

# CITATION REPORT

List of articles citing

## Minimum Information about a Biosynthetic Gene cluster

DOI: 10.1038/nchembio.1890

Nature Chemical Biology, 2015, 11, 625-31.

**Source:** <https://exaly.com/paper-pdf/62614396/citation-report.pdf>

**Version:** 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
637	Discovery of CGlycosylpyranonaphthoquinones in <i>Streptomyces</i> sp. MBT76 by a Combined NMR-Based Metabolomics and Bioinformatics Workflow.		
636	Two Biosynthetic Pathways in <i>Jahnella thaxteri</i> for Thaxteramides, Distinct Types of Lipopeptides.		
635	A Pressure Test to Make 10 Molecules in 90 Days: External Evaluation of Methods to Engineer Biology.		
634	Assessing the Efficiency of Cultivation Techniques To Recover Natural Product Biosynthetic Gene Populations from Sediment.		
633	Structure and Function of BorB, the Type II Thioesterase from the Borrelidin Biosynthetic Gene Cluster.		
632	Streptocollin, a Type IV Lanthipeptide Produced by <i>Streptomyces collinus</i> TB65. <b>2015</b> , 16, 2615-23		36
631	Synthetic biology for pharmaceutical drug discovery. <b>2015</b> , 9, 6285-302		46
630	Novel Routes for Improving Biocontrol Activity of <i>Bacillus</i> Based Bioinoculants. <b>2015</b> , 6, 1395		72
629	Genetic engineering, high resolution mass spectrometry and nuclear magnetic resonance spectroscopy elucidate the bikaverin biosynthetic pathway in <i>Fusarium fujikuroi</i> . <b>2015</b> , 84, 26-36		21
628	Computational approaches to natural product discovery. <i>Nature Chemical Biology</i> , <b>2015</b> , 11, 639-48	11.7	285
627	Marine-derived myxobacteria of the suborder Nannocystineae: An underexplored source of structurally intriguing and biologically active metabolites. <b>2016</b> , 12, 969-984		26
626	Next Generation Sequencing of Actinobacteria for the Discovery of Novel Natural Products. <b>2016</b> , 14,		82
625	Sequencing rare marine actinomycete genomes reveals high density of unique natural product biosynthetic gene clusters. <b>2016</b> , 162, 2075-2086		48
624	Challenges in the Heterologous Production of Antibiotics in <i>Streptomyces</i> . <b>2016</b> , 349, 594-601		19
623	Toolbox for Antibiotics Discovery from Microorganisms. <b>2016</b> , 349, 683-91		5
622	Metabolomics-guided analysis of isocoumarin production by species MBT76 and biotransformation of flavonoids and phenylpropanoids. <b>2016</b> , 12, 90		24
621	Delineation of metabolic gene clusters in plant genomes by chromatin signatures. <b>2016</b> , 44, 2255-65		51

620	Bioengineering microbial communities: Their potential to help, hinder and disgust. <b>2016</b> , 7, 137-44	15
619	Biogenesis of antibiotics-viewing its history and glimpses of the future. <b>2016</b> , 61, 347-58	9
618	methods for linking genes and secondary metabolites: The way forward. <b>2016</b> , 1, 80-88	24
617	Applied evolutionary theories for engineering of secondary metabolic pathways. <b>2016</b> , 35, 133-141	4
616	Polyketide and nonribosomal peptide retro-biosynthesis and global gene cluster matching. <i>Nature Chemical Biology</i> , <b>2016</b> , 12, 1007-1014	11.7 92
615	The botrydial biosynthetic gene cluster of <i>Botrytis cinerea</i> displays a bipartite genomic structure and is positively regulated by the putative Zn(II)Cys transcription factor BcBot6. <b>2016</b> , 96, 33-46	27
614	Genomic charting of ribosomally synthesized natural product chemical space facilitates targeted mining. <b>2016</b> , 113, E6343-E6351	93
613	Antibiotic drug discovery. <b>2016</b> , 9, 541-8	80
612	Natural Products and the Gene Cluster Revolution. <b>2016</b> , 24, 968-977	75
611	Synthetic Biology of Natural Products. <b>2016</b> , 8,	20
610	Phylogenomic Analysis of Natural Products Biosynthetic Gene Clusters Allows Discovery of Arseno-Organic Metabolites in Model Streptomyces. <b>2016</b> , 8, 1906-16	73
609	New antibiotics from Nature's chemical inventory. <b>2016</b> , 24, 6227-6252	50
608	Generation of new compounds through unbalanced transcription of landomycin A cluster. <b>2016</b> , 100, 9175-9186	16
607	What Lies Within: The Human Body Might Well Be One of the Best Sources for New Antibiotics. <b>2016</b> , 7, 16-19	
606	Secondary metabolite gene clusters in the entomopathogen fungus <i>Metarhizium anisopliae</i> : genome identification and patterns of expression in a cuticle infection model. <b>2016</b> , 17, 736	23
605	MixS-HCR: a MixS extension defining a minimal information standard for sequence data from environments pertaining to hydrocarbon resources. <b>2016</b> , 11, 78	2
604	Plant metabolic clusters - from genetics to genomics. <b>2016</b> , 211, 771-89	187
603	Metagenomics as a Tool for Biodiscovery and Enhanced Production of Marine Bioactives. <b>2016</b> , 377-400	

602	Marine Fungi. <b>2016</b> , 99-153	5
601	The evolution of genome mining in microbes - a review. <b>2016</b> , 33, 988-1005	371
600	Standardization for natural product synthetic biology. <b>2016</b> , 33, 920-4	11
599	Computational genomic identification and functional reconstitution of plant natural product biosynthetic pathways. <b>2016</b> , 33, 951-62	59
598	Biological characterization of the hygrobafilomycin antibiotic JBIR-100 and bioinformatic insights into the hygrolide family of natural products. <b>2016</b> , 24, 6276-6290	11
597	The Prehistory of Antibiotic Resistance. <b>2016</b> , 6,	82
596	Norine: A powerful resource for novel nonribosomal peptide discovery. <b>2016</b> , 1, 89-94	20
595	Genome sequencing and secondary metabolism of the postharvest pathogen <i>Penicillium griseofulvum</i> . <b>2016</b> , 17, 19	54
594	Comprehensive curation and analysis of fungal biosynthetic gene clusters of published natural products. <b>2016</b> , 89, 18-28	76
593	Computational strategies for genome-based natural product discovery and engineering in fungi. <b>2016</b> , 89, 29-36	48
592	Synthetic biology to access and expand nature's chemical diversity. <b>2016</b> , 14, 135-49	314
591	The secondary metabolite bioinformatics portal: Computational tools to facilitate synthetic biology of secondary metabolite production. <b>2016</b> , 1, 69-79	119
590	Bacteriocins of lactic acid bacteria: extending the family. <b>2016</b> , 100, 2939-51	320
589	Assembly and clustering of natural antibiotics guides target identification. <i>Nature Chemical Biology</i> , <b>2016</b> , 12, 233-9	11.7 65
588	Characterization and engineering of the biosynthesis gene cluster for antitumor macrolides PM100117 and PM100118 from a marine actinobacteria: generation of a novel improved derivative. <b>2016</b> , 15, 44	21
587	StreptomeDB 2.0--an extended resource of natural products produced by streptomycetes. <b>2016</b> , 44, D509-14	60
586	Leucanicidin and Endophenazines Result from Methyl-Rhamnosylation by the Same Tailoring Enzymes in <i>Kitasatospora</i> sp. MBT66. <b>2016</b> , 11, 478-90	16
585	Biosynthesis of polyketides by trans-AT polyketide synthases. <b>2016</b> , 33, 231-316	205

584	Prospecting for new bacterial metabolites: a glossary of approaches for inducing, activating and upregulating the biosynthesis of bacterial cryptic or silent natural products. <b>2016</b> , 33, 54-72	80
583	Dereplication, sequencing and identification of peptidic natural products: from genome mining to peptidogenomics to spectral networks. <b>2016</b> , 33, 73-86	54
582	Identification and activation of novel biosynthetic gene clusters by genome mining in the kirromycin producer <i>Streptomyces collinus</i> T <sub>B</sub> 65. <b>2016</b> , 43, 277-91	30
581	MicroScope in 2017: an expanding and evolving integrated resource for community expertise of microbial genomes. <b>2017</b> , 45, D517-D528	133
580	Discovery of C-Glycosylpyranonaphthoquinones in <i>Streptomyces</i> sp. MBT76 by a Combined NMR-Based Metabolomics and Bioinformatics Workflow. <b>2017</b> , 80, 269-277	31
579	Genomics-Guided Exploitation of Lipopeptide Diversity in Myxobacteria. <b>2017</b> , 12, 779-786	10
578	sp. ATCC 55076 harbours the largest actinomycete chromosome to date and the kistamicin biosynthetic gene cluster. <b>2017</b> , 8, 780-788	22
577	Antibacterial Paramagnetic Quinones from <i>Actinoallomurus</i> . <b>2017</b> , 80, 819-827	8
576	Development of fungal cell factories for the production of secondary metabolites: Linking genomics and metabolism. <b>2017</b> , 2, 5-12	66
575	A new genome-mining tool redefines the lasso peptide biosynthetic landscape. <i>Nature Chemical Biology</i> , <b>2017</b> , 13, 470-478	11.7 224
574	Resequencing and annotation of the <i>Nostoc punctiforme</i> ATCC 29133 genome: facilitating biofuel and high-value chemical production. <b>2017</b> , 7, 42	8
573	Antibiotics v2.0: computational and synthetic biology approaches to combat antibiotic resistance. <b>2017</b> , 12, 267-269	3
572	Ribosomally synthesized and post-translationally modified peptide natural product discovery in the genomic era. <b>2017</b> , 38, 36-44	90
571	Using natural products for drug discovery: the impact of the genomics era. <b>2017</b> , 12, 475-487	58
570	Mining prokaryotes for antimicrobial compounds: from diversity to function. <b>2017</b> , 41, 417-429	60
569	The Uncommon Enzymology of Cis-Acyltransferase Assembly Lines. <b>2017</b> , 117, 5334-5366	50
568	Phylogenomic Analysis of the Microviridin Biosynthetic Pathway Coupled with Targeted Chemo-Enzymatic Synthesis Yields Potent Protease Inhibitors. <b>2017</b> , 12, 1538-1546	30
567	Gut Microbiota: Small Molecules Modulate Host Cellular Functions. <b>2017</b> , 27, R307-R310	3

566	First complete genome sequence of <i>Bacillus glycinifermentans</i> B-27. <b>2017</b> , 257, 187-191	2
565	antiSMASH 4.0-improvements in chemistry prediction and gene cluster boundary identification. <b>2017</b> , 45, W36-W41	834
564	Aromatic Polyketide GTRI-02 is a Previously Unidentified Product of the act Gene Cluster in <i>Streptomyces coelicolor</i> A3(2). <b>2017</b> , 18, 1428-1434	13
563	The Antibiotic Resistant Target Seeker (ARTS), an exploration engine for antibiotic cluster prioritization and novel drug target discovery. <b>2017</b> , 45, W42-W48	96
562	Identification and characterization of a biosynthetic gene cluster for tryptophan dimers in deep sea-derived <i>Streptomyces</i> sp. SCSIO 03032. <b>2017</b> , 101, 6123-6136	13
561	Cryptic indole hydroxylation by a non-canonical terpenoid cyclase parallels bacterial xenobiotic detoxification. <b>2017</b> , 8, 15804	17
560	Are highly morphed peptide frameworks lurking silently in microbial genomes valuable as next generation antibiotic scaffolds?. <b>2017</b> , 34, 687-693	7
559	RiPPMiner: a bioinformatics resource for deciphering chemical structures of RiPPs based on prediction of cleavage and cross-links. <b>2017</b> , 45, W80-W88	66
558	SANDPUMA: ensemble predictions of nonribosomal peptide chemistry reveal biosynthetic diversity across Actinobacteria. <b>2017</b> , 33, 3202-3210	58
557	Nonribosomal peptide synthetase biosynthetic clusters of ESKAPE pathogens. <b>2017</b> , 34, 981-1009	31
556	plantiSMASH: automated identification, annotation and expression analysis of plant biosynthetic gene clusters. <b>2017</b> , 45, W55-W63	123
555	Harnessing plant metabolic diversity. <b>2017</b> , 40, 24-30	35
554	Symbiosis-inspired approaches to antibiotic discovery. <b>2017</b> , 34, 784-814	68
553	A scalable platform to identify fungal secondary metabolites and their gene clusters. <i>Nature Chemical Biology</i> , <b>2017</b> , 13, 895-901	11.7 108
552	Global analysis of biosynthetic gene clusters reveals vast potential of secondary metabolite production in <i>Penicillium</i> species. <b>2017</b> , 2, 17044	136
551	Polyketidsynthase-Module: eine Neudefinition. <b>2017</b> , 129, 4730-4732	0
550	New strategies and approaches for engineering biosynthetic gene clusters of microbial natural products. <b>2017</b> , 35, 936-949	33
549	Polyketide Synthase Modules Redefined. <b>2017</b> , 56, 4658-4660	40

548	Synthetic Biology-The Synthesis of Biology. <b>2017</b> , 56, 6396-6419	103
547	Synthetische Biologie Die Synthese der Biologie. <b>2017</b> , 129, 6494-6519	7
546	Small Molecule Accurate Recognition Technology (SMART) to Enhance Natural Products Research. <b>2017</b> , 7, 14243	40
545	Heterologous Gene Expression of N-Terminally Truncated Variants of LipPks1 Suggests a Functionally Critical Structural Motif in the N-terminus of Modular Polyketide Synthase. <b>2017</b> , 12, 2725-2729	7
544	Identification of secondary metabolite biosynthetic gene clusters associated with the infection of citrus fruit by <i>Penicillium digitatum</i> . <b>2017</b> , 134, 17-21	16
543	Comparative genomics of maize ear rot pathogens reveals expansion of carbohydrate-active enzymes and secondary metabolism backbone genes in <i>Stenocarpella maydis</i> . <b>2017</b> , 121, 966-983	4
542	Engineered polyketides: Synergy between protein and host level engineering. <b>2017</b> , 2, 147-166	55
541	Simultaneous Production of Anabaenopeptins and Namalides by the Cyanobacterium <i>Nostoc</i> sp. CENA543. <b>2017</b> , 12, 2746-2755	21
540	Phenetic Comparison of Prokaryotic Genomes Using k-mers. <b>2017</b> , 34, 2716-2729	8
539	Genomic insights into specialized metabolism in the marine actinomycete <i>Salinispora</i> . <b>2017</b> , 19, 3660-3673	46
538	Secondary metabolite genes encoded by potato rhizosphere microbiomes in the Andean highlands are diverse and vary with sampling site and vegetation stage. <b>2017</b> , 7, 2330	12
537	From a Natural Product to Its Biosynthetic Gene Cluster: A Demonstration Using Polyketomycin from <i>Streptomyces diastatochromogenes</i> T8028. <b>2017</b> ,	3
536	Actinomycetes: still a source of novel antibiotics. <b>2017</b> , 34, 1203-1232	214
535	Minimum information about a single amplified genome (MISAG) and a metagenome-assembled genome (MIMAG) of bacteria and archaea. <b>2017</b> , 35, 725-731	648
534	Comparative transcriptomics as a guide to natural product discovery and biosynthetic gene cluster functionality. <b>2017</b> , 114, E11121-E11130	70
533	Novel Microbial Diversity and Functional Potential in the Marine Mammal Oral Microbiome. <b>2017</b> , 27, 3752-3762.e6	44
532	Recent development of computational resources for new antibiotics discovery. <b>2017</b> , 39, 113-120	24
531	Coculture of Marine Invertebrate-Associated Bacteria and Interdisciplinary Technologies Enable Biosynthesis and Discovery of a New Antibiotic, Keyicin. <b>2017</b> , 12, 3093-3102	71

530	SeMPI: a genome-based secondary metabolite prediction and identification web server. <b>2017</b> , 45, W64-W71	18
529	Global chemical analysis of biology by mass spectrometry. <b>2017</b> , 1,	91
528	Assessing in silico the recruitment and functional spectrum of bacterial enzymes from secondary metabolism. <b>2017</b> , 17, 36	3
527	Indexing the <i>Pseudomonas</i> specialized metabolome enabled the discovery of poeamide B and the bananamides. <b>2016</b> , 2, 16197	83
526	High-throughput strategies for the discovery and engineering of enzymes for biocatalysis. <b>2017</b> , 40, 161-180	28
525	Dereplication of peptidic natural products through database search of mass spectra. <i>Nature Chemical Biology</i> , <b>2017</b> , 13, 30-37	11.7 131
524	The antiSMASH database, a comprehensive database of microbial secondary metabolite biosynthetic gene clusters. <b>2017</b> , 45, D555-D559	164
523	Employing the promiscuity of lantibiotic biosynthetic machineries to produce novel antimicrobials. <b>2017</b> , 41, 5-18	37
522	Mining Bacterial Genomes for Secondary Metabolite Gene Clusters. <b>2017</b> , 1520, 23-47	35
521	Natural products as mediators of disease. <b>2017</b> , 34, 194-219	47
520	Warhead biosynthesis and the origin of structural diversity in hydroxamate metalloproteinase inhibitors. <b>2017</b> , 8, 1965	20
519	Current Status and Future Prospects of Marine Natural Products (MNPs) as Antimicrobials. <b>2017</b> , 15,	73
518	, and Form an "Operational Group " within the Species Complex. <b>2017</b> , 8, 22	186
517	Identification by Genome Mining of a Type I Polyketide Gene Cluster from Involved in the Biosynthesis of Pyridine and Piperidine Alkaloids Argimycins P. <b>2017</b> , 8, 194	22
516	Genome-Wide Analysis of Secondary Metabolite Gene Clusters in <i>O</i> and Reveals a Fujikurin-Like Gene Cluster with a Putative Role in Infection. <b>2017</b> , 8, 1063	15
515	Identification of Secondary Metabolite Gene Clusters in the Genus Reveals Encouraging Biosynthetic Potential toward the Production of Novel Bioactive Compounds. <b>2017</b> , 8, 1494	32
514	Diverse Cone-Snail Species Harbor Closely Related Species with Conserved Chemical and Genetic Profiles, Including Polycyclic Tetramic Acid Macrolactams. <b>2017</b> , 8, 2305	8
513	Computational Studies and Biosynthesis of Natural Products with Promising Anticancer Properties. <b>2017</b> ,	4



512	A strategy for the identification of patterns in the biosynthesis of nonribosomal peptides by Betaproteobacteria species. <b>2017</b> , 7, 10400	
511	Interpreting Microbial Biosynthesis in the Genomic Age: Biological and Practical Considerations. <b>2017</b> , 15,	21
510	NPASS: natural product activity and species source database for natural product research, discovery and tool development. <b>2018</b> , 46, D1217-D1222	96
509	A Pressure Test to Make 10 Molecules in 90 Days: External Evaluation of Methods to Engineer Biology. <b>2018</b> , 140, 4302-4316	87
508	Characterization of the Actinonin Biosynthetic Gene Cluster. <b>2018</b> , 19, 1189	7
507	Identification of the First Diketomorpholine Biosynthetic Pathway Using FAC-MS Technology. <b>2018</b> , 13, 1142-1147	21
506	HEx: A heterologous expression platform for the discovery of fungal natural products. <b>2018</b> , 4, eaar5459	106
505	Exploration and exploitation of the environment for novel specialized metabolites. <b>2018</b> , 50, 206-213	24
504	Identification of a biosynthetic gene cluster for the polyene macrolactam sceliphrolactam in a Streptomyces strain isolated from mangrove sediment. <b>2018</b> , 8, 1594	33
503	From genomics to metabolomics, moving toward an integrated strategy for the discovery of fungal secondary metabolites. <b>2018</b> , 35, 147-173	73
502	Panning for gold in mould: can we increase the odds for fungal genome mining?. <b>2018</b> , 16, 1620-1626	16
501	Increased diversity of peptidic natural products revealed by modification-tolerant database search of mass spectra. <b>2018</b> , 3, 319-327	49
500	Linking secondary metabolites to gene clusters through genome sequencing of six diverse species. <b>2018</b> , 115, E753-E761	78
499	Secondary Metabolites: More than Just Aflatoxins. <b>2018</b> , 6, 7-32	19
498	Regulation of antibiotic production in Actinobacteria: new perspectives from the post-genomic era. <b>2018</b> , 35, 575-604	115
497	Mining for Microbial Gems: Integrating Proteomics in the Postgenomic Natural Product Discovery Pipeline. <b>2018</b> , 18, e1700332	24
496	Analysis of the Pseudouridimycin Biosynthetic Pathway Provides Insights into the Formation of C-nucleoside Antibiotics. <b>2018</b> , 25, 540-549.e4	33
495	Interrogation of Benzomalvin Biosynthesis Using Fungal Artificial Chromosomes with Metabolomic Scoring (FAC-MS): Discovery of a Benzodiazepine Synthase Activity. <b>2018</b> , 57, 3237-3243	15

494	The modules of trans-acyltransferase assembly lines redefined with a central acyl carrier protein. <b>2018</b> , 86, 664-675	29
493	Antibiotic resistance genes show enhanced mobilization through suspended growth and biofilm-based wastewater treatment processes. <b>2018</b> , 94,	17
492	Computational Genomics of Specialized Metabolism: from Natural Product Discovery to Microbiome Ecology. <b>2018</b> , 3,	17
491	Upstream biomanufacturing of pharmaceutical colchicine. <b>2018</b> , 38, 83-92	8
490	Uncovering the repertoire of fungal secondary metabolites: From Fleming's laboratory to the International Space Station. <b>2018</b> , 9, 12-16	27
489	Collaborating with Undergraduates To Contribute to Biochemistry Community Resources. <b>2018</b> , 57, 383-389	8
488	ClusterCAD: a computational platform for type I modular polyketide synthase design. <b>2018</b> , 46, D509-D515	45
487	From Axenic to Mixed Cultures: Technological Advances Accelerating a Paradigm Shift in Microbiology. <b>2018</b> , 26, 538-554	60
486	De novo design and engineering of non-ribosomal peptide synthetases. <b>2018</b> , 10, 275-281	106
485	Innovations in Undergraduate Chemical Biology Education. <b>2018</b> , 13, 26-35	10
484	Endophytic fungus produces cyclopeptides and plant-related bioactive rotenoids.. <b>2018</b> , 8, 35575-35586	6
483	Analysis of the Genome and Metabolome of Marine Myxobacteria Reveals High Potential for Biosynthesis of Novel Specialized Metabolites. <b>2018</b> , 8, 16600	22
482	Charting an Unexplored Streptococcal Biosynthetic Landscape Reveals a Unique Peptide Cyclization Motif. <b>2018</b> , 140, 17674-17684	42
481	Uncovering secondary metabolite evolution and biosynthesis using gene cluster networks and genetic dereplication. <b>2018</b> , 8, 17957	22
480	FZB42 in 2018: The Gram-Positive Model Strain for Plant Growth Promotion and Biocontrol. <b>2018</b> , 9, 2491	106
479	Exploration of the Biosynthetic Potential of the Microbiome. <b>2018</b> , 3,	21
478	Biosynthesis of the neurotoxin domoic acid in a bloom-forming diatom. <b>2018</b> , 361, 1356-1358	75
477	Conditional generative adversarial network for gene expression inference. <b>2018</b> , 34, i603-i611	32

476	Hidden antibiotics: Where to uncover?. <b>2018</b> , 36, 2201-2218	9
475	Short-chain ketone production by engineered polyketide synthases in <i>Streptomyces albus</i> . <b>2018</b> , 9, 4569	29
474	Metabolic Gene Clusters in Eukaryotes. <b>2018</b> , 52, 159-183	81
473	Activation of microbial secondary metabolic pathways: Avenues and challenges. <b>2018</b> , 3, 163-178	78
472	A standardized workflow for submitting data to the Minimum Information about a Biosynthetic Gene cluster (MIBiG) repository: prospects for research-based educational experiences. <b>2018</b> , 13, 16	20
471	BAGEL4: a user-friendly web server to thoroughly mine RiPPs and bacteriocins. <b>2018</b> , 46, W278-W281	250
470	An orthogonal system for heterologous expression of actinobacterial lasso peptides in <i>Streptomyces</i> hosts. <b>2018</b> , 8, 8232	20
469	Uncovering production of specialized metabolites by <i>Streptomyces argillaceus</i> : Activation of cryptic biosynthesis gene clusters using nutritional and genetic approaches. <b>2018</b> , 13, e0198145	28
468	Whole genome comparison of <i>Aspergillus flavus</i> L-morphotype strain NRRL 3357 (type) and S-morphotype strain AF70. <b>2018</b> , 13, e0199169	16
467	Chemoenzymatic Dissection of Polyketide EBranching in the Bryostatin Pathway. <b>2018</b> , 604, 207-236	5
466	Assessing the Efficiency of Cultivation Techniques To Recover Natural Product Biosynthetic Gene Populations from Sediment. <b>2018</b> , 13, 2074-2081	9
465	Boosting Secondary Metabolite Production and Discovery through the Engineering of Novel Microbial Biosensors. <b>2018</b> , 2018, 7021826	9
464	Bipartite interactions, antibiotic production and biosynthetic potential of the <i>Arabidopsis</i> leaf microbiome. <b>2018</b> , 3, 909-919	79
463	Genes to Metabolites and Metabolites to Genes Approaches to Predict Biosynthetic Pathways in Microbes for Natural Product Discovery. <b>2018</b> , 1-16	
462	Searching for Glycosylated Natural Products in Actinomycetes and Identification of Novel Macrolactams and Angucyclines. <b>2018</b> , 9, 39	15
461	Comparative Genomics and Biosynthetic Potential Analysis of Two Lichen-Isolated Strains. <b>2018</b> , 9, 369	8
460	Evolution and Diversity of Biosynthetic Gene Clusters in. <b>2018</b> , 9, 1158	22
459	Genome Sequencing and analyses of Two Marine Fungi from the North Sea Unraveled a Plethora of Novel Biosynthetic Gene Clusters. <b>2018</b> , 8, 10187	14

458	Diverse and Abundant Secondary Metabolism Biosynthetic Gene Clusters in the Genomes of Marine Sponge Derived Streptomyces spp. Isolates. <b>2018</b> , 16,	39
457	Cooperative Involvement of Glycosyltransferases in the Transfer of Amino Sugars during the Biosynthesis of the Macrolactam Sipanmycin by Streptomyces sp. Strain CS149. <b>2018</b> , 84,	9
456	The evolution of three siderophore biosynthetic clusters in environmental and host-associating strains of Pantoea. <b>2018</b> , 293, 1453-1467	8
455	Microbial small molecules - weapons of plant subversion. <b>2018</b> , 35, 410-433	71
454	Characterization of the Jomthonic Acids Biosynthesis Pathway and Isolation of Novel Analogues in GUA-06-05-006A. <b>2018</b> , 16,	7
453	Evolutionary freedom in the regulation of the conserved itaconate cluster by Ria1 in related Ustilaginaceae. <b>2018</b> , 5, 14	12
452	Identification of Natural Product Biosynthetic Gene Clusters from Bacterial Genomic Data. <b>2018</b> , 1	0
451	Current strategies to induce secondary metabolites from microbial biosynthetic cryptic gene clusters. <b>2018</b> , 68, 419-432	9
450	Application of Computation in the Biosynthesis of Phytochemicals. <b>2018</b> , 255-276	
449	Novel soil bacteria possess diverse genes for secondary metabolite biosynthesis. <b>2018</b> , 558, 440-444	165
448	Detection and Expression of Biosynthetic Gene Clusters in Actinobacteria. <b>2018</b> , 245-255	
447	Collection, Culturing, and Genome Analyses of Tropical Marine Filamentous Benthic Cyanobacteria. <b>2018</b> , 604, 3-43	6
446	Inter-Kingdom beach warfare: Microbial chemical communication activates natural chemical defences. <b>2019</b> , 13, 147-158	20
445	The value of universally available raw NMR data for transparency, reproducibility, and integrity in natural product research. <b>2019</b> , 36, 35-107	63
444	A deep learning genome-mining strategy for biosynthetic gene cluster prediction. <b>2019</b> , 47, e110	57
443	A Single Biosynthetic Gene Cluster Is Responsible for the Production of Bagremycin Antibiotics and Ferroverdin Iron Chelators. <b>2019</b> , 10,	21
442	Engineering actinomycetes for biosynthesis of macrolactone polyketides. <b>2019</b> , 18, 137	15
441	Comparative genomics reveals complex natural product biosynthesis capacities and carbon metabolism across host-associated and free-living Aquimarina (Bacteroidetes, Flavobacteriaceae) species. <b>2019</b> , 21, 4002-4019	10

440	Assembling a plug-and-play production line for combinatorial biosynthesis of aromatic polyketides in <i>Escherichia coli</i> . <b>2019</b> , 17, e3000347	25
439	NPS: scoring and evaluating the statistical significance of peptidic natural product-spectrum matches. <b>2019</b> , 35, i315-i323	4
438	MicroScope-an integrated resource for community expertise of gene functions and comparative analysis of microbial genomic and metabolic data. <b>2019</b> , 20, 1071-1084	35
437	Comparative Genomics of Marine Sponge-Derived spp. Isolates SM17 and SM18 With Their Closest Terrestrial Relatives Provides Novel Insights Into Environmental Niche Adaptations and Secondary Metabolite Biosynthesis Potential. <b>2019</b> , 10, 1713	12
436	A polyketide synthase gene cluster associated with the sexual reproductive cycle of the banana pathogen, <i>Pseudocercospora fijiensis</i> . <b>2019</b> , 14, e0220319	4
435	Linking biosynthetic and chemical space to accelerate microbial secondary metabolite discovery. <b>2019</b> , 366,	21
434	Multi-level regulation of coelimycin synthesis in <i>Streptomyces coelicolor</i> A3(2). <b>2019</b> , 103, 6423-6434	18
433	Computer-aided re-engineering of nonribosomal peptide and polyketide biosynthetic assembly lines. <b>2019</b> , 36, 1249-1261	28
432	MIBiG 2.0: a repository for biosynthetic gene clusters of known function. <b>2020</b> , 48, D454-D458	180
431	MetaMiner: A Scalable Peptidogenomics Approach for Discovery of Ribosomal Peptide Natural Products with Blind Modifications from Microbial Communities. <b>2019</b> , 9, 600-608.e4	26
430	Comparative genome analysis reveals metabolic traits associated with probiotics properties in <i>Lactobacillus reuteri</i> KUB-AC5. <b>2019</b> , 17, 100536	4
429	Pathogen-induced activation of disease-suppressive functions in the endophytic root microbiome. <b>2019</b> , 366, 606-612	263
428	The Natural Products Atlas: An Open Access Knowledge Base for Microbial Natural Products Discovery. <b>2019</b> , 5, 1824-1833	137
427	IMG-ABC v.5.0: an update to the IMG/Atlas of Biosynthetic Gene Clusters Knowledgebase. <b>2020</b> , 48, D422-D430	33
426	A case of spontaneous hepatic hemangioma rupture: Successful management with transarterial chemoembolization alone. <b>2019</b> , 2, 131-133	0
425	Diversity, Ecology, and Prevalence of Antimicrobials in Nature. <b>2019</b> , 10, 2518	21
424	Culture-Dependent Bioprospecting of Bacterial Isolates From the Canadian High Arctic Displaying Antibacterial Activity. <b>2019</b> , 10, 1836	14
423	Applied evolution: phylogeny-based approaches in natural products research. <b>2019</b> , 36, 1295-1312	21

422	Metagenome Driven Discovery of Nonribosomal Peptides. <b>2019</b> , 14, 2115-2126	5
421	Genome Mining Coupled with OSMAC-Based Cultivation Reveal Differential Production of Surugamide A by the Marine Sponge Isolate sp. SM17 When Compared to Its Terrestrial Relative J1074. <b>2019</b> , 7,	8
420	Structural basis for chain release from the enacyloxin polyketide synthase. <b>2019</b> , 11, 913-923	29
419	Loci Encoding Compounds Potentially Active against Drug-Resistant Pathogens amidst a Decreasing Pool of Novel Antibiotics. <b>2019</b> , 85,	3
418	Taxonomic and Metabolic Incongruence in the Ancient Genus. <b>2019</b> , 10, 2170	23
417	A selective genome-guided method for environmental Burkholderia isolation. <b>2019</b> , 46, 345-362	6
416	Targeted Rediscovery and Biosynthesis of the Farnesyl-Transferase Inhibitor Peptidocinnamin E. <b>2019</b> , 20, 1387-1393	11
415	Marine biofilms constitute a bank of hidden microbial diversity and functional potential. <b>2019</b> , 10, 517	47
414	Discovery of the Cyclic Lipopeptide Gacamide A by Genome Mining and Repair of the Defective GacA Regulator in Pseudomonas fluorescens Pf0-1. <b>2019</b> , 82, 301-308	21
413	The antimicrobial potential of Streptomyces from insect microbiomes. <b>2019</b> , 10, 516	110
412	Omics Technologies to Understand Activation of a Biosynthetic Gene Cluster in Micromonospora sp. WMMB235: Deciphering Keyicin Biosynthesis. <b>2019</b> , 14, 1260-1270	7
411	Microbial community drivers of PK/NRP gene diversity in selected global soils. <b>2019</b> , 7, 78	15
410	Diversification of polyketide structures synthase engineering. <b>2019</b> , 10, 1256-1272	10
409	Cold-adapted Bacilli isolated from the Qinghai-Tibetan Plateau are able to promote plant growth in extreme environments. <b>2019</b> , 21, 3505	17
408	Survey of Biosynthetic Gene Clusters from Sequenced Myxobacteria Reveals Unexplored Biosynthetic Potential. <b>2019</b> , 7,	14
407	Next-Generation Drug Discovery to Combat Antimicrobial Resistance. <b>2019</b> , 44, 961-972	32
406	Biochemical Characteristics of Microbial Enzymes and Their Significance from Industrial Perspectives. <b>2019</b> , 61, 579-601	35
405	Strategies to establish the link between biosynthetic gene clusters and secondary metabolites. <b>2019</b> , 130, 107-121	37

404	Whole Genome Sequencing and Metabolomic Study of Cave Isolates ICC1 and ICC4. <b>2019</b> , 10, 1020	21
403	Phylogenomic analyses and distribution of terpene synthases among. <b>2019</b> , 15, 1181-1193	15
402	Cytochrome P450 Monooxygenase CYP139 Family Involved in the Synthesis of Secondary Metabolites in 824 Mycobacterial Species. <b>2019</b> , 20,	8
401	BiosyntheticSPAdes: reconstructing biosynthetic gene clusters from assembly graphs. <b>2019</b> , 29, 1352-1362	26
400	The hidden enzymology of bacterial natural product biosynthesis. <b>2019</b> , 3, 404-425	37
399	Genetic platforms for heterologous expression of microbial natural products. <b>2019</b> , 36, 1313-1332	60
398	The Group: Species with Pathogenic Potential. <b>2019</b> , 7,	143
397	Unearthing fungal chemodiversity and prospects for drug discovery. <b>2019</b> , 51, 22-29	18
396	Synthetic biology strategies for microbial biosynthesis of plant natural products. <b>2019</b> , 10, 2142	135
395	Identification of the Bacterial Biosynthetic Gene Clusters of the Oral Microbiome Illuminates the Unexplored Social Language of Bacteria during Health and Disease. <b>2019</b> , 10,	42
394	Retrosynthetic design of metabolic pathways to chemicals not found in nature. <b>2019</b> , 14, 82-107	50
393	antiSMASH 5.0: updates to the secondary metabolite genome mining pipeline. <b>2019</b> , 47, W81-W87	1429
392	Secondary Metabolites of the Plant Growth Promoting Model Rhizobacterium <i>Bacillus velezensis</i> FZB42 Are Involved in Direct Suppression of Plant Pathogens and in Stimulation of Plant-Induced Systemic Resistance. <b>2019</b> , 147-168	6
391	Synthetic Biology: A Novel Approach for Pharmaceutically Important Compounds. <b>2019</b> , 475-491	
390	Diazaquinomycin Biosynthetic Gene Clusters from Marine and Freshwater Actinomycetes. <b>2019</b> , 82, 937-946	11
389	Antibacterial and anticancer activities of orphan biosynthetic gene clusters from Atlantis II Red Sea brine pool. <b>2019</b> , 18, 56	8
388	Refactoring the Cryptic Streptophenazine Biosynthetic Gene Cluster Unites Phenazine, Polyketide, and Nonribosomal Peptide Biochemistry. <b>2019</b> , 26, 724-736.e7	28
387	Computational identification of co-evolving multi-gene modules in microbial biosynthetic gene clusters. <b>2019</b> , 2, 83	14

386	New Approaches to Detect Biosynthetic Gene Clusters in the Environment. <b>2019</b> , 6,	18
385	LanI-Mediated Lantibiotic Immunity in <i>Bacillus subtilis</i> : Functional Analysis. <b>2019</b> , 85,	8
384	The overlapping continuum of host range among strains in the <i>Pseudomonas syringae</i> complex. <b>2019</b> , 1,	28
383	A trans-Acting Cyclase Offloading Strategy for Nonribosomal Peptide Synthetases. <b>2019</b> , 14, 845-849	8
382	Direct cloning and heterologous expression of natural product biosynthetic gene clusters by transformation-associated recombination. <b>2019</b> , 621, 87-110	23
381	Chemical Ecology of Marine Sponges: New Opportunities through "-Omics". <b>2019</b> , 59, 765-776	16
380	Detection of Natural Products and Their Producers in Ocean Sediments. <b>2019</b> , 85,	13
379	Genome mining and prospects for antibiotic discovery. <b>2019</b> , 51, 1-8	22
378	Biosynthetic Gene Content of the 'Perfume Lichens' and. <b>2019</b> , 24,	21
377	Inter-Modular Linkers play a crucial role in governing the biosynthesis of non-ribosomal peptides. <b>2019</b> , 35, 3584-3591	5
376	Supporting supervised learning in fungal Biosynthetic Gene Cluster discovery: new benchmark datasets. <b>2019</b> ,	1
375	The <i>Bacillus cereus</i> Group: <i>Bacillus</i> Species with Pathogenic Potential. <b>2019</b> , 875-902	8
374	: Linking Microbiota Functions with Medicine Therapeutics. <b>2019</b> , 4,	0
373	Engineering enzymatic assembly lines to produce new antibiotics. <b>2019</b> , 51, 88-96	24
372	Genus level analysis of PKS-NRPS and NRPS-PKS hybrids reveals their origin in <i>Aspergilli</i> . <b>2019</b> , 20, 847	9
371	Bacterial terpene biosynthesis: challenges and opportunities for pathway engineering. <b>2019</b> , 15, 2889-2906	38
370	Evolution and Diversity of Assembly-Line Polyketide Synthases. <b>2019</b> , 119, 12524-12547	74
369	Competition among Nasal Bacteria Suggests a Role for Siderophore-Mediated Interactions in Shaping the Human Nasal Microbiota. <b>2019</b> , 85,	36



368	The antiSMASH database version 2: a comprehensive resource on secondary metabolite biosynthetic gene clusters. <b>2019</b> , 47, D625-D630	106
367	Natural product drug discovery in the genomic era: realities, conjectures, misconceptions, and opportunities. <b>2019</b> , 46, 281-299	54
366	Epigenetic modification, co-culture and genomic methods for natural product discovery. <b>2019</b> , 4,	5
365	Sequence-based classification of type II polyketide synthase biosynthetic gene clusters for antiSMASH. <b>2019</b> , 46, 469-475	9
364	Antibacterial Aromatic Polyketides Incorporating the Unusual Amino Acid Enduracididine. <b>2019</b> , 82, 35-44	4
363	Investigations into PoyH, a promiscuous protease from polytheonamide biosynthesis. <b>2019</b> , 46, 551-563	8
362	Fungal secondary metabolism: regulation, function and drug discovery. <b>2019</b> , 17, 167-180	371
361	Emerging evolutionary paradigms in antibiotic discovery. <b>2019</b> , 46, 257-271	48
360	Recent development of antiSMASH and other computational approaches to mine secondary metabolite biosynthetic gene clusters. <b>2019</b> , 20, 1103-1113	71
359	Protocols for yTRES/Tn5-based gene cluster expression in <i>Pseudomonas putida</i> . <b>2020</b> , 13, 250-262	7
358	Genome Mining Approaches to Bacterial Natural Product Discovery. <b>2020</b> , 19-33	1
357	Whole metagenomic sequencing to characterize the sediment microbial community within the Stellwagen Bank National Marine Sanctuary and preliminary biosynthetic gene cluster screening of <i>Streptomyces scabrissporus</i> . <b>2020</b> , 50, 100718	1
356	Evolutionary dynamics of natural product biosynthesis in bacteria. <b>2020</b> , 37, 566-599	47
355	Advanced strategy for metabolite exploration in filamentous fungi. <b>2020</b> , 40, 180-198	5
354	Genome mining and biosynthesis of the Acyl-CoA:cholesterol acyltransferase inhibitor beauveriolide I and III in <i>Cordyceps militaris</i> . <b>2020</b> , 309, 85-91	8
353	Antimicrobial secondary metabolites from agriculturally important bacteria as next-generation pesticides. <b>2020</b> , 104, 1013-1034	29
352	Reconstitution of biosynthetic machinery of fungal natural products in heterologous hosts. <b>2020</b> , 84, 433-444	12
351	miRPathDB 2.0: a novel release of the miRNA Pathway Dictionary Database. <b>2020</b> , 48, D142-D147	62

350	Discovery of the Streptoketides by Direct Cloning and Rapid Heterologous Expression of a Cryptic PKS II Gene Cluster from sp. T6314. <b>2020</b> , 85, 664-673	14
349	Biosynthetic gene clusters and the evolution of fungal chemodiversity. <b>2020</b> , 37, 868-878	30
348	Distribution and conservation of known secondary metabolite biosynthesis gene clusters in the genomes of geographically diverse <i>Microcystis aeruginosa</i> strains. <b>2020</b> , 71, 701	9
347	Genomic and gene expression evidence of nonribosomal peptide and polyketide production among ruminal bacteria: a potential role in niche colonization?. <b>2020</b> , 96,	4
346	Cultivation and functional characterization of 79 planctomycetes uncovers their unique biology. <b>2020</b> , 5, 126-140	85
345	A computational framework to explore large-scale biosynthetic diversity. <i>Nature Chemical Biology</i> , <b>2020</b> , 16, 60-68	11.7 211
344	Recent Progress in Lanthipeptide Biosynthesis, Discovery, and Engineering. <b>2020</b> , 119-165	1
343	Discovery of an Abundance of Biosynthetic Gene Clusters in Shark Bay Microbial Mats. <b>2020</b> , 11, 1950	15
342	Dynamics in Secondary Metabolite Gene Clusters in Otherwise Highly Syntenic and Stable Genomes in the Fungal Genus <i>Botrytis</i> . <b>2020</b> , 12, 2491-2507	8
341	Major genomic regions responsible for wheat yield and its components as revealed by meta-QTL and genotype-phenotype association analyses. <b>2020</b> , 252, 65	11
340	Fungal secondary metabolites and their biotechnological applications for human health. <b>2020</b> , 147-161	52
339	Synthetic-Bioinformatic Natural Product Antibiotics with Diverse Modes of Action. <b>2020</b> , 142, 14158-14168	17
338	Exploiting the Biosynthetic Potency of Taxol from Fungal Endophytes of Conifers Plants; Genome Mining and Metabolic Manipulation. <b>2020</b> , 25,	14
337	Enzyme Evolution in Secondary Metabolism. <b>2020</b> , 90-112	1
336	Comprehensive prediction of secondary metabolite structure and biological activity from microbial genome sequences. <b>2020</b> , 11, 6058	50
335	Recent developments of tools for genome and metabolome studies in basidiomycete fungi and their application to natural product research. <b>2020</b> , 9,	8
334	Mass Spectrometry for Natural Product Discovery. <b>2020</b> , 263-306	6
333	Culturable diversity of bacterial endophytes associated with medicinal plants of the Western Ghats, India. <b>2020</b> , 96,	7

332	Comprehensive chemotaxonomic and genomic profiling of a biosynthetically talented Australian fungus, <i>Aspergillus burnettii</i> sp. nov. <b>2020</b> , 143, 103435	11
331	Chemical communication between <i>Trichoderma</i> and plants. <b>2020</b> , 109-139	2
330	Towards improved understanding of intersubunit interactions in modular polyketide biosynthesis: Docking in the enacyloxin IIa polyketide synthase. <b>2020</b> , 212, 107581	7
329	Hawaiian Bobtail Squid Symbionts Inhibit Marine Bacteria via Production of Specialized Metabolites, Including New Bromoalterochromides BAC-D/D'. <b>2020</b> , 5,	8
328	Genetic elucidation of interconnected antibiotic pathways mediating maize innate immunity. <b>2020</b> , 6, 1375-1388	23
327	Cryptic or Silent? The Known Unknowns, Unknown Knowns, and Unknown Unknowns of Secondary Metabolism. <b>2020</b> , 11,	14
326	Secretion of and Self-Resistance to the Novel Fibupeptide Antimicrobial Lugdunin by Distinct ABC Transporters in <i>Staphylococcus lugdunensis</i> . <b>2020</b> , 65,	5
325	RRE-Finder: a Genome-Mining Tool for Class-Independent RiPP Discovery. <b>2020</b> , 5,	24
324	Next-generation metabolic engineering approaches towards development of plant cell suspension cultures as specialized metabolite producing biofactories. <b>2020</b> , 45, 107635	21
323	Impact of lifestyle on cytochrome P450 monooxygenase repertoire is clearly evident in the bacterial phylum Firmicutes. <b>2020</b> , 10, 13982	8
322	Genome Mining, Microbial Interactions, and Molecular Networking Reveals New Dibromoalterochromides from Strains of of Coiba National Park-Panama. <b>2020</b> , 18,	4
321	Identifying the Compounds of the Metabolic Elicitors of N 21.4 Responsible for Their Ability to Induce Plant Resistance. <b>2020</b> , 9,	3
320	Comparative genomic analysis of Flavobacteriaceae: insights into carbohydrate metabolism, gliding motility and secondary metabolite biosynthesis. <b>2020</b> , 21, 569	12
319	Production of the antimicrobial compound tetrabromopyrrole and the <i>Pseudomonas</i> quinolone system precursor, 2-heptyl-4-quinolone, by a novel marine species <i>Pseudoalteromonas galathea</i> sp. nov. <b>2020</b> , 10, 21630	4
318	The Integration of Genome Mining, Comparative Genomics, and Functional Genetics for Biosynthetic Gene Cluster Identification. <b>2020</b> , 11, 600116	7
317	Rings of Power: Enzymatic Routes to $\beta$ -Lactones. <b>2020</b> , 323-345	0
316	Exploring novel bacterial terpene synthases. <b>2020</b> , 15, e0232220	9
315	Heterochiral coupling in non-ribosomal peptide macrolactamization. <b>2020</b> , 3, 507-515	6

314	Genetic localization of the orevactaene/epipyronone biosynthetic gene cluster in <i>Epicoccum nigrum</i> . <b>2020</b> , 30, 127242	4
313	Palantir: a springboard for the analysis of secondary metabolite gene clusters in large-scale genome mining projects. <b>2020</b> , 36, 4345-4347	3
312	Linking genomics and metabolomics to chart specialized metabolic diversity. <b>2020</b> , 49, 3297-3314	52
311	A Two-Component regulatory system with opposite effects on glycopeptide antibiotic biosynthesis and resistance. <b>2020</b> , 10, 6200	10
310	Mining the Biosynthetic Potential for Specialized Metabolism of a Soil Community. <b>2020</b> , 9,	10
309	New strategies and targets for antibacterial discovery. <b>2020</b> , 249-272	1
308	Antibiotic drug discovery: Challenges and perspectives in the light of emerging antibiotic resistance. <b>2020</b> , 105, 229-292	3
307	The genus as a model microorganism for bioactive natural product discovery.. <b>2020</b> , 10, 20939-20959	10
306	Comparative Genomics and Metabolomics in the Genus. <b>2020</b> , 5,	19
305	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family. <b>2020</b> , 21, 387	47
304	Antimicrobial biosynthetic potential and diversity of culturable soil actinobacteria from forest ecosystems of Northeast India. <b>2020</b> , 10, 4104	16
303	Mass Spectrometry-Guided Genome Mining as a Tool to Uncover Novel Natural Products. <b>2020</b> ,	3
302	spp. From the Marine Sponge : Analyses of Secondary Metabolite Biosynthesis Gene Clusters and Some of Their Products. <b>2020</b> , 11, 437	8
301	Novel approach in whole genome mining and transcriptome analysis reveal conserved RiPPs in <i>Trichoderma</i> spp. <b>2020</b> , 21, 258	10
300	Coevolution-based prediction of protein-protein interactions in polyketide biosynthetic assembly lines. <b>2020</b> , 36, 4846-4853	4
299	Genotyping-Guided Discovery of Persiamycin A From Sponge-Associated Halophilic sp. PA3. <b>2020</b> , 11, 1237	5
298	A Systematic Analysis of Mosquito-Microbiome Biosynthetic Gene Clusters Reveals Antimalarial Siderophores that Reduce Mosquito Reproduction Capacity. <b>2020</b> , 27, 817-826.e5	7
297	Ecological and biotechnological importance of secondary metabolites produced by coral-associated bacteria. <b>2020</b> , 129, 1441-1457	10

296	Genome mining of biosynthetic and chemotherapeutic gene clusters in <i>Streptomyces</i> bacteria. <b>2020</b> , 10, 2003	57
295	Diversity of Bacterial Biosynthetic Genes in Maritime Antarctica. <b>2020</b> , 8,	5
294	Microfluidic automated plasmid library enrichment for biosynthetic gene cluster discovery. <b>2020</b> , 48, e48	7
293	A comparative genomics study of 23 <i>Aspergillus</i> species from section <i>Flavi</i> . <b>2020</b> , 11, 1106	54
292	Establishment of recombineering genome editing system in <i>Paraburkholderia megapolitana</i> empowers activation of silent biosynthetic gene clusters. <b>2020</b> , 13, 397-405	12
291	Molecular imprints of plant beneficial <i>Streptomyces</i> sp. AC30 and AC40 reveal differential capabilities and strategies to counter environmental stresses. <b>2020</b> , 235, 126449	8
290	Identification and Heterologous Expression of the Biosynthetic Gene Cluster Encoding the Lasso Peptide Humidimycin, a Caspofungin Activity Potentiator. <b>2020</b> , 9,	8
289	The Pathway Less Traveled: Engineering Biosynthesis of Nonstandard Functional Groups. <b>2020</b> , 38, 532-545	12
288	Isolation, Genomic and Metabolomic Characterization of VITAKN with Quorum Sensing Inhibitory Activity from Southern India. <b>2020</b> , 8,	9
287	Genome-based analysis for the bioactive potential of <i>Streptomyces yeochonensis</i> CN732, an acidophilic filamentous soil actinobacterium. <b>2020</b> , 21, 118	10
286	Linking Genes to Molecules in Eukaryotic Sources: An Endeavor to Expand Our Biosynthetic Repertoire. <b>2020</b> , 25,	3
285	Monasone Naphthoquinone Biosynthesis and Resistance in Fungi. <b>2020</b> , 11,	12
284	Genome mining as a biotechnological tool for the discovery of novel marine natural products. <b>2020</b> , 40, 571-589	5
283	Multicomponent Microscale Biosynthesis of Unnatural Cyanobacterial Indole Alkaloids. <b>2020</b> , 9, 1349-1360	12
282	Annotated Genome Sequence of NIH1004. <b>2020</b> , 9,	1
281	The Biosynthesis of Fungal Secondary Metabolites: From Fundamentals to Biotechnological Applications. <b>2021</b> , 458-476	14
280	Microbiome Engineering: Synthetic Biology of Plant-Associated Microbiomes in Sustainable Agriculture. <b>2021</b> , 39, 244-261	47
279	The Use of the Rare TTA Codon in Genes: Significance of the Codon Context?. <b>2021</b> , 61, 24-30	1

278	A machine learning-based method for prediction of macrocyclization patterns of polyketides and non-ribosomal peptides. <b>2021</b> , 37, 603-611	6
277	Polyketide Ebranching: diversity, mechanism and selectivity. <b>2021</b> , 38, 723-756	7
276	The antiSMASH database version 3: increased taxonomic coverage and new query features for modular enzymes. <b>2021</b> , 49, D639-D643	32
275	A biaryl-linked tripeptide from <i>Planomonospora</i> reveals a widespread class of minimal RiPP gene clusters. <b>2021</b> , 28, 733-739.e4	8
274	Microbial natural product databases: moving forward in the multi-omics era. <b>2021</b> , 38, 264-278	18
273	Genomic Insights Into the Antifungal Activity and Plant Growth-Promoting Ability in CMRP 4490. <b>2020</b> , 11, 618415	5
272	The Food Poisoning Toxins of. <b>2021</b> , 13,	33
271	Bioinformatics Applications in Fungal Siderophores: Omics Implications. <b>2021</b> , 157-171	
270	Genome analysis of a halophilic bacterium <i>Halomonas malpeensis</i> YU-PRIM-29 reveals its exopolysaccharide and pigment producing capabilities. <b>2021</b> , 11, 1749	1
269	Identification of Oral Bacterial Biosynthetic Gene Clusters Associated with Caries. <b>2021</b> , 2327, 161-189	1
268	Bioinformatics Approaches for Fungal Biotechnology. <b>2021</b> , 536-554	
267	A Multi-Omics Characterization of the Natural Product Potential of Tropical Filamentous Marine Cyanobacteria. <b>2021</b> , 19,	6
266	Mining metagenomes for natural product biosynthetic gene clusters: unlocking new potential with ultrafast techniques.	2
265	The confluence of big data and evolutionary genome mining for the discovery of natural products. <b>2021</b> , 38, 2024-2040	7
264	The ecological roles of microbial lipopeptides: Where are we going?. <b>2021</b> , 19, 1400-1413	6
263	Chlorinated metabolites from <i>Streptomyces</i> sp. highlight the role of biosynthetic mosaics and superclusters in the evolution of chemical diversity. <b>2021</b> , 19, 6147-6159	3
262	Hybrid Clustering of Long and Short-read for Improved Metagenome Assembly.	
261	Alternative metabolic pathways and strategies to high-titre terpenoid production in. <b>2021</b> ,	7

260	Genus <i>Penicillium</i> : Advances and application in the modern era. <b>2021</b> , 201-213	0
259	<i>Streptomyces</i> sp. M54: an actinobacteria associated with a neotropical social wasp with high potential for antibiotic production. <b>2021</b> , 114, 379-398	2
258	Evolution of combinatorial diversity in trans-acyltransferase polyketide synthase assembly lines across bacteria. <b>2021</b> , 12, 1422	5
257	Blocks in the pseudouridimycin pathway unlock hidden metabolites in the <i>Streptomyces</i> producer strain. <b>2021</b> , 11, 5827	6
256	Genomic insights into biocontrol potential of edible seaweed-associated <i>Bacillus velezensis</i> MTCC 10456 from Gulf of Mannar. <b>2021</b> , 203, 2941-2952	
255	Deep learning approaches for natural product discovery from plant endophytic microbiomes. <b>2021</b> , 16, 6	2
254	Metagenomic insights into the taxonomy, function, and dysbiosis of prokaryotic communities in octocorals. <b>2021</b> , 9, 72	7
253	Unexpected genomic, biosynthetic and species diversity of <i>Streptomyces</i> bacteria from bats in Arizona and New Mexico, USA. <b>2021</b> , 22, 247	1
252	Coelimycin Synthesis Activatory Proteins Are Key Regulators of Specialized Metabolism and Precursor Flux in A3(2). <b>2021</b> , 12, 616050	4
251	Anaerobic gut fungi are an untapped reservoir of natural products. <b>2021</b> , 118,	11
250	Phylogenetic Distribution of Secondary Metabolites in the <i>Bacillus subtilis</i> Species Complex. <b>2021</b> , 6,	7
249	Deciphering the Genome to Discover Effector Genes Possibly Involved in Virulence. <b>2021</b> , 12,	7
248	Phylogenomic Insights into Distribution and Adaptation of <i>Bdellovibrionota</i> in Marine Waters. <b>2021</b> , 9,	3
247	The <i>Pectobacterium</i> pangenome, with a focus on <i>Pectobacterium brasiliense</i> , shows a robust core and extensive exchange of genes from a shared gene pool. <b>2021</b> , 22, 265	8
246	Genomics- and machine learning-accelerated discovery of biocontrol bacteria.	0
245	Deep Large-Scale Multitask Learning Network for Gene Expression Inference. <b>2021</b> , 28, 485-500	
244	Density-based binning of gene clusters to infer function or evolutionary history using GeneGrouper.	1
243	Accurate de novo identification of biosynthetic gene clusters with GECCO.	3

242	Draft Genome Sequences of Five Fungal Strains Isolated from Kefir. <b>2021</b> , 10, e0019521	
241	Salicylic Acid Biosynthesis and Metabolism: A Divergent Pathway for Plants and Bacteria. <b>2021</b> , 11,	7
240	A Machine Learning Bioinformatics Method to Predict Biological Activity from Biosynthetic Gene Clusters. <b>2021</b> , 61, 2560-2571	5
239	Ranking microbial metabolomic and genomic links in the NPLinker framework using complementary scoring functions. <b>2021</b> , 17, e1008920	7
238	Optimising the use of gene expression data to predict plant metabolic pathway memberships. <b>2021</b> , 231, 475-489	2
237	An interpreted atlas of biosynthetic gene clusters from 1,000 fungal genomes. <b>2021</b> , 118,	27
236	Recent advances in heterologous expression of natural product biosynthetic gene clusters in <i>Streptomyces</i> hosts. <b>2021</b> , 69, 118-127	19
235	Mining genomes to illuminate the specialized chemistry of life. <b>2021</b> , 22, 553-571	25
234	Comparative Genomic Insights Into the Taxonomic Classification, Diversity, and Secondary Metabolic Potentials of , a Genus Closely Related to. <b>2021</b> , 12, 683814	5
233	Secondary metabolism drives ecological breadth in the Xylariaceae.	0
232	Bifurcation drives the evolution of assembly-line biosynthesis.	1
231	Australian bush medicines harbour diverse microbial endophytes with broad-spectrum antibacterial activity. <b>2021</b> , 131, 2244-2256	0
230	Natural Products from <i>Nocardia</i> and Their Role in Pathogenicity. <b>2021</b> , 31, 217-232	1
229	A Standalone $\beta$ -Ketoreductase Acts Concomitantly with Biosynthesis of the Antimycin Scaffold. <b>2021</b> , 16, 1152-1158	1
228	Linking a Gene Cluster to Atranorin, a Major Cortical Substance of Lichens, through Genetic Dereplication and Heterologous Expression. <b>2021</b> , 12, e0111121	9
227	MolDiscovery: learning mass spectrometry fragmentation of small molecules. <b>2021</b> , 12, 3718	8
226	Genetic loci of the <i>R. anatipestifer</i> serotype discovered by Pan-GWAS and its application for the development of a multiplex PCR serotyping method.	
225	Machine Learning of <i>Pseudomonas aeruginosa</i> transcriptomes identifies independently modulated sets of genes associated with known transcriptional regulators.	0



224	Insights into the Variation in Bioactivities of Closely Related Strains from Marine Sediments of the Visayan Sea against ESKAPE and Ovarian Cancer. <b>2021</b> , 19,	2
223	Genomic and chemical decryption of the Bacteroidetes phylum for its potential to biosynthesize natural products.	1
222	High-Throughput Transcriptional Characterization of Regulatory Sequences from Bacterial Biosynthetic Gene Clusters. <b>2021</b> , 10, 1859-1873	2
221	The Design-Build-Test-Learn cycle for metabolic engineering of Streptomyces. <b>2021</b> , 65, 261-275	6
220	Genome mining for drug discovery: progress at the front end. <b>2021</b> ,	3
219	Communication Breakdown: Dissecting the COM Interfaces between the Subunits of Nonribosomal Peptide Synthetases. <b>2021</b> , 11, 10802-10813	3
218	Cyanochelins, an Overlooked Class of Widely Distributed Cyanobacterial Siderophores, Discovered by Silent Gene Cluster Awakening. <b>2021</b> , 87, e0312820	1
217	TaxiBGC: a Taxonomy-guided Approach for the Identification of Experimentally Verified Microbial Biosynthetic Gene Clusters in Shotgun Metagenomic Data.	
216	Plant Metabolic Gene Clusters: Evolution, Organization, and Their Applications in Synthetic Biology. <b>2021</b> , 12, 697318	3
215	Comparative Genomics Reveals a Remarkable Biosynthetic Potential of the Phylogenetic Lineage Associated with Rugose-Ornamented Spores. <b>2021</b> , 6, e0048921	1
214	Integrating perspectives in actinomycete research: an ActinoBase review of 2020-21. <b>2021</b> , 167,	0
213	Characterization and engineering of <i>Streptomyces griseofuscus</i> DSM 40191 as a potential host for heterologous expression of biosynthetic gene clusters. <b>2021</b> , 11, 18301	2
212	A high-quality genome assembly of <i>Jasminum sambac</i> provides insight into floral trait formation and Oleaceae genome evolution. <b>2021</b> ,	2
211	Synthetic biology of plant natural products: From pathway elucidation to engineered biosynthesis in plant cells. <b>2021</b> , 2, 100229	3
210	Bioactive exometabolites drive maintenance competition in simple bacterial communities.	
209	Heterologous expression of a natural product biosynthetic gene cluster from <i>Cordyceps militaris</i> . <b>2021</b> ,	0
208	Integrated omics approaches for deciphering antifungal metabolites produced by a novel <i>Bacillus</i> species, <i>B. cabrialesii</i> TE3, against the spot blotch disease of wheat ( <i>Triticum turgidum</i> L. subsp. <i>durum</i> ). <b>2021</b> , 251, 126826	5
207	Synergizing the potential of bacterial genomics and metabolomics to find novel antibiotics. <b>2021</b> , 12, 5994-6010	10

206	Diverse Taxonomies for Diverse Chemistries: Enhanced Representation of Natural Product Metabolism in UniProtKB. <b>2021</b> , 11,	2
205	Statistical and Computational Methods in Microbiome and Metagenomics. <b>2019</b> , 977-550	5
204	Deep Large-Scale Multi-task Learning Network for Gene Expression Inference. <b>2020</b> , 19-36	4
203	Engineering Heterologous Hosts for the Enhanced Production of Non-ribosomal Peptides. <b>2020</b> , 25, 795-809	1
202	Modern Plant Metabolomics for the Discovery and Characterization of Natural Products and Their Biosynthetic Genes. <b>2020</b> , 156-188	1
201	Cultivation dependent formation of siderophores by <i>Gordonia rubripertincta</i> CWB2. <b>2020</b> , 238, 126481	8
200	Norine: update of the nonribosomal peptide resource. <b>2020</b> , 48, D465-D469	32
199	EvoMining reveals the origin and fate of natural product biosynthetic enzymes. <b>2019</b> , 5,	19
198	PlantISMASH: automated identification, annotation and expression analysis of plant biosynthetic gene clusters.	1
197	clusterTools: proximity searches for functional elements to identify putative biosynthetic gene clusters.	2
196	Precursor peptide-targeted mining of more than one hundred thousand genomes expands the lanthipeptide natural product family.	2
195	Integration of machine learning and pan-genomics expands the biosynthetic landscape of RiPP natural products.	3
194	Biosynthesis and heterologous expression of cacaoidin, the first member of the lanthidin family of RiPPs.	2
193	Identification of polyketide biosynthetic gene clusters that harbor self-resistance target genes.	2
192	Ranking microbial metabolomic and genomic links in the NPLinker framework using complementary scoring functions.	6
191	An Interpreted Atlas of Biosynthetic Gene Clusters from 1000 Fungal Genomes.	3
190	Phylogenetic distribution of secondary metabolites in the <i>Bacillus subtilis</i> species complex.	1
189	MolDiscovery: Learning Mass Spectrometry Fragmentation of Small Molecules.	1

188	Vertical inheritance governs biosynthetic gene cluster evolution and chemical diversification.	6
187	Identification of the bacterial biosynthetic gene clusters of the oral microbiome illuminates the unexplored social language of bacteria during health and disease.	3
186	A computational framework for systematic exploration of biosynthetic diversity from large-scale genomic data.	29
185	Coevolution-based prediction of protein-protein interactions in polyketide biosynthetic assembly lines.	1
184	High-Throughput Functional Annotation of Natural Products by Integrated Activity Profiling.	3
183	Pangenome Analysis of Enterobacteria Reveals Richness of Secondary Metabolite Gene Clusters and their Associated Gene Sets.	2
182	Accessing Nature's diversity through metabolic engineering and synthetic biology. <b>2016</b> , 5,	33
181	<i>Aspergillus hancockii</i> sp. nov., a biosynthetically talented fungus endemic to southeastern Australian soils. <b>2017</b> , 12, e0170254	28
180	Drug Resistance and the Prevention Strategies in Food Borne Bacteria: An Update Review. <b>2019</b> , 9, 335-347	34
179	Direct Capture Technologies for Genomics-Guided Discovery of Natural Products. <b>2016</b> , 16, 1695-704	4
178	The Microbiome: A Reservoir to Discover New Antimicrobials Agents. <b>2020</b> , 20, 1291-1299	2
177	Evolutionary Histories of Type III Polyketide Synthases in Fungi. <b>2019</b> , 10, 3018	14
176	SYN-View: A Phylogeny-Based Synteny Exploration Tool for the Identification of Gene Clusters Linked to Antibiotic Resistance. <b>2020</b> , 26,	4
175	Digitizing mass spectrometry data to explore the chemical diversity and distribution of marine cyanobacteria and algae. <b>2017</b> , 6,	26
174	Antibiotic-induced acceleration of type 1 diabetes alters maturation of innate intestinal immunity. <b>2018</b> , 7,	41
173	-Genomic data mining of the marine actinobacteria sp. H-KF8 unveils insights into multi-stress related genes and metabolic pathways involved in antimicrobial synthesis. <b>2017</b> , 5, e2912	21
172	Needles in haystacks: reevaluating old paradigms for the discovery of bacterial secondary metabolites. <b>2021</b> , 38, 2083-2099	1
171	Nerpa: A Tool for Discovering Biosynthetic Gene Clusters of Bacterial Nonribosomal Peptides. <b>2021</b> , 11,	2

- 170 Looking Back to : History of the Antibiotic Discovery and Future Prospects. **2021**, 10, 2
- 169 Mining the Microbiome and Microbiota-Derived Molecules in Inflammatory Bowel Disease. **2021**, 22, 1
- 168 Biomolecular Engineering of Microorganisms for Natural Products Production. **2017**,
- 167 Revisiting biodiscovery from microbial sources in the light of molecular advances. **2017**, 38, 58 1
- 166 Qinichelins, novel catecholate-hydroxamate siderophores synthesized via a multiplexed convergent biosynthesis pathway.
- 165 MetaRiPPquest: A Peptidogenomics Approach for the Discovery of Ribosomally Synthesized and Post-translationally Modified Peptides. 1
- 164 HEx: a heterologous expression platform for the discovery of fungal natural products.
- 163 Bacterial competition mediated by siderophore production among the human nasal microbiota.
- 162 EvoMining reveals the origin and fate of natural products biosynthetic enzymes.
- 161 A Deep Learning Genome-Mining Strategy Improves Biosynthetic Gene Cluster Prediction. 1
- 160 Microbial Type III Polyketide Synthases. **2019**,
- 159 Bagremycin Antibiotics and Ferroverdin iron-chelators are synthesized by the Same Gene Cluster.
- 158 DDAP: docking domain affinity and biosynthetic pathway prediction tool for type I polyketide synthases.
- 157 A Systematic Analysis of Mosquito-Microbiome Biosynthetic Gene Clusters Reveals Antimalarial Siderophores that Reduce Mosquito Reproduction Capacity.
- 156 Chemical, Bioactivity, and Biosynthetic Screening of Epiphytic Fungus. **2020**, 25, 0
- 155 Activation and Identification of a Griseusin Cluster in sp. CA-256286 by Employing Transcriptional Regulators and Multi-Omics Methods. **2021**, 26, 1
- 154 A Multidisciplinary Approach to Unraveling the Natural Product Biosynthetic Potential of a Strain Collection Isolated from Leaf-Cutting Ants. **2021**, 9, 0
- 153 In silico analyses of maleidride biosynthetic gene clusters.

152	General Strategies for Biosynthetic Gene Cluster Identification, Capture, and Heterologous Expression. <b>2020</b> , 3-18	
151	Engineering Natural Product Biosynthetic Pathways to Produce Commodity and Specialty Chemicals. <b>2020</b> , 352-376	
150	Microbial Co-Cultures as Source of Novel Drugs for Infections. <b>2020</b> , 142-160	
149	Bioinformatics—The Power of Integrated Platforms for Omics Mining. <b>2020</b> , 211-221	
148	Genome Mining in Fungi. <b>2020</b> , 34-49	
147	Activation of Silent Natural Product Biosynthetic Gene Clusters Using Synthetic Biology Tools. <b>2020</b> , 113-135	0
146	Metagenome Mining. <b>2020</b> , 50-89	
145	Artificial intelligence-guided discovery of anticancer lead compounds from plants and associated microorganisms. <b>2021</b> ,	3
144	Density-based binning of gene clusters to infer function or evolutionary history using GeneGrouper. <b>2021</b> ,	1
143	Genomics-accelerated discovery of diverse fungicidal bacteria.	
142	Metabolomic investigation of the pseudouridimycin producer, a prolific streptomycete.	
141	Characterization and Engineering of <i>Streptomyces griseofuscus</i> DSM 40191 as a Potential Host for Heterologous Expression of Biosynthetic Gene Clusters.	
140	The In Silico Characterization of a Salicylic Acid Analogue Coding Gene Clusters in Selected Strains. <b>2019</b> , 17, e2250	1
139	Glacier-fed stream biofilms harbour diverse resistomes and biosynthetic gene clusters.	
138	Ecological generalism drives hyperdiversity of secondary metabolite gene clusters in xylarialean endophytes. <b>2021</b> ,	3
137	Synthaser: a CD-Search enabled Python toolkit for analysing domain architecture of fungal secondary metabolite megasynth(et)ases. <b>2021</b> , 8, 13	1
136	Vertical Inheritance Facilitates Interspecies Diversification in Biosynthetic Gene Clusters and Specialized Metabolites. <b>2021</b> , e0270021	3
135	Full Issue PDF. <b>2021</b> , 5, 368-472	

134	Meta-QTLs, ortho-meta-QTLs and candidate genes for grain yield and associated traits in wheat ( <i>Triticum aestivum</i> L.).. <b>2022</b> , 1	4
133	Gene cluster from plant to microbes: Their role in genome architecture, organism's development, specialized metabolism and drug discovery. <b>2021</b> , 193, 1-1	0
132	Biosynthetic Gene Cluster Analysis in Actinobacterial Genus <i>Streptomyces</i> . <b>2022</b> , 247-262	
131	Traditional Screening and Genome-Guided Screening of Natural Products from Actinobacteria. <b>2022</b> , 59-76	
130	CRISPR ERA: Current Applications and Future Perspectives on Actinobacteria. <b>2022</b> , 181-202	
129	Comparative Genomics Reveal the Animal-Associated Features of the Bacteria, and Description of <i>gen. nov., sp., nov.</i> <b>2022</b> , 13, 778535	
128	Global analysis of biosynthetic gene clusters reveals conserved and unique natural products in entomopathogenic nematode-symbiotic bacteria.	0
127	Single cell mutant selection for metabolic engineering of actinomycetes.	
126	Biosynthetic potential of the endophytic fungus <i>Helotiales</i> sp. BL73 revealed via compound identification and genome mining.. <b>2022</b> , aem0251021	0
125	Genomic regions controlling yield-related traits in spring wheat: A mini review and a case study for rainfed environments in Australia and China.. <b>2022</b> , 110268	0
124	Integrated Genomic and Metabolomic Analysis Illuminates Key Secreted Metabolites Produced by the Novel Endophyte <i>Cal.l.30</i> Involved in Diverse Biological Control Activities.. <b>2022</b> , 10,	1
123	Genomic and Metabolomic Insights into Secondary Metabolites of the Novel <i>Hil4</i> , an Endophyte with Promising Antagonistic Activity against Gray Mold and Plant Growth Promoting Potential.. <b>2021</b> , 9,	1
122	Genome Mining of Species: Diversity and Evolution of Metabolic and Biosynthetic Potential.. <b>2021</b> , 26,	2
121	Genome Mining and Analysis of PKS Genes in E1 Isolated from Fuzhuan Brick Tea.. <b>2022</b> , 8,	0
120	Unveiling the genomic potential of type strains for discovering new natural products.. <b>2022</b> , 8,	0
119	In silico analyses of maleidride biosynthetic gene clusters.. <b>2022</b> , 9, 2	0
118	Machine learning from <i>Pseudomonas aeruginosa</i> transcriptomes identifies independently modulated sets of genes associated with known transcriptional regulators.. <b>2022</b> ,	3
117	New Glycosylated Polyene Macrolides: Refining the Ore from Genome Mining.. <b>2022</b> , 11,	1

- 116 Genetics Behind the Glycosylation Patterns in the Biosynthesis of Dalbaheptides.. **2022**, 10, 858708 0
- 115 , a Vintage Model with a Cutting-Edge Profile in Biotechnology.. **2022**, 10, 2
- 114 A coevolution experiment reveals parallel mutations in the AcrA-AcrB-TolC efflux pump that contributes to bacterial antibiotic resistance.
- 113 The Evolution of the Satratoxin and Atranone Gene Clusters of .. **2022**, 8, 0
- 112 Non-ribosomal peptide synthetase domain boundary identification and new motifs discovery based on motif-intermotifs standardized architecture. 0
- 111 Microbial metabolites: cause or consequence in gastrointestinal disease?. **2022**, 1
- 110 Draft Genome Sequence of *Brevibacillus brevis* LABIM17, a Biotechnologically Important Antimicrobial-Producing Bacterium.. **2022**, e0000622 0
- 109 Comparative metagenomic analysis of biosynthetic diversity across sponge microbiomes highlights metabolic novelty, conservation and diversification.
- 108 Heterologous Expression of Macrollins from Phytopathogenic Revealed a Cytochrome P450 Mono-oxygenase in the Biosynthesis of  $\beta$ -Hydroxyl Tetramic Acid. **2021**, 0
- 107 Secondary metabolite biosynthetic diversity in Arctic Ocean metagenomes.. **2021**, 7, 1
- 106 Polar Actinobacteria: A Source of Biosynthetic Diversity. **2022**, 71-89
- 105 Marine Fungi. **2022**, 243-295
- 104 Metabolic Engineering of Actinomycetes for Natural Product Discovery. **2022**, 267-307
- 103 Genomic and Chemical Decryption of the Bacteroidetes Phylum for Its Potential to Biosynthesize Natural Products.. **2022**, e0247921 2
- 102 Table3.DOCX. **2018**,
- 101 Data\_Sheet\_1.docx. **2020**,
- 100 Image\_1.jpeg. **2019**,
- 99 Image\_2.jpeg. **2019**,

98 Image\_3.tif. 2019,

97 Data\_Sheet\_1.FASTA. 2020,

96 Data\_Sheet\_2.FASTA. 2020,

95 Data\_Sheet\_3.docx. 2020,

94 Data\_Sheet\_4.fasta. 2020,

93 Data\_Sheet\_5.zip. 2020,

92 Data\_Sheet\_6.zip. 2020,

91 Data\_Sheet\_7.pdf. 2020,

90 Data\_Sheet\_8.zip. 2020,

89 Data\_Sheet\_9.pdf. 2020,

88 Table\_1.xlsx. 2020,

87 Data\_Sheet\_1.docx. 2018,

86 Data\_Sheet\_2.xlsx. 2018,

85 Data\_Sheet\_1.pdf. 2018,

84 Table\_1.XLSX. 2020,

83 Image\_1.tif. 2019,

82 Image\_2.tif. 2019,

81 Table\_1.DOCX. 2019,



80 Table\_2.DOCX. 2019,

79 Table\_3.DOCX. 2019,

78 Table\_4.DOCX. 2019,

77 Table\_5.DOCX. 2019,

76 Table\_6.DOCX. 2019,

75 Presentation\_1.pdf. 2020,

74 Image1.PDF. 2018,

73 Image2.PDF. 2018,

72 Image3.PDF. 2018,

71 Table1.docx. 2018,

70 Table2.DOCX. 2018,

69 Data\_Sheet\_1.docx. 2020,

68 Global analysis of biosynthetic gene clusters reveals conserved and unique natural products in entomopathogenic nematode-symbiotic bacteria.. 2022, 2

67 Marine Microorganisms: From Pollutant Degradation to Added Value Products. 2022, 193-212

66 Heterologous Expression of Fungal Biosynthetic Pathways in *Aspergillus nidulans* Using Episomal Vectors.. 2022, 2489, 75-92

65 An Unprecedented Number of Cytochrome P450s Are Involved in Secondary Metabolism in *Salinispora* Species. 2022, 10, 871 2

64 Comparative genomics reveals the organic acid biosynthesis metabolic pathways among five lactic acid bacterial species isolated from fermented vegetables.. 2022, 2

63 Pangenome analysis of Enterobacteria reveals richness of secondary metabolite gene clusters and their associated gene sets. 2022, 0

62	Insights into applications and strategies for discovery of microbial bioactive metabolites. <b>2022</b> , 127053	1
61	Biosynthesis of Guanitoxin Enables Global Environmental Detection in Freshwater Cyanobacteria.. <b>2022</b> ,	2
60	Comprehensive genome analysis of <i>Lentzea</i> reveals repertoire of polymer-degrading enzymes and bioactive compounds with clinical relevance.. <b>2022</b> , 12, 8409	1
59	Comparative Analysis of Pseudo-nitzschia Chloroplast Genomes Revealed Extensive Inverted Region Variation and Pseudo-nitzschia Speciation. <b>2022</b> , 9,	1
58	The Significance of Digital Marketing in Shaping Ecotourism Behaviour through Destination Image. <b>2022</b> , 14, 7395	2
57	Metadata harmonization standards are the key for a better usage of omics data for integrative microbiome analysis. <b>2022</b> , 17,	0
56	Functional and phylogenetic analyses of camel rumen microbiota associated with different lignocellulosic substrates. <b>2022</b> , 8,	0
55	Biological Dark Matter Exploration using Data Mining for the Discovery of Antimicrobial Natural Products.	
54	Bifurcation drives the evolution of assembly-line biosynthesis. <b>2022</b> , 13,	2
53	Proteomining-Based Elucidation of Natural Product Biosynthetic Pathways in <i>Streptomyces</i> . 13,	
52	Deep-Sea Sediments from the Southern Gulf of Mexico Harbor a Wide Diversity of PKS I Genes. <b>2022</b> , 11, 887	
51	Dynamic description of temporal changes of gut microbiota in broilers. <b>2022</b> , 102037	0
50	Comparative Metagenomic Analysis of Biosynthetic Diversity across Sponge Microbiomes Highlights Metabolic Novelty, Conservation, and Diversification.	0
49	Single cell mutant selection for metabolic engineering of actinomycetes. <b>2022</b> , 73, 124-133	2
48	Structure and Function of a Dehydrating Condensation Domain in Nonribosomal Peptide Biosynthesis.	0
47	Comparative analysis of assembly algorithms to optimize biosynthetic gene cluster identification in novel marine actinomycete genomes. 9,	
46	Footprinting approach for the identification of protein synthesis inhibitor producers. <b>2022</b> , 4,	0
45	Exploring the Antibiotic Production Potential of Heterotrophic Bacterial Communities Isolated from the Marine Sponges <i>Crateromorpha meyeri</i> , <i>Pseudaxinella reticulata</i> , <i>Farrea similaris</i> , and <i>Caulophacus arcticus</i> through Synergistic Metabolomic and Genomic Analyses. <b>2022</b> , 20, 463	0

- 44 Exploring the role of antimicrobials in the selective growth of purple phototrophic bacteria through genome mining and agar spot assays.
- 43 Emerging trends in genomic and epigenomic regulation of plant specialised metabolism. **2022**, 203, 113427 1
- 42 Functional characterization of prokaryotic dark matter: the road so far and what lies ahead. **2022**, 3, 100159 0
- 41 Maleidride biosynthesis [Construction of dimeric anhydrides [more than just heads or tails. 0
- 40 Genetic localization of epicoccamide biosynthetic gene cluster in *Epicoccum nigrum* KACC 40642. **2022**, 65, 159-166 0
- 39 Metagenomics-resolved genomics provides novel insights into chitin turnover, metabolic specialization, and niche partitioning in the octocoral microbiome. **2022**, 10, 0
- 38 *Streptomyces*: The biofactory of secondary metabolites. 13, 1
- 37 Complete genome sequencing and in silico genome mining reveal the promising metabolic potential in *Streptomyces* strain CS-7. 13, 0
- 36 *Streptococcus salivarius* 24SMBC Genome Analysis Reveals New Biosynthetic Gene Clusters Involved in Antimicrobial Effects on *Streptococcus pneumoniae* and *Streptococcus pyogenes*. **2022**, 10, 2042 0
- 35 Amino acid (acyl carrier protein) ligase-associated biosynthetic gene clusters reveal unexplored biosynthetic potential. 0
- 34 Revealing the Genetic Architecture of Yield-Related and Quality Traits in Indian Mustard [*Brassica juncea* (L.) Czern. and Coss.] Using Meta-QTL Analysis. **2022**, 12, 2442 2
- 33 Meta-analysis of metagenomics reveals the signatures of vaginal microbiome in preterm birth. **2022**, 14, 100065 0
- 32 TaxiBGC: a Taxonomy-Guided Approach for Profiling Experimentally Characterized Microbial Biosynthetic Gene Clusters and Secondary Metabolite Production Potential in Metagenomes. 1
- 31 Genome analysis and elucidation of the biosynthetic pathway for the cRAS inhibitor rasfonin in *Cephalotrichum gorgonifer*. 0
- 30 Nonribosomal peptide synthetase gene clusters and characteristics of predicted NRPS-dependent siderophore synthetases in *Armillaria* and other species in the Physalacriaceae. 0
- 29 MIBiG 3.0: a community-driven effort to annotate experimentally validated biosynthetic gene clusters. 1
- 28 A survey of the biosynthetic potential and specialized metabolites of archaea and understudied bacteria. **2023**, 5, 100117 1
- 27 Specialized Metabolism of *Gordonia* Genus: An Integrated Survey on Chemodiversity Combined with a Comparative Genomics-Based Analysis. **2022**, 11, 53 0

- 26 Strategizing the human microbiome for small molecules: Approaches and perspectives. **2022**, 103459 ○
- 25 Saprophytic to Pathogenic Mycobacteria: Loss of Cytochrome P450s Vis a Vis Their Prominent Involvement in Natural Metabolite Biosynthesis. **2023**, 24, 149 1
- 24 Draft Genome Sequences of 14 Fungal Species from Alternaria Section Infectoriae. ○
- 23 Natural and engineered cyclodipeptides: Biosynthesis, chemical diversity, and engineering strategies for diversification and high-yield bioproduction.. **2022**, 100067 ○
- 22 Novel Plant-Associated Brevibacillus and Lysinibacillus Genomes Harbor a Rich Biosynthetic Potential of Antimicrobial Compounds. **2023**, 11, 168 ○
- 21 Metagenomics Shines Light on the Evolution of Sunscreen Pigment Metabolism in the Teloschistales (Lichen-Forming Ascomycota). 1
- 20 The Diversity of Deep-Sea Actinobacteria and Their Natural Products: An Epitome of Curiosity and Drug Discovery. **2023**, 15, 30 ○
- 19 Isolation, complete genome sequencing and in silico genome mining of Burkholderia for secondary metabolites. **2022**, 22, ○
- 18 Diversity of Bacterial Secondary Metabolite Biosynthetic Gene Clusters in Three Vietnamese Sponges. **2023**, 21, 29 ○
- 17 Uncovering a miltiradiene biosynthetic gene cluster in the Lamiaceae reveals a dynamic evolutionary trajectory. **2023**, 14, ○
- 16 Glacier-Fed Stream Biofilms Harbor Diverse Resistomes and Biosynthetic Gene Clusters. ○
- 15 Resorculins: hybrid polyketide macrolides from Streptomyces sp. MST-91080. **2023**, 21, 2531-2538 ○
- 14 Enhancing chemical and biological diversity by co-cultivation. 14, ○
- 13 Computational Approaches to Enzyme Inhibition by Marine Natural Products in the Search for New Drugs. **2023**, 21, 100 ○
- 12 A coevolution experiment between Flavobacterium johnsoniae and Burkholderia thailandensis reveals parallel mutations that reduce antibiotic susceptibility. **2023**, 169, ○
- 11 Genome-Wide Identification and Evolutionary Analyses of SrfA Operon Genes in Bacillus. **2023**, 14, 422 ○
- 10 Correlative metabologenomics of 110 fungi reveals metabolite-gene cluster pairs. ○
- 9 The genomic landscape of reference genomes of cultivated human gut bacteria. **2023**, 14, ○

- 8 Surfactin: Its Biological Activity and Possibility of Application in Agriculture. **2023**, 59, 1-13
- 7 Genome mining to identify valuable secondary metabolites and their regulation in Actinobacteria from different niches. **2023**, 205,
- 6 Soil conditions and the plant microbiome boost the accumulation of monoterpenes in the fruit of *Citrus reticulata* [Hachi] **2023**, 11,
- 5 Comprehensive analysis of biosynthetic gene clusters in bacteria and discovery of *Tumebacillus* as a potential producer of natural products.
- 4 Total Synthesis and Structure Assignment of the Relacidine Lipopeptide Antibiotics and Preparation of Analogues with Enhanced Stability. **2023**, 9, 739-748
- 3 Integrated Omics approach for Prediction of Operons like gene clusters in plants: Tools, Techniques, and Future aspects. **2023**, 947-954
- 2 A comprehensive genomic analysis provides insights on the high environmental adaptability of *Acinetobacter* strains. 14,
- 1 Mining for a New Class of Fungal Natural Products: The Evolution, Diversity, and Distribution of Isocyanide Synthase Biosynthetic Gene Clusters.