

Trent R Northen

List of Publications by Citations

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Version: 2024-04-28

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

172
papers

8,395
citations

42
h-index

89
g-index

193
ext. papers

11,671
ext. citations

8.9
avg, IF

6.21
L-index

#	Paper	IF	Citations
172	Sharing and community curation of mass spectrometry data with Global Natural Products Social Molecular Networking. <i>Nature Biotechnology</i> , 2016 , 34, 828-837	44.5	1566
171	Feed Your Friends: Do Plant Exudates Shape the Root Microbiome?. <i>Trends in Plant Science</i> , 2018 , 23, 25-41	13.1	655
170	Dynamic root exudate chemistry and microbial substrate preferences drive patterns in rhizosphere microbial community assembly. <i>Nature Microbiology</i> , 2018 , 3, 470-480	26.6	623
169	Clathrate nanostructures for mass spectrometry. <i>Nature</i> , 2007 , 449, 1033-6	50.4	426
168	Gut microbiota mediate caffeine detoxification in the primary insect pest of coffee. <i>Nature Communications</i> , 2015 , 6, 7618	17.4	194
167	Deciphering microbial interactions in synthetic human gut microbiome communities. <i>Molecular Systems Biology</i> , 2018 , 14, e8157	12.2	185
166	Multiple ionization mass spectrometry strategy used to reveal the complexity of metabolomics. <i>Analytical Chemistry</i> , 2008 , 80, 421-9	7.8	163
165	Dynamic cyanobacterial response to hydration and dehydration in a desert biological soil crust. <i>ISME Journal</i> , 2013 , 7, 2178-91	11.9	156
164	Dealing with the unknown: metabolomics and metabolite atlases. <i>Journal of the American Society for Mass Spectrometry</i> , 2010 , 21, 1471-6	3.5	135
163	A nanostructure-initiator mass spectrometry-based enzyme activity assay. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 3678-83	11.5	132
162	Identification of metabolic signatures linked to anti-inflammatory effects of <i>Faecalibacterium prausnitzii</i> . <i>MBio</i> , 2015 , 6,	7.8	128
161	Calcifying cyanobacteria--the potential of biomineralization for carbon capture and storage. <i>Current Opinion in Biotechnology</i> , 2010 , 21, 365-71	11.4	124
160	Exometabolite niche partitioning among sympatric soil bacteria. <i>Nature Communications</i> , 2015 , 6, 8289	17.4	120
159	A genomic catalog of Earth's microbiomes. <i>Nature Biotechnology</i> , 2021 , 39, 499-509	44.5	120
158	Nanostructure-initiator mass spectrometry: a protocol for preparing and applying NIMS surfaces for high-sensitivity mass analysis. <i>Nature Protocols</i> , 2008 , 3, 1341-9	18.8	112
157	Nanostructure initiator mass spectrometry: tissue imaging and direct biofluid analysis. <i>Analytical Chemistry</i> , 2009 , 81, 2969-75	7.8	110
156	Bacteria increase arid-land soil surface temperature through the production of sunscreens. <i>Nature Communications</i> , 2016 , 7, 10373	17.4	107

155	Untargeted soil metabolomics methods for analysis of extractable organic matter. <i>Soil Biology and Biochemistry</i> , 2015 , 80, 189-198	7.5	87
154	The lethal cargo of <i>Myxococcus xanthus</i> outer membrane vesicles. <i>Frontiers in Microbiology</i> , 2014 , 5, 474	5.7	86
153	Linking soil biology and chemistry in biological soil crust using isolate exometabolomics. <i>Nature Communications</i> , 2018 , 9, 19	17.4	83
152	Cyanobacteria as Biocatalysts for Carbonate Mineralization. <i>Minerals (Basel, Switzerland)</i> , 2012 , 2, 338-364	3.4	83
151	Learning representations of microbe-metabolite interactions. <i>Nature Methods</i> , 2019 , 16, 1306-1314	21.6	79
150	Proteogenomic analyses indicate bacterial methylotrophy and archaeal heterotrophy are prevalent below the grass root zone. <i>PeerJ</i> , 2016 , 4, e2687	3.1	72
149	Mediterranean grassland soil C-N compound turnover is dependent on rainfall and depth, and is mediated by genomically divergent microorganisms. <i>Nature Microbiology</i> , 2019 , 4, 1356-1367	26.6	70
148	OpenMSI: a high-performance web-based platform for mass spectrometry imaging. <i>Analytical Chemistry</i> , 2013 , 85, 10354-61	7.8	68
147	Cooking shapes the structure and function of the gut microbiome. <i>Nature Microbiology</i> , 2019 , 4, 2052-2066	26.6	66
146	Untangling the sequence of events during the S ₂ -S ₁ transition in photosystem II and implications for the water oxidation mechanism. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 12624-12635	11.5	65
145	High surface area of porous silicon drives desorption of intact molecules. <i>Journal of the American Society for Mass Spectrometry</i> , 2007 , 18, 1945-9	3.5	64
144	Metabolites associated with adaptation of microorganisms to an acidophilic, metal-rich environment identified by stable-isotope-enabled metabolomics. <i>MBio</i> , 2013 , 4, e00484-12	7.8	63
143	Belowground Response to Drought in a Tropical Forest Soil. I. Changes in Microbial Functional Potential and Metabolism. <i>Frontiers in Microbiology</i> , 2016 , 7, 525	5.7	63
142	Lineage-specific chromatin signatures reveal a regulator of lipid metabolism in microalgae. <i>Nature Plants</i> , 2015 , 1, 15107	11.5	60
141	Metabolite identification in <i>Synechococcus</i> sp. PCC 7002 using untargeted stable isotope assisted metabolite profiling. <i>Analytical Chemistry</i> , 2010 , 82, 9034-42	7.8	59
140	Mass spectrometry based metabolomics and enzymatic assays for functional genomics. <i>Current Opinion in Microbiology</i> , 2009 , 12, 547-52	7.9	57
139	Probing the active fraction of soil microbiomes using BONCAT-FACS. <i>Nature Communications</i> , 2019 , 10, 2770	17.4	53
138	Lessons from Two Design-Build-Test-Learn Cycles of Dodecanol Production in <i>Escherichia coli</i> Aided by Machine Learning. <i>ACS Synthetic Biology</i> , 2019 , 8, 1337-1351	5.7	53

137	High-throughput platforms for metabolomics. <i>Current Opinion in Chemical Biology</i> , 2016 , 30, 7-13	9.7	52
136	Mass spectrometry-based metabolomics, analysis of metabolite-protein interactions, and imaging. <i>BioTechniques</i> , 2010 , 49, 557-65	2.5	51
135	CRAGE enables rapid activation of biosynthetic gene clusters in undomesticated bacteria. <i>Nature Microbiology</i> , 2019 , 4, 2498-2510	26.6	48
134	Mass spectrometry imaging for in situ kinetic histochemistry. <i>Scientific Reports</i> , 2013 , 3, 1656	4.9	47
133	Phylogenomically guided identification of industrially relevant GH1 β glucosidases through DNA synthesis and nanostructure-initiator mass spectrometry. <i>ACS Chemical Biology</i> , 2014 , 9, 2082-91	4.9	45
132	Functional genomics of novel secondary metabolites from diverse cyanobacteria using untargeted metabolomics. <i>Marine Drugs</i> , 2013 , 11, 3617-31	6	45
131	A robust gene-stacking method utilizing yeast assembly for plant synthetic biology. <i>Nature Communications</i> , 2016 , 7, 13215	17.4	42
130	High throughput screening of enzyme activity with mass spectrometry imaging. <i>Current Opinion in Biotechnology</i> , 2015 , 31, 1-9	11.4	41
129	Exometabolomics and MSI: deconstructing how cells interact to transform their small molecule environment. <i>Current Opinion in Biotechnology</i> , 2015 , 34, 209-16	11.4	40
128	Untargeted metabolic footprinting reveals a surprising breadth of metabolite uptake and release by <i>Synechococcus</i> sp. PCC 7002. <i>Molecular BioSystems</i> , 2011 , 7, 3200-6		40
127	EcoFABs: advancing microbiome science through standardized fabricated ecosystems. <i>Nature Methods</i> , 2019 , 16, 567-571	21.6	39
126	Multifunctional cellulase catalysis targeted by fusion to different carbohydrate-binding modules. <i>Biotechnology for Biofuels</i> , 2015 , 8, 220	7.8	38
125	Isolation of a significant fraction of non-phototroph diversity from a desert Biological Soil Crust. <i>Frontiers in Microbiology</i> , 2015 , 6, 277	5.7	37
124	Impacts of Maize Domestication and Breeding on Rhizosphere Microbial Community Recruitment from a Nutrient Depleted Agricultural Soil. <i>Scientific Reports</i> , 2019 , 9, 15611	4.9	37
123	Belowground Response to Drought in a Tropical Forest Soil. II. Change in Microbial Function Impacts Carbon Composition. <i>Frontiers in Microbiology</i> , 2016 , 7, 323	5.7	37
122	"Replica-extraction-transfer" nanostructure-initiator mass spectrometry imaging of acoustically printed bacteria. <i>Analytical Chemistry</i> , 2013 , 85, 10856-62	7.8	36
121	Regulation of Oxygenic Photosynthesis during Trophic Transitions in the Green Alga. <i>Plant Cell</i> , 2019 , 31, 579-601	11.6	35
120	From soil to structure, a novel dimeric β glucosidase belonging to glycoside hydrolase family 3 isolated from compost using metagenomic analysis. <i>Journal of Biological Chemistry</i> , 2013 , 288, 14985-92	5.4	35

119	On-chip integration of droplet microfluidics and nanostructure-initiator mass spectrometry for enzyme screening. <i>Lab on A Chip</i> , 2017 , 17, 323-331	7.2	33
118	Enzyme promiscuity shapes adaptation to novel growth substrates. <i>Molecular Systems Biology</i> , 2019 , 15, e8462	12.2	33
117	Resolving brain regions using nanostructure initiator mass spectrometry imaging of phospholipids. <i>Integrative Biology (United Kingdom)</i> , 2012 , 4, 693-9	3.7	32
116	Conserved features of cancer cells define their sensitivity to HAMLET-induced death; c-Myc and glycolysis. <i>Oncogene</i> , 2011 , 30, 4765-79	9.2	31
115	Rapid kinetic characterization of glycosyl hydrolases based on oxime derivatization and nanostructure-initiator mass spectrometry (NIMS). <i>ACS Chemical Biology</i> , 2014 , 9, 1470-9	4.9	30
114	Acoustic deposition with NIMS as a high-throughput enzyme activity assay. <i>Analytical and Bioanalytical Chemistry</i> , 2012 , 403, 707-11	4.4	30
113	Function-driven single-cell genomics uncovers cellulose-degrading bacteria from the rare biosphere. <i>ISME Journal</i> , 2020 , 14, 659-675	11.9	29
112	Competitive sorption of microbial metabolites on an iron oxide mineral. <i>Soil Biology and Biochemistry</i> , 2015 , 90, 34-41	7.5	28
111	Analysis of Metabolomics Datasets with High-Performance Computing and Metabolite Atlases. <i>Metabolites</i> , 2015 , 5, 431-42	5.6	28
110	Rapid screening of fatty acids using nanostructure-initiator mass spectrometry. <i>Analytical Chemistry</i> , 2010 , 82, 3751-5	7.8	28
109	Colloid-based multiplexed screening for plant biomass-degrading glycoside hydrolase activities in microbial communities. <i>Energy and Environmental Science</i> , 2011 , 4, 2884	35.4	28
108	Metabolome-proteome differentiation coupled to microbial divergence. <i>MBio</i> , 2010 , 1,	7.8	26
107	Drought and plant litter chemistry alter microbial gene expression and metabolite production. <i>ISME Journal</i> , 2020 , 14, 2236-2247	11.9	26
106	Application of Black Silicon for Nanostructure-Initiator Mass Spectrometry. <i>Analytical Chemistry</i> , 2016 , 88, 1625-30	7.8	25
105	Stable-isotope probing reveals that hydrogen isotope fractionation in proteins and lipids in a microbial community are different and species-specific. <i>ACS Chemical Biology</i> , 2013 , 8, 1755-63	4.9	24
104	Taxonomic and Metabolic Incongruence in the Ancient Genus. <i>Frontiers in Microbiology</i> , 2019 , 10, 2170	5.7	23
103	Need for Laboratory Ecosystems To Unravel the Structures and Functions of Soil Microbial Communities Mediated by Chemistry. <i>MBio</i> , 2018 , 9,	7.8	23
102	Metabolic footprinting of mutant libraries to map metabolite utilization to genotype. <i>ACS Chemical Biology</i> , 2013 , 8, 189-99	4.9	23

101	Characteristics of Wetting-Induced Bacteriophage Blooms in Biological Soil Crust. <i>MBio</i> , 2019 , 10,	7.8	23
100	Multilab EcoFAB study shows highly reproducible physiology and depletion of soil metabolites by a model grass. <i>New Phytologist</i> , 2019 , 222, 1149-1160	9.8	22
99	Large scale physiological readjustment during growth enables rapid, comprehensive and inexpensive systems analysis. <i>BMC Systems Biology</i> , 2010 , 4, 64	3.5	21
98	Ecosystem Fabrication (EcoFAB) Protocols for The Construction of Laboratory Ecosystems Designed to Study Plant-microbe Interactions. <i>Journal of Visualized Experiments</i> , 2018 ,	1.6	20
97	Phosphonium labeling for increasing metabolomic coverage of neutral lipids using electrospray ionization mass spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 2009 , 23, 1849-55	2.2	20
96	MAGI: A Method for Metabolite Annotation and Gene Integration. <i>ACS Chemical Biology</i> , 2019 , 14, 704-714	1.9	19
95	Extensive Turnover of Compatible Solutes in Cyanobacteria Revealed by Deuterium Oxide (D ₂ O) Stable Isotope Probing. <i>ACS Chemical Biology</i> , 2017 , 12, 674-681	4.9	18
94	A High-Throughput Mass Spectrometric Enzyme Activity Assay Enabling the Discovery of Cytochrome P450 Biocatalysts. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 10114-10119	16.4	18
93	Exometabolomics Assisted Design and Validation of Synthetic Obligate Mutualism. <i>ACS Synthetic Biology</i> , 2016 , 5, 569-76	5.7	18
92	Encoding substrates with mass tags to resolve stereospecific reactions using Nimzyme. <i>Rapid Communications in Mass Spectrometry</i> , 2012 , 26, 611-5	2.2	18
91	Lipids as tumoricidal components of human α -lactalbumin made lethal to tumor cells (HAMLET): unique and shared effects on signaling and death. <i>Journal of Biological Chemistry</i> , 2013 , 288, 17460-71	5.4	18
90	Low-dose ionizing radiation-induced blood plasma metabolic response in a diverse genetic mouse population. <i>Radiation Research</i> , 2012 , 178, 551-5	3.1	17
89	Multivariate analysis of a 3D mass spectral image for examining tissue heterogeneity. <i>Integrative Biology (United Kingdom)</i> , 2011 , 3, 460-7	3.7	17
88	Dynamic substrate preferences predict metabolic properties of a simple microbial consortium. <i>BMC Bioinformatics</i> , 2017 , 18, 57	3.6	16
87	Large Blooms of () Underlie the Response to Wetting of Cyanobacterial Biocrusts at Various Stages of Maturity. <i>MBio</i> , 2018 , 9,	7.8	16
86	New insight into the role of MMP14 in metabolic balance. <i>PeerJ</i> , 2016 , 4, e2142	3.1	16
85	OpenMSI Arrayed Analysis Toolkit: Analyzing Spatially Defined Samples Using Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2017 , 89, 5818-5823	7.8	15
84	Morphology-Driven Control of Metabolite Selectivity Using Nanostructure-Initiator Mass Spectrometry. <i>Analytical Chemistry</i> , 2017 , 89, 6521-6526	7.8	15

83	A novel method to evaluate nutrient retention by biological soil crust exopolymeric matrix. <i>Plant and Soil</i> , 2018 , 429, 53-64	4.2	14
82	Versatile synthesis of probes for high-throughput enzyme activity screening. <i>Analytical and Bioanalytical Chemistry</i> , 2013 , 405, 4969-73	4.4	14
81	Development of a High Throughput Platform for Screening Glycoside Hydrolases Based on Oxime-NIMS. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015 , 3, 153	5.8	14
80	Optimizing genome assembly from PCR-amplified metagenomes. <i>PeerJ</i> , 2019 , 7, e6902	3.1	14
79	Determination of glycoside hydrolase specificities during hydrolysis of plant cell walls using glycome profiling. <i>Biotechnology for Biofuels</i> , 2017 , 10, 31	7.8	13
78	Smartphone Analytics: Mobilizing the Lab into the Cloud for Omic-Scale Analyses. <i>Analytical Chemistry</i> , 2016 , 88, 9753-9758	7.8	13
77	Comparative Community Proteomics Demonstrates the Unexpected Importance of Actinobacterial Glycoside Hydrolase Family 12 Protein for Crystalline Cellulose Hydrolysis. <i>MBio</i> , 2016 , 7,	7.8	12
76	Construction of Viable Soil Defined Media Using Quantitative Metabolomics Analysis of Soil Metabolites. <i>Frontiers in Microbiology</i> , 2017 , 8, 2618	5.7	12
75	Deuterium-exchange metabolomics identifies N-methyl lyso phosphatidylethanolamines as abundant lipids in acidophilic mixed microbial communities. <i>Metabolomics</i> , 2012 , 8, 566-578	4.7	12
74	Improved genome annotation through untargeted detection of pathway-specific metabolites. <i>BMC Genomics</i> , 2011 , 12 Suppl 1, S6	4.5	12
73	Rhizosphere Carbon Turnover from Cradle to Grave: The Role of Microbe-Plant Interactions. <i>Rhizosphere Biology</i> , 2021 , 51-73	0.8	12
72	Cervicovaginal Microbiome Composition Is Associated with Metabolic Profiles in Healthy Pregnancy. <i>MBio</i> , 2020 , 11,	7.8	12
71	A New Method to Correct for Habitat Filtering in Microbial Correlation Networks. <i>Frontiers in Microbiology</i> , 2019 , 10, 585	5.7	11
70	Unraveling heterogeneous susceptibility and the evolution of breast cancer using a systems biology approach. <i>Genome Biology</i> , 2015 , 16, 40	18.3	11
69	Key Metabolites and Mechanistic Changes for Salt Tolerance in an Experimentally Evolved Sulfate-Reducing Bacterium,. <i>MBio</i> , 2017 , 8,	7.8	11
68	High throughput nanostructure-initiator mass spectrometry screening of microbial growth conditions for maximal Eglucosidase production. <i>Frontiers in Microbiology</i> , 2013 , 4, 365	5.7	11
67	Synthesis and characterization of peptide grafted porous polymer microstructures. <i>Biomacromolecules</i> , 2006 , 7, 750-4	6.9	11
66	Anaerobic gut fungi are an untapped reservoir of natural products. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021 , 118,	11.5	11

65	Bioactive diterpenoids impact the composition of the root-associated microbiome in maize (<i>Zea mays</i>). <i>Scientific Reports</i> , 2021 , 11, 333	4.9	11
64	Microbial Ecology on Solar Panels in Berkeley, CA, United States. <i>Frontiers in Microbiology</i> , 2018 , 9, 3043	5.7	10
63	Web of microbes (WoM): a curated microbial exometabolomics database for linking chemistry and microbes. <i>BMC Microbiology</i> , 2018 , 18, 115	4.5	10
62	In Situ X-Ray Tomography Imaging of Soil Water and Cyanobacteria From Biological Soil Crusts Undergoing Desiccation. <i>Frontiers in Environmental Science</i> , 2018 , 6,	4.8	10
61	Exometabolomic Analysis of Cross-Feeding Metabolites. <i>Metabolites</i> , 2017 , 7,	5.6	8
60	Nanostructure imaging mass spectrometry: the role of fluorocarbons in metabolite analysis and yoctomole level sensitivity. <i>Methods in Molecular Biology</i> , 2015 , 1203, 141-9	1.4	8
59	Root morphology and exudate availability are shaped by particle size and chemistry in. <i>Plant Direct</i> , 2020 , 4, e00207	3.3	8
58	Decrypting bacterial polyphenol metabolism in an anoxic wetland soil. <i>Nature Communications</i> , 2021 , 12, 2466	17.4	8
57	Robust automated mass spectra interpretation and chemical formula calculation using mixed integer linear programming. <i>Analytical Chemistry</i> , 2013 , 85, 9777-84	7.8	6
56	Combinatorial Screening of Biomimetic Protein Affinity Materials. <i>Advanced Materials</i> , 2008 , 20, 4691-4697	2.4	6
55	Light-directed movement of polymer microstructures. <i>Langmuir</i> , 2005 , 21, 4949-53	4	6
54	Metabolic imaging using nanostructure-initiator mass spectrometry (NIMS). <i>Methods in Molecular Biology</i> , 2014 , 1198, 313-29	1.4	6
53	Mass Spectrometry for Natural Product Discovery 2020 , 263-306		6
52	A multi-omic characterization of temperature stress in a halotolerant <i>Scenedesmus</i> strain for algal biotechnology. <i>Communications Biology</i> , 2021 , 4, 333	6.7	6
51	Rapid characterization of the activities of lignin-modifying enzymes based on nanostructure-initiator mass spectrometry (NIMS). <i>Biotechnology for Biofuels</i> , 2018 , 11, 266	7.8	6
50	GNPS Dashboard: collaborative exploration of mass spectrometry data in the web browser. <i>Nature Methods</i> , 2021 ,	21.6	5
49	CRAGE-Duet Facilitates Modular Assembly of Biological Systems for Studying Plant-Microbe Interactions. <i>ACS Synthetic Biology</i> , 2020 , 9, 2610-2615	5.7	5
48	Untargeted Soil Metabolomics Using Liquid Chromatography-Mass Spectrometry and Gas Chromatography-Mass Spectrometry. <i>Methods in Molecular Biology</i> , 2019 , 1859, 97-109	1.4	5

47	Flux balance modeling to predict bacterial survival during pulsed-activity events. <i>Biogeosciences</i> , 2018 , 15, 2219-2229	4.6	5
46	Use of Nanostructure-Initiator Mass Spectrometry to Deduce Selectivity of Reaction in Glycoside Hydrolases. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015 , 3, 165	5.8	4
45	Processing of grassland soil C-N compounds into soluble and volatile molecules is depth stratified and mediated by genomically novel bacteria and archaea		4
44	Shed Light in the DaRk LineagES of the Fungal Tree of Life-STRES. <i>Life</i> , 2020 , 10,	3	4
43	A High-Throughput Mass Spectrometric Enzyme Activity Assay Enabling the Discovery of Cytochrome P450 Biocatalysts. <i>Angewandte Chemie</i> , 2019 , 131, 10220-10225	3.6	3
42	Noninvasive Mapping of Photosynthetic Heterogeneity in Biological Soil Crusts by Positron Emission Tomography: Carbon Fixation. <i>Environmental Science and Technology Letters</i> , 2014 , 1, 393-398	11	3
41	Ecological generalism drives hyperdiversity of secondary metabolite gene clusters in xylarialean endophytes. <i>New Phytologist</i> , 2021 ,	9.8	3
40	Vertical movement of soluble carbon and nutrients from biocrusts to subsurface mineral soils. <i>Geoderma</i> , 2022 , 405, 115495	6.7	3
39	Study of Oak Ridge soils using BONCAT-FACS-Seq reveals that a large fraction of the soil microbiome is active		3
38	Multi-lab EcoFAB study shows highly reproducible physiology and depletion of soil metabolites by a model grass		3
37	Physiological adaptations of leaf litter microbial communities to long-term drought		3
36	Specialized Plant Growth Chamber Designs to Study Complex Rhizosphere Interactions. <i>Frontiers in Microbiology</i> , 2021 , 12, 625752	5.7	3
35	Faster, better, and cheaper: harnessing microfluidics and mass spectrometry for biotechnology. <i>RSC Chemical Biology</i> , 2021 , 2, 1331-1351	3	3
34	Novel and Emerging Capabilities that Can Provide a Holistic Understanding of the Plant Root Microbiome. <i>Phytobiomes Journal</i> , 2021 , 5, 122-132	4.8	3
33	Nanostructure-Initiator Mass Spectrometry (NIMS) for the Analysis of Enzyme Activities. <i>Current Protocols in Chemical Biology</i> , 2012 , 4, 123-142	1.8	3
32	Long-read metagenomics of soil communities reveals phylum-specific secondary metabolite dynamics. <i>Communications Biology</i> , 2021 , 4, 1302	6.7	2
31	Cervicovaginal microbiome composition drives metabolic profiles in healthy pregnancy		2
30	Root morphology and exudate availability is shaped by particle size and chemistry in <i>Brachypodium distachyon</i>		

29	A structural and kinetic survey of GH5_4 endoglucanases reveals determinants of broad substrate specificity and opportunities for biomass hydrolysis. <i>Journal of Biological Chemistry</i> , 2020 , 295, 17752-17769	5.4	2
28	GNPS Dashboard: Collaborative Analysis of Mass Spectrometry Data in the Web Browser		2
27	Genomics, Exometabolomics, and Metabolic Probing Reveal Conserved Proteolytic Metabolism of and Three Candidate Species From China and Japan. <i>Frontiers in Microbiology</i> , 2021 , 12, 632731	5.7	2
26	Reply to: Examining microbe-metabolite correlations by linear methods. <i>Nature Methods</i> , 2021 , 18, 40-41	1.6	2
25	Long-read metagenomics of soil communities reveals phylum-specific secondary metabolite dynamics		2
24	Getting back to the grass roots: harnessing specialized metabolites for improved crop stress resilience. <i>Current Opinion in Biotechnology</i> , 2021 , 70, 174-186	11.4	2
23	CRAGE-CRISPR facilitates rapid activation of secondary metabolite biosynthetic gene clusters in bacteria. <i>Cell Chemical Biology</i> , 2021 ,	8.2	2
22	Insulator Nanostructure Desorption Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2018 , 90, 9657-9661	1.6	1
21	Development of platforms for functional characterization and production of phenazines using a multi-chassis approach via CRAGE. <i>Metabolic Engineering</i> , 2021 , 69, 188-188	9.7	1
20	Linking soil biology and chemistry using bacterial isolate exometabolite profiles		1
19	Drought shifts sorghum root metabolite and microbiome profiles and enriches the stress response factor pipecolic acid		1
18	MAGI: A method for metabolite, annotation, and gene integration		1
17	A New Method to Correct for Habitat Filtering in Microbial Correlation Networks		1
16	Dynamic substrate preferences and predicted metabolic properties of a simple microbial consortium		1
15	A multiplexed nanostructure-initiator mass spectrometry (NIMS) assay for simultaneously detecting glycosyl hydrolase and lignin modifying enzyme activities. <i>Scientific Reports</i> , 2021 , 11, 11803	4.9	1
14	Analysis and Interpretation of Mass Spectrometry Imaging Datasets. <i>Comprehensive Analytical Chemistry</i> , 2018 , 82, 369-386	1.9	1
13	Engineering sorghum for higher 4-hydroxybenzoic acid content		1
12	Biofilm Interaction Mapping and Analysis (BIMA): A tool for deconstructing interspecific interactions in co-culture biofilms		1

11	Biofilm Interaction Mapping and Analysis (BIMA) of Interspecific Interactions in Co-culture Biofilms.. <i>Frontiers in Microbiology</i> , 2021 , 12, 757856	5.7	1
10	Identification of Effector Metabolites Using Exometabolite Profiling of Diverse Microalgae. <i>MSystems</i> , 2021 , e0083521	7.6	0
9	Metabolomic Patterns of Septoria Canker Resistant and Susceptible Genotypes 24 Hours Postinoculation. <i>Phytopathology</i> , 2021 , PHYTO02210053R	3.8	0
8	Cocultivation of Anaerobic Fungi with Rumen Bacteria Establishes an Antagonistic Relationship. <i>MBio</i> , 2021 , 12, e0144221	7.8	0
7	SIMILE enables alignment of tandem mass spectra with statistical significance.. <i>Nature Communications</i> , 2022 , 13, 2510	17.4	0
6	The Small-Molecule Dimension: Mass-Spectrometry-Based Metabolomics, Enzyme Assays, and Imaging 2011 , 675-682		
5	Biofuels and biomaterials from microbes315-335		
4	Meta-analysis of global metabolomics and proteomics data to link alterations with phenotype. <i>Spectroscopy</i> , 2011 , 26, 151-154		
3	Retinoic acid induces a metabolic switch in SH-SY5Y cells from glycolysis to oxidative phosphorylation. <i>FASEB Journal</i> , 2012 , 26, 967.1	0.9	
2	Exometabolomics for Linking Soil Carbon Dynamics to Microbial Communities 2016 , 119-145		
1	Attracting and Retaining Top Scientists and Engineers at U.S. National Laboratories and Universities: Listening to the Next Generation. <i>Electrochemical Society Interface</i> , 2019 , 28, 34-36	3.6	