Linquan Bai

List of Publications by Year
in descending order

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70	1,593	361413	330143
papers	citations	20 h-index	37 g-index

71	71	71	1449
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The biosynthetic gene cluster of the maytansinoid antitumor agent ansamitocin from Actinosynnema pretiosum. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 7968-7973.	7.1	270
2	Biosynthesis of 3,5-AHBA-derived natural products. Natural Product Reports, 2012, 29, 243-263.	10.3	104
3	Enhanced salinomycin production by adjusting the supply of polyketide extender units in Streptomyces albus. Metabolic Engineering, 2016, 35, 129-137.	7.0	72
4	Overexpression of the ABC transporter AvtAB increases avermectin production in Streptomyces avermitilis. Applied Microbiology and Biotechnology, 2011, 92, 337-345.	3.6	65
5	Cloning and Characterization of the Polyether Salinomycin Biosynthesis Gene Cluster of Streptomyces albus XM211. Applied and Environmental Microbiology, 2012, 78, 994-1003.	3.1	61
6	Engineering validamycin production by tandem deletion of Î³-butyrolactone receptor genes in Streptomyces hygroscopicus 5008. Metabolic Engineering, 2015, 28, 74-81.	7.0	54
7	Two pHZ1358 Derivative Vectors for Efficient Gene Knockout in Streptomyces. Journal of Microbiology and Biotechnology, 2010, 20, 678-682.	2.1	50
8	Exogenous 1,4â€butyrolactone stimulates Aâ€factorâ€like cascade and validamycin biosynthesis in Streptomyces hygroscopicus 5008. Biotechnology and Bioengineering, 2013, 110, 2984-2993.	3.3	45
9	Theoretical Studies on the Catalytic Mechanism and Substrate Diversity for Macrocyclization of Pikromycin Thioesterase. ACS Catalysis, 2018, 8, 4323-4332.	11.2	42
10	Genome engineering for microbial natural product discovery. Current Opinion in Microbiology, 2018, 45, 53-60.	5.1	36
11	Reconstitution of Kinamycin Biosynthesis within the Heterologous Host Streptomyces albus J1074. Journal of Natural Products, 2018, 81, 72-77.	3.0	35
12	ValC, a New Type of C7-Cyclitol Kinase Involved in the Biosynthesis of the Antifungal Agent Validamycin A. ChemBioChem, 2007, 8, 632-641.	2.6	33
13	Enhancement of antibiotic productions by engineered nitrate utilization in actinomycetes. Applied Microbiology and Biotechnology, 2017, 101, 5341-5352.	3.6	33
14	Theoretical Studies on the Mechanism of Thioesterase-Catalyzed Macrocyclization in Erythromycin Biosynthesis. ACS Catalysis, 2016, 6, 4369-4378.	11.2	32
15	Positive and negative regulation of GlnR in validamycin A biosynthesis by binding to different loci in promoter region. Applied Microbiology and Biotechnology, 2015, 99, 4771-4783.	3.6	30
16	Amide N-Glycosylation by Asm25, an N-Glycosyltransferase of Ansamitocins. Chemistry and Biology, 2008, 15, 863-874.	6.0	29
17	Alternative Epimerization in C7N-Aminocyclitol Biosynthesis Is Catalyzed by ValD, A Large Protein of the Vicinal Oxygen Chelate Superfamily. Chemistry and Biology, 2009, 16, 567-576.	6.0	25
18	Formation of the Î”^{18,19} Double Bond and Bis(spiroacetal) in Salinomycin Is Atypically Catalyzed by SlnM, a Methyltransferaseâ€like Enzyme. Angewandte Chemie - International Edition, 2015, 54, 9097-9100.	13.8	24

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19	Mechanistic Investigation on ROS Resistance of Phosphorothioated DNA. Scientific Reports, 2017, 7, 42823.	3.3	24
20	Identification and Engineering of Postâ€PKS Modification Bottlenecks for Ansamitocin Pâ€3 Titer Improvement in Actinosynnema pretiosum subsp. pretiosum ATCC 31280. Biotechnology Journal, 2017, 12, 1700484.	3.5	24
21	Activating cryptic biosynthetic gene cluster through a CRISPRâ€“Cas12a-mediated direct cloning approach. Nucleic Acids Research, 2022, 50, 3581-3592.	14.5	23
22	Overexpression of yeast S-adenosylmethionine synthetase metK in Streptomyces actuosus leads to increased production of nosiheptide. Applied Microbiology and Biotechnology, 2008, 78, 991-995.	3.6	20
23	Genetically engineered production of 1,1â€²-bis-valienamine and validienamycin in Streptomyces hygroscopicus and their conversion to valienamine. Applied Microbiology and Biotechnology, 2009, 81, 895-902.	3.6	20
24	Engineered biosynthesis of pimaricin derivatives with improved antifungal activity and reduced cytotoxicity. Applied Microbiology and Biotechnology, 2015, 99, 6745-6752.	3.6	20
25	Inactivation of the positive LuxR-type oligomycin biosynthesis regulators OlmRI and OlmRII increases avermectin production in Streptomyces avermitilis. Science Bulletin, 2012, 57, 869-876.	1.7	18
26	Dual Carbamoylations on the Polyketide and Glycosyl Moiety by Asm21 Result in Extended Ansamitocin Biosynthesis. Chemistry and Biology, 2011, 18, 1571-1580.	6.0	17
27	Functional characterization of the first two actinomycete 4-amino-4-deoxychorismate lyase genes. Microbiology (United Kingdom), 2009, 155, 2450-2459.	1.8	16
28	Nâ€Methylation of the Amide Bond by Methyltransferase Asm10 in Ansamitocin Biosynthesis. ChemBioChem, 2011, 12, 1759-1766.	2.6	16
29	Conversion of the high-yield salinomycin producer Streptomyces albus BK3-25 into a surrogate host for polyketide production. Science China Life Sciences, 2017, 60, 1000-1009.	4.9	16
30	Asm8, a specific LAL-type activator of 3-amino-5-hydroxybenzoate biosynthesis in ansamitocin production. Science China Life Sciences, 2013, 56, 601-608.	4.9	15
31	In Silico Discovery of Aminoacyl-tRNA Synthetase Inhibitors. International Journal of Molecular Sciences, 2014, 15, 1358-1373.	4.1	15
32	A severe leakage of intermediates to shunt products in acarbose biosynthesis. Nature Communications, 2020, 11, 1468.	12.8	15
33	A cold shock protein promotes high-temperature microbial growth through binding to diverse RNA species. Cell Discovery, 2021, 7, 15.	6.7	15
34	Structural and Functional Analysis of Validoxylamine A 7â€²-phosphate Synthase ValL Involved in Validamycin A Biosynthesis. PLoS ONE, 2012, 7, e32033.	2.5	15
35	Effect of ammonium in medium on ansamitocin P-3 production by Actinosynnema pretiosum. Biotechnology and Bioprocess Engineering, 2010, 15, 119-125.	2.6	14
36	Enhancement of UDPG synthetic pathway improves ansamitocin production in Actinosynnem pretiosum. Applied Microbiology and Biotechnology, 2016, 100, 2651-2662.	3.6	14

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37	Improved PKS Gene Expression With Strong Endogenous Promoter Resulted in Geldanamycin Yield Increase. Biotechnology Journal, 2017, 12, 1700321.	3.5	14
38	Improving acarbose production and eliminating the by-product component C with an efficient genetic manipulation system of Actinoplanes sp. SE50/110. Synthetic and Systems Biotechnology, 2017, 2, 302-309.	3.7	14
39	Effects of modulation of pentose-phosphate pathway on biosynthesis of ansamitocins in Actinosynnema pretiosum. Journal of Biotechnology, 2016, 230, 3-10.	3.8	13
40	Comparative functional genomics of the acarbose producers reveals potential targets for metabolic engineering. Synthetic and Systems Biotechnology, 2019, 4, 49-56.	3.7	13
41	Mechanism of salinomycin overproduction in Streptomyces albus as revealed by comparative functional genomics. Applied Microbiology and Biotechnology, 2017, 101, 4635-4644.	3.6	12
42	Elimination of indigenous linear plasmids in Streptomyces hygroscopicus var. jinggangensis and Streptomyces sp. FR008 to increase validamycin A and candicidin productivities. Applied Microbiology and Biotechnology, 2017, 101, 4247-4257.	3.6	12
43	Structural Insights into the Substrate Specificity of Acyltransferases from Salinomycin Polyketide Synthase. Biochemistry, 2019, 58, 2978-2986.	2.5	12
44	Structural and Mechanistic Insights into Chain Release of the Polyene PKS Thioesterase Domain. ACS Catalysis, 2022, 12, 762-776.	11.2	11
45	Stereospecificity of Enoylreductase Domains from Modular Polyketide Synthases. ACS Chemical Biology, 2018, 13, 871-875.	3.4	10
46	Subtilisin-Involved Morphology Engineering for Improved Antibiotic Production in Actinomycetes. Biomolecules, 2020, 10, 851.	4.0	10
47	Identification and engineering of regulation-related genes toward improved kasugamycin production. Applied Microbiology and Biotechnology, 2016, 100, 1811-1821.	3.6	9
48	De Novo Biosynthesis of Î²-Valienamine in Engineered Streptomyces hygroscopicus 5008. ACS Synthetic Biology, 2016, 5, 15-20.	3.8	9
49	Structural and Biochemical Insight into the Recruitment of Acyl Carrier Proteinâ€Linked Extender Units in Ansamitocin Biosynthesis. ChemBioChem, 2020, 21, 1309-1314.	2.6	9
50	Generation of tetramycin B derivative with improved pharmacological property based on pathway engineering. Applied Microbiology and Biotechnology, 2020, 104, 2561-2573.	3.6	9
51	Why does tautomycetin thioesterase prefer hydrolysis to macrocyclization? Theoretical study on its catalytic mechanism. Catalysis Science and Technology, 2019, 9, 6391-6403.	4.1	8
52	Defense Mechanism of Phosphorothioated DNA under Peroxynitrite-Mediated Oxidative Stress. ACS Chemical Biology, 2020, 15, 2558-2567.	3.4	8
53	The Antitumor Agent Ansamitocin P-3 Binds to Cell Division Protein FtsZ in Actinosynnema pretiosum. Biomolecules, 2020, 10, 699.	4.0	8
54	Efflux identification and engineering for ansamitocin P-3 production in Actinosynnema pretiosum. Applied Microbiology and Biotechnology, 2021, 105, 695-706.	3.6	7

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55	Nonomuraea nitratireducens sp. nov., a new actinobacterium isolated from Suaeda australis Moq. rhizosphere. International Journal of Systematic and Evolutionary Microbiology, 2020, 70, 5026-5031.	1.7	7
56	Enhanced validamycin production and gene expression at elevated temperature in Streptomyces hygroscopicus subsp. jingangensis 5008. Science Bulletin, 2009, 54, 1204-1209.	9.0	6
57	Toward steadfast growth of antibiotic research in China: From natural products to engineered biosynthesis. Biotechnology Advances, 2012, 30, 1228-1241.	11.7	5
58	Directed accumulation of less toxic pimaricin derivatives by improving the efficiency of a polyketide synthase dehydratase domain. Applied Microbiology and Biotechnology, 2017, 101, 2427-2436.	3.6	5
59	Theoretical study on substrate recognition and catalytic mechanisms of gephyronic acid dehydratase DH1. Catalysis Science and Technology, 2021, 11, 2155-2166.	4.1	5
60	Computational studies on the substrate specificity of an acyltransferase domain from salinomycin polyketide synthase. Catalysis Science and Technology, 2021, 11, 6782-6792.	4.1	3
61	Comparative Transcriptome-Based Mining of Genes Involved in the Export of Polyether Antibiotics for Titer Improvement. Antibiotics, 2022, 11, 600.	3.7	3
62	Insight into Structural Characteristics of Protein-Substrate Interaction in Pimaricin Thioesterase. International Journal of Molecular Sciences, 2019, 20, 877.	4.1	2
63	p-Aminophenylalanine Involved in the Biosynthesis of Antitumor Dnacin B1 for Quinone Moiety Formation. Molecules, 2020, 25, 4186.	3.8	2
64	Adaptive Optimization Boosted the Production of Moenomycin A in the Microbial Chassis Streptomyces albus J1074. ACS Synthetic Biology, 2021, 10, 2210-2221.	3.8	2
65	Insights into specificity and catalytic mechanism of amphotericin B/nystatin thioesterase. Proteins: Structure, Function and Bioinformatics, 2021, 89, 558-568.	2.6	2
66	Exploring the Molecular Basis of Substrate and Product Selectivities of Nocardicin Bifunctional Thioesterase. Interdisciplinary Sciences, Computational Life Sciences, 2022, 14, 233-244.	3.6	2
67	A3 foresight network on natural products. Journal of Industrial Microbiology and Biotechnology, 2019, 46, 313-317.	3.0	1
68	Determination of the Protein-Protein Interactions within Acyl Carrier Protein (MmcB)-Dependent Modifications in the Biosynthesis of Mitomycin. Molecules, 2021, 26, 6791.	3.8	1
69	15th International symposium on the biology of the Actinomycetes; Shanghai 2009. Antonie Van Leeuwenhoek, 2010, 98, 117-118.	1.7	0
70	Tandem Modifications of an Epoxyquinone C7N Pharmacophore. Chemistry and Biology, 2013, 20, 859-860.	6.0	0