Mohammad R Seyedsayamdost

List of Publications by Year
in descending order

114 papers	5,290 citations	61857 43 h-index	98622 67 g-index
117 all docs	117 docs citations	117 times ranked	4540 citing authors

#	Article	IF	Citations
1	Algal p-coumaric acid induces oxidative stress and siderophore biosynthesis in the bacterial symbiont Phaeobacter inhibens. Cell Chemical Biology, 2022, 29, 670-679.e5.	2.5	9
2	Structural Elucidation of Cryptic Algaecides in Marine Algalâ€Bacterial Symbioses by NMR Spectroscopy and MicroED. Angewandte Chemie - International Edition, 2022, 61, .	7.2	10
3	Structural Elucidation of Cryptic Algaecides in Marine Algalâ€Bacterial Symbioses by NMR Spectroscopy and MicroED. Angewandte Chemie, 2022, 134, .	1.6	2
4	Structural insights into inhibition of the drug target dihydroorotate dehydrogenase by bacterial hydroxyalkylquinolines. RSC Chemical Biology, 2022, 3, 420-425.	2.0	3
5	Guidelines for metabolomics-guided transposon mutagenesis for microbial natural product discovery. Methods in Enzymology, 2022, 665, 305-323.	0.4	2
6	RaS-RiPPs in Streptococci and the Human Microbiome. ACS Bio & Med Chem Au, 2022, 2, 328-339.	1.7	18
7	Induction of Diverse Cryptic Fungal Metabolites by Steroids and Channel Blockers. Angewandte Chemie - International Edition, 2022, , .	7.2	3
8	The Small-Molecule Language of Dynamic Microbial Interactions. Annual Review of Microbiology, 2022, 76, 641-660.	2.9	4
9	Quorum Sensing in Streptococcus mutans Regulates Production of Tryglysin, a Novel RaS-RiPP Antimicrobial Compound. MBio, 2021, 12, .	1.8	24
10	Trapping a cross-linked lysineâ€“tryptophan radical in the catalytic cycle of the radical SAM enzyme SuiB. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	29
11	Piperacillin triggers virulence factor biosynthesis via the oxidative stress response in <i>Burkholderia thailandensis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	10
12	A Natural Product Chemist's Guide to Unlocking Silent Biosynthetic Gene Clusters. Annual Review of Biochemistry, 2021, 90, 763-788.	5.0	50
13	Radical SAM Enzyme QmpB Installs Two 9-Membered Ring Sactionine Macrocycles during Biogenesis of a Ribosomal Peptide Natural Product. Journal of Organic Chemistry, 2021, 86, 11284-11289.	1.7	15
14	MetEx, a Metabolomics Explorer Application for Natural Product Discovery. ACS Chemical Biology, 2021, 16, 2825-2833.	1.6	15
15	Thailandenes, Cryptic Polyene Natural Products Isolated from <i>Burkholderia thailandensis</i> Using Phenotype-Guided Transposon Mutagenesis. ACS Chemical Biology, 2020, 15, 1195-1203.	1.6	15
16	Secondary metabolites from the <i>Burkholderia pseudomallei</i> complex: structure, ecology, and evolution. Journal of Industrial Microbiology and Biotechnology, 2020, 47, 877-887.	1.4	18
17	Mapping and Exploiting the Promiscuity of OxyB toward the Biocatalytic Production of Vancomycin Aglycone Variants. ACS Catalysis, 2020, 10, 9287-9298.	5.5	12
18	A microbial metabolite synergizes with endogenous serotonin to trigger <i>C. elegans</i> reproductive behavior. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30589-30598.	3.3	10

#	Article	IF	Citations
19	Discovery of a Cryptic Depsipeptide from <i>Streptomyces ghanaensis</i> via MALDIâ€MSâ€Guided Highâ€Throughput Elicitor Screening. Angewandte Chemie - International Edition, 2020, 59, 23005-23009.	7.2	33
20	Discovery of a Cryptic Depsipeptide from Streptomyces ghanaensis via MALDIâ€MSâ€Guided Highâ€Throughput Elicitor Screening. Angewandte Chemie, 2020, 132, 23205-23209.	1.6	7
21	Cytotoxic alkyl-quinolones mediate surface-induced virulence in Pseudomonas aeruginosa. PLoS Pathogens, 2020, 16, e1008867.	2.1	12
22	Discovery and Biosynthesis of Streptosactin, a Sactipeptide with an Alternative Topology Encoded by Commensal Bacteria in the Human Microbiome. Journal of the American Chemical Society, 2020, 142, 16265-16275.	6.6	42
23	Unlocking Cryptic Metabolites with Mass Spectrometry-Guided Transposon Mutant Selection. ACS Chemical Biology, 2020, 15, 2766-2774.	1.6	18
24	Multi-Omic Analyses Provide Links between Low-Dose Antibiotic Treatment and Induction of Secondary Metabolism in Burkholderia thailandensis. MBio, 2020, 11, .	1.8	23
25	Special Issue in Honor of Professor Jon Clardy. Journal of Natural Products, 2020, 83, 565-568.	1.5	2
26	CanE, an Iron/2-Oxoglutarate-Dependent Lasso Peptide Hydroxylase from <i>Streptomyces canus</i>. ACS Chemical Biology, 2020, 15, 890-894.	1.6	17
27	The Chemistry and Biology of Bactobolin: A 10-Year Collaboration with Natural Product Chemist Extraordinaire Jon Clardy. Journal of Natural Products, 2020, 83, 738-743.	1.5	14
28	Reporterâ€Guided Transposon Mutant Selection for Activation of Silent Gene Clusters in <i>Burkholderia thailandensis</i>. ChemBioChem, 2020, 21, 1826-1831.	1.3	11
29	The Chemistry and Structural Enzymology of RiPP-Modifying Radical SAM Metalloenzymes. , 2020, , 49-64.		4
30	Burkholderia-Derived Natural Products: From Discovery to Target Identification Towards Chemical Ecology. , 2020, , 124-141.		0
31	Cytotoxic alkyl-quinolones mediate surface-induced virulence in Pseudomonas aeruginosa. , 2020, 16, e1008867.		0
32	Cytotoxic alkyl-quinolones mediate surface-induced virulence in Pseudomonas aeruginosa. , 2020, 16, e1008867.		0
33	Cytotoxic alkyl-quinolones mediate surface-induced virulence in Pseudomonas aeruginosa. , 2020, 16, e1008867.		0
34	Cytotoxic alkyl-quinolones mediate surface-induced virulence in Pseudomonas aeruginosa. , 2020, 16, e1008867.		0
35	Cytotoxic alkyl-quinolones mediate surface-induced virulence in Pseudomonas aeruginosa. , 2020, 16, e1008867.		0
36	Macrocyclization via an Arginine-Tyrosine Crosslink Broadens the Reaction Scope of Radical <i>S</i>-Adenosylmethionine Enzymes. Journal of the American Chemical Society, 2019, 141, 16610-16614.	6.6	58

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37	Total Synthesis and Stereochemical Assignment of Streptide. Journal of the American Chemical Society, 2019, 141, 17361-17369.	6.6	38
38	Toward a global picture of bacterial secondary metabolism. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 301-311.	1.4	41
39	Aliphatic Ether Bond Formation Expands the Scope of Radical SAM Enzymes in Natural Product Biosynthesis. Journal of the American Chemical Society, 2019, 141, 10610-10615.	6.6	47
40	Bioactivity-HiTES Unveils Cryptic Antibiotics Encoded in Actinomycete Bacteria. ACS Chemical Biology, 2019, 14, 767-774.	1.6	53
41	Cebulantin, a Cryptic Lanthipeptide Antibiotic Uncovered Using Bioactivityâ€Coupled HiTES. Angewandte Chemie - International Edition, 2019, 58, 5973-5977.	7.2	41
42	Cebulantin, a Cryptic Lanthipeptide Antibiotic Uncovered Using Bioactivityâ€Coupled HiTES. Angewandte Chemie, 2019, 131, 6034-6038.	1.6	14
43	Identification of the Hypertension Drug Guanfacine as an Antivirulence Agent in <i>Pseudomonas aeruginosa</i>. ChemBioChem, 2019, 20, 2005-2011.	1.3	6
44	Discovery of a New Class I Ribonucleotide Reductase with an Essential DOPA Radical and NO Metal as an Initiator of Long-Range Radical Transfer. Biochemistry, 2019, 58, 435-437.	1.2	7
45	A genetics-free method for high-throughput discovery of cryptic microbial metabolites. Nature Chemical Biology, 2019, 15, 161-168.	3.9	114
46	Radical Approach to Enzymatic Î²-Thioether Bond Formation. Journal of the American Chemical Society, 2019, 141, 990-997.	6.6	68
47	Small Biomolecules for Big Applications. ACS Central Science, 2018, 4, 437-439.	5.3	6
48	In Vitro Reconstitution of OxyC Activity Enables Total Chemoenzymatic Syntheses of Vancomycin Aglycone Variants. Angewandte Chemie - International Edition, 2018, 57, 8048-8052.	7.2	47
49	Installation of multiple aryl ether crosslinks onto non-native substrate peptides by the vancomycin OxyB. Tetrahedron, 2018, 74, 3231-3237.	1.0	9
50	Mechanistic Investigations of Lysineâ€"Tryptophan Cross-Link Formation Catalyzed by Streptococcal Radical <i>S</i>-Adenosylmethionine Enzymes. Biochemistry, 2018, 57, 461-468.	1.2	29
51	In Vitro Reconstitution of OxyC Activity Enables Total Chemoenzymatic Syntheses of Vancomycin Aglycone Variants. Angewandte Chemie, 2018, 130, 8180-8184.	1.6	9
52	Crochelins: Siderophores with an Unprecedented Ironâ€Chelating Moiety from the Nitrogenâ€Fixing Bacterium <i>Azotobacter chroococcum</i>. Angewandte Chemie, 2018, 130, 545-550.	1.6	11
53	Crochelins: Siderophores with an Unprecedented Ironâ€Chelating Moiety from the Nitrogenâ€Fixing Bacterium Azotobacter chroococcum. Angewandte Chemie - International Edition, 2018, 57, 536-541.	7.2	23
54	Charting an Unexplored Streptococcal Biosynthetic Landscape Reveals a Unique Peptide Cyclization Motif. Journal of the American Chemical Society, 2018, 140, 17674-17684.	6.6	78

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55	Multiple siderophores: bug or feature?. Journal of Biological Inorganic Chemistry, 2018, 23, 983-993.	1.1	35
56	Modulating OxyB-Catalyzed Cross-Coupling Reactions in Vancomycin Biosynthesis by Incorporation of Diverse <scp>d</scp>-Tyr Analogues. Journal of Organic Chemistry, 2018, 83, 7309-7317.	1.7	12
57	Quorum sensing and iron regulate a two-for-one siderophore gene cluster in <i>Vibrio harveyi</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 7581-7586.	3.3	56
58	Guidelines for Determining the Structures of Radical SAM Enzyme-Catalyzed Modifications in the Biosynthesis of RiPP Natural Products. Methods in Enzymology, 2018, 606, 439-460.	0.4	10
59	The Polyene Natural Product Thailandamide A Inhibits Fatty Acid Biosynthesis in Gram-Positive and Gram-Negative Bacteria. Biochemistry, 2018, 57, 4247-4251.	1.2	26
60	Malleilactone Is a Burkholderia pseudomallei Virulence Factor Regulated by Antibiotics and Quorum Sensing. Journal of Bacteriology, 2018, 200, .	1.0	32
61	Recent advances in activating silent biosynthetic gene clusters in bacteria. Current Opinion in Microbiology, 2018, 45, 156-163.	2.3	89
62	Metalloenzymeâ€catalyzed carbonâ€carbon bond formation in natural product biosynthesis. FASEB Journal, 2018, 32, 271.1.	0.2	0
63	Acinetodin and Klebsidin, RNA Polymerase Targeting Lasso Peptides Produced by Human Isolates of <i>Acinetobacter gyllenbergii</i> and <i>Klebsiella pneumoniae</i>. ACS Chemical Biology, 2017, 12, 814-824.	1.6	54
64	<i>Nonomuraea</i> sp. ATCC 55076 harbours the largest actinomycete chromosome to date and the kistamicin biosynthetic gene cluster. MedChemComm, 2017, 8, 780-788.	3.5	29
65	Opinion: Hijacking exogenous signals to generate new secondary metabolites during symbiotic interactions. Nature Reviews Chemistry, 2017, 1, .	13.8	18
66	Lysine-Tryptophan-Crosslinked Peptides Produced by Radical SAM Enzymes in Pathogenic Streptococci. ACS Chemical Biology, 2017, 12, 922-927.	1.6	52
67	Discovery of a Cryptic Antifungal Compound from <i>Streptomyces albus</i> J1074 Using High-Throughput Elicitor Screens. Journal of the American Chemical Society, 2017, 139, 9203-9212.	6.6	121
68	Discovery of <i>scmR</i> as a global regulator of secondary metabolism and virulence in <i>Burkholderia thailandensis</i> E264. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2920-E2928.	3.3	78
69	A Vibrio cholerae autoinducerâ€“receptor pair that controls biofilm formation. Nature Chemical Biology, 2017, 13, 551-557.	3.9	179
70	Synergy and Target Promiscuity Drive Structural Divergence in Bacterial Alkylquinolone Biosynthesis. Cell Chemical Biology, 2017, 24, 1437-1444.e3.	2.5	49
71	Roseochelin B, an Algaecidal Natural Product Synthesized by the Roseobacter Phaeobacter inhibens in Response to Algal Sinapic Acid. Organic Letters, 2017, 19, 5138-5141.	2.4	42
72	Structures of the peptide-modifying radical SAM enzyme SuiB elucidate the basis of substrate recognition. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 10420-10425.	3.3	83

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73	Though Much Is Taken, Much Abides: Finding New Antibiotics Using Old Ones. Biochemistry, 2017, 56, 4925-4926.	1.2	17
74	<i>In Vitro</i> Reconstitution of OxyA Enzymatic Activity Clarifies Late Steps in Vancomycin Biosynthesis. ACS Chemical Biology, 2017, 12, 2248-2253.	1.6	13
75	Antibiotic dialogues: induction of silent biosynthetic gene clusters by exogenous small molecules. FEMS Microbiology Reviews, 2017, 41, 19-33.	3.9	160
76	Long-range proton-coupled electron transfer in the <i>Escherichia coli</i> class Ia ribonucleotide reductase. Essays in Biochemistry, 2017, 61, 281-292.	2.1	14
77	Investigation of the Genetics and Biochemistry of Roseobacticide Production in the <i>Roseobacter</i> Clade Bacterium Phaeobacter inhibens. MBio, 2016, 7, e02118.	1.8	62
78	Mapping the Trimethoprim-Induced Secondary Metabolome of <i>Burkholderia thailandensis</i>. ACS Chemical Biology, 2016, 11, 2124-2130.	1.6	61
79	Mode of action and resistance studies unveil new roles for tropodithietic acid as an anticancer agent and the Î3-glutamyl cycle as a proton sink. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 1630-1635.	3.3	67
80	The Siderophore Metabolome of Azotobacter vinelandii. Applied and Environmental Microbiology, 2016, 82, 27-39.	1.4	69
81	A Burkholderia thailandensis Acyl-Homoserine Lactone-Independent Orphan LuxR Homolog That Activates Production of the Cytotoxin Malleilactone. Journal of Bacteriology, 2015, 197, 3456-3462.	1.0	34
82	Structure and biosynthesis of a macrocyclic peptide containing an unprecedented lysine-to-tryptophan crosslink. Nature Chemistry, 2015, 7, 431-437.	6.6	181
83	High-throughput platform for the discovery of elicitors of silent bacterial gene clusters. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 7266-7271.	3.3	221
84	Hybrid Biosynthesis of Roseobacticides from Algal and Bacterial Precursor Molecules. Journal of the American Chemical Society, 2014, 136, 15150-15153.	6.6	68
85	Natural Products and Synthetic Biology. ACS Synthetic Biology, 2014, 3, 745-747.	1.9	33
86	Function of the Diiron Cluster of <i>Escherichia coli</i> Class Ia Ribonucleotide Reductase in Proton-Coupled Electron Transfer. Journal of the American Chemical Society, 2013, 135, 8585-8593.	6.6	55
87	Bactobolin Resistance Is Conferred by Mutations in the L2 Ribosomal Protein. MBio, 2012, 3, .	1.8	44
88	Old Meets New: Using Interspecies Interactions to Detect Secondary Metabolite Production in Actinomycetes. Methods in Enzymology, 2012, 517, 89-109.	0.4	41
89	Interspecies modulation of bacterial development through iron competition and siderophore piracy. Molecular Microbiology, 2012, 86, 628-644.	1.2	148
90	Mixing and Matching Siderophore Clusters: Structure and Biosynthesis of Serratiochelins from <i>Serratia sp.</i> V4. Journal of the American Chemical Society, 2012, 134, 13550-13553.	6.6	48

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91	Catecholate Siderophores Protect Bacteria from Pyochelin Toxicity. PLoS ONE, 2012, 7, e46754.	1.1	113
92	Kinetics of Radical Intermediate Formation and Deoxynucleotide Production in 3-Aminotyrosine-Substituted <i>Escherichia coli</i> Ribonucleotide Reductases. Journal of the American Chemical Society, 2011, 133, 9430-9440.	6.6	62
93	Use of 2,3,5-F₃Y-Î²2 and 3-NH₂Y-Î±2 To Study Proton-Coupled Electron Transfer in <i>Escherichia coli</i> Ribonucleotide Reductase. Biochemistry, 2011, 50, 1403-1411.	1.2	11
94	Sources of Diversity in Bactobolin Biosynthesis by <i>Burkholderia thailandensis</i> E264. Organic Letters, 2011, 13, 3048-3051.	2.4	42
95	Structure and Biosynthesis of Amychelin, an Unusual Mixed-Ligand Siderophore from <i>Amycolatopsis sp.</i> AA4. Journal of the American Chemical Society, 2011, 133, 11434-11437.	6.6	103
96	Roseobacticides: Small Molecule Modulators of an Algal-Bacterial Symbiosis. Journal of the American Chemical Society, 2011, 133, 18343-18349.	6.6	125
97	The Jekyll-and-Hyde chemistry of Phaeobacter gallaeciensis. Nature Chemistry, 2011, 3, 331-335.	6.6	392
98	Quorum-Sensing-Regulated Bactobolin Production by <i>Burkholderia thailandensis</i> E264. Organic Letters, 2010, 12, 716-719.	2.4	114
99	Use of 3-Aminotyrosine To Examine the Pathway Dependence of Radical Propagation in <i>Escherichia coli</i> Ribonucleotide Reductase. Biochemistry, 2009, 48, 12125-12132.	1.2	21
100	Chapter 3 Replacement of Y730 and Y731 in the Î±2 Subunit of Escherichia coli Ribonucleotide Reductase with 3â€Aminotyrosine using an Evolved Suppressor tRNA/tRNAâ€Synthetase Pair. Methods in Enzymology, 2009, 462, 45-76.	0.4	10
101	Structural Examination of the Transient 3-Aminotyrosyl Radical on the PCET Pathway of <i>E. coli</i> Ribonucleotide Reductase by Multifrequency EPR Spectroscopy. Journal of the American Chemical Society, 2009, 131, 15729-15738.	6.6	25
102	Forward and Reverse Electron Transfer with the Y356DOPA-Î²2 Heterodimer ofE. coliRibonucleotide Reductase. Journal of the American Chemical Society, 2007, 129, 2226-2227.	6.6	35
103	Photoactive Peptides for Light-Initiated Tyrosyl Radical Generation and Transport into Ribonucleotide Reductase. Journal of the American Chemical Society, 2007, 129, 8500-8509.	6.6	44
104	PELDOR Spectroscopy with DOPA-Î²2 and NH₂Y-Î±2s:â€‰ Distance Measurements between Residues Involved in the Radical Propagation Pathway of <i>E. coli</i> Ribonucleotide Reductase. Journal of the American Chemical Society, 2007, 129, 15748-15749.	6.6	68
105	Site-Specific Insertion of 3-Aminotyrosine into Subunit Î±2 of <i>E. coli</i> Ribonucleotide Reductase:â€‰ Direct Evidence for Involvement of Y₇₃₀ and Y₇₃₁ in Radical Propagation. Journal of the American Chemical Society, 2007, 129, 15060-15071.	6.6	129
106	Direct Observation of a Transient Tyrosine Radical Competent for Initiating Turnover in a Photochemical Ribonucleotide Reductase. Journal of the American Chemical Society, 2007, 129, 13828-13830.	6.6	50
107	Site-specific incorporation of fluorotyrosines into the R2 subunit of E. coli ribonucleotide reductase by expressed protein ligation. Nature Protocols, 2007, 2, 1225-1235.	5.5	56
108	Mono-, Di-, Tri-, and Tetra-Substituted Fluorotyrosines:Â New Probes for Enzymes That Use Tyrosyl Radicals in Catalysisâ€. Journal of the American Chemical Society, 2006, 128, 1569-1579.	6.6	126

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109	pH Rate Profiles of FnY356â^'R2s (n= 2, 3, 4) inEscherichiacoliRibonucleotide Reductase:Â Evidence that Y356Is a Redox-Active Amino Acid along the Radical Propagation Pathway. Journal of the American Chemical Society, 2006, 128, 1562-1568.	6.6	114
110	Site-Specific Replacement of Y356with 3,4-Dihydroxyphenylalanine in the Î²2 Subunit ofE.coliRibonucleotide Reductase. Journal of the American Chemical Society, 2006, 128, 2522-2523.	6.6	84
111	Electron Transfer Reactions of Fluorotyrosyl Radicals. Journal of the American Chemical Society, 2006, 128, 13654-13655.	6.6	49
112	Generation of the R2 Subunit of Ribonucleotide Reductase by Intein Chemistry:Â Insertion of 3-Nitrotyrosine at Residue 356 as a Probe of the Radical Initiation Processâ€. Biochemistry, 2003, 42, 14541-14552.	1.2	79
113	On the Structure of Thailandene A: Synthetic Examination of the Cryptic Natural Product Aided by a Theoretical Approach. Synthesis, 0, 54, .	1.2	0
114	Induction of Diverse Cryptic Fungal Metabolites by Steroids and Channel Blockers. Angewandte Chemie, 0, , .	1.6	0