Martin Elsner

List of Publications by Citations

144 papers	6,205 citations	40 h-index	75 g-index
150 ext. papers	7,310 ext. citations	8.1 avg, IF	6.15 L-index

#	Paper	IF	Citations
144	Evaluating pesticide degradation in the environment: blind spots and emerging opportunities. *Science*, **2013**, 341, 752-8	33.3	597
143	A new concept linking observable stable isotope fractionation to transformation pathways of organic pollutants. *Environmental Science & Technology*, **2005**, 39, 6896-916	10.3	428
142	Reactivity of Fe(II)-bearing minerals toward reductive transformation of organic contaminants. *Environmental Science & Technology*, **2004**, 38, 799-807	10.3	315
141	Compound-specific stable isotope analysis of organic contaminants in natural environments: a critical review of the state of the art, prospects, and future challenges. *Analytical and Bioanalytical Chemistry*, **2004**, 378, 283-300	4.4	277
140	Stable isotope fractionation to investigate natural transformation mechanisms of organic contaminants: principles, prospects and limitations. *Journal of Environmental Monitoring*, **2010**, 12, 2005-31		265
139	Current challenges in compound-specific stable isotope analysis of environmental organic contaminants. *Analytical and Bioanalytical Chemistry*, **2012**, 403, 2471-91	4.4	193
138	New evaluation scheme for two-dimensional isotope analysis to decipher biodegradation processes: application to groundwater contamination by MTBE. *Environmental Science & Technology*, **2005**, 39, 1018-29	10.3	174
137	Methods for the analysis of submicrometer- and nanoplastic particles in the environment. *TrAC - Trends in Analytical Chemistry*, **2019**, 112, 52-65	14.6	164
136	Biodegradation: Updating the concepts of control for microbial cleanup in contaminated aquifers. *Environmental Science & Technology*, **2015**, 49, 7073-81	10.3	155
135	Quantitative Survey and Structural Classification of Hydraulic Fracturing Chemicals Reported in Unconventional Gas Production. *Environmental Science & Technology*, **2016**, 50, 3290-314	10.3	119
134	Mechanisms and products of surface-mediated reductive dehalogenation of carbon tetrachloride by Fe(II) on goethite. *Environmental Science & Technology*, **2004**, 38, 2058-66	10.3	106
133	Raman microspectroscopy as a tool for microplastic particle analysis. *TrAC - Trends in Analytical Chemistry*, **2018**, 109, 214-226	14.6	103
132	Elevated levels of diesel range organic compounds in groundwater near Marcellus gas operations are derived from surface activities. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 13184-9	11.5	101
131	Macropore flow of old water revisited: experimental insights from a tile-drained hillslope. *Hydrology and Earth System Sciences*, **2013**, 17, 103-118	5.5	99
130	Insight into methyl tert-butyl ether (MTBE) stable isotope fractionation from abiotic reference experiments. *Environmental Science & Technology*, **2007**, 41, 5693-700	10.3	95
129	Organic Reference Materials for Hydrogen, Carbon, and Nitrogen Stable Isotope-Ratio Measurements: Caffeines, n-Alkanes, Fatty Acid Methyl Esters, Glycines, L-Valines, Polyethylenes, and Oils. *Analytical Chemistry*, **2016**, 88, 4294-302	7.8	91
128	Compound-specific isotope analysis (CSIA) of micropollutants in the environment - current developments and future challenges. *Current Opinion in Biotechnology*, **2016**, 41, 60-72	11.4	89

127	Compound-specific chlorine isotope analysis: a comparison of gas chromatography/isotope ratio mass spectrometry and gas chromatography/quadrupole mass spectrometry methods in an interlaboratory study. *Analytical Chemistry*, **2011**, 83, 7624-34	7.8	86
126	Identifying abiotic chlorinated ethene degradation: characteristic isotope patterns in reaction products with nanoscale zero-valent iron. *Environmental Science & Technology*, **2008**, 42, 5963-70	10.3	83
125	C and N isotope fractionation suggests similar mechanisms of microbial atrazine transformation despite involvement of different enzymes (AtzA and TrzN). *Environmental Science & Technology*, **2009**, 43, 8079-85	10.3	79
124	Indications of Transformation Products from Hydraulic Fracturing Additives in Shale-Gas Wastewater. *Environmental Science & Technology*, **2016**, 50, 8036-48	10.3	73
123	Pathway dependent isotopic fractionation during aerobic biodegradation of 1,2-dichloroethane. *Environmental Science & Technology*, **2004**, 38, 4775-81	10.3	66
122	Reductive dechlorination of TCE by chemical model systems in comparison to dehalogenating bacteria: insights from dual element isotope analysis (13C/12C, 37Cl/35Cl). *Environmental Science & Technology*, **2013**, 47, 6855-63	10.3	65
121	Isotopic evidence suggests different initial reaction mechanisms for anaerobic benzene biodegradation. *Environmental Science & Technology*, **2008**, 42, 8290-6	10.3	64
120	Modeling chlorine isotope trends during sequential transformation of chlorinated ethenes. *Environmental Science & Technology*, **2009**, 43, 6750-6	10.3	62
119	Natural Gas Residual Fluids: Sources, Endpoints, and Organic Chemical Composition after Centralized Waste Treatment in Pennsylvania. *Environmental Science & Technology*, **2015**, 49, 8347-55	10.3	61
118	Combined C and Cl isotope effects indicate differences between corrinoids and enzyme (Sulfurospirillum multivorans PceA) in reductive dehalogenation of tetrachloroethene, but not trichloroethene. *Environmental Science & Technology*, **2014**, 48, 11837-45	10.3	59
117	Carbon isotope fractionation in the reductive dehalogenation of carbon tetrachloride at iron (hydr)oxide and iron sulfide minerals. *Environmental Science & Technology*, **2005**, 39, 5634-41	10.3	56
116	Effects of trace element concentration on enzyme controlled stable isotope fractionation during aerobic biodegradation of toluene. *Environmental Science & Technology*, **2006**, 40, 7675-81	10.3	56
115	C, N, and H isotope fractionation of the herbicide isoproturon reflects different microbial transformation pathways. *Environmental Science & Technology*, **2010**, 44, 2372-8	10.3	51
114	Precise and accurate compound specific carbon and nitrogen isotope analysis of atrazine: critical role of combustion oven conditions. *Environmental Science & Technology*, **2008**, 42, 7757-63	10.3	51
113	1,1,2,2-tetrachloroethane reactions with OH-, Cr(II), granular iron, and a copper-iron bimetal: insights from product formation and associated carbon isotope fractionation. *Environmental Science & Technology*, **2007**, 41, 4111-7	10.3	51
112	Isotopic fractionation of methyl tert-butyl ether suggests different initial reaction mechanisms during aerobic biodegradation. *Environmental Science & Technology*, **2009**, 43, 2793-9	10.3	46
111	Nanoplastic Analysis by Online Coupling of Raman Microscopy and Field-Flow Fractionation Enabled by Optical Tweezers. *Analytical Chemistry*, **2020**, 92, 5813-5820	7.8	45
110	Carbon isotopic fractionation during aerobic vinyl chloride degradation. *Environmental Science & Technology*, **2005**, 39, 1064-70	10.3	45

109	Evaluating chlorine isotope effects from isotope ratios and mass spectra of polychlorinated molecules. *Analytical Chemistry*, **2008**, 80, 4731-40	7.8	43
108	Dual (C, H) isotope fractionation in anaerobic low molecular weight (poly)aromatic hydrocarbon (PAH) degradation: potential for field studies and mechanistic implications. *Environmental Science & Technology*, **2011**, 45, 6947-53	10.3	41
107	Potential for identifying abiotic chloroalkane degradation mechanisms using carbon isotopic fractionation. *Environmental Science & Technology*, **2008**, 42, 126-32	10.3	41
106	Cytochrome P450-catalyzed dealkylation of atrazine by Rhodococcus sp. strain NI86/21 involves hydrogen atom transfer rather than single electron transfer. *Dalton Transactions*, **2014**, 43, 12175-86	4.3	40
105	Chlorine isotope effects from isotope ratio mass spectrometry suggest intramolecular C-Cl bond competition in trichloroethene (TCE) reductive dehalogenation. *Molecules*, **2014**, 19, 6450-73	4.8	40
104	Carbon and nitrogen isotope analysis of atrazine and desethylatrazine at sub-microgram per liter concentrations in groundwater. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 2857-67	4.4	40
103	C and Cl isotope fractionation of 1,2-dichloroethane displays unique □□C/□□Cl patterns for pathway identification and reveals surprising C-Cl bond involvement in microbial oxidation. *Environmental Science & Technology*, **2014**, 48, 9430-7	10.3	39
102	Dermal Tattoo Biosensors for Colorimetric Metabolite Detection. *Angewandte Chemie - International Edition*, **2019**, 58, 10506-10513	16.4	38
101	Cl and C isotope analysis to assess the effectiveness of chlorinated ethene degradation by zero-valent iron: Evidence from dual element and product isotope values. *Applied Geochemistry*, **2013**, 32, 175-183	3.5	38
100	Geochemical and microbial community determinants of reductive dechlorination at a site biostimulated with glycerol. *Environmental Microbiology*, **2017**, 19, 968-981	5.2	37
99	C and N isotope fractionation during biodegradation of the pesticide metabolite 2,6-dichlorobenzamide (BAM): potential for environmental assessments. *Environmental Science & Technology*, **2012**, 46, 1447-54	10.3	35
98	A Critical Review of State-of-the-Art and Emerging Approaches to Identify Fracking-Derived Gases and Associated Contaminants in Aquifers. *Environmental Science & Technology*, **2019**, 53, 1063-1077	10.3	34
97	Compound-specific isotope analysis of benzotriazole and its derivatives. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 2843-56	4.4	31
96	Combined isotope and enantiomer analysis to assess the fate of phenoxy acids in a heterogeneous geologic setting at an old landfill. *Water Research*, **2013**, 47, 637-49	12.5	30
95	Small and reproducible isotope effects during methylation with trimethylsulfonium hydroxide (TMSH): a convenient derivatization method for isotope analysis of negatively charged molecules. *Analytical Chemistry*, **2010**, 82, 2013-9	7.8	29
94	C, Cl and H compound-specific isotope analysis to assess natural versus Fe(0) barrier-induced degradation of chlorinated ethenes at a contaminated site. *Journal of Hazardous Materials*, **2015**, 299, 747-54	12.8	28
93	Surface-enhanced Raman spectroscopy of microorganisms: limitations and applicability on the single-cell level. *Analyst, The*, **2019**, 144, 943-953	5	28
92	UV-Sensitive Wearable Devices for Colorimetric Monitoring of UV Exposure. *Advanced Optical Materials*, **2020**, 8, 1901969	8.1	27

91	Freezing to preserve groundwater samples and improve headspace quantification limits of water-soluble organic contaminants for carbon isotope analysis. *Analytical Chemistry*, **2006**, 78, 7528-34	7.8	27
90	Distinct Dual C-Cl Isotope Fractionation Patterns during Anaerobic Biodegradation of 1,2-Dichloroethane: Potential To Characterize Microbial Degradation in the Field. *Environmental Science & Technology*, **2017**, 51, 2685-2694	10.3	26
89	Carbon and Chlorine Isotope Fractionation Patterns Associated with Different Engineered Chloroform Transformation Reactions. *Environmental Science & Technology*, **2017**, 51, 6174-6184	10.3	26
88	Small (13)C/(12)C fractionation contrasts with large enantiomer fractionation in aerobic biodegradation of phenoxy acids. *Environmental Science & Technology*, **2014**, 48, 5501-11	10.3	26
87	Rate-dependent carbon and nitrogen kinetic isotope fractionation in hydrolysis of isoproturon. *Environmental Science & Technology*, **2008**, 42, 7764-71	10.3	26
86	Defining lower limits of biodegradation: atrazine degradation regulated by mass transfer and maintenance demand in Arthrobacter aurescens TC1. *ISME Journal*, **2019**, 13, 2236-2251	11.9	25
85	Solid-phase extraction method for stable isotope analysis of pesticides from large volume environmental water samples. *Analyst, The*, **2019**, 144, 2898-2908	5	25
84	C & N isotope analysis of diclofenac to distinguish oxidative and reductive transformation and to track commercial products. *Environmental Science & Technology*, **2014**, 48, 2312-20	10.3	25
83	Current Perspectives on the Mechanisms of Chlorohydrocarbon Degradation in Subsurface Environments: Insight from Kinetics, Product Formation, Probe Molecules, and Isotope Fractionation. *ACS Symposium Series*, **2011**, 407-439	0.4	25
82	Sorption properties and behaviour at laboratory scale of selected pharmaceuticals using batch experiments. *Journal of Contaminant Hydrology*, **2019**, 225, 103500	3.9	24
81	Controls of event-based pesticide leaching in natural soils: A systematic study based on replicated field scale irrigation experiments. *Journal of Hydrology*, **2014**, 512, 528-539	6	24
80	13C/12C and 15N/14N isotope analysis to characterize degradation of atrazine: evidence from parent and daughter compound values. *Environmental Science & Technology*, **2013**, 47, 6884-91	10.3	23
79	Intramolecular carbon and nitrogen isotope analysis by quantitative dry fragmentation of the phenylurea herbicide isoproturon in a combined injector/capillary reactor prior to GC separation. *Analytical Chemistry*, **2007**, 79, 8399-405	7.8	23
78	Chlorinated Ethene Reactivity with Vitamin B12Is Governed by Cobalamin Chloroethylcarbanions as Crossroads of Competing Pathways. *ACS Catalysis*, **2018**, 8, 3054-3066	13.1	22
77	Isotope Fractionation Pinpoints Membrane Permeability as a Barrier to Atrazine Biodegradation in Gram-negative Polaromonas sp. Nea-C. *Environmental Science & Technology*, **2018**, 52, 4137-4144	10.3	22
76	Reductive Outer-Sphere Single Electron Transfer Is an Exception Rather than the Rule in Natural and Engineered Chlorinated Ethene Dehalogenation. *Environmental Science & Technology*, **2017**, 51, 9663-9673	10.3	22
75	Rate-Limiting Mass Transfer in Micropollutant Degradation Revealed by Isotope Fractionation in Chemostat. *Environmental Science & Technology*, **2019**, 53, 1197-1205	10.3	22
74	Compound-Specific Chlorine Isotope Analysis of Tetrachloromethane and Trichloromethane by Gas Chromatography-Isotope Ratio Mass Spectrometry vs Gas Chromatography-Quadrupole Mass Spectrometry: Method Development and Evaluation of Precision and Trueness. *Analytical Chemistry* , **2017**, 89, 3411-3420	7.8	21

73	Implementation of an open source algorithm for particle recognition and morphological characterisation for microplastic analysis by means of Raman microspectroscopy. *Analytical Methods*, **2019**, 11, 3483-3489	3.2	20
72	Model complexity needed for quantitative analysis of high resolution isotope and concentration data from a toluene-pulse experiment. *Environmental Science & Technology*, **2013**, 47, 6900-7	10.3	20
71	Carbon Isotope Analysis to Evaluate Nanoscale Fe(O) Treatment at a Chlorohydrocarbon Contaminated Site. *Ground Water Monitoring and Remediation*, **2010**, 30, 79-95	1.4	19
70	Characteristic isotope fractionation patterns in s-triazine degradation have their origin in multiple protonation options in the s-triazine hydrolase TrzN. *Environmental Science & Technology*, **2015** , 49, 3490-8	10.3	18
69	Gas chromatography/isotope ratio mass spectrometry of recalcitrant target compounds: performance of different combustion reactors and strategies for standardization. *Rapid Communications in Mass Spectrometry*, **2012**, 26, 1053-60	2.2	18
68	Quantitative site-specific (2)H NMR investigation of MTBE: potential for assessing contaminant sources and fate. *Environmental Science & Technology*, **2010**, 44, 1062-8	10.3	18
67	New Evaluation Scheme for Two-Dimensional Isotope Analysis to Decipher Biodegradation Processes:Application to Groundwater Contamination by MTBE. *Environmental Science & Technology*, **2005**, 39, 7344-7344	10.3	18
66	Mechanistic Dichotomy in Bacterial Trichloroethene Dechlorination Revealed by Carbon and Chlorine Isotope Effects. *Environmental Science & Technology*, **2019**, 53, 4245-4254	10.3	17
65	Enantioselective stable isotope analysis (ESIA) of polar herbicides. *Analytical and Bioanalytical Chemistry*, **2013**, 405, 2825-31	4.4	16
64	Compound-Specific Stable Isotope Fractionation of Pesticides and Pharmaceuticals in a Mesoscale Aquifer Model. *Environmental Science & Technology*, **2016**, 50, 5729-39	10.3	16
63	Contrasting dual (C, Cl) isotope fractionation offers potential to distinguish reductive chloroethene transformation from breakdown by permanganate. *Science of the Total Environment*, **2017**, 596-597, 169-177	10.2	15
62	Dual element ((15)N/(14)N, (13)C/(12)C) isotope analysis of glyphosate and AMPA by derivatization-gas chromatography isotope ratio mass spectrometry (GC/IRMS) combined with LC/IRMS. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 5249-60	4.4	15
61	Simple Generation of Suspensible Secondary Microplastic Reference Particles via Ultrasound Treatment. *Frontiers in Chemistry*, **2020**, 8, 169	5	15
60	Response and recovery of a pristine groundwater ecosystem impacted by toluene contamination - A meso-scale indoor aquifer experiment. *Journal of Contaminant Hydrology*, **2017**, 207, 17-30	3.9	15
59	Triple-element compound-specific stable isotope analysis of 1,2-dichloroethane for characterization of the underlying dehalogenation reaction in two Dehalococcoides mccartyi strains. *FEMS Microbiology Ecology*, **2017**, 93,	4.3	15
58	Porphyrinic MOF Film for Multifaceted Electrochemical Sensing. *Angewandte Chemie - International Edition*, **2021**, 60, 20551-20557	16.4	15
57	Experimental Determination of Isotope Enrichment Factors - Bias from Mass Removal by Repetitive Sampling. *Environmental Science & Technology*, **2017**, 51, 1527-1536	10.3	14
56	Dermal Tattoo Biosensors for Colorimetric Metabolite Detection. *Angewandte Chemie*, **2019**, 131, 10616-10623	3.6	14

55	Direct experimental evidence of non-first order degradation kinetics and sorption-induced isotopic fractionation in a mesoscale aquifer: 13C/12C analysis of a transient toluene pulse. *Environmental Science & Technology*, **2013**, 47, 6892-9	10.3	14
54	C- and N-Isotope Analysis of Desphenylchloridazon by Liquid Chromatography-Isotope-Ratio Mass Spectrometry and Derivatization Gas Chromatography-Isotope-Ratio Mass Spectrometry. *Analytical Chemistry*, **2019**, 91, 3412-3420	7.8	12
53	Substrate-dependent CO2 fixation in heterotrophic bacteria revealed by stable isotope labelling. *FEMS Microbiology Ecology*, **2020**, 96,	4.3	12
52	TUM-ParticleTyper: A detection and quantification tool for automated analysis of (Microplastic) particles and fibers. *PLoS ONE*, **2020**, 15, e0234766	3.7	12
51	Exploring Trends of C and N Isotope Fractionation to Trace Transformation Reactions of Diclofenac in Natural and Engineered Systems. *Environmental Science & Technology*, **2016**, 50, 10933-10942	10.3	12
50	Intrinsic potential for immediate biodegradation of toluene in a pristine, energy-limited aquifer. *Biodegradation*, **2014**, 25, 325-36	4.1	12
49	Reviews and syntheses: Heterotrophic fixation of inorganic carbon □ significant but invisible flux in environmental carbon cycling. *Biogeosciences*, **2021**, 18, 3689-3700	4.6	12
48	Biodegradation and photooxidation of phenolic compounds in soil-A compound-specific stable isotope approach. *Chemosphere*, **2019**, 230, 210-218	8.4	11
47	Compound-specific chlorine isotope fractionation in biodegradation of atrazine. *Environmental Sciences: Processes and Impacts*, **2020**, 22, 792-801	4.3	11
46	□13C and □37Cl Isotope Fractionation To Characterize Aerobic vs Anaerobic Degradation of Trichloroethylene. *Environmental Science and Technology Letters*, **2018**, 5, 202-208	11	11
45	Chronic d-serine supplementation impairs insulin secretion. *Molecular Metabolism*, **2018**, 16, 191-202	8.8	11
44	Predicting pesticide attenuation in a fractured aquifer using lumped-parameter models. *Ground Water*, **2013**, 51, 276-85	2.4	11
43	Compound-Specific Chlorine Isotope Analysis of the Herbicides Atrazine, Acetochlor, and Metolachlor. *Analytical Chemistry*, **2019**, 91, 14290-14298	7.8	10
42	Reductive Dehalogenation of Trichloromethane by Two Different Dehalobacter restrictus Strains Reveal Opposing Dual Element Isotope Effects. *Environmental Science & Technology*, **2019**, 53, 2332-2343	10.3	10
41	Adsorbing vs. Nonadsorbing Tracers for Assessing Pesticide Transport in Arable Soils. *Vadose Zone Journal*, **2018**, 17, 170033	2.7	10
40	High Permeation Rates in Liposome Systems Explain Rapid Glyphosate Biodegradation Associated with Strong Isotope Fractionation. *Environmental Science & Technology*, **2018**, 52, 7259-7268	10.3	10
39	Introduction of a new platform for parameter estimation of kinetically complex environmental systems. *Environmental Modelling and Software*, **2017**, 98, 12-20	5.2	9
38	Stable-isotope Raman microspectroscopy for the analysis of soil organic matter. *Analytical and Bioanalytical Chemistry*, **2018**, 410, 923-931	4.4	9

37	Delineating spring recharge areas in a fractured sandstone aquifer (Luxembourg) based on pesticide mass balance. *Hydrogeology Journal*, **2013**, 21, 799-812	3.1	9
36	Monitoring Microbial Mineralization Using Reverse Stable Isotope Labeling Analysis by Mid-Infrared Laser Spectroscopy. *Environmental Science & Technology*, **2017**, 51, 11876-11883	10.3	9
35	Pre-drilling background groundwater quality in the Deep River Triassic Basin of central North Carolina, USA. *Applied Geochemistry*, **2015**, 60, 3-13	3.5	9
34	Response to Comment on 1,1,2,2-Tetrachloroethane Reactions with OH-, Cr(II), Granular Iron, and a Copper−Iron Bimetal: Insights from Product Formation and Associated Carbon Isotope Fractionation. *Environmental Science & Technology*, **2007**, 41, 7949-7950	10.3	9
33	Methodological Advances to Study Contaminant Biotransformation: New Prospects for Understanding and Reducing Environmental Persistence?. *ACS ES&T Water*, **2021**, 1, 1541-1554		9
32	Phenotypic heterogeneity as key factor for growth and survival under oligotrophic conditions. *Environmental Microbiology*, **2020**, 22, 3339-3356	5.2	8
31	Mass Transfer Limitation during Slow Anaerobic Biodegradation of 2-Methylnaphthalene. *Environmental Science & Technology*, **2019**, 53, 9481-9490	10.3	8
30	Improved constraints on in situ rates and on quantification of complete chloroethene degradation from stable carbon isotope mass balances in groundwater plumes. *Journal of Contaminant Hydrology*, **2015**, 182, 173-82	3.9	8
29	Asc-1 regulates white versus beige adipocyte fate in a subcutaneous stromal cell population. *Nature Communications*, **2021**, 12, 1588	17.4	7
28	Mass-Transfer-Limited Biodegradation at Low Concentrations-Evidence from Reactive Transport Modeling of Isotope Profiles in a Bench-Scale Aquifer. *Environmental Science & Technology*, **2021**, 55, 7386-7397	10.3	7
27	Modeling of Contaminant Biodegradation and Compound-Specific Isotope Fractionation in Chemostats at Low Dilution Rates. *Environmental Science & Technology*, **2019**, 53, 1186-1196	10.3	7
26	Nitrate Removal by a Novel Lithoautotrophic Nitrate-Reducing, Iron(II)-Oxidizing Culture Enriched from a Pyrite-Rich Limestone Aquifer. *Applied and Environmental Microbiology*, **2021**, 87, e0046021	4.8	7
25	Comment on the German draft legislation on hydraulic fracturing: the need for an accurate state of knowledge and for independent scientific research. *Environmental Science & Technology*, **2015**, 49, 6367-9	10.3	6
24	Dual element (CCl) isotope approach to distinguish abiotic reactions of chlorinated methanes by Fe(0) and by Fe(II) on iron minerals at neutral and alkaline pH. *Chemosphere*, **2018**, 206, 447-456	8.4	6
23	Calibration bias of experimentally determined chlorine isotope enrichment factors: the need for a two-point calibration in compound-specific chlorine isotope analysis. *Rapid Communications in Mass Spectrometry*, **2017**, 31, 68-74	2.2	6
22	Principles and Mechanisms of Isotope Fractionation **2009**, 43-77		6
21	Toward Improved Accuracy in Chlorine Isotope Analysis: Synthesis Routes for In-House Standards and Characterization via Complementary Mass Spectrometry Methods. *Analytical Chemistry*, **2019**, 91, 12290-12297	7.8	4
20	Dual-Element Isotope Analysis of Desphenylchloridazon to Investigate Its Environmental Fate in a Systematic Field Study: A Long-Term Lysimeter Experiment. *Environmental Science & Technology*, **2020**, 54, 3929-3939	10.3	4

19	Solvent stress-induced changes in membrane fatty acid composition of denitrifying bacteria reduce the extent of nitrogen stable isotope fractionation during denitrification. *Geochimica Et Cosmochimica Acta*, **2018**, 239, 275-283	5.5	4
18	NO and natural organic matter affect both soot aggregation behavior and sorption of S-metolachlor. *Environmental Sciences: Processes and Impacts*, **2019**, 21, 1729-1735	4.3	3
17	Response to Comment on New Evaluation Scheme for Two-Dimensional Isotope Analysis to Decipher Biodegradation Processes: Application to Groundwater Contamination by MTBE *Environmental Science & Technology*, **2005**, 39, 8543-8544	10.3	3
16	Automated, flow-based chemiluminescence microarray immunoassay for the rapid multiplex detection of IgG antibodies to SARS-CoV-2 in human serum and plasma (CoVRapid CL-MIA). *Analytical and Bioanalytical Chemistry*, **2021**, 413, 5619-5632	4.4	3
15	Which particles to select, and if yes, how many? : Subsampling methods for Raman microspectroscopic analysis of very small microplastic. *Analytical and Bioanalytical Chemistry*, **2021**, 413, 3625-3641	4.4	3
14	Isothermal haRPA detection of bla in bacterial isolates from water samples and comparison with qPCR. *Analytical Methods*, **2021**, 13, 552-557	3.2	3
13	A robust optimization technique for analysis of multi-tracer experiments. *Journal of Contaminant Hydrology*, **2019**, 224, 103481	3.9	2
12	Hydrochemical and operational parameters driving carbonate scale kinetics at geothermal facilities in the Bavarian Molasse Basin. *Geothermal Energy*, **2020**, 8,	3.3	2
11	Macroporous epoxy-based monoliths for rapid quantification of Pseudomonas aeruginosa by adsorption elution method optimized for qPCR. *Analytical and Bioanalytical Chemistry*, **2020**, 412, 8185-8195	4.4	2
10	Magnitude of Diffusion- and Transverse Dispersion-Induced Isotope Fractionation of Organic Compounds in Aqueous Systems. *Environmental Science & Technology*, **2021**, 55, 4772-4782	10.3	2
9	Fate of Four Herbicides in an Irrigated Field Cropped with Corn: Lysimeter Experiments. *Procedia Earth and Planetary Science*, **2015**, 13, 158-161		1
8	Protocol to Investigate Volatile Aromatic Hydrocarbon Degradation with Purge and Trap Coupled to a Gas Chromatograph/Isotope Ratio Mass Spectrometer. *Springer Protocols*, **2015**, 259-288	0.3	1
7	Nondestructive Chemical Analysis of the Iron-Containing Protein Ferritin Using Raman Microspectroscopy. *Applied Spectroscopy*, **2020**, 74, 193-203	3.1	1
6	Isotope fractionation of micropollutants during large-volume extraction: heads-up from a critical method evaluation for atrazine, desethylatrazine and 2,6-dichlorobenzamide at low ng/L concentrations in groundwater. *Isotopes in Environmental and Health Studies*, **2021**, 57, 35-52	1.5	1
5	A Chip-Based Colony Fusion Recombinase Polymerase Amplification Assay for Monitoring of Antimicrobial Resistance Genes and Their Carrying Species in Surface Water. *ACS ES&T Water*, **2021**, 1, 584-594		1
4	Triple-Element Compound-Specific Stable Isotope Analysis (3D-CSIA): Added Value of Cl Isotope Ratios to Assess Herbicide Degradation. *Environmental Science & Technology*, **2021**, 55, 13891-13901	10.3	1
3	Isotope Effects on the Vaporization of Organic Compounds from an Aqueous Solution-Insight from Experiment and Computations.. *Journal of Physical Chemistry B*, **2021**, 125, 13868-13885	3.4	1
2	Microplastic sampling from wastewater treatment plant effluents: Best-practices and synergies between thermoanalytical and spectroscopic analysis.. *Water Research*, **2022**, 219, 118549	12.5	1

1 Influence of changes in microbial cell membrane composition on isotopic fractionation of nitrate during denitrification. *E3S Web of Conferences*, **2019**, 98, 01051 0.5