Janet L Smith

List of Publications by Year
in descending order

73 papers	3,730 citations	147726 31 h-index	143943 57 g-index
74 all docs	74 docs citations	74 times ranked	4417 citing authors

#	Article	IF	Citations
1	Fast automated energy changes at synchrotron radiation beamlines equipped with transfocator or focusing mirrors. Journal of Synchrotron Radiation, 2022, 29, 393-399.	1.0	1
2	Flavivirus NS1: Structure and Function of an Enigmatic Virulence Factor. FASEB Journal, 2022, 36, .	0.2	1
3	Structural Basis for Control of Methylation Extent in Polyketide Synthase Metal-Dependent C-Methyltransferases. ACS Chemical Biology, 2022, 17, 2088-2098.	1.6	2
4	Lipid-based vaccine nanoparticles for induction of humoral immune responses against HIV-1 and SARS-CoV-2. Journal of Controlled Release, 2021, 330, 529-539.	4.8	31
5	Structural basis for antibody inhibition of flavivirus NS1â€“triggered endothelial dysfunction. Science, 2021, 371, 194-200.	6.0	74
6	Triple-Negative Breast Cancer Cells RecruitÂNeutrophils by Secreting TGF-Î² and CXCR2 Ligands. Frontiers in Immunology, 2021, 12, 659996.	2.2	50
7	Levels of Circulating NS1 Impact West Nile Virus Spread to the Brain. Journal of Virology, 2021, 95, e0084421.	1.5	13
8	Structural biology in the fight against COVID-19. Nature Structural and Molecular Biology, 2021, 28, 2-7.	3.6	20
9	Molecular Basis for Spirocycle Formation in the Paraherquamide Biosynthetic Pathway. Journal of the American Chemical Society, 2020, 142, 2244-2252.	6.6	33
10	Repurposing the GNAT Fold in the Initiation of Polyketide Biosynthesis. Structure, 2020, 28, 63-74.e4.	1.6	12
11	Flexibility in Nucleic Acid Binding Is Central to APOBEC3H Antiviral Activity. Journal of Virology, 2019, 93, .	1.5	8
12	Stereodivergent, Chemoenzymatic Synthesis of Azaphilone Natural Products. Journal of the American Chemical Society, 2019, 141, 18551-18559.	6.6	37
13	Structure of the zinc-finger antiviral protein in complex with RNA reveals a mechanism for selective targeting of CG-rich viral sequences. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 24303-24309.	3.3	106
14	Fungal indole alkaloid biogenesis through evolution of a bifunctional reductase/Dielsâ€“Alderase. Nature Chemistry, 2019, 11, 972-980.	6.6	52
15	Structural Basis for Selectivity in Flavin-Dependent Monooxygenase-Catalyzed Oxidative Dearomatization. ACS Catalysis, 2019, 9, 3633-3640.	5.5	28
16	Structural and dynamical rationale for fatty acid unsaturation in Escherichia coli. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6775-6783.	3.3	41
17	Thiosulfate sulfurtransferase-like domainâ€“containing 1 protein interacts with thioredoxin. Journal of Biological Chemistry, 2018, 293, 2675-2686.	1.6	49
18	Biosynthesis of t-Butyl in Apratoxin A: Functional Analysis and Architecture of a PKS Loading Module. ACS Chemical Biology, 2018, 13, 1640-1650.	1.6	21

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19	PKSâ€“NRPS Enzymology and Structural Biology: Considerations in Protein Production. Methods in Enzymology, 2018, 604, 45-88.	0.4	14
20	Structural basis of the Cope rearrangement and cyclization in hapalindole biogenesis. Nature Chemical Biology, 2018, 14, 345-351.	3.9	34
21	Ketoreductase Domain Dysfunction Expands Chemodiversity: Malyngamide Biosynthesis in the Cyanobacterium Okeania hirsuta. ACS Chemical Biology, 2018, 13, 3385-3395.	1.6	25
22	Structural Basis of Polyketide Synthase O-Methylation. ACS Chemical Biology, 2018, 13, 3221-3228.	1.6	9
23	Sacrificial Cobaltâ€“Carbon Bond Homolysis in Coenzyme B₁₂ as a Cofactor Conservation Strategy. Journal of the American Chemical Society, 2018, 140, 13205-13208.	6.6	24
24	HIV-1 Tat interactions with cellular 7SK and viral TAR RNAs identifies dual structural mimicry. Nature Communications, 2018, 9, 4266.	5.8	62
25	Proteinâ€“protein interactions in â€œcis-ATâ€•polyketide synthases. Natural Product Reports, 2018, 35, 1082-1096.	5.2	33
26	Molecular Basis for Olefin Rearrangement in the Gephyronic Acid Polyketide Synthase. ACS Chemical Biology, 2018, 13, 2699-2707.	1.6	7
27	Chemoenzymatic Dissection of Polyketide Î²-Branching in the Bryostatin Pathway. Methods in Enzymology, 2018, 604, 207-236.	0.4	7
28	A Defined and Flexible Pocket Explains Aryl Substrate Promiscuity of the Cahuitamycin Starter Unitâ€“Activating Enzyme CahJ. ChemBioChem, 2018, 19, 1595-1600.	1.3	17
29	Unveiling sequential late-stage methyltransferase reactions in the meleagrin/oxaline biosynthetic pathway. Organic and Biomolecular Chemistry, 2018, 16, 6450-6459.	1.5	32
30	APOBEC3H structure reveals an unusual mechanism of interaction with duplex RNA. Nature Communications, 2017, 8, 1021.	5.8	44
31	Function and Structure of MalA/MalAâ€², Iterative Halogenases for Late-Stage Câ€“H Functionalization of Indole Alkaloids. Journal of the American Chemical Society, 2017, 139, 12060-12068.	6.6	56
32	A Mononuclear Iron-Dependent Methyltransferase Catalyzes Initial Steps in Assembly of the Apratoxin A Polyketide Starter Unit. ACS Chemical Biology, 2017, 12, 3039-3048.	1.6	22
33	Structural and biochemical analyses indicate that a bacterial persulfide dioxygenaseâ€“rhodanese fusion protein functions in sulfur assimilation. Journal of Biological Chemistry, 2017, 292, 14026-14038.	1.6	30
34	Can I solve my structure by SAD phasing? Planning an experiment, scaling data and evaluating the useful anomalous correlation and anomalous signal. Acta Crystallographica Section D: Structural Biology, 2016, 72, 359-374.	1.1	29
35	Efficient merging of data from multiple samples for determination of anomalous substructure. Acta Crystallographica Section D: Structural Biology, 2016, 72, 296-302.	1.1	13
36	Domain Organization and Active Site Architecture of a Polyketide Synthase C-methyltransferase. ACS Chemical Biology, 2016, 11, 3319-3327.	1.6	41

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37	Anatomy of the Î²-branching enzyme of polyketide biosynthesis and its interaction with an acyl-ACP substrate. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 10316-10321.	3.3	29
38	Extended surface for membrane association in Zika virus NS1 structure. Nature Structural and Molecular Biology, 2016, 23, 865-867.	3.6	135
39	Vinylogous Dehydration by a Polyketide Dehydratase Domain in Curacin Biosynthesis. Journal of the American Chemical Society, 2016, 138, 16024-16036.	6.6	36
40	Can I solve my structure by SAD phasing? Anomalous signal in SAD phasing. Acta Crystallographica Section D: Structural Biology, 2016, 72, 346-358.	1.1	31
41	Deprotonations in the Reaction of Flavin-Dependent Thymidylate Synthase. Biochemistry, 2016, 55, 3261-3269.	1.2	16
42	Structural Basis of Substrate Specificity and Regiochemistry in the MycF/TylF Family of Sugar O-Methyltransferases.. ACS Chemical Biology, 2015, 10, 1340-1351.	1.6	12
43	Architecture of the polyketide synthase module: surprises from electron cryo-microscopy. Current Opinion in Structural Biology, 2015, 31, 9-19.	2.6	28
44	Editorial overview: Biophysical and molecular biological methods: Structure, dynamics, and single molecules. Current Opinion in Structural Biology, 2015, 34, iv-vi.	2.6	0
45	Tylosin polyketide synthase module 3: stereospecificity, stereoselectivity and steady-state kinetic analysis of Î²-processing domains via diffusible, synthetic substrates. Chemical Science, 2015, 6, 5027-5033.	3.7	15
46	Functional Characterization of a Dehydratase Domain from the Pikromycin Polyketide Synthase. Journal of the American Chemical Society, 2015, 137, 7003-7006.	6.6	29
47	Context-Dependent Cleavage of the Capsid Protein by the West Nile Virus Protease Modulates the Efficiency of Virus Assembly. Journal of Virology, 2015, 89, 8632-8642.	1.5	15
48	Crystal Structures Capture Three States in the Catalytic Cycle of a Pyridoxal Phosphate (PLP) Synthase. Journal of Biological Chemistry, 2015, 290, 5226-5239.	1.6	19
49	Structural Basis for Cyclopropanation by a Unique Enoyl-Acyl Carrier Protein Reductase. Structure, 2015, 23, 2213-2223.	1.6	27
50	Host Competence and Helicase Activity Differences Exhibited by West Nile Viral Variants Expressing NS3-249 Amino Acid Polymorphisms. PLoS ONE, 2014, 9, e100802.	1.1	26
51	Use of massively multiple merged data for low-resolution S-SAD phasing and refinement of flavivirus NS1. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2719-2729.	2.5	34
52	Tightly integrated single- and multi-crystal data collection strategy calculation and parallelized data processing in JBluIce beamline control system. Journal of Applied Crystallography, 2014, 47, 1992-1999.	1.9	12
53	Flavivirus NS1 Structures Reveal Surfaces for Associations with Membranes and the Immune System. Science, 2014, 343, 881-885.	6.0	315
54	Structure of a modular polyketide synthase. Nature, 2014, 510, 512-517.	13.7	269

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55	Structural rearrangements of a polyketide synthase module during its catalytic cycle. Nature, 2014, 510, 560-564.	13.7	168
56	Cyanobacterial Polyketide Synthase Docking Domains: A Tool for Engineering Natural Product Biosynthesis. Chemistry and Biology, 2013, 20, 1340-1351.	6.2	100
57	Structural and Stereochemical Analysis of a Modular Polyketide Synthase Ketoreductase Domain Required for the Generation of a cis-Alkene. Chemistry and Biology, 2013, 20, 772-783.	6.2	52
58	Predicted optical performance of the GM/CA@APS micro-focus beamline. Journal of Physics: Conference Series, 2013, 425, 012006.	0.3	5
59	Micro-crystallography comes of age. Current Opinion in Structural Biology, 2012, 22, 602-612.	2.6	144
60	Insights from the sea: Structural biology of marine polyketide synthases. Natural Product Reports, 2012, 29, 1038.	5.2	23
61	New ligation-independent cloning vectors compatible with a high-throughput platform for parallel construct expression evaluation using baculovirus-infected insect cells. Protein Expression and Purification, 2011, 77, 34-45.	0.6	13
62	Crystal Structures of Dehydratase Domains from the Curacin Polyketide Biosynthetic Pathway. Structure, 2010, 18, 94-105.	1.6	107
63	Biochemical and Structural Characterization of the Tautomycetin Thioesterase: Analysis of a Stereoselective Polyketide Hydrolase. Angewandte Chemie - International Edition, 2010, 49, 5726-5730.	7.2	43
64	Metamorphic enzyme assembly in polyketide diversification. Nature, 2009, 459, 731-735.	13.7	165
65	Structural Basis for Binding Specificity between Subclasses of Modular Polyketide Synthase Docking Domains. ACS Chemical Biology, 2009, 4, 41-52.	1.6	97
66	Mocr: A novel fusion tag for enhancing solubility that is compatible with structural biology applications. Protein Expression and Purification, 2009, 63, 40-49.	0.6	52
67	An Enzyme Assembly Line. Science, 2008, 321, 1304-1305.	6.0	43
68	Optical Performance of the GM/CA-CAT Canted Undulator Beam lines for Protein Crystallography. AIP Conference Proceedings, 2007, , .	0.3	6
69	Crystal Structure of the ECH2 Catalytic Domain of CurF from Lyngbya majuscula. Journal of Biological Chemistry, 2007, 282, 35954-35963.	1.6	50
70	GNAT-Like Strategy for Polyketide Chain Initiation. Science, 2007, 318, 970-974.	6.0	108
71	Structural and mechanistic insights into polyketide macrolactonization from polyketide-based affinity labels. , 2006, 2, 531-536.		77
72	Structural basis for macrolactonization by the pikromycin thioesterase. , 2006, 2, 537-542.		101

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73	Structure of a dehydrataseâ€“isomerase from the bacterial pathway for biosynthesis of unsaturated fatty acids: two catalytic activities in one active site. Structure, 1996, 4, 253-264.	1.6	250