## Norbert Sträter

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3353749/publications.pdf

Version: 2024-02-01

114 7,419 papers citations

94433 56724 83
h-index g-index

122 122 all docs citations

122 times ranked 8017 citing authors

#	Article	IF	CITATIONS
1	Low Carbon Footprint Recycling of Postâ€Consumer PET Plastic with a Metagenomic Polyester Hydrolase. ChemSusChem, 2022, 15, .	6.8	70
2	Structure–Activity Relationship of 3-Methylcytidine-5′-α,β-methylenediphosphates as CD73 Inhibitors. Journal of Medicinal Chemistry, 2022, 65, 2409-2433.	6.4	5
3	Mono-ADP-ribosylation sites of human CD73 inhibit its adenosine-generating enzymatic activity. Purinergic Signalling, 2022, 18, 115-121.	2.2	3
4	Structure activity relationship of 3â€methylcytidineâ€5'â€Î±,βâ€methylenediphosphates as CD73 inhibitors. F Journal, 2022, 36, .	ASEB 0.5	0
5	Functional impact of intramolecular cleavage and dissociation of adhesion G protein–coupled receptor GPR133 (ADGRD1) on canonical signaling. Journal of Biological Chemistry, 2021, 296, 100798.	3.4	23
6	Substrate binding modes of purine and pyrimidine nucleotides to human ecto-5′-nucleotidase (CD73) and inhibition by their bisphosphonic acid derivatives. Purinergic Signalling, 2021, 17, 693-704.	2.2	8
7	Discovery of Potent and Selective Methylenephosphonic Acid CD73 Inhibitors. Journal of Medicinal Chemistry, 2021, 64, 845-860.	6.4	17
8	2-Substituted α,β-Methylene-ADP Derivatives: Potent Competitive Ecto-5′-nucleotidase (CD73) Inhibitors with Variable Binding Modes. Journal of Medicinal Chemistry, 2020, 63, 2941-2957.	6.4	37
9	Calcium-sensing receptor-mediated NLRP3 inflammasome response to calciprotein particles drives inflammation in rheumatoid arthritis. Nature Communications, 2020, 11, 4243.	12.8	79
10	Structural Studies on the Inhibitory Binding Mode of Aromatic Coumarinic Esters to Human Kallikrein-Related Peptidase 7. Journal of Medicinal Chemistry, 2020, 63, 5723-5733.	6.4	8
11	Discovery of Potent and Selective Non-Nucleotide Small Molecule Inhibitors of CD73. Journal of Medicinal Chemistry, 2020, 63, 3935-3955.	6.4	34
12	Discovery of AB680: A Potent and Selective Inhibitor of CD73. Journal of Medicinal Chemistry, 2020, 63, 11448-11468.	6.4	52
13	Membrane Phospholipids and Polyphosphates as Cofactors and Binding Molecules of SERPINA12 (vaspin). Molecules, 2020, 25, 1992.	3.8	6
14	Ribosomal Targetâ∈Binding Sites of Antimicrobial Peptides Api137 and Onc112 Are Conserved among Pathogens Indicating New Lead Structures To Develop Novel Broadâ€Spectrum Antibiotics. ChemBioChem, 2020, 21, 2628-2634.	2.6	14
15	Xâ€Ray Coâ€Crystal Structure Guides the Way to Subnanomolar Competitive Ectoâ€5′â€Nucleotidase (CD73) Inhibitors for Cancer Immunotherapy. Advanced Therapeutics, 2019, 2, 1900075.	3.2	33
16	Structures of 2-Hydroxyisobutyric Acid-CoA Ligase Reveal Determinants of Substrate Specificity and Describe a Multi-Conformational Catalytic Cycle. Journal of Molecular Biology, 2019, 431, 2747-2761.	4.2	12
17	Kallikrein-related peptidase 14 is the second KLK protease targeted by the serpin vaspin. Biological Chemistry, 2018, 399, 1079-1084.	2.5	14
18	Surfaceâ€Binding Peptide Facilitates Electricityâ€Driven NADPHâ€Free Cytochrome P450 Catalysis. ChemCatChem, 2018, 10, 525-530.	3.7	17

#	Article	IF	CITATIONS
19	Crystallization of ectonucleotide phosphodiesterase/pyrophosphatase-3 and orientation of the SMB domains in the full-length ectodomain. Acta Crystallographica Section F, Structural Biology Communications, 2018, 74, 696-703.	0.8	2
20	Crystal structure and substrate binding mode of ectonucleotide phosphodiesterase/pyrophosphatase-3 (NPP3). Scientific Reports, 2018, 8, 10874.	3.3	9
21	Amylose recognition and ring-size determination of amylomaltase. Science Advances, 2017, 3, e1601386.	10.3	42
22	Basic Residues of $\hat{l}^2$ -Sheet A Contribute to Heparin Binding and Activation of Vaspin (Serpin A12). Journal of Biological Chemistry, 2017, 292, 994-1004.	3.4	14
23	Glycosylation of human vaspin (SERPINA12) and its impact on serpin activity, heparin binding and thermal stability. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2017, 1865, 1188-1194.	2.3	12
24	Regulatory Function of Hexokinase 2 in Glucose Signaling in Saccharomyces cerevisiae. Journal of Biological Chemistry, 2016, 291, 16477.	3.4	8
25	Understanding the Structural Basis of Adhesion GPCR Functions. Handbook of Experimental Pharmacology, 2016, 234, 67-82.	1.8	16
26	Characterization of the Domain Orientations of E.Âcoli 5′-Nucleotidase by Fitting an Ensemble of Conformers to DEER Distance Distributions. Structure, 2016, 24, 43-56.	3.3	19
27	Crystal structure of cleaved vaspin (serpinA12). Biological Chemistry, 2016, 397, 111-123.	2.5	7
28	Proline-rich Antimicrobial Peptides Optimized for Binding to Escherichia coli Chaperone DnaK. Protein and Peptide Letters, 2016, 23, 1061-1071.	0.9	21
29	A unique serpin P1′ glutamate and a conserved β-sheet C arginine are key residues for activity, protease recognition and stability of serpinA12 (vaspin). Biochemical Journal, 2015, 470, 357-367.	3.7	17
30	Structural Basis of the Stereospecificity of Bacterial B12-dependent 2-Hydroxyisobutyryl-CoA Mutase. Journal of Biological Chemistry, 2015, 290, 9727-9737.	3.4	23
31	Crystal structure of human platelet phosphofructokinase-1 locked in an activated conformation. Biochemical Journal, 2015, 469, 421-432.	3.7	22
32	î±,î²-Methylene-ADP (AOPCP) Derivatives and Analogues: Development of Potent and Selective <i>ecto</i> -5′-Nucleotidase (CD73) Inhibitors. Journal of Medicinal Chemistry, 2015, 58, 6248-6263.	6.4	110
33	Protein surface charge of trypsinogen changes its activation pattern. BMC Biotechnology, 2014, 14, 109.	3.3	10
34	An Artificial Imine Reductase based on the Ribonucleaseâ€S Scaffold. ChemCatChem, 2014, 6, 736-740.	3.7	19
35	Structures of <i>Legionella pneumophila </i> NTPDase1 in complex with polyoxometallates. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 1147-1154.	2.5	25
36	Fluorineâ€Containing 6,7â€Dialkoxybiarylâ€Based Inhibitors for Phosphodiesteraseâ€10 A: Synthesis and invitro Evaluation of Inhibitory Potency, Selectivity, and Metabolism. ChemMedChem, 2014, 9, 1476-1487.	<sup>1</sup> 3.2	13

#	Article	IF	CITATIONS
37	Structural and functional studies on a thermostable polyethylene terephthalate degrading hydrolase from Thermobifida fusca. Applied Microbiology and Biotechnology, 2014, 98, 7815-7823.	3.6	191
38	Insectâ€Derived Prolineâ€Rich Antimicrobial Peptides Kill Bacteria by Inhibiting Bacterial Protein Translation at the 70 S Ribosome. Angewandte Chemie - International Edition, 2014, 53, 12236-12239.	13.8	195
39	Crystallization and preliminary crystallographic analysis of human muscle phosphofructokinase, the main regulator of glycolysis. Acta Crystallographica Section F, Structural Biology Communications, 2014, 70, 578-582.	0.8	5
40	Crystal structure of NTPDase2 in complex with the sulfoanthraquinone inhibitor PSB-071. Journal of Structural Biology, 2014, 185, 336-341.	2.8	25
41	Posttranslational Incorporation of Noncanonical Amino Acids in the RNase S System by Semisynthetic Protein Assembly. Methods in Molecular Biology, 2014, 1216, 71-87.	0.9	1
42	Structural Identification of DnaK Binding Sites within Bovine and Sheep Bactenecin Bac7. Protein and Peptide Letters, 2014, 21, 407-412.	0.9	30
43	Analysis of a rare functional truncating mutation rs61757459 in vaspin (SERPINA12) on circulating vaspin levels. Journal of Molecular Medicine, 2013, 91, 1285-1292.	3.9	6
44	Vaspin inhibits kallikrein 7 by serpin mechanism. Cellular and Molecular Life Sciences, 2013, 70, 2569-2583.	5.4	125
45	The ATP/ADP Substrate Specificity Switch between <i>Toxoplasma gondii</i> NTPDase1 and NTPDase3 is Caused by an Altered Mode of Binding of the Substrate Base. ChemBioChem, 2013, 14, 2292-2300.	2.6	5
46	Leucyl Aminopeptidase (Animal). , 2013, , 1465-1470.		5
47	In vivo phosphorylation and in vitro autophosphorylation-inactivation of Kluyveromyces lactis hexokinase KlHxk1. Biochemical and Biophysical Research Communications, 2013, 435, 313-318.	2.1	6
48	Structural Studies on the Forward and Reverse Binding Modes of Peptides to the Chaperone DnaK. Journal of Molecular Biology, 2013, 425, 2463-2479.	4.2	104
49	Crystallographic Snapshots along the Reaction Pathway of Nucleoside Triphosphate Diphosphohydrolases. Structure, 2013, 21, 1460-1475.	3.3	44
50	Contribution of the two domains of <i>E. coli</i> 5′â€nucleotidase to substrate specificity and catalysis. FEBS Letters, 2013, 587, 460-466.	2.8	13
51	Crystal structure and catalytic mechanism of chloromuconolactone dehalogenase <scp>ClcF</scp> from <i><scp>R</scp> hodococcus opacus</i> 1 <scp>CP</scp> . Molecular Microbiology, 2013, 88, 254-267.	2.5	6
52	The crystal structure of $\langle i \rangle$ Toxoplasma gondii $\langle i \rangle$ nucleoside triphosphate diphosphohydrolase 1 represents a conformational intermediate in the reductive activation mechanism of the tetrameric enzyme. Proteins: Structure, Function and Bioinformatics, 2013, 81, 1271-1276.	2.6	9
53	Structure and allosteric regulation of eukaryotic 6-phosphofructokinases. Biological Chemistry, 2013, 394, 977-993.	2.5	58
54	New crystal forms of NTPDase1 from the bacterium (i>Legionella pneumophila (i>). Acta Crystallographica Section F: Structural Biology Communications, 2013, 69, 257-262.	0.7	13

#	Article	IF	CITATIONS
55	Localization and orientation of heavy-atom cluster compounds in protein crystals using molecular replacement. Acta Crystallographica Section D: Biological Crystallography, 2013, 69, 284-297.	2.5	9
56	Crystal Structure of Apo―and Metalated Thiolate containing RNase S as Structural Basis for the Design of Artificial Metalloenzymes by Peptideâ€Protein Complementation. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2013, 639, 2395-2400.	1.2	3
57	Structural Insight into Activation Mechanism of Toxoplasma gondii Nucleoside Triphosphate Diphosphohydrolases by Disulfide Reduction*. Journal of Biological Chemistry, 2012, 287, 3051-3066.	3.4	21
58	Crystal Structure of the Human Ecto-5′-Nucleotidase (CD73): Insights into the Regulation of Purinergic Signaling. Structure, 2012, 20, 2161-2173.	3.3	164
59	Api88 Is a Novel Antibacterial Designer Peptide To Treat Systemic Infections with Multidrug-Resistant Gram-Negative Pathogens. ACS Chemical Biology, 2012, 7, 1281-1291.	3.4	94
60	Recombinant expression of a unique chloromuconolactone dehalogenase ClcF from Rhodococcus opacus 1CP and identification of catalytically relevant residues by mutational analysis. Archives of Biochemistry and Biophysics, 2012, 526, 69-77.	3.0	9
61	Crystallographic Evidence for a Domain Motion in Rat Nucleoside Triphosphate Diphosphohydrolase (NTPDase) 1. Journal of Molecular Biology, 2012, 415, 288-306.	4.2	73
62	Crystallization and preliminary X-ray analysis of the open form of human ecto-5′-nucleotidase (CD73). Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1545-1549.	0.7	6
63	Crystal structure of a supercharged variant of the human enteropeptidase light chain. Proteins: Structure, Function and Bioinformatics, 2012, 80, 1907-1910.	2.6	13
64	Cellular function and molecular structure of ecto-nucleotidases. Purinergic Signalling, 2012, 8, 437-502.	2.2	850
65	Functional Linkage of Adenine Nucleotide Binding Sites in Mammalian Muscle 6-Phosphofructokinase. Journal of Biological Chemistry, 2012, 287, 17546-17553.	3.4	25
66	Crystallization and preliminary characterization of chloromuconolactone dehalogenase fromRhodococcus opacus1CP. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 591-595.	0.7	3
67	Rational Design of Oncocin Derivatives with Superior Protease Stabilities and Antibacterial Activities Based on the Highâ€Resolution Structure of the Oncocinâ€DnaK Complex. ChemBioChem, 2011, 12, 874-876.	2.6	77
68	Molecular architecture and structural basis of allosteric regulation of eukaryotic phosphofructokinases. FASEB Journal, 2011, 25, 89-98.	0.5	14
69	Surface supercharged human enteropeptidase light chain shows improved solubility and refolding yield. Protein Engineering, Design and Selection, 2011, 24, 261-268.	2.1	45
70	Crystal Structure of Hexokinase KlHxk1 of Kluyveromyces lactis. Journal of Biological Chemistry, 2010, 285, 41019-41033.	3.4	26
71	Structure and function of the abasic site specificity pocket of an AP endonuclease from Archaeoglobus fulgidus. DNA Repair, 2009, 8, 219-231.	2.8	18
72	Active-Site Mobility Revealed by the Crystal Structure of Arylmalonate Decarboxylase from Bordetella bronchiseptica. Journal of Molecular Biology, 2008, 377, 386-394.	4.2	17

#	Article	IF	CITATIONS
73	Expression and purification of the ligand-binding domain of peroxisome proliferator-activated receptor alpha (PPARÎ $\pm$ ). Protein Expression and Purification, 2008, 62, 185-189.	1.3	10
74	Structural insight into signal conversion and inactivation by NTPDase2 in purinergic signaling. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 6882-6887.	7.1	71
75	Characterization of Rat NTPDase1, -2, and -3 Ectodomains Refolded from Bacterial Inclusion Bodies. Biochemistry, 2007, 46, 11945-11956.	2.5	34
76	Crystallization and preliminary X-ray diffraction studies of hexokinase KlHxk1 fromKluyveromyces lactis. Acta Crystallographica Section F: Structural Biology Communications, 2007, 63, 430-433.	0.7	2
77	Cosubstrateâ€induced dynamics of Dâ€3â€hydroxybutyrate dehydrogenase from <i>Pseudomonas putida</i> FEBS Journal, 2007, 274, 5767-5779.	4.7	24
78	Crystallization and preliminary X-ray characterization of two thermostable DNA nucleases. Acta Crystallographica Section F: Structural Biology Communications, 2006, 62, 1290-1293.	0.7	2
79	Ecto-5'-nucleotidase: Structure function relationships. Purinergic Signalling, 2006, 2, 343-350.	2.2	159
80	A Large Hinge Bending Domain Rotation Is Necessary for the Catalytic Function ofEscherichia coli5â€~Nucleotidaseâ€. Biochemistry, 2005, 44, 2244-2252.	2.5	30
81	Reinforced HNA Backbone Hydration in the Crystal Structure of a Decameric HNA/RNA Hybrid. Journal of the American Chemical Society, 2005, 127, 2937-2943.	13.7	30
82	Crystal Structures of Recombinant Human Purple Acid Phosphatase With and Without an Inhibitory Conformation of the Repression Loop. Journal of Molecular Biology, 2005, 351, 233-246.	4.2	73
83	RNase T1 Variant RV Cleaves Single-Stranded RNA after Purines Due to Specific Recognition by the Asn46 Side Chain Amide. Biochemistry, 2004, 43, 2854-2862.	2.5	6
84	Trapping a $96 \hat{A}^\circ$ domain rotation in two distinct conformations by engineered disulfide bridges. Protein Science, 2004, 13, 1811-1822.	7.6	24
85	Biochemie und Molekularbiologie 2003. Nachrichten Aus Der Chemie, 2004, 52, 292-305.	0.0	0
86	Leucyl aminopeptidase (animal)., 2004,, 896-901.		9
87	Structure of DNA helicase RepA in complex with sulfate at 1.95â€Ã resolution implicates structural changes to an`open' form. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 815-822.	2.5	14
88	Crystal Structure of Thermotoga maritima α-Glucosidase AglA Defines a New Clan of NAD+-dependent Glycosidases. Journal of Biological Chemistry, 2003, 278, 19151-19158.	3.4	56
89	The X-ray Crystal Structure of Human $\hat{l}^2$ -Hexosaminidase B Provides New Insights into Sandhoff Disease. Journal of Molecular Biology, 2003, 328, 669-681.	4.2	109
90	Crystal structure of the plasmid maintenance system $\hat{A}/\hat{A}$ : Functional mechanism of toxin $\hat{A}$ and inactivation by $\hat{A}2\hat{A}2$ complex formation. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1661-1666.	7.1	119

#	Article	IF	CITATIONS
91	Identification of residues important for NAD+binding by theThermotoga maritimal±-glucosidase AglA, a member of glycoside hydrolase family 4. FEBS Letters, 2002, 517, 267-271.	2.8	26
92	Mechanism of hydrolysis of phosphate esters by the dimetal center of 5′-nucleotidase based on crystal structures. Journal of Molecular Biology, 2001, 309, 239-254.	4.2	96
93	E. coli 5′-nucleotidase undergoes a hinge-bending domain rotation resembling a ball-and-socket motion. Journal of Molecular Biology, 2001, 309, 255-266.	4.2	50
94	Crystallization and preliminary X-ray diffraction studies of the â^ŠÎ¶ addiction system encoded byStreptococcus pyogenesplasmid pSM19035. Acta Crystallographica Section D: Biological Crystallography, 2001, 57, 745-747.	2.5	19
95	X-ray structure of acarbose bound to amylomaltase from Thermus aquaticus. FEBS Journal, 2000, 267, 6903-6913.	0.2	43
96	Crystal structure of amylomaltase from Thermus aquaticus, a glycosyltransferase catalysing the production of large cyclic glucans. Journal of Molecular Biology, 2000, 296, 873-886.	4.2	96
97	X-ray structure of acarbose bound to amylomaltase from Thermus aquaticus . Implications for the synthesis of large cyclic glucans. FEBS Journal, 2000, 267, 6903-6913.	0.2	17
98	A bicarbonate ion as a general base in the mechanism of peptide hydrolysis by dizinc leucine aminopeptidase. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11151-11155.	7.1	100
99	X-ray structure of the Escherichia coli periplasmic 5'-nucleotidase containing a dimetal catalytic site. , 1999, 6, 448-453.		111
100	X-ray structure of aminopeptidase A from Escherichia coli and a model for the nucleoprotein complex in Xer site-specific recombination. EMBO Journal, 1999, 18, 4513-4522.	7.8	114
101	Yeast chorismate and other allosteric enzymes. Pure and Applied Chemistry, 1998, 70, 527-531.	1.9	2
102	A glutamate residue in the catalytic center of the yeast chorismate mutase restricts enzyme activity to acidic conditions. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 8491-8496.	7.1	38
103	Mechanisms of catalysis and allosteric regulation of yeast chorismate mutase from crystal structures. Structure, 1997, 5, 1437-1452.	3.3	93
104	Mechanism of Fe(III) – Zn(II) Purple Acid Phosphatase Based on Crystal Structures. Journal of Molecular Biology, 1996, 259, 737-748.	4.2	342
105	Recent Advances in Zinc Enzymology. Chemical Reviews, 1996, 96, 2375-2434.	47.7	1,323
106	Crystal structure of the T state of allosteric yeast chorismate mutase and comparison with the R state Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 3330-3334.	7.1	46
107	Enzymatische Acyl―und Phosphoryltransferreaktionen unter Beteiligung von zwei Metallionen. Angewandte Chemie, 1996, 108, 2158-2191.	2.0	103
108	Two-Metal Ion Catalysis in Enzymatic Acyl- and Phosphoryl-Transfer Reactions. Angewandte Chemie International Edition in English, 1996, 35, 2024-2055.	4.4	595

#	Article	IF	CITATION
109	Transition State Analog L-Leucinephosphonic Acid Bound to Bovine Lens Leucine Aminopeptidase: X-ray Structure at 1.65 .ANG. Resolution in a New Crystal Form. Biochemistry, 1995, 34, 9200-9210.	2.5	146
110	Structural relationship between the mammalian Fe(III)-Fe(II) and the Fe(III)-Zn(II) plant purple acid phosphatases. FEBS Letters, 1995, 367, 56-60.	2.8	88
111	X-Ray Structure Analysis of Methane Monooxygenase: An Important Step toward Understanding the Oxidation of Methane in Biological Systems. Angewandte Chemie International Edition in English, 1994, 33, 841-843.	4.4	4
112	Röntgenstrukturanalyse der Methanâ€Monooxygenase: ein wichtiger Beitrag zum Verstädnis der Oxidation von Methan in biologischen Systemen. Angewandte Chemie, 1994, 106, 889-891.	2.0	3
113	Crystal structure and spectroscopic characterization of cesium vanadium sulfate CsV(SO4)2. Evidence for an electronic Raman transition. Inorganic Chemistry, 1993, 32, 4714-4720.	4.0	30
114	Crystallization and preliminary crystallographic data of purple acid phosphatase from red kidney bean. Journal of Molecular Biology, 1992, 224, 511-513.	4.2	27