

Claude Sauter

List of Publications by Year in descending order

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57
papers

1,941
citations

218677

26
h-index

254184

43
g-index

62
all docs

62
docs citations

62
times ranked

2275
citing authors

#	ARTICLE	IF	CITATIONS
1	Sm-like proteins in Eubacteria: the crystal structure of the Hfq protein from Escherichia coli. <i>Nucleic Acids Research</i> , 2003, 31, 4091-4098.	14.5	185
2	Structure of transfer RNAs: similarity and variability. <i>Wiley Interdisciplinary Reviews RNA</i> , 2012, 3, 37-61.	6.4	139
3	Microfluidic chips for the crystallization of biomacromolecules by counter-diffusion and on-chip crystal X-ray analysis. <i>Lab on A Chip</i> , 2009, 9, 1412.	6.0	102
4	Crystal structure of 3WJ core revealing divalent ion-promoted thermostability and assembly of the Phi29 hexameric motor pRNA. <i>Rna</i> , 2013, 19, 1226-1237.	3.5	98
5	Crystal Structures of the Pyrococcus abyssi Sm Core and Its Complex with RNA. <i>Journal of Biological Chemistry</i> , 2003, 278, 1239-1247.	3.4	97
6	Structure of tetragonal hen egg-white lysozyme at 0.94 Å from crystals grown by the counter-diffusion method. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2001, 57, 1119-1126.	2.5	86
7	The free yeast aspartyl-tRNA synthetase differs from the tRNA ^{Asp} -complexed enzyme by structural changes in the catalytic site, hinge region, and anticodon-binding domain. <i>Journal of Molecular Biology</i> , 2000, 299, 1313-1324.	4.2	67
8	Structural insights into protein-only RNase P complexed with tRNA. <i>Nature Communications</i> , 2013, 4, 1353.	12.8	62
9	Crystal growth of proteins, nucleic acids, and viruses in gels. <i>Progress in Biophysics and Molecular Biology</i> , 2009, 101, 13-25.	2.9	60
10	Additives for the crystallization of proteins and nucleic acids. <i>Journal of Crystal Growth</i> , 1999, 196, 365-376.	1.5	56
11	From Macrofluidics to Microfluidics for the Crystallization of Biological Macromolecules. <i>Crystal Growth and Design</i> , 2007, 7, 2247-2250.	3.0	51
12	Crystallization of biological macromolecules using agarose gel. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2002, 58, 1657-1659.	2.5	50
13	Crystal Structure of Human Mitochondrial Tyrosyl-tRNA Synthetase Reveals Common and Idiosyncratic Features. <i>Structure</i> , 2007, 15, 1505-1516.	3.3	50
14	Towards atomic resolution with crystals grown in gel: The case of thaumatin seen at room temperature. <i>Proteins: Structure, Function and Bioinformatics</i> , 2002, 48, 146-150.	2.6	45
15	A supersaturation wave of protein crystallization. <i>Journal of Crystal Growth</i> , 2001, 232, 149-155.	1.5	44
16	Structural Insights into Viral Determinants of Nematode Mediated Grapevine fanleaf virus Transmission. <i>PLoS Pathogens</i> , 2011, 7, e1002034.	4.7	44
17	PPR proteins shed a new light on RNase P biology. <i>RNA Biology</i> , 2013, 10, 1457-1468.	3.1	41
18	ChipX: A Novel Microfluidic Chip for Counter-Diffusion Crystallization of Biomolecules and in Situ Crystal Analysis at Room Temperature. <i>Crystal Growth and Design</i> , 2013, 13, 3333-3340.	3.0	39

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19	Small but large enough: structural properties of armless mitochondrial tRNAs from the nematode <i>Romanomermis culicivorax</i> . <i>Nucleic Acids Research</i> , 2018, 46, 9170-9180.	14.5	35
20	<i>Deinococcus glutaminyl-tRNA synthetase</i> is a chimer between proteins from an ancient and the modern pathways of aminoacyl-tRNA formation. <i>Nucleic Acids Research</i> , 2007, 35, 1421-1431.	14.5	34
21	Thermodynamic properties distinguish human mitochondrial aspartyl-tRNA synthetase from bacterial homolog with same 3D architecture. <i>Nucleic Acids Research</i> , 2013, 41, 2698-2708.	14.5	32
22	Lessons from crystals grown in the Advanced Protein Crystallisation Facility for conventional crystallisation applied to structural biology. <i>Biophysical Chemistry</i> , 2005, 118, 102-112.	2.8	31
23	Loss of a Primordial Identity Element for a Mammalian Mitochondrial Aminoacylation System*. <i>Journal of Biological Chemistry</i> , 2006, 281, 15980-15986.	3.4	31
24	Neurodegenerative disease-associated mutants of a human mitochondrial aminoacyl-tRNA synthetase present individual molecular signatures. <i>Scientific Reports</i> , 2015, 5, 17332.	3.3	31
25	A sulfate pocket formed by three GoU pairs in the 0.97 Å resolution X-ray structure of a nonameric RNA. <i>Rna</i> , 1999, 5, 1384-1395.	3.5	30
26	Molecular basis for the differential interaction of plant mitochondrial VDAC proteins with tRNAs. <i>Nucleic Acids Research</i> , 2014, 42, 9937-9948.	14.5	30
27	Comparative analysis of space-grown and earth-grown crystals of an aminoacyl-tRNA synthetase: space-grown crystals are more useful for structural determination. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2002, 58, 645-652.	2.5	27
28	Tertiary network in mammalian mitochondrial tRNA ^{Asp} revealed by solution probing and phylogeny. <i>Nucleic Acids Research</i> , 2009, 37, 6881-6895.	14.5	27
29	Biophysical analysis of <i>Arabidopsis</i> protein-only RNase P alone and in complex with tRNA provides a refined model of tRNA binding. <i>Journal of Biological Chemistry</i> , 2017, 292, 13904-13913.	3.4	26
30	A simple and versatile microfluidic device for efficient biomacromolecule crystallization and structural analysis by serial crystallography. <i>IUCrJ</i> , 2019, 6, 454-464.	2.2	23
31	Growth kinetics, diffraction properties and effect of agarose on the stability of a novel crystal form of <i>Thermus thermophilus</i> aspartyl-tRNA synthetase-1. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2001, 57, 552-558.	2.5	20
32	Display of whole proteins on inner and outer surfaces of grapevine fanleaf virus-like particles. <i>Plant Biotechnology Journal</i> , 2016, 14, 2288-2299.	8.3	19
33	Crystallogensis studies on yeast aspartyl-tRNA synthetase: use of phase diagram to improve crystal quality. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1999, 55, 149-156.	2.5	17
34	Crystallogensis Trends of Free and Liganded Aminoacyl-tRNA Synthetases. <i>Crystal Growth and Design</i> , 2008, 8, 4297-4306.	3.0	17
35	Crystal Structure of Glutamyl-Queuosine tRNA ^{Asp} Synthetase Complexed with l-Glutamate: Structural Elements Mediating tRNA-Independent Activation of Glutamate and Glutamylation of tRNA ^{Asp} Anticodon. <i>Journal of Molecular Biology</i> , 2008, 381, 1224-1237.	4.2	17
36	Biocrystallography: Past, present, future. <i>HFSP Journal</i> , 2010, 4, 109-121.	2.5	17

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37	Peculiar inhibition of human mitochondrial aspartyl-tRNA synthetase by adenylate analogs. <i>Biochimie</i> , 2009, 91, 596-603.	2.6	16
38	Transfer RNA: From pioneering crystallographic studies to contemporary tRNA biology. <i>Archives of Biochemistry and Biophysics</i> , 2016, 602, 95-105.	3.0	14
39	Strategies for the crystallization of viruses: Using phase diagrams and gels to produce 3D crystals of Grapevine fanleaf virus. <i>Journal of Structural Biology</i> , 2011, 174, 344-351.	2.8	12
40	Crystal Structure of the Archaeal Asparagine Synthetase: Interrelation with Aspartyl-tRNA and Asparaginyl-tRNA Synthetases. <i>Journal of Molecular Biology</i> , 2011, 412, 437-452.	4.2	12
41	Exploiting Protein Engineering and Crystal Polymorphism for Successful X-ray Structure Determination. <i>Crystal Growth and Design</i> , 2011, 11, 4334-4343.	3.0	12
42	Re-designed N-terminus enhances expression, solubility and crystallizability of mitochondrial protein. <i>Protein Engineering, Design and Selection</i> , 2012, 25, 473-481.	2.1	12
43	Predicting Protein Crystallizability and Nucleation. <i>Protein and Peptide Letters</i> , 2012, 19, 725-731.	0.9	10
44	Mechanistic and Structural Studies of Protein-Only RNase P Compared to Ribonucleoproteins Reveal the Two Faces of the Same Enzymatic Activity. <i>Biomolecules</i> , 2016, 6, 30.	4.0	10
45	Structural basis of nanobody recognition of grapevine fanleaf virus and of virus resistance loss. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10848-10855.	7.1	10
46	Agarose gel facilitates enzyme crystal soaking with a ligand analog. <i>Journal of Applied Crystallography</i> , 2009, 42, 279-283.	4.5	8
47	Combining crystallogensis methods to produce diffraction-quality crystals of a psychrophilic tRNA-maturation enzyme. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2018, 74, 747-753.	0.8	8
48	Tyrosyl-tRNA synthetase: the first crystallization of a human mitochondrial aminoacyl-tRNA synthetase. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2007, 63, 338-341.	0.7	7
49	Adaptation of the <i>Romanomermis culicivorax</i> CCA-Adding Enzyme to Miniaturized Armless tRNA Substrates. <i>International Journal of Molecular Sciences</i> , 2020, 21, 9047.	4.1	6
50	Disorder Can Exist inside Well-Diffracting Crystals. <i>Crystal Growth and Design</i> , 2007, 7, 2195-2197.	3.0	5
51	Monitoring the Production of High Diffraction-Quality Crystals of Two Enzymes in Real Time Using In Situ Dynamic Light Scattering. <i>Crystals</i> , 2020, 10, 65.	2.2	3
52	Structural Analysis of RNA by Small-Angle X-ray Scattering. <i>Methods in Molecular Biology</i> , 2020, 2113, 189-215.	0.9	3
53	Crystallization and preliminary X-ray characterization of the atypical glutaminyl-tRNA synthetase from <i>Deinococcus radiodurans</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 2361-2363.	2.5	2
54	Translation in Mammalian Mitochondria: Order and Disorder Linked to tRNAs and Aminoacyl-tRNA Synthetases. , 2013, , 55-83.		2

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55	Crystallization and crystallographic analysis of an Arabidopsis nuclear proteinaceous RNase P. Acta Crystallographica Section F, Structural Biology Communications, 2015, 71, 1372-1377.	0.8	2
56	CCA-addition in the cold: Structural characterization of the psychrophilic CCA-adding enzyme from the permafrost bacterium Planococcus halocryophilus. Computational and Structural Biotechnology Journal, 2021, 19, 5845-5855.	4.1	2
57	Crystallization and Structural Determination of an Enzyme:Substrate Complex by Serial Crystallography in a Versatile Microfluidic Chip. Journal of Visualized Experiments, 2021, , .	0.3	0