Steven C Almo

List of Publications by Year in descending order

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66343 69250 6,925 125 42 77 citations h-index g-index papers 134 134 134 11719 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Structural genomics: beyond the Human Genome Project. Nature Genetics, 1999, 23, 151-157.	21.4	369
2	Structural basis for co-stimulation by the human CTLA-4/B7-2 complex. Nature, 2001, 410, 604-608.	27.8	323
3	Immune responses to SARS-CoV-2 infection in hospitalized pediatric and adult patients. Science Translational Medicine, 2020, 12 , .	12.4	298
4	Durable antitumor responses to CD47 blockade require adaptive immune stimulation. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E2646-54.	7.1	272
5	A metabolic pathway for bile acid dehydroxylation by the gut microbiome. Nature, 2020, 582, 566-570.	27.8	262
6	GPRC5D is a target for the immunotherapy of multiple myeloma with rationally designed CAR T cells. Science Translational Medicine, 2019, 11 , .	12.4	229
7	A naturally occurring antiviral ribonucleotide encoded by the human genome. Nature, 2018, 558, 610-614.	27.8	225
8	<scp>GBT</scp> 440 increases haemoglobin oxygen affinity, reduces sickling and prolongs <scp>RBC</scp> halfâ€life in a murine model of sickle cell disease. British Journal of Haematology, 2016, 175, 141-153.	2.5	187
9	Recent advances in mammalian protein production. FEBS Letters, 2014, 588, 253-260.	2.8	179
10	Structure of the profilin-poly-L-proline complex involved in morphogenesis and cytoskeletal regulation. Nature Structural and Molecular Biology, 1997, 4, 953-960.	8.2	154
11	The 2.0 A structure of human hypoxanthine-guanine phosphoribosyltransferase in complex with a transition-state analog inhibitor. Nature Structural Biology, 1999, 6, 588-593.	9.7	148
12	Structural genomics of protein phosphatases. Journal of Structural and Functional Genomics, 2007, 8, 121-140.	1.2	148
13	Discovery of GBT440, an Orally Bioavailable R-State Stabilizer of Sickle Cell Hemoglobin. ACS Medicinal Chemistry Letters, 2017, 8, 321-326.	2.8	129
14	Expression, Clinical Significance, and Receptor Identification of the Newest B7 Family Member HHLA2 Protein. Clinical Cancer Research, 2015, 21, 2359-2366.	7.0	125
15	The structure of an actin-crosslinking domain from human fimbrin. Nature Structural Biology, 1997, 4, 708-712.	9.7	121
16	Structural basis for cancer immunotherapy by the first-in-class checkpoint inhibitor ipilimumab. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4223-E4232.	7.1	121
17	Anti–CTLA-4 therapy requires an Fc domain for efficacy. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 3912-3917.	7.1	121
18	Structural Insights into Thioether Bond Formation in the Biosynthesis of Sactipeptides. Journal of the American Chemical Society, 2017, 139, 11734-11744.	13.7	119

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19	Divergent Evolution in Enolase Superfamily: Strategies for Assigning Functions. Journal of Biological Chemistry, 2012, 287, 29-34.	3.4	118
20	Panoramic view of a superfamily of phosphatases through substrate profiling. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E1974-83.	7.1	118
21	Structure of EVH1, a novel proline-rich ligand-binding module involved in cytoskeletal dynamics and neural function. Nature Structural Biology, 1999, 6, 661-666.	9.7	110
22	Profilin binds proline-rich ligands in two distinct amide backbone orientations. Nature Structural Biology, 1999, 6, 666-671.	9.7	102
23	The biosynthesis of methanobactin. Science, 2018, 359, 1411-1416.	12.6	101
24	PD-L1 is an activation-independent marker of brown adipocytes. Nature Communications, 2017, 8, 647.	12.8	97
25	Development and Evaluation of a Human Single Chain Variable Fragment (scFv) Derived Bcma Targeted CAR T Cell Vector Leads to a High Objective Response Rate in Patients with Advanced MM. Blood, 2017, 130, 742-742.	1.4	92
26	Trypanosomal Nucleoside Hydrolase. A Novel Mechanism from the Structure with a Transition-State Inhibitorâ€. Biochemistry, 1998, 37, 6277-6285.	2.5	89
27	Structure Determination and Characterization of Saccharomyces cerevisiae Profilinâ €. Biochemistry, 1998, 37, 11171-11181.	2.5	85
28	Prediction and characterization of enzymatic activities guided by sequence similarity and genome neighborhood networks. ELife, 2014, 3, .	6.0	81
29	Large-Scale Determination of Sequence, Structure, and Function Relationships in Cytosolic Glutathione Transferases across the Biosphere. PLoS Biology, 2014, 12, e1001843.	5.6	79
30	Development and Evaluation of an Optimal Human Single-Chain Variable Fragment-Derived BCMA-Targeted CAR T Cell Vector. Molecular Therapy, 2018, 26, 1447-1456.	8.2	77
31	Viperin Reveals Its True Function. Annual Review of Virology, 2020, 7, 421-446.	6.7	76
32	Biosynthesis of Squalene from Farnesyl Diphosphate in Bacteria: Three Steps Catalyzed by Three Enzymes. ACS Central Science, 2015, 1, 77-82.	11.3	69
33	Integrative Structure–Function Mapping of the Nucleoporin Nup133 Suggests a Conserved Mechanism for Membrane Anchoring of the Nuclear Pore Complex. Molecular and Cellular Proteomics, 2014, 13, 2911-2926.	3.8	67
34	Molecular Architecture of the Major Membrane Ring Component of the Nuclear Pore Complex. Structure, 2017, 25, 434-445.	3.3	61
35	Structure and Cancer Immunotherapy of the B7 Family Member B7x. Cell Reports, 2014, 9, 1089-1098.	6.4	58
36	Aptamer-targeted Antigen Delivery. Molecular Therapy, 2014, 22, 1375-1387.	8.2	58

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37	Better and faster: improvements and optimization for mammalian recombinant protein production. Current Opinion in Structural Biology, 2014, 26, 39-43.	5.7	57
38	Characterization of the SARS-CoV-2 S Protein: Biophysical, Biochemical, Structural, and Antigenic Analysis. ACS Omega, 2021, 6, 85-102.	3.5	54
39	Tissue-Expressed B7-H1 Critically Controls Intestinal Inflammation. Cell Reports, 2014, 6, 625-632.	6.4	53
40	Inhibition of SARS-CoV-2 polymerase by nucleotide analogs from a single-molecule perspective. ELife, 2021, 10, .	6.0	53
41	Structure-guided development of a high-affinity human Programmed Cell Death-1: Implications for tumor immunotherapy. EBioMedicine, 2017, 17, 30-44.	6.1	52
42	Structural Analysis of Adenine Phosphoribosyltransferase from Saccharomyces cerevisiae,. Biochemistry, 2001, 40, 10800-10809.	2.5	47
43	Assignment of function to a domain of unknown function: DUF1537 is a new kinase family in catabolic pathways for acid sugars. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4161-9.	7.1	46
44	A novel bifunctional transcriptional regulator of riboflavin metabolism in Archaea. Nucleic Acids Research, 2017, 45, gkw1331.	14.5	44
45	Synchrotron Protein Footprinting: A Technique to Investigate Protein-Protein Interactions. Journal of Biomolecular Structure and Dynamics, 2001, 19, 405-418.	3.5	42
46	Computational-guided discovery and characterization of a sesquiterpene synthase from <i>Streptomyces clavuligerus</i> . Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5661-5666.	7.1	42
47	An essential bifunctional enzyme in <i>Mycobacterium tuberculosis</i> for itaconate dissimilation and leucine catabolism. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15907-15913.	7.1	42
48	Substrate Distortion and the Catalytic Reaction Mechanism of 5-Carboxyvanillate Decarboxylase. Journal of the American Chemical Society, 2016, 138, 826-836.	13.7	41
49	Crystal Structure of the Complex of Human FasL and Its Decoy Receptor DcR3. Structure, 2016, 24, 2016-2023.	3.3	39
50	General principles of binding between cell surface receptors and multi-specific ligands: A computational study. PLoS Computational Biology, 2017, 13, e1005805.	3.2	39
51	Protein production from the structural genomics perspective: achievements and future needs. Current Opinion in Structural Biology, 2013, 23, 335-344.	5.7	37
52	Discovery of novel bacterial queuine salvage enzymes and pathways in human pathogens. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19126-19135.	7.1	36
53	Treatment of Severe COVID-19 with Convalescent Plasma in Bronx, NYC. JCI Insight, 2021, 6, .	5.0	36
54	CUE-101, a Novel E7-pHLA-IL2-Fc Fusion Protein, Enhances Tumor Antigen-Specific T-Cell Activation for the Treatment of HPV16-Driven Malignancies. Clinical Cancer Research, 2020, 26, 1953-1964.	7.0	35

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55	Diversity-Oriented Synthesis as a Strategy for Fragment Evolution against GSK3 \hat{I}^2 . ACS Medicinal Chemistry Letters, 2016, 7, 852-856.	2.8	34
56	In vivo detection of antigen-specific CD8+ T cells by immuno-positron emission tomography. Nature Methods, 2020, 17, 1025-1032.	19.0	34
57	An HSV-2 single-cycle candidate vaccine deleted in glycoprotein D, î"gD-2, protects male mice from lethal skin challenge with clinical isolates of HSV-1 and HSV-2. Journal of Infectious Diseases, 2018, 217, 754-758.	4.0	33
58	Structural Basis of CD160:HVEM Recognition. Structure, 2019, 27, 1286-1295.e4.	3.3	33
59	Mechanism and Structure of Î ³ -Resorcylate Decarboxylase. Biochemistry, 2018, 57, 3167-3175.	2.5	30
60	Prediction of enzymatic pathways by integrative pathway mapping. ELife, 2018, 7, .	6.0	30
61	Loss of quaternary structure is associated with rapid sequence divergence in the OSBS family. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8535-8540.	7.1	29
62	ATP-binding Cassette (ABC) Transport System Solute-binding Protein-guided Identification of Novel d-Altritol and Galactitol Catabolic Pathways in Agrobacterium tumefaciens C58. Journal of Biological Chemistry, 2015, 290, 28963-28976.	3.4	29
63	A General Strategy for the Discovery of Metabolic Pathways: <scp>d</scp> -Threitol, <scp>l</scp> -Threitol, and Erythritol Utilization in <i>Mycobacterium smegmatis</i> American Chemical Society, 2015, 137, 14570-14573.	13.7	29
64	Testing the Sulfotransferase Molecular Pore Hypothesis. Journal of Biological Chemistry, 2013, 288, 8619-8626.	3.4	27
65	Mechanistic Basis for Functional Promiscuity in the TNF and TNF Receptor Superfamilies: Structure of the LIGHT:DcR3 Assembly. Structure, 2014, 22, 1252-1262.	3.3	27
66	Functional assignment of multiple catabolic pathways for d-apiose. Nature Chemical Biology, 2018, 14, 696-705.	8.0	26
67	Structural Characterization of the Glycoprotein GP2 Core Domain from the CAS Virus, a Novel Arenavirus-Like Species. Journal of Molecular Biology, 2014, 426, 1452-1468.	4.2	25
68	Compensatory Mechanisms Allow Undersized Anchor-Deficient Class I MHC Ligands To Mediate Pathogenic Autoreactive T Cell Responses. Journal of Immunology, 2014, 193, 2135-2146.	0.8	25
69	Structural basis for tRNA methylthiolation by the radical SAM enzyme MiaB. Nature, 2021, 597, 566-570.	27.8	25
70	Orange Fluorescent Proteins: Structural Studies of LSSmOrange, PSmOrange and PSmOrange2. PLoS ONE, 2014, 9, e99136.	2.5	24
71	Determinants of the CmoB carboxymethyl transferase utilized for selective tRNA wobble modification. Nucleic Acids Research, 2015, 43, 4602-4613.	14.5	23
72	Mechanistic dissection of the PD-L1:B7-1 co-inhibitory immune complex. PLoS ONE, 2020, 15, e0233578.	2.5	23

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73	Inhibition of Zinc-Dependent Histone Deacetylases with a Chemically Triggered Electrophile. ACS Chemical Biology, 2016, 11, 1844-1851.	3.4	21
74	Co-stimulate or Co-inhibit Regulatory T Cells, Which Side to Go?. Immunological Investigations, 2016, 45, 813-831.	2.0	21
75	A Binary Arginine Methylation Switch on Histone H3 Arginine 2 Regulates Its Interaction with WDR5. Biochemistry, 2020, 59, 3696-3708.	2.5	21
76	Structural Insight into the Substrate Scope of Viperin and Viperin-like Enzymes from Three Domains of Life. Biochemistry, 2021, 60, 2116-2129.	2.5	21
77	Stilbene epoxidation and detoxification in a Photorhabdus luminescens-nematode symbiosis. Journal of Biological Chemistry, 2017, 292, 6680-6694.	3.4	20
78	Novel Metabolic Pathways and Regulons for Hexuronate Utilization in Proteobacteria. Journal of Bacteriology, 2019, 201, .	2.2	19
79	Photoswitchable Red Fluorescent Protein with a Large Stokes Shift. Chemistry and Biology, 2014, 21, 1402-1414.	6.0	18
80	Structural, mutational and biophysical studies reveal a canonical mode of molecular recognition between immune receptor TIGIT and nectin-2. Molecular Immunology, 2017, 81, 151-159.	2.2	18
81	A Small Protein Associated with Fungal Energy Metabolism Affects the Virulence of Cryptococcus neoformans in Mammals. PLoS Pathogens, 2016, 12, e1005849.	4.7	17
82	Tumor-expressed immune checkpoint B7x promotes cancer progression and antigen-specific CD8 T cell exhaustion and suppressive innate immune cells. Oncotarget, 2017, 8, 82740-82753.	1.8	17
83	Viperin triggers ribosome collision-dependent translation inhibition to restrict viral replication. Molecular Cell, 2022, 82, 1631-1642.e6.	9.7	16
84	Investigating the role of a backbone to substrate hydrogen bond in OMP decarboxylase using a site-specific amide to ester substitution. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15066-15071.	7.1	15
85	HVEM structures and mutants reveal distinct functions of binding to LIGHT and BTLA/CD160. Journal of Experimental Medicine, 2021, 218, .	8.5	15
86	Active Site and Remote Contributions to Catalysis in Methylthioadenosine Nucleosidases. Biochemistry, 2015, 54, 2520-2529.	2.5	14
87	Identification of a novel tRNA wobble uridine modifying activity in the biosynthesis of 5-methoxyuridine. Nucleic Acids Research, 2018, 46, 9160-9169.	14.5	13
88	Computational Redesign of PD-1 Interface for PD-L1 Ligand Selectivity. Structure, 2019, 27, 829-836.e3.	3.3	13
89	Redesigning HVEM Interface for Selective Binding to LIGHT, BTLA, and CD160. Structure, 2020, 28, 1197-1205.e2.	3.3	13
90	A switch from parallel to antiparallel strand orientation in a coiled-coil X-ray structure via two core hydrophobic mutations. Biopolymers, 2015, 104, 178-185.	2.4	12

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91	The active site of the Mycobacterium tuberculosis branched-chain amino acid biosynthesis enzyme dihydroxyacid dehydratase contains a 2Fe–2S cluster. Journal of Biological Chemistry, 2019, 294, 13158-13170.	3.4	12
92	HVEM signaling promotes protective antibody-dependent cellular cytotoxicity (ADCC) vaccine responses to herpes simplex viruses. Science Immunology, 2020, 5, .	11.9	12
93	Biochemical characterization of two haloalkane dehalogenases: DccA from <scp><i>C</i></scp> <i>aulobacter crescentus</i> and DsaA from <scp><i>S</i></scp> <i>accharomonospora azurea</i> . Protein Science, 2016, 25, 877-886.	7.6	11
94	Single-Dilution COVID-19 Antibody Test with Qualitative and Quantitative Readouts. MSphere, 2021, 6, .	2.9	11
95	Chemical Synthesis of the Antiviral Nucleotide Analogue ddhCTP. Journal of Organic Chemistry, 2021, 86, 8843-8850.	3.2	11
96	Increased Heterologous Protein Expression in Drosophila S2 Cells for Massive Production of Immune Ligands/Receptors and Structural Analysis of Human HVEM. Molecular Biotechnology, 2015, 57, 914-922.	2.4	10
97	Narrow-Spectrum Antibiotic Targeting of the Radical SAM Enzyme MqnE in Menaquinone Biosynthesis. Biochemistry, 2020, 59, 2562-2575.	2.5	10
98	Longitudinally monitored immune biomarkers predict the timing of COVID-19 outcomes. PLoS Computational Biology, 2022, 18, e1009778.	3.2	10
99	INI1/SMARCB1 Rpt1 domain mimics TAR RNA in binding to integrase to facilitate HIV-1 replication. Nature Communications, 2021, 12, 2743.	12.8	9
100	CAR T Cell Therapy Targeting G Protein-Coupled Receptor Class C Group 5 Member D (GPRC5D), a Novel Target for the Immunotherapy of Multiple Myeloma. Blood, 2018, 132, 589-589.	1.4	9
101	Can the propensity of protein crystallization be increased by using systematic screening with metals?. Protein Science, 2017, 26, 1704-1713.	7.6	8
102	T cell receptor–targeted immunotherapeutics drive selective in vivo HIV- and CMV-specific T cell expansion in humanized mice. Journal of Clinical Investigation, 2021, 131, .	8.2	8
103	Temperature-induced conformational changes in prosomatostatin-II: implications for processing. Biochemical Journal, 1998, 334, 275-282.	3.7	7
104	Structural Determinants of the $5\hat{a}\in^2$ -Methylthioinosine Specificity of Plasmodium Purine Nucleoside Phosphorylase. PLoS ONE, 2014, 9, e84384.	2.5	7
105	Considerations for Combined Immune Checkpoint Modulation and Radiation Treatment. Radiation Research, 2014, 182, 230-238.	1.5	7
106	Identification of Mycobacterial Ribosomal Proteins as Targets for CD4 ⁺ T Cells That Enhance Protective Immunity in Tuberculosis. Infection and Immunity, 2018, 86, .	2.2	7
107	Purification, crystallization and structural elucidation of <scp>D < /scp>-galactaro-1,4-lactone cycloisomerase from <i>Agrobacterium tumefaciens < /i>involved in pectin degradation. Acta Crystallographica Section F, Structural Biology Communications, 2016, 72, 36-41.</i></scp>	0.8	7
108	Structures of the L27 Domain of Disc Large Homologue 1 Protein Illustrate a Self-Assembly Module. Biochemistry, 2018, 57, 1293-1305.	2.5	6

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109	Structure of an ABC transporter solute-binding protein specific for the amino sugars glucosamine and galactosamine. Acta Crystallographica Section F, Structural Biology Communications, 2016, 72, 467-472.	0.8	5
110	The hidden treasure in your data: phasing with unexpected weak anomalous scatterers from routine data sets. Acta Crystallographica Section F, Structural Biology Communications, 2017, 73, 184-195.	0.8	5
111	Substrate Profile of the Phosphotriesterase Homology Protein from <i>Escherichia coli</i> Biochemistry, 2018, 57, 6219-6227.	2.5	5
112	Function Discovery and Structural Characterization of a Methylphosphonate Esterase. Biochemistry, 2015, 54, 2919-2930.	2.5	4
113	Structures of FOX-4 Cephamycinase in Complex with Transition-State Analog Inhibitors. Biomolecules, 2020, 10, 671.	4.0	4
114	Structural and Functional Characterization of a Biliverdin-Binding Near-Infrared Fluorescent Protein From the Serpin Superfamily. Journal of Molecular Biology, 2022, 434, 167359.	4.2	4
115	Crystallization and preliminary crystallographic analysis of the N-terminal actin binding domain of human fimbrin., 1997, 28, 452-453.		3
116	Genetically modified hematopoietic stem/progenitor cells that produce IL-10–secreting regulatory T cells. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2634-2639.	7.1	3
117	Peptide-HLA-based immunotherapeutics platforms for direct modulation of antigen-specific T cells. Scientific Reports, 2021, 11, 19220.	3.3	2
118	Structure of a single-chain H2A/H2B dimer. Acta Crystallographica Section F, Structural Biology Communications, 2020, 76, 194-198.	0.8	1
119	Allosteric regulation of binding specificity of HVEM for CD160 and BTLA ligands upon G89F mutation. Current Research in Structural Biology, 2021, 3, 337-345.	2.2	1
120	Application of Novel T Cell Immunotherapeutics to Drive Antigen-Specific Activation, Expansion, and Differentiation of CD19 Chimeric Antigen Receptor T Cells (CAR T-cells). Blood, 2020, 136, 34-35.	1.4	1
121	Use of cMet Crystal Structures to Identify Potential Drugâ€Resistant Mutants. FASEB Journal, 2009, 23, .	0.5	0
122	Functional Annotation of Unknown Enzymes within the Amidohydrolase Superfamily. FASEB Journal, 2009, 23, 674.2.	0.5	0
123	Ultra Highâ€throughput Screening Uncovers New Activities in Phosphatases of the Haloalkanoic Acid Dehalogenase Superfamily (HADSF). FASEB Journal, 2013, 27, 571.1.	0.5	0
124	Type 1 Diabetes: A Promising Dialogue between Promiscuous T Cell Receptor and Hâ€2D ^b Peptide Complex. FASEB Journal, 2022, 36, .	0.5	0
125	HSMotifDiscover: identification of motifs in sequences composed of non-single-letter elements. Bioinformatics, 2022, 38, 4036-4038.	4.1	0