

# Vinayak Agarwal

## List of Publications by Citations

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**Version:** 2024-04-27

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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.

41  
papers

2,657  
citations

16  
h-index

45  
g-index

45  
ext. papers

3,652  
ext. citations

9.6  
avg. IF

4.58  
L-index

#	Paper	IF	Citations
41	Sharing and community curation of mass spectrometry data with Global Natural Products Social Molecular Networking. <i>Nature Biotechnology</i> , <b>2016</b> , 34, 828-837	44.5	1566
40	Biosynthesis of polybrominated aromatic organic compounds by marine bacteria. <i>Nature Chemical Biology</i> , <b>2014</b> , 10, 640-7	11.7	188
39	Enzymatic Halogenation and Dehalogenation Reactions: Pervasive and Mechanistically Diverse. <i>Chemical Reviews</i> , <b>2017</b> , 117, 5619-5674	68.1	184
38	Metagenomic discovery of polybrominated diphenyl ether biosynthesis by marine sponges. <i>Nature Chemical Biology</i> , <b>2017</b> , 13, 537-543	11.7	95
37	Structure of the enzyme-acyl carrier protein (ACP) substrate gatekeeper complex required for biotin synthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 17406-11	11.5	70
36	Biosynthesis of coral settlement cue tetrabromopyrrole in marine bacteria by a uniquely adapted brominase-thioesterase enzyme pair. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 3797-802	11.5	60
35	Structures of cyanobactin maturation enzymes define a family of transamidating proteases. <i>Chemistry and Biology</i> , <b>2012</b> , 19, 1411-22		52
34	Unusual flavoenzyme catalysis in marine bacteria. <i>Current Opinion in Chemical Biology</i> , <b>2016</b> , 31, 31-9	9.7	40
33	Biochemical and structural insights into xylan utilization by the thermophilic bacterium <i>Caldanaerobius polysaccharolyticus</i> . <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 34946-34960	5.4	38
32	Complexity of naturally produced polybrominated diphenyl ethers revealed via mass spectrometry. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 1339-46	10.3	36
31	Structural and functional insight into an unexpectedly selective N-methyltransferase involved in plantazolicin biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 12954-9	11.5	34
30	Enzymatic Reductive Dehalogenation Controls the Biosynthesis of Marine Bacterial Pyrroles. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 13167-13170	16.4	29
29	Enzymatic synthesis of polybrominated dioxins from the marine environment. <i>ACS Chemical Biology</i> , <b>2014</b> , 9, 1980-4	4.9	26
28	Chemoenzymatic Synthesis of Acyl Coenzyme A Substrates Enables in Situ Labeling of Small Molecules and Proteins. <i>Organic Letters</i> , <b>2015</b> , 17, 4452-5	6.2	23
27	Pangenomic comparison of globally distributed Poribacteria associated with sponge hosts and marine particles. <i>ISME Journal</i> , <b>2019</b> , 13, 468-481	11.9	22
26	Comparative Genomics of Cyanobacterial Symbionts Reveals Distinct, Specialized Metabolism in Tropical Sponges. <i>MBio</i> , <b>2019</b> , 10,	7.8	16
25	Chemical Ecology of Marine Sponges: New Opportunities through "-Omics". <i>Integrative and Comparative Biology</i> , <b>2019</b> , 59, 765-776	2.8	16

24	Structure and function of phosphonoacetaldehyde dehydrogenase: the missing link in phosphonoacetate formation. <i>Chemistry and Biology</i> , <b>2014</b> , 21, 125-35		16
23	Structure and function of a serine carboxypeptidase adapted for degradation of the protein synthesis antibiotic microcin C7. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 4425-30	11.5	16
22	A blueprint for academic laboratories to produce SARS-CoV-2 quantitative RT-PCR test kits. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 15438-15453	5.4	16
21	Mass Spectrometry-Based Integration and Expansion of the Chemical Diversity Harbored Within a Marine Sponge. <i>Journal of the American Society for Mass Spectrometry</i> , <b>2019</b> , 30, 1373-1384	3.5	14
20	Multi-Omic Profiling of Sponges Reveals Diverse Metabolomic and Microbiome Architectures that Are Non-overlapping with Ecological Neighbors. <i>Marine Drugs</i> , <b>2020</b> , 18,	6	12
19	Organohalogens Naturally Biosynthesized in Marine Environments and Produced as Disinfection Byproducts Alter Sarco/Endoplasmic Reticulum Ca Dynamics. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 5469-5478	10.3	12
18	Genetic and Biochemical Reconstitution of Bromoform Biosynthesis in Lends Insights into Seaweed Reactive Oxygen Species Enzymology. <i>ACS Chemical Biology</i> , <b>2020</b> , 15, 1662-1670	4.9	11
17	Diversity and distribution of the bmp gene cluster and its Polybrominated products in the genus <i>Pseudoalteromonas</i> . <i>Environmental Microbiology</i> , <b>2019</b> , 21, 1575-1585	5.2	9
16	Insights into Thiotemplated Pyrrole Biosynthesis Gained from the Crystal Structure of Flavin-Dependent Oxidase in Complex with Carrier Protein. <i>Biochemistry</i> , <b>2019</b> , 58, 918-929	3.2	8
15	A genomic view of trophic and metabolic diversity in clade-specific Lamellodysidea sponge microbiomes. <i>Microbiome</i> , <b>2020</b> , 8, 97	16.6	6
14	Presence of Bromotyrosine Alkaloids in Marine Sponges Is Independent of Metabolomic and Microbiome Architectures. <i>MSystems</i> , <b>2021</b> , 6,	7.6	6
13	Fungal polyketide engineering comes of age. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 12278-9	11.5	5
12	A blueprint for academic labs to produce SARS-CoV-2 RT-qPCR test kits <b>2020</b> ,		5
11	Precursor-Guided Mining of Marine Sponge Metabolomes Lends Insight into Biosynthesis of Pyrrole-Imidazole Alkaloids. <i>ACS Chemical Biology</i> , <b>2020</b> , 15, 2185-2194	4.9	5
10	Sulfonation and glucuronidation of hydroxylated bromodiphenyl ethers in human liver. <i>Chemosphere</i> , <b>2019</b> , 226, 132-139	8.4	4
9	Obligate Brominating Enzymes Underlie Bromoform Production by Marine Cyanobacteria. <i>Journal of Phycology</i> , <b>2021</b> , 57, 1131-1139	3	4
8	An Obligate Peptidyl Brominase Underlies the Discovery of Highly Distributed Biosynthetic Gene Clusters in Marine Sponge Microbiomes. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 10221-10231	16.4	3
7	Chemoenzymatic Synthesis of Starting Materials and Characterization of Halogenases Requiring Acyl Carrier Protein-Tethered Substrates. <i>Methods in Enzymology</i> , <b>2018</b> , 604, 333-366	1.7	3

6	Gatekeeping Ketosynthases Dictate Initiation of Assembly Line Biosynthesis of Pyrrolic Polyketides. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 7617-7622	16.4	2
5	Assaying Oxidative Coupling Activity of CYP450 Enzymes. <i>Methods in Enzymology</i> , <b>2018</b> , 604, 499-521	1.7	2
4	Stereochemical Assignment and Absolute Abundance of Nonproteinogenic Amino Acid Homoarginine in Marine Sponges.. <i>ACS Omega</i> , <b>2021</b> , 6, 33200-33205	3.9	1
3	Enzymatic Synthesis Assisted Discovery of Proline-Rich Macrocyclic Peptides in Marine Sponges. <i>ChemBioChem</i> , <b>2021</b> , 22, 2614-2618	3.8	1
2	Hepatic demethylation of methoxy-bromodiphenyl ethers and conjugation of the resulting hydroxy-bromodiphenyl ethers in a marine fish, the red snapper, <i>Lutjanus campechanus</i> , and a freshwater fish, the channel catfish, <i>Ictalurus punctatus</i> . <i>Chemosphere</i> , <b>2022</b> , 286, 131620	8.4	0
1	Interactions of Hydroxylated Tetrabromodiphenyl Ethers with Phase II Enzymes. <i>FASEB Journal</i> , <b>2019</b> , 33, 673.10	0.9	