Oliver J Lechtenfeld

List of Publications by Year in descending order

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52 papers

2,692 citations

279701 23 h-index 50 g-index

71 all docs

71 docs citations

71 times ranked 3611 citing authors

#	Article	IF	CITATIONS
1	Thermophilic archaea activate butane via alkyl-coenzyme M formation. Nature, 2016, 539, 396-401.	13.7	279
2	The GEOTRACES Intermediate Data Product 2017. Chemical Geology, 2018, 493, 210-223.	1.4	257
3	Molecular transformation and degradation of refractory dissolved organic matter in the Atlantic and Southern Ocean. Geochimica Et Cosmochimica Acta, 2014, 126, 321-337.	1.6	247
4	Marine sequestration of carbon in bacterial metabolites. Nature Communications, 2015, 6, 6711.	5.8	223
5	A molecular perspective on the ageing of marine dissolved organic matter. Biogeosciences, 2012, 9, 1935-1955.	1.3	200
6	Dissolved organic sulfur in the ocean: Biogeochemistry of a petagram inventory. Science, 2016, 354, 456-459.	6.0	152
7	Anaerobic oxidation of ethane by archaea from a marine hydrocarbon seep. Nature, 2019, 568, 108-111.	13.7	149
8	Selectivity of solid phase extraction of freshwater dissolved organic matter and its effect on ultrahigh resolution mass spectra. Environmental Sciences: Processes and Impacts, 2016, 18, 918-927.	1.7	128
9	The Weddell Gyre, Southern Ocean: Present Knowledge and Future Challenges. Reviews of Geophysics, 2019, 57, 623-708.	9.0	105
10	A depth profile of uranium-236 in the Atlantic Ocean. Geochimica Et Cosmochimica Acta, 2012, 77, 98-107.	1.6	55
11	Quantifying the impact of solid-phase extraction on chromophoric dissolved organic matter composition. Marine Chemistry, 2018, 207, 33-41.	0.9	48
12	Conditioning Film and Early Biofilm Succession on Plastic Surfaces. Environmental Science & Emp; Technology, 2021, 55, 11006-11018.	4.6	45
13	The influence of salinity on the molecular and optical properties of surface microlayers in a karstic estuary. Marine Chemistry, 2013, 150, 25-38.	0.9	43
14	Linking the mobilization of dissolved organic matter in catchments and its removal in drinking water treatment to its molecular characteristics. Water Research, 2017, 113, 149-159.	5.3	42
15	Characterizing chemical transformation of organophosphorus compounds by 13C and 2H stable isotope analysis. Science of the Total Environment, 2018, 615, 20-28.	3.9	41
16	Improved Understanding of Dissolved Organic Matter Processing in Freshwater Using Complementary Experimental and Machine Learning Approaches. Environmental Science & Environm	4.6	38
17	2D Liquid Chromatographic Fractionation with Ultra-high Resolution MS Analysis Resolves a Vast Molecular Diversity of Tropospheric Particle Organics. Environmental Science & Technology, 2019, 53, 11353-11363.	4.6	34
18	Photochemically Induced Changes of Dissolved Organic Matter in a Humic-Rich and Forested Stream. Water (Switzerland), 2020, 12, 331.	1.2	30

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19	Dissolved organic matter in a tropical saline-alkaline lake of the East African Rift Valley Water Research, 2020, 173, 115532.	5.3	29
20	Online Counter Gradient LC-FT-ICR-MS Enables Detection of Highly Polar Natural Organic Matter Fractions. Analytical Chemistry, 2021, 93, 1740-1748.	3.2	29
21	Inorganics in Organics: Quantification of Organic Phosphorus and Sulfur and Trace Element Speciation in Natural Organic Matter Using HPLC-ICPMS. Analytical Chemistry, 2011, 83, 8968-8974.	3.2	27
22	High concentrations of dissolved biogenic methane associated with cyanobacterial blooms in East African lake surface water. Communications Biology, 2021, 4, 845.	2.0	26
23	Factors influencing particulate lipid production in the East Atlantic Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2014, 89, 56-67.	0.6	25
24	Quantifying a Biocatalytic Product from a Few Living Microbial Cells Using Microfluidic Cultivation Coupled to FT-ICR-MS. Analytical Chemistry, 2019, 91, 7012-7018.	3.2	25
25	High-frequency measurements explain quantity and quality of dissolved organic carbon mobilization in a headwater catchment. Biogeosciences, 2019, 16, 4497-4516.	1.3	22
26	Discovery of Polar Ozonation Byproducts via Direct Injection of Effluent Organic Matter with Online LC-FT-ICR-MS. Environmental Science & Echnology, 2022, 56, 1894-1904.	4.6	22
27	Legacy Effects of Sorption Determine the Formation Efficiency of Mineral-Associated Soil Organic Matter. Environmental Science & Environmental Science	4.6	21
28	Photochemically Induced Bound Residue Formation of Carbamazepine with Dissolved Organic Matter. Environmental Science & Enviro	4.6	16
29	Aging and Molecular Changes of Dissolved Organic Matter Between Two Deep Oceanic Endâ€Members. Global Biogeochemical Cycles, 2018, 32, 1449-1456.	1.9	15
30	Interlaboratory comparison of humic substances compositional space as measured by Fourier transform ion cyclotron resonance mass spectrometry (IUPAC Technical Report). Pure and Applied Chemistry, 2020, 92, 1447-1467.	0.9	15
31	Absorption Mode Spectral Processing Improves Data Quality of Natural Organic Matter Analysis by Fourier-Transform Ion Cyclotron Resonance Mass Spectrometry. Journal of the American Society for Mass Spectrometry, 2020, 31, 1615-1618.	1.2	13
32	Online Nano Solid Phase Extraction Fourier-Transform Ion Cyclotron Resonance Mass Spectrometry Workflow to Analyze Small Scale Gradients of Soil Solution Organic Matter in the Rhizosphere. Analytical Chemistry, 2020, 92, 10442-10449.	3.2	13
33	Moxidectin toxicity to zebrafish embryos: Bioaccumulation and biomarker responses. Environmental Pollution, 2021, 283, 117096.	3.7	13
34	Production and transformation of dissolved neutral sugars and amino acids by bacteria in seawater. Biogeosciences, 2014, 11, 5349-5363.	1.3	11
35	Response to Comment on "Dissolved organic sulfur in the ocean: Biogeochemistry of a petagram inventoryâ€. Science, 2017, 356, 813-813.	6.0	10
36	Refinement of Compound Aromaticity in Complex Organic Mixtures by Stable Isotope Label Assisted Ultrahigh-Resolution Mass Spectrometry. Analytical Chemistry, 2020, 92, 9032-9038.	3.2	10

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37	Impacts of litter decay on organic leachate composition and reactivity. Biogeochemistry, 2021, 154, 99-117.	1.7	10
38	Direct Imaging of Plant Metabolites in the Rhizosphere Using Laser Desorption Ionization Ultra-High Resolution Mass Spectrometry. Frontiers in Plant Science, 2021, 12, 753812.	1.7	10
39	Multi-proxy approach involving ultrahigh resolution mass spectrometry and self-organising maps to investigate the origin and quality of sedimentary organic matter across a subtropical reservoir. Organic Geochemistry, 2021, 151, 104165.	0.9	9
40	Aromaticity Index with Improved Estimation of Carboxyl Group Contribution for Biogeochemical Studies. Environmental Science &	4.6	9
41	2H and 13C isotope fractionation analysis of organophosphorus compounds for characterizing transformation reactions in biogas slurry: Potential for anaerobic treatment of contaminated biomass. Water Research, 2019, 163, 114882.	5.3	7
42	Dissolved Organic Matter in Continental Hydro-Geothermal Systems: Insights from Two Hot Springs of the East African Rift Valley. Water (Switzerland), 2020, 12, 3512.	1.2	7
43	New Insights into the Seasonal Variation of DOM Quality of a Humic-Rich Drinking-Water Reservoirâ€"Coupling 2D-Fluorescence and FTICR MS Measurements. Water (Switzerland), 2021, 13, 1703.	1.2	7
44	Small-scale topography explains patterns and dynamics of dissolved organic carbon exports from the riparian zone of a temperate, forested catchment. Hydrology and Earth System Sciences, 2021, 25, 6067-6086.	1.9	7
45	Quality of Dissolved Organic Matter Driven by Autotrophic and Heterotrophic Microbial Processes in a Large River. Water (Switzerland), 2020, 12, 1577.	1.2	6
46	Direct analysis of fulvic acids adsorbed onto capped gold nanoparticles by laser desorption ionization Fourier-transform ion cyclotron resonance mass spectrometry. Environmental Science: Nano, 2021, 8, 2336-2346.	2.2	6
47	Delineating Source Contributions to Stream Dissolved Organic Matter Composition Under Baseflow Conditions in Forested Headwater Catchments. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006425.	1.3	6
48	Iron Exports From Catchments Are Constrained by Redox Status and Topography. Global Biogeochemical Cycles, 2022, 36, .	1.9	6
49	Lagrangian profiles of riverine autotrophy, organic matter transformation, and micropollutants at extreme drought. Science of the Total Environment, 2022, 828, 154243.	3.9	6
50	Validation of a field deployable reactor for <i>in situ</i> formation of NOM-engineered nanoparticle corona. Environmental Science: Nano, 2020, 7, 486-500.	2.2	5
51	Exploring the potential of laser desorption ionisation time-of-flight mass spectrometry to analyse organic capping agents on inorganic nanoparticle surfaces. Analytical and Bioanalytical Chemistry, 2020, 412, 5261-5271.	1.9	4
52	Zebrafish Oatp1d1 Acts as a Cellular Efflux Transporter of the Anionic Herbicide Bromoxynil. Chemical Research in Toxicology, 2022, , .	1.7	0