

Christopher R Anderton

List of Publications by Year in descending order

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66
papers

4,177
citations

257357

24
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118793

62
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all docs

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docs citations

68
times ranked

6699
citing authors

#	ARTICLE	IF	CITATIONS
1	Novel metabolic interactions and environmental conditions mediate the boreal peatmoss-cyanobacteria mutualism. <i>ISME Journal</i> , 2022, 16, 1074-1085.	4.4	25
2	Elucidating Drought-Tolerance Mechanisms in Plant Roots through ¹ H NMR Metabolomics in Parallel with MALDI-MS, and NanoSIMS Imaging Techniques. <i>Environmental Science & Technology</i> , 2022, 56, 2021-2032.	4.6	10
3	Review of the Third Conference of the Imaging Mass Spectrometry Society (IMSS 3): Accounts of a Hybrid Virtual and In-Person Meeting and the State and Future of the Field. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 238-241.	1.2	2
4	Imaging and Direct Sampling Capabilities of Nanospray Desorption Electrospray Ionization with Absorption-Mode 21 Tesla Fourier Transform Ion Cyclotron Resonance Mass Spectrometry. <i>Analytical Chemistry</i> , 2022, 94, 3629-3636.	3.2	14
5	Single-Cell Metabolomics with Rapid Determination of Chemical Formulas from Isotopic Fine Structures. <i>Methods in Molecular Biology</i> , 2022, 2437, 61-75.	0.4	0
6	Spatial Mapping of Plant N-Glycosylation Cellular Heterogeneity Inside Soybean Root Nodules Provided Insights Into Legume-Rhizobia Symbiosis. <i>Frontiers in Plant Science</i> , 2022, 13, .	1.7	7
7	A reference tissue atlas for the human kidney. <i>Science Advances</i> , 2022, 8, .	4.7	67
8	Controlled Humidity Levels for Fine Spatial Detail Information in Enzyme-Assisted ¹⁵ N-Glycan MALDI MSI. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 1577-1580.	1.2	3
9	A multimodal and integrated approach to interrogate human kidney biopsies with rigor and reproducibility: guidelines from the Kidney Precision Medicine Project. <i>Physiological Genomics</i> , 2021, 53, 1-11.	1.0	59
10	Preserved and variable spatial chemical changes of lipids across tomato leaves in response to central vein wounding reveals potential origin of linolenic acid in signal transduction cascade. <i>Plant-Environment Interactions</i> , 2021, 2, 28-35.	0.7	4
11	Spatially Resolved Mass Spectrometry at the Single Cell: Recent Innovations in Proteomics and Metabolomics. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 872-894.	1.2	158
12	Optical Microscopy-Guided Laser Ablation Electrospray Ionization Ion Mobility Mass Spectrometry: Ambient Single Cell Metabolomics with Increased Confidence in Molecular Identification. <i>Metabolites</i> , 2021, 11, 200.	1.3	25
13	Acyclic Terpenes Reduce Secondary Organic Aerosol Formation from Emissions of a Riparian Shrub. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1242-1253.	1.2	5
14	Deciphering the Incipient Phases of Ice-Mineral Interactions as a Precursor of Physical Weathering. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1233-1241.	1.2	5
15	SubTap, a Versatile 3D Printed Platform for Eavesdropping on Extracellular Interactions. <i>MSystems</i> , 2021, 6, e0090221.	1.7	1
16	Ambient Single-Cell Analysis and Native Tissue Imaging Using Laser-Ablation Electrospray Ionization Mass Spectrometry with Increased Spatial Resolution. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 2490-2494.	1.2	20
17	Expanding Molecular Coverage in Mass Spectrometry Imaging of Microbial Systems Using Metal-Assisted Laser Desorption/Ionization. <i>Microbiology Spectrum</i> , 2021, 9, e0052021.	1.2	9
18	Rapid Automated Annotation and Analysis of N-Glycan Mass Spectrometry Imaging Data Sets Using NGlycDB in METASPACE. <i>Analytical Chemistry</i> , 2021, 93, 13421-13425.	3.2	8

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19	The importance of nutrients for microbial priming in a bog rhizosphere. <i>Biogeochemistry</i> , 2021, 152, 271-290.	1.7	4
20	Draft Genome Sequence of <i>Fusarium</i> sp. Strain DS 682, a Novel Fungal Isolate from the Grass Rhizosphere. <i>Microbiology Resource Announcements</i> , 2021, 10, .	0.3	7
21	Direct Visualization of Chemical Cues and Cellular Phenotypes throughout <i>Bacillus subtilis</i> Biofilms. <i>MSystems</i> , 2021, 6, e0103821.	1.7	10
22	An approach for visualizing the spatial metabolome of an entire plant root system inspired by the Swiss-rolling technique. <i>Journal of Mass Spectrometry</i> , 2020, 55, e4363.	0.7	9
23	In-Situ Metabolomic Analysis of <i>Setaria viridis</i> Roots Colonized by Beneficial Endophytic Bacteria. <i>Molecular Plant-Microbe Interactions</i> , 2020, 33, 272-283.	1.4	23
24	Soil microbial EPS resiliency is influenced by carbon source accessibility. <i>Soil Biology and Biochemistry</i> , 2020, 151, 108037.	4.2	17
25	Visualizing Microbial Community Dynamics via a Controllable Soil Environment. <i>MSystems</i> , 2020, 5, .	1.7	12
26	Nitrogen Source Governs Community Carbon Metabolism in a Model Hypersaline Benthic Phototrophic Biofilm. <i>MSystems</i> , 2020, 5, .	1.7	4
27	Modelling kidney disease using ontology: insights from the Kidney Precision Medicine Project. <i>Nature Reviews Nephrology</i> , 2020, 16, 686-696.	4.1	45
28	Storage Conditions of Human Kidney Tissue Sections Affect Spatial Lipidomics Analysis Reproducibility. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 2538-2546.	1.2	20
29	Correlated Imaging of Topology and Composition Within Phase-separated Supported Lipid Membranes. <i>Microscopy and Microanalysis</i> , 2020, 26, 1602-1603.	0.2	0
30	Utilizing Correlative Imaging Approaches with ToF-SIMS Expands Our Biochemical Interpretation Abilities Across Biological Kingdoms. <i>Microscopy and Microanalysis</i> , 2020, 26, 2508-2508.	0.2	0
31	Metabolomic profiling of wild-type and mutant soybean root nodules using laser-ablation electrospray ionization mass spectrometry reveals altered metabolism. <i>Plant Journal</i> , 2020, 103, 1937-1958.	2.8	21
32	Response Surface Methodology As a New Approach for Finding Optimal MALDI Matrix Spraying Parameters for Mass Spectrometry Imaging. <i>Journal of the American Society for Mass Spectrometry</i> , 2020, 31, 508-516.	1.2	22
33	DESI-MSI and METASPACE indicates lipid abnormalities and altered mitochondrial membrane components in diabetic renal proximal tubules. <i>Metabolomics</i> , 2020, 16, 11.	1.4	34
34	An approach for broad molecular imaging of the root-soil interface via indirect matrix-assisted laser desorption/ionization mass spectrometry. <i>Soil Biology and Biochemistry</i> , 2020, 146, 107804.	4.2	15
35	Single-Cell Metabolic Profiling: Metabolite Formulas from Isotopic Fine Structures in Heterogeneous Plant Cell Populations. <i>Analytical Chemistry</i> , 2020, 92, 7289-7298.	3.2	37
36	Sequential Ammonia and Carbon Dioxide Adsorption on Pyrolyzed Biomass to Recover Waste Stream Nutrients. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 7121-7131.	3.2	15

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37	Passively Sampled Environmental Films Show Geographic Variability and Host a Variety of Microorganisms. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2726-2735.	1.2	4
38	Exploiting the Semidestructive Nature of Gas Cluster Ion Beam Time-of-Flight Secondary Ion Mass Spectrometry Imaging for Simultaneous Localization and Confident Lipid Annotations. <i>Analytical Chemistry</i> , 2019, 91, 15073-15080.	3.2	21
39	Towards resolving the spatial metabolome with unambiguous molecular annotations in complex biological systems by coupling mass spectrometry imaging with structures for lossless ion manipulations. <i>Chemical Communications</i> , 2019, 55, 306-309.	2.2	27
40	Physical and Chemical Morphology of Passively Sampled Environmental Films. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 305-313.	1.2	16
41	Spatiotemporal Transformation in the Alkaloid Profile of <i>Pinus</i> Roots in Response to Mycorrhization. <i>Journal of Natural Products</i> , 2019, 82, 1382-1386.	1.5	4
42	Ambient Metabolic Profiling and Imaging of Biological Samples with Ultrahigh Molecular Resolution Using Laser Ablation Electrospray Ionization 21 Tesla FTICR Mass Spectrometry. <i>Analytical Chemistry</i> , 2019, 91, 5028-5035.	3.2	40
43	Insights into the histology of planarian flatworm <i>Phagocata gracilis</i> based on location specific, intact lipid information provided by GCIB-ToF-SIMS imaging. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2019, 1864, 733-743.	1.2	9
44	NanoSIMS for biological applications: Current practices and analyses. <i>Biointerphases</i> , 2018, 13, 03B301.	0.6	147
45	Multimodal MSI in Conjunction with Broad Coverage Spatially Resolved MS ² Increases Confidence in Both Molecular Identification and Localization. <i>Analytical Chemistry</i> , 2018, 90, 702-707.	3.2	30
46	Metabolic Noise and Distinct Subpopulations Observed by Single Cell LAESI Mass Spectrometry of Plant Cells in situ. <i>Frontiers in Plant Science</i> , 2018, 9, 1646.	1.7	40
47	Optimizing colormaps with consideration for color vision deficiency to enable accurate interpretation of scientific data. <i>PLoS ONE</i> , 2018, 13, e0199239.	1.1	101
48	Observed metabolic asymmetry within soybean root nodules reflects unexpected complexity in rhizobacteria-legume metabolite exchange. <i>ISME Journal</i> , 2018, 12, 2335-2338.	4.4	39
49	Laser ablation electrospray ionization mass spectrometry with ion mobility separation reveals metabolites in the symbiotic interactions of soybean roots and rhizobia. <i>Plant Journal</i> , 2017, 91, 340-354.	2.8	48
50	Mass spectrometry imaging: Towards mapping the elemental and molecular composition of the rhizosphere. <i>Rhizosphere</i> , 2017, 3, 254-258.	1.4	23
51	Constant-Distance Mode Nanospray Desorption Electrospray Ionization Mass Spectrometry Imaging of Biological Samples with Complex Topography. <i>Analytical Chemistry</i> , 2017, 89, 1131-1137.	3.2	57
52	Quantifying element incorporation in multispecies biofilms using nanoscale secondary ion mass spectrometry image analysis. <i>Biointerphases</i> , 2016, 11, 02A322.	0.6	20
53	Cellular Delivery of Nanoparticles Revealed with Combined Optical and Isotopic Nanoscopy. <i>ACS Nano</i> , 2016, 10, 4046-4054.	7.3	36
54	Secondary Ion Mass Spectrometry Imaging of Tissues, Cells, and Microbial Systems. <i>Microscopy Today</i> , 2016, 24, 24-31.	0.2	56

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55	Utilizing a Robotic Sprayer for High Lateral and Mass Resolution MALDI FT-ICR MSI of Microbial Cultures. <i>Journal of the American Society for Mass Spectrometry</i> , 2016, 27, 556-559.	1.2	23
56	Advanced Solvent Based Methods for Molecular Characterization of Soil Organic Matter by High-Resolution Mass Spectrometry. <i>Analytical Chemistry</i> , 2015, 87, 5206-5215.	3.2	167
57	Direct Probes of 4 nm Diameter Gold Nanoparticles Interacting with Supported Lipid Bilayers. <i>Journal of Physical Chemistry C</i> , 2015, 119, 534-546.	1.5	77
58	Secondary Ion Mass Spectrometry Imaging of Dictyostelium discoideum Aggregation Streams. <i>PLoS ONE</i> , 2014, 9, e99319.	1.1	14
59	The effect of high vacuum on the mechanical properties and bioactivity of collagen fibril matrices. <i>Biointerphases</i> , 2013, 8, 2.	0.6	7
60	Frictional properties of native and functionalized type I collagen thin films. <i>Applied Physics Letters</i> , 2013, 103, 143703.	1.5	3
61	Identification of a lipid-related peak set to enhance the interpretation of TOF-SIMS data from model and cellular membranes. <i>Surface and Interface Analysis</i> , 2012, 44, 322-333.	0.8	28
62	Correlated AFM and NanoSIMS imaging to probe cholesterol-induced changes in phase behavior and non-ideal mixing in ternary lipid membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 307-315.	1.4	42
63	Discriminating and Imaging Different Phosphatidylcholine Species within Phase-Separated Model Membranes by Principal Component Analysis of TOF-Secondary Ion Mass Spectrometry Images. <i>Analytical Chemistry</i> , 2010, 82, 10006-10014.	3.2	40
64	Nanostructured Plasmonic Sensors. <i>Chemical Reviews</i> , 2008, 108, 494-521.	23.0	2,245
65	Analysis of green tea extract dietary supplements by micellar electrokinetic chromatography. <i>Journal of Chromatography A</i> , 2006, 1117, 103-108.	1.8	29
66	Determination of catechins in matcha green tea by micellar electrokinetic chromatography. <i>Journal of Chromatography A</i> , 2003, 1011, 173-180.	1.8	64