

Thomas J Simpson

List of Publications by Year in descending order

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67
papers

3,168
citations

147801

31
h-index

155660

55
g-index

70
all docs

70
docs citations

70
times ranked

2930
citing authors

#	ARTICLE	IF	CITATIONS
1	Meroterpenoids produced by fungi. <i>Natural Product Reports</i> , 2009, 26, 1063.	10.3	353
2	Characterization of the Mupirocin Biosynthesis Gene Cluster from <i>Pseudomonas fluorescens</i> NCIMB 10586. <i>Chemistry and Biology</i> , 2003, 10, 419-430.	6.0	251
3	Fusarin C Biosynthesis in <i>Fusarium moniliforme</i> and <i>Fusarium venenatum</i> . <i>ChemBioChem</i> , 2004, 5, 1196-1203.	2.6	183
4	Resistance to and synthesis of the antibiotic mupirocin. <i>Nature Reviews Microbiology</i> , 2010, 8, 281-289.	28.6	178
5	Genetic, molecular, and biochemical basis of fungal tropolone biosynthesis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 7642-7647.	7.1	148
6	Authentic Heterologous Expression of the Tenellin Iterative Polyketide Synthase Nonribosomal Peptide Synthetase Requires Coexpression with an Enoyl Reductase. <i>ChemBioChem</i> , 2008, 9, 585-594.	2.6	125
7	Rational Domain Swaps Decipher Programming in Fungal Highly Reducing Polyketide Synthases and Resurrect an Extinct Metabolite. <i>Journal of the American Chemical Society</i> , 2011, 133, 16635-16641.	13.7	119
8	One pathway, many compounds: heterologous expression of a fungal biosynthetic pathway reveals its intrinsic potential for diversity. <i>Chemical Science</i> , 2013, 4, 3845.	7.4	89
9	A conserved motif flags acyl carrier proteins for β^2 -branching in polyketide synthesis. <i>Nature Chemical Biology</i> , 2013, 9, 685-692.	8.0	78
10	The programming role of trans-acting enoyl reductases during the biosynthesis of highly reduced fungal polyketides. <i>Chemical Science</i> , 2011, 2, 972.	7.4	71
11	Strobilurin biosynthesis in Basidiomycete fungi. <i>Nature Communications</i> , 2018, 9, 3940.	12.8	71
12	A Mammalian Type I Fatty Acid Synthase Acyl Carrier Protein Domain Does Not Sequester Acyl Chains. <i>Journal of Biological Chemistry</i> , 2008, 283, 518-528.	3.4	69
13	Heterologous expression of the avirulence gene ACE1 from the fungal rice pathogen <i>Magnaporthe oryzae</i> . <i>Chemical Science</i> , 2015, 6, 4837-4845.	7.4	69
14	Rapid cloning and expression of a fungal polyketide synthase gene involved in squalestatin biosynthesis. <i>Chemical Communications</i> , 2004, , 2260.	4.1	66
15	A Natural Plasmid Uniquely Encodes Two Biosynthetic Pathways Creating a Potent Anti-MRSA Antibiotic. <i>PLoS ONE</i> , 2011, 6, e18031.	2.5	59
16	Heterologous Production of Fungal Maleidrides Reveals the Cryptic Cyclization Involved in their Biosynthesis. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 6784-6788.	13.8	55
17	Probing the Interactions of Early Polyketide Intermediates with the Actinorhodin ACP from <i>S. coelicolor</i> A3(2). <i>Journal of Molecular Biology</i> , 2009, 389, 511-528.	4.2	50
18	Nongenetic Reprogramming of a Fungal Highly Reducing Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2011, 133, 10990-10998.	13.7	50

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19	Recognition of Intermediate Functionality by Acyl Carrier Protein over a Complete Cycle of Fatty Acid Biosynthesis. <i>Chemistry and Biology</i> , 2010, 17, 776-785.	6.0	49
20	Biosynthesis of the fungal xanthone ravenelin. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1976, , 898.	0.9	47
21	MCAT is not required for in vitro polyketide synthesis in a minimal actinorhodin polyketide synthase from <i>Streptomyces coelicolor</i> . <i>Chemistry and Biology</i> , 1998, 5, 699-711.	6.0	47
22	The structures of some metabolites of <i>Penicillium diversum</i> : $\hat{1}\pm$ - and $\hat{1}2$ -diversonolic esters. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1983, , 1365-1368.	0.9	43
23	Characterisation of the biosynthetic pathway to agnestins A and B reveals the reductive route to chrysophanol in fungi. <i>Chemical Science</i> , 2019, 10, 233-238.	7.4	42
24	Biosynthesis of Mupirocin by <i>Pseudomonas fluorescens</i> NCIMB 10586 Involves Parallel Pathways. <i>Journal of the American Chemical Society</i> , 2014, 136, 5501-5507.	13.7	40
25	Structure revision of cryptosporioptides and determination of the genetic basis for dimeric xanthone biosynthesis in fungi. <i>Chemical Science</i> , 2019, 10, 2930-2939.	7.4	40
26	Genetic and Biosynthetic Studies of the Fungal Prenylated Xanthone Shamixanthone and Related Metabolites in <i>Aspergillus</i> spp. Revisited. <i>ChemBioChem</i> , 2012, 13, 1680-1688.	2.6	38
27	Engineered Thiomarinol Antibiotics Active against MRSA Are Generated by Mutagenesis and Mutasynthesis of <i>Pseudoalteromonas</i> SANK73390. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 3271-3274.	13.8	37
28	Mutational Analysis Reveals That All Tailoring Region Genes Are Required for Production of Polyketide Antibiotic Mupirocin by <i>Pseudomonas fluorescens</i> . <i>Journal of Biological Chemistry</i> , 2007, 282, 15451-15461.	3.4	36
29	Biosynthesis of thiomarinol A and related metabolites of <i>Pseudoalteromonas</i> sp. SANK 73390. <i>Chemical Science</i> , 2014, 5, 397-402.	7.4	35
30	Catalytic Relationships between Type I and Type II Iterative Polyketide Synthases: The <i>Aspergillus parasiticus</i> Norsolorinic Acid Synthase. <i>ChemBioChem</i> , 2006, 7, 1951-1958.	2.6	34
31	Mupirocin W, a novel pseudomonic acid produced by targeted mutation of the mupirocin biosynthetic gene cluster. <i>Chemical Communications</i> , 2005, , 1179.	4.1	33
32	Dissecting the Component Reactions Catalyzed by the Actinorhodin Minimal Polyketide Synthase. <i>Biochemistry</i> , 2007, 46, 14672-14681.	2.5	31
33	Novel nonadride, heptadride and maleic acid metabolites from the byssochlamic acid producer <i>Byssochlamys fulva</i> IMI 40021 – an insight into the biosynthesis of maleidrides. <i>Chemical Communications</i> , 2015, 51, 17088-17091.	4.1	31
34	Acylation of Streptomyces type II polyketide synthase acyl carrier proteins. <i>FEBS Letters</i> , 1998, 433, 132-138.	2.8	29
35	Shift to Pseudomonic Acid B Production in <i>P. fluorescens</i> NCIMB10586 by Mutation of Mupirocin Tailoring Genes mupO, mupU, mupV, and macpE. <i>Chemistry and Biology</i> , 2005, 12, 825-833.	6.0	29
36	The cycloaspeptides: uncovering a new model for methylated nonribosomal peptide biosynthesis. <i>Chemical Science</i> , 2018, 9, 4109-4117.	7.4	28

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37	The biosynthesis of fungal metabolites. Part III. Structure of shamixanthone and tajixanthone, metabolites of <i>Aspergillus varicolor</i> . <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1974, , 1584.	0.9	26
38	The Biosynthesis and Catabolism of the Maleic Anhydride Moiety of Stipitatonic Acid. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 7519-7523.	13.8	24
39	Substrate selectivity of an isolated enoyl reductase catalytic domain from an iterative highly reducing fungal polyketide synthase reveals key components of programming. <i>Chemical Science</i> , 2017, 8, 1116-1126.	7.4	24
40	Fungal polyketide biosynthesis – a personal perspective. <i>Natural Product Reports</i> , 2014, 31, 1247-1252.	10.3	23
41	Molecular basis of methylation and chain-length programming in a fungal iterative highly reducing polyketide synthase. <i>Chemical Science</i> , 2019, 10, 8478-8489.	7.4	22
42	A Rieske oxygenase/epoxide hydrolase-catalysed reaction cascade creates oxygen heterocycles in mupirocin biosynthesis. <i>Nature Catalysis</i> , 2018, 1, 968-976.	34.4	21
43	Conserved secondary structure in the actinorhodin polyketide synthase acyl carrier protein from <i>Streptomyces coelicolor</i> A3(2) and the fatty acid synthase acyl carrier protein from <i>Escherichia coli</i> . <i>FEBS Letters</i> , 1996, 391, 302-306.	2.8	20
44	Elucidation of the relative and absolute stereochemistry of the kalimantacin/batumin antibiotics. <i>Chemical Science</i> , 2017, 8, 6196-6201.	7.4	20
45	The Kalimantacin Polyketide Antibiotics Inhibit Fatty Acid Biosynthesis in <i>Staphylococcus aureus</i> by Targeting the Enoyl-acyl Carrier Protein Binding Site of FabI. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 10549-10556.	13.8	20
46	In vitro kinetic study of the squalestatin tetraketide synthase dehydratase reveals the stereochemical course of a fungal highly reducing polyketide synthase. <i>Chemical Communications</i> , 2017, 53, 1727-1730.	4.1	18
47	Investigations into the biosynthesis of the antifungal strobilurins. <i>Organic and Biomolecular Chemistry</i> , 2018, 16, 5524-5532.	2.8	18
48	Genetic and chemical characterisation of the cornexistin pathway provides further insight into maleidride biosynthesis. <i>Chemical Communications</i> , 2017, 53, 7965-7968.	4.1	17
49	Biosynthesis of norsolorinic acid and averufin: substrate specificity of norsolorinic acid synthase. <i>Chemical Communications</i> , 1996, , 301.	4.1	15
50	Selected Mutations Reveal New Intermediates in the Biosynthesis of Mupirocin and the Thiomarinol Antibiotics. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3930-3934.	13.8	15
51	Mixing and matching genes of marine and terrestrial origin in the biosynthesis of the mupirocin antibiotics. <i>Chemical Science</i> , 2020, 11, 5221-5226.	7.4	14
52	Control of β -branching in Kalimantacin Biosynthesis: Application of ^{13}C -NMR to Polyketide Programming. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 12446-12450.	13.8	13
53	Uncovering biosynthetic relationships between antifungal nonadrides and octadrides. <i>Chemical Science</i> , 2020, 11, 11570-11578.	7.4	13
54	Recognition of extended linear and cyclised polyketide mimics by a type II acyl carrier protein. <i>Chemical Science</i> , 2016, 7, 1779-1785.	7.4	11

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55	Oryzines A & B, Maleidride Congeners from <i>Aspergillus oryzae</i> and Their Putative Biosynthesis. <i>Journal of Fungi</i> (Basel, Switzerland), 2018, 4, 96.	3.5	10
56	Bartanol and bartallol, novel macrodiolides from <i>Cytospora</i> sp. ATCC 20502. <i>Journal of the Chemical Society Perkin Transactions 1</i> , 1994, , 2493.	0.9	9
57	Mupirocin F: structure elucidation, synthesis and rearrangements. <i>Tetrahedron</i> , 2011, 67, 5098-5106.	1.9	9
58	A Priming Cassette Generates Hydroxylated Acyl Starter Units in Mupirocin and Thiomarinol Biosynthesis. <i>ACS Chemical Biology</i> , 2020, 15, 494-503.	3.4	9
59	Defining the genes for the final steps in biosynthesis of the complex polyketide antibiotic mupirocin by <i>Pseudomonas fluorescens</i> NCIMB10586. <i>Scientific Reports</i> , 2019, 9, 1542.	3.3	8
60	The Kalimantanin Polyketide Antibiotics Inhibit Fatty Acid Biosynthesis in <i>Staphylococcus aureus</i> by Targeting the Enoyl-acyl Carrier Protein Binding Site of FabI. <i>Angewandte Chemie</i> , 2020, 132, 10636-10643.	2.0	6
61	Total Synthesis of Kalimantanin A. <i>Organic Letters</i> , 2020, 22, 6349-6353.	4.6	5
62	Structural and synthetic studies on maleic anhydride and related diacid natural products. <i>Tetrahedron</i> , 2020, 76, 130717.	1.9	4
63	Selected Mutations Reveal New Intermediates in the Biosynthesis of Mupirocin and the Thiomarinol Antibiotics. <i>Angewandte Chemie</i> , 2017, 129, 3988-3992.	2.0	3
64	Fine Tuning of Antibiotic Activity by a Tailoring Hydroxylase in a Trans-AT Polyketide Synthase Pathway. <i>ChemBioChem</i> , 2018, 19, 836-841.	2.6	3
65	Control of ^2H -Branching in Kalimantanin Biosynthesis: Application of ^{13}C -NMR to Polyketide Programming. <i>Angewandte Chemie</i> , 2019, 131, 12576-12580.	2.0	2
66	Fusarochromene, a novel tryptophan-derived metabolite from <i>Fusarium sacchari</i> . <i>Organic and Biomolecular Chemistry</i> , 2021, 19, 182-187.	2.8	2
67	Selected Mutations Reveal New Intermediates in the Biosynthesis of Mupirocin and the Thiomarinol Antibiotics (Angew. Chem. 14/2017). <i>Angewandte Chemie</i> , 2017, 129, 4126-4126.	2.0	0