Adrian Keatinge-Clay

List of Publications by Year
in descending order

78 papers	3,425 citations	159585 30 h-index	149698 56 g-index
79 all docs	79 docs citations	79 times ranked	2702 citing authors

#	Article	IF	Citations
1	Crystal structure of Acetyl-CoA carboxylase (AccB) from Streptomyces antibioticus and insights into the substrate-binding through in silico mutagenesis and biophysical investigations. Computers in Biology and Medicine, 2022, 145, 105439.	7.0	2
2	Structural and Mechanistic Insights into Chain Release of the Polyene PKS Thioesterase Domain. ACS Catalysis, 2022, 12, 762-776.	11.2	11
3	The Streptomyces viridochromogenes product template domain represents an evolutionary intermediate between dehydratase and aldol cyclase of type I polyketide synthases. Communications Biology, 2022, 5, .	4.4	3
4	Priming enzymes from the pikromycin synthase reveal how assembly-line ketosynthases catalyze carbon-carbon chemistry. Structure, 2022, 30, 1331-1339.e3.	3.3	11
5	Computational studies on the substrate specificity of an acyltransferase domain from salinomycin polyketide synthase. Catalysis Science and Technology, 2021, 11, 6782-6792.	4.1	3
6	Preparative production of an enantiomeric pair by engineered polyketide synthases. Chemical Communications, 2021, 57, 8762-8765.	4.1	11
7	Insights into modular polyketide synthase loops aided by repetitive sequences. Proteins: Structure, Function and Bioinformatics, 2021, 89, 1099-1110.	2.6	4
8	How <i>cis</i>-Acyltransferase Assembly-Line Ketosynthases Gatekeep for Processed Polyketide Intermediates. ACS Chemical Biology, 2021, 16, 2515-2526.	3.4	10
9	Evidence for an Enzyme-Catalyzed Rauhutâ€“Currier Reaction during the Biosynthesis of Spinosyn A. Journal of the American Chemical Society, 2021, 143, 20291-20295.	13.7	8
10	An alternative pathway for repair of deaminated bases in DNA triggered by archaeal NucS endonuclease. DNA Repair, 2020, 85, 102734.	2.8	15
11	General chemoenzymatic route to two-stereocenter triketides employing assembly line ketoreductases. Chemical Communications, 2020, 56, 157-160.	4.1	3
12	An in vitro platform for engineering and harnessing modular polyketide synthases. Nature Communications, 2020, 11, 80.	12.8	34
13	Structural and Biochemical Insight into the Recruitment of Acyl Carrier Proteinâ€Linked Extender Units in Ansamitocin Biosynthesis. ChemBioChem, 2020, 21, 1309-1314.	2.6	9
14	Hexachlorobenzene Monooxygenase Substrate Selectivity and Catalysis: Structural and Biochemical Insights. Applied and Environmental Microbiology, 2020, 87, .	3.1	7
15	Structural Biology of Tailoring Domains in Polyketide Synthases. , 2020, , 47-60.		0
16	Biochemical characterization and mutational studies of the 8-oxoguanine DNA glycosylase from the hyperthermophilic and radioresistant archaeon Thermococcus gammatolerans. Applied Microbiology and Biotechnology, 2019, 103, 8021-8033.	3.6	8
17	Employing 25-Residue Docking Motifs from Modular Polyketide Synthases as Orthogonal Protein Connectors. ACS Synthetic Biology, 2019, 8, 2017-2024.	3.8	5
18	Seven-enzyme <i>in vitro</i> cascade to (3<i>R</i>)-3-hydroxybutyryl-CoA. Organic and Biomolecular Chemistry, 2019, 17, 1375-1378.	2.8	3

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19	Structural Insights into the Substrate Specificity of Acyltransferases from Salinomycin Polyketide Synthase. Biochemistry, 2019, 58, 2978-2986.	2.5	12
20	Crystal structure of the condensation domain from lovastatin polyketide synthase. Synthetic and Systems Biotechnology, 2019, 4, 10-15.	3.7	8
21	Structural and Functional Studies of a Pyran Synthase Domain from a <i>trans</i>-Acyltransferase Assembly Line. ACS Chemical Biology, 2018, 13, 975-983.	3.4	17
22	Substrate-bound structures of a ketoreductase from amphotericin modular polyketide synthase. Journal of Structural Biology, 2018, 203, 135-141.	2.8	13
23	Stereospecificity of Enoylreductase Domains from Modular Polyketide Synthases. ACS Chemical Biology, 2018, 13, 871-875.	3.4	10
24	The modules of <i>trans</i>â€acyltransferase assembly lines redefined with a central acyl carrier protein. Proteins: Structure, Function and Bioinformatics, 2018, 86, 664-675.	2.6	49
25	Structural and Functional Studies of a <i>gem</i>-Dimethylating Methyltransferase from a <i>trans</i>-Acyltransferase Assembly Line. ACS Chemical Biology, 2018, 13, 3306-3314.	3.4	6
26	Directed accumulation of less toxic pimaricin derivatives by improving the efficiency of a polyketide synthase dehydratase domain. Applied Microbiology and Biotechnology, 2017, 101, 2427-2436.	3.6	5
27	The Uncommon Enzymology of Cis-Acyltransferase Assembly Lines. Chemical Reviews, 2017, 117, 5334-5366.	47.7	71
28	Structural and Functional Trends in Dehydrating Bimodules from trans-Acyltransferase Polyketide Synthases. Structure, 2017, 25, 1045-1055.e2.	3.3	23
29	Polyketidsynthaseâ€Module: eine Neudefinition. Angewandte Chemie, 2017, 129, 4730-4732.	2.0	2
30	Polyketide Synthase Modules Redefined. Angewandte Chemie - International Edition, 2017, 56, 4658-4660.	13.8	56
31	Portability and Structure of the Four-Helix Bundle Docking Domains of <i>trans</i>-Acyltransferase Modular Polyketide Synthases. ACS Chemical Biology, 2016, 11, 2466-2474.	3.4	22
32	The Structural Relationship between Iterative and Modular PKSs. Cell Chemical Biology, 2016, 23, 540-542.	5.2	8
33	Methyltransferases excised from trans-AT polyketide synthases operate on N-acetylcysteamine-bound substrates. Journal of Antibiotics, 2016, 69, 567-570.	2.0	12
34	Î±-Methylation follows condensation in the gephyronic acid modular polyketide synthase. Chemical Communications, 2016, 52, 8822-8825.	4.1	17
35	Epimerase and Reductase Activities of Polyketide Synthase Ketoreductase Domains Utilize the Same Conserved Tyrosine and Serine Residues. Biochemistry, 2016, 55, 1179-1186.	2.5	23
36	Cloning, expression, and characterization of a thermostable glucose-6-phosphate dehydrogenase from Thermoanaerobacter tengcongensis. Extremophiles, 2016, 20, 149-156.	2.3	6

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37	The LINKS motif zippers trans-acyltransferase polyketide synthase assembly lines into a biosynthetic megacomplex. Journal of Structural Biology, 2016, 193, 196-205.	2.8	21
38	Substrate structureâ€“activity relationships guide rational engineering of modular polyketide synthase ketoreductases. Chemical Communications, 2016, 52, 792-795.	4.1	34
39	Stereocontrol within polyketide assembly lines. Natural Product Reports, 2016, 33, 141-149.	10.3	85
40	Coenzyme A-free activity, crystal structure, and rational engineering of a promiscuous Î²-ketoacyl thiolase from Ralstonia eutropha. Journal of Molecular Catalysis B: Enzymatic, 2015, 121, 113-121.	1.8	12
41	Structure of Salmonella FlhE, Conserved Member of a Flagellar Type III Secretion Operon. Journal of Molecular Biology, 2015, 427, 1254-1262.	4.2	17
42	Structural and Functional Analysis of the Loading Acyltransferase from Avermectin Modular Polyketide Synthase. ACS Chemical Biology, 2015, 10, 1017-1025.	3.4	45
43	The structure of SpnF, a standalone enzyme that catalyzes [4 + 2] cycloaddition. Nature Chemical Biology, 2015, 11, 256-258.	8.0	101
44	Molecular Dynamics Studies of Modular Polyketide Synthase Ketoreductase Stereospecificity. Biochemistry, 2015, 54, 2346-2359.	2.5	15
45	Mechanically Modulating the Photophysical Properties of Fluorescent Protein Biocomposites for Ratioâ€•and Intensiometric Sensors. Angewandte Chemie - International Edition, 2014, 53, 5088-5092.	13.8	28
46	Crystallographic study of the phosphoethanolamine transferase EptC required for polymyxin resistance and motility in<i>Campylobacter jejuni</i>. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2730-2739.	2.5	33
47	Structural and functional studies of a <i>trans</i> -acyltransferase polyketide assembly line enzyme that catalyzes stereoselective Î±- and Î²-ketoreduction. Proteins: Structure, Function and Bioinformatics, 2014, 82, 2067-2077.	2.6	29
48	Investigating the reactivities of a polyketide synthase module through fluorescent click chemistry. Chemical Communications, 2014, 50, 5276-5278.	4.1	6
49	Elucidation of the Cryptic Epimerase Activity of Redox-Inactive Ketoreductase Domains from Modular Polyketide Synthases by Tandem Equilibrium Isotope Exchange. Journal of the American Chemical Society, 2014, 136, 10190-10193.	13.7	28
50	Antimicrobial Peptide Resistance of <i>Vibrio cholerae</i> Results from an LPS Modification Pathway Related to Nonribosomal Peptide Synthetases. ACS Chemical Biology, 2014, 9, 2382-2392.	3.4	51
51	A Double-Hotdog with a New Trick: Structure and Mechanism of the <i>trans</i>-Acyltransferase Polyketide Synthase Enoyl-isomerase. ACS Chemical Biology, 2014, 9, 2374-2381.	3.4	45
52	Rapid modification of the pET-28 expression vector for ligation independent cloning using homologous recombination in Saccharomyces cerevisiae. Plasmid, 2014, 76, 66-71.	1.4	10
53	A Close Look at a Ketosynthase from a Trans-Acyltransferase Modular Polyketide Synthase. Structure, 2014, 22, 444-451.	3.3	65
54	Generalized bacterial genome editing using mobile group II introns and Creâ€•lox. Molecular Systems Biology, 2013, 9, 685.	7.2	70

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55	The status of type I polyketide synthase ketoreductases. MedChemComm, 2013, 4, 34-40.	3.4	32
56	The Missing Linker: A Dimerization Motif Located within Polyketide Synthase Modules. ACS Chemical Biology, 2013, 8, 1263-1270.	3.4	37
57	Mechanobiochemistry: harnessing biomacromolecules for force-responsive materials. Polymer Chemistry, 2013, 4, 3916.	3.9	44
58	Structure and Stereospecificity of the Dehydratase Domain from the Terminal Module of the Rifamycin Polyketide Synthase. Biochemistry, 2013, 52, 8916-8928.	2.5	51
59	Structural Studies of an A2-Type Modular Polyketide Synthase Ketoreductase Reveal Features Controlling Î±-Substituent Stereochemistry. ACS Chemical Biology, 2013, 8, 1964-1971.	3.4	45
60	Monitoring Biocatalytic Transformations Mediated by Polyketide Synthase Enzymes in Cell Lysate via Fluorine NMR. Synlett, 2012, 23, 1840-1842.	1.8	3
61	Divergence of multimodular polyketide synthases revealed by a didomain structure. Nature Chemical Biology, 2012, 8, 615-621.	8.0	66
62	Preparative, in Vitro Biocatalysis of Triketide Lactone Chiral Building Blocks. ChemBioChem, 2012, 13, 2200-2203.	2.6	21
63	Employing a polyketide synthase module and thioesterase in the semipreparative biocatalysis of diverse triketide pyrones. MedChemComm, 2012, 3, 956.	3.4	19
64	The structures of type I polyketide synthases. Natural Product Reports, 2012, 29, 1050.	10.3	262
65	Structural and Functional Analysis of C2-Type Ketoreductases from Modular Polyketide Synthases. Journal of Molecular Biology, 2011, 410, 105-117.	4.2	49
66	Employing Modular Polyketide Synthase Ketoreductases as Biocatalysts in the Preparative Chemoenzymatic Syntheses of Diketide Chiral Building Blocks. Chemistry and Biology, 2011, 18, 1331-1340.	6.0	60
67	Enzymatic Extender Unit Generation for InÂVitro Polyketide Synthase Reactions: Structural and Func-tional Showcasing of Streptomyces coelicolor MatB. Chemistry and Biology, 2011, 18, 165-176.	6.0	94
68	Structural and Functional Analysis of A-Type Ketoreductases from the Amphotericin Modular Polyketide Synthase. Structure, 2010, 18, 913-922.	3.3	85
69	Stereospecificity of the Dehydratase Domain of the Erythromycin Polyketide Synthase. Journal of the American Chemical Society, 2010, 132, 14697-14699.	13.7	64
70	Crystal Structure of the Erythromycin Polyketide Synthase Dehydratase. Journal of Molecular Biology, 2008, 384, 941-953.	4.2	174
71	Stereospecificity of Ketoreductase Domains 1 and 2 of the Tylactone Modular Polyketide Synthase. Journal of the American Chemical Society, 2008, 130, 11598-11599.	13.7	43
72	A Tylosin Ketoreductase Reveals How Chirality Is Determined in Polyketides. Chemistry and Biology, 2007, 14, 898-908.	6.0	281

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73	The Structure of a Ketoreductase Determines the Organization of the Î²-Carbon Processing Enzymes of Modular Polyketide Synthases. Structure, 2006, 14, 737-748.	3.3	197
74	An antibiotic factory caught in action. Nature Structural and Molecular Biology, 2004, 11, 888-893.	8.2	162
75	Catalysis, Specificity, and ACP Docking Site of Streptomyces coelicolor Malonyl-CoA:ACP Transacylase. Structure, 2003, 11, 147-154.	3.3	125
76	Crystal Structure of the Priming Î²-Ketosynthase from the R1128 Polyketide Biosynthetic Pathway. Structure, 2002, 10, 1559-1568.	3.3	75
77	High-Resolution Macromolecular NMR Spectroscopy Inside Living Cells. Journal of the American Chemical Society, 2001, 123, 2446-2447.	13.7	187
78	Precursor-directed biosynthesis of 12-ethyl erythromycin. Bioorganic and Medicinal Chemistry, 1998, 6, 1171-1177.	3.0	43