

Thomas P Sakmar

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202
papers

14,907
citations

64
h-index

118
g-index

241
ext. papers

16,155
ext. citations

8.6
avg, IF

6.36
L-index

#	Paper	IF	Citations
202	Defeating Alzheimer's disease and other dementias: a priority for European science and society. <i>Lancet Neurology, The</i> , 2016 , 15, 455-532	24.1	921
201	Glutamic acid-113 serves as the retinylidene Schiff base counterion in bovine rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1989 , 86, 8309-13	11.5	701
200	AMD3100, a small molecule inhibitor of HIV-1 entry via the CXCR4 co-receptor. <i>Nature Medicine</i> , 1998 , 4, 72-7	50.5	688
199	Rhodopsin mutants that bind but fail to activate transducin. <i>Science</i> , 1990 , 250, 123-5	33.3	438
198	Rhodopsin activation blocked by metal-ion-binding sites linking transmembrane helices C and F. <i>Nature</i> , 1996 , 383, 347-50	50.4	403
197	A binding pocket for a small molecule inhibitor of HIV-1 entry within the transmembrane helices of CCR5. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 5639-44	11.5	387
196	Cysteine residues 110 and 187 are essential for the formation of correct structure in bovine rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1988 , 85, 8459-63	11.5	384
195	Update on Alzheimer's Disease Therapy and Prevention Strategies. <i>Annual Review of Medicine</i> , 2017 , 68, 413-430	17.4	296
194	G protein-coupled receptors self-assemble in dynamics simulations of model bilayers. <i>Journal of the American Chemical Society</i> , 2007 , 129, 10126-32	16.4	275
193	Rhodopsin: structural basis of molecular physiology. <i>Physiological Reviews</i> , 2001 , 81, 1659-88	47.9	273
192	CXCR7/CXCR4 heterodimer constitutively recruits beta-arrestin to enhance cell migration. <i>Journal of Biological Chemistry</i> , 2011 , 286, 32188-97	5.4	247
191	Protonation states of membrane-embedded carboxylic acid groups in rhodopsin and metarhodopsin II: a Fourier-transform infrared spectroscopy study of site-directed mutants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993 , 90, 10206-10	11.5	240
190	Regulation of the rhodopsin-transducin interaction by a highly conserved carboxylic acid group. <i>Biochemistry</i> , 1993 , 32, 7229-36	3.2	237
189	Specific tryptophan UV-absorbance changes are probes of the transition of rhodopsin to its active state. <i>Biochemistry</i> , 1996 , 35, 11149-59	3.2	232
188	Curvature and hydrophobic forces drive oligomerization and modulate activity of rhodopsin in membranes. <i>Biophysical Journal</i> , 2006 , 91, 4464-77	2.9	229
187	Tracking G-protein-coupled receptor activation using genetically encoded infrared probes. <i>Nature</i> , 2010 , 464, 1386-9	50.4	220
186	Structural basis of CXCR4 sulfotyrosine recognition by the chemokine SDF-1/CXCL12. <i>Science Signaling</i> , 2008 , 1, ra4	8.8	215

185	Rhodopsin: insights from recent structural studies. <i>Annual Review of Biophysics and Biomolecular Structure</i> , 2002 , 31, 443-84		193
184	Analysis of the mechanism by which the small-molecule CCR5 antagonists SCH-351125 and SCH-350581 inhibit human immunodeficiency virus type 1 entry. <i>Journal of Virology</i> , 2003 , 77, 5201-8	6.6	189
183	Amino-terminal substitutions in the CCR5 coreceptor impair gp120 binding and human immunodeficiency virus type 1 entry. <i>Journal of Virology</i> , 1998 , 72, 279-85	6.6	188
182	Helix movement is coupled to displacement of the second extracellular loop in rhodopsin activation. <i>Nature Structural and Molecular Biology</i> , 2009 , 16, 168-75	17.6	184
181	Retinal counterion switch in the photoactivation of the G protein-coupled receptor rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 9262-7	11.5	182
180	Structural determinants of the supramolecular organization of G protein-coupled receptors in bilayers. <i>Journal of the American Chemical Society</i> , 2012 , 134, 10959-65	16.4	181
179	How color visual pigments are tuned. <i>Trends in Biochemical Sciences</i> , 1999 , 24, 300-5	10.3	178
178	Recurrent activating mutations of G-protein-coupled receptor CYSLTR2 in uveal melanoma. <i>Nature Genetics</i> , 2016 , 48, 675-80	36.3	178
177	Specific interaction of CCR5 amino-terminal domain peptides containing sulfotyrosines with HIV-1 envelope glycoprotein gp120. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2000 , 97, 5762-7	11.5	165
176	FTIR analysis of GPCR activation using azido probes. <i>Nature Chemical Biology</i> , 2009 , 5, 397-9	11.7	152
175	Identification of glutamic acid 113 as the Schiff base proton acceptor in the metarhodopsin II photointermediate of rhodopsin. <i>Biochemistry</i> , 1994 , 33, 10878-82	3.2	145
174	Targeting of the pulmonary capillary vascular niche promotes lung alveolar repair and ameliorates fibrosis. <i>Nature Medicine</i> , 2016 , 22, 154-62	50.5	144
173	Bilateral olfactory sensory input enhances chemotaxis behavior. <i>Nature Neuroscience</i> , 2008 , 11, 187-99	25.5	144
172	Constitutive activation of opsin by mutation of methionine 257 on transmembrane helix 6. <i>Biochemistry</i> , 1998 , 37, 8253-61	3.2	138
171	Mutation of the fourth cytoplasmic loop of rhodopsin affects binding of transducin and peptides derived from the carboxyl-terminal sequences of transducin alpha and gamma subunits. <i>Journal of Biological Chemistry</i> , 2000 , 275, 1937-43	5.4	134
170	Functional role of the "ionic lock"--an interhelical hydrogen-bond network in family A heptahelical receptors. <i>Journal of Molecular Biology</i> , 2008 , 380, 648-55	6.5	132
169	Site-specific incorporation of keto amino acids into functional G protein-coupled receptors using unnatural amino acid mutagenesis. <i>Journal of Biological Chemistry</i> , 2008 , 283, 1525-1533	5.4	131
168	The role of the retinylidene Schiff base counterion in rhodopsin in determining wavelength absorbance and Schiff base pKa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1991 , 88, 3079-83	11.5	128

167	Recreating a functional ancestral archosaur visual pigment. <i>Molecular Biology and Evolution</i> , 2002 , 19, 1483-9	8.3	123
166	Interaction of small molecule inhibitors of HIV-1 entry with CCR5. <i>Virology</i> , 2006 , 349, 41-54	3.6	117
165	Opsin is a phospholipid flippase. <i>Current Biology</i> , 2011 , 21, 149-53	6.3	113
164	The amino terminus of the fourth cytoplasmic loop of rhodopsin modulates rhodopsin-transducin interaction. <i>Journal of Biological Chemistry</i> , 2000 , 275, 1930-6	5.4	107
163	Mechanisms of spectral tuning in blue cone visual pigments. Visible and raman spectroscopy of blue-shifted rhodopsin mutants. <i>Journal of Biological Chemistry</i> , 1998 , 273, 24583-91	5.4	104
162	Rapid incorporation of functional rhodopsin into nanoscale apolipoprotein bound bilayer (NABB) particles. <i>Journal of Molecular Biology</i> , 2008 , 377, 1067-81	6.5	101
161	Recognition of a CXCR4 sulfotyrosine by the chemokine stromal cell-derived factor-1alpha (SDF-1alpha/CXCL12). <i>Journal of Molecular Biology</i> , 2006 , 359, 1400-9	6.5	99
160	Parietal-eye phototransduction components and their potential evolutionary implications. <i>Science</i> , 2006 , 311, 1617-21	33.3	97
159	Structure of rhodopsin and the superfamily of seven-helical receptors: the same and not the same. <i>Current Opinion in Cell Biology</i> , 2002 , 14, 189-95	9	94
158	The steric trigger in rhodopsin activation. <i>Journal of Molecular Biology</i> , 1997 , 269, 373-84	6.5	93
157	The role of Glu181 in the photoactivation of rhodopsin. <i>Journal of Molecular Biology</i> , 2005 , 353, 345-56	6.5	92
156	Evidence that helix 8 of rhodopsin acts as a membrane-dependent conformational switch. <i>Biochemistry</i> , 2002 , 41, 8298-309	3.2	89
155	Dopamine D4/D2 receptor selectivity is determined by A divergent aromatic microdomain contained within the second, third, and seventh membrane-spanning segments. <i>Molecular Pharmacology</i> , 1999 , 56, 1116-26	4.3	88
154	Function of extracellular loop 2 in rhodopsin: glutamic acid 181 modulates stability and absorption wavelength of metarhodopsin II. <i>Biochemistry</i> , 2002 , 41, 3620-7	3.2	86
153	Tyrosine sulfation of CCR5 N-terminal peptide by tyrosylprotein sulfotransferases 1 and 2 follows a discrete pattern and temporal sequence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 11031-6	11.5	85
152	Toward a framework for sulfoproteomics: Synthesis and characterization of sulfotyrosine-containing peptides. <i>Biopolymers</i> , 2008 , 90, 459-77	2.2	82
151	Mapping the ligand-binding site on a G protein-coupled receptor (GPCR) using genetically encoded photocrosslinkers. <i>Biochemistry</i> , 2011 , 50, 3411-3	3.2	81
150	Characterization of deletion and truncation mutants of the rat glucagon receptor. Seven transmembrane segments are necessary for receptor transport to the plasma membrane and glucagon binding. <i>Journal of Biological Chemistry</i> , 1995 , 270, 27720-7	5.4	81

149	Spectroscopic evidence for interaction between transmembrane helices 3 and 5 in rhodopsin. <i>Biochemistry</i> , 1998 , 37, 7630-9	3.2	79
148	Interaction of A2E with model membranes. Implications to the pathogenesis of age-related macular degeneration. <i>Journal of General Physiology</i> , 2002 , 120, 147-57	3.4	79
147	Discovery of a CXCR4 agonist pepducin that mobilizes bone marrow hematopoietic cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 22255-9	11.5	78
146	Small-molecule antagonists of CCR5 and CXCR4: a promising new class of anti-HIV-1 drugs. <i>Current Pharmaceutical Design</i> , 2004 , 10, 2041-62	3.3	75
145	Characterization of rhodopsin mutants that bind transducin but fail to induce GTP nucleotide uptake. Classification of mutant pigments by fluorescence, nucleotide release, and flash-induced light-scattering assays. <i>Journal of Biological Chemistry</i> , 1995 , 270, 10580-6	5.4	71
144	Functional interaction of transmembrane helices 3 and 6 in rhodopsin. Replacement of phenylalanine 261 by alanine causes reversion of phenotype of a glycine 121 replacement mutant. <i>Journal of Biological Chemistry</i> , 1996 , 271, 32337-42	5.4	70
143	The state of GPCR research in 2004. <i>Nature Reviews Drug Discovery</i> , 2004 , 3, 575, 577-626	64.1	70
142	Rhodopsin: a prototypical G protein-coupled receptor. <i>Progress in Molecular Biology and Translational Science</i> , 1998 , 59, 1-34		69
141	Transducin-dependent protonation of glutamic acid 134 in rhodopsin. <i>Biochemistry</i> , 2000 , 39, 10607-12	3.2	68
140	The effects of amino acid replacements of glycine 121 on transmembrane helix 3 of rhodopsin. <i>Journal of Biological Chemistry</i> , 1996 , 271, 32330-6	5.4	68
139	The C9 methyl group of retinal interacts with glycine-121 in rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997 , 94, 13442-7	11.5	65
138	Sequential tyrosine sulfation of CXCR4 by tyrosylprotein sulfotransferases. <i>Biochemistry</i> , 2008 , 47, 11253-62	3.6	62
137	Selective reconstitution of human D4 dopamine receptor variants with Gi alpha subtypes. <i>Biochemistry</i> , 2000 , 39, 3734-44	3.2	61
136	Light-dependent transducin activation by an ultraviolet-absorbing rhodopsin mutant. <i>Biochemistry</i> , 1993 , 32, 9165-71	3.2	60
135	Genetically encoded photo-cross-linkers map the binding site of an allosteric drug on a G protein-coupled receptor. <i>ACS Chemical Biology</i> , 2012 , 7, 967-72	4.9	59
134	Resonance Raman microprobe spectroscopy of rhodopsin mutants: effect of substitutions in the third transmembrane helix. <i>Biochemistry</i> , 1992 , 31, 5105-11	3.2	59
133	G protein beta gamma subunit interaction with the dynein light-chain component Tctex-1 regulates neurite outgrowth. <i>EMBO Journal</i> , 2007 , 26, 2621-32	13	58
132	Characterization of rhodopsin-transducin interaction: a mutant rhodopsin photoproduct with a protonated Schiff base activates transducin. <i>Biochemistry</i> , 1994 , 33, 9753-61	3.2	58

131	Rhodopsin forms a dimer with cytoplasmic helix 8 contacts in native membranes. <i>Biochemistry</i> , 2012 , 51, 1819-21	3.2	57
130	Direct interaction between an allosteric agonist pepducin and the chemokine receptor CXCR4. <i>Journal of the American Chemical Society</i> , 2011 , 133, 15878-81	16.4	57
129	Photoactivated state of rhodopsin and how it can form. <i>Biophysical Chemistry</i> , 1995 , 56, 171-81	3.5	57
128	Structural basis for ligand binding and specificity in adrenergic receptors: implications for GPCR-targeted drug discovery. <i>Biochemistry</i> , 2008 , 47, 11013-23	3.2	56
127	Rapid activation of transducin by mutations distant from the nucleotide-binding site: evidence for a mechanistic model of receptor-catalyzed nucleotide exchange by G proteins. <i>Journal of Biological Chemistry</i> , 2001 , 276, 27400-5	5.4	55
126	Role of the C9 methyl group in rhodopsin activation: characterization of mutant opsins with the artificial chromophore 11-cis-9-demethylretinal. <i>Biochemistry</i> , 1998 , 37, 538-45	3.2	55
125	Antibodies against specific extracellular epitopes of the glucagon receptor block glucagon binding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996 , 93, 310-5	11.5	54
124	CXC Chemokine Receptor 3 Alternative Splice Variants Selectively Activate Different Signaling Pathways. <i>Molecular Pharmacology</i> , 2016 , 90, 483-95	4.3	52
123	Disruption of the alpha5 helix of transducin impairs rhodopsin-catalyzed nucleotide exchange. <i>Biochemistry</i> , 2002 , 41, 6988-94	3.2	50
122	Characterization of the mutant visual pigment responsible for congenital night blindness: a biochemical and Fourier-transform infrared spectroscopy study. <i>Biochemistry</i> , 1996 , 35, 7536-45	3.2	49
121	Multiple CCR5 conformations on the cell surface are used differentially by human immunodeficiency viruses resistant or sensitive to CCR5 inhibitors. <i>Journal of Virology</i> , 2011 , 85, 8227-40	6.6	48
120	Two cytoplasmic loops of the glucagon receptor are required to elevate cAMP or intracellular calcium. <i>Journal of Biological Chemistry</i> , 1999 , 274, 19455-64	5.4	48
119	Evidence for the specific interaction of a lipid molecule with rhodopsin which is altered in the transition to the active state metarhodopsin II. <i>FEBS Letters</i> , 1998 , 436, 304-8	3.8	46
118	Agonists and partial agonists of rhodopsin: retinal polyene methylation affects receptor activation. <i>Biochemistry</i> , 2006 , 45, 1640-52	3.2	44
117	Resonance Raman analysis of the mechanism of energy storage and chromophore distortion in the primary visual photoproduct. <i>Biochemistry</i> , 2004 , 43, 10867-76	3.2	44
116	Mapping substance P binding sites on the neurokinin-1 receptor using genetic incorporation of a photoreactive amino acid. <i>Journal of Biological Chemistry</i> , 2014 , 289, 18045-54	5.4	43
115	Chromophore structural changes in rhodopsin from nanoseconds to microseconds following pigment photolysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997 , 94, 8557-62	11.5	43
114	Glucagon receptor activates extracellular signal-regulated protein kinase 1/2 via cAMP-dependent protein kinase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001 , 98, 10102-7	11.5	43

113	Rhodopsin activation affects the environment of specific neighboring phospholipids: an FTIR spectroscopic study. <i>Biophysical Journal</i> , 2000 , 79, 3063-71	2.9	43
112	A mutant rhodopsin photoproduct with a protonated Schiff base displays an active-state conformation: a Fourier-transform infrared spectroscopy study. <i>Biochemistry</i> , 1994 , 33, 13700-5	3.2	43
111	Genetically encoded photocrosslinkers locate the high-affinity binding site of antidepressant drugs in the human serotonin transporter. <i>Nature Communications</i> , 2016 , 7, 11261	17.4	41
110	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. <i>Journal of Virology</i> , 2004 , 78, 4134-44	6.6	41
109	Roles of specific extracellular domains of the glucagon receptor in ligand binding and signaling. <i>Biochemistry</i> , 2002 , 41, 11795-803	3.2	41
108	Structural evidence for a sequential release mechanism for activation of heterotrimeric G proteins. <i>Journal of Molecular Biology</i> , 2009 , 393, 882-97	6.5	40
107	Crystal structure of the SH3 domain of betaPIX in complex with a high affinity peptide from PAK2. <i>Journal of Molecular Biology</i> , 2006 , 358, 509-22	6.5	39
106	Site-specific in vitro and in vivo incorporation of molecular probes to study G-protein-coupled receptors. <i>Current Opinion in Chemical Biology</i> , 2011 , 15, 392-8	9.7	37
105	Direct measurement of thermal stability of expressed CCR5 and stabilization by small molecule ligands. <i>Biochemistry</i> , 2011 , 50, 502-11	3.2	37
104	Probing G protein-coupled receptor-ligand interactions with targeted photoactivatable cross-linkers. <i>Biochemistry</i> , 2013 , 52, 8625-32	3.2	36
103	G protein-coupled receptor modulation with pepducins: moving closer to the clinic. <i>Annals of the New York Academy of Sciences</i> , 2011 , 1226, 34-49	6.5	36
102	6-s-cis Conformation and polar binding pocket of the retinal chromophore in the photoactivated state of rhodopsin. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15160-9	16.4	36
101	Bioorthogonal fluorescent labeling of functional G-protein-coupled receptors. <i>ChemBioChem</i> , 2014 , 15, 1820-9	3.8	35
100	Escaping the flatlands: new approaches for studying the dynamic assembly and activation of GPCR signaling complexes. <i>Trends in Pharmacological Sciences</i> , 2011 , 32, 410-9	13.2	35
99	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). <i>Journal of Biological Chemistry</i> , 2017 , 292, 7131-7144	5.4	33
98	A simple method for enhancing the bioorthogonality of cyclooctyne reagent. <i>Chemical Communications</i> , 2016 , 52, 5451-4	5.8	32
97	Chemical biology methods for investigating G protein-coupled receptor signaling. <i>Chemistry and Biology</i> , 2014 , 21, 1224-37		32
96	Site-specific epitope tagging of G protein-coupled receptors by bioorthogonal modification of a genetically encoded unnatural amino acid. <i>Biochemistry</i> , 2013 , 52, 1028-36	3.2	32

95	Partial agonist activity of 11-cis-retinal in rhodopsin mutants. <i>Journal of Biological Chemistry</i> , 1997 , 272, 23081-5	5.4	32
94	Energetics Underlying Twist Polymorphisms in Amyloid Fibrils. <i>Journal of Physical Chemistry B</i> , 2018 , 122, 1081-1091	3.4	31
93	Unnatural amino acid mutagenesis of GPCRs using amber codon suppression and bioorthogonal labeling. <i>Methods in Enzymology</i> , 2013 , 520, 281-305	1.7	29
92	Use of G-protein-coupled and -uncoupled CCR5 receptors by CCR5 inhibitor-resistant and -sensitive human immunodeficiency virus type 1 variants. <i>Journal of Virology</i> , 2013 , 87, 6569-81	6.6	29
91	Coupling of protonation switches during rhodopsin activation. <i>Photochemistry and Photobiology</i> , 2007 , 83, 286-92	3.6	27
90	Multiplexed analysis of the secretin-like GPCR-RAMP interactome. <i>Science Advances</i> , 2019 , 5, eaaw2778	14.3	26
89	The function of interdomain interactions in controlling nucleotide exchange rates in transducin. <i>Journal of Biological Chemistry</i> , 2001 , 276, 23873-80	5.4	25
88	Properties and Photoactivity of Rhodopsin Mutants. <i>Israel Journal of Chemistry</i> , 1995 , 35, 325-337	3.4	25
87	GPCRs globally coevolved with receptor activity-modifying proteins, RAMPs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 12015-12020	11.5	24
86	Antibody epitopes on g protein-coupled receptors mapped with genetically encoded photoactivatable cross-linkers. <i>Biochemistry</i> , 2014 , 53, 1302-10	3.2	24
85	Nucleobindin 1 is a calcium-regulated guanine nucleotide dissociation inhibitor of G{alpha}i1. <i>Journal of Biological Chemistry</i> , 2010 , 285, 31647-60	5.4	24
84	Time-resolved photointermediate changes in rhodopsin glutamic acid 181 mutants. <i>Biochemistry</i> , 2004 , 43, 12614-21	3.2	24
83	Selective stabilization of the high affinity binding conformation of glucagon receptor by the long splice variant of Galpha(s). <i>Journal of Biological Chemistry</i> , 2000 , 275, 21631-8	5.4	23
82	Reconstitution of the vertebrate visual cascade using recombinant heterotrimeric transducin purified from Sf9 cells. <i>Protein Expression and Purification</i> , 2000 , 20, 514-26	2	23
81	Spectroscopic evidence for altered chromophore--protein interactions in low-temperature photoproducts of the visual pigment responsible for congenital night blindness. <i>Biochemistry</i> , 1996 , 35, 15065-73	3.2	23
80	DNA-encircled lipid bilayers. <i>Nanoscale</i> , 2018 , 10, 18463-18467	7.7	23
79	Photointermediates of the Rhodopsin S186A Mutant as a Probe of the Hydrogen-Bond Network in the Chromophore Pocket and the Mechanism of Counterion Switch. <i>Journal of Physical Chemistry C</i> , 2007 , 111, 8843-8848	3.8	22
78	Epitranscriptomic profiling across cell types reveals associations between APOBEC1-mediated RNA editing, gene expression outcomes, and cellular function. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 13296-13301	11.5	21

77	Total synthesis and expression of a gene for the alpha-subunit of bovine rod outer segment guanine nucleotide-binding protein (transducin). <i>Nucleic Acids Research</i> , 1988 , 16, 6361-72	20.1	21
76	Nucleobindin 1 binds to multiple types of pre-fibrillar amyloid and inhibits fibrillization. <i>Scientific Reports</i> , 2017 , 7, 42880	4.9	20
75	Spectral tuning of ultraviolet cone pigments: an interhelical lock mechanism. <i>Journal of the American Chemical Society</i> , 2013 , 135, 19064-7	16.4	20
74	Properties of early photolysis intermediates of rhodopsin are affected by glycine 121 and phenylalanine 261. <i>Biochemistry</i> , 1997 , 36, 11804-10	3.2	20
73	A novel interaction between atrophin-interacting protein 4 and beta-p21-activated kinase-interactive exchange factor is mediated by an SH3 domain. <i>Journal of Biological Chemistry</i> , 2007 , 282, 28893-28903	5.4	20
72	Modulating rhodopsin receptor activation by altering the pKa of the retinal Schiff base. <i>Journal of the American Chemical Society</i> , 2006 , 128, 10503-12	16.4	20
71	Mapping a ligand binding site using genetically encoded photoactivatable crosslinkers. <i>Methods in Enzymology</i> , 2013 , 520, 307-22	1.7	19
70	SEIRA spectroscopy on a membrane receptor monolayer using lipoprotein particles as carriers. <i>Biophysical Journal</i> , 2010 , 99, 2327-35	2.9	19
69	G protein subtype-specific signaling bias in a series of CCR5 chemokine analogs. <i>Science Signaling</i> , 2018 , 11,	8.8	19
68	Nucleobindin 1 caps human islet amyloid polypeptide protofibrils to prevent amyloid fibril formation. <i>Journal of Molecular Biology</i> , 2012 , 421, 378-89	6.5	17
67	Time-resolved spectroscopy of the early photolysis intermediates of rhodopsin Schiff base counterion mutants. <i>Biochemistry</i> , 1997 , 36, 1999-2009	3.2	17
66	Bioorthogonal Labeling of Ghrelin Receptor to Facilitate Studies of Ligand-Dependent Conformational Dynamics. <i>Chemistry and Biology</i> , 2015 , 22, 1431-1436		16
65	Micelle-Enhanced Bioorthogonal Labeling of Genetically Encoded Azido Groups on the Lipid-Embedded Surface of a GPCR. <i>ChemBioChem</i> , 2015 , 16, 1314-22	3.8	16
64	Structural biology: snapshot of a signalling complex. <i>Nature</i> , 2011 , 477, 540-1	50.4	16
63	pH dependence of photolysis intermediates in the photoactivation of rhodopsin mutant E113Q. <i>Biochemistry</i> , 2000 , 39, 599-606	3.2	16
62	Structural determinants of active state conformation of rhodopsin: molecular biophysics approaches. <i>Methods in Enzymology</i> , 2000 , 315, 178-96	1.7	15
61	Genetic code expansion and photocross-linking identify different arrestin binding modes to the angiotensin II type 1 receptor. <i>Journal of Biological Chemistry</i> , 2019 , 294, 17409-17420	5.4	14
60	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. <i>Biochemistry</i> , 2018 , 57, 4915-4922	3.2	14

59	Complex Photochemistry within the Green-Absorbing Channelrhodopsin ReaChR. <i>Biophysical Journal</i> , 2017 , 112, 1166-1175	2.9	13
58	Third-Party Capture of Elusive GPCR Dimers. <i>Biophysical Journal</i> , 2019 , 116, 1-3	2.9	13
57	Multiplex detection of functional G protein-coupled receptors harboring site-specifically modified unnatural amino acids. <i>Biochemistry</i> , 2015 , 54, 776-86	3.2	13
56	Synthetic gene technology: applications to ancestral gene reconstruction and structure-function studies of receptors. <i>Methods in Enzymology</i> , 2002 , 343, 274-94	1.7	13
55	Isopeptide and ester bond ubiquitination both regulate degradation of the human dopamine receptor 4. <i>Journal of Biological Chemistry</i> , 2017 , 292, 21623-21630	5.4	12
54	Assays for activation of recombinant expressed opsins by all-trans-retinals. <i>Methods in Enzymology</i> , 2000 , 315, 251-67	1.7	12
53	Site-specific labeling of genetically encoded azido groups for multicolor, single-molecule fluorescence imaging of GPCRs. <i>Methods in Cell Biology</i> , 2013 , 117, 267-303	1.8	11
52	Proton movement and photointermediate kinetics in rhodopsin mutants. <i>Biochemistry</i> , 2006 , 45, 5430-9	3.2	11
51	Combined Inhibition of G α and MEK Enhances Therapeutic Efficacy in Uveal Melanoma. <i>Clinical Cancer Research</i> , 2021 , 27, 1476-1490	12.9	11
50	Direct evidence that the GPCR CysLTR2 mutant causative of uveal melanoma is constitutively active with highly biased signaling. <i>Journal of Biological Chemistry</i> , 2021 , 296, 100163	5.4	10
49	Measurement of Slow Spontaneous Release of 11-cis-Retinal from Rhodopsin. <i>Biophysical Journal</i> , 2017 , 112, 153-161	2.9	9
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