Thomas Martin Schmeing

List of Publications by Year
in descending order

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42 papers	3,845 citations	279701 23 h-index	276775 41 g-index
43 all docs	43 docs citations	43 times ranked	3304 citing authors

#	Article	IF	Citations
1	What recent ribosome structures have revealed about the mechanism of translation. Nature, 2009, 461, 1234-1242.	13.7	597
2	The Crystal Structure of the Ribosome Bound to EF-Tu and Aminoacyl-tRNA. Science, 2009, 326, 688-694.	6.0	481
3	An induced-fit mechanism to promote peptide bond formation and exclude hydrolysis of peptidyl-tRNA. Nature, 2005, 438, 520-524.	13.7	326
4	The Mechanism for Activation of GTP Hydrolysis on the Ribosome. Science, 2010, 330, 835-838.	6.0	318
5	Structural insights into peptide bond formation. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 11670-11675.	3.3	267
6	Structural Insights into the Roles of Water and the 2â€² Hydroxyl of the P Site tRNA in the Peptidyl Transferase Reaction. Molecular Cell, 2005, 20, 437-448.	4.5	253
7	Structural and functional aspects of the nonribosomal peptide synthetase condensation domain superfamily: discovery, dissection and diversity. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1587-1604.	1.1	159
8	Synthetic cycle of the initiation module of a formylating nonribosomal peptide synthetase. Nature, 2016, 529, 239-242.	13.7	132
9	How mutations in tRNA distant from the anticodon affect the fidelity of decoding. Nature Structural and Molecular Biology, 2011, 18, 432-436.	3.6	109
10	A pre-translocational intermediate in protein synthesis observed in crystals of enzymatically active 50S subunits. Nature Structural Biology, 2002, 9, 225-30.	9.7	108
11	Structures of a dimodular nonribosomal peptide synthetase reveal conformational flexibility. Science, 2019, 366, .	6.0	99
12	Protospacer Adjacent Motif (PAM)-Distal Sequences Engage CRISPR Cas9 DNA Target Cleavage. PLoS ONE, 2014, 9, e109213.	1.1	94
13	X-Ray Crystallography and Electron Microscopy of Cross- and Multi-Module Nonribosomal Peptide Synthetase Proteins Reveal a Flexible Architecture. Structure, 2017, 25, 783-793.e4.	1.6	90
14	Structures of deacylated tRNA mimics bound to the E site of the large ribosomal subunit. Rna, 2003, 9, 1345-1352.	1.6	81
15	Crystal Structures of the First Condensation Domain of CDA Synthetase Suggest Conformational Changes during the Synthetic Cycle of Nonribosomal Peptide Synthetases. Journal of Molecular Biology, 2013, 425, 3137-3150.	2.0	79
16	Trapping biosynthetic acyl-enzyme intermediates with encoded 2,3-diaminopropionic acid. Nature, 2019, 565, 112-117.	13.7	78
17	Structural and mutational analysis of the nonribosomal peptide synthetase heterocyclization domain provides insight into catalysis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 95-100.	3.3	75
18	Piecing together nonribosomal peptide synthesis. Current Opinion in Structural Biology, 2018, 49, 104-113.	2.6	75

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19	Chemical Probes Allow Structural Insight into the Condensation Reaction of Nonribosomal Peptide Synthetases. Cell Chemical Biology, 2016, 23, 331-339.	2.5	53
20	Design, synthesis and inÂvitro evaluation of novel SARS-CoV-2 3CLpro covalent inhibitors. European Journal of Medicinal Chemistry, 2022, 229, 114046.	2.6	41
21	The multifaceted eukaryotic cap structure. Wiley Interdisciplinary Reviews RNA, 2021, 12, e1636.	3.2	33
22	Response to Comment on â€œThe Mechanism for Activation of GTP Hydrolysis on the Ribosomeâ€• Science, 2011, 333, 37-37.	6.0	29
23	Biosynthesis of depsipeptides, or Depsi: The peptides with varied generations. Protein Science, 2020, 29, 2316-2347.	3.1	29
24	Structural basis of keto acid utilization in nonribosomal depsipeptide synthesis. Nature Chemical Biology, 2020, 16, 493-496.	3.9	28
25	Characterization of Cereulide Synthetase, a Toxin-Producing Macromolecular Machine. PLoS ONE, 2015, 10, e0128569.	1.1	25
26	Structures and function of the amino acid polymerase cyanophycin synthetase. Nature Chemical Biology, 2021, 17, 1101-1110.	3.9	24
27	RNA-tethering assay and eIF4G:eIF4A obligate dimer design uncovers multiple eIF4F functional complexes. Nucleic Acids Research, 2020, 48, 8562-8575.	6.5	21
28	The chaperone HSPB1 prepares protein aggregates for resolubilization by HSP70. Scientific Reports, 2021, 11, 17139.	1.6	19
29	Efficacy of epetraborole against Mycobacterium abscessus is increased with norvaline. PLoS Pathogens, 2021, 17, e1009965.	2.1	19
30	Structures and function of a tailoring oxidase in complex with a nonribosomal peptide synthetase module. Nature Communications, 2022, 13, 548.	5.8	16
31	Towards a characterization of the structural determinants of specificity in the macrocyclizing thioesterase for deoxyerythronolide B biosynthesis. Biochimica Et Biophysica Acta - General Subjects, 2016, 1860, 486-497.	1.1	13
32	Structural basis for plazomicin antibiotic action and resistance. Communications Biology, 2021, 4, 729.	2.0	13
33	A cryptic third active site in cyanophycin synthetase creates primers for polymerization. Nature Communications, 2022, 13, .	5.8	12
34	Structure and Function of the Î²-Asp-Arg Polymerase Cyanophycin Synthetase 2. ACS Chemical Biology, 2022, 17, 670-679.	1.6	11
35	Structures of GapR reveal a central channel which could accommodate B-DNA. Scientific Reports, 2019, 9, 16679.	1.6	9
36	Specific disulfide cross-linking to constrict the mobile carrier domain of nonribosomal peptide synthetases. Protein Engineering, Design and Selection, 2015, 28, 163-170.	1.0	8

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37	Manipulation of an existing crystal form unexpectedly results in interwoven packing networks with pseudo-translational symmetry. Acta Crystallographica Section D: Structural Biology, 2016, 72, 1130-1136.	1.1	8
38	Structural Insight into a Novel Formyltransferase and Evolution to a Nonribosomal Peptide Synthetase Tailoring Domain. ACS Chemical Biology, 2018, 13, 3161-3172.	1.6	8
39	Ribosomes make sweeping arrests. Nature Chemical Biology, 2016, 12, 127-128.	3.9	2
40	Regulation of protein kinase CÎ´ Nuclear Import and Apoptosis by Mechanistic Target of Rapamycin Complex-1. Scientific Reports, 2019, 9, 17620.	1.6	2
41	Visualizing A Natural Antibiotic Nanofactory. Clinical and Investigative Medicine, 2016, 39, 220.	0.3	1
42	Structural Insights into the Roles of Water and the 2â€² Hydroxyl of the P Site tRNA in the Peptidyl Transferase Reaction. journal of hand surgery Asian-Pacific volume, The, 2020, , 557-568.	0.2	0