

Sean F Brady

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/463242/publications.pdf>

Version: 2024-02-01

99
papers

10,545
citations

36303

51
h-index

33894

99
g-index

106
all docs

106
docs citations

106
times ranked

8957
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis and evaluation of dual-action kanglemycin-fluoroquinolone hybrid antibiotics. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2022, 57, 128484.	2.2	7
2	A naturally inspired antibiotic to target multidrug-resistant pathogens. <i>Nature</i> , 2022, 601, 606-611.	27.8	92
3	Lapcin, a potent dual topoisomerase I/II inhibitor discovered by soil metagenome guided total chemical synthesis. <i>Nature Communications</i> , 2022, 13, 842.	12.8	12
4	Identification of structurally diverse menaquinone-binding antibiotics with in vivo activity against multidrug-resistant pathogens. <i>Nature Microbiology</i> , 2022, 7, 120-131.	13.3	22
5	Bioinformatic prospecting and synthesis of a bifunctional lipopeptide antibiotic that evades resistance. <i>Science</i> , 2022, 376, 991-996.	12.6	44
6	Unraveling function and diversity of bacterial lectins in the human microbiome. <i>Nature Communications</i> , 2022, 13, .	12.8	3
7	Biosynthetic Interrogation of Soil Metagenomes Reveals Metamarin, an Uncommon Cyclomarin Congener with Activity against <i>Mycobacterium tuberculosis</i> . <i>Journal of Natural Products</i> , 2021, 84, 1056-1066.	3.0	18
8	Refactoring biosynthetic gene clusters for heterologous production of microbial natural products. <i>Current Opinion in Biotechnology</i> , 2021, 69, 145-152.	6.6	27
9	Multiplexed functional metagenomic analysis of the infant microbiome identifies effectors of NF- κ B, autophagy, and cellular redox state. <i>Cell Reports</i> , 2021, 36, 109746.	6.4	4
10	Metagenome-Guided Analogue Synthesis Yields Improved Gram-Negative Active Albicidin and Cystobactamid-Type Antibiotics. <i>Angewandte Chemie</i> , 2021, 133, 22346-22351.	2.0	3
11	Metagenome-Guided Analogue Synthesis Yields Improved Gram-Negative Active Albicidin and Cystobactamid-Type Antibiotics. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22172-22177.	13.8	12
12	Metabolites with SARS-CoV-2 Inhibitory Activity Identified from Human Microbiome Commensals. <i>MSphere</i> , 2021, 6, e0071121.	2.9	16
13	Synthetic-Bioinformatic Natural Product Antibiotics with Diverse Modes of Action. <i>Journal of the American Chemical Society</i> , 2020, 142, 14158-14168.	13.7	32
14	Total Synthesis of Malacidin A by β -Hydroxyaspartic Acid Ligation-Mediated Cyclization and Absolute Structure Establishment. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 19868-19872.	13.8	22
15	Total Synthesis of Malacidin A by β -Hydroxyaspartic Acid Ligation-Mediated Cyclization and Absolute Structure Establishment. <i>Angewandte Chemie</i> , 2020, 132, 20040-20044.	2.0	2
16	A Semisynthetic Kanglemycin Shows In Vivo Efficacy against High-Burden Rifampicin Resistant Pathogens. <i>ACS Infectious Diseases</i> , 2020, 6, 2431-2440.	3.8	15
17	Elucidating the Diversity and Potential Function of Nonribosomal Peptide and Polyketide Biosynthetic Gene Clusters in the Root Microbiome. <i>MSystems</i> , 2020, 5, .	3.8	12
18	General Strategies for Biosynthetic Gene Cluster Identification, Capture, and Heterologous Expression. , 2020, , 3-18.		0

#	ARTICLE	IF	CITATIONS
19	Mapping Interactions of Microbial Metabolites with Human G-Protein-Coupled Receptors. <i>Cell Host and Microbe</i> , 2019, 26, 273-282.e7.	11.0	113
20	Uncovering the biosynthetic potential of rare metagenomic DNA using co-occurrence network analysis of targeted sequences. <i>Nature Communications</i> , 2019, 10, 3848.	12.8	47
21	Bioactive Synthetic-Bioinformatic Natural Product Cyclic Peptides Inspired by Nonribosomal Peptide Synthetase Gene Clusters from the Human Microbiome. <i>Journal of the American Chemical Society</i> , 2019, 141, 15737-15741.	13.7	28
22	Cadasides, Calcium-Dependent Acidic Lipopeptides from the Soil Metagenome That Are Active against Multidrug-Resistant Bacteria. <i>Journal of the American Chemical Society</i> , 2019, 141, 3910-3919.	13.7	58
23	Functional Multigenomic Screening of Human-Associated Bacteria for NF- κ B-Inducing Bioactive Effectors. <i>MBio</i> , 2019, 10, .	4.1	8
24	Atolypenes, Tricyclic Bacterial Sesterterpenes Discovered Using a Multiplexed <i>In Vitro</i> Cas9-TAR Gene Cluster Refactoring Approach. <i>ACS Synthetic Biology</i> , 2019, 8, 109-118.	3.8	38
25	Culture-independent discovery of the malacidins as calcium-dependent antibiotics with activity against multidrug-resistant Gram-positive pathogens. <i>Nature Microbiology</i> , 2018, 3, 415-422.	13.3	338
26	An Optimized Synthetic-Bioinformatic Natural Product Antibiotic Sterilizes Multidrug-Resistant <i>Acinetobacter baumannii</i> -Infected Wounds. <i>MSphere</i> , 2018, 3, .	2.9	19
27	Human Microbiome Inspired Antibiotics with Improved β -Lactam Synergy against MDR <i>Staphylococcus aureus</i> . <i>ACS Infectious Diseases</i> , 2018, 4, 33-38.	3.8	30
28	Identification of the Colicin V Bacteriocin Gene Cluster by Functional Screening of a Human Microbiome Metagenomic Library. <i>ACS Infectious Diseases</i> , 2018, 4, 27-32.	3.8	23
29	Rifamycin congeners kanglemycins are active against rifampicin-resistant bacteria via a distinct mechanism. <i>Nature Communications</i> , 2018, 9, 4147.	12.8	57
30	Accessing Bioactive Natural Products from the Human Microbiome. <i>Cell Host and Microbe</i> , 2018, 23, 725-736.	11.0	101
31	Antimicrobials Inspired by Nonribosomal Peptide Synthetase Gene Clusters. <i>Journal of the American Chemical Society</i> , 2017, 139, 1404-1407.	13.7	51
32	Bacterial natural product biosynthetic domain composition in soil correlates with changes in latitude on a continent-wide scale. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11615-11620.	7.1	53
33	Commensal bacteria make GPCR ligands that mimic human signalling molecules. <i>Nature</i> , 2017, 549, 48-53.	27.8	361
34	Identification of biosynthetic gene clusters from metagenomic libraries using PPTase complementation in a <i>Streptomyces</i> host. <i>FEMS Microbiology Letters</i> , 2017, 364, .	1.8	34
35	Biotechnological potential of Actinobacteria from Canadian and Azorean volcanic caves. <i>Applied Microbiology and Biotechnology</i> , 2017, 101, 843-857.	3.6	40
36	Multiplexed CRISPR/Cas9- and TAR-Mediated Promoter Engineering of Natural Product Biosynthetic Gene Clusters in Yeast. <i>ACS Synthetic Biology</i> , 2016, 5, 1002-1010.	3.8	85

#	ARTICLE	IF	CITATIONS
37	Urban park soil microbiomes are a rich reservoir of natural product biosynthetic diversity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14811-14816.	7.1	89
38	Natural Product Discovery through Improved Functional Metagenomics in <i>Streptomyces</i> . Journal of the American Chemical Society, 2016, 138, 9341-9344.	13.7	65
39	Discovery of MRSA active antibiotics using primary sequence from the human microbiome. Nature Chemical Biology, 2016, 12, 1004-1006.	8.0	149
40	Culture-independent discovery of natural products from soil metagenomes. Journal of Industrial Microbiology and Biotechnology, 2016, 43, 129-141.	3.0	109
41	Global biogeographic sampling of bacterial secondary metabolism. ELife, 2015, 4, e05048.	6.0	117
42	Yeast homologous recombination-based promoter engineering for the activation of silent natural product biosynthetic gene clusters. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8953-8958.	7.1	96
43	Multiplexed metagenome mining using short DNA sequence tags facilitates targeted discovery of epoxyketone proteasome inhibitors. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 4221-4226.	7.1	104
44	Targeted Metagenomics: Finding Rare Tryptophan Dimer Natural Products in the Environment. Journal of the American Chemical Society, 2015, 137, 6044-6052.	13.7	58
45	Minimum Information about a Biosynthetic Gene cluster. Nature Chemical Biology, 2015, 11, 625-631.	8.0	715
46	Functional metagenomic discovery of bacterial effectors in the human microbiome and isolation of commendamide, a GPCR G2A/132 agonist. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4825-34.	7.1	133
47	Chemical-biogeographic survey of secondary metabolism in soil. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 3757-3762.	7.1	125
48	Mining Soil Metagenomes to Better Understand the Evolution of Natural Product Structural Diversity: Pentangular Polyphenols as a Case Study. Journal of the American Chemical Society, 2014, 136, 18111-18119.	13.7	63
49	Mutations in the Proteolipid Subunits of the Vacuolar H ⁺ -ATPase Provide Resistance to Indoltryptoline Natural Products. Biochemistry, 2014, 53, 7123-7131.	2.5	8
50	Characterization of an Environmental DNA-Derived Gene Cluster that Encodes the Bisindolylmaleimide Methylarcyriarubin. ChemBioChem, 2014, 15, 815-821.	2.6	20
51	Antibacterial enzymes from the functional screening of metagenomic libraries hosted in <i>Ralstonia metallidurans</i> . FEMS Microbiology Letters, 2014, 354, 19-26.	1.8	33
52	Mining the Metabiome: Identifying Novel Natural Products from Microbial Communities. Chemistry and Biology, 2014, 21, 1211-1223.	6.0	166
53	eSNaPD: A Versatile, Web-Based Bioinformatics Platform for Surveying and Mining Natural Product Biosynthetic Diversity from Metagenomes. Chemistry and Biology, 2014, 21, 1023-1033.	6.0	84
54	The Chemical Arsenal of <i>Burkholderia pseudomallei</i> Is Essential for Pathogenicity. Journal of the American Chemical Society, 2014, 136, 9484-9490.	13.7	60

#	ARTICLE	IF	CITATIONS
55	Metagenomic small molecule discovery methods. <i>Current Opinion in Microbiology</i> , 2014, 19, 70-75.	5.1	76
56	Arixanthomycins Aâ€“C: Phylogeny-Guided Discovery of Biologically Active eDNA-Derived Pentangular Polyphenols. <i>ACS Chemical Biology</i> , 2014, 9, 1267-1272.	3.4	69
57	Arimetamycin A: Improving Clinically Relevant Families of Natural Products through Sequenceâ€“Guided Screening of Soil Metagenomes. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11063-11067.	13.8	64
58	Discovery and Synthetic Refactoring of Tryptophan Dimer Gene Clusters from the Environment. <i>Journal of the American Chemical Society</i> , 2013, 135, 17906-17912.	13.7	46
59	Discovery of indolotryptoline antiproliferative agents by homology-guided metagenomic screening. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 2478-2483.	7.1	108
60	Selective Enrichment of Environmental DNA Libraries for Genes Encoding Nonribosomal Peptides and Polyketides by Phosphopantetheine Transferase-Dependent Complementation of Siderophore Biosynthesis. <i>ACS Chemical Biology</i> , 2013, 8, 138-143.	3.4	29
61	Mapping gene clusters within arrayed metagenomic libraries to expand the structural diversity of biomedically relevant natural products. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 11797-11802.	7.1	148
62	RÃ¼cktitelbild: Arimetamycin A: Improving Clinically Relevant Families of Natural Products through Sequence-Guided Screening of Soil Metagenomes (<i>Angew. Chem.</i> 42/2013). <i>Angewandte Chemie</i> , 2013, 125, 11382-11382.	2.0	0
63	Natural Product Biosynthetic Gene Diversity in Geographically Distinct Soil Microbiomes. <i>Applied and Environmental Microbiology</i> , 2012, 78, 3744-3752.	3.1	96
64	Reassembly of Functionally Intact Environmental DNA-Derived Biosynthetic Gene Clusters. <i>Methods in Enzymology</i> , 2012, 517, 225-239.	1.0	33
65	Environmental DNA-Encoded Antibiotics Fasamycins A and B Inhibit FabF in Type II Fatty Acid Biosynthesis. <i>Journal of the American Chemical Society</i> , 2012, 134, 2981-2987.	13.7	88
66	Tetarimycin A, an MRSA-Active Antibiotic Identified through Induced Expression of Environmental DNA Gene Clusters. <i>Journal of the American Chemical Society</i> , 2012, 134, 19552-19555.	13.7	117
67	Biocatalysts and small molecule products from metagenomic studies. <i>Current Opinion in Chemical Biology</i> , 2012, 16, 109-116.	6.1	64
68	Cloning and Characterization of an Environmental DNA-Derived Gene Cluster That Encodes the Biosynthesis of the Antitumor Substance BE-54017. <i>Journal of the American Chemical Society</i> , 2011, 133, 9996-9999.	13.7	70
69	Discovery of a Metagenomeâ€“Derived Enzyme that Produces Branchedâ€“Chain Acylâ€“(Acylâ€“Carrierâ€“Protein)s from Branchedâ€“Chain Î±â€“Keto Acids. <i>ChemBioChem</i> , 2011, 12, 1849-1853.	2.6	8
70	Functional analysis of environmental DNA-derived type II polyketide synthases reveals structurally diverse secondary metabolites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 12629-12634.	7.1	124
71	Long-Chain <i>N</i> -Acyl Amino Acid Synthases Are Linked to the Putative PEP-CTERM/Exosortase Protein-Sorting System in Gram-Negative Bacteria. <i>Journal of Bacteriology</i> , 2011, 193, 5707-5715.	2.2	29
72	Cloning large natural product gene clusters from the environment: Piecing environmental DNA gene clusters back together with TAR. <i>Biopolymers</i> , 2010, 93, 833-844.	2.4	115

#	ARTICLE	IF	CITATIONS
73	Unlocking Environmental DNA Derived Gene Clusters Using a Metagenomics Approach. , 2010, , 455-474.		1
74	Utahmycins A and B, Azaquinones Produced by an Environmental DNA Clone. <i>Journal of Natural Products</i> , 2010, 73, 976-979.	3.0	56
75	Tailoring Enzyme-Rich Environmental DNA Clones: A Source of Enzymes for Generating Libraries of Unnatural Natural Products. <i>Journal of the American Chemical Society</i> , 2010, 132, 15661-15670.	13.7	50
76	Fluostatins Produced by the Heterologous Expression of a TAR Reassembled Environmental DNA Derived Type II PKS Gene Cluster. <i>Journal of the American Chemical Society</i> , 2010, 132, 11902-11903.	13.7	96
77	Recent application of metagenomic approaches toward the discovery of antimicrobials and other bioactive small molecules. <i>Current Opinion in Microbiology</i> , 2010, 13, 603-609.	5.1	115
78	Expanding Small-Molecule Functional Metagenomics through Parallel Screening of Broad-Host-Range Cosmid Environmental DNA Libraries in Diverse <i>Proteobacteria</i> . <i>Applied and Environmental Microbiology</i> , 2010, 76, 1633-1641.	3.1	188
79	An Environmental DNA-Derived Type-II Polyketide Biosynthetic Pathway Encodes the Biosynthesis of the Pentacyclic Polyketide Erdacin. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 6257-6261.	13.8	42
80	Natural Products from Environmental DNA Hosted in <i>Ralstonia metallidurans</i> . <i>ACS Chemical Biology</i> , 2009, 4, 23-28.	3.4	70
81	Metagenomic approaches to natural products from free-living and symbiotic organisms. <i>Natural Product Reports</i> , 2009, 26, 1488.	10.3	112
82	Cloning and characterization of new glycopeptide gene clusters found in an environmental DNA megalibrary. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 17273-17277.	7.1	121
83	Cyclic AMP Directly Activates NasP, an N-Acyl Amino Acid Antibiotic Biosynthetic Enzyme Cloned from an Uncultured β -Proteobacterium. <i>Journal of Bacteriology</i> , 2007, 189, 6487-6489.	2.2	17
84	Natural Products from <i>isnA</i> -Containing Biosynthetic Gene Clusters Recovered from the Genomes of Cultured and Uncultured Bacteria. <i>Journal of the American Chemical Society</i> , 2007, 129, 12102-12103.	13.7	46
85	Construction of soil environmental DNA cosmid libraries and screening for clones that produce biologically active small molecules. <i>Nature Protocols</i> , 2007, 2, 1297-1305.	12.0	180
86	Cloning and Heterologous Expression of Isocyanide Biosynthetic Genes from Environmental DNA. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7063-7065.	13.8	103
87	Systematic Investigation of the <i>Escherichia coli</i> Metabolome for the Biosynthetic Origin of an Isocyanide Carbon Atom. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7045-7048.	13.8	52
88	<i>N</i> -Acyl Derivatives of Arginine and Tryptophan Isolated from Environmental DNA Expressed in <i>Escherichia coli</i> . <i>Organic Letters</i> , 2005, 7, 3613-3616.	4.6	49
89	Long-Chain <i>N</i> -Acetyltyrosine Synthases from Environmental DNA. <i>Applied and Environmental Microbiology</i> , 2004, 70, 6865-6870.	3.1	95
90	Palmitoylputrescine, an Antibiotic Isolated from the Heterologous Expression of DNA Extracted from Bromeliad Tank Water. <i>Journal of Natural Products</i> , 2004, 67, 1283-1286.	3.0	74

#	ARTICLE	IF	CITATIONS
91	Synthesis of Long-Chain Fatty Acid Enol Esters Isolated from an Environmental DNA Clone. <i>Organic Letters</i> , 2003, 5, 121-124.	4.6	25
92	Isolation of Antibiotics Turbomycin A and B from a Metagenomic Library of Soil Microbial DNA. <i>Applied and Environmental Microbiology</i> , 2002, 68, 4301-4306.	3.1	435
93	New Natural Product Families from an Environmental DNA (eDNA) Gene Cluster. <i>Journal of the American Chemical Society</i> , 2002, 124, 9968-9969.	13.7	142
94	Cloning and Heterologous Expression of a Natural Product Biosynthetic Gene Cluster from eDNA. <i>Organic Letters</i> , 2001, 3, 1981-1984.	4.6	194
95	Cloning the Soil Metagenome: a Strategy for Accessing the Genetic and Functional Diversity of Uncultured Microorganisms. <i>Applied and Environmental Microbiology</i> , 2000, 66, 2541-2547.	3.1	1,076
96	CR377, a New Pentaketide Antifungal Agent Isolated from an Endophytic Fungus. <i>Journal of Natural Products</i> , 2000, 63, 1447-1448.	3.0	82
97	Long-Chain N-Acyl Amino Acid Antibiotics Isolated from Heterologously Expressed Environmental DNA. <i>Journal of the American Chemical Society</i> , 2000, 122, 12903-12904.	13.7	138
98	The Cytosporones, New Octaketide Antibiotics Isolated from an Endophytic Fungus. <i>Organic Letters</i> , 2000, 2, 4043-4046.	4.6	183
99	Molecular biological access to the chemistry of unknown soil microbes: a new frontier for natural products. <i>Chemistry and Biology</i> , 1998, 5, R245-R249.	6.0	1,471