Thomas J Simpson

List of Publications by Year
in descending order

67 papers	3,168 citations	147566 31 h-index	155451 55 g-index
70 all docs	70 docs citations	70 times ranked	2930 citing authors

#	Article	IF	Citations
1	Fusarochromene, a novel tryptophan-derived metabolite from Fusarium sacchari. Organic and Biomolecular Chemistry, 2021, 19, 182-187.	1.5	2
2	Structural and synthetic studies on maleic anhydride and related diacid natural products. Tetrahedron, 2020, 76, 130717.	1.0	4
3	Uncovering biosynthetic relationships between antifungal nonadrides and octadrides. Chemical Science, 2020, 11, 11570-11578.	3.7	13
4	Total Synthesis of Kalimantacin A. Organic Letters, 2020, 22, 6349-6353.	2.4	5
5	The Kalimantacin Polyketide Antibiotics Inhibit Fatty Acid Biosynthesis in <i>Staphylococcus aureus</i> by Targeting the Enoylâ€Acyl Carrier Protein Binding Site of FabI. Angewandte Chemie, 2020, 132, 10636-10643.	1.6	6
6	Mixing and matching genes of marine and terrestrial origin in the biosynthesis of the mupirocin antibiotics. Chemical Science, 2020, 11, 5221-5226.	3.7	14
7	The Kalimantacin Polyketide Antibiotics Inhibit Fatty Acid Biosynthesis in Staphylococcus aureus by Targeting the Enoylâ€Acyl Carrier Protein Binding Site of FabI. Angewandte Chemie - International Edition, 2020, 59, 10549-10556.	7.2	20
8	A Priming Cassette Generates Hydroxylated Acyl Starter Units in Mupirocin and Thiomarinol Biosynthesis. ACS Chemical Biology, 2020, 15, 494-503.	1.6	9
9	Control of Î²â€Branching in Kalimantacin Biosynthesis: Application of13Câ€…NMR to Polyketide Programming. Angewandte Chemie, 2019, 131, 12576-12580.	1.6	2
10	Control of Î²â€Branching in Kalimantacin Biosynthesis: Application of ¹³Câ€…NMR to Polyketide Programming. Angewandte Chemie - International Edition, 2019, 58, 12446-12450.	7.2	13
11	Molecular basis of methylation and chain-length programming in a fungal iterative highly reducing polyketide synthase. Chemical Science, 2019, 10, 8478-8489.	3.7	22
12	Structure revision of cryptosporioptides and determination of the genetic basis for dimeric xanthone biosynthesis in fungi. Chemical Science, 2019, 10, 2930-2939.	3.7	40
13	Characterisation of the biosynthetic pathway to agnestins A and B reveals the reductive route to chrysophanol in fungi. Chemical Science, 2019, 10, 233-238.	3.7	42
14	Defining the genes for the final steps in biosynthesis of the complex polyketide antibiotic mupirocin by Pseudomonas fluorescens NCIMB10586. Scientific Reports, 2019, 9, 1542.	1.6	8
15	The cycloaspeptides: uncovering a new model for methylated nonribosomal peptide biosynthesis. Chemical Science, 2018, 9, 4109-4117.	3.7	28
16	Fine Tuning of Antibiotic Activity by a Tailoring Hydroxylase in a Transâ€AT Polyketide Synthase Pathway. ChemBioChem, 2018, 19, 836-841.	1.3	3
17	A Rieske oxygenase/epoxide hydrolase-catalysed reaction cascade creates oxygen heterocycles in mupirocin biosynthesis. Nature Catalysis, 2018, 1, 968-976.	16.1	21
18	Strobilurin biosynthesis in Basidiomycete fungi. Nature Communications, 2018, 9, 3940.	5.8	71

#	Article	IF	Citations
19	Investigations into the biosynthesis of the antifungal strobilurins. Organic and Biomolecular Chemistry, 2018, 16, 5524-5532.	1.5	18
20	Oryzines A & B, Maleidride Congeners from Aspergillus oryzae and Their Putative Biosynthesis. Journal of Fungi (Basel, Switzerland), 2018, 4, 96.	1.5	10
21	In vitro kinetic study of the squalestatin tetraketide synthase dehydratase reveals the stereochemical course of a fungal highly reducing polyketide synthase. Chemical Communications, 2017, 53, 1727-1730.	2.2	18
22	Selected Mutations Reveal New Intermediates in the Biosynthesis of Mupirocin and the Thiomarinol Antibiotics. Angewandte Chemie - International Edition, 2017, 56, 3930-3934.	7.2	15
23	Selected Mutations Reveal New Intermediates in the Biosynthesis of Mupirocin and the Thiomarinol Antibiotics. Angewandte Chemie, 2017, 129, 3988-3992.	1.6	3
24	Genetic and chemical characterisation of the cornexistin pathway provides further insight into maleidride biosynthesis. Chemical Communications, 2017, 53, 7965-7968.	2.2	17
25	Elucidation of the relative and absolute stereochemistry of the kalimantacin/batumin antibiotics. Chemical Science, 2017, 8, 6196-6201.	3.7	20
26	RÃ¼cktitelbild: Selected Mutations Reveal New Intermediates in the Biosynthesis of Mupirocin and the Thiomarinol Antibiotics (Angew. Chem. 14/2017). Angewandte Chemie, 2017, 129, 4126-4126.	1.6	0
27	Substrate selectivity of an isolated enoyl reductase catalytic domain from an iterative highly reducing fungal polyketide synthase reveals key components of programming. Chemical Science, 2017, 8, 1116-1126.	3.7	24
28	Heterologous Production of Fungal Maleidrides Reveals the Cryptic Cyclization Involved in their Biosynthesis. Angewandte Chemie - International Edition, 2016, 55, 6784-6788.	7.2	55
29	Recognition of extended linear and cyclised polyketide mimics by a type II acyl carrier protein. Chemical Science, 2016, 7, 1779-1785.	3.7	11
30	Heterologous expression of the avirulence gene ACE1 from the fungal rice pathogen Magnaporthe oryzae. Chemical Science, 2015, 6, 4837-4845.	3.7	69
31	Novel nonadride, heptadride and maleic acid metabolites from the byssochlamic acid producer Byssochlamys fulva IMI 40021 â€“ an insight into the biosynthesis of maleidrides. Chemical Communications, 2015, 51, 17088-17091.	2.2	31
32	The Biosynthesis and Catabolism of the Maleic Anhydride Moiety of Stipitatonic Acid. Angewandte Chemie - International Edition, 2014, 53, 7519-7523.	7.2	24
33	Biosynthesis of thiomarinol A and related metabolites of Pseudoalteromonas sp. SANK 73390. Chemical Science, 2014, 5, 397-402.	3.7	35
34	Fungal polyketide biosynthesis â€“ a personal perspective. Natural Product Reports, 2014, 31, 1247-1252.	5.2	23
35	Biosynthesis of Mupirocin by <i>Pseudomonas fluorescens</i> NCIMB 10586 Involves Parallel Pathways. Journal of the American Chemical Society, 2014, 136, 5501-5507.	6.6	40
36	One pathway, many compounds: heterologous expression of a fungal biosynthetic pathway reveals its intrinsic potential for diversity. Chemical Science, 2013, 4, 3845.	3.7	89

#	Article	IF	Citations
37	A conserved motif flags acyl carrier proteins for Î2-branching in polyketide synthesis. Nature Chemical Biology, 2013, 9, 685-692.	3.9	78
38	Genetic, molecular, and biochemical basis of fungal tropolone biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 7642-7647.	3.3	148
39	Genetic and Biosynthetic Studies of the Fungal Prenylated Xanthone Shamixanthone and Related Metabolites in <i>Aspergillus spp.</i> Revisited. ChemBioChem, 2012, 13, 1680-1688.	1.3	38
40	The programming role of trans-acting enoyl reductases during the biosynthesis of highly reduced fungal polyketides. Chemical Science, 2011, 2, 972.	3.7	71
41	Nongenetic Reprogramming of a Fungal Highly Reducing Polyketide Synthase. Journal of the American Chemical Society, 2011, 133, 10990-10998.	6.6	50
42	Rational Domain Swaps Decipher Programming in Fungal Highly Reducing Polyketide Synthases and Resurrect an Extinct Metabolite. Journal of the American Chemical Society, 2011, 133, 16635-16641.	6.6	119
43	Mupirocin F: structure elucidation, synthesis and rearrangements. Tetrahedron, 2011, 67, 5098-5106.	1.0	9
44	Engineered Thiomarinol Antibiotics Active against MRSA Are Generated by Mutagenesis and Mutasynthesis of <i>Pseudoalteromonas</i> SANK73390. Angewandte Chemie - International Edition, 2011, 50, 3271-3274.	7.2	37
45	A Natural Plasmid Uniquely Encodes Two Biosynthetic Pathways Creating a Potent Anti-MRSA Antibiotic. PLoS ONE, 2011, 6, e18031.	1.1	59
46	Recognition of Intermediate Functionality by Acyl Carrier Protein over a Complete Cycle of Fatty Acid Biosynthesis. Chemistry and Biology, 2010, 17, 776-785.	6.2	49
47	Resistance to and synthesis of the antibiotic mupirocin. Nature Reviews Microbiology, 2010, 8, 281-289.	13.6	178
48	Probing the Interactions of Early Polyketide Intermediates with the Actinorhodin ACP from S. coelicolor A3(2). Journal of Molecular Biology, 2009, 389, 511-528.	2.0	50
49	Meroterpenoids produced by fungi. Natural Product Reports, 2009, 26, 1063.	5.2	353
50	Authentic Heterologous Expression of the Tenellin Iterative Polyketide Synthase Nonribosomal Peptide Synthetase Requires Coexpression with an Enoyl Reductase. ChemBioChem, 2008, 9, 585-594.	1.3	125
51	A Mammalian Type I Fatty Acid Synthase Acyl Carrier Protein Domain Does Not Sequester Acyl Chains. Journal of Biological Chemistry, 2008, 283, 518-528.	1.6	69
52	Mutational Analysis Reveals That All Tailoring Region Genes Are Required for Production of Polyketide Antibiotic Mupirocin by Pseudomonas fluorescens. Journal of Biological Chemistry, 2007, 282, 15451-15461.	1.6	36
53	Dissecting the Component Reactions Catalyzed by the Actinorhodin Minimal Polyketide Synthase. Biochemistry, 2007, 46, 14672-14681.	1.2	31
54	Catalytic Relationships between Type I and Type II Iterative Polyketide Synthases: The Aspergillus parasiticus Norsolorinic Acid Synthase. ChemBioChem, 2006, 7, 1951-1958.	1.3	34

#	Article	IF	Citations
55	Shift to Pseudomonic Acid B Production in P. fluorescens NCIMB10586 by Mutation of Mupirocin Tailoring Genes mupO, mupU, mupV, and macpE. Chemistry and Biology, 2005, 12, 825-833.	6.2	29
56	Mupirocin W, a novel pseudomonic acid produced by targeted mutation of the mupirocin biosynthetic gene cluster. Chemical Communications, 2005, , 1179.	2.2	33
57	Fusarin C Biosynthesis in Fusarium moniliforme and Fusarium venenatum. ChemBioChem, 2004, 5, 1196-1203.	1.3	183
58	Rapid cloning and expression of a fungal polyketide synthase gene involved in squalestatin biosynthesis. Chemical Communications, 2004, , 2260.	2.2	66
59	Characterization of the Mupirocin Biosynthesis Gene Cluster from Pseudomonas fluorescens NCIMB 10586. Chemistry and Biology, 2003, 10, 419-430.	6.2	251
60	MCAT is not required for in vitro polyketide synthesis in a minimal actinorhodin polyketide synthase from Streptomyces coelicolor. Chemistry and Biology, 1998, 5, 699-711.	6.2	47
61	Acylation ofStreptomycestype II polyketide synthase acyl carrier proteins. FEBS Letters, 1998, 433, 132-138.	1.3	29
62	Conserved secondary structure in the actinorhodin polyketide synthase acyl carrier protein from Streptomyces coelicolor A3(2) and the fatty acid synthase acyl carrier protein from Escherichia coli. FEBS Letters, 1996, 391, 302-306.	1.3	20
63	Biosynthesis of norsolorinic acid and averufin: substrate specificity of norsolorinic acid synthase. Chemical Communications, 1996, , 301.	2.2	15
64	Bartanol and bartallol, novel macrodiolides from Cytospora sp. ATCC 20502. Journal of the Chemical Society Perkin Transactions 1, 1994, , 2493.	0.9	9
65	The structures of some metabolites of Penicillium diversum: Î±-and Î²-diversonolic esters. Journal of the Chemical Society Perkin Transactions 1, 1983, , 1365-1368.	0.9	43
66	Biosynthesis of the fungal xanthone ravenelin. Journal of the Chemical Society Perkin Transactions 1, 1976, , 898.	0.9	47
67	The biosynthesis of fungal metabolites. Part III. Structure of shamixanthone and tajixanthone, metabolites of Aspergillus variecolor. Journal of the Chemical Society Perkin Transactions 1, 1974, , 1584.	0.9	26