Trent R Northen

List of Publications by Year in Descending Order

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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 8,395 42 89 g-index

193 11,671 8.9 6.21 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
172	Vertical movement of soluble carbon and nutrients from biocrusts to subsurface mineral soils. <i>Geoderma</i> , 2022 , 405, 115495	6.7	3
171	SIMILE enables alignment of tandem mass spectra with statistical significance <i>Nature Communications</i> , 2022 , 13, 2510	17.4	0
170	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
169	Identification of Effector Metabolites Using Exometabolite Profiling of Diverse Microalgae. <i>MSystems</i> , 2021 , e0083521	7.6	O
168	Long-read metagenomics of soil communities reveals phylum-specific secondary metabolite dynamics. <i>Communications Biology</i> , 2021 , 4, 1302	6.7	2
167	Ecological generalism drives hyperdiversity of secondary metabolite gene clusters in xylarialean endophytes. <i>New Phytologist</i> , 2021 ,	9.8	3
166	GNPS Dashboard: collaborative exploration of mass spectrometry data in the web browser. <i>Nature Methods</i> , 2021 ,	21.6	5
165	Rhizosphere Carbon Turnover from Cradle to Grave: The Role of Microbe B lant Interactions. <i>Rhizosphere Biology</i> , 2021 , 51-73	0.8	12
164	A multi-omic characterization of temperature stress in a halotolerant Scenedesmus strain for algal biotechnology. <i>Communications Biology</i> , 2021 , 4, 333	6.7	6
163	Specialized Plant Growth Chamber Designs to Study Complex Rhizosphere Interactions. <i>Frontiers in Microbiology</i> , 2021 , 12, 625752	5.7	3
162	Metabolomic Patterns of Septoria Canker Resistant and Susceptible Genotypes 24 Hours Postinoculation. <i>Phytopathology</i> , 2021 , PHYTO02210053R	3.8	O
161	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
160	Decrypting bacterial polyphenol metabolism in an anoxic wetland soil. <i>Nature Communications</i> , 2021 , 12, 2466	17.4	8
159	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
158	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
157	A genomic catalog of Earth® microbiomes. <i>Nature Biotechnology</i> , 2021 , 39, 499-509	44.5	120
156	Faster, better, and cheaper: harnessing microfluidics and mass spectrometry for biotechnology. <i>RSC Chemical Biology</i> , 2021 , 2, 1331-1351	3	3

Reply to: Examining microbe-metabolite correlations by linear methods. *Nature Methods*, **2021**, 18, 40-4½1.6 2 155 Bioactive diterpenoids impact the composition of the root-associated microbiome in maize (Zea 154 4.9 11 mays). Scientific Reports, 2021, 11, 333 Cocultivation of Anaerobic Fungi with Rumen Bacteria Establishes an Antagonistic Relationship. 7.8 153 \circ MBio, 2021, 12, e0144221 Getting back to the grass roots: harnessing specialized metabolites for improved crop stress 152 11.4 resilience. Current Opinion in Biotechnology, 2021, 70, 174-186 CRAGE-CRISPR facilitates rapid activation of secondary metabolite biosynthetic gene clusters in 8.2 2 151 bacteria. Cell Chemical Biology, 2021, Novel and Emerging Capabilities that Can Provide a Holistic Understanding of the Plant Root 4.8 150 Microbiome. Phytobiomes Journal, 2021, 5, 122-132 Biofilm Interaction Mapping and Analysis (BIMA) of Interspecific Interactions in Co-culture 149 1 5.7 Biofilms.. Frontiers in Microbiology, 2021, 12, 757856 Drought and plant litter chemistry alter microbial gene expression and metabolite production. ISME 148 11.9 26 Journal, 2020, 14, 2236-2247 Untangling the sequence of events during the S-rs transition in photosystem II and implications for the water oxidation mechanism. Proceedings of the National Academy of Sciences of the United 65 11.5 147 States of America, 2020, 117, 12624-12635 Function-driven single-cell genomics uncovers cellulose-degrading bacteria from the rare 146 11.9 29 biosphere. ISME Journal, 2020, 14, 659-675 A structural and kinetic survey of GH5_4 endoglucanases reveals determinants of broad substrate 145 2 specificity and opportunities for biomass hydrolysis. Journal of Biological Chemistry, 2020, 295, 17752-17769 Mass Spectrometry for Natural Product Discovery 2020, 263-306 6 144 CRAGE-Duet Facilitates Modular Assembly of Biological Systems for Studying Plant-Microbe 143 5.7 5 Interactions. ACS Synthetic Biology, 2020, 9, 2610-2615 Cervicovaginal Microbiome Composition Is Associated with Metabolic Profiles in Healthy 7.8 12 142 Pregnancy. MBio, 2020, 11, Root morphology and exudate availability are shaped by particle size and chemistry in. Plant Direct, 8 141 3.3 2020, 4, e00207 Shed Light in the DaRk LineagES of the Fungal Tree of Life-STRES. Life, 2020, 10, 140 3 4 Taxonomic and Metabolic Incongruence in the Ancient Genus. Frontiers in Microbiology, 2019, 10, 2170 5.7 139 23 EcoFABs: advancing microbiome science through standardized fabricated ecosystems. Nature 138 21.6 39 Methods, 2019, 16, 567-571

137	Probing the active fraction of soil microbiomes using BONCAT-FACS. <i>Nature Communications</i> , 2019 , 10, 2770	17.4	53
136	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
135	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
134	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
133	Lessons from Two Design-Build-Test-Learn Cycles of Dodecanol Production in Escherichia coli Aided by Machine Learning. <i>ACS Synthetic Biology</i> , 2019 , 8, 1337-1351	5.7	53
132	MAGI: A Method for Metabolite Annotation and Gene Integration. ACS Chemical Biology, 2019 , 14, 704-7	744)	19
131	A New Method to Correct for Habitat Filtering in Microbial Correlation Networks. <i>Frontiers in Microbiology</i> , 2019 , 10, 585	5.7	11
130	Enzyme promiscuity shapes adaptation to novel growth substrates. <i>Molecular Systems Biology</i> , 2019 , 15, e8462	12.2	33
129	Regulation of Oxygenic Photosynthesis during Trophic Transitions in the Green Alga. <i>Plant Cell</i> , 2019 , 31, 579-601	11.6	35
128	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
127	Learning representations of microbe-metabolite interactions. <i>Nature Methods</i> , 2019 , 16, 1306-1314	21.6	79
126	Optimizing genome assembly from PCR-amplified metagenomes. <i>PeerJ</i> , 2019 , 7, e6902	3.1	14
125	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	
124	Characteristics of Wetting-Induced Bacteriophage Blooms in Biological Soil Crust. <i>MBio</i> , 2019 , 10,	7.8	23
123	Cooking shapes the structure and function of the gut microbiome. <i>Nature Microbiology</i> , 2019 , 4, 2052-2	0.63 .6	66
122	CRAGE enables rapid activation of biosynthetic gene clusters in undomesticated bacteria. <i>Nature Microbiology</i> , 2019 , 4, 2498-2510	26.6	48
121	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
120	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

(2017-2018)

119	Large Blooms of () Underlie the Response to Wetting of Cyanobacterial Biocrusts at Various Stages of Maturity. <i>MBio</i> , 2018 , 9,	7.8	16
118	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
117	Linking soil biology and chemistry in biological soil crust using isolate exometabolomics. <i>Nature Communications</i> , 2018 , 9, 19	17.4	83
116	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
115	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
114	Feed Your Friends: Do Plant Exudates Shape the Root Microbiome?. <i>Trends in Plant Science</i> , 2018 , 23, 25-41	13.1	655
113	Deciphering microbial interactions in synthetic human gut microbiome communities. <i>Molecular Systems Biology</i> , 2018 , 14, e8157	12.2	185
112	Insulator Nanostructure Desorption Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2018 , 90, 9657	- 9 6661	1
111	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
110	Flux balance modeling to predict bacterial survival during pulsed-activity events. <i>Biogeosciences</i> , 2018 , 15, 2219-2229	4.6	5
109	Microbial Ecology on Solar Panels in Berkeley, CA, United States. Frontiers in Microbiology, 2018, 9, 3043	5.7	10
108	Analysis and Interpretation of Mass Spectrometry Imaging Datasets. <i>Comprehensive Analytical Chemistry</i> , 2018 , 82, 369-386	1.9	1
107	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
106	Web of microbes (WoM): a curated microbial exometabolomics database for linking chemistry and microbes. <i>BMC Microbiology</i> , 2018 , 18, 115	4.5	10
105	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
104	Extensive Turnover of Compatible Solutes in Cyanobacteria Revealed by Deuterium Oxide (DO) Stable Isotope Probing. <i>ACS Chemical Biology</i> , 2017 , 12, 674-681	4.9	18
103	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
102	Dynamic substrate preferences predict metabolic properties of a simple microbial consortium. <i>BMC Bioinformatics</i> , 2017 , 18, 57	3.6	16

101	OpenMSI Arrayed Analysis Toolkit: Analyzing Spatially Defined Samples Using Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2017 , 89, 5818-5823	7.8	15
100	Morphology-Driven Control of Metabolite Selectivity Using Nanostructure-Initiator Mass Spectrometry. <i>Analytical Chemistry</i> , 2017 , 89, 6521-6526	7.8	15
99	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
98	Key Metabolites and Mechanistic Changes for Salt Tolerance in an Experimentally Evolved Sulfate-Reducing Bacterium,. <i>MBio</i> , 2017 , 8,	7.8	11
97	Exometabolomic Analysis of Cross-Feeding Metabolites. <i>Metabolites</i> , 2017 , 7,	5.6	8
96	Construction of Viable Soil Defined Media Using Quantitative Metabolomics Analysis of Soil Metabolites. <i>Frontiers in Microbiology</i> , 2017 , 8, 2618	5.7	12
95	Smartphone Analytics: Mobilizing the Lab into the Cloud for Omic-Scale Analyses. <i>Analytical Chemistry</i> , 2016 , 88, 9753-9758	7.8	13
94	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
93	A robust gene-stacking method utilizing yeast assembly for plant synthetic biology. <i>Nature Communications</i> , 2016 , 7, 13215	17.4	42
92	Bacteria increase arid-land soil surface temperature through the production of sunscreens. <i>Nature Communications</i> , 2016 , 7, 10373	17.4	107
91	High-throughput platforms for metabolomics. Current Opinion in Chemical Biology, 2016, 30, 7-13	9.7	52
90	Exometabolomics Assisted Design and Validation of Synthetic Obligate Mutualism. <i>ACS Synthetic Biology</i> , 2016 , 5, 569-76	5.7	18
89	Application of Black Silicon for Nanostructure-Initiator Mass Spectrometry. <i>Analytical Chemistry</i> , 2016 , 88, 1625-30	7.8	25
88	New insight into the role of MMP14 in metabolic balance. <i>PeerJ</i> , 2016 , 4, e2142	3.1	16
87	Proteogenomic analyses indicate bacterial methylotrophy and archaeal heterotrophy are prevalent below the grass root zone. <i>PeerJ</i> , 2016 , 4, e2687	3.1	72
86	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
85	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
84	Exometabolomics for Linking Soil Carbon Dynamics to Microbial Communities 2016 , 119-145		

(2014-2016)

83	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
82	Gut microbiota mediate caffeine detoxification in the primary insect pest of coffee. <i>Nature Communications</i> , 2015 , 6, 7618	17.4	194
81	Identification of metabolic signatures linked to anti-inflammatory effects of Faecalibacterium prausnitzii. <i>MBio</i> , 2015 , 6,	7.8	128
8o	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
79	Unraveling heterogeneous susceptibility and the evolution of breast cancer using a systems biology approach. <i>Genome Biology</i> , 2015 , 16, 40	18.3	11
78	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
77	Competitive sorption of microbial metabolites on an iron oxide mineral. <i>Soil Biology and Biochemistry</i> , 2015 , 90, 34-41	7·5	28
76	Untargeted soil metabolomics methods for analysis of extractable organic matter. <i>Soil Biology and Biochemistry</i> , 2015 , 80, 189-198	7.5	87
75	High throughput screening of enzyme activity with mass spectrometry imaging. <i>Current Opinion in Biotechnology</i> , 2015 , 31, 1-9	11.4	41
74	Lineage-specific chromatin signatures reveal a regulator of lipid metabolism in microalgae. <i>Nature Plants</i> , 2015 , 1, 15107	11.5	60
73	Exometabolite niche partitioning among sympatric soil bacteria. <i>Nature Communications</i> , 2015 , 6, 8289	17.4	120
72	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
71	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
70	Analysis of Metabolomics Datasets with High-Performance Computing and Metabolite Atlases. <i>Metabolites</i> , 2015 , 5, 431-42	5.6	28
69	Multifunctional cellulase catalysis targeted by fusion to different carbohydrate-binding modules. <i>Biotechnology for Biofuels</i> , 2015 , 8, 220	7.8	38
68	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
67	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
66	Phylogenomically guided identification of industrially relevant GH1 Eglucosidases through DNA synthesis and nanostructure-initiator mass spectrometry. <i>ACS Chemical Biology</i> , 2014 , 9, 2082-91	4.9	45

65	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
64	The lethal cargo of Myxococcus xanthus outer membrane vesicles. <i>Frontiers in Microbiology</i> , 2014 , 5, 474	5.7	86
63	Metabolic imaging using nanostructure-initiator mass spectrometry (NIMS). <i>Methods in Molecular Biology</i> , 2014 , 1198, 313-29	1.4	6
62	Versatile synthesis of probes for high-throughput enzyme activity screening. <i>Analytical and Bioanalytical Chemistry</i> , 2013 , 405, 4969-73	4.4	14
61	Dynamic cyanobacterial response to hydration and dehydration in a desert biological soil crust. <i>ISME Journal</i> , 2013 , 7, 2178-91	11.9	156
60	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
59	Mass spectrometry imaging for in situ kinetic histochemistry. <i>Scientific Reports</i> , 2013 , 3, 1656	4.9	47
58	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
57	"Replica-extraction-transfer" nanostructure-initiator mass spectrometry imaging of acoustically printed bacteria. <i>Analytical Chemistry</i> , 2013 , 85, 10856-62	7.8	36
56	Metabolic footprinting of mutant libraries to map metabolite utilization to genotype. <i>ACS Chemical Biology</i> , 2013 , 8, 189-99	4.9	23
55	OpenMSI: a high-performance web-based platform for mass spectrometry imaging. <i>Analytical Chemistry</i> , 2013 , 85, 10354-61	7.8	68
54	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
53	Lipids as tumoricidal components of human Hactalbumin 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
52	From soil to structure, a novel dimeric Eglucosidase belonging to glycoside hydrolase family 3 isolated from compost using metagenomic analysis. <i>Journal of Biological Chemistry</i> , 2013 , 288, 14985-92	<u>5</u> -4	35
51	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
50	Functional genomics of novel secondary metabolites from diverse cyanobacteria using untargeted metabolomics. <i>Marine Drugs</i> , 2013 , 11, 3617-31	6	45
49	Cyanobacteria as Biocatalysts for Carbonate Mineralization. <i>Minerals (Basel, Switzerland)</i> , 2012 , 2, 338-3	644	83
48	Resolving brain regions using nanostructure initiator mass spectrometry imaging of phospholipids. <i>Integrative Biology (United Kingdom)</i> , 2012 , 4, 693-9	3.7	32

(2010-2012)

47	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
46	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
45	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
44	Acoustic deposition with NIMS as a high-throughput enzyme activity assay. <i>Analytical and Bioanalytical Chemistry</i> , 2012 , 403, 707-11	4.4	30
43	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	
42	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
41	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
40	The Small-Molecule Dimension: Mass-Spectrometry-Based Metabolomics, Enzyme Assays, and Imaging 2011 , 675-682		
39	Improved genome annotation through untargeted detection of pathway-specific metabolites. <i>BMC Genomics</i> , 2011 , 12 Suppl 1, S6	4.5	12
38	Untargeted metabolic footprinting reveals a surprising breadth of metabolite uptake and release by Synechococcus sp. PCC 7002. <i>Molecular BioSystems</i> , 2011 , 7, 3200-6		40
37	Meta-analysis of global metabolomics and proteomics data to link alterations with phenotype. <i>Spectroscopy</i> , 2011 , 26, 151-154		
36	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
35	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
34	Mass spectrometry-based metabolomics, analysis of metabolite-protein interactions, and imaging. <i>BioTechniques</i> , 2010 , 49, 557-65	2.5	51
33	Metabolome-proteome differentiation coupled to microbial divergence. MBio, 2010, 1,	7.8	26
32	Rapid screening of fatty acids using nanostructure-initiator mass spectrometry. <i>Analytical Chemistry</i> , 2010 , 82, 3751-5	7.8	28
31	Metabolite identification in Synechococcus sp. PCC 7002 using untargeted stable isotope assisted metabolite profiling. <i>Analytical Chemistry</i> , 2010 , 82, 9034-42	7.8	59
30	Calcifying cyanobacteriathe potential of biomineralization for carbon capture and storage. <i>Current Opinion in Biotechnology</i> , 2010 , 21, 365-71	11.4	124

29	Large scale physiological readjustment during growth enables rapid, comprehensive and inexpensive systems analysis. <i>BMC Systems Biology</i> , 2010 , 4, 64	3.5	21
28	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
27	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
26	Mass spectrometry based metabolomics and enzymatic assays for functional genomics. <i>Current Opinion in Microbiology</i> , 2009 , 12, 547-52	7.9	57
25	Nanostructure initiator mass spectrometry: tissue imaging and direct biofluid analysis. <i>Analytical Chemistry</i> , 2009 , 81, 2969-75	7.8	110
24	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
23	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
22	Combinatorial Screening of Biomimetic Protein Affinity Materials. <i>Advanced Materials</i> , 2008 , 20, 4691-4	16947	6
21	Multiple ionization mass spectrometry strategy used to reveal the complexity of metabolomics. <i>Analytical Chemistry</i> , 2008 , 80, 421-9	7.8	163
20	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
19	Clathrate nanostructures for mass spectrometry. <i>Nature</i> , 2007 , 449, 1033-6	50.4	426
18	Synthesis and characterization of peptide grafted porous polymer microstructures. <i>Biomacromolecules</i> , 2006 , 7, 750-4	6.9	11
17	Light-directed movement of polymer microstructures. <i>Langmuir</i> , 2005 , 21, 4949-53	4	6
16	Biofuels and biomaterials from microbes315-335		
15	Cervicovaginal microbiome composition drives metabolic profiles in healthy pregnancy		2
14	Linking soil biology and chemistry using bacterial isolate exometabolite profiles		1
13	Drought shifts sorghum root metabolite and microbiome profiles and enriches the stress response factor pipecolic acid		1
12	MAGI: A method for metabolite, annotation, and gene integration		1

LIST OF PUBLICATIONS

11	microbiome is active	3
10	Multi-lab EcoFAB study shows highly reproducible physiology and depletion of soil metabolites by a model grass	3
9	Processing of grassland soil C-N compounds into soluble and volatile molecules is depth stratified and mediated by genomically novel bacteria and archaea	4
8	A New Method to Correct for Habitat Filtering in Microbial Correlation Networks	1
7	Physiological adaptations of leaf litter microbial communities to long-term drought	3
6	Root morphology and exudate availability is shaped by particle size and chemistry in Brachypodium distachy	on2
5	Dynamic substrate preferences and predicted metabolic properties of a simple microbial consortium	1
4	GNPS Dashboard: Collaborative Analysis of Mass Spectrometry Data in the Web Browser	2
3	Long-read metagenomics of soil communities reveals phylum-specific secondary metabolite dynamics	2
2	Engineering sorghum for higher 4-hydroxybenzoic acid content	1
1	Biofilm Interaction Mapping and Analysis (BIMA): A tool for deconstructing interspecific interactions in co-culture biofilms	1