

Martin Krauss

List of Publications by Year in descending order

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100
papers

6,878
citations

66315

42
h-index

62565

80
g-index

102
all docs

102
docs citations

102
times ranked

6986
citing authors

#	ARTICLE	IF	CITATIONS
1	Elimination of Organic Micropollutants in a Municipal Wastewater Treatment Plant Upgraded with a Full-Scale Post-Ozonation Followed by Sand Filtration. <i>Environmental Science & Technology</i> , 2009, 43, 7862-7869.	4.6	726
2	LCâ€“high resolution MS in environmental analysis: from target screening to the identification of unknowns. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 397, 943-951.	1.9	615
3	Non-target screening with high-resolution mass spectrometry: critical review using a collaborative trial on water analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 6237-6255.	1.9	489
4	Effect-directed analysis supporting monitoring of aquatic environments â€” An in-depth overview. <i>Science of the Total Environment</i> , 2016, 544, 1073-1118.	3.9	288
5	Kinetic assessment and modeling of an ozonation step for full-scale municipal wastewater treatment: Micropollutant oxidation, by-product formation and disinfection. <i>Water Research</i> , 2011, 45, 605-617.	5.3	261
6	Carbamazepine and its metabolites in wastewater: Analytical pitfalls and occurrence in Germany and Portugal. <i>Water Research</i> , 2014, 57, 104-114.	5.3	190
7	Availability of Polycyclic Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs) to Earthworms in Urban Soils. <i>Environmental Science & Technology</i> , 2000, 34, 4335-4340.	4.6	170
8	Linking in Vitro Effects and Detected Organic Micropollutants in Surface Water Using Mixture-Toxicity Modeling. <i>Environmental Science & Technology</i> , 2015, 49, 14614-14624.	4.6	164
9	Micropollutants in European rivers: A mode of action survey to support the development of effectâ€“based tools for water monitoring. <i>Environmental Toxicology and Chemistry</i> , 2016, 35, 1887-1899.	2.2	161
10	From the exposome to mechanistic understanding of chemical-induced adverse effects. <i>Environment International</i> , 2017, 99, 97-106.	4.8	146
11	Sequestration of Manure-Applied Sulfadiazine Residues in Soils. <i>Environmental Science & Technology</i> , 2009, 43, 1824-1830.	4.6	140
12	Suspect and non-targeted screening of chemicals of emerging concern for human biomonitoring, environmental health studies and support to risk assessment: From promises to challenges and harmonisation issues. <i>Environment International</i> , 2020, 139, 105545.	4.8	133
13	Screening of Lake Sediments for Emerging Contaminants by Liquid Chromatography Atmospheric Pressure Photoionization and Electrospray Ionization Coupled to High Resolution Mass Spectrometry. <i>Environmental Science & Technology</i> , 2013, 47, 976-986.	4.6	131
14	Occurrence and removal of N-nitrosamines in wastewater treatment plants. <i>Water Research</i> , 2009, 43, 4381-4391.	5.3	129
15	Pesticides are the dominant stressors for vulnerable insects in lowland streams. <i>Water Research</i> , 2021, 201, 117262.	5.3	118
16	Analysis of Nitrosamines in Wastewater:â€” Exploring the Trace Level Quantification Capabilities of a Hybrid Linear Ion Trap/Orbitrap Mass Spectrometer. <i>Analytical Chemistry</i> , 2008, 80, 834-842.	3.2	113
17	Mixture effects in samples of multiple contaminants â€” An inter-laboratory study with manifold bioassays. <i>Environment International</i> , 2018, 114, 95-106.	4.8	113
18	Long-Term Persistence of Pesticides and TPs in Archived Agricultural Soil Samples and Comparison with Pesticide Application. <i>Environmental Science & Technology</i> , 2017, 51, 10642-10651.	4.6	110

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19	Carbon Isotope Signature of Polycyclic Aromatic Hydrocarbons (PAHs): Evidence for Different Sources in Tropical and Temperate Environments?. <i>Environmental Science & Technology</i> , 2002, 36, 3530-3535.	4.6	106
20	Predicting heavy metal transfer from soil to plant: potential use of Freundlich-type functions. <i>Journal of Plant Nutrition and Soil Science</i> , 2002, 165, 3.	1.1	79
21	Development and Application of Liquid Chromatographic Retention Time Indices in HRMS-Based Suspect and Nontarget Screening. <i>Analytical Chemistry</i> , 2021, 93, 11601-11611.	3.2	79
22	Polycyclic aromatic hydrocarbon (PAH) patterns in climatically different ecological zones of Brazil. <i>Organic Geochemistry</i> , 2003, 34, 1405-1417.	0.9	74
23	Cation Binding of Antimicrobial Sulfathiazole to Leonardite Humic Acid. <i>Environmental Science & Technology</i> , 2009, 43, 6632-6638.	4.6	73
24	Heterocyclic Aromatic Hydrocarbons Show Estrogenic Activity upon Metabolization in a Recombinant Transactivation Assay. <i>Environmental Science & Technology</i> , 2014, 48, 5892-5901.	4.6	71
25	Spatial variability of herbicide mobilisation and transport at catchment scale: insights from a field experiment. <i>Hydrology and Earth System Sciences</i> , 2012, 16, 1947-1967.	1.9	66
26	Assessing the Mixture Effects in <i>In Vitro</i> Bioassays of Chemicals Occurring in Small Agricultural Streams during Rain Events. <i>Environmental Science & Technology</i> , 2020, 54, 8280-8290.	4.6	66
27	Occurrence and risk assessment of organic micropollutants in freshwater systems within the Lake Victoria South Basin, Kenya. <i>Science of the Total Environment</i> , 2020, 714, 136748.	3.9	66
28	Water reuse: >90% water yield in MBR/RO through concentrate recycling and CO ₂ addition as scaling control. <i>Water Research</i> , 2011, 45, 6141-6151.	5.3	64
29	Covalent Binding of Sulfamethazine to Natural and Synthetic Humic Acids: Assessing Laccase Catalysis and Covalent Bond Stability. <i>Environmental Science & Technology</i> , 2013, 47, 6916-6924.	4.6	60
30	Identification of Unknown Antiandrogenic Compounds in Surface Waters by Effect-Directed Analysis (EDA) Using a Parallel Fractionation Approach. <i>Environmental Science & Technology</i> , 2018, 52, 288-297.	4.6	59
31	Effect-directed analysis (EDA) of Danube River water sample receiving untreated municipal wastewater from Novi Sad, Serbia. <i>Science of the Total Environment</i> , 2018, 624, 1072-1081.	3.9	58
32	Consensus Structure Elucidation Combining GC/EI-MS, Structure Generation, and Calculated Properties. <i>Analytical Chemistry</i> , 2012, 84, 3287-3295.	3.2	57
33	Assessing the Fate of Nitrosamine Precursors in Wastewater Treatment by Physicochemical Fractionation. <i>Environmental Science & Technology</i> , 2010, 44, 7871-7877.	4.6	55
34	Detecting a wide range of environmental contaminants in human blood samples – combining QuEChERS with LC-MS and GC-MS methods. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 7047-7054.	1.9	55
35	Solid-phase extraction as sample preparation of water samples for cell-based and other <i>in vitro</i> bioassays. <i>Environmental Sciences: Processes and Impacts</i> , 2018, 20, 493-504.	1.7	53
36	Characterization and risk assessment of seasonal and weather dynamics in organic pollutant mixtures from discharge of a separate sewer system. <i>Water Research</i> , 2018, 135, 122-133.	5.3	53

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37	Sorption Strength of Persistent Organic Pollutants in Particle Size Fractions of Urban Soils. Soil Science Society of America Journal, 2002, 66, 430-437.	1.2	50
38	Unraveling longitudinal pollution patterns of organic micropollutants in a river by non-target screening and cluster analysis. Science of the Total Environment, 2020, 727, 138388.	3.9	50
39	Body burden of pesticides and wastewater-derived pollutants on freshwater invertebrates: Method development and application in the Danube River. Environmental Pollution, 2016, 214, 77-85.	3.7	49
40	Reactions of a Sulfonamide Antimicrobial with Model Humic Constituents: Assessing Pathways and Stability of Covalent Bonding. Environmental Science & Technology, 2012, 46, 2102-2111.	4.6	48
41	Biomimetic Extraction of PAHs and PCBs from Soil with Octadecyl-Modified Silica Disks To Predict Their Availability to Earthworms. Environmental Science & Technology, 2001, 35, 3931-3935.	4.6	45
42	Mutagenicity in Surface Waters: Synergistic Effects of Carboline Alkaloids and Aromatic Amines. Environmental Science & Technology, 2017, 51, 1830-1839.	4.6	45
43	Effect of temperature, pH and total organic carbon variations on microbial turnover of ¹³ C/ ¹⁵ N-glyphosate in agricultural soil. Science of the Total Environment, 2019, 658, 697-707.	3.9	42
44	Screening of Pesticide and Biocide Patterns As Risk Drivers in Sediments of Major European River Mouths: Ubiquitous or River Basin-Specific Contamination?. Environmental Science & Technology, 2018, 52, 2251-2260.	4.6	41
45	Adaptation of Gammarus pulex to agricultural insecticide contamination in streams. Science of the Total Environment, 2018, 621, 479-485.	3.9	41
46	Prioritising site-specific micropollutants in surface water from LC-HRMS non-target screening data using a rarity score. Environmental Sciences Europe, 2019, 31, .	2.6	39
47	Effect-Directed Analysis of Progestogens and Glucocorticoids at Trace Concentrations in River Water. Environmental Toxicology and Chemistry, 2020, 39, 189-199.	2.2	39
48	Forest Fertilization with Wood Ash: Effect on the Distribution and Storage of Polycyclic Aromatic Hydrocarbons (PAHs) and Polychlorinated Biphenyls (PCBs). Journal of Environmental Quality, 2001, 30, 1296-1304.	1.0	38
49	Extending analysis of environmental pollutants in human urine towards screening for suspected compounds. Journal of Chromatography A, 2015, 1394, 18-25.	1.8	37
50	Polycyclic Aromatic Hydrocarbons (PAHs) in Soils of the Moscow Region- Concentrations, Temporal Trends, and Small-Scale Distribution. Journal of Environmental Quality, 2005, 34, 1581-1590.	1.0	36
51	Anthropogenic Stressors Shape Genetic Structure: Insights from a Model Freshwater Population along a Land Use Gradient. Environmental Science & Technology, 2016, 50, 11346-11356.	4.6	36
52	Predicting Soil-Water Partitioning of Polycyclic Aromatic Hydrocarbons and Polychlorinated Biphenyls by Desorption with Methanol-Water Mixtures at Different Temperatures. Environmental Science & Technology, 2001, 35, 2319-2325.	4.6	35
53	Effect-directed analysis for estrogenic compounds in a fluvial sediment sample using transgenic cyp19a1b-GFP zebrafish embryos. Aquatic Toxicology, 2014, 154, 221-229.	1.9	34
54	Identification of Mutagenic Aromatic Amines in River Samples with Industrial Wastewater Impact. Environmental Science & Technology, 2017, 51, 4681-4688.	4.6	33

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55	Wastewater treatment efficacy evaluated with in vitro bioassays. <i>Water Research X</i> , 2020, 9, 100072.	2.8	31
56	Effect-Directed Analysis of Aryl Hydrocarbon Receptor Agonists in Sediments from the Three Gorges Reservoir, China. <i>Environmental Science & Technology</i> , 2016, 50, 11319-11328.	4.6	30
57	Critical source areas for herbicides can change location depending on rain events. <i>Agriculture, Ecosystems and Environment</i> , 2014, 192, 85-94.	2.5	29
58	Pesticide Body Burden of the Crustacean <i>Gammarus pulex</i> as a Measure of Toxic Pressure in Agricultural Streams. <i>Environmental Science & Technology</i> , 2018, 52, 7823-7832.	4.6	29
59	An annotation database for chemicals of emerging concern in exposome research. <i>Environment International</i> , 2021, 152, 106511.	4.8	29
60	Pesticide Nonextractable Residue Formation in Soil: Insights from Inverse Modeling of Degradation Time Series. <i>Environmental Science & Technology</i> , 2012, 46, 9830-9837.	4.6	26
61	Multicriteria Approach To Select Polyaromatic River Mutagen Candidates. <i>Environmental Science & Technology</i> , 2015, 49, 2959-2968.	4.6	24
62	A sediment extraction and cleanup method for wide-scope multitarget screening by liquid chromatography-high-resolution mass spectrometry. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 177-188.	1.9	24
63	Suspended Particulate Matter—A Source or Sink for Chemical Mixtures of Organic Micropollutants in a Small River under Baseflow Conditions?. <i>Environmental Science & Technology</i> , 2021, 55, 5106-5116.	4.6	24
64	Disentangling multiple chemical and non-chemical stressors in a lotic ecosystem using a longitudinal approach. <i>Science of the Total Environment</i> , 2021, 769, 144324.	3.9	24
65	Polycyclic Aromatic Hydrocarbon Storage in a Typical Cerrado of the Brazilian Savanna. <i>Journal of Environmental Quality</i> , 2004, 33, 946.	1.0	23
66	Spatial and Temporal Patterns of Pharmaceuticals in the Aquatic Environment: A Review. <i>Geography Compass</i> , 2008, 2, 920-955.	1.5	23
67	Concentrations and forms of heavy metals in Slovak soils. <i>Journal of Plant Nutrition and Soil Science</i> , 2005, 168, 676-686.	1.1	22
68	Performance of combined fragmentation and retention prediction for the identification of organic micropollutants by LC-HRMS. <i>Analytical and Bioanalytical Chemistry</i> , 2018, 410, 1931-1941.	1.9	22
69	Integrated biological-chemical approach for the isolation and selection of polyaromatic mutagens in surface waters. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 9101-9112.	1.9	21
70	Optimization of LC-Orbitrap-HRMS acquisition and MZmine 2 data processing for nontarget screening of environmental samples using design of experiments. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 7905-7915.	1.9	20
71	Superabsorbent polymer as a supplement substrate of constructed wetland to retain pesticides from agricultural runoff. <i>Water Research</i> , 2021, 207, 117776.	5.3	20
72	Application of the Sea Urchin Embryo Test in Toxicity Evaluation and Effect-Directed Analysis of Wastewater Treatment Plant Effluents. <i>Environmental Science & Technology</i> , 2020, 54, 8890-8899.	4.6	19

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73	Title is missing!. Journal of Plant Nutrition and Soil Science, 2003, 166, 93-101.	1.1	18
74	Calibration and field application of the Atlantic HLB Disk containing Chemcatcher® passive sampler “Quantitative monitoring of herbicides, other pesticides, and transformation products in German streams. Journal of Hazardous Materials, 2021, 410, 124538.	6.5	18
75	Chemical Pollution Levels in a River Explain Site-Specific Sensitivities to Micropollutants within a Genetically Homogeneous Population of Freshwater Amphipods. Environmental Science & Technology, 2021, 55, 6087-6096.	4.6	18
76	Quantification of anthropogenic lead in Slovak forest and arable soils along a deposition gradient with stable lead isotope ratios. Journal of Plant Nutrition and Soil Science, 2001, 164, 303-307.	1.1	17
77	Mixture Risk Drivers in Freshwater Sediments and Their Bioavailability Determined Using Passive Equilibrium Sampling. Environmental Science & Technology, 2020, 54, 13197-13206.	4.6	17
78	Nonextractable residue formation of sulfonamide antimicrobials: New insights from soil incubation experiments. Chemosphere, 2014, 107, 366-372.	4.2	16
79	Multi- and transgenerational effects following early-life exposure of zebrafish to permethrin and coumarin 47: Impact on growth, fertility, behavior and lipid metabolism. Ecotoxicology and Environmental Safety, 2020, 205, 111348.	2.9	16
80	Evidence for antifouling biocides as one of the limiting factors for the recovery of macrophyte communities in lakes of Schleswig-Holstein. Environmental Sciences Europe, 2021, 33, .	2.6	16
81	Microbial reporter gene assay as a diagnostic and early warning tool for the detection and characterization of toxic pollution in surface waters. Environmental Toxicology and Chemistry, 2015, 34, 2523-2532.	2.2	15
82	Supporting non-target identification by adding hydrogen deuterium exchange MS/MS capabilities to MetFrag. Analytical and Bioanalytical Chemistry, 2019, 411, 4683-4700.	1.9	14
83	A look down the drain: Identification of dissolved and particle bound organic pollutants in urban runoff waters and sediments. Environmental Pollution, 2022, 302, 119047.	3.7	13
84	Non-targeted mercapturic acid screening in urine using LC-MS/MS with matrix effect compensation by postcolumn infusion of internal standard (PCI-IS). Analytical and Bioanalytical Chemistry, 2019, 411, 7771-7781.	1.9	12
85	A Data Set of 255,000 Randomly Selected and Manually Classified Extracted Ion Chromatograms for Evaluation of Peak Detection Methods. Metabolites, 2020, 10, 162.	1.3	12
86	Decoding and Discrimination of Chemical Cues and Signals: Avoidance of Predation and Competition during Parental Care Behavior in Sympatric Poison Frogs. PLoS ONE, 2015, 10, e0129929.	1.1	12
87	Novel metabolites in cyanobacterium <i>Cylindrospermopsis raciborskii</i> with potencies to inhibit gap junctional intercellular communication. Journal of Hazardous Materials, 2013, 262, 571-579.	6.5	11
88	Photochemical oxidation of polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs) in soils “a tool to assess their degradability?”. Journal of Plant Nutrition and Soil Science, 2002, 165, 173.	1.1	10
89	Improving the Screening Analysis of Pesticide Metabolites in Human Biomonitoring by Combining High-Throughput <i>In Vitro</i> Incubation and Automated LC-MS/MS Data Processing. Analytical Chemistry, 2021, 93, 9149-9157.	3.2	9
90	Complex chemical cocktail, containing insecticides diazinon and permethrin, drives acute toxicity to crustaceans in mountain lakes. Science of the Total Environment, 2022, 828, 154456.	3.9	9

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91	Measuring the internal concentration of volatile organic compounds in small organisms using micro-QuEChERS coupled to LVI ² -GC ² -MS/MS. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 6041-6052.	1.9	8
92	Long-term effects of a catastrophic insecticide spill on stream invertebrates. <i>Science of the Total Environment</i> , 2021, 768, 144456.	3.9	7
93	Reduced genetic diversity of freshwater amphipods in rivers with increased levels of anthropogenic organic micropollutants. <i>Evolutionary Applications</i> , 2022, 15, 976-991.	1.5	7
94	Symbolic Aggregate Approximation Improves Gap Filling in High-Resolution Mass Spectrometry Data Processing. <i>Analytical Chemistry</i> , 2020, 92, 10425-10432.	3.2	6
95	Neurobehavioral effects of cyanobacterial biomass field extracts on zebrafish embryos and potential role of retinoids. <i>Aquatic Toxicology</i> , 2020, 228, 105613.	1.9	6
96	pH-Dependent Partitioning of Ionizable Organic Chemicals between the Silicone Polymer Polydimethylsiloxane (PDMS) and Water. <i>ACS Environmental Au</i> , 2022, 2, 253-262.	3.3	6
97	Combination of In Situ Feeding Rate Experiments and Chemical Body Burden Analysis to Assess the Influence of Micropollutants in Wastewater on <i>Gammarus pulex</i> . <i>International Journal of Environmental Research and Public Health</i> , 2019, 16, 883.	1.2	5
98	Variability in retinoid-like activity of extracellular compound mixtures produced by wide spectra of phytoplankton species and contributing metabolites. <i>Journal of Hazardous Materials</i> , 2021, 414, 125412.	6.5	4
99	Sources and Fate of the Antiandrogenic Fluorescent Dye 4-Methyl-7-Diethylaminocoumarin in Small River Systems. <i>Environmental Toxicology and Chemistry</i> , 2021, 40, 3078-3091.	2.2	4
100	High-Resolution Mass Spectrometry in the Effect-Directed Analysis of Water Resources. <i>Comprehensive Analytical Chemistry</i> , 2016, 71, 433-457.	0.7	3