

Chaitan Khosla

List of Publications by Year in descending order

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Version: 2024-02-01

353
papers

26,964
citations

4955

84
h-index

9854

141
g-index

369
all docs

369
docs citations

369
times ranked

14818
citing authors

#	ARTICLE	IF	CITATIONS
1	Fragment antigen binding domains (Fabs) as tools to study assembly-line polyketide synthases. <i>Synthetic and Systems Biotechnology</i> , 2022, 7, 506-512.	1.8	3
2	Early non-neutralizing, afucosylated antibody responses are associated with COVID-19 severity. <i>Science Translational Medicine</i> , 2022, 14, eabm7853.	5.8	71
3	An efficient urine peptidomics workflow identifies chemically defined dietary gluten peptides from patients with celiac disease. <i>Nature Communications</i> , 2022, 13, 888.	5.8	16
4	KIR ⁺ CD8 ⁺ T cells suppress pathogenic T cells and are active in autoimmune diseases and COVID-19. <i>Science</i> , 2022, 376, eabi9591.	6.0	113
5	Engineering site-selective incorporation of fluorine into polyketides. <i>Nature Chemical Biology</i> , 2022, 18, 886-893.	3.9	23
6	50 Years Ago in T J P. <i>Journal of Pediatrics</i> , 2021, 230, 70.	0.9	2
7	Peginterferon Lambda-1a for treatment of outpatients with uncomplicated COVID-19: a randomized placebo-controlled trial. <i>Nature Communications</i> , 2021, 12, 1967.	5.8	107
8	Properties of a "Split-and-Stuttering" Module of an Assembly Line Polyketide Synthase. <i>Journal of Organic Chemistry</i> , 2021, 86, 11100-11106.	1.7	4
9	SARS-CoV-2 Subgenomic RNA Kinetics in Longitudinal Clinical Samples. <i>Open Forum Infectious Diseases</i> , 2021, 8, ofab310.	0.4	24
10	GRINS: Genetic elements that recode assembly-line polyketide synthases and accelerate their diversification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	13
11	An Unusual "OR" Gate for Allosteric Regulation of Mammalian Transglutaminase 2 in the Extracellular Matrix. <i>Journal of the American Chemical Society</i> , 2021, 143, 10537-10540.	6.6	3
12	The COVID-19 Outpatient Pragmatic Platform Study (COPPS): Study design of a multi-center pragmatic platform trial. <i>Contemporary Clinical Trials</i> , 2021, 108, 106509.	0.8	5
13	Solution Structure and Conformational Flexibility of a Polyketide Synthase Module. <i>Jacs Au</i> , 2021, 1, 2162-2171.	3.6	14
14	Mapping the catalytic conformations of an assembly-line polyketide synthase module. <i>Science</i> , 2021, 374, 729-734.	6.0	41
15	Prospects for Antibacterial Discovery and Development. <i>Journal of the American Chemical Society</i> , 2021, 143, 21127-21142.	6.6	51
16	Challenges and opportunities for engineering assembly-line polyketide biosynthesis in <i>Escherichia coli</i> . <i>Metabolic Engineering Communications</i> , 2020, 10, e00106.	1.9	3
17	A genome-wide analysis of targets of macrolide antibiotics in mammalian cells. <i>Journal of Biological Chemistry</i> , 2020, 295, 2057-2067.	1.6	10
18	Substrates, inhibitors, and probes of mammalian transglutaminase 2. <i>Analytical Biochemistry</i> , 2020, 591, 113560.	1.1	24

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19	Antibody Probes of Module 1 of the 6-Deoxyerythronolide B Synthase Reveal an Extended Conformation During Ketoreduction. <i>Journal of the American Chemical Society</i> , 2020, 142, 14933-14939.	6.6	8
20	Structure and Mechanism of the Ketosynthase-Chain Length Factor Didomain from a Prototypical Polyunsaturated Fatty Acid Synthase. <i>Biochemistry</i> , 2020, 59, 4735-4743.	1.2	2
21	Complete Reconstitution and Deorphanization of the 3 MDa Nocardiosis-Associated Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2020, 142, 5952-5957.	6.6	27
22	Enhancing the Antiviral Efficacy of RNA-Dependent RNA Polymerase Inhibition by Combination with Modulators of Pyrimidine Metabolism. <i>Cell Chemical Biology</i> , 2020, 27, 668-677.e9.	2.5	23
23	IL-15, gluten and HLA-DQ8 drive tissue destruction in coeliac disease. <i>Nature</i> , 2020, 578, 600-604.	13.7	122
24	Characterization of Natural Product Biosynthetic Pathways by In Vitro Reconstitution. , 2020, , 307-317.		1
25	Latiglutenase treatment for celiac disease: symptom and quality of life improvement for seropositive patients on a gluten-free diet. <i>GastroHep</i> , 2019, 1, 293-301.	0.3	24
26	Discovery of small molecule inhibitors of human uridine-cytidine kinase 2 by high-throughput screening. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2019, 29, 2559-2564.	1.0	14
27	Engineering of Chimeric Polyketide Synthases Using SYNZIP Docking Domains. <i>ACS Chemical Biology</i> , 2019, 14, 426-433.	1.6	31
28	Tunable Enzymatic Synthesis of the Immunomodulator Lipid IV _A To Enable Structure-Activity Analysis. <i>Journal of the American Chemical Society</i> , 2019, 141, 9474-9478.	6.6	5
29	In Vivo Measurement of Redox-Regulated TG2 Activity. <i>Methods in Molecular Biology</i> , 2019, 1967, 263-274.	0.4	2
30	Evolution and Diversity of Assembly-Line Polyketide Synthases. <i>Chemical Reviews</i> , 2019, 119, 12524-12547.	23.0	178
31	From Active Sites to Machines: A Challenge for Enzyme Chemists. <i>Israel Journal of Chemistry</i> , 2019, 59, 37-40.	1.0	3
32	HEx: A heterologous expression platform for the discovery of fungal natural products. <i>Science Advances</i> , 2018, 4, eaar5459.	4.7	167
33	Endoplasmic reticulum-resident protein 57 (ERp57) oxidatively inactivates human transglutaminase 2. <i>Journal of Biological Chemistry</i> , 2018, 293, 2640-2649.	1.6	33
34	Cystamine and Disulfiram Inhibit Human Transglutaminase 2 via an Oxidative Mechanism. <i>Biochemistry</i> , 2018, 57, 3359-3363.	1.2	27
35	Discovery and Characterization of a Thioesterase-Specific Monoclonal Antibody That Recognizes the 6-Deoxyerythronolide B Synthase. <i>Biochemistry</i> , 2018, 57, 6201-6208.	1.2	7
36	A tribute to Professor Jay Bailey: A pioneer in biochemical engineering. <i>AIChE Journal</i> , 2018, 64, 4179-4181.	1.8	1

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37	A Tribute to James E. Bailey. <i>AIChE Journal</i> , 2018, 64, 4178-4178.	1.8	0
38	Structure-Function Analysis of the Extended Conformation of a Polyketide Synthase Module. <i>Journal of the American Chemical Society</i> , 2018, 140, 6518-6521.	6.6	37
39	Interleukin 4 is inactivated via selective disulfide-bond reduction by extracellular thioredoxin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8781-8786.	3.3	20
40	Mechanism and Stereochemistry of Polyketide Chain Elongation and Methyl Group Epimerization in Polyether Biosynthesis. <i>Journal of the American Chemical Society</i> , 2017, 139, 3283-3292.	6.6	18
41	Celiac Disease: Lessons for and from Chemical Biology. <i>ACS Chemical Biology</i> , 2017, 12, 1455-1459.	1.6	8
42	Elucidation of the Stereospecificity of <i>C</i> -Methyltransferases from <i>trans</i> -AT Polyketide Synthases. <i>Journal of the American Chemical Society</i> , 2017, 139, 6102-6105.	6.6	19
43	Heterologous expression of diverse propionyl-CoA carboxylases affects polyketide production in <i>Escherichia coli</i> . <i>Journal of Antibiotics</i> , 2017, 70, 859-863.	1.0	8
44	Human pyrimidine nucleotide biosynthesis as a target for antiviral chemotherapy. <i>Current Opinion in Biotechnology</i> , 2017, 48, 127-134.	3.3	64
45	Real-Time <i>in Vivo</i> Detection of H_2O_2 Using Hyperpolarized ^{13}C -Thiourea. <i>ACS Chemical Biology</i> , 2017, 12, 1737-1742.	1.6	20
46	A B-Cell Gene Signature Correlates With the Extent of Gluten-Induced Intestinal Injury in Celiac Disease. <i>Cellular and Molecular Gastroenterology and Hepatology</i> , 2017, 4, 1-17.	2.3	13
47	Reovirus infection triggers inflammatory responses to dietary antigens and development of celiac disease. <i>Science</i> , 2017, 356, 44-50.	6.0	367
48	Thioredoxin-1 Selectively Activates Transglutaminase 2 in the Extracellular Matrix of the Small Intestine. <i>Journal of Biological Chemistry</i> , 2017, 292, 2000-2008.	1.6	35
49	Genetic Mapping and Biochemical Basis of Yellow Feather Pigmentation in Budgerigars. <i>Cell</i> , 2017, 171, 427-439.e21.	13.5	101
50	Biosynthesis and structure-activity relationships of the lipid a family of glycolipids. <i>Current Opinion in Chemical Biology</i> , 2017, 40, 127-137.	2.8	22
51	The Conformational Flexibility of the Acyltransferase from the Disorazole Polyketide Synthase Is Revealed by an X-ray Free-Electron Laser Using a Room-Temperature Sample Delivery Method for Serial Crystallography. <i>Biochemistry</i> , 2017, 56, 4751-4756.	1.2	20
52	Latiglutenase Improves Symptoms in Seropositive Celiac Disease Patients While on a Gluten-Free Diet. <i>Digestive Diseases and Sciences</i> , 2017, 62, 2428-2432.	1.1	58
53	Transglutaminase 2 in pulmonary and cardiac tissue remodeling in experimental pulmonary hypertension. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2017, 313, L752-L762.	1.3	40
54	Elucidation of the Cryptic Methyl Group Epimerase Activity of Dehydratase Domains from Modular Polyketide Synthases Using a Tandem Modules Epimerase Assay. <i>Journal of the American Chemical Society</i> , 2017, 139, 9507-9510.	6.6	18

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55	Intracellular TG2 Activity Increases Microtubule Stability but is not Sufficient to Prompt Neurite Growth. <i>Neuroscience Bulletin</i> , 2017, 33, 103-106.	1.5	2
56	Cholestyramine as a promising, strong anion exchange resin for direct capture of genetic biomarkers from raw pancreatic fluids. <i>Biotechnology and Bioengineering</i> , 2017, 114, 934-938.	1.7	3
57	Partial <i>In Vitro</i> Reconstitution of an Orphan Polyketide Synthase Associated with Clinical Cases of Nocardiosis. <i>ACS Chemical Biology</i> , 2016, 11, 2636-2641.	1.6	24
58	A Turnstile Mechanism for the Controlled Growth of Biosynthetic Intermediates on Assembly Line Polyketide Synthases. <i>ACS Central Science</i> , 2016, 2, 14-20.	5.3	51
59	Thiol-Disulfide Exchange Reactions in the Mammalian Extracellular Environment. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2016, 7, 197-222.	3.3	59
60	Recognition of acyl carrier proteins by ketoreductases in assembly line polyketide synthases. <i>Journal of Antibiotics</i> , 2016, 69, 507-510.	1.0	15
61	Protein-Protein Interactions, Not Substrate Recognition, Dominate the Turnover of Chimeric Assembly Line Polyketide Synthases. <i>Journal of Biological Chemistry</i> , 2016, 291, 16404-16415.	1.6	55
62	Roles of Conserved Active Site Residues in the Ketosynthase Domain of an Assembly Line Polyketide Synthase. <i>Biochemistry</i> , 2016, 55, 4476-4484.	1.2	50
63	Structure and mechanism of assembly line polyketide synthases. <i>Current Opinion in Structural Biology</i> , 2016, 41, 10-18.	2.6	104
64	Editorial overview: Next-generation therapeutics: Breaking new ground and making a difference for patients. <i>Current Opinion in Chemical Biology</i> , 2016, 32, 58-59.	2.8	0
65	Parallel shRNA and CRISPR-Cas9 screens enable antiviral drug target identification. <i>Nature Chemical Biology</i> , 2016, 12, 361-366.	3.9	157
66	Epimerase and Reductase Activities of Polyketide Synthase Ketoreductase Domains Utilize the Same Conserved Tyrosine and Serine Residues. <i>Biochemistry</i> , 2016, 55, 1179-1186.	1.2	23
67	Gluten Introduction, Breastfeeding, and Celiac Disease: Back to the Drawing Board. <i>American Journal of Gastroenterology</i> , 2016, 111, 12-14.	0.2	29
68	An unprecedented dual antagonist and agonist of human Transglutaminase 2. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2015, 25, 4922-4926.	1.0	9
69	Quo vadis, enzymology?. <i>Nature Chemical Biology</i> , 2015, 11, 438-441.	3.9	13
70	In Vitro Reconstitution of Metabolic Pathways: Insights into Nature's Chemical Logic. <i>Synlett</i> , 2015, 26, 1008-1025.	1.0	26
71	Therapeutic approaches for celiac disease. <i>Bailliere's Best Practice and Research in Clinical Gastroenterology</i> , 2015, 29, 503-521.	1.0	43
72	Computational identification and analysis of orphan assembly-line polyketide synthases. <i>Journal of Antibiotics</i> , 2014, 67, 89-97.	1.0	59

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73	The Convergence of Chemistry & Human Biology. <i>Daedalus</i> , 2014, 143, 43-48.	0.9	2
74	The initiation ketosynthase (FabH) is the sole rate-limiting enzyme of the fatty acid synthase of <i>Synechococcus</i> sp. PCC 7002. <i>Metabolic Engineering</i> , 2014, 22, 53-59.	3.6	28
75	Elevated Transglutaminase 2 Activity Is Associated with Hypoxia-Induced Experimental Pulmonary Hypertension in Mice. <i>ACS Chemical Biology</i> , 2014, 9, 266-275.	1.6	57
76	Discovery of Potent and Specific Dihydroisoxazole Inhibitors of Human Transglutaminase 2. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 9042-9064.	2.9	45
77	Role of hypoxia-induced transglutaminase 2 in pulmonary artery smooth muscle cell proliferation. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2014, 307, L576-L585.	1.3	40
78	Elucidation of the Cryptic Epimerase Activity of Redox-Inactive Ketoreductase Domains from Modular Polyketide Synthases by Tandem Equilibrium Isotope Exchange. <i>Journal of the American Chemical Society</i> , 2014, 136, 10190-10193.	6.6	28
79	Dihydroisoxazole inhibitors of <i>Anopheles gambiae</i> seminal transglutaminase AgTG3. <i>Malaria Journal</i> , 2014, 13, 210.	0.8	10
80	Generation of food-grade recombinant <i>Lactobacillus casei</i> delivering <i>Myxococcus xanthus</i> prolyl endopeptidase. <i>Applied Microbiology and Biotechnology</i> , 2014, 98, 6689-6700.	1.7	21
81	Assembly Line Polyketide Synthases: Mechanistic Insights and Unsolved Problems. <i>Biochemistry</i> , 2014, 53, 2875-2883.	1.2	114
82	Use of transmission electron microscopy to identify nanocrystals of challenging protein targets. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 8470-8475.	3.3	51
83	Architectures of Whole-Module and Bimodular Proteins from the 6-Deoxyerythronolide B Synthase. <i>Journal of Molecular Biology</i> , 2014, 426, 2229-2245.	2.0	60
84	Comparative Analysis of the Substrate Specificity of <i>trans</i> - versus <i>cis</i> -Acyltransferases of Assembly Line Polyketide Synthases. <i>Biochemistry</i> , 2014, 53, 3796-3806.	1.2	45
85	CYP3A4-Catalyzed Simvastatin Metabolism as a Non-Invasive Marker of Small Intestinal Health in Celiac Disease. <i>American Journal of Gastroenterology</i> , 2013, 108, 1344-1351.	0.2	36
86	Analysis and Refactoring of the A-74528 Biosynthetic Pathway. <i>Journal of the American Chemical Society</i> , 2013, 135, 3752-3755.	6.6	8
87	Expanding the Fluorine Chemistry of Living Systems Using Engineered Polyketide Synthase Pathways. <i>Science</i> , 2013, 341, 1089-1094.	6.0	166
88	Coupled Methyl Group Epimerization and Reduction by Polyketide Synthase Ketoreductase Domains. Ketoreductase-Catalyzed Equilibrium Isotope Exchange. <i>Journal of the American Chemical Society</i> , 2013, 135, 16324-16327.	6.6	31
89	<i>In Vitro</i> Reconstitution and Analysis of the 6-Deoxyerythronolide B Synthase. <i>Journal of the American Chemical Society</i> , 2013, 135, 16809-16812.	6.6	70
90	Gluten-sensitive enteropathy coincides with decreased capability of intestinal T cells to secrete IL-17 and IL-22 in a macaque model for celiac disease. <i>Clinical Immunology</i> , 2013, 147, 40-49.	1.4	24

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91	Selective Inhibition of Extracellular Thioredoxin by Asymmetric Disulfides. <i>Journal of Medicinal Chemistry</i> , 2013, 56, 1301-1310.	2.9	49
92	Mechanism and Specificity of an Acyltransferase Domain from a Modular Polyketide Synthase. <i>Biochemistry</i> , 2013, 52, 1839-1841.	1.2	62
93	Stereochemistry of Reductions Catalyzed by Methyl-Epimerizing Ketoreductase Domains of Polyketide Synthases. <i>Journal of the American Chemical Society</i> , 2013, 135, 7406-7409.	6.6	26
94	Nonproteinogenic Amino Acid Building Blocks for Nonribosomal Peptide and Hybrid Polyketide Scaffolds. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 7098-7124.	7.2	314
95	Metabolic Flux between Unsaturated and Saturated Fatty Acids Is Controlled by the FabA:FabB Ratio in the Fully Reconstituted Fatty Acid Biosynthetic Pathway of <i>Escherichia coli</i> . <i>Biochemistry</i> , 2013, 52, 8304-8312.	1.2	23
96	The Stanford Institute for Chemical Biology. <i>ACS Chemical Biology</i> , 2013, 8, 1860-1861.	1.6	0
97	Dietary gluten triggers concomitant activation of CD4 ⁺ and CD8 ⁺ T cells and T _H 17 T cells in celiac disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 13073-13078.	3.3	178
98	Engineering the acyltransferase substrate specificity of assembly line polyketide synthases. <i>Journal of the Royal Society Interface</i> , 2013, 10, 20130297.	1.5	99
99	Discovery and Mechanism of Type III Secretion System Inhibitors. <i>Israel Journal of Chemistry</i> , 2013, 53, 577-587.	1.0	4
100	Interferon- β Activates Transglutaminase 2 via a Phosphatidylinositol-3-Kinase-Dependent Pathway: Implications for Celiac Sprue Therapy. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2012, 341, 104-114.	1.3	30
101	Reprogramming a module of the 6-deoxyerythronolide B synthase for iterative chain elongation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 4110-4115.	3.3	97
102	Engineering <i>Escherichia coli</i> for Biotransformation of Biomass into Fatty Acid Derived Fuels. <i>Current Chemical Biology</i> , 2012, 6, 7-13.	0.2	0
103	Regulation of the activities of the mammalian transglutaminase family of enzymes. <i>Protein Science</i> , 2012, 21, 1781-1791.	3.1	47
104	Role of transglutaminase 2 in celiac disease pathogenesis. <i>Seminars in Immunopathology</i> , 2012, 34, 513-522.	2.8	71
105	Molecular Insights into the Biosynthesis of Guadinomine: A Type III Secretion System Inhibitor. <i>Journal of the American Chemical Society</i> , 2012, 134, 17797-17806.	6.6	72
106	Role of a Conserved Arginine Residue in Linkers between the Ketosynthase and Acyltransferase Domains of Multimodular Polyketide Synthases. <i>Biochemistry</i> , 2012, 51, 3708-3710.	1.2	25
107	Oral Enzyme Therapy for Celiac Sprue. <i>Methods in Enzymology</i> , 2012, 502, 241-271.	0.4	72
108	Precursor Directed Biosynthesis of an Orthogonally Functional Erythromycin Analogue: Selectivity in the Ribosome Macrolide Binding Pocket. <i>Journal of the American Chemical Society</i> , 2012, 134, 12259-12265.	6.6	53

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109	Activation and Inhibition of Transglutaminase 2 in Mice. PLoS ONE, 2012, 7, e30642.	1.1	58
110	Engineering Escherichia coli for Biotransformation of Biomass into Fatty Acid Derived Fuels. Current Chemical Biology, 2012, 6, 7-13.	0.2	1
111	Natural product inhibitors of glucose-6-phosphate translocase. MedChemComm, 2012, 3, 926.	3.5	17
112	Resolving Multiple Proteinâ€”Peptide Binding Events: Implication for HLAâ€”DQ2 Mediated Antigen Presentation in Celiac Disease. Chemistry - an Asian Journal, 2012, 7, 992-999.	1.7	8
113	Combinatorial biosynthesis of polyketidesâ€”a perspective. Current Opinion in Chemical Biology, 2012, 16, 117-123.	2.8	126
114	Activation of Extracellular Transglutaminase 2 by Thioredoxin. Journal of Biological Chemistry, 2011, 286, 37866-37873.	1.6	95
115	Structure and Mechanism of the <i>trans</i> -Acting Acyltransferase from the Disorazole Synthase. Biochemistry, 2011, 50, 6539-6548.	1.2	78
116	Chemistry and Biology of Macrolide Antiparasitic Agents. Journal of Medicinal Chemistry, 2011, 54, 2792-2804.	2.9	30
117	Engineered biosynthesis of the antiparasitic agent frenolicin B and rationally designed analogs in a heterologous host. Journal of Antibiotics, 2011, 64, 759-762.	1.0	16
118	In vitro and in vivo activity of frenolicin B against Plasmodium falciparum and P berghei. Journal of Antibiotics, 2011, 64, 799-801.	1.0	10
119	Novel therapies for coeliac disease. Journal of Internal Medicine, 2011, 269, 604-613.	2.7	101
120	Improved precursor-directed biosynthesis in E. coli via directed evolution. Journal of Antibiotics, 2011, 64, 59-64.	1.0	19
121	Analysis of the Ketosynthase-Chain Length Factor Heterodimer from the Fredericamycin Polyketide Synthase. Chemistry and Biology, 2011, 18, 1021-1031.	6.2	16
122	Novel chemo-sensitizing agent, ERW1227B, impairs cellular motility and enhances cell death in glioblastomas. Journal of Neuro-Oncology, 2011, 103, 207-219.	1.4	15
123	Probing the interactions of an acyl carrier protein domain from the 6â€”deoxyerythronolide B synthase. Protein Science, 2011, 20, 1244-1255.	3.1	50
124	Dihydroisoxazole Analogs for Labeling and Visualization of Catalytically Active Transglutaminase 2. Chemistry and Biology, 2011, 18, 58-66.	6.2	22
125	Acylideneoxoindoles: A new class of reversible inhibitors of human transglutaminase 2. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 2692-2696.	1.0	58
126	In vitro reconstitution and steady-state analysis of the fatty acid synthase from <i>Escherichia coli</i> . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 18643-18648.	3.3	152

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127	Novel aspects of quantitation of immunogenic wheat gluten peptides by liquid chromatography-mass spectrometry/mass spectrometry. <i>Journal of Chromatography A</i> , 2010, 1217, 4167-4183.	1.8	91
128	Quantitative analysis and engineering of fatty acid biosynthesis in <i>E. coli</i> . <i>Metabolic Engineering</i> , 2010, 12, 378-386.	3.6	198
129	Inhibition of Tubulogenesis and of Carcinogen-mediated Signaling in Brain Endothelial Cells Highlight the Antiangiogenic Properties of a Mumbaistatin Analog. <i>Chemical Biology and Drug Design</i> , 2010, 75, 481-488.	1.5	14
130	Characterization of transglutaminase type II role in dendritic cell differentiation and function. <i>Journal of Leukocyte Biology</i> , 2010, 88, 181-188.	1.5	29
131	Molecular recognition between ketosynthase and acyl carrier protein domains of the 6-deoxyerythronolide B synthase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 22066-22071.	3.3	81
132	Thematic Minireview Series on Antibacterial Natural Products: New Tricks for Old Dogs. <i>Journal of Biological Chemistry</i> , 2010, 285, 27499.	1.6	1
133	In Living Color: Bacterial Pigments as an Untapped Resource in the Classroom and Beyond. <i>PLoS Biology</i> , 2010, 8, e1000510.	2.6	26
134	Protein-Protein Recognition between Acyltransferases and Acyl Carrier Proteins in Multimodular Polyketide Synthases. <i>Biochemistry</i> , 2010, 49, 95-102.	1.2	52
135	Stereospecificity of the Dehydratase Domain of the Erythromycin Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2010, 132, 14697-14699.	6.6	64
136	Redox Regulation of Transglutaminase 2 Activity. <i>Journal of Biological Chemistry</i> , 2010, 285, 25402-25409.	1.6	155
137	Genetic Engineering of <i>Escherichia coli</i> for Biofuel Production. <i>Annual Review of Genetics</i> , 2010, 44, 53-69.	3.2	119
138	A Balancing Act for Taxol Precursor Pathways in <i>E. coli</i> . <i>Science</i> , 2010, 330, 44-45.	6.0	17
139	Cloning, Sequencing, Heterologous Expression, and Mechanistic Analysis of A-74528 Biosynthesis. <i>Journal of the American Chemical Society</i> , 2010, 132, 9122-9128.	6.6	20
140	Mechanism and Engineering of Polyketide Chain Initiation in Fredericamycin Biosynthesis. <i>Journal of the American Chemical Society</i> , 2010, 132, 8831-8833.	6.6	18
141	Visualization of Transepithelial Passage of the Immunogenic 33-Residue Peptide from α -2 Gliadin in Gluten-Sensitive Macaques. <i>PLoS ONE</i> , 2010, 5, e10228.	1.1	37
142	Interferon- γ Released by Gluten-Stimulated Celiac Disease-Specific Intestinal T Cells Enhances the Transepithelial Flux of Gluten Peptides. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2009, 329, 657-668.	1.3	37
143	Modular biocatalysts. <i>AIChE Journal</i> , 2009, 55, 1926-1929.	1.8	1
144	Revisiting the modularity of modular polyketide synthases. <i>Current Opinion in Chemical Biology</i> , 2009, 13, 135-143.	2.8	83

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145	Noninflammatory Gluten Peptide Analogs as Biomarkers for Celiac Sprue. <i>Chemistry and Biology</i> , 2009, 16, 868-881.	6.2	13
146	In Vivo and In Vitro Analysis of the Hedamycin Polyketide Synthase. <i>Chemistry and Biology</i> , 2009, 16, 1197-1207.	6.2	26
147	A Food-Grade Enzyme Preparation with Modest Gluten Detoxification Properties. <i>PLoS ONE</i> , 2009, 4, e6313.	1.1	84
148	Structures and Mechanisms of Polyketide Synthases. <i>Journal of Organic Chemistry</i> , 2009, 74, 6416-6420.	1.7	88
149	Biosynthesis of Aromatic Polyketides in Bacteria. <i>Accounts of Chemical Research</i> , 2009, 42, 631-639.	7.6	170
150	Evidence for Transcriptional Regulation of the Glucose-6-Phosphate Transporter by HIF-1: Targeting G6PT with Mumbaistatin Analogs in Hypoxic Mesenchymal Stromal Cells. <i>Stem Cells</i> , 2009, 27, 489-497.	1.4	47
151	The Biochemical Basis for Stereochemical Control in Polyketide Biosynthesis. <i>Journal of the American Chemical Society</i> , 2009, 131, 18501-18511.	6.6	79
152	The Diversity of Nuclear Magnetic Resonance Spectroscopy. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2009, , 65-81.	0.2	0
153	Tissue transglutaminase 2 expression in meningiomas. <i>Journal of Neuro-Oncology</i> , 2008, 90, 125-132.	1.4	19
154	Mechanism based protein crosslinking of domains from the 6-deoxyerythronolide B synthase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 3034-3038.	1.0	28
155	Overproduction of free fatty acids in <i>E. coli</i> : Implications for biodiesel production. <i>Metabolic Engineering</i> , 2008, 10, 333-339.	3.6	341
156	Fit for an enzyme. <i>Nature</i> , 2008, 454, 832-833.	13.7	8
157	Stereospecificity of Ketoreductase Domains 1 and 2 of the Tylactone Modular Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2008, 130, 11598-11599.	6.6	43
158	Protein engineering of improved prolyl endopeptidases for celiac sprue therapy. <i>Protein Engineering, Design and Selection</i> , 2008, 21, 699-707.	1.0	80
159	Evolution of polyketide synthases in bacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 4595-4600.	3.3	163
160	Parallels between Pathogens and Gluten Peptides in Celiac Sprue. <i>PLoS Pathogens</i> , 2008, 4, e34.	2.1	51
161	A Non-Human Primate Model for Gluten Sensitivity. <i>PLoS ONE</i> , 2008, 3, e1614.	1.1	76
162	Extracellular Transglutaminase 2 Is Catalytically Inactive, but Is Transiently Activated upon Tissue Injury. <i>PLoS ONE</i> , 2008, 3, e1861.	1.1	174

#	ARTICLE	IF	CITATIONS
163	Toward the Assessment of Food Toxicity for Celiac Patients: Characterization of Monoclonal Antibodies to a Main Immunogenic Gluten Peptide. <i>PLoS ONE</i> , 2008, 3, e2294.	1.1	141
164	Transepithelial Transport and Enzymatic Detoxification of Gluten in Gluten-Sensitive Rhesus Macaques. <i>PLoS ONE</i> , 2008, 3, e1857.	1.1	37
165	Transglutaminase 2 Undergoes a Large Conformational Change upon Activation. <i>PLoS Biology</i> , 2007, 5, e327.	2.6	369
166	Bioassay-Guided Evolution of Glycosylated Macrolide Antibiotics in <i>Escherichia coli</i> . <i>PLoS Biology</i> , 2007, 5, e45.	2.6	36
167	Stereospecificity of Ketoreductase Domains of the 6-Deoxyerythronolide B Synthase. <i>Journal of the American Chemical Society</i> , 2007, 129, 13758-13769.	6.6	81
168	Structure and Mechanism of the 6-Deoxyerythronolide B Synthase. <i>Annual Review of Biochemistry</i> , 2007, 76, 195-221.	5.0	282
169	Transglutaminase 2 Regulates Mallory Body Inclusion Formation and Injury-Associated Liver Enlargement. <i>Gastroenterology</i> , 2007, 132, 1515-1526.	0.6	66
170	Combination Enzyme Therapy for Gastric Digestion of Dietary Gluten in Patients With Celiac Sprue. <i>Gastroenterology</i> , 2007, 133, 472-480.	0.6	205
171	A scaleable manufacturing process for pro-EP-B2, a cysteine protease from barley indicated for celiac sprue. <i>Biotechnology and Bioengineering</i> , 2007, 98, 177-185.	1.7	22
172	Structure-activity relationships of semisynthetic mumbaistatin analogs. <i>Bioorganic and Medicinal Chemistry</i> , 2007, 15, 5207-5218.	1.4	15
173	Structure-based design of β -amido aldehyde containing gluten peptide analogues as modulators of HLA-DQ2 and transglutaminase 2. <i>Bioorganic and Medicinal Chemistry</i> , 2007, 15, 6253-6261.	1.4	41
174	Cyclic and dimeric gluten peptide analogues inhibiting DQ2-mediated antigen presentation in celiac disease. <i>Bioorganic and Medicinal Chemistry</i> , 2007, 15, 6565-6573.	1.4	85
175	Structure-Based Dissociation of a Type I Polyketide Synthase Module. <i>Chemistry and Biology</i> , 2007, 14, 784-792.	6.2	72
176	Structural and Mechanistic Analysis of Protein Interactions in Module 3 of the 6-Deoxyerythronolide B Synthase. <i>Chemistry and Biology</i> , 2007, 14, 931-943.	6.2	151
177	Transglutaminase 2 inhibitor, KCC009, disrupts fibronectin assembly in the extracellular matrix and sensitizes orthotopic glioblastomas to chemotherapy. <i>Oncogene</i> , 2007, 26, 2563-2573.	2.6	156
178	Antibiotic production from the ground up. <i>Nature Biotechnology</i> , 2007, 25, 428-429.	9.4	19
179	Transglutaminase 2 inhibitors and their therapeutic role in disease states. , 2007, 115, 232-245.		170
180	Synthesis and Biological Activity of Novel Pyranopyrones Derived from Engineered Aromatic Polyketides. <i>ACS Chemical Biology</i> , 2007, 2, 104-108.	1.6	15

#	ARTICLE	IF	CITATIONS
181	Solution structure and proposed domain-domain recognition interface of an acyl carrier protein domain from a modular polyketide synthase. <i>Protein Science</i> , 2007, 16, 2093-2107.	3.1	107
182	Prolyl endopeptidases. <i>Cellular and Molecular Life Sciences</i> , 2007, 64, 345-355.	2.4	121
183	Extender Unit and Acyl Carrier Protein Specificity of Ketosynthase Domains of the 6-Deoxyerythronolide B Synthase. <i>Journal of the American Chemical Society</i> , 2006, 128, 3067-3074.	6.6	94
184	Trapping Transient Protein-Protein Interactions in Polyketide Biosynthesis. <i>ACS Chemical Biology</i> , 2006, 1, 679-680.	1.6	5
185	Inhibition of HLA-DQ2-Mediated Antigen Presentation by Analogues of a High Affinity 33-Residue Peptide from α -Gliadin. <i>Journal of the American Chemical Society</i> , 2006, 128, 1859-1867.	6.6	73
186	Pharmacologic transglutaminase inhibition attenuates drug-primed liver hypertrophy but not Mallory body formation. <i>FEBS Letters</i> , 2006, 580, 2351-2357.	1.3	14
187	Structure-Activity Relationship Analysis of the Selective Inhibition of Transglutaminase 2 by Dihydroisoxazoles. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 7493-7501.	2.9	78
188	Modular polyketide synthases: Investigating intermodular communication using 6 deoxyerythronolide B synthase module 2. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006, 16, 213-216.	1.0	4
189	Heterologous Expression, Purification, Refolding, and Structural-Functional Characterization of EP-B2, a Self-Activating Barley Cysteine Endoprotease. <i>Chemistry and Biology</i> , 2006, 13, 637-647.	6.2	104
190	Rational Design of Combination Enzyme Therapy for Celiac Sprue. <i>Chemistry and Biology</i> , 2006, 13, 649-658.	6.2	117
191	Macrolactonization to 10-deoxymethynolide catalyzed by the recombinant thioesterase of the picromycin/methymycin polyketide synthase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2006, 16, 391-394.	1.0	34
192	Investigating Nonribosomal Peptide and Polyketide Biosynthesis by Direct Detection of Intermediates on >70 kDa Polypeptides by Using Fourier-Transform Mass Spectrometry. <i>ChemBioChem</i> , 2006, 7, 904-907.	1.3	21
193	The 2.7-Å crystal structure of a 194-kDa homodimeric fragment of the 6-deoxyerythronolide B synthase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 11124-11129.	3.3	259
194	Effect of Barley Endoprotease EP-B2 on Gluten Digestion in the Intact Rat. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2006, 318, 1178-1186.	1.3	65
195	Structure, Mechanism and Engineering of Polyketide Synthases. <i>FASEB Journal</i> , 2006, 20, A1472.	0.2	0
196	Chemistry and Biology of Dihydroisoxazole Derivatives: Selective Inhibitors of Human Transglutaminase 2. <i>Chemistry and Biology</i> , 2005, 12, 469-475.	6.2	154
197	Orthogonal Protein Interactions in Spore Pigment Producing and Antibiotic Producing Polyketide Synthases. <i>Journal of Antibiotics</i> , 2005, 58, 663-666.	1.0	8
198	Just add chlorine. <i>Nature</i> , 2005, 436, 1094-1095.	13.7	4

#	ARTICLE	IF	CITATIONS
199	Chain Elongation, Macrolactonization, and Hydrolysis of Natural and Reduced Hexaketide Substrates by the Picromycin/Methymycin Polyketide Synthase. <i>Angewandte Chemie - International Edition</i> , 2005, 44, 7557-7560.	7.2	11
200	Fermentation, purification, formulation, and pharmacological evaluation of a prolyl endopeptidase from <i>Myxococcus xanthus</i> : Implications for Celiac Sprue therapy. <i>Biotechnology and Bioengineering</i> , 2005, 92, 674-684.	1.7	70
201	A New Route to Designer Antibiotics. <i>ChemInform</i> , 2005, 36, no.	0.1	0
202	Structural and mechanistic analysis of two prolyl endopeptidases: Role of interdomain dynamics in catalysis and specificity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 3599-3604.	3.3	133
203	Tissue Transglutaminase-Mediated Formation and Cleavage of Histamine-Gliadin Complexes: Biological Effects and Implications for Celiac Disease. <i>Journal of Immunology</i> , 2005, 174, 1657-1663.	0.4	38
204	Future therapeutic options for celiac disease. <i>Nature Reviews Gastroenterology & Hepatology</i> , 2005, 2, 140-147.	1.7	137
205	Main Chain Hydrogen Bond Interactions in the Binding of Proline-rich Gluten Peptides to the Celiac Disease-associated HLA-DQ2 Molecule. <i>Journal of Biological Chemistry</i> , 2005, 280, 21791-21796.	1.6	32
206	Tissue transglutaminase 2 inhibition promotes cell death and chemosensitivity in glioblastomas. <i>Molecular Cancer Therapeutics</i> , 2005, 4, 1293-1302.	1.9	82
207	Prolyl Endopeptidase-Mediated Destruction of T Cell Epitopes in Whole Gluten: Chemical and Immunological Characterization. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2005, 312, 19-26.	1.3	123
208	Engineered Biosynthesis of Aklanonic Acid Analogues. <i>Journal of the American Chemical Society</i> , 2005, 127, 12254-12262.	6.6	36
209	Stereochemical Assignment of Intermediates in the Rifamycin Biosynthetic Pathway by Precursor-Directed Biosynthesis. <i>Journal of the American Chemical Society</i> , 2005, 127, 11202-11203.	6.6	11
210	Analysis of Covalently Bound Polyketide Intermediates on 6-Deoxyerythronolide B Synthase by Tandem Proteolysis ⁺ Mass Spectrometry. <i>Biochemistry</i> , 2005, 44, 11836-11842.	1.2	30
211	Identification and Analysis of Multivalent Proteolytically Resistant Peptides from Gluten: Implications for Celiac Sprue. <i>Journal of Proteome Research</i> , 2005, 4, 1732-1741.	1.8	239
212	Equilibrium and Kinetic Analysis of the Unusual Binding Behavior of a Highly Immunogenic Gluten Peptide to HLA-DQ2. <i>Biochemistry</i> , 2005, 44, 4442-4449.	1.2	45
213	Polyketide Double Bond Biosynthesis. Mechanistic Analysis of the Dehydratase-Containing Module 2 of the Picromycin/Methymycin Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2005, 127, 17393-17404.	6.6	71
214	Effect of Pretreatment of Food Gluten With Prolyl Endopeptidase on Gluten-Induced Malabsorption in Celiac Sprue. <i>Clinical Gastroenterology and Hepatology</i> , 2005, 3, 687-694.	2.4	93
215	Low-Dose Gluten Challenge in Celiac Sprue: Malabsorptive and Antibody Responses. <i>Clinical Gastroenterology and Hepatology</i> , 2005, 3, 679-686.	2.4	24
216	CHEMISTRY: A New Route to Designer Antibiotics. <i>Science</i> , 2005, 308, 367-368.	6.0	19

#	ARTICLE	IF	CITATIONS
217	Reconstitution and Characterization of a New Desosaminyl Transferase, EryCIII, from the Erythromycin Biosynthetic Pathway. <i>Journal of the American Chemical Society</i> , 2004, 126, 9924-9925.	6.6	17
218	Structural basis for HLA-DQ2-mediated presentation of gluten epitopes in celiac disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 4175-4179.	3.3	386
219	Effect of Prolyl Endopeptidase on Digestive-Resistant Gliadin Peptides in Vivo. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2004, 311, 213-219.	1.3	101
220	Comparative biochemical analysis of three bacterial prolyl endopeptidases: implications for coeliac sprue. <i>Biochemical Journal</i> , 2004, 383, 311-318.	1.7	204
221	Engineered Biosynthesis of Regioselectively Modified Aromatic Polyketides Using Bimodular Polyketide Synthases. <i>PLoS Biology</i> , 2004, 2, e31.	2.6	71
222	Reconstituting Modular Activity from Separated Domains of 6-Deoxyerythronolide B Synthase. <i>Biochemistry</i> , 2004, 43, 13892-13898.	1.2	63
223	Manipulation and Analysis of Polyketide Synthases. <i>Methods in Enzymology</i> , 2004, 388, 269-293.	0.4	17
224	An antibiotic factory caught in action. <i>Nature Structural and Molecular Biology</i> , 2004, 11, 888-893.	3.6	162
225	Exploring the biosynthetic potential of bimodular aromatic polyketide synthases. <i>Tetrahedron</i> , 2004, 60, 7659-7671.	1.0	14
226	Engineered biosynthesis of polyketides in heterologous hosts. <i>Chemical Engineering Science</i> , 2004, 59, 4693-4701.	1.9	10
227	Antigen Presentation to Celiac Lesion-Derived T Cells of a 33-Mer Gliadin Peptide Naturally Formed by Gastrointestinal Digestion. <i>Journal of Immunology</i> , 2004, 173, 1757-1762.	0.4	140
228	Biochemical Analysis of the Substrate Specificity of the β^2 -Ketoacyl-Acyl Carrier Protein Synthase Domain of Module 2 of the Erythromycin Polyketide Synthase. <i>Biochemistry</i> , 2004, 43, 16301-16310.	1.2	42
229	Precursor-Directed Biosynthesis of Epothilone in <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2004, 126, 7436-7437.	6.6	60
230	Precursor-Directed polyketide biosynthesis in <i>Escherichia coli</i> . <i>Bioorganic and Medicinal Chemistry Letters</i> , 2003, 13, 3701-3704.	1.0	25
231	Catalysis, Specificity, and ACP Docking Site of <i>Streptomyces coelicolor</i> Malonyl-CoA:ACP Transacylase. <i>Structure</i> , 2003, 11, 147-154.	1.6	125
232	Precursor-Directed Biosynthesis: Stereospecificity for Branched-Chain Diketides of the β^2 -Ketoacyl-ACP Synthase Domain 2 of 6-Deoxyerythronolide B Synthase. <i>Helvetica Chimica Acta</i> , 2003, 86, 3889-3907.	1.0	17
233	Building-block selectivity of polyketide synthases. <i>Current Opinion in Chemical Biology</i> , 2003, 7, 279-284.	2.8	53
234	Metabolic engineering for drug discovery and development. <i>Nature Reviews Drug Discovery</i> , 2003, 2, 1019-1025.	21.5	187

#	ARTICLE	IF	CITATIONS
235	Design, Synthesis, and Evaluation of Gluten Peptide Analogs as Selective Inhibitors of Human Tissue Transglutaminase. <i>Chemistry and Biology</i> , 2003, 10, 225-231.	6.2	75
236	Mechanistic Analysis of Acyl Transferase Domain Exchange in Polyketide Synthase Modules. <i>Journal of the American Chemical Society</i> , 2003, 125, 5366-5374.	6.6	67
237	Ketosynthases in the Initiation and Elongation Modules of Aromatic Polyketide Synthases Have Orthogonal Acyl Carrier Protein Specificity. <i>Biochemistry</i> , 2003, 42, 6588-6595.	1.2	62
238	Expression and Kinetic Analysis of the Substrate Specificity of Modules 5 and 6 of the Picromycin/Methymycin Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2003, 125, 5671-5676.	6.6	25
239	Solution Structure and Backbone Dynamics of the Holo Form of the Frenolicin Acyl Carrier Protein. <i>Biochemistry</i> , 2003, 42, 4648-4657.	1.2	93
240	Intermodular Communication in Modular Polyketide Synthases: A Structural and Mutational Analysis of Linker Mediated Protein-Protein Recognition. <i>Journal of the American Chemical Society</i> , 2003, 125, 4097-4102.	6.6	38
241	A Switch for the Transfer of Substrate between Nonribosomal Peptide and Polyketide Modules of the Rifamycin Synthetase Assembly Line. <i>Journal of the American Chemical Society</i> , 2003, 125, 13664-13665.	6.6	22
242	Polyketide Chain Length Control by Chain Length Factor. <i>Journal of the American Chemical Society</i> , 2003, 125, 12708-12709.	6.6	102
243	Epothilone C Macrolactonization and Hydrolysis Are Catalyzed by the Isolated Thioesterase Domain of Epothilone Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2003, 125, 3428-3429.	6.6	80
244	Enhancing the Modularity of the Modular Polyketide Synthases: ϵ -Transacylation in Modular Polyketide Synthases Catalyzed by Malonyl-CoA:ACP Transacylase. <i>Journal of the American Chemical Society</i> , 2003, 125, 14307-14312.	6.6	51
245	Quantitative Analysis of Loading and Extender Acyltransferases of Modular Polyketide Synthases. <i>Biochemistry</i> , 2003, 42, 200-207.	1.2	42
246	Crystal Structure of an Acyl-ACP Dehydrogenase from the FK520 Polyketide Biosynthetic Pathway: Insights into Extender Unit Biosynthesis. <i>Journal of Molecular Biology</i> , 2003, 334, 435-444.	2.0	35
247	Biosynthesis of Yersiniabactin, a Complex Polyketide-Nonribosomal Peptide, Using <i>Escherichia coli</i> as a Heterologous Host. <i>Applied and Environmental Microbiology</i> , 2003, 69, 6698-6702.	1.4	111
248	Engineered biosynthesis of an ansamycin polyketide precursor in <i>Escherichia coli</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 9774-9778.	3.3	83
249	Understanding Substrate Specificity of Polyketide Synthase Modules by Generating Hybrid Multimodular Synthases. <i>Journal of Biological Chemistry</i> , 2003, 278, 42020-42026.	1.6	65
250	A specific role of the <i>Saccharopolyspora erythraea</i> thioesterase II gene in the function of modular polyketide synthases. <i>Microbiology (United Kingdom)</i> , 2003, 149, 2213-2225.	0.7	42
251	Process and Metabolic Strategies for Improved Production of <i>Escherichia coli</i> -Derived 6-Deoxyerythronolide B. <i>Applied and Environmental Microbiology</i> , 2002, 68, 3287-3292.	1.4	87
252	Circular Dichroism and Nuclear Magnetic Resonance Spectroscopic Analysis of Immunogenic Gluten Peptides and Their Analogs. <i>Journal of Biological Chemistry</i> , 2002, 277, 45572-45578.	1.6	34

#	ARTICLE	IF	CITATIONS
253	Kinetic and Structural Analysis of a New Group of Acyl-CoA Carboxylases Found in <i>Streptomyces coelicolor</i> A3(2). <i>Journal of Biological Chemistry</i> , 2002, 277, 31228-31236.	1.6	74
254	Intestinal digestive resistance of immunodominant gliadin peptides. <i>American Journal of Physiology - Renal Physiology</i> , 2002, 283, G996-G1003.	1.6	296
255	The Loading and Initial Elongation Modules of Rifamycin Synthetase Collaborate To Produce Mixed Aryl Ketide Products. <i>Biochemistry</i> , 2002, 41, 5313-5324.	1.2	26
256	Expression, Site-Directed Mutagenesis, and Steady State Kinetic Analysis of the Terminal Thioesterase Domain of the Methymycin/Picromycin Polyketide Synthase. <i>Biochemistry</i> , 2002, 41, 12590-12597.	1.2	61
257	Insights into Channel Architecture and Substrate Specificity from Crystal Structures of Two Macrocycle-Forming Thioesterases of Modular Polyketide Synthases. <i>Biochemistry</i> , 2002, 41, 12598-12606.	1.2	113
258	High Selectivity of Human Tissue Transglutaminase for Immunoactive Gliadin Peptides: Implications for Celiac Sprue. <i>Biochemistry</i> , 2002, 41, 386-393.	1.2	125
259	Metabolic Engineering of a Methylmalonyl-CoA Mutase-Epimerase Pathway for Complex Polyketide Biosynthesis in <i>Escherichia coli</i> . <i>Biochemistry</i> , 2002, 41, 5193-5201.	1.2	82
260	Quantitative Analysis of the Relative Contributions of Donor Acyl Carrier Proteins, Acceptor Ketosynthases, and Linker Regions to Intermodular Transfer of Intermediates in Hybrid Polyketide Synthases. <i>Biochemistry</i> , 2002, 41, 5056-5066.	1.2	120
261	Crystal Structure of the Priming β -Ketosynthase from the R1128 Polyketide Biosynthetic Pathway. <i>Structure</i> , 2002, 10, 1559-1568.	1.6	75
262	Biochemistry-engineering interface in biochemical engineering. <i>AIChE Journal</i> , 2002, 48, 1366-1368.	1.8	5
263	Engineering of molecular and cellular biocatalysts: Selected contributions by James E. Bailey. <i>Biotechnology and Bioengineering</i> , 2002, 79, 490-495.	1.7	3
264	Precursor-Directed Biosynthesis. <i>Chemistry and Biology</i> , 2002, 9, 131-142.	6.2	53
265	Structural Basis for Gluten Intolerance in Celiac Sprue. <i>Science</i> , 2002, 297, 2275-2279.	6.0	1,383
266	Biosynthesis of Complex Polyketides in a Metabolically Engineered Strain of <i>E. coli</i> . <i>Science</i> , 2001, 291, 1790-1792.	6.0	687
267	Structure-Activity Relationships within a Family of Selectively Cytotoxic Macrolide Natural Products. <i>Organic Letters</i> , 2001, 3, 57-59.	2.4	51
268	Remarkably Broad Substrate Tolerance of Malonyl-CoA Synthetase, an Enzyme Capable of Intracellular Synthesis of Polyketide Precursors. <i>Journal of the American Chemical Society</i> , 2001, 123, 5822-5823.	6.6	42
269	Precursor-Directed Biosynthesis of 16-Membered Macrolides by the Erythromycin Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2001, 123, 2495-2502.	6.6	46
270	Assessing the Balance between Protein-Protein Interactions and Enzyme-Substrate Interactions in the Channeling of Intermediates between Polyketide Synthase Modules. <i>Journal of the American Chemical Society</i> , 2001, 123, 6465-6474.	6.6	124

#	ARTICLE	IF	CITATIONS
271	The Loading Module of Rifamycin Synthetase Is an Adenylation~Thiolation Didomain with Substrate Tolerance for Substituted Benzoates. <i>Biochemistry</i> , 2001, 40, 6116-6123.	1.2	62
272	Malonyl-CoA:ACP Transacylase from <i>Streptomyces coelicolor</i> Has Two Alternative Catalytically Active Nucleophiles. <i>Biochemistry</i> , 2001, 40, 12407-12411.	1.2	31
273	Intermodular Communication in Polyketide Synthases: Comparing the Role of Protein~Protein Interactions to Those in Other Multidomain Proteins. <i>Biochemistry</i> , 2001, 40, 2317-2325.	1.2	43
274	Erythromycin biosynthesis. The 4-pro-S hydride of NADPH is utilized for ketoreduction by both module 5 and module 6 of the 6-deoxyerythronolide B synthase. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2001, 11, 1477-1479.	1.0	35
275	Apoptolidin, a selective cytotoxic agent, is an inhibitor of FOF1-ATPase. <i>Chemistry and Biology</i> , 2001, 8, 71-80.	6.2	138
276	Modular enzymes. <i>Nature</i> , 2001, 409, 247-252.	13.7	137
277	Enhancing the Atom Economy of Polyketide Biosynthetic Processes through Metabolic Engineering. <i>Biotechnology Progress</i> , 2001, 17, 612-617.	1.3	48
278	Selective Protein~Protein Interactions Direct Channeling of Intermediates between Polyketide Synthase Modules. <i>Biochemistry</i> , 2001, 40, 2326-2331.	1.2	122
279	Biosynthesis of Polyketides in Heterologous Hosts. <i>Microbiology and Molecular Biology Reviews</i> , 2001, 65, 106-118.	2.9	225
280	Dissecting the Chain Length Specificity in Bacterial Aromatic Polyketide Synthases using Chimeric Genes. <i>Tetrahedron</i> , 2000, 56, 9401-9408.	1.0	65
281	Role of linkers in communication between protein modules. <i>Current Opinion in Chemical Biology</i> , 2000, 4, 22-27.	2.8	179
282	Natural Product Biosynthesis: A New Interface between Enzymology and Medicine. <i>Journal of Organic Chemistry</i> , 2000, 65, 8127-8133.	1.7	64
283	Cloning, Nucleotide Sequence, and Heterologous Expression of the Biosynthetic Gene Cluster for R1128, a Non-steroidal Estrogen Receptor Antagonist. <i>Journal of Biological Chemistry</i> , 2000, 275, 33443-33448.	1.6	86
284	Directed Transfer of Large DNA Fragments between <i>Streptomyces</i> Species. <i>Applied and Environmental Microbiology</i> , 2000, 66, 2274-2277.	1.4	15
285	Isolation and characterization of the epothilone biosynthetic gene cluster from <i>Sorangium cellulosum</i> . <i>Gene</i> , 2000, 249, 153-160.	1.0	172
286	Cloning and Heterologous Expression of the Epothilone Gene Cluster. <i>Science</i> , 2000, 287, 640-642.	6.0	429
287	Mechanistic Analysis of a Type II Polyketide Synthase. Role of Conserved Residues in the β^2 -Ketoacyl Synthase~Chain Length Factor Heterodimer. <i>Biochemistry</i> , 2000, 39, 2088-2095.	1.2	66
288	Substrate Specificity of the Loading Didomain of the Erythromycin Polyketide Synthase. <i>Biochemistry</i> , 2000, 39, 10514-10520.	1.2	50

#	ARTICLE	IF	CITATIONS
289	Analysis of the Molecular Recognition Features of Individual Modules Derived from the Erythromycin Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 2000, 122, 4847-4852.	6.6	71
290	Kinetic Analysis of the Actinorhodin Aromatic Polyketide Synthase. <i>Journal of Biological Chemistry</i> , 1999, 274, 25108-25112.	1.6	57
291	Precursor directed biosynthesis of novel 6-deoxyerythronolide B analogs containing non-natural oxygen substituents and reactive functionalities. <i>Tetrahedron Letters</i> , 1999, 40, 635-638.	0.7	23
292	Mechanism and specificity of the terminal thioesterase domain from the erythromycin polyketide synthase. <i>Chemistry and Biology</i> , 1999, 6, 117-125.	6.2	140
293	Heterologous expression, purification, reconstitution and kinetic analysis of an extended type II polyketide synthase. <i>Chemistry and Biology</i> , 1999, 6, 607-615.	6.2	37
294	Tolerance and Specificity of Recombinant 6-Methylsalicylic Acid Synthase. <i>Metabolic Engineering</i> , 1999, 1, 180-187.	3.6	26
295	Dissecting and Exploiting Intermodular Communication in Polyketide Synthases. <i>Science</i> , 1999, 284, 482-485.	6.0	330
296	Tolerance and Specificity of Polyketide Synthases. <i>Annual Review of Biochemistry</i> , 1999, 68, 219-253.	5.0	348
297	Dissecting the Role of Acyltransferase Domains of Modular Polyketide Synthases in the Choice and Stereochemical Fate of Extender Units. <i>Biochemistry</i> , 1999, 38, 1643-1651.	1.2	81
298	A host vector system for analysis and manipulation of rifamycin polyketide biosynthesis in <i>Amycolatopsis mediterranei</i> . <i>Microbiology (United Kingdom)</i> , 1999, 145, 2335-2341.	0.7	15
299	Precursor-directed biosynthesis of 12-ethyl erythromycin. <i>Bioorganic and Medicinal Chemistry</i> , 1998, 6, 1171-1177.	1.4	43
300	New directions in metabolic engineering. <i>Current Opinion in Chemical Biology</i> , 1998, 2, 133-137.	2.8	21
301	Synthesis and Incorporation of an N-Acetylcysteamine Analogue of Methylmalonyl-CoA by a Modular Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 1998, 120, 11206-11207.	6.6	27
302	Purification and in Vitro Reconstitution of the Essential Protein Components of an Aromatic Polyketide Synthase. <i>Biochemistry</i> , 1998, 37, 2084-2088.	1.2	86
303	Erythromycin Biosynthesis: The β^2 -Ketoreductase Domains Catalyze the Stereospecific Transfer of the 4-pro-S-Hydride of NADPH. <i>Journal of the American Chemical Society</i> , 1998, 120, 3267-3268.	6.6	48
304	Primer Unit Specificity in Rifamycin Biosynthesis Principally Resides in the Later Stages of the Biosynthetic Pathway. <i>Journal of the American Chemical Society</i> , 1998, 120, 1092-1093.	6.6	42
305	Engineered Biosynthesis of Novel Polyketides from <i>Streptomyces</i> Spore Pigment Polyketide Synthases. <i>Journal of the American Chemical Society</i> , 1998, 120, 7749-7759.	6.6	92
306	Functional Orientation of the Acyltransferase Domain in a Module of the Erythromycin Polyketide Synthase. <i>Biochemistry</i> , 1998, 37, 2524-2528.	1.2	46

#	ARTICLE	IF	CITATIONS
307	Alcohol Stereochemistry in Polyketide Backbones Is Controlled by the β^2 -Ketoreductase Domains of Modular Polyketide Synthases. <i>Journal of the American Chemical Society</i> , 1998, 120, 2478-2479.	6.6	81
308	Dissecting the Evolutionary Relationship between 14-Membered and 16-Membered Macrolides. <i>Journal of the American Chemical Society</i> , 1998, 120, 9096-9097.	6.6	18
309	Harnessing the Biosynthetic Code: Combinations, Permutations, and Mutations. , 1998, 282, 63-68.		539
310	Spontaneous Priming of a Downstream Module in 6-Deoxyerythronolide B Synthase Leads to Polyketide Biosynthesis. <i>Biochemistry</i> , 1998, 37, 4928-4934.	1.2	36
311	Harnessing the Biosynthetic Potential of Modular Polyketide Synthases. <i>Chemical Reviews</i> , 1997, 97, 2577-2590.	23.0	202
312	Domain Analysis of the Molecular Recognition Features of Aromatic Polyketide Synthase Subunits. <i>Journal of Biological Chemistry</i> , 1997, 272, 16184-16188.	1.6	32
313	Utilization of Enzymatically Phosphopantetheinylated Acyl Carrier Proteins and Acetyl β -Acyl Carrier Proteins by the Actinorhodin Polyketide Synthase β . <i>Biochemistry</i> , 1997, 36, 11757-11761.	1.2	45
314	Gain-of-Function Mutagenesis of a Modular Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 1997, 119, 4309-4310.	6.6	77
315	Rational Design and Engineered Biosynthesis of a Novel 18-Carbon Aromatic Polyketide. <i>Journal of the American Chemical Society</i> , 1997, 119, 635-639.	6.6	56
316	Gain of Function Mutagenesis of the Erythromycin Polyketide Synthase. 2. Engineered Biosynthesis of an Eight-Membered Ring Tetraketide Lactone. <i>Journal of the American Chemical Society</i> , 1997, 119, 11339-11340.	6.6	79
317	Precursor-Directed Biosynthesis of Erythromycin Analogs by an Engineered Polyketide Synthase. <i>Science</i> , 1997, 277, 367-369.	6.0	271
318	Engineered intermodular and intramodular polyketide synthase fusions. <i>Chemistry and Biology</i> , 1997, 4, 667-674.	6.2	78
319	Molecular recognition of diketide substrates by a β^2 -ketoacyl-acyl carrier protein synthase domain within a bimodular polyketide synthase. <i>Chemistry and Biology</i> , 1997, 4, 757-766.	6.2	43
320	Engineering of Novel Polyketides.. <i>Annals of the New York Academy of Sciences</i> , 1996, 799, 32-45.	1.8	6
321	Engineered Biosynthesis of Novel Polyketides: β Regiospecific Methylation of an Unnatural Substrate by the tcmOO-Methyltransferase β . <i>Biochemistry</i> , 1996, 35, 6527-6532.	1.2	28
322	Engineered Biosynthesis of Structurally Diverse Tetraketides by a Trimodular Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 1996, 118, 9184-9185.	6.6	86
323	Evidence for Two Catalytically Independent Clusters of Active Sites in a Functional Modular Polyketide Synthase β . <i>Biochemistry</i> , 1996, 35, 12363-12368.	1.2	100
324	Efficient Synthesis of Aromatic Polyketides <i>in Vitro</i> by the Actinorhodin Polyketide Synthase. <i>Journal of the American Chemical Society</i> , 1996, 118, 5158-5159.	6.6	38

#	ARTICLE	IF	CITATIONS
325	6-Deoxyerythronolide B Synthase 1 Is Specifically Acylated by a Diketide Intermediate at the β^2 -Ketoacyl-Acyl Carrier Protein Synthase Domain of Module 2. <i>Biochemistry</i> , 1996, 35, 15244-15248.	1.2	24
326	Specificity and versatility in erythromycin biosynthesis. <i>Chemical Society Reviews</i> , 1996, 25, 297.	18.7	18
327	Generation of polyketide libraries via combinatorial biosynthesis. <i>Trends in Biotechnology</i> , 1996, 14, 335-341.	4.9	110
328	Antibiotic activity of polyketide products derived from combinatorial biosynthesis: Implications for directed evolution. <i>Molecular Diversity</i> , 1996, 1, 121-124.	2.1	11
329	A new enzyme superfamily – the phosphopantetheinyl transferases. <i>Chemistry and Biology</i> , 1996, 3, 923-936.	6.2	746
330	Evolutionally guided enzyme design. , 1996, 52, 122-128.		15
331	Erythromycin biosynthesis: Exploiting the catalytic versatility of the modular polyketide synthase. <i>Bioorganic and Medicinal Chemistry</i> , 1996, 4, 995-999.	1.4	25
332	Engineered Biosynthesis of Novel Polyketides: Properties of the whiE Aromatase/Cyclase. <i>Nature Biotechnology</i> , 1996, 14, 335-338.	9.4	40
333	Combinatorial chemistry and biology: an opportunity for engineers. <i>Current Opinion in Biotechnology</i> , 1996, 7, 219-222.	3.3	10
334	A functional chimeric modular polyketide synthase generated via domain replacement. <i>Chemistry and Biology</i> , 1996, 3, 827-831.	6.2	64
335	Deciphering the biosynthetic origin of the aglycone of the aureolic acid group of anti-tumor agents. <i>Chemistry and Biology</i> , 1996, 3, 193-196.	6.2	42
336	Erythromycin Biosynthesis. Highly Efficient Incorporation of Polyketide Chain Elongation Intermediates into 6-Deoxyerythronolide B in an Engineered <i>Streptomyces</i> Host.. <i>Journal of Antibiotics</i> , 1995, 48, 647-651.	1.0	24
337	Rational design of aromatic polyketide natural products by recombinant assembly of enzymatic subunits. <i>Nature</i> , 1995, 375, 549-554.	13.7	286
338	Combinatorial biosynthesis of “unnatural” natural products: the polyketide example. <i>Chemistry and Biology</i> , 1995, 2, 355-362.	6.2	87
339	Remarkably broad substrate specificity of a modular polyketide synthase in a cell-free system. <i>Journal of the American Chemical Society</i> , 1995, 117, 11373-11374.	6.6	53
340	Engineered Biosynthesis of Novel Polyketides: Analysis of tcmN Function in Tetracenomycin Biosynthesis. <i>Journal of the American Chemical Society</i> , 1995, 117, 6805-6810.	6.6	60
341	Engineered biosynthesis of novel polyketides: evidence for temporal, but not regiospecific, control of cyclization of an aromatic polyketide precursor. <i>Chemistry and Biology</i> , 1994, 1, 205-210.	6.2	72
342	Efficient Sampling of Protein Sequence Space for Multiple Mutants. <i>Bio/technology</i> , 1994, 12, 517-520.	1.9	4

#	ARTICLE	IF	CITATIONS
343	Engineered Biosynthesis of Novel Polyketides: actVII and actIV Genes Encode Aromatase and Cyclase Enzymes, Respectively. <i>Journal of the American Chemical Society</i> , 1994, 116, 10855-10859.	6.6	95
344	Engineered biosynthesis of a triketide lactone from an incomplete modular polyketide synthase. <i>Journal of the American Chemical Society</i> , 1994, 116, 11612-11613.	6.6	96
345	Engineered Biosynthesis of Novel Polyketides: Dissection of the Catalytic Specificity of the act Ketoreductase. <i>Journal of the American Chemical Society</i> , 1994, 116, 4166-4170.	6.6	125
346	Relaxed Specificity of the Oxytetracycline Polyketide Synthase for an Acetate Primer in the Absence of a Malonamyl Primer. <i>Journal of the American Chemical Society</i> , 1994, 116, 6443-6444.	6.6	52
347	Engineered biosynthesis of novel polyketides: manipulation and analysis of an aromatic polyketide synthase with unproven catalytic specificities. <i>Journal of the American Chemical Society</i> , 1993, 115, 11671-11675.	6.6	95
348	Targeted gene replacements in a <i>Streptomyces</i> polyketide synthase gene cluster: role for the acyl carrier protein. <i>Molecular Microbiology</i> , 1992, 6, 3237-3249.	1.2	79
349	Genes for Polyketide Secondary Metabolic Pathways in Microorganisms and Plants. <i>Novartis Foundation Symposium</i> , 1992, 171, 88-112.	1.2	24
350	Expression of Intracellular Hemoglobin Improves Protein Synthesis in Oxygen-Limited <i>Escherichia coli</i> . <i>Nature Biotechnology</i> , 1990, 8, 849-853.	9.4	82
351	Evidence for partial export of <i>Vitreoscilla</i> hemoglobin into the periplasmic space in <i>Escherichia coli</i> . <i>Journal of Molecular Biology</i> , 1989, 210, 79-89.	2.0	64
352	The <i>Vitreoscilla</i> hemoglobin gene: Molecular cloning, nucleotide sequence and genetic expression in <i>Escherichia coli</i> . <i>Molecular Genetics and Genomics</i> , 1988, 214, 158-161.	2.4	119
353	Heterologous expression of a bacterial haemoglobin improves the growth properties of recombinant <i>Escherichia coli</i> . <i>Nature</i> , 1988, 331, 633-635.	13.7	233