Thomas P Sakmar

List of Publications by Year
in descending order

225 papers	17,198 citations	13854 67 h-index	15716 125 g-index
241 all docs	241 docs citations	241 times ranked	15140 citing authors

#	Article	IF	Citations
1	Defeating Alzheimer's disease and other dementias: a priority for European science and society. Lancet Neurology, The, 2016, 15, 455-532.	4.9	1,242
2	Glutamic acid-113 serves as the retinylidene Schiff base counterion in bovine rhodopsin.. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 8309-8313.	3.3	760
3	AMD3100, a small molecule inhibitor of HIV-1 entry via the CXCR4 co-receptor. Nature Medicine, 1998, 4, 72-77.	15.2	760
4	Rhodopsin mutants that bind but fail to activate transducin. Science, 1990, 250, 123-125.	6.0	460
5	Rhodopsin activation blocked by metal-ion-binding sites linking transmembrane helices C and F. Nature, 1996, 383, 347-350.	13.7	429
6	Cysteine residues 110 and 187 are essential for the formation of correct structure in bovine rhodopsin.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 8459-8463.	3.3	416
7	A binding pocket for a small molecule inhibitor of HIV-1 entry within the transmembrane helices of CCR5. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5639-5644.	3.3	413
8	Update on Alzheimer's Disease Therapy and Prevention Strategies. Annual Review of Medicine, 2017, 68, 413-430.	5.0	402
9	G Protein-Coupled Receptors Self-Assemble in Dynamics Simulations of Model Bilayers. Journal of the American Chemical Society, 2007, 129, 10126-10132.	6.6	298
10	CXCR7/CXCR4 Heterodimer Constitutively Recruits Î²-Arrestin to Enhance Cell Migration. Journal of Biological Chemistry, 2011, 286, 32188-32197.	1.6	295
11	Rhodopsin: Structural Basis of Molecular Physiology. Physiological Reviews, 2001, 81, 1659-1688.	13.1	291
12	Curvature and Hydrophobic Forces Drive Oligomerization and Modulate Activity of Rhodopsin in Membranes. Biophysical Journal, 2006, 91, 4464-4477.	0.2	261
13	Protonation states of membrane-embedded carboxylic acid groups in rhodopsin and metarhodopsin II: a Fourier-transform infrared spectroscopy study of site-directed mutants.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 10206-10210.	3.3	260
14	Structural Basis of CXCR4 Sulfotyrosine Recognition by the Chemokine SDF-1/CXCL12. Science Signaling, 2008, 1, ra4.	1.6	256
15	Tracking G-protein-coupled receptor activation using genetically encoded infrared probes. Nature, 2010, 464, 1386-1389.	13.7	245
16	Specific Tryptophan UV-Absorbance Changes Are Probes of the Transition of Rhodopsin to Its Active Stateâ€. Biochemistry, 1996, 35, 11149-11159.	1.2	244
17	Regulation of the rhodopsin-transducin interaction by a highly conserved carboxylic acid group. Biochemistry, 1993, 32, 7229-7236.	1.2	240
18	Recurrent activating mutations of G-protein-coupled receptor CYSLTR2 in uveal melanoma. Nature Genetics, 2016, 48, 675-680.	9.4	236

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19	Rhodopsin: Insights from Recent Structural Studies. Annual Review of Biophysics and Biomolecular Structure, 2002, 31, 443-484.	18.3	222
20	Helix movement is coupled to displacement of the second extracellular loop in rhodopsin activation. Nature Structural and Molecular Biology, 2009, 16, 168-175.	3.6	210
21	Amino-Terminal Substitutions in the CCR5 Coreceptor Impair gp120 Binding and Human Immunodeficiency Virus Type 1 Entry. Journal of Virology, 1998, 72, 279-285.	1.5	209
22	Retinal counterion switch in the photoactivation of the G protein-coupled receptor rhodopsin. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9262-9267.	3.3	204
23	Targeting of the pulmonary capillary vascular niche promotes lung alveolar repair and ameliorates fibrosis. Nature Medicine, 2016, 22, 154-162.	15.2	201
24	Analysis of the Mechanism by Which the Small-Molecule CCR5 Antagonists SCH-351125 and SCH-350581 Inhibit Human Immunodeficiency Virus Type 1 Entry. Journal of Virology, 2003, 77, 5201-5208.	1.5	200
25	Structural Determinants of the Supramolecular Organization of G Protein-Coupled Receptors in Bilayers. Journal of the American Chemical Society, 2012, 134, 10959-10965.	6.6	199
26	How color visual pigments are tuned. Trends in Biochemical Sciences, 1999, 24, 300-305.	3.7	198
27	Specific interaction of CCR5 amino-terminal domain peptides containing sulfotyrosines with HIV-1 envelope glycoprotein gp120. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5762-5767.	3.3	182
28	FTIR analysis of GPCR activation using azido probes. Nature Chemical Biology, 2009, 5, 397-399.	3.9	173
29	Bilateral olfactory sensory input enhances chemotaxis behavior. Nature Neuroscience, 2008, 11, 187-199.	7.1	167
30	Identification of Glutamic Acid 113 as the Schiff Base Proton Acceptor in the Metarhodopsin II Photointermediate of Rhodopsin. Biochemistry, 1994, 33, 10878-10882.	1.2	156
31	Site-specific Incorporation of Keto Amino Acids into Functional G Protein-coupled Receptors Using Unnatural Amino Acid Mutagenesis. Journal of Biological Chemistry, 2008, 283, 1525-1533.	1.6	155
32	Opsin Is a Phospholipid Flippase. Current Biology, 2011, 21, 149-153.	1.8	154
33	Constitutive Activation of Opsin by Mutation of Methionine 257 on Transmembrane Helix 6â€. Biochemistry, 1998, 37, 8253-8261.	1.2	150
34	Functional Role of the â€œIonic Lockâ€â€"An Interhelical Hydrogen-Bond Network in Family A Heptahelical Receptors. Journal of Molecular Biology, 2008, 380, 648-655.	2.0	148
35	Recreating a Functional Ancestral Archosaur Visual Pigment. Molecular Biology and Evolution, 2002, 19, 1483-1489.	3.5	147
36	The role of the retinylidene Schiff base counterion in rhodopsin in determining wavelength absorbance and Schiff base pKa.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 3079-3083.	3.3	146

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37	Mutation of the Fourth Cytoplasmic Loop of Rhodopsin Affects Binding of Transducin and Peptides Derived from the Carboxyl-terminal Sequences of Transducin Î± and Î³ Subunits. Journal of Biological Chemistry, 2000, 275, 1937-1943.	1.6	146
38	Mechanisms of Spectral Tuning in Blue Cone Visual Pigments. Journal of Biological Chemistry, 1998, 273, 24583-24591.	1.6	126
39	Interaction of small molecule inhibitors of HIV-1 entry with CCR5. Virology, 2006, 349, 41-54.	1.1	123
40	The Amino Terminus of the Fourth Cytoplasmic Loop of Rhodopsin Modulates Rhodopsin-Transducin Interaction. Journal of Biological Chemistry, 2000, 275, 1930-1936.	1.6	121
41	Recognition of a CXCR4 Sulfotyrosine by the Chemokine Stromal Cell-derived Factor-1Î± (SDF-1Î±/CXCL12). Journal of Molecular Biology, 2006, 359, 1400-1409.	2.0	116
42	Parietal-Eye Phototransduction Components and Their Potential Evolutionary Implications. Science, 2006, 311, 1617-1621.	6.0	113
43	Rapid Incorporation of Functional Rhodopsin into Nanoscale Apolipoprotein Bound Bilayer (NABB) Particles. Journal of Molecular Biology, 2008, 377, 1067-1081.	2.0	110
44	Structure of rhodopsin and the superfamily of seven-helical receptors: the same and not the same. Current Opinion in Cell Biology, 2002, 14, 189-195.	2.6	107
45	The Role of Glu181 in the Photoactivation of Rhodopsin. Journal of Molecular Biology, 2005, 353, 345-356.	2.0	105
46	Tyrosine sulfation of CCR5 N-terminal peptide by tyrosylprotein sulfotransferases 1 and 2 follows a discrete pattern and temporal sequence. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 11031-11036.	3.3	100
47	The steric trigger in rhodopsin activation 1 1Edited by F. E.Cohen. Journal of Molecular Biology, 1997, 269, 373-384.	2.0	98
48	Toward a framework for sulfoproteomics: Synthesis and characterization of sulfotyrosineâ€containing peptides. Biopolymers, 2008, 90, 459-477.	1.2	97
49	Evidence That Helix 8 of Rhodopsin Acts as a Membrane-Dependent Conformational Switchâ€. Biochemistry, 2002, 41, 8298-8309.	1.2	95
50	Dopamine D4/D2 Receptor Selectivity Is Determined by A Divergent Aromatic Microdomain Contained within the Second, Third, and Seventh Membrane-Spanning Segments. Molecular Pharmacology, 1999, 56, 1116-1126.	1.0	92
51	Function of Extracellular Loop 2 in Rhodopsin:Â Glutamic Acid 181 Modulates Stability and Absorption Wavelength of Metarhodopsin IIâ€. Biochemistry, 2002, 41, 3620-3627.	1.2	92
52	Mapping the Ligand-Binding Site on a G Protein-Coupled Receptor (GPCR) Using Genetically Encoded Photocrosslinkers. Biochemistry, 2011, 50, 3411-3413.	1.2	91
53	Discovery of a CXCR4 agonist pepducin that mobilizes bone marrow hematopoietic cells. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 22255-22259.	3.3	90
54	Interaction of A2E with Model Membranes. Implications to the Pathogenesis of Age-related Macular Degeneration. Journal of General Physiology, 2002, 120, 147-157.	0.9	89

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55	Characterization of Deletion and Truncation Mutants of the Rat Glucagon Receptor. Journal of Biological Chemistry, 1995, 270, 27720-27727.	1.6	86
56	Rhodopsin: A Prototypical G Protein-Coupled Receptor. Progress in Molecular Biology and Translational Science, 1997, 59, 1-34.	1.9	84
57	Sequential Tyrosine Sulfation of CXCR4 by Tyrosylprotein Sulfotransferases. Biochemistry, 2008, 47, 11251-11262.	1.2	84
58	CXC Chemokine Receptor 3 Alternative Splice Variants Selectively Activate Different Signaling Pathways. Molecular Pharmacology, 2016, 90, 483-495.	1.0	84
59	Spectroscopic Evidence for Interaction between Transmembrane Helices 3 and 5 in Rhodopsinâ€. Biochemistry, 1998, 37, 7630-7639.	1.2	82
60	The state of GPCR research in 2004. Nature Reviews Drug Discovery, 2004, 3, 577-626.	21.5	81
61	Functional Interaction of Transmembrane Helices 3 and 6 in Rhodopsin. Journal of Biological Chemistry, 1996, 271, 32337-32342.	1.6	79
62	Small-Molecule Antagonists of CCR5 and CXCR4: A Promising New Class of Anti-HIV-1 Drugs. Current Pharmaceutical Design, 2004, 10, 2041-2062.	0.9	79
63	Characterization of Rhodopsin Mutants That Bind Transducin but Fail to Induce GTP Nucleotide Uptake. Journal of Biological Chemistry, 1995, 270, 10580-10586.	1.6	78
64	G protein Î²Î³ subunit interaction with the dynein light-chain component Tctex-1 regulates neurite outgrowth. EMBO Journal, 2007, 26, 2621-2632.	3.5	76
65	Transducin-Dependent Protonation of Glutamic Acid 134 in Rhodopsinâ€. Biochemistry, 2000, 39, 10607-10612.	1.2	73
66	The Effects of Amino Acid Replacements of Glycine 121 on Transmembrane Helix 3 of Rhodopsin. Journal of Biological Chemistry, 1996, 271, 32330-32336.	1.6	71
67	The C9 methyl group of retinal interacts with glycine-121 in rhodopsin. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 13442-13447.	3.3	69
68	Resonance Raman microprobe spectroscopy of rhodopsin mutants: effect of substitutions in the third transmembrane helix. Biochemistry, 1992, 31, 5105-5111.	1.2	67
69	Genetically Encoded Photo-cross-linkers Map the Binding Site of an Allosteric Drug on a G Protein-Coupled Receptor. ACS Chemical Biology, 2012, 7, 967-972.	1.6	67
70	Selective Reconstitution of Human D4 Dopamine Receptor Variants with GiÎ± Subtypes. Biochemistry, 2000, 39, 3734-3744.	1.2	65
71	Rhodopsin Forms a Dimer with Cytoplasmic Helix 8 Contacts in Native Membranes. Biochemistry, 2012, 51, 1819-1821.	1.2	65
72	Direct Interaction between an Allosteric Agonist Pepducin and the Chemokine Receptor CXCR4. Journal of the American Chemical Society, 2011, 133, 15878-15881.	6.6	64

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73	Light-dependent transducin activation by an ultraviolet-absorbing rhodopsin mutant. Biochemistry, 1993, 32, 9165-9171.	1.2	62
74	Rapid Activation of Transducin by Mutations Distant from the Nucleotide-binding Site. Journal of Biological Chemistry, 2001, 276, 27400-27405.	1.6	62
75	Characterization of Rhodopsin-Transducin Interaction: A Mutant Rhodopsin Photoproduct with a Protonated Schiff Base Activates Transducin. Biochemistry, 1994, 33, 9753-9761.	1.2	61
76	Structural Basis for Ligand Binding and Specificity in Adrenergic Receptors: Implications for GPCR-Targeted Drug Discovery. Biochemistry, 2008, 47, 11013-11023.	1.2	60
77	Multiple CCR5 Conformations on the Cell Surface Are Used Differentially by Human Immunodeficiency Viruses Resistant or Sensitive to CCR5 Inhibitors. Journal of Virology, 2011, 85, 8227-8240.	1.5	60
78	Photoactivated state of rhodopsin and how it can form. Biophysical Chemistry, 1995, 56, 171-181.	1.5	59
79	Role of the C9Methyl Group in Rhodopsin Activation:Â Characterization of Mutant Opsins with the Artificial Chromophore 11-cis-9-Demethylretinalâ€. Biochemistry, 1998, 37, 538-545.	1.2	58
80	Antibodies against specific extracellular epitopes of the glucagon receptor block glucagon binding.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 310-315.	3.3	55
81	Multiplexed analysis of the secretin-like GPCR-RAMP interactome. Science Advances, 2019, 5, eaaw2778.	4.7	54
82	Characterization of the Mutant Visual Pigment Responsible for Congenital Night Blindness:Â A Biochemical and Fourier-Transform Infrared Spectroscopy Studyâ€. Biochemistry, 1996, 35, 7536-7545.	1.2	53
83	Disruption of the Î±5 Helix of Transducin Impairs Rhodopsin-Catalyzed Nucleotide Exchangeâ€. Biochemistry, 2002, 41, 6988-6994.	1.2	51
84	Resonance Raman Analysis of the Mechanism of Energy Storage and Chromophore Distortion in the Primary Visual Photoproductâ€. Biochemistry, 2004, 43, 10867-10876.	1.2	51
85	Genetically encoded photocrosslinkers locate the high-affinity binding site of antidepressant drugs in the human serotonin transporter. Nature Communications, 2016, 7, 11261.	5.8	51
86	Evidence for the specific interaction of a lipid molecule with rhodopsin which is altered in the transition to the active state metarhodopsin II1. FEBS Letters, 1998, 436, 304-308.	1.3	49
87	Two Cytoplasmic Loops of the Glucagon Receptor Are Required to Elevate cAMP or Intracellular Calcium. Journal of Biological Chemistry, 1999, 274, 19455-19464.	1.6	49
88	Agonists and Partial Agonists of Rhodopsin:Â Retinal Polyene Methylation Affects Receptor Activationâ€. Biochemistry, 2006, 45, 1640-1652.	1.2	49
89	Mapping Substance P Binding Sites on the Neurokinin-1 Receptor Using Genetic Incorporation of a Photoreactive Amino Acid. Journal of Biological Chemistry, 2014, 289, 18045-18054.	1.6	49
90	Chromophore structural changes in rhodopsin from nanoseconds to microseconds following pigment photolysis. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 8557-8562.	3.3	48

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91	A Mutant Rhodopsin Photoproduct with a Protonated Schiff Base Displays an Active-State Conformation: A Fourier-Transform Infrared Spectroscopy Study. Biochemistry, 1994, 33, 13700-13705.	1.2	47
92	Glucagon receptor activates extracellular signal-regulated protein kinase 1/2 via cAMP-dependent protein kinase. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 10102-10107.	3.3	47
93	Probing G Protein-Coupled Receptorâ€"Ligand Interactions with Targeted Photoactivatable Cross-Linkers. Biochemistry, 2013, 52, 8625-8632.	1.2	46
94	Rhodopsin Activation Affects the Environment of Specific Neighboring Phospholipids: An FTIR Spectroscopic Study. Biophysical Journal, 2000, 79, 3063-3071.	0.2	45
95	Roles of Specific Extracellular Domains of the Glucagon Receptor in Ligand Binding and Signalingâ€. Biochemistry, 2002, 41, 11795-11803.	1.2	45
96	Crystal Structure of the SH3 Domain of Î²PIX in Complex with a High Affinity Peptide from PAK2. Journal of Molecular Biology, 2006, 358, 509-522.	2.0	45
97	Structural Evidence for a Sequential Release Mechanism for Activation of Heterotrimeric G Proteins. Journal of Molecular Biology, 2009, 393, 882-897.	2.0	45
98	Direct Measurement of Thermal Stability of Expressed CCR5 and Stabilization by Small Molecule Ligands. Biochemistry, 2011, 50, 502-511.	1.2	44
99	Energetics Underlying Twist Polymorphisms in Amyloid Fibrils. Journal of Physical Chemistry B, 2018, 122, 1081-1091.	1.2	44
100	Bioorthogonal Fluorescent Labeling of Functional Gâ€Proteinâ€Coupled Receptors. ChemBioChem, 2014, 15, 1820-1829.	1.3	43
101	The Differential Sensitivity of Human and Rhesus Macaque CCR5 to Small-Molecule Inhibitors of Human Immunodeficiency Virus Type 1 Entry Is Explained by a Single Amino Acid Difference and Suggests a Mechanism of Action for These Inhibitors. Journal of Virology, 2004, 78, 4134-4144.	1.5	42
102	Site-specific in vitro and in vivo incorporation of molecular probes to study G-protein-coupled receptors. Current Opinion in Chemical Biology, 2011, 15, 392-398.	2.8	41
103	Genetically encoded photocross-linkers determine the biological binding site of exendin-4 peptide in the N-terminal domain of the intact human glucagon-like peptide-1 receptor (GLP-1R). Journal of Biological Chemistry, 2017, 292, 7131-7144.	1.6	41
104	G proteinâ€"coupled receptor modulation with pepducins: moving closer to the clinic. Annals of the New York Academy of Sciences, 2011, 1226, 34-49.	1.8	39
105	A simple method for enhancing the bioorthogonality of cyclooctyne reagent. Chemical Communications, 2016, 52, 5451-5454.	2.2	39
106	6-<i>s-cis</i> Conformation and Polar Binding Pocket of the Retinal Chromophore in the Photoactivated State of Rhodopsin. Journal of the American Chemical Society, 2009, 131, 15160-15169.	6.6	38
107	Use of G-Protein-Coupled and -Uncoupled CCR5 Receptors by CCR5 Inhibitor-Resistant and -Sensitive Human Immunodeficiency Virus Type 1 Variants. Journal of Virology, 2013, 87, 6569-6581.	1.5	38
108	Chemical Biology Methods for Investigating G Protein-Coupled Receptor Signaling. Chemistry and Biology, 2014, 21, 1224-1237.	6.2	38

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109	Partial Agonist Activity of 11-cis-Retinal in Rhodopsin Mutants. Journal of Biological Chemistry, 1997, 272, 23081-23085.	1.6	37
110	Site-Specific Epitope Tagging of G Protein-Coupled Receptors by Bioorthogonal Modification of a Genetically Encoded Unnatural Amino Acid. Biochemistry, 2013, 52, 1028-1036.	1.2	37
111	Escaping the flatlands: new approaches for studying the dynamic assembly and activation of GPCR signaling complexes. Trends in Pharmacological Sciences, 2011, 32, 410-419.	4.0	35
112	DNA-encircled lipid bilayers. Nanoscale, 2018, 10, 18463-18467.	2.8	35
113	Epitranscriptomic profiling across cell types reveals associations between APOBEC1-mediated RNA editing, gene expression outcomes, and cellular function. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13296-13301.	3.3	33
114	The Function of Interdomain Interactions in Controlling Nucleotide Exchange Rates in Transducin. Journal of Biological Chemistry, 2001, 276, 23873-23880.	1.6	32
115	Coupling of Protonation Switches During Rhodopsin Activationâ€. Photochemistry and Photobiology, 2007, 83, 286-292.	1.3	32
116	Unnatural Amino Acid Mutagenesis of GPCRs Using Amber Codon Suppression and Bioorthogonal Labeling. Methods in Enzymology, 2013, 520, 281-305.	0.4	32
117	G protein subtypeâ€"specific signaling bias in a series of CCR5 chemokine analogs. Science Signaling, 2018, 11, .	1.6	31
118	GPCRs globally coevolved with receptor activity-modifying proteins, RAMPs. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12015-12020.	3.3	30
119	Properties and Photoactivity of Rhodopsin Mutants. Israel Journal of Chemistry, 1995, 35, 325-337.	1.0	29
120	Nucleobindin 1 binds to multiple types of pre-fibrillar amyloid and inhibits fibrillization. Scientific Reports, 2017, 7, 42880.	1.6	29
121	Combined Inhibition of GÎ±q and MEK Enhances Therapeutic Efficacy in Uveal Melanoma. Clinical Cancer Research, 2021, 27, 1476-1490.	3.2	29
122	Time-Resolved Photointermediate Changes in Rhodopsin Glutamic Acid 181 Mutantsâ€. Biochemistry, 2004, 43, 12614-12621.	1.2	28
123	Nucleobindin 1 Is a Calcium-regulated Guanine Nucleotide Dissociation Inhibitor of GÎ±i1. Journal of Biological Chemistry, 2010, 285, 31647-31660.	1.6	28
124	Antibody Epitopes on G Protein-Coupled Receptors Mapped with Genetically Encoded Photoactivatable Cross-Linkers. Biochemistry, 2014, 53, 1302-1310.	1.2	28
125	Selective Stabilization of the High Affinity Binding Conformation of Glucagon Receptor by the Long Splice Variant of GÎ±s. Journal of Biological Chemistry, 2000, 275, 21631-21638.	1.6	26
126	Total synthesis and expression of a gene for the Î±-subunit of bovine rod outer segment guanine nucleotide-binding protein (transducin). Nucleic Acids Research, 1988, 16, 6361-6372.	6.5	25

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127	Spectroscopic Evidence for Altered Chromophoreâˆ'Protein Interactions in Low-Temperature Photoproducts of the Visual Pigment Responsible for Congenital Night Blindnessâ€. Biochemistry, 1996, 35, 15065-15073.	1.2	25
128	Reconstitution of the Vertebrate Visual Cascade Using Recombinant Heterotrimeric Transducin Purified from Sf9 Cells. Protein Expression and Purification, 2000, 20, 514-526.	0.6	25
129	A Novel Interaction between Atrophin-interacting Protein 4 and Î²-p21-activated Kinase-interactive Exchange Factor Is Mediated by an SH3 Domain. Journal of Biological Chemistry, 2007, 282, 28893-28903.	1.6	25
130	Spectral Tuning of Ultraviolet Cone Pigments: An Interhelical Lock Mechanism. Journal of the American Chemical Society, 2013, 135, 19064-19067.	6.6	24
131	Properties of Early Photolysis Intermediates of Rhodopsin Are Affected by Glycine 121 and Phenylalanine 261â€. Biochemistry, 1997, 36, 11804-11810.	1.2	23
132	Principles and practice for SARS-CoV-2 decontamination of N95 masks with UV-C. Biophysical Journal, 2021, 120, 2927-2942.	0.2	23
133	Modulating Rhodopsin Receptor Activation by Altering the pKaof the Retinal Schiff Base. Journal of the American Chemical Society, 2006, 128, 10503-10512.	6.6	22
134	Photointermediates of the Rhodopsin S186A Mutant as a Probe of the Hydrogen-Bond Network in the Chromophore Pocket and the Mechanism of Counterion Switchâ€. Journal of Physical Chemistry C, 2007, 111, 8843-8848.	1.5	22
135	Direct evidence that the GPCR CysLTR2 mutant causative of uveal melanoma is constitutively active with highly biased signaling. Journal of Biological Chemistry, 2021, 296, 100163.	1.6	22
136	SEIRA Spectroscopy on a Membrane Receptor Monolayer Using Lipoprotein Particles as Carriers. Biophysical Journal, 2010, 99, 2327-2335.	0.2	21
137	Nucleobindin 1 Caps Human Islet Amyloid Polypeptide Protofibrils to Prevent Amyloid Fibril Formation. Journal of Molecular Biology, 2012, 421, 378-389.	2.0	21
138	Genetic code expansion and photocross-linking identify different Î²-arrestin binding modes to the angiotensin II type 1 receptor. Journal of Biological Chemistry, 2019, 294, 17409-17420.	1.6	21
139	Photoaffinity Cross-Linking and Unnatural Amino Acid Mutagenesis Reveal Insights into Calcitonin Gene-Related Peptide Binding to the Calcitonin Receptor-like Receptor/Receptor Activity-Modifying Protein 1 (CLR/RAMP1) Complex. Biochemistry, 2018, 57, 4915-4922.	1.2	20
140	Time-Resolved Spectroscopy of the Early Photolysis Intermediates of Rhodopsin Schiff Base Counterion Mutantsâ€. Biochemistry, 1997, 36, 1999-2009.	1.2	19
141	pH Dependence of Photolysis Intermediates in the Photoactivation of Rhodopsin Mutant E113Q. Biochemistry, 2000, 39, 599-606.	1.2	19
142	Mapping a Ligand Binding Site Using Genetically Encoded Photoactivatable Crosslinkers. Methods in Enzymology, 2013, 520, 307-322.	0.4	19
143	Introduction: G-Protein Coupled Receptors. Chemical Reviews, 2017, 117, 1-3.	23.0	19
144	[13] Structural determinants of active state conformation of rhodopsin: Molecular biophysics approaches. Methods in Enzymology, 2000, 315, 178-196.	0.4	18

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145	Micelleâ€Enhanced Bioorthogonal Labeling of Genetically Encoded Azido Groups on the Lipidâ€Embedded Surface of a GPCR. ChemBioChem, 2015, 16, 1314-1322.	1.3	18
146	Complex Photochemistry within the Green-Absorbing Channelrhodopsin ReaChR. Biophysical Journal, 2017, 112, 1166-1175.	0.2	18
147	Third-Party Capture of Elusive GPCR Dimers. Biophysical Journal, 2019, 116, 1-3.	0.2	18
148	Synthetic gene technology: Applications to ancestral gene reconstruction and structure-function studies of receptors. Methods in Enzymology, 2002, 343, 274-294.	0.4	17
149	Bioorthogonal Labeling of Ghrelin Receptor to Facilitate Studies of Ligand-Dependent Conformational Dynamics. Chemistry and Biology, 2015, 22, 1431-1436.	6.2	17
150	Isopeptide and ester bond ubiquitination both regulate degradation of the human dopamine receptor 4. Journal of Biological Chemistry, 2017, 292, 21623-21630.	1.6	17
151	Snapshot of a signalling complex. Nature, 2011, 477, 540-541.	13.7	16
152	Multiplex Detection of Functional G Protein-Coupled Receptors Harboring Site-Specifically Modified Unnatural Amino Acids. Biochemistry, 2015, 54, 776-786.	1.2	16
153	Length-dependent gene misexpression is associated with Alzheimerâ€™s disease progression. Scientific Reports, 2017, 7, 190.	1.6	16
154	The Energetics of Chromophore Binding in the Visual Photoreceptor Rhodopsin. Biophysical Journal, 2017, 113, 60-72.	0.2	16
155	14-3-3 signal adaptor and scaffold proteins mediate GPCR trafficking. Scientific Reports, 2019, 9, 11156.	1.6	15
156	Frizzled BRET sensors based on bioorthogonal labeling of unnatural amino acids reveal WNT-induced dynamics of the cysteine-rich domain. Science Advances, 2021, 7, eabj7917.	4.7	15
157	Measurement of Slow Spontaneous Release ofÂ11-cis-Retinal from Rhodopsin. Biophysical Journal, 2017, 112, 153-161.	0.2	14
158	Site-Specific Labeling of Genetically Encoded Azido Groups for Multicolor, Single-Molecule Fluorescence Imaging of GPCRs. Methods in Cell Biology, 2013, 117, 267-303.	0.5	13
159	Dual Bioorthogonal Labeling of the Amyloid-Î² Protein Precursor Facilitates Simultaneous Visualization of the Protein and Its Cleavage Products. Journal of Alzheimer's Disease, 2019, 72, 537-548.	1.2	13
160	High-Affinity Binding of Chemokine Analogs that Display Ligand Bias at the HIV-1 Coreceptor CCR5. Biophysical Journal, 2019, 117, 903-919.	0.2	13
161	[18] Assays for activation of recombinant expressed opsins by all-trans-retinals. Methods in Enzymology, 2000, 315, 251-267.	0.4	12
162	Methodology of Pulsed Photoacoustics and Its Application to Probe Photosystems and Receptors. Sensors, 2010, 10, 5642-5667.	2.1	12

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