Shawn R Campagna

List of Publications by Year
in descending order

101 papers	4,309 citations	117625 34 h-index	123424 61 g-index
108 all docs	108 docs citations	108 times ranked	5843 citing authors

#	Article	IF	Citations
1	Salmonella typhimurium Recognizes a Chemically Distinct Form of the Bacterial Quorum-Sensing Signal AI-2. Molecular Cell, 2004, 15, 677-687.	9.7	502
2	Cryptic carbon and sulfur cycling between surface ocean plankton. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 453-457.	7.1	348
3	Autoinducer 2: a concentration-dependent signal for mutualistic bacterial biofilm growth. Molecular Microbiology, 2006, 60, 1446-1456.	2.5	327
4	Composition of the gut microbiota modulates the severity of malaria. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 2235-2240.	7.1	198
5	Phage infection of an environmentally relevant marine bacterium alters host metabolism and lysate composition. ISME Journal, 2014, 8, 1089-1100.	9.8	127
6	An Expeditious Synthesis of DPD and Boron Binding Studies. Organic Letters, 2005, 7, 569-572.	4.6	121
7	Recognition cascade and metabolite transfer in a marine bacteriaâ€phytoplankton model system. Environmental Microbiology, 2017, 19, 3500-3513.	3.8	111
8	Quorum sensing control of phosphorus acquisition in Trichodesmium consortia. ISME Journal, 2012, 6, 422-429.	9.8	108
9	Metabolite discovery through global annotation of untargeted metabolomics data. Nature Methods, 2021, 18, 1377-1385.	19.0	107
10	Riboneogenesis in Yeast. Cell, 2011, 145, 969-980.	28.9	105
11	The Quorum-Sensing Molecule Autoinducer 2 Regulates Motility and Flagellar Morphogenesis in Helicobacter pylori. Journal of Bacteriology, 2007, 189, 6109-6117.	2.2	84
12	Transcriptomic and metabolomic profiling of chicken adipose tissue in response to insulin neutralization and fasting. BMC Genomics, 2012, 13, 441.	2.8	84
13	Nutrients drive transcriptional changes that maintain metabolic homeostasis but alter genome architecture in Microcystis. ISME Journal, 2014, 8, 2080-2092.	9.8	84
14	Urea Is Both a Carbon and Nitrogen Source for Microcystis aeruginosa: Tracking 13C Incorporation at Bloom pH Conditions. Frontiers in Microbiology, 2019, 10, 1064.	3.5	75
15	Safety and pharmacokinetics of naringenin: A randomized, controlled, singleâ€ascendingâ€dose clinical trial. Diabetes, Obesity and Metabolism, 2020, 22, 91-98.	4.4	74
16	Autoinducer-2 influences interactions amongst pioneer colonizing streptococci in oral biofilms. Microbiology (United Kingdom), 2012, 158, 1783-1795.	1.8	67
17	Pancreatic Î²-Cell Death in Response to Pro-Inflammatory Cytokines Is Distinct from Genuine Apoptosis. PLoS ONE, 2011, 6, e22485.	2.5	65
18	Integration of the Second Messenger c-di-GMP into the Chemotactic Signaling Pathway. MBio, 2013, 4, e00001-13.	4.1	59

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19	The corrinoid cofactor of reductive dehalogenases affects dechlorination rates and extents in organohalide-respiring Dehalococcoides mccartyi. ISME Journal, 2016, 10, 1092-1101.	9.8	59
20	Purinyl-cobamide is a native prosthetic group of reductive dehalogenases. Nature Chemical Biology, 2018, 14, 8-14.	8.0	58
21	Choline and Choline Metabolite Patterns and Associations in Blood and Milk during Lactation in Dairy Cows. PLoS ONE, 2014, 9, e103412.	2.5	58
22	Seasonally Relevant Cool Temperatures Interact with N Chemistry to Increase Microcystins Produced in Lab Cultures of Microcystis aeruginosa NIES-843. Environmental Science & Technology, 2018, 52, 4127-4136.	10.0	55
23	Toward More Transparent and Reproducible Omics Studies Through a Common Metadata Checklist and Data Publications. OMICS A Journal of Integrative Biology, 2014, 18, 10-14.	2.0	54
24	Alcohol-associated intestinal dysbiosis impairs pulmonary host defense against Klebsiella pneumoniae. PLoS Pathogens, 2017, 13, e1006426.	4.7	54
25	Evolution of the Toxins Muscarine and Psilocybin in a Family of Mushroom-Forming Fungi. PLoS ONE, 2013, 8, e64646.	2.5	52
26	Autoinducer-2 is produced in saliva-fed flow conditions relevant to natural oral biofilms. Journal of Applied Microbiology, 2008, 105, 2096-2103.	3.1	50
27	Identification of 4-Hydroxycumyl Alcohol As the Major MnO₂-Mediated Bisphenol A Transformation Product and Evaluation of Its Environmental Fate. Environmental Science & Technology, 2015, 49, 6214-6221.	10.0	46
28	Functional Characteristics of the Gut Microbiome in C57BL/6 Mice Differentially Susceptible to Plasmodium yoelii. Frontiers in Microbiology, 2016, 7, 1520.	3.5	46
29	Two-dimensional liquid chromatography/mass spectrometry/mass spectrometry separation of water-soluble metabolites. Journal of Chromatography A, 2010, 1217, 8161-8166.	3.7	42
30	Metabolomic analysis of mouse prefrontal cortex reveals upregulated analytes during wakefulness compared to sleep. Scientific Reports, 2018, 8, 11225.	3.3	40
31	Boron Binding with the Quorum Sensing Signal AI-2 and Analogues. Organic Letters, 2004, 6, 2635-2637.	4.6	39
32	Serum metabolites associated with feed efficiency in black angus steers. Metabolomics, 2017, 13, 1.	3.0	39
33	Exogenous Fatty Acids Protect Enterococcus faecalis from Daptomycin-Induced Membrane Stress Independently of the Response Regulator LiaR. Applied and Environmental Microbiology, 2016, 82, 4410-4420.	3.1	38
34	Integrated proteomics and metabolomics suggests symbiotic metabolism and multimodal regulation in a fungalâ€endobacterial system. Environmental Microbiology, 2017, 19, 1041-1053.	3.8	38
35	Direct Quantitation of the Quorum Sensing Signal, Autoinducer-2, in Clinically Relevant Samples by Liquid Chromatographyâ^'Tandem Mass Spectrometry. Analytical Chemistry, 2009, 81, 6374-6381.	6.5	37
36	Rumen fluid metabolomics of beef steers differing in feed efficiency. Metabolomics, 2020, 16, 23.	3.0	37

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37	Impacts of Glutaraldehyde on Microbial Community Structure and Degradation Potential in Streams Impacted by Hydraulic Fracturing. Environmental Science & Technology, 2018, 52, 5989-5999.	10.0	35
38	Rumen Bacteria and Serum Metabolites Predictive of Feed Efficiency Phenotypes in Beef Cattle. Scientific Reports, 2019, 9, 19265.	3.3	34
39	MetabR: an R script for linear model analysis of quantitative metabolomic data. BMC Research Notes, 2012, 5, 596.	1.4	33
40	Quorum Sensing Signal Production and Microbial Interactions in a Polymicrobial Disease of Corals and the Coral Surface Mucopolysaccharide Layer. PLoS ONE, 2014, 9, e108541.	2.5	30
41	Differential Sensitivity to Plasmodium yoelii Infection in C57BL/6 Mice Impacts Gut-Liver Axis Homeostasis. Scientific Reports, 2019, 9, 3472.	3.3	30
42	Metabolomics reveals distinct neurochemical profiles associated with stress resilience. Neurobiology of Stress, 2017, 7, 103-112.	4.0	25
43	Molecular and metabolic profiles suggest that increased lipid catabolism in adipose tissue contributes to leanness in domestic chickens. Physiological Genomics, 2014, 46, 315-327.	2.3	23
44	Role of phosphatidylserine synthase in shaping the phospholipidome of Candida albicans. FEMS Yeast Research, 2017, 17, .	2.3	22
45	Extensive metabolic remodeling after limiting mitochondrial lipid burden is consistent with an improved metabolic health profile. Journal of Biological Chemistry, 2019, 294, 12313-12327.	3.4	22
46	Proteogenomics Reveals Novel Reductive Dehalogenases and Methyltransferases Expressed during Anaerobic Dichloromethane Metabolism. Applied and Environmental Microbiology, 2019, 85, .	3.1	21
47	Mineralization versus fermentation: evidence for two distinct anaerobic bacterial degradation pathways for dichloromethane. ISME Journal, 2020, 14, 959-970.	9.8	21
48	Pseudomonas sp. Strain 273 Degrades Fluorinated Alkanes. Environmental Science & Technology, 2020, 54, 14994-15003.	10.0	21
49	Detection and Quantitation of Bacterial Acylhomoserine Lactone Quorum Sensing Molecules via Liquid Chromatographyâ€“Isotope Dilution Tandem Mass Spectrometry. Analytical Chemistry, 2012, 84, 1243-1252.	6.5	19
50	Phaeobacter sp. Strain Y4I Utilizes Two Separate Cell-to-Cell Communication Systems To Regulate Production of the Antimicrobial Indigoidine. Applied and Environmental Microbiology, 2015, 81, 1417-1425.	3.1	19
51	Untargeted metabolomics confirms and extends the understanding of the impact of aminoimidazole carboxamide ribotide (AICAR) in the metabolic network of Salmonella enterica. Microbial Cell, 2018, 5, 74-87.	3.2	19
52	Expanding lipidomics coverage: effective ultra performance liquid chromatography-high resolution mass spectrometer methods for detection and quantitation of cardiolipin, phosphatidylglycerol, and lysyl-phosphatidylglycerol. Metabolomics, 2019, 15, 53.	3.0	18
53	Muscle Metabolome Profiles in Woody Breast-(un)Affected Broilers: Effects of Quantum Blue Phytase-Enriched Diet. Frontiers in Veterinary Science, 2020, 7, 458.	2.2	18
54	Nitrogen flux into metabolites and microcystins changes in response to different nitrogen sources in<scp>Microcystis aeruginosaNIES</scp>â€843. Environmental Microbiology, 2020, 22, 2419-2431.	3.8	18

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55	Tissue Level Diet and Sex-by-Diet Interactions Reveal Unique Metabolite and Clustering Profiles Using Untargeted Liquid Chromatographyâ€“Mass Spectrometry on Adipose, Skeletal Muscle, and Liver Tissue in C57BL6/J Mice. Journal of Proteome Research, 2018, 17, 1077-1090.	3.7	17
56	Metabolome changes are induced in the arbuscular mycorrhizal fungus Gigaspora margarita by germination and by its bacterial endosymbiont. Mycorrhiza, 2018, 28, 421-433.	2.8	17
57	Ecology and Physiology of the Pathogenic Cyanobacterium Roseofilum reptotaenium. Life, 2014, 4, 968-987.	2.4	16
58	Elucidating Duramycinâ€™s Bacterial Selectivity and Mode of Action on the Bacterial Cell Envelope. Frontiers in Microbiology, 2018, 9, 219.	3.5	14
59	One week of continuous corticosterone exposure impairs hepatic metabolic flexibility, promotes islet Î²-cell proliferation, and reduces physical activity in male C57BL/6â€J mice. Journal of Steroid Biochemistry and Molecular Biology, 2019, 195, 105468.	2.5	14
60	Loss of carotenoids from membranes of Pantoea sp. YR343 results in altered lipid composition and changes in membrane biophysical properties. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 1338-1345.	2.6	14
61	Enterococcus faecalis Readily Adapts Membrane Phospholipid Composition to Environmental and Genetic Perturbation. Frontiers in Microbiology, 2021, 12, 616045.	3.5	14
62	Comparative Decomposition of Humans and Pigs: Soil Biogeochemistry, Microbial Activity and Metabolomic Profiles. Frontiers in Microbiology, 2020, 11, 608856.	3.5	13
63	Correlation between Pre-Ovulatory Follicle Diameter and Follicular Fluid Metabolome Profiles in Lactating Beef Cows. Metabolites, 2021, 11, 623.	2.9	13
64	Discovery and Functional Characterization of a Yeast Sugar Alcohol Phosphatase. ACS Chemical Biology, 2018, 13, 3011-3020.	3.4	12
65	Carbon Fate and Flux in Prochlorococcus under Nitrogen Limitation. MSystems, 2019, 4, .	3.8	12
66	Midgut metabolomic profiling of fall armyworm (Spodoptera frugiperda) with field-evolved resistance to Cry1F corn. Insect Biochemistry and Molecular Biology, 2019, 106, 1-9.	2.7	12
67	Establishing a Quantitative Definition of Quorum Sensing Provides Insight into the Information Content of the Autoinducer Signals in Vibrio harveyi and Escherichia coli. Biochemistry, 2010, 49, 5621-5623.	2.5	11
68	Root-AssociatedStreptomycesIsolates HarboringmelCGenes Demonstrate Enhanced Plant Colonization. Phytobiomes Journal, 2019, 3, 165-176.	2.7	11
69	A biomimetic synthesis of (â^')-ascorbyl phloroglucinol and studies toward the construction of ascorbyl-modified catechin natural products and analogues. Tetrahedron, 2011, 67, 9265-9272.	1.9	10
70	Design and Evaluation of a Gas Chromatograph-Atmospheric Pressure Chemical Ionization Interface for an Exactive Orbitrap Mass Spectrometer. Journal of the American Society for Mass Spectrometry, 2019, 30, 2369-2379.	2.8	10
71	Pseudomonas sp. Strain 273 Incorporates Organofluorine into the Lipid Bilayer during Growth with Fluorinated Alkanes. Environmental Science & Technology, 2022, 56, 8155-8166.	10.0	10
72	Thiobenzothiazole-modified Hydrocortisones Display Anti-inflammatory Activity with Reduced Impact on Islet Î²-Cell Function. Journal of Biological Chemistry, 2015, 290, 13401-13416.	3.4	9

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73	Elevated Temperature Enhances Short to Medium Chain Acyl Homoserine Lactone Production by Black Band Disease Associated Vibrios. FEMS Microbiology Ecology, 2017, 93, fix005.	2.7	9
74	Bifunctional amyloid-reactive peptide promotes binding of antibody 11-1F4 to diverse amyloid types and enhances therapeutic efficacy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E10839-E10848.	7.1	9
75	Integrated Proteomics and Lipidomics Reveal That the Swarming Motility of Paenibacillus polymyxa Is Characterized by Phospholipid Modification, Surfactant Deployment, and Flagellar Specialization Relative to Swimming Motility. Frontiers in Microbiology, 2019, 10, 2594.	3.5	9
76	Trait Energy and Fatigue May Be Connected to Gut Bacteria among Young Physically Active Adults: An Exploratory Study. Nutrients, 2022, 14, 466.	4.1	9
77	Postmortem Skeletal Microbial Community Composition and Function in Buried Human Remains. MSystems, 2022, 7, e0004122.	3.8	9
78	Maternal consumption of fish oil programs reduced adiposity in broiler chicks. Scientific Reports, 2017, 7, 13129.	3.3	8
79	Impact of Fatty-Acid Labeling of Bacillus subtilis Membranes on the Cellular Lipidome and Proteome. Frontiers in Microbiology, 2020, 11, 914.	3.5	8
80	Stability of Gas-Phase Tartaric Acid Anions Investigated by Quantum Chemistry, Mass Spectrometry, and Infrared Spectroscopy. Journal of Physical Chemistry A, 2012, 116, 4789-4800.	2.5	7
81	4-Methylphenol produced in freshwater sediment microcosms is not a bisphenol A metabolite. Chemosphere, 2014, 117, 521-526.	8.2	7
82	Metabolomics Approach in the Study of the Well-Defined Polyherbal Preparation Zyflamend. Journal of Medicinal Food, 2018, 21, 306-316.	1.5	7
83	Populations of Populus angustifolia have evolved distinct metabolic profiles that influence their surrounding soil. Plant and Soil, 2020, 448, 399-411.	3.7	7
84	Removal of peptidoglycan and inhibition of active cellular processes leads to daptomycin tolerance in Enterococcus faecalis. PLoS ONE, 2021, 16, e0254796.	2.5	7
85	Multiomics Evaluation of Human Fat-Derived Mesenchymal Stem Cells on an Osteobiologic Nanocomposite. BioResearch Open Access, 2020, 9, 37-50.	2.6	6
86	Preovulatory follicular fluid and serum metabolome profiles in lactating beef cows with thin, moderate, and obese body condition. Journal of Animal Science, 2022, 100, .	0.5	6
87	Isoflurane anesthesia disrupts the cortical metabolome. Journal of Neurophysiology, 2020, 124, 2012-2021.	1.8	5
88	The Rid family member RutC of Escherichia coli is a 3-aminoacrylate deaminase. Journal of Biological Chemistry, 2021, 296, 100651.	3.4	5
89	Preovulatory serum estradiol concentration is positively associated with oocyte ATP and follicular fluid metabolite abundance in lactating beef cattle. Journal of Animal Science, 2022, 100, .	0.5	5
90	Structure and Stability of Phenoxide and Fluorophenoxide Anions Investigated with Infrared Multiple-Photon Dissociation and Detachment Spectroscopy and Tandem Mass Spectrometry. Journal of Physical Chemistry A, 2014, 118, 8597-8605.	2.5	4

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91	Microcystin-LR does not induce alterations to transcriptomic or metabolomic profiles of a model heterotrophic bacterium. PLoS ONE, 2017, 12, e0189608.	2.5	4
92	Changes in Microbiome Activity and Sporadic Viral Infection Help Explain Observed Variability in Microcosm Studies. Frontiers in Microbiology, 2022, 13, 809989.	3.5	4
93	Duodenal Metabolic Profile Changes in Heat-Stressed Broilers. Animals, 2022, 12, 1337.	2.3	4
94	Novobiocin and peptide analogs of Î±-factor are positive allosteric modulators of the yeast G protein-coupled receptor Ste2p. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 916-924.	2.6	3
95	Potent Anti-Inflammatory, Arylpyrazole-Based Glucocorticoid Receptor Agonists That Do Not Impair Insulin Secretion. ACS Medicinal Chemistry Letters, 2021, 12, 1568-1577.	2.8	3
96	Apex Predator Nematodes and Meso-Predator Bacteria Consume Their Basal Insect Prey through Discrete Stages of Chemical Transformations. MSystems, 2022, 7, e0031222.	3.8	3
97	Gut Microbiome and Metabolome Variations in Self-Identified Muscle Builders Who Report Using Protein Supplements. Nutrients, 2022, 14, 533.	4.1	2
98	Cross-Omics Analysis of Fenugreek Supplementation Reveals Beneficial Effects Are Caused by Gut Microbiome Changes Not Mammalian Host Physiology. International Journal of Molecular Sciences, 2022, 23, 3654.	4.1	2
99	Avian metabolomics. , 2022, , 49-63.		1
100	Transcriptomic and Metabolomic Profiling of Chicken Adipose Tissue: Dual Purpose Benefit for Human Obesity and Poultry Production. Current Metabolomics, 2018, 6, 96-102.	0.5	0
101	Independent and Interactive Effects of Genetic Background and Sex on Tissue Metabolomes of Adipose, Skeletal Muscle, and Liver in Mice. Metabolites, 2022, 12, 337.	2.9	0