Rosalie K Chu

List of Publications by Year
in descending order

25 papers	1,498 citations	516710 16 h-index	552781 26 g-index
34 all docs	34 docs citations	34 times ranked	2192 citing authors

#	Article	IF	Citations
1	Groundwaterâ€“surface water mixing shifts ecological assembly processes and stimulates organic carbon turnover. Nature Communications, 2016, 7, 11237.	12.8	290
2	Advanced Solvent Based Methods for Molecular Characterization of Soil Organic Matter by High-Resolution Mass Spectrometry. Analytical Chemistry, 2015, 87, 5206-5215.	6.5	167
3	MPLEx: a Robust and Universal Protocol for Single-Sample Integrative Proteomic, Metabolomic, and Lipidomic Analyses. MSystems, 2016, 1, .	3.8	166
4	Sequential extraction protocol for organic matter from soils and sediments using high resolution mass spectrometry. Analytica Chimica Acta, 2017, 972, 54-61.	5.4	110
5	Influences of organic carbon speciation on hyporheic corridor biogeochemistry and microbial ecology. Nature Communications, 2018, 9, 585.	12.8	110
6	An international laboratory comparison of dissolved organic matter composition by high resolution mass spectrometry: Are we getting the same answer?. Limnology and Oceanography: Methods, 2020, 18, 235-258.	2.0	109
7	Intracellular pathways for lignin catabolism in white-rot fungi. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	82
8	Potential utilization of terrestrially derived dissolved organic matter by aquatic microbial communities in saline lakes. ISME Journal, 2020, 14, 2313-2324.	9.8	64
9	Dispersal limitation and thermodynamic constraints govern spatial structure of permafrost microbial communities. FEMS Microbiology Ecology, 2018, 94, .	2.7	62
10	Using metacommunity ecology to understand environmental metabolomes. Nature Communications, 2020, 11, 6369.	12.8	51
11	Carbon Limitation Leads to Thermodynamic Regulation of Aerobic Metabolism. Environmental Science and Technology Letters, 2020, 7, 517-524.	8.7	32
12	Multimodal MSI in Conjunction with Broad Coverage Spatially Resolved MS² Increases Confidence in Both Molecular Identification and Localization. Analytical Chemistry, 2018, 90, 702-707.	6.5	30
13	Towards resolving the spatial metabolome with unambiguous molecular annotations in complex biological systems by coupling mass spectrometry imaging with structures for lossless ion manipulations. Chemical Communications, 2019, 55, 306-309.	4.1	27
14	Using Community Science to Reveal the Global Chemogeography of River Metabolomes. Metabolites, 2020, 10, 518.	2.9	27
15	Novel metabolic interactions and environmental conditions mediate the boreal peatmoss-cyanobacteria mutualism. ISME Journal, 2022, 16, 1074-1085.	9.8	25
16	Ecological theory applied to environmental metabolomes reveals compositional divergence despite conserved molecular properties. Science of the Total Environment, 2021, 788, 147409.	8.0	21
17	Spatial gradients in the characteristics of soil-carbon fractions are associated with abiotic features but not microbial communities. Biogeosciences, 2019, 16, 3911-3928.	3.3	19
18	Coupled Biotic-Abiotic Processes Control Biogeochemical Cycling of Dissolved Organic Matter in the Columbia River Hyporheic Zone. Frontiers in Water, 2021, 2, .	2.3	18

#	Article	IF	Citations
19	Co-located contemporaneous mapping of morphological, hydrological, chemical, and biological conditions in a 5th-order mountain stream network, Oregon, USA. Earth System Science Data, 2019, 11, 1567-1581.	9.9	14
20	A Customizable Flow Injection System for Automated, High Throughput, and Time Sensitive Ion Mobility Spectrometry and Mass Spectrometry Measurements. Analytical Chemistry, 2018, 90, 737-744.	6.5	11
21	Disturbance triggers non-linear microbeâ€“environment feedbacks. Biogeosciences, 2021, 18, 4773-4789.	3.3	8
22	Implications of sample treatment on characterization of riverine dissolved organic matter. Environmental Sciences: Processes and Impacts, 2022, 24, 773-782.	3.5	6
23	MetFish: a Metabolomics Pipeline for Studying Microbial Communities in Chemically Extreme Environments. MSystems, 2021, 6, e0105820.	3.8	5
24	Inferring the Contribution of Microbial Taxa and Organic Matter Molecular Formulas to Ecological Assembly. Frontiers in Microbiology, 2022, 13, 803420.	3.5	5
25	Organic matter transformations are disconnected between surface water and the hyporheic zone. Biogeosciences, 2022, 19, 3099-3110.	3.3	4