Mohamed A Marahiel

List of Publications by Year
in descending order

238 papers	26,781 citations	4960 84 h-index	6996 154 g-index
252 all docs	252 docs citations	252 times ranked	15358 citing authors

#	Article	IF	Citations
1	Ribosomally synthesized and post-translationally modified peptide natural products: overview and recommendations for a universal nomenclature. Natural Product Reports, 2013, 30, 108-160.	10.3	1,692
2	Siderophore-Based Iron Acquisition and Pathogen Control. Microbiology and Molecular Biology Reviews, 2007, 71, 413-451.	6.6	1,342
3	The specificity-conferring code of adenylation domains in nonribosomal peptide synthetases. Chemistry and Biology, 1999, 6, 493-505.	6.0	1,096
4	Modular Peptide Synthetases Involved in Nonribosomal Peptide Synthesis. Chemical Reviews, 1997, 97, 2651-2674.	47.7	1,035
5	Biosynthesis of Nonribosomal Peptides. Annual Review of Microbiology, 2004, 58, 453-488.	7.3	775
6	A new enzyme superfamily â€" the phosphopantetheinyl transferases. Chemistry and Biology, 1996, 3, 923-936.	6.0	746
7	Molecular Mechanisms Underlying Nonribosomal Peptide Synthesis:â€‰ Approaches to New Antibiotics. Chemical Reviews, 2005, 105, 715-738.	47.7	523
8	Nonribosomal peptides: from genes to products. Natural Product Reports, 2003, 20, 275.	10.3	503
9	A superfamily of proteins that contain the cold-shock domain. Trends in Biochemical Sciences, 1998, 23, 286-290.	7.5	402
10	Nonribosomal peptide synthetases: structures and dynamics. Current Opinion in Structural Biology, 2010, 20, 234-240.	5.7	366
11	Universal nucleic acid-binding domain revealed by crystal structure of the B. subtilis major cold-shock protein. Nature, 1993, 364, 164-168.	27.8	357
12	The dhb Operon of Bacillus subtilisEncodes the Biosynthetic Template for the Catecholic Siderophore 2,3-Dihydroxybenzoate-Glycine-Threonine Trimeric Ester Bacillibactin. Journal of Biological Chemistry, 2001, 276, 7209-7217.	3.4	318
13	Peptide cyclization catalysed by the thioesterase domain of tyrocidine synthetase. Nature, 2000, 407, 215-218.	27.8	311
14	Ways of Assembling Complex Natural Products on Modular Nonribosomal Peptide Synthetases A list of abbreviations can be found at the end of the text.. ChemBioChem, 2002, 3, 490.	2.6	311
15	Crystal Structure of the Termination Module of a Nonribosomal Peptide Synthetase. Science, 2008, 321, 659-663.	12.6	311
16	Peptide Bond Formation in Nonribosomal Peptide Biosynthesis. Journal of Biological Chemistry, 1998, 273, 22773-22781.	3.4	293
17	Lasso Peptides: An Intriguing Class of Bacterial Natural Products. Accounts of Chemical Research, 2015, 48, 1909-1919.	15.6	290
18	Dissection of the Mechanism for the Stringent Factor RelA. Molecular Cell, 2002, 10, 779-788.	9.7	275

#	Article	IF	Citations
19	Extremely rapid protein folding in the absence of intermediates. Nature Structural Biology, 1995, 2, 663-673.	9.7	264
20	Conservation of rapid two-state folding in mesophilic, thermophilic and hyperthermophilic cold shock proteins. Nature Structural Biology, 1998, 5, 229-235.	9.7	263
21	Crystal structure of DhbE, an archetype for aryl acid activating domains of modular nonribosomal peptide synthetases. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 12120-12125.	7.1	254
22	A family of cold shock proteins in Bacillus subtilis is essential for cellular growth and for efficient protein synthesis at optimal and low temperatures. Molecular Microbiology, 1997, 25, 741-756.	2.5	228
23	Isolation and Structural Characterization of Capistruin, a Lasso Peptide Predicted from the Genome Sequence of Burkholderia thailandensis E264. Journal of the American Chemical Society, 2008, 130, 11446-11454.	13.7	220
24	The bacitracin biosynthesis operon of Bacillus licheniformis ATCC 10716: molecular characterization of three multi-modular peptide synthetases. Chemistry and Biology, 1997, 4, 927-937.	6.0	215
25	Modular structure of genes encoding multifunctional peptide synthetases required for non-ribosomal peptide synthesis. FEMS Microbiology Letters, 1995, 125, 3-14.	1.8	211
26	How do peptide synthetases generate structural diversity?. Chemistry and Biology, 1999, 6, R39-R48.	6.0	201
27	Structural Basis for the Cyclization of the Lipopeptide Antibiotic Surfactin by the Thioesterase Domain SrfTE. Structure, 2002, 10, 301-310.	3.3	200
28	Copper Stress Affects Iron Homeostasis by Destabilizing Iron-Sulfur Cluster Formation in Bacillus subtilis. Journal of Bacteriology, 2010, 192, 2512-2524.	2.2	200
29	Chemoenzymatic and Template-Directed Synthesis of Bioactive Macrocyclic Peptides. Microbiology and Molecular Biology Reviews, 2006, 70, 121-146.	6.6	199
30	Macrocyclization strategies in polyketide and nonribosomal peptide biosynthesis. Natural Product Reports, 2007, 24, 735.	10.3	197
31	Regeneration of misprimed nonribosomal peptide synthetases by type II thioesterases. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14083-14088.	7.1	187
32	Solution structure of PCP, a prototype for the peptidyl carrier domains of modular peptide synthetases. Structure, 2000, 8, 407-418.	3.3	176
33	Daptomycin, a Bacterial Lipopeptide Synthesized by a Nonribosomal Machinery. Journal of Biological Chemistry, 2010, 285, 27501-27508.	3.4	176
34	Bacterial Cold Shock Responses. Science Progress, 2003, 86, 9-75.	1.9	171
35	Cold Shock Response of Bacillus subtilis : Isoleucine-Dependent Switch in the Fatty Acid Branching Pattern for Membrane Adaptation to Low Temperatures. Journal of Bacteriology, 1999, 181, 5341-5349.	2.2	170
36	The radical SAM enzyme AlbA catalyzes thioether bond formation in subtilosin A. Nature Chemical Biology, 2012, 8, 350-357.	8.0	166

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37	Modular Structure of Peptide Synthetases Revealed by Dissection of the Multifunctional Enzyme GrsA. Journal of Biological Chemistry, 1995, 270, 6163-6169.	3.4	162
38	4â€²-Phosphopantetheine Transfer in Primary and Secondary Metabolism of Bacillus subtilis. Journal of Biological Chemistry, 2001, 276, 37289-37298.	3.4	161
39	Ferriâ€bacillibactin uptake and hydrolysis in Bacillus subtilis. Molecular Microbiology, 2006, 61, 1413-1427.	2.5	160
40	Cloning and characterization of a relA/spoT homologue from Bacillus subtilis. Molecular Microbiology, 1997, 26, 65-79.	2.5	152
41	Structural and Functional Insights into a Peptide Bond-Forming Bidomain from a Nonribosomal Peptide Synthetase. Structure, 2007, 15, 781-792.	3.3	152
42	Generality of Peptide Cyclization Catalyzed by Isolated Thioesterase Domains of Nonribosomal Peptide Synthetasesâ€. Biochemistry, 2001, 40, 7099-7108.	2.5	151
43	Exploitation of the Selectivity-Conferring Code of Nonribosomal Peptide Synthetases for the Rational Design of Novel Peptide Antibioticsâ€. Biochemistry, 2002, 41, 9718-9726.	2.5	150
44	Conformational Switches Modulate Protein Interactions in Peptide Antibiotic Synthetases. Science, 2006, 312, 273-276.	12.6	149
45	A biosynthetic gene cluster for a secreted cellobiose lipid with antifungal activity from Ustilago maydis. Molecular Microbiology, 2007, 66, 525-533.	2.5	148
46	Identification of a Gene Cluster for Biosynthesis of Mannosylerythritol Lipids in the Basidiomycetous Fungus Ustilago maydis. Applied and Environmental Microbiology, 2006, 72, 5469-5477.	3.1	145
47	Cloning and characterization of the biosynthetic gene cluster for kutznerides. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 16498-16503.	7.1	144
48	Mutational analysis of the putative nucleic acid-binding surface of the cold-shock domain, CspB, revealed an essential role of aromatic and basic residues in binding of single-stranded DNA containing the Y-box motif. Molecular Microbiology, 1995, 16, 699-708.	2.5	132
49	Molecular and Biochemical Characterization of the Protein Template Controlling Biosynthesis of the Lipopeptide Lichenysin. Journal of Bacteriology, 1999, 181, 133-140.	2.2	131
50	Ebony, a Novel Nonribosomal Peptide Synthetase for Î²-Alanine Conjugation with Biogenic Amines in Drosophila. Journal of Biological Chemistry, 2003, 278, 41160-41166.	3.4	123
51	Biochemical characterization of peptidyl carrier protein (PCP), the thiolation domain of multifunctional peptide synthetases. Chemistry and Biology, 1996, 3, 913-921.	6.0	122
52	Control of Directionality in Nonribosomal Peptide Synthesis:Â Role of the Condensation Domain in Preventing Misinitiation and Timing of Epimerizationâ€. Biochemistry, 2000, 39, 10439-10447.	2.5	119
53	Working outside the proteinâ€synthesis rules: insights into nonâ€ribosomal peptide synthesis. Journal of Peptide Science, 2009, 15, 799-807.	1.4	119
54	Synthesis and Derivatization of Daptomycin:ÂÂA Chemoenzymatic Route to Acidic Lipopeptide Antibiotics. Journal of the American Chemical Society, 2004, 126, 17025-17031.	13.7	118

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55	Insights into the Biosynthesis and Stability of the Lasso Peptide Capistruin. Chemistry and Biology, 2009, 16, 1290-1298.	6.0	118
56	Crystal Structure of DltA. Journal of Biological Chemistry, 2008, 283, 32484-32491.	3.4	117
57	Protein templates for the biosynthesis of peptide antibiotics. Chemistry and Biology, 1997, 4, 561-567.	6.0	116
58	Cold-Induced Putative DEAD Box RNA Helicases CshA and CshB Are Essential for Cold Adaptation and Interact with Cold Shock Protein B in Bacillus subtilis. Journal of Bacteriology, 2006, 188, 240-248.	2.2	114
59	Genomewide Transcriptional Analysis of the Cold Shock Response in Bacillus subtilis. Journal of Bacteriology, 2002, 184, 6395-6402.	2.2	113
60	The Structural Diversity of Acidic Lipopeptide Antibiotics. ChemBioChem, 2009, 10, 607-616.	2.6	113
61	Functional Dissection of Surfactin Synthetase Initiation Module Reveals Insights into the Mechanism of Lipoinitiation. Chemistry and Biology, 2010, 17, 872-880.	6.0	113
62	Structural basis for the selectivity of the external thioesterase of the surfactin synthetase. Nature, 2008, 454, 907-911.	27.8	112
63	Lasso peptides from proteobacteria: Genome mining employing heterologous expression and mass spectrometry. Biopolymers, 2013, 100, 527-542.	2.4	111
64	Catalytic mechanism and allosteric regulation of an oligomeric (p)ppGpp synthetase by an alarmone. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13348-13353.	7.1	111
65	The Thioesterase Domain of the Fengycin Biosynthesis Cluster: A Structural Base for the Macrocyclization of a Non-ribosomal Lipopeptide. Journal of Molecular Biology, 2006, 359, 876-889.	4.2	110
66	A structural model for multimodular NRPS assembly lines. Natural Product Reports, 2016, 33, 136-140.	10.3	110
67	Multimodular biocatalysts for natural product assembly. Die Naturwissenschaften, 2001, 88, 93-101.	1.6	108
68	Introducing Lasso Peptides as Molecular Scaffolds for Drug Design: Engineering of an Integrin Antagonist. Angewandte Chemie - International Edition, 2011, 50, 8714-8717.	13.8	108
69	Mechanistic and Structural Basis of Stereospecific Cî²-Hydroxylation in Calcium-Dependent Antibiotic, a Daptomycin-Type Lipopeptide. ACS Chemical Biology, 2007, 2, 187-196.	3.4	107
70	Dissecting the Maturation Steps of the Lasso Peptide Microcin J25 in vitro. ChemBioChem, 2012, 13, 1046-1052.	2.6	106
71	Mutational analysis of the C-domain in nonribosomal peptide synthesis. FEBS Journal, 2002, 269, 620-629.	0.2	105
72	Learning from Nature's Drug Factories: Nonribosomal Synthesisof MacrocyclicPeptides. Journal of Bacteriology, 2003, 185, 7036-7043.	2.2	103

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73	Complete nucleotide sequence of the tycA gene coding the tyrocidine synthetase 1 fromBacillus brevis. Nucleic Acids Research, 1988, 16, 11841-11841.	14.5	102
74	Characterization of the Surfactin Synthetase C-Terminal Thioesterase Domain as a Cyclic Depsipeptide Synthaseâ€. Biochemistry, 2002, 41, 13350-13359.	2.5	102
75	Multidomain enzymes involved in peptide synthesis. FEBS Letters, 1992, 307, 40-43.	2.8	100
76	Role of the Bacillus subtilis fatty acid desaturase in membrane adaptation during cold shock. Molecular Microbiology, 2004, 39, 1321-1329.	2.5	100
77	Insights into the Unique Phosphorylation of the Lasso Peptide Paeninodin. Journal of Biological Chemistry, 2016, 291, 13662-13678.	3.4	100
78	Caulosegnins Iâ€“III: A Highly Diverse Group of Lasso Peptides Derived from a Single Biosynthetic Gene Cluster. Journal of the American Chemical Society, 2013, 135, 210-222.	13.7	99
79	Exploring the Domain Structure of Modular Nonribosomal Peptide Synthetases. Structure, 2001, 9, R3-R9.	3.3	98
80	Inhibition of the D-alanine:D-alanyl carrier protein ligase from Bacillus subtilis increases the bacterium's susceptibility to antibiotics that target the cell wall. FEBS Journal, 2005, 272, 2993-3003.	4.7	93
81	The Linear Pentadecapeptide Gramicidin Is Assembled by Four Multimodular Nonribosomal Peptide Synthetases That Comprise 16 Modules with 56 Catalytic Domains. Journal of Biological Chemistry, 2004, 279, 7413-7419.	3.4	92
82	Portability of Epimerization Domain and Role of Peptidyl Carrier Protein on Epimerization Activity in Nonribosomal Peptide Synthetases. Biochemistry, 2001, 40, 15824-15834.	2.5	91
83	Dipeptide formation on engineered hybrid peptide synthetases. Chemistry and Biology, 2000, 7, 373-384.	6.0	90
84	Two [4Fe-4S] Clusters Containing Radical SAM Enzyme SkfB Catalyze Thioether Bond Formation during the Maturation of the Sporulation Killing Factor. Journal of the American Chemical Society, 2013, 135, 959-962.	13.7	89
85	Characterization of a New Type of Phosphopantetheinyl Transferase for Fatty Acid and Siderophore Synthesis in Pseudomonas aeruginosa. Journal of Biological Chemistry, 2002, 277, 50293-50302.	3.4	88
86	Copper Acquisition Is Mediated by YcnJ and Regulated by YcnK and CsoR in Bacillus subtilis. Journal of Bacteriology, 2009, 191, 2362-2370.	2.2	88
87	Engineered Biosynthesis of the Peptide Antibiotic Bacitracin in the Surrogate Host Bacillus subtilis. Journal of Biological Chemistry, 2001, 276, 34824-34831.	3.4	86
88	Inhibition of aryl acid adenylation domains involved in bacterial siderophore synthesis. FEBS Journal, 2006, 273, 409-419.	4.7	84
89	The Bacillus subtilis EfeUOB transporter is essential for high-affinity acquisition of ferrous and ferric iron. Biochimica Et Biophysica Acta - Molecular Cell Research, 2013, 1833, 2267-2278.	4.1	84
90	Chirality of Peptide Bond-Forming Condensation Domains in Nonribosomal Peptide Synthetases:Â The C5Domain of Tyrocidine Synthetase Is aDCLCatalystâ€. Biochemistry, 2003, 42, 12095-12104.	2.5	83

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91	SufU Is an Essential Iron-Sulfur Cluster Scaffold Protein in Bacillus subtilis. Journal of Bacteriology, 2010, 192, 1643-1651.	2.2	83
92	The Antibacterial Threaded-lasso Peptide Capistruin Inhibits Bacterial RNA Polymerase. Journal of Molecular Biology, 2011, 412, 842-848.	4.2	82
93	The Iterative Gramicidin S Thioesterase Catalyzes Peptide Ligation and Cyclization. Chemistry and Biology, 2007, 14, 13-22.	6.0	81
94	The Astexin-1 Lasso Peptides: Biosynthesis, Stability, and Structural Studies. Chemistry and Biology, 2013, 20, 558-569.	6.0	79
95	Radical S-adenosylmethionine enzyme catalyzed thioether bond formation in sactipeptide biosynthesis. Current Opinion in Chemical Biology, 2013, 17, 605-612.	6.1	78
96	Recognition of Hybrid Peptidyl Carrier Proteins/Acyl Carrier Proteins in Nonribosomal Peptide Synthetase Modules by the 4â€²-Phophopantetheinyl Transferases AcpS and Sfp. Journal of Biological Chemistry, 2002, 277, 17023-17031.	3.4	76
97	Decreasing the Ring Size of a Cyclic Nonribosomal Peptide Antibiotic by In-Frame Module Deletion in the Biosynthetic Genes. Journal of the American Chemical Society, 2002, 124, 10980-10981.	13.7	76
98	The major cold shock protein of Bacillus subtilis CspB binds with high affinity to the ATTGG- and CCAAT sequences in single stranded oligonucleotides. FEBS Letters, 1994, 338, 157-160.	2.8	75
99	Stereospecific Enzymatic Transformation of Î±-Ketoglutarate to (2S,3R)-3-Methyl Glutamate during Acidic Lipopeptide Biosynthesis. Journal of the American Chemical Society, 2007, 129, 12011-12018.	13.7	75
100	Structural and mutational analysis of the nonribosomal peptide synthetase heterocyclization domain provides insight into catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 95-100.	7.1	75
101	Timing of Epimerization and Condensation Reactions in Nonribosomal Peptide Assembly Lines:Â Kinetic Analysis of Phenylalanine Activating Elongation Modules of Tyrocidine Synthetase Bâ€. Biochemistry, 2002, 41, 9184-9196.	2.5	74
102	Xanthomoninsâ€…Iâ€“III: A New Class of Lasso Peptides with a Sevenâ€Residue Macrolactam Ring. Angewandte Chemie - International Edition, 2014, 53, 2230-2234.	13.8	72
103	Peptide Macrocyclization:Â The Reductase of the Nostocyclopeptide Synthetase Triggers the Self-Assembly of a Macrocyclic Imine. Journal of the American Chemical Society, 2006, 128, 16478-16479.	13.7	70
104	The glucagon receptor antagonist BIâ€32169 constitutes a new class of lasso peptides. FEBS Letters, 2010, 584, 785-789.	2.8	70
105	The Siderophore-Interacting Protein YqjH Acts as a Ferric Reductase in Different Iron Assimilation Pathways of Escherichia coli. Biochemistry, 2011, 50, 10951-10964.	2.5	70
106	Biosynthetic systems for nonribosomal peptide antibiotic assembly. Current Opinion in Chemical Biology, 1997, 1, 543-551.	6.1	69
107	Stereospecific Synthesis of threo- and erythro-Î²-Hydroxyglutamic Acid During Kutzneride Biosynthesis. Journal of the American Chemical Society, 2009, 131, 13523-13530.	13.7	68
108	Elucidation of the complete ferrichrome A biosynthetic pathway in Ustilago maydis. Molecular Microbiology, 2010, 75, 1260-1271.	2.5	68

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109	Identification and Characterization of the Lysobactin Biosynthetic Gene Cluster Reveals Mechanistic Insights into an Unusual Termination Module Architecture. Chemistry and Biology, 2011, 18, 655-664.	6.0	68
110	The tRNA-Dependent Biosynthesis of Modified Cyclic Dipeptides. International Journal of Molecular Sciences, 2014, 15, 14610-14631.	4.1	68
111	Rational Improvement of the Affinity and Selectivity of Integrin Binding of Grafted Lasso Peptides. Journal of Medicinal Chemistry, 2014, 57, 5829-5834.	6.4	68
112	A tRNA-Dependent Two-Enzyme Pathway for the Generation of Singly and Doubly Methylated Ditryptophan 2,5-Diketopiperazines. Biochemistry, 2013, 52, 4274-4283.	2.5	67
113	Rational and combinatorial tailoring of bioactive cyclic dipeptides. Frontiers in Microbiology, 2015, 6, 785.	3.5	67
114	Biosynthesis of Natural Products on Modular Peptide Synthetases. Metabolic Engineering, 2001, 3, 64-77.	7.0	66
115	Aminoacyl Adenylate Substrate Analogues for the Inhibition of Adenylation Domains of Nonribosomal Peptide Synthetases. ChemBioChem, 2003, 4, 903-906.	2.6	66
116	Loading Peptidyl-Coenzyme A onto Peptidyl Carrier Proteins: A Novel Approach in Characterizing Macrocyclization by Thioesterase Domains. Journal of the American Chemical Society, 2003, 125, 10862-10866.	13.7	66
117	Role of DptE and DptF in the lipidation reaction of daptomycin. FEBS Journal, 2008, 275, 5343-5354.	4.7	66
118	The Family of Cold Shock Proteins of Bacillus subtilis. Journal of Biological Chemistry, 1999, 274, 3407-3413.	3.4	65
119	Interaction of AbrB, a transcriptional regulator from Bacillus subtilis with the promoters of the transition state-activated genes tycA and spoVG. Molecular Genetics and Genomics, 1991, 225, 347-354.	2.4	64
120	Cyclophilin and Trigger Factor from Bacillus subtilis Catalyze in Vitro Protein Folding and Are Necessary for Viability under Starvation Conditions. Biochemistry, 1998, 37, 13392-13399.	2.5	64
121	Structural basis for the erythroâ€stereospecificity of the <scp>l</scp>â€arginine oxygenase VioC in viomycin biosynthesis. FEBS Journal, 2009, 276, 3669-3682.	4.7	64
122	Design and application of multimodular peptide synthetases. Current Opinion in Biotechnology, 1999, 10, 341-348.	6.6	63
123	Structure-Based Mutational Analysis of the 4â€˜-Phosphopantetheinyl Transferases Sfp from Bacillus subtilis:â€‰ Carrier Protein Recognition and Reaction Mechanism,. Biochemistry, 2004, 43, 4128-4136.	2.5	62
124	Insights into the Generation of Structural Diversity in a tRNA-Dependent Pathway for Highly Modified Bioactive Cyclic Dipeptides. Chemistry and Biology, 2013, 20, 828-838.	6.0	62
125	Biological Role of Gramicidin S in Spore Functions. Studies on Gramicidin-S-Negative Mutants of Bacillus brevis ATCC9999. FEBS Journal, 1979, 99, 49-55.	0.2	61
126	Engineered biosynthesis of peptide antibiotics. Biochemical Pharmacology, 1996, 52, 177-186.	4.4	61

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127	Enterobacter bugandensis: a novel enterobacterial species associated with severe clinical infection. Scientific Reports, 2018, 8, 5392.	3.3	61
128	Functional characterization of 4Ã¢Â€Â²-phosphopantetheinyl transferase genes of bacterial and fungal origin by complementation ofSaccharomyces cerevisiae lys5. FEMS Microbiology Letters, 2002, 213, 51-57.	1.8	60
129	The PqqD homologous domain of the radical SAM enzyme ThnB is required for thioether bond formation during thurincin H maturation. FEBS Letters, 2015, 589, 1802-1806.	2.8	60
130	Peptidyl Thiophenols as Substrates for Nonribosomal Peptide Cyclases. Angewandte Chemie - International Edition, 2004, 43, 493-498.	13.8	57
131	The Siderophore Binding Protein FeuA Shows Limited Promiscuity toward Exogenous Triscatecholates. Chemistry and Biology, 2011, 18, 907-919.	6.0	57
132	Cold shock proteins CspB and CspC are major stationary-phase-induced proteins in Bacillus subtilis. Archives of Microbiology, 1999, 171, 135-138.	2.2	55
133	Coping with the cold: the cold shock response in the Gram-positive soil bacterium Bacillus subtilis. Philosophical Transactions of the Royal Society B: Biological Sciences, 2002, 357, 895-907.	4.0	55
134	Rational Design of a Bimodular Model System for the Investigation of Heterocyclization in Nonribosomal Peptide Biosynthesis. Chemistry and Biology, 2004, 11, 261-271.	6.0	55
135	Where chemistry meets biology: the chemoenzymatic synthesis of nonribosomal peptides and polyketides. Current Opinion in Biotechnology, 2007, 18, 513-520.	6.6	55
136	Biosynthesis of the Siderophore Rhodochelin Requires the Coordinated Expression of Three Independent Gene Clusters in Rhodococcus jostii RHA1. Journal of the American Chemical Society, 2011, 133, 4587-4595.	13.7	55
137	Chemo- and Regioselective Peptide Cyclization Triggered by the N-Terminal Fatty Acid Chain Length:Â The Recombinant Cyclase of the Calcium-Dependent Antibiotic fromStreptomyces coelicolorâ€. Biochemistry, 2004, 43, 2915-2925.	2.5	53
138	Surface-exposed phenylalanines in the RNP1/RNP2 motif stabilize the cold-shock protein CspB fromBacillus subtilis. , 1998, 30, 401-406.		52
139	Chemoenzymatic Design of Acidic Lipopeptide Hybrids:â€‰ New Insights into the Structureâ”Activity Relationship of Daptomycin and A54145. Biochemistry, 2006, 45, 10474-10481.	2.5	52
140	Isolation, Structure Elucidation, and Biosynthesis of an Unusual Hydroxamic Acid Ester-Containing Siderophore from Actinosynnema mirum. Journal of Natural Products, 2012, 75, 905-914.	3.0	52
141	Structural Characterization of the Heterobactin Siderophores from Rhodococcus erythropolis PR4 and Elucidation of Their Biosynthetic Machinery. Journal of Natural Products, 2013, 76, 2282-2290.	3.0	52
142	Tn10 insertional mutations of Bacillus subtilis that block the biosynthesis of bacilysin. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2001, 1518, 87-94.	2.4	51
143	The Major Facilitator Superfamily-Type Transporter YmfE and the Multidrug-Efflux Activator Mta Mediate Bacillibactin Secretion in Bacillus subtilis. Journal of Bacteriology, 2008, 190, 5143-5152.	2.2	51
144	Structural Basis and Stereochemistry of Triscatecholate Siderophore Binding by FeuA. Angewandte Chemie - International Edition, 2009, 48, 7924-7927.	13.8	51

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145	Erythrochelin â€“ a hydroxamateâ€type siderophore predicted from the genome of Saccharopolysporaâ€ferythraea. FEBS Journal, 2010, 277, 663-676.	4.7	50
146	Ribosomeâ€independent biosynthesis of biologically active peptides: Application of synthetic biology to generate structural diversity. FEBS Letters, 2012, 586, 2065-2075.	2.8	50
147	The two-component regulatory system BacRS is associated with bacitracin â€˜self-resistanceâ€™ ofBacillus licheniformisATCC 10716. FEBS Journal, 2001, 268, 3180-3189.	0.2	48
148	Ion Mobilityâ€“Mass Spectrometry of Lasso Peptides: Signature of a Rotaxane Topology. Analytical Chemistry, 2015, 87, 1166-1172.	6.5	48
149	The B1 Protein Guides the Biosynthesis of a Lasso Peptide. Scientific Reports, 2016, 6, 35604.	3.3	48
150	Cloning of the tyrocidine synthetase 1 gene from Bacillus brevis and its expression in Escherichia coli. Molecular Genetics and Genomics, 1985, 201, 231-236.	2.4	47
151	Exploring the impact of different thioesterase domains for the design of hybrid peptide synthetases. Chemistry and Biology, 2001, 8, 997-1010.	6.0	47
152	Complementation of Cold Shock Proteins by Translation Initiation Factor IF1 In Vivo. Journal of Bacteriology, 2001, 183, 7381-7386.	2.2	46
153	Formylation Domain:Â An Essential Modifying Enzyme for the Nonribosomal Biosynthesis of Linear Gramicidin. Journal of the American Chemical Society, 2006, 128, 7406-7407.	13.7	46
154	Overproduction, crystallization, and preliminary Xâ€ray diffraction studies of the major cold shock protein from Bacillus subtilis, CspB. Proteins: Structure, Function and Bioinformatics, 1992, 14, 120-124.	2.6	45
155	Construction of hybrid peptide synthetases for the production of alpha-l-aspartyl-l-phenylalanine, a precursor for the high-intensity sweetener aspartame. FEBS Journal, 2003, 270, 4555-4563.	0.2	45
156	Peptide Antibiotics. , 2014, , 897-916.		45
157	Reactions Catalyzed by Mature and Recombinant Nonribosomal Peptide Synthetases. Methods in Enzymology, 2004, 388, 293-315.	1.0	44
158	Crosslinking Studies of Protein-Protein Interactions in Nonribosomal Peptide Biosynthesis. Chemistry and Biology, 2009, 16, 372-381.	6.0	42
159	Evidence for a Monomeric Structure of Nonribosomal Peptide Synthetases. Chemistry and Biology, 2002, 9, 997-1008.	6.0	41
160	Characterization of caulonodin lasso peptides revealed unprecedented N-terminal residues and a precursor motif essential for peptide maturation. Chemical Science, 2014, 5, 4032-4043.	7.4	40
161	Effect of pH and phosphate ions on selfâ€association properties of the major coldâ€shock protein from Bacillus subtilis. Protein Science, 1994, 3, 2144-2147.	7.6	39
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