

# Christian Siebold

## List of Publications by Year in descending order

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79  
papers

6,765  
citations

57631

44  
h-index

71532

76  
g-index

93  
all docs

93  
docs citations

93  
times ranked

10047  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mutations in $\beta$ -Tubulin Cause Abnormal Neuronal Migration in Mice and Lissencephaly in Humans. <i>Cell</i> , 2007, 128, 45-57.	13.5	397
2	MHC class II proteins and disease: a structural perspective. <i>Nature Reviews Immunology</i> , 2006, 6, 271-282.	10.6	354
3	Structural basis of Smoothed regulation by its extracellular domains. <i>Nature</i> , 2016, 535, 517-522.	13.7	300
4	Proteoglycan-Specific Molecular Switch for RPTP $\beta$ Clustering and Neuronal Extension. <i>Science</i> , 2011, 332, 484-488.	6.0	294
5	Initiation of T cell signaling by CD45 segregation at 'close contacts'. <i>Nature Immunology</i> , 2016, 17, 574-582.	7.0	253
6	A procedure for setting up high-throughput nanolitre crystallization experiments. Crystallization workflow for initial screening, automated storage, imaging and optimization. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2005, 61, 651-657.	2.5	234
7	Large spectrum of lissencephaly and pachygyria phenotypes resulting from de novo missense mutations in tubulin alpha 1A (TUBA1A). <i>Human Mutation</i> , 2007, 28, 1055-1064.	1.1	213
8	Structural basis of semaphorin $\beta$ plexin signalling. <i>Nature</i> , 2010, 467, 1118-1122.	13.7	211
9	Cholesterol activates the G-protein coupled receptor Smoothed to promote Hedgehog signaling. <i>ELife</i> , 2016, 5, .	2.8	188
10	Interactions between Hedgehog proteins and their binding partners come into view. <i>Genes and Development</i> , 2010, 24, 2001-2012.	2.7	184
11	Biochemical mechanisms of vertebrate hedgehog signaling. <i>Development (Cambridge)</i> , 2019, 146, .	1.2	179
12	Structure of the fungal $\beta$ -glucan-binding immune receptor dectin-1: Implications for function. <i>Protein Science</i> , 2007, 16, 1042-1052.	3.1	168
13	Neuropilins lock secreted semaphorins onto plexins in a ternary signaling complex. <i>Nature Structural and Molecular Biology</i> , 2012, 19, 1293-1299.	3.6	160
14	Crystal structure of HLA-DQ0602 that protects against type 1 diabetes and confers strong susceptibility to narcolepsy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 1999-2004.	3.3	142
15	Structure and function of the Smoothed extracellular domain in vertebrate Hedgehog signaling. <i>ELife</i> , 2013, 2, e01340.	2.8	140
16	Restoring p53 Function in Human Melanoma Cells by Inhibiting MDM2 and Cyclin B1/CDK1-Phosphorylated Nuclear iASPP. <i>Cancer Cell</i> , 2013, 23, 618-633.	7.7	136
17	Modular mechanism of Wnt signaling inhibition by Wnt inhibitory factor 1. <i>Nature Structural and Molecular Biology</i> , 2011, 18, 886-893.	3.6	135
18	Lentiviral transduction of mammalian cells for fast, scalable and high-level production of soluble and membrane proteins. <i>Nature Protocols</i> , 2018, 13, 2991-3017.	5.5	131

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19	Structural basis for integration of GluD receptors within synaptic organizer complexes. <i>Science</i> , 2016, 353, 295-299.	6.0	128
20	Structural insights into hedgehog ligand sequestration by the human hedgehog-interacting protein HHIP. <i>Nature Structural and Molecular Biology</i> , 2009, 16, 698-703.	3.6	123
21	Structural and Functional Studies of LRP6 Ectodomain Reveal a Platform for Wnt Signaling. <i>Developmental Cell</i> , 2011, 21, 848-861.	3.1	109
22	Structure of a Tyrosine Phosphatase Adhesive Interaction Reveals a Spacer-Clamp Mechanism. <i>Science</i> , 2007, 317, 1217-1220.	6.0	107
23	Structure and functional analysis of the IGF-II/IGF2R interaction. <i>EMBO Journal</i> , 2008, 27, 265-276.	3.5	101
24	Cilia-Associated Oxysterols Activate Smoothed. <i>Molecular Cell</i> , 2018, 72, 316-327.e5.	4.5	100
25	Cholesterol accessibility at the ciliary membrane controls hedgehog signaling. <i>ELife</i> , 2019, 8, .	2.8	97
26	Carbohydrate transporters of the bacterial phosphoenolpyruvate: sugar phosphotransferase system (PTS). <i>FEBS Letters</i> , 2001, 504, 104-111.	1.3	96
27	Glypicans shield the Wnt lipid moiety to enable signalling at a distance. <i>Nature</i> , 2020, 585, 85-90.	13.7	90
28	Cholesterol access in cellular membranes controls Hedgehog signaling. <i>Nature Chemical Biology</i> , 2020, 16, 1303-1313.	3.9	90
29	Structural Plasticity of Eph Receptor A4 Facilitates Cross-Class Ephrin Signaling. <i>Structure</i> , 2009, 17, 1386-1397.	1.6	86
30	RGMs: Structural Insights, Molecular Regulation, and Downstream Signaling. <i>Trends in Cell Biology</i> , 2017, 27, 365-378.	3.6	83
31	Molecular analysis of receptor protein tyrosine phosphatase $\hat{1}/4$ -mediated cell adhesion. <i>EMBO Journal</i> , 2006, 25, 701-712.	3.5	82
32	Structural insights into proteoglycan-shaped Hedgehog signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 16420-16425.	3.3	79
33	Repulsive guidance molecule is a structural bridge between neogenin and bone morphogenetic protein. <i>Nature Structural and Molecular Biology</i> , 2015, 22, 458-465.	3.6	78
34	Cholesterol Interaction Sites on the Transmembrane Domain of the Hedgehog Signal Transducer and Class F G Protein-Coupled Receptor Smoothed. <i>Structure</i> , 2019, 27, 549-559.e2.	1.6	77
35	High-resolution structure of the catalytic region of MICAL (molecule interacting with CasL), a multidomain flavoenzyme-signaling molecule. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 16836-16841.	3.3	75
36	Biochemical and Structural Studies of ASPP Proteins Reveal Differential Binding to p53, p63, and p73. <i>Structure</i> , 2008, 16, 259-268.	1.6	73

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37	Crystal Structure of the GluR2 Amino-Terminal Domain Provides Insights into the Architecture and Assembly of Ionotropic Glutamate Receptors. <i>Journal of Molecular Biology</i> , 2009, 392, 1125-1132.	2.0	70
38	Structural insights into semaphorins and their receptors. <i>Seminars in Cell and Developmental Biology</i> , 2013, 24, 139-145.	2.3	62
39	A Tick Protein with a Modified Kunitz Fold Inhibits Human Trypsin. <i>Journal of Molecular Biology</i> , 2007, 368, 1172-1186.	2.0	57
40	Automation of large scale transient protein expression in mammalian cells. <i>Journal of Structural Biology</i> , 2011, 175, 209-215.	1.3	55
41	A Dual Binding Mode for RhoGTPases in Plexin Signalling. <i>PLoS Biology</i> , 2011, 9, e1001134.	2.6	54
42	Structure of the Repulsive Guidance Molecule (RGM) Neogenin Signaling Hub. <i>Science</i> , 2013, 341, 77-80.	6.0	52
43	Multiple ligand binding sites regulate the Hedgehog signal transducer Smoothened in vertebrates. <i>Current Opinion in Cell Biology</i> , 2018, 51, 81-88.	2.6	52
44	The morphogen Sonic hedgehog inhibits its receptor Patched by a pincer grasp mechanism. <i>Nature Chemical Biology</i> , 2019, 15, 975-982.	3.9	52
45	Crystal Structure of the <i>Citrobacter freundii</i> Dihydroxyacetone Kinase Reveals an Eight-stranded $\alpha$ -Helical Barrel ATP-binding Domain. <i>Journal of Biological Chemistry</i> , 2003, 278, 48236-48244.	1.6	47
46	Lrig2 Negatively Regulates Ectodomain Shedding of Axon Guidance Receptors by ADAM Proteases. <i>Developmental Cell</i> , 2015, 35, 537-552.	3.1	46
47	Structures of vertebrate Patched and Smoothened reveal intimate links between cholesterol and Hedgehog signalling. <i>Current Opinion in Structural Biology</i> , 2019, 57, 204-214.	2.6	44
48	An Ion-channel Modulator from the Saliva of the Brown Ear Tick has a Highly Modified Kunitz/BPTI Structure. <i>Journal of Molecular Biology</i> , 2009, 389, 734-747.	2.0	42
49	Secreted HHIP1 interacts with heparan sulfate and regulates Hedgehog ligand localization and function. <i>Journal of Cell Biology</i> , 2015, 209, 739-758.	2.3	39
50	A mechanism of covalent substrate binding in the x-ray structure of subunit K of the <i>Escherichia coli</i> dihydroxyacetone kinase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 8188-8192.	3.3	38
51	R-spondins engage heparan sulfate proteoglycans to potentiate WNT signaling. <i>ELife</i> , 2020, 9, .	2.8	37
52	The Structure and Function of the Outer Coat Protein VP9 of Borna Disease Virus. <i>Structure</i> , 2005, 13, 17-28.	1.6	35
53	Crystal Structure of the Phosphoenolpyruvate-binding Enzyme I-Domain from the <i>Thermotoga maritima</i> PEP: Sugar Phosphotransferase System (PTS). <i>Journal of Molecular Biology</i> , 2005, 346, 521-532.	2.0	34
54	Patched 1 reduces the accessibility of cholesterol in the outer leaflet of membranes. <i>ELife</i> , 2021, 10, .	2.8	34

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55	A calcium-sensing receptor mutation causing hypocalcemia disrupts a transmembrane salt bridge to activate $\beta^2$ -arrestin $\beta$ -biased signaling. <i>Science Signaling</i> , 2018, 11, .	1.6	32
56	Structure of HLA-A*0301 in complex with a peptide of proteolipid protein: insights into the role of HLA-A alleles in susceptibility to multiple sclerosis. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2011, 67, 447-454.	2.5	29
57	Structure, mechanism, and inhibition of Hedgehog acyltransferase. <i>Molecular Cell</i> , 2021, 81, 5025-5038.e10.	4.5	28
58	Evidence for the Specificity for Platelet HPA-1a Alloepitope and the Presenting HLA-DR52a of Diverse Antigen-Specific Helper T Cell Clones from Alloimmunized Mothers. <i>Journal of Immunology</i> , 2009, 183, 677-686.	0.4	27
59	Acylation-coupled lipophilic induction of polarisation (Acyl-cLIP): a universal assay for lipid transferase and hydrolase enzymes. <i>Chemical Science</i> , 2019, 10, 8995-9000.	3.7	27
60	Calcium-sensing receptor residues with loss- and gain-of-function mutations are located in regions of conformational change and cause signalling bias. <i>Human Molecular Genetics</i> , 2018, 27, 3720-3733.	1.4	23
61	Crystal Structure of Enzyme I of the Phosphoenolpyruvate Sugar Phosphotransferase System in the Dephosphorylated State. <i>Journal of Biological Chemistry</i> , 2009, 284, 33169-33176.	1.6	22
62	Relative Affinities of Protein $\beta$ -Cholesterol Interactions from Equilibrium Molecular Dynamics Simulations. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 6548-6558.	2.3	21
63	Intein-mediated cyclization of a soluble and a membrane protein in vivo: function and stability. <i>Biophysical Chemistry</i> , 2002, 96, 163-171.	1.5	20
64	Simultaneous binding of Guidance Cues NET1 and RGM blocks extracellular NEO1 signaling. <i>Cell</i> , 2021, 184, 2103-2120.e31.	13.5	20
65	iASPP mediates p53 selectivity through a modular mechanism fine-tuning DNA recognition. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 17470-17479.	3.3	20
66	Patched 1 regulates Smoothed by controlling sterol binding to its extracellular cysteine-rich domain. <i>Science Advances</i> , 2022, 8, .	4.7	19
67	Repulsive guidance molecules lock growth differentiation factor 5 in an inhibitory complex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 15620-15631.	3.3	18
68	Photochemical Probe Identification of a Small $\beta$ -Molecule Inhibitor Binding Site in Hedgehog Acyltransferase (HHAT)**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13542-13547.	7.2	18
69	Hedgehog-Interacting Protein is a multimodal antagonist of Hedgehog signalling. <i>Nature Communications</i> , 2021, 12, 7171.	5.8	16
70	Mechanism-based Inhibition of Enzyme I of the Escherichia coli Phosphotransferase System. <i>Journal of Biological Chemistry</i> , 2002, 277, 6934-6942.	1.6	15
71	Receptor protein tyrosine phosphatase $\beta$ : measuring where to stick. <i>Biochemical Society Transactions</i> , 2008, 36, 167-172.	1.6	14
72	Diversity of oligomerization in Drosophila semaphorins suggests a mechanism of functional fine-tuning. <i>Nature Communications</i> , 2019, 10, 3691.	5.8	10

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73	Recording information on protein complexes in an information management system. Journal of Structural Biology, 2011, 175, 224-229.	1.3	3
74	Calibration-free <i>In Vitro</i> Quantification of Protein Homo-oligomerization Using Commercial Instrumentation and Free, Open Source Brightness Analysis Software. Journal of Visualized Experiments, 2018, , .	0.2	2
75	Modular Mechanism of Wnt Signalling Inhibition by Wnt Inhibitory Factor 1. Biophysical Journal, 2012, 102, 518a.	0.2	0
76	Neuropilins Lock Secreted Semaphorins onto Plexins in a Ternary Signalling Complex. Biophysical Journal, 2013, 104, 613a.	0.2	0
77	The Energetics of Cholesterol Transport through Patched1: MD Simulations and Free Energy Calculations. Biophysical Journal, 2021, 120, 72a.	0.2	0
78	Photochemical Probe Identification of a Small Molecule Inhibitor Binding Site in Hedgehog Acyltransferase (HHAT)**. Angewandte Chemie, 2021, 133, 13654-13659.	1.6	0
79	Secreted HHIP1 interacts with heparan sulfate and regulates Hedgehog ligand localization and function. Journal of Experimental Medicine, 2015, 212, 2127OIA55.	4.2	0