

Oliver P Ernst

List of Publications by Year in descending order

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Version: 2024-02-01

53
papers

6,544
citations

159585

30
h-index

161849

54
g-index

58
all docs

58
docs citations

58
times ranked

6668
citing authors

#	ARTICLE	IF	CITATIONS
1	Structural evidence for visual arrestin priming via complexation of phosphoinositols. <i>Structure</i> , 2022, 30, 263-277.e5.	3.3	12
2	Serial femtosecond and serial synchrotron crystallography can yield data of equivalent quality: A systematic comparison. <i>Science Advances</i> , 2021, 7, .	10.3	25
3	Insane in the membrane: developments in protein folding, protein transport, and signaling by GPCRs. <i>Current Opinion in Structural Biology</i> , 2021, 69, vi-viii.	5.7	0
4	Electron paramagnetic resonance spectroscopy on G-protein-coupled receptors: Adopting strategies from related model systems. <i>Current Opinion in Structural Biology</i> , 2021, 69, 177-186.	5.7	5
5	The crystal structures of a chloride-pumping microbial rhodopsin and its proton-pumping mutant illuminate proton transfer determinants. <i>Journal of Biological Chemistry</i> , 2020, 295, 14793-14804.	3.4	19
6	Structural Basis of the Activation of Heterotrimeric Gs-Protein by Isoproterenol-Bound β^2 -Adrenergic Receptor. <i>Molecular Cell</i> , 2020, 80, 59-71.e4.	9.7	60
7	Genetically Encoded Quinone Methides Enabling Rapid, Site-Specific, and Photocontrolled Protein Modification with Amine Reagents. <i>Journal of the American Chemical Society</i> , 2020, 142, 17057-17068.	13.7	25
8	Excited-State Vibronic Dynamics of Bacteriorhodopsin from Two-Dimensional Electronic Photon Echo Spectroscopy and Multiconfigurational Quantum Chemistry. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 3889-3896.	4.6	16
9	Cryo-EM structure of the native rhodopsin dimer in nanodiscs. <i>Journal of Biological Chemistry</i> , 2019, 294, 14215-14230.	3.4	64
10	X-ray Crystallographic Structure and Oligomerization of Gloeobacter Rhodopsin. <i>Scientific Reports</i> , 2019, 9, 11283.	3.3	46
11	Synthesis of Chiral Spin-Labeled Amino Acids. <i>Organic Letters</i> , 2019, 21, 10149-10153.	4.6	7
12	Stationary Phase EPR Spectroscopy for Monitoring Membrane Protein Refolding by Conformational Response. <i>Analytical Chemistry</i> , 2019, 91, 1071-1079.	6.5	3
13	Fixed-target serial oscillation crystallography at room temperature. <i>IUCr</i> , 2019, 6, 305-316.	2.2	26
14	G _i - and G _s -coupled GPCRs show different modes of G-protein binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 2383-2388.	7.1	64
15	Mechanistic insights into allosteric regulation of the A2A adenosine G protein-coupled receptor by physiological cations. <i>Nature Communications</i> , 2018, 9, 1372.	12.8	126
16	Structure of the glucagon receptor in complex with a glucagon analogue. <i>Nature</i> , 2018, 553, 106-110.	27.8	109
17	High-throughput in situ X-ray screening of and data collection from protein crystals at room temperature and under cryogenic conditions. <i>Nature Protocols</i> , 2018, 13, 260-292.	12.0	46
18	A Novel Polar Core and Weakly Fixed C-Tail in Squid Arrestin Provide New Insight into Interaction with Rhodopsin. <i>Journal of Molecular Biology</i> , 2018, 430, 4102-4118.	4.2	7

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19	Cryo-EM structure of human rhodopsin bound to an inhibitory G protein. <i>Nature</i> , 2018, 558, 553-558.	27.8	230
20	Crystallogenes of Membrane Proteins Mediated by Polymer-Bounded Lipid Nanodiscs. <i>Structure</i> , 2017, 25, 384-392.	3.3	128
21	Conformational equilibria of light-activated rhodopsin in nanodiscs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E3268-E3275.	7.1	84
22	X-ray transparent microfluidic chips for high-throughput screening and optimization of in meso membrane protein crystallization. <i>Biomicrofluidics</i> , 2017, 11, 024118.	2.4	7
23	Molecular assembly of rhodopsin with G protein-coupled receptor kinases. <i>Cell Research</i> , 2017, 27, 728-747.	12.0	40
24	The Primary Photochemistry of Vision Occurs at the Molecular Speed Limit. <i>Journal of Physical Chemistry B</i> , 2017, 121, 4040-4047.	2.6	42
25	Utilizing tagged paramagnetic shift reagents to monitor protein dynamics by NMR. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 1555-1563.	2.3	4
26	Recent advances in biophysical studies of rhodopsins – Oligomerization, folding, and structure. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2017, 1865, 1512-1521.	2.3	27
27	Light-independent phospholipid scramblase activity of bacteriorhodopsin from <i>Halobacterium salinarum</i> . <i>Scientific Reports</i> , 2017, 7, 9522.	3.3	24
28	Identification of Phosphorylation Codes for Arrestin Recruitment by G Protein-Coupled Receptors. <i>Cell</i> , 2017, 170, 457-469.e13.	28.9	344
29	Accessible virtual reality of biomolecular structural models using the Autodesk Molecule Viewer. <i>Nature Methods</i> , 2017, 14, 1122-1123.	19.0	31
30	Low-dose fixed-target serial synchrotron crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 373-378.	2.3	91
31	<i>TakeTwo</i> : an indexing algorithm suited to still images with known crystal parameters. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 956-965.	2.3	35
32	Toward Precise Interpretation of DEER-Based Distance Distributions: Insights from Structural Characterization of V1 Spin-Labeled Side Chains. <i>Biochemistry</i> , 2016, 55, 5256-5263.	2.5	18
33	Activation of the A2A adenosine G-protein-coupled receptor by conformational selection. <i>Nature</i> , 2016, 533, 265-268.	27.8	290
34	A Versatile System for High-Throughput In Situ X-ray Screening and Data Collection of Soluble and Membrane-Protein Crystals. <i>Crystal Growth and Design</i> , 2016, 16, 6318-6326.	3.0	22
35	7TM Domain Structure of Adhesion GPCRs. <i>Handbook of Experimental Pharmacology</i> , 2016, 234, 43-66.	1.8	13
36	Dimerization deficiency of enigmatic retinitis pigmentosa-linked rhodopsin mutants. <i>Nature Communications</i> , 2016, 7, 12832.	12.8	54

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37	Fixed target combined with spectral mapping: approaching 100% hit rates for serial crystallography. <i>Acta Crystallographica Section D: Structural Biology</i> , 2016, 72, 944-955.	2.3	71
38	The effect of phosphorylation on arrestin-rhodopsin interaction in the squid visual system. <i>Journal of Neurochemistry</i> , 2015, 135, 1129-1139.	3.9	5
39	Does ketamine target olfactory receptors in the brain?. <i>Science Signaling</i> , 2015, 8, fs6.	3.6	1
40	Phospholipid scrambling by rhodopsin. <i>Photochemical and Photobiological Sciences</i> , 2015, 14, 1922-1931.	2.9	39
41	Crystal structure of rhodopsin bound to arrestin by femtosecond X-ray laser. <i>Nature</i> , 2015, 523, 561-567.	27.8	683
42	Rapid and Facile Recombinant Expression of Bovine Rhodopsin in HEK293S GnT1 ⁻ Cells Using a PiggyBac Inducible System. <i>Methods in Enzymology</i> , 2015, 556, 307-330.	1.0	11
43	Local vibrational coherences drive the primary photochemistry of vision. <i>Nature Chemistry</i> , 2015, 7, 980-986.	13.6	162
44	Coupling of G Proteins to Reconstituted Monomers and Tetramers of the M2 Muscarinic Receptor. <i>Journal of Biological Chemistry</i> , 2014, 289, 24347-24365.	3.4	35
45	Constitutive phospholipid scramblase activity of a G protein-coupled receptor. <i>Nature Communications</i> , 2014, 5, 5115.	12.8	112
46	Microbial and Animal Rhodopsins: Structures, Functions, and Molecular Mechanisms. <i>Chemical Reviews</i> , 2014, 114, 126-163.	47.7	897
47	The photocycle and ultrafast vibrational dynamics of bacteriorhodopsin in lipid nanodiscs. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 21310-21320.	2.8	37
48	Opsin, a Structural Model for Olfactory Receptors?. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11021-11024.	13.8	66
49	3P035 Opsin, Structural Model for Olfactory Receptors(01A. Protein: Structure,Poster). <i>Seibutsu Butsuri</i> , 2013, 53, S217.	0.1	0
50	Crystal structure of metarhodopsin II. <i>Nature</i> , 2011, 471, 651-655.	27.8	620
51	Crystal structure of opsin in its G-protein-interacting conformation. <i>Nature</i> , 2008, 455, 497-502.	27.8	1,019
52	High-resolution distance mapping in rhodopsin reveals the pattern of helix movement due to activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 7439-7444.	7.1	436
53	Monomeric G protein-coupled receptor rhodopsin in solution activates its G protein transducin at the diffusion limit. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 10859-10864.	7.1	196