , 2017, 473, 215-226.	4.4	63
31	Interactions of dissolved CO <sub>2</sub> with cadmium isotopes in the Southern Ocean. <i>Marine Chemistry</i> , 2017, 195, 105-121.	2.3	17
32	A geochemical study of the winonaites: Evidence for limited partial melting and constraints on the precursor composition. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 199, 13-30.	3.9	46
33	18 Investigation and Application of Thallium Isotope Fractionation. , 2017, , 759-798.		2
34	Return of naturally sourced Pb to Atlantic surface waters. <i>Nature Communications</i> , 2016, 7, 12921.	12.8	47
35	Cadmium Isotope Fractionation in Soil—Wheat Systems. <i>Environmental Science &amp; Technology</i> , 2016, 50, 9223-9231.	10.0	113
36	Neodymium isotopic composition and concentration in the western North Atlantic Ocean: Results from the GEOTRACES GA02 section. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 177, 1-29.	3.9	117

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37	Molybdenum drawdown during Cretaceous Oceanic Anoxic Event 2. <i>Earth and Planetary Science Letters</i> , 2016, 440, 81-91.	4.4	61
38	Improvements in Cd stable isotope analysis achieved through use of liquid-liquid extraction to remove organic residues from Cd separates obtained by extraction chromatography. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 319-327.	3.0	34
39	Earthworm Uptake Routes and Rates of Ionic Zn and ZnO Nanoparticles at Realistic Concentrations, Traced Using Stable Isotope Labeling. <i>Environmental Science &amp; Technology</i> , 2016, 50, 412-419.	10.0	57
40	High precision $^{142}\text{Ce}/^{140}\text{Ce}$ stable isotope measurements of purified materials with a focus on $\text{CeO}_2$ nanoparticles. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 297-302.	3.0	20
41	Tracing the Agulhas leakage with lead isotopes. <i>Geophysical Research Letters</i> , 2015, 42, 8515-8521.	4.0	18
42	High-precision measurements of seawater Pb isotope compositions by double spike thermal ionization mass spectrometry. <i>Analytica Chimica Acta</i> , 2015, 863, 59-69.	5.4	29
43	Cadmium-isotopic evidence for increasing primary productivity during the Late Permian anoxic event. <i>Earth and Planetary Science Letters</i> , 2015, 410, 84-96.	4.4	60
44	Iron and zinc isotope fractionation during uptake and translocation in rice ( <i>Oryza sativa</i> ) grown in oxic and anoxic soils. <i>Comptes Rendus - Geoscience</i> , 2015, 347, 397-404.	1.2	37
45	Fe and O isotope composition of meteorite fusion crusts: Possible natural analogues to chondrule formation?. <i>Meteoritics and Planetary Science</i> , 2015, 50, 229-242.	1.6	17
46	Zinc isotopic compositions of breast cancer tissue. <i>Metallomics</i> , 2015, 7, 112-117.	2.4	90
47	Thallium geochemistry in the metamorphic Lengenbach sulfide deposit, Switzerland: Thallium-isotope fractionation in a sulfide melt. <i>American Mineralogist</i> , 2014, 99, 793-803.	1.9	28
48	The geochemistry of Tl and its isotopes during magmatic and hydrothermal processes: The peralkaline Ilimaussaq complex, southwest Greenland. <i>Chemical Geology</i> , 2014, 366, 1-13.	3.3	29
49	Comment on "The isotopic composition of cadmium in the water column of the South China Sea". <i>Geochimica Et Cosmochimica Acta</i> , 2014, 134, 335-338.	3.9	5
50	An inter-laboratory comparison of high precision stable isotope ratio measurements for nanoparticle tracing in biological samples. <i>Journal of Analytical Atomic Spectrometry</i> , 2014, 29, 471-477.	3.0	17
51	Tracing Anthropogenic Thallium in Soil Using Stable Isotope Compositions. <i>Environmental Science &amp; Technology</i> , 2014, 48, 9030-9036.	10.0	52
52	Controls on thallium uptake during hydrothermal alteration of the upper ocean crust. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 144, 25-42.	3.9	32
53	Synthesis and characterization of isotopically labeled silver nanoparticles for tracing studies. <i>Environmental Science: Nano</i> , 2014, 1, 271-283.	4.3	23
54	Measurement of fossil deep-sea coral Nd isotopic compositions and concentrations by TIMS as $\text{NdO}^+$ , with evaluation of cleaning protocols. <i>Chemical Geology</i> , 2014, 374-375, 128-140.	3.3	26

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55	Unlocking the zinc isotope systematics of iron meteorites. <i>Earth and Planetary Science Letters</i> , 2014, 400, 153-164.	4.4	37
56	A Common Reference Material for Cadmium Isotope Studies – NIST SRM 3108. <i>Geostandards and Geoanalytical Research</i> , 2013, 37, 5-17.	3.1	117
57	Isotopic analysis of Cd in the mixing zone of Siberian rivers with the Arctic Ocean – New constraints on marine Cd cycling and the isotope composition of riverine Cd. <i>Earth and Planetary Science Letters</i> , 2013, 361, 64-73.	4.4	57
58	Cadmium isotope variations in the Southern Ocean. <i>Earth and Planetary Science Letters</i> , 2013, 382, 161-172.	4.4	73
59	Resolution of inter-laboratory discrepancies in Mo isotope data: an intercalibration. <i>Journal of Analytical Atomic Spectrometry</i> , 2013, 28, 724.	3.0	138
60	Towards an understanding of thallium isotope fractionation during adsorption to manganese oxides. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 117, 252-265.	3.9	95
61	High precision isotope measurements reveal poor control of copper metabolism in Parkinsonism. <i>Metallomics</i> , 2013, 5, 125.	2.4	29
62	Stable Isotope Tracer To Determine Uptake and Efflux Dynamics of ZnO Nano- and Bulk Particles and Dissolved Zn to an Estuarine Snail. <i>Environmental Science &amp; Technology</i> , 2013, 47, 8532-8539.	10.0	41
63	GEOTRACES IC1 (BATS) contamination – prone trace element isotopes Cd, Fe, Pb, Zn, Cu, and Mo intercalibration. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 653-665.	2.0	98
64	Tracing Bioavailability of ZnO Nanoparticles Using Stable Isotope Labeling. <i>Environmental Science &amp; Technology</i> , 2012, 46, 12137-12145.	10.0	71
65	Evaluation of Stable Isotope Tracing for ZnO Nanomaterials – New Constraints from High Precision Isotope Analyses and Modeling. <i>Environmental Science &amp; Technology</i> , 2012, 46, 4149-4158.	10.0	46
66	A new methodology for precise cadmium isotope analyses of seawater. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 883-893.	3.7	72
67	Thallium Isotopes and Their Application to Problems in Earth and Environmental Science. <i>Advances in Isotope Geochemistry</i> , 2012, , 247-269.	1.4	18
68	A new separation procedure for Cu prior to stable isotope analysis by MC-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2011, 26, 1627.	3.0	56
69	The cadmium-phosphate relationship in brine: biological versus physical control over micronutrients in sea ice environments. <i>Antarctic Science</i> , 2010, 22, 11.	0.9	11
70	Measurement of zinc stable isotope ratios in biogeochemical matrices by double-spike MC-ICPMS and determination of the isotope ratio pool available for plants from soil. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 3115-3125.	3.7	95
71	A nebula setting as the origin for bulk chondrule Fe isotope variations in CV chondrites. <i>Earth and Planetary Science Letters</i> , 2010, 296, 423-433.	4.4	47
72	Tellurium isotope compositions of calcium – aluminum – rich inclusions. <i>Meteoritics and Planetary Science</i> , 2009, 44, 971-984.	1.6	18

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73	Cadmium and phosphate in coastal Antarctic seawater: Implications for Southern Ocean nutrient cycling. <i>Marine Chemistry</i> , 2008, 112, 149-157.	2.3	33
74	Cd/Ca ratios of in situ collected planktonic foraminiferal tests. <i>Paleoceanography</i> , 2008, 23, .	3.0	20
75	The effects of core formation on the Pb- and Tl- isotopic composition of the silicate Earth. <i>Earth and Planetary Science Letters</i> , 2008, 269, 326-336.	4.4	37
76	Cadmium stable isotope cosmochemistry. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 646-667.	3.9	137
77	Application of Nontraditional Stable-Isotope Systems to the Study of Sources and Fate of Metals in the Environment. <i>Environmental Science &amp; Technology</i> , 2008, 42, 655-664.	10.0	115
78	Cadmium isotope fractionation in seawater $\delta^{114}\text{Cd}$ A signature of biological activity. <i>Earth and Planetary Science Letters</i> , 2007, 261, 670-684.	4.4	139
79	Thallium isotopes in Iceland and Azores lavas $\delta^{205}\text{Tl}$ Implications for the role of altered crust and mantle geochemistry. <i>Earth and Planetary Science Letters</i> , 2007, 264, 332-345.	4.4	58
80	A highly sensitive MC-ICPMS method for Cd/Ca analyses of foraminiferal tests. <i>Journal of Analytical Atomic Spectrometry</i> , 2007, 22, 1275.	3.0	10
81	Hydrothermal fluid fluxes calculated from the isotopic mass balance of thallium in the ocean crust. <i>Earth and Planetary Science Letters</i> , 2006, 251, 120-133.	4.4	145
82	Large thallium isotopic variations in iron meteorites and evidence for lead-205 in the early solar system. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 2643-2657.	3.9	57
83	Search for nucleosynthetic and radiogenic tellurium isotope anomalies in carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 3436-3448.	3.9	35
84	Thallium isotopic evidence for ferromanganese sediments in the mantle source of Hawaiian basalts. <i>Nature</i> , 2006, 439, 314-317.	27.8	106
85	Nb/Zr fractionation on the Moon and the search for extinct $^{92}\text{Nb}$ . <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 775-785.	3.9	22
86	Thallium isotope composition of the upper continental crust and rivers $\delta^{205}\text{Tl}$ An investigation of the continental sources of dissolved marine thallium. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 2007-2019.	3.9	107
87	Nucleosynthetic zirconium isotope anomalies in acid leachates of carbonaceous chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 5113-5122.	3.9	56
88	Tellurium isotopic composition of the early solar system $\delta^{126}\text{Te}$ A search for effects resulting from stellar nucleosynthesis, $^{126}\text{Sn}$ decay, and mass-independent fractionation. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 5099-5112.	3.9	35
89	Stable Isotope Analysis by Multiple Collector ICP-MS. , 2004, , 692-725.		9
90	A Reflection on Mg, Cd, Ca, Li and Si Isotopic Measurements and Related Reference Materials. <i>Geostandards and Geoanalytical Research</i> , 2004, 28, 139-148.	1.9	59

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91	Problems and Suggestions Concerning the Notation of Cadmium Stable Isotope Compositions and the Use of Reference Materials. <i>Geostandards and Geoanalytical Research</i> , 2004, 28, 173-178.	1.9	46
92	Application of MC-ICPMS to the precise determination of tellurium isotope compositions in chondrites, iron meteorites and sulfides. <i>International Journal of Mass Spectrometry</i> , 2004, 232, 83-94.	1.5	81
93	The mass balance of dissolved thallium in the oceans. <i>Marine Chemistry</i> , 2004, 85, 125-139.	2.3	94
94	Ion exchange chromatography and high precision isotopic measurements of zirconium by MC-ICP-MS. <i>Analyst</i> , 2004, 129, 32-37.	3.5	57
95	The precise and accurate determination of thallium isotope compositions and concentrations for water samples by MC-ICPMS. <i>Chemical Geology</i> , 2004, 204, 109-124.	3.3	110
96	Determination of the mass-dependence of cadmium isotope fractionation during evaporation. <i>Geochimica Et Cosmochimica Acta</i> , 2004, 68, 2349-2357.	3.9	109
97	Cenozoic marine geochemistry of thallium deduced from isotopic studies of ferromanganese crusts and pelagic sediments. <i>Earth and Planetary Science Letters</i> , 2004, 219, 77-91.	4.4	106
98	Investigation of the mass discrimination of multiple collector ICP-MS using neodymium isotopes and the generalised power law. <i>Journal of Analytical Atomic Spectrometry</i> , 2003, 18, 1371-1375.	3.0	87
99	Stable isotope compositions of cadmium in geological materials and meteorites determined by multiple-collector ICPMS. <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4639-4654.	3.9	222
100	Zirconium isotope evidence for incomplete admixing of r -process components in the solar nebula. <i>Earth and Planetary Science Letters</i> , 2003, 216, 467-481.	4.4	69
101	Niobium-Zirconium Chronometry and Early Solar System Development. <i>Science</i> , 2002, 295, 1705-1708.	12.6	165
102	Determination of ultra-low Nb, Ta, Zr and Hf concentrations and the chondritic Zr/Hf and Nb/Ta ratios by isotope dilution analyses with multiple collector ICP-MS. <i>Chemical Geology</i> , 2002, 187, 295-313.	3.3	185
103	Thallium isotope variations in seawater and hydrogenetic, diagenetic, and hydrothermal ferromanganese deposits. <i>Earth and Planetary Science Letters</i> , 2002, 197, 65-81.	4.4	177
104	Multiple Collector ICP-MS: Introduction to Instrumentation, Measurement Techniques and Analytical Capabilities. <i>Geostandards and Geoanalytical Research</i> , 2001, 25, 23-40.	3.1	133
105	Sr, Nd, Pb and O Isotopes of Minettes from Schirmacher Oasis, East Antarctica: a Case of Mantle Metasomatism involving Subducted Continental Material. <i>Journal of Petrology</i> , 2001, 42, 1387-1400.	2.8	36
106	Tracing the Earth's evolution. <i>Nature</i> , 2000, 407, 848-849.	27.8	3
107	Cadmium, indium, tin, tellurium, and sulfur in oceanic basalts: Implications for chalcophile element fractionation in the Earth. <i>Journal of Geophysical Research</i> , 2000, 105, 18927-18948.	3.3	130
108	Investigation of matrix effects for Pb isotope ratio measurements by multiple collector ICP-MS: verification and application of optimized analytical protocols. <i>Journal of Analytical Atomic Spectrometry</i> , 2000, 15, 1451-1460.	3.0	165

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109	Non-chondritic platinum-group element ratios in oceanic mantle lithosphere: petrogenetic signature of melt percolation?. <i>Earth and Planetary Science Letters</i> , 1999, 172, 65-81.	4.4	145
110	The precise measurement of Tl isotopic compositions by MC-ICPMS: Application to the analysis of geological materials and meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 935-944.	3.9	139
111	Ir, Ru, Pt, and Pd in basalts and komatiites: new constraints for the geochemical behavior of the platinum-group elements in the mantle. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3915-3934.	3.9	280
112	Precise Determination of Cadmium, Indium and Tellurium Using Multiple Collector ICP-MS. <i>Geostandards and Geoanalytical Research</i> , 1998, 22, 173-179.	3.1	38
113	Applications of Multiple Collector-ICPMS to Cosmochemistry, Geochemistry, and Paleooceanography. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 919-940.	3.9	256
114	Platinum-Group Element Abundance Patterns in Different Mantle Environments. <i>Science</i> , 1997, 278, 1595-1598.	12.6	122
115	High precision $^{230}\text{Th}/^{232}\text{Th}$ and $^{234}\text{U}/^{238}\text{U}$ measurements using energyfiltered ICP magnetic sector multiple collector mass spectrometry. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 171, 105-117.	1.8	185
116	Early evolution of the Earth and Moon: new constraints from Hf-W isotope geochemistry. <i>Earth and Planetary Science Letters</i> , 1996, 142, 75-89.	4.4	115
117	A highly sensitive HPLC method for the determination of Th and U concentrations in geological samples. <i>Chemical Geology</i> , 1995, 119, 1-12.	3.3	15
118	A new low-level HPLC technique for quantitative determination of niobium in rocks. <i>Chemical Geology</i> , 1994, 113, 61-69.	3.3	9