

Ryan S Renslow

List of Publications by Year in descending order

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Version: 2024-02-01

67
papers

2,518
citations

186265
28
h-index

206112
48
g-index

70
all docs

70
docs citations

70
times ranked

3538
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrochemically active biofilms: facts and fiction. A review. <i>Biofouling</i> , 2012, 28, 789-812.	2.2	183
2	NanoSIMS for biological applications: Current practices and analyses. <i>Biointerphases</i> , 2018, 13, 03B301.	1.6	147
3	pH, redox potential and local biofilm potential microenvironments within <i>Geobacter sulfurreducens</i> biofilms and their roles in electron transfer. <i>Biotechnology and Bioengineering</i> , 2012, 109, 2651-2662.	3.3	112
4	Optimizing colormaps with consideration for color vision deficiency to enable accurate interpretation of scientific data. <i>PLoS ONE</i> , 2018, 13, e0199239.	2.5	101
5	Phototrophic biofilm assembly in microbial-mat-derived unicyanobacterial consortia: model systems for the study of autotroph-heterotroph interactions. <i>Frontiers in Microbiology</i> , 2014, 5, 109.	3.5	97
6	Diffusion in biofilms respiring on electrodes. <i>Energy and Environmental Science</i> , 2013, 6, 595-607.	30.8	95
7	Enhancing glycan isomer separations with metal ions and positive and negative polarity ion mobility spectrometry-mass spectrometry analyses. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 467-476.	3.7	78
8	In situ effective diffusion coefficient profiles in live biofilms using pulsed-field gradient nuclear magnetic resonance. <i>Biotechnology and Bioengineering</i> , 2010, 106, 928-937.	3.3	76
9	SLIM Ultrahigh Resolution Ion Mobility Spectrometry Separations of Isotopologues and Isotopomers Reveal Mobility Shifts due to Mass Distribution Changes. <i>Analytical Chemistry</i> , 2019, 91, 11952-11962.	6.5	76
10	The epsomitic phototrophic microbial mat of Hot Lake, Washington: community structural responses to seasonal cycling. <i>Frontiers in Microbiology</i> , 2013, 4, 323.	3.5	75
11	ISICLE: A Quantum Chemistry Pipeline for Establishing in Silico Collision Cross Section Libraries. <i>Analytical Chemistry</i> , 2019, 91, 4346-4356.	6.5	74
12	Metabolic spatial variability in electrode-respiring <i>Geobacter sulfurreducens</i> biofilms. <i>Energy and Environmental Science</i> , 2013, 6, 1827.	30.8	73
13	Modeling biofilms with dual extracellular electron transfer mechanisms. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 19262.	2.8	70
14	The mechanism of neutral red-mediated microbial electrosynthesis in <i>Escherichia coli</i> : menaquinone reduction. <i>Bioresource Technology</i> , 2015, 192, 689-695.	9.6	69
15	New mass spectrometry technologies contributing towards comprehensive and high throughput omics analyses of single cells. <i>Analyst</i> , 2019, 144, 794-807.	3.5	67
16	Integrating ion mobility spectrometry into mass spectrometry-based exposome measurements: what can it add and how far can it go?. <i>Bioanalysis</i> , 2017, 9, 81-98.	1.5	66
17	SPE-IMS-MS: An automated platform for sub-sixty second surveillance of endogenous metabolites and xenobiotics in biofluids. <i>Clinical Mass Spectrometry</i> , 2016, 2, 1-10.	1.9	63
18	Integrating Ecological and Engineering Concepts of Resilience in Microbial Communities. <i>Frontiers in Microbiology</i> , 2015, 6, 1298.	3.5	62

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19	Deep Learning to Generate <i>in Silico</i> Chemical Property Libraries and Candidate Molecules for Small Molecule Identification in Complex Samples. <i>Analytical Chemistry</i> , 2020, 92, 1720-1729.	6.5	62
20	Oxygen reduction kinetics on graphite cathodes in sediment microbial fuel cells. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 21573.	2.8	53
21	<i>Staphylococcus aureus</i> Induces Hypoxia and Cellular Damage in Porcine Dermal Explants. <i>Infection and Immunity</i> , 2015, 83, 2531-2541.	2.2	52
22	Quantum Chemistry Calculations for Metabolomics. <i>Chemical Reviews</i> , 2021, 121, 5633-5670.	47.7	47
23	Structural Elucidation of <i>cis/trans</i> Dicafeoylquinic Acid Photoisomerization Using Ion Mobility Spectrometry-Mass Spectrometry. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1381-1388.	4.6	45
24	Biofilm shows spatially stratified metabolic responses to contaminant exposure. <i>Environmental Microbiology</i> , 2012, 14, 2901-2910.	3.8	44
25	High-resolution elemental mapping of the root-rhizosphere-soil continuum using laser-induced breakdown spectroscopy (LIBS). <i>Soil Biology and Biochemistry</i> , 2019, 131, 119-132.	8.8	39
26	NP-MRD: the Natural Products Magnetic Resonance Database. <i>Nucleic Acids Research</i> , 2022, 50, D665-D677.	14.5	39
27	An automated framework for NMR chemical shift calculations of small organic molecules. <i>Journal of Cheminformatics</i> , 2018, 10, 52.	6.1	37
28	Increasing parvovirus filter throughput of monoclonal antibodies using ion exchange membrane adsorptive pre-filtration. <i>Biotechnology and Bioengineering</i> , 2010, 106, 627-637.	3.3	33
29	A Practical Guide to Metabolomics Software Development. <i>Analytical Chemistry</i> , 2021, 93, 1912-1923.	6.5	30
30	An Introduction to the Benchmarking and Publications for Non-Targeted Analysis Working Group. <i>Analytical Chemistry</i> , 2021, 93, 16289-16296.	6.5	30
31	In situ nuclear magnetic resonance microimaging of live biofilms in a microchannel. <i>Analyst</i> , 2017, 142, 2363-2371.	3.5	29
32	A voltammetric flavin microelectrode for use in biofilms. <i>Sensors and Actuators B: Chemical</i> , 2012, 161, 929-937.	7.8	28
33	Trade-offs between microbiome diversity and productivity in a stratified microbial mat. <i>ISME Journal</i> , 2017, 11, 405-414.	9.8	26
34	Biofilm image reconstruction for assessing structural parameters. <i>Biotechnology and Bioengineering</i> , 2011, 108, 1383-1394.	3.3	23
35	Organismal and spatial partitioning of energy and macronutrient transformations within a hypersaline mat. <i>FEMS Microbiology Ecology</i> , 2017, 93, .	2.7	23
36	Quantifying element incorporation in multispecies biofilms using nanoscale secondary ion mass spectrometry image analysis. <i>Biointerphases</i> , 2016, 11, 02A322.	1.6	20

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37	Spatially tracking ¹³ C-labelled substrate (bicarbonate) accumulation in microbial communities using laser ablation isotope ratio mass spectrometry. <i>Environmental Microbiology Reports</i> , 2014, 6, 786-791.	2.4	17
38	Soil microbial EPS resiliency is influenced by carbon source accessibility. <i>Soil Biology and Biochemistry</i> , 2020, 151, 108037.	8.8	17
39	Precursor Ion “Ion Aggregation in the Brust-Schiffrin Synthesis of Alkanethiol Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2016, 120, 19837-19847.	3.1	16
40	Vancomycin and maltodextrin affect structure and activity of <i>Staphylococcus aureus</i> biofilms. <i>Biotechnology and Bioengineering</i> , 2015, 112, 2562-2570.	3.3	15
41	A biofilm microreactor system for simultaneous electrochemical and nuclear magnetic resonance techniques. <i>Water Science and Technology</i> , 2014, 69, 966-973.	2.5	14
42	Colonization of Epidermal Tissue by <i>Staphylococcus aureus</i> Produces Localized Hypoxia and Stimulates Secretion of Antioxidant and Caspase-14 Proteins. <i>Infection and Immunity</i> , 2015, 83, 3026-3034.	2.2	14
43	DEIMoS: An Open-Source Tool for Processing High-Dimensional Mass Spectrometry Data. <i>Analytical Chemistry</i> , 2022, 94, 6130-6138.	6.5	14
44	Efficient discrimination of natural stereoisomers of chicoric acid, an HIV-1 integrase inhibitor. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2018, 189, 258-266.	3.8	13
45	Evaluation of <i>In Silico</i> Multifeature Libraries for Providing Evidence for the Presence of Small Molecules in Synthetic Blinded Samples. <i>Journal of Chemical Information and Modeling</i> , 2019, 59, 4052-4060.	5.4	13
46	Isolation of Tryptanthrin and Reassessment of Evidence for Its Isobaric Isostere Wrightiadione in Plants of the <i>Wrightia</i> Genus. <i>Journal of Natural Products</i> , 2019, 82, 440-448.	3.0	13
47	High-resolution microstrip NMR detectors for subnanoliter samples. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 28163-28174.	2.8	12
48	Regulation of electron transfer processes affects phototrophic mat structure and activity. <i>Frontiers in Microbiology</i> , 2015, 6, 909.	3.5	11
49	Excess surface area in bioelectrochemical systems causes ion transport limitations. <i>Biotechnology and Bioengineering</i> , 2015, 112, 858-866.	3.3	11
50	Structural and metabolic responses of <i>Staphylococcus aureus</i> biofilms to hyperosmotic and antibiotic stress. <i>Biotechnology and Bioengineering</i> , 2018, 115, 1594-1603.	3.3	11
51	PIXIE: an algorithm for automated ion mobility arrival time extraction and collision cross section calculation using global data association. <i>Bioinformatics</i> , 2017, 33, 2715-2722.	4.1	10
52	Modeling Substrate Utilization, Metabolite Production, and Uranium Immobilization in <i>Shewanella oneidensis</i> Biofilms. <i>Frontiers in Environmental Science</i> , 2017, 5, .	3.3	9
53	Application and assessment of deep learning for the generation of potential NMDA receptor antagonists. <i>Physical Chemistry Chemical Physics</i> , 2021, 23, 1197-1214.	2.8	9
54	Exploring the Impacts of Conformer Selection Methods on Ion Mobility Collision Cross Section Predictions. <i>Analytical Chemistry</i> , 2021, 93, 3830-3838.	6.5	8

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55	Mass Spectrometry Adduct Calculator. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 5721-5725.	5.4	7
56	Reconstruction of biofilm images: combining local and global structural parameters. <i>Biofouling</i> , 2014, 30, 1141-1154.	2.2	6
57	Toward high-resolution NMR spectroscopy of microscopic liquid samples. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 14256-14261.	2.8	6
58	Non-destructive spatial analysis of phosphatase activity and total protein distribution in the rhizosphere using a root blotting method. <i>Soil Biology and Biochemistry</i> , 2020, 146, 107820.	8.8	6
59	Proton Affinity Values of Fentanyl and Fentanyl Analogues Pertinent to Ambient Ionization and Detection. <i>Journal of the American Society for Mass Spectrometry</i> , 2022, 33, 482-490.	2.8	6
60	Nitrogen Source Governs Community Carbon Metabolism in a Model Hypersaline Benthic Phototrophic Biofilm. <i>MSystems</i> , 2020, 5, .	3.8	4
61	A Generalized Spatial Measure for Resilience of Microbial Systems. <i>Frontiers in Microbiology</i> , 2016, 7, 443.	3.5	3
62	Metabolic effects of vitamin B12 on physiology, stress resistance, growth rate and biomass productivity of <i>Cyanobacterium stanieri</i> planktonic and biofilm cultures. <i>Algal Research</i> , 2019, 42, 101580.	4.6	2
63	Water-dispersible nanocolloids and higher temperatures promote the release of carbon from riparian soil. <i>Vadose Zone Journal</i> , 2020, 19, e20077.	2.2	2
64	Chespa: Streamlining Expansive Chemical Space Evaluation of Molecular Sets. <i>Journal of Chemical Information and Modeling</i> , 2020, 60, 6251-6257.	5.4	2
65	Ligand- and Structure-Based Analysis of Deep Learning-Generated Potential β Adrenoceptor Agonists. <i>Journal of Chemical Information and Modeling</i> , 2021, 61, 481-492.	5.4	1
66	Integration of Electrochemical Methods with Magnetic Resonance and Electron Microscopies for the Study of <i>Geobacter sulfurreducens</i> Biofilms. <i>Microscopy and Microanalysis</i> , 2012, 18, 14-15.	0.4	0
67	Monitoring Electron Transfer Rates of Electrode-Respiring Cells. , 2020, , 76-84.		0