

# CITATION REPORT

List of articles citing

**Crystal structure of rhodopsin: A G protein-coupled receptor**

**DOI: 10.1126/science.289.5480.739**  
**Science, 2000, 289, 739-45.**

**Source:** <https://exaly.com/paper-pdf/32119244/citation-report.pdf>

**Version:** 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
2251	Energy Landscapes Reveal Agonist Control of G Protein-Coupled Receptor Activation via Microswitches.		
2250	Combining Graphics Processing Units, Simplified Time-Dependent Density Functional Theory, and Finite-Difference Couplings to Accelerate Nonadiabatic Molecular Dynamics.		
2249	Discovery of a Potent and Orally Efficacious TGR5 Receptor Agonist.		
2248	Chapter 2 The primary photoreaction of rhodopsin. <b>2000</b> , 55-90		42
2247	Preface to volume 3 molecular mechanisms in visual transduction. <b>2000</b> , 3, vii-ix		2
2246	Chapter 1 Structure and mechanism of vertebrate visual pigments. <b>2000</b> , 3, 1-54		8
2245	Structure and regulation of opioid receptors. <b>2000</b> , 55, 334-46		74
2244	Identifying conformational changes with site-directed spin labeling. <b>2000</b> , 7, 735-9		670
2243	Clear vision for a structure-seeking business. <b>2000</b> , 18, 1017		
2242	New roles for structure in biology and drug discovery. <b>2000</b> , 7 Suppl, 928-30		169
2241	Synchrotron crystallography. <b>2000</b> , 25, 637-43		112
2240	An improved tripod amphiphile for membrane protein solubilization. <b>2000</b> , 9, 2518-27		46
2239	Highly conserved glutamic acid in the extracellular IV-V loop in rhodopsins acts as the counterion in retinochrome, a member of the rhodopsin family. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2000</b> , 97, 14263-7	11.5	94
2238	Identification of Edg1 receptor residues that recognize sphingosine 1-phosphate. <b>2000</b> , 275, 39379-84		133
2237	Interactions of metarhodopsin II. Arrestin peptides compete with arrestin and transducin. <b>2000</b> , 275, 37679-85		66
2236	An additional phosphate-binding element in arrestin molecule. Implications for the mechanism of arrestin activation. <b>2000</b> , 275, 41049-57		145
2235	Characterization of the binding site on the formyl peptide receptor using three receptor mutants and analogs of Met-Leu-Phe and Met-Met-Trp-Leu-Leu. <b>2000</b> , 275, 39012-7		47

2234	Chapter 7 Invertebrate visual pigments. <b>2000</b> , 297-388	17
2233	Functionally discrete mimics of light-activated rhodopsin identified through expression of soluble cytoplasmic domains. <b>2000</b> , 275, 39354-63	33
2232	Requirement of specific intrahelical interactions for stabilizing the inactive conformation of glycoprotein hormone receptors. <b>2000</b> , 275, 37860-9	28
2231	Modeling and docking the endothelin G-protein-coupled receptor. <b>2000</b> , 79, 3083-94	40
2230	Hinges, swivels and switches: the role of prolines in signalling via transmembrane alpha-helices. <b>2000</b> , 21, 445-51	269
2229	Dopamine receptors: from structure to behavior. <b>2000</b> , 23, S34-40	114
2228	Reversible inactivation of AT(2) angiotensin II receptor from cysteine-disulfide bond exchange. <b>2000</b> , 484, 133-8	20
2227	Retinylidene proteins: structures and functions from archaea to humans. <b>2000</b> , 16, 365-92	509
2226	Therapeutic opportunities for muscarinic receptors in the central nervous system. <b>2000</b> , 43, 4333-53	197
2225	Light-induced conformational changes of rhodopsin probed by fluorescent alexa594 immobilized on the cytoplasmic surface. <b>2000</b> , 39, 15225-33	40
2224	Synthesis and biophysical analysis of transmembrane domains of a <i>Saccharomyces cerevisiae</i> G protein-coupled receptor. <b>2000</b> , 39, 15462-74	48
2223	Molecular determinants of ligand binding to the human melanocortin-4 receptor. <b>2000</b> , 39, 14900-11	155
2222	Dynamics of biochemical and biophysical reactions: insight from computer simulations. <b>2001</b> , 34, 563-679	240
2221	Fluorosulfonyl- and bis-(beta-chloroethyl)amino-phenylamino functionalized pyrazolo[4,3-e]1,2,4-triazolo[1,5-c]pyrimidine derivatives: irreversible antagonists at the human A3 adenosine receptor and molecular modeling studies. <b>2001</b> , 44, 2735-42	36
2220	The guanine nucleotide-binding switch in three dimensions. <i>Science</i> , <b>2001</b> , 294, 1299-304	333 1379
2219	Recent advances in adenosine receptor antagonist research. <b>2001</b> , 11, 1533-1561	42
2218	Studies on the structure of the G-protein-coupled receptor rhodopsin including the putative G-protein binding site in unactivated and activated forms. <b>2001</b> , 40, 11932-7	89
2217	Dimerization of G-protein-coupled receptors. <b>2001</b> , 44, 4595-614	129

2216	Wavelength dependent cis-trans isomerization in vision. <b>2001</b> , 40, 13774-8	147
2215	Peptides as receptor ligand drugs and their relationship to G-coupled signal transduction. <b>2001</b> , 10, 1063-73	11
2214	Intermolecular interactions between cholecystokinin-8 and the third extracellular loop of the cholecystokinin A receptor. <b>2001</b> , 40, 3804-9	58
2213	Acyclic and cyclopropyl analogues of adenosine bisphosphate antagonists of the P2Y1 receptor: structure-activity relationships and receptor docking. <b>2001</b> , 44, 3092-108	65
2212	Design, synthesis, and biological characterization of bivalent 1-methyl-1,2,5,6-tetrahydropyridyl-1,2,5-thiadiazole derivatives as selective muscarinic agonists. <b>2001</b> , 44, 4563-76	42
2211	Immunoaffinity purification and reconstitution of human alpha(2)-adrenergic receptor subtype C2 into phospholipid vesicles. <b>2001</b> , 22, 1-10	10
2210	Effects of differential sulfhydryl group-specific labeling on the rhodopsin and guanine nucleotide binding activities of transducin. <b>2001</b> , 387, 233-42	16
2209	Chemical modification of transducin with iodoacetic acid: transducin-alpha carboxymethylated at Cys(347) allows transducin binding to Light-activated rhodopsin but prevents its release in the presence of GTP. <b>2001</b> , 395, 146-57	12
2208	3D model for TM region of the AT-1 receptor in complex with angiotensin II independently validated by site-directed mutagenesis data. <b>2001</b> , 286, 1204-11	35
2207	Non-alpha-helical elements modulate polytopic membrane protein architecture. <b>2001</b> , 306, 349-62	98
2206	An expressed sequence tag (EST) data mining strategy succeeding in the discovery of new G-protein coupled receptors. <b>2001</b> , 307, 799-813	141
2205	Electron crystallographic analysis of two-dimensional crystals of sensory rhodopsin II: a 6.9 Å projection structure. <b>2001</b> , 308, 279-93	28
2204	Structure and function in bacteriorhodopsin: the role of the interhelical loops in the folding and stability of bacteriorhodopsin. <b>2001</b> , 308, 409-22	46
2203	Helix-helix packing and interfacial pairwise interactions of residues in membrane proteins. <b>2001</b> , 311, 891-907	162
2202	Three-dimensional structure of an invertebrate rhodopsin and basis for ordered alignment in the photoreceptor membrane. <b>2001</b> , 314, 455-63	66
2201	Stability of membrane proteins: relevance for the selection of appropriate methods for high-resolution structure determinations. <b>2001</b> , 136, 144-57	73
2200	Neoreceptor concept based on molecular complementarity in GPCRs: a mutant adenosine A(3) receptor with selectively enhanced affinity for amine-modified nucleosides. <b>2001</b> , 44, 4125-36	76
2199	Structural properties of a highly polyunsaturated lipid bilayer from molecular dynamics simulations. <b>2001</b> , 81, 204-16	121

2198	Assembly of a polytopic membrane protein structure from the solution structures of overlapping peptide fragments of bacteriorhodopsin. <b>2001</b> , 81, 1029-36	77
2197	Membrane insertion and orientation of polyalanine peptides: a (15)N solid-state NMR spectroscopy investigation. <b>2001</b> , 81, 2251-6	44
2196	Rhodopsin-transducin interface: studies with conformationally constrained peptides. <b>2001</b> , 81, 3285-93	33
2195	Characterization of the type A cholecystokinin receptor hormone-binding domain: use of contrasting and complementary methodologies. <b>2001</b> , 22, 1223-8	9
2194	Role of medium- and long-range interactions in discriminating globular and membrane proteins. <b>2001</b> , 29, 25-34	17
2193	Molecular evolution of the cone visual pigments in the pure rod-retina of the nocturnal gecko, Gekko gekko. <b>2001</b> , 276, 117-25	36
2192	Molecular determinants of metabotropic glutamate receptor signaling. <b>2001</b> , 22, 114-20	271
2191	Muscarinic receptors: it's a knockout. <b>2001</b> , 22, 215-219	28
2190	Receptor activation: what does the rhodopsin structure tell us?. <b>2001</b> , 22, 587-93	165
2189	Detergents as tools in membrane biochemistry. <b>2001</b> , 276, 32403-6	426
2188	Multiple phosphorylation of rhodopsin and the in vivo chemistry underlying rod photoreceptor dark adaptation. <b>2001</b> , 31, 87-101	130
2187	Polarized dendritic transport and the AP-1 mu1 clathrin adaptor UNC-101 localize odorant receptors to olfactory cilia. <b>2001</b> , 31, 277-87	135
2186	Human immunodeficiency virus type-1 and chemokines: beyond competition for common cellular receptors. <b>2001</b> , 12, 219-43	63
2185	Receptor signaling and structure: insights from serotonin-1 receptors. <b>2001</b> , 12, 453-60	60
2184	The role of a proline-induced broken-helix motif in alpha-helix 2 of Bacillus thuringiensis delta-endotoxins. <b>2001</b> , 490, 70-4	19
2183	O-Glycosylation of G-protein-coupled receptor, octopus rhodopsin. Direct analysis by FAB mass spectrometry. <b>2001</b> , 496, 19-24	16
2182	Proper receptor signalling in a mutant catfish gonadotropin-releasing hormone receptor lacking the highly conserved Asp(90) residue. <b>2001</b> , 501, 131-4	6
2181	Overexpression of mammalian integral membrane proteins for structural studies. <b>2001</b> , 504, 94-8	144

2180	Functional roles of conserved transmembrane prolines in the human VPAC(1) receptor. <b>2001</b> , 503, 126-30	13
2179	The conformational switch in muscarinic acetylcholine receptors. <b>2001</b> , 68, 2495-500	21
2178	Constitutively active muscarinic receptors. <b>2001</b> , 68, 2511-6	14
2177	Architecture of the protein-conducting channel associated with the translating 80S ribosome. <i>Cell</i> , <b>2001</b> , 107, 361-72	56.2 335
2176	Insights into the molecular basis of ligand binding by the cholecystokinin receptor. <b>2001</b> , 1, 336-42	1
2175	Novel rhodopsin mutation in a Chinese family with autosomal dominant retinitis pigmentosa. <b>2001</b> , 22, 155-62	9
2174	Insights into the structure and function of 5-HT(2) family serotonin receptors reveal novel strategies for therapeutic target development. <b>2001</b> , 5, 685-695	29
2173	Update on the molecular genetics of retinitis pigmentosa. <b>2001</b> , 22, 133-54	78
2172	Family-B G-protein-coupled receptors. <b>2001</b> , 2, REVIEWS3013	220
2171	Comparison of the amino acid residues in the sixth transmembrane domains accessible in the binding-site crevices of mu, delta, and kappa opioid receptors. <b>2001</b> , 40, 8018-29	30
2170	The photobleaching sequence of a short-wavelength visual pigment. <b>2001</b> , 40, 7832-44	44
2169	Structural Determinants of Spectral Tuning in Retinal Proteins Bacteriorhodopsin vs Sensory Rhodopsin II#. <b>2001</b> , 105, 10124-10131	106
2168	The first transmembrane segment of the dopamine D2 receptor: accessibility in the binding-site crevice and position in the transmembrane bundle. <b>2001</b> , 40, 12339-48	56
2167	Engineering a functional blue-wavelength-shifted rhodopsin mutant. <b>2001</b> , 40, 7219-27	46
2166	Difference in molecular structure of rod and cone visual pigments studied by Fourier transform infrared spectroscopy. <b>2001</b> , 40, 2879-86	12
2165	Resonance Raman Structural Evidence that the Cis-to-Trans Isomerization in Rhodopsin Occurs in Femtoseconds. <b>2001</b> , 105, 1240-9	48
2164	Synthesis and structure-activity relationships of a new model of arylpiperazines. Study of the 5-HT(1a)/alpha(1)-adrenergic receptor affinity by classical hansch analysis, artificial neural networks, and computational simulation of ligand recognition. <b>2001</b> , 44, 198-207	65
2163	Stepwise modulation of neurokinin-3 and neurokinin-2 receptor affinity and selectivity in quinoline tachykinin receptor antagonists. <b>2001</b> , 44, 1675-89	45

2162	Chloride effect on iodopsin studied by low-temperature visible and infrared spectroscopies. <b>2001</b> , 40, 1385-92	28
2161	Thermal destabilization of rhodopsin and opsin by proteolytic cleavage in bovine rod outer segment disk membranes. <b>2001</b> , 40, 11176-83	40
2160	Influence of highly polyunsaturated lipid acyl chains of biomembranes on the NMR order parameters. <b>2001</b> , 123, 7381-7	32
2159	Molecular mechanism of spectral tuning in sensory rhodopsin II. <b>2001</b> , 40, 13906-14	101
2158	Structure and function in rhodopsin: mapping light-dependent changes in distance between residue 65 in helix TM1 and residues in the sequence 306-319 at the cytoplasmic end of helix TM7 and in helix H8. <b>2001</b> , 40, 15483-92	96
2157	High-yield expression and functional analysis of Escherichia coli glycerol-3-phosphate transporter. <b>2001</b> , 40, 6628-35	72
2156	Structure activity studies of the melanocortin-4 receptor by in vitro mutagenesis: identification of agouti-related protein (AGRP), melanocortin agonist and synthetic peptide antagonist interaction determinants. <b>2001</b> , 40, 6164-79	142
2155	Structure and function in rhodopsin: mapping light-dependent changes in distance between residue 316 in helix 8 and residues in the sequence 60-75, covering the cytoplasmic end of helices TM1 and TM2 and their connection loop CL1. <b>2001</b> , 40, 15493-500	104
2154	Advances in determination of a high-resolution three-dimensional structure of rhodopsin, a model of G-protein-coupled receptors (GPCRs). <b>2001</b> , 40, 7761-72	597
2153	Characterization of melanocortin NDP-MSH agonist peptide fragments at the mouse central and peripheral melanocortin receptors. <b>2001</b> , 44, 2247-52	64
2152	Constitutive activation of the mu opioid receptor by mutation of D3.49(164), but not D3.32(147): D3.49(164) is critical for stabilization of the inactive form of the receptor and for its expression. <b>2001</b> , 40, 12039-50	65
2151	All-trans-retinal forms a visible-absorbing pigment with human rod opsin. <b>2001</b> , 40, 4446-53	5
2150	Steric barrier to bathorhodopsin decay in 5-demethyl and mesityl analogues of rhodopsin. <b>2001</b> , 123, 10024-9	15
2149	Probing the dark state tertiary structure in the cytoplasmic domain of rhodopsin: proximities between amino acids deduced from spontaneous disulfide bond formation between cysteine pairs engineered in cytoplasmic loops 1, 3, and 4. <b>2001</b> , 40, 12479-85	28
2148	ATR-FTIR study of the structure and orientation of transmembrane domains of the Saccharomyces cerevisiae alpha-mating factor receptor in phospholipids. <b>2001</b> , 40, 8945-54	37
2147	Ultra-high-field MAS NMR assay of a multispin labeled ligand bound to its G-protein receptor target in the natural membrane environment: electronic structure of the retinylidene chromophore in rhodopsin. <b>2001</b> , 40, 3282-8	43
2146	Functional role of a conserved motif in TM6 of the rat mu opioid receptor: constitutively active and inactive receptors result from substitutions of Thr6.34(279) with Lys and Asp. <b>2001</b> , 40, 13501-9	85
2145	Probing the dark state tertiary structure in the cytoplasmic domain of rhodopsin: proximities between amino acids deduced from spontaneous disulfide bond formation between Cys316 and engineered cysteines in cytoplasmic loop 1. <b>2001</b> , 40, 12472-8	27

2144	Serine 85 in transmembrane helix 2 of short-wavelength visual pigments interacts with the retinylidene Schiff base counterion. <b>2001</b> , 40, 15098-108	19
2143	Conformation and orientation of the retinyl chromophore in rhodopsin: a critical evaluation of recent NMR data on the basis of theoretical calculations results in a minimum energy structure consistent with all experimental data. <b>2001</b> , 40, 4201-4	28
2142	Minireview: Insights into G protein-coupled receptor function using molecular models. <b>2001</b> , 142, 2-10	106
2141	Anions stabilize a metarhodopsin II-like photoproduct with a protonated Schiff base. <b>2001</b> , 40, 13342-52	31
2140	Structural domains of the CB1 cannabinoid receptor that contribute to constitutive activity and G-protein sequestration. <b>2001</b> , 21, 8758-64	74
2139	Rhodopsin: structural basis of molecular physiology. <b>2001</b> , 81, 1659-88	273
2138	Drug design--chemistry and biology. <b>2001</b> , 31, 1164, 1166, 1168 passim	1
2137	Prostanoid receptors: ontogeny and implications in vascular physiology. <b>2001</b> , 281, R1343-60	69
2136	Role of the human V1 vasopressin receptor COOH terminus in internalization and mitogenic signal transduction. <b>2001</b> , 281, E81-92	13
2135	Distinct interaction of human and guinea pig histamine H2-receptor with guanidine-type agonists. <b>2001</b> , 60, 1210-25	70
2134	An Approach to the Rational Design of Opioid Receptor Ligands Non-narcotic $\mu$ -Opioid Receptor Ligand KT-95 Free from Euphoria and or Dysphoria. <b>2001</b> , 1, 1-25	3
2133	Receptores acoplados $\hat{a}$ prote $\acute{a}$ na G: implica $\acute{c}$ oes para a fisiologia e doen $\acute{c}$ as end $\acute{o}$ crinas. <b>2001</b> , 45, 228-239	3
2132	Mutations of gonadotropin and gonadotropin receptor genes: the clinical spectrum. <b>2001</b> , 8, 291-295	2
2131	Receptor biology and signal transduction. <b>2001</b> , 17, 410-5	
2130	Regulatory mechanism for the stability of the meta II intermediate of pinopsin. <b>2001</b> , 129, 329-34	6
2129	Photoaffinity labeling of mutant neurokinin-1 receptors reveals additional structural features of the substance P/NK-1 receptor complex. <b>2001</b> , 40, 2530-9	29
2128	A structural role for Asp83 in the photoactivation of rhodopsin. <b>2001</b> , 382, 1263-70	9
2127	Beta-adrenoceptors: three-dimensional structures and binding sites for ligands. <b>2001</b> , 87, 7-13	12



2126	Chapter 3. New developments in the study of corticotropin releasing factor. <b>2001</b> , 36, 21-30	5
2125	Bioinformatics and receptor mechanisms of psychotropic drugs. <b>2001</b> , 7, 165-77	3
2124	Direct and differential interaction of beta-arrestins with the intracellular domains of different opioid receptors. <b>2001</b> , 59, 758-64	65
2123	Dyes, Sensitizing. <b>2001</b> ,	
2122	Vision in the ultraviolet. <b>2001</b> , 58, 1583-98	99
2121	Yeast--a panacea for the structure-function analysis of membrane proteins?. <b>2001</b> , 40, 157-71	43
2120	The search for drug target molecules from genomics. <b>2001</b> , 88 Suppl 2, 11-7; discussion 49-50	12
2119	Cytoplasmic surface structure of bacteriorhodopsin consisting of interhelical loops and C-terminal alpha helix, modified by a variety of environmental factors as studied by (13)C-NMR. <b>2001</b> , 268, 2218-28	18
2118	Different antagonist binding properties of human and rat histamine H3 receptors. <b>2001</b> , 11, 951-4	46
2117	3-D-QSAR/CoMFA and recognition models of benzimidazole derivatives at the 5-HT(4) receptor. <b>2001</b> , 11, 2807-11	17
2116	Molecular dynamics of buspirone analogues interacting with the 5-HT1A and 5-HT2A serotonin receptors. <b>2001</b> , 9, 881-95	21
2115	Chemogenomic approaches to drug discovery. <b>2001</b> , 5, 464-70	151
2114	Structure of melittin bound to phospholipid micelles studied using hydrogen-deuterium exchange and electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry. <b>2001</b> , 12, 1247-53	25
2113	Solid state NMR measurements of conformation and conformational distributions in the membrane-bound HIV-1 fusion peptide. <b>2001</b> , 19, 129-35	27
2112	Prediction of membrane protein orientation in lipid bilayers: a theoretical approach. <b>2001</b> , 20, 235-44	23
2111	Towards synthetic adrenaline receptors. <b>2001</b> , 18, 147-155	2
2110	Structures of the transmembrane helices of the G-protein coupled receptor, rhodopsin. <b>2001</b> , 58, 79-89	39
2109	Mutations at position 125 in transmembrane helix III of rhodopsin affect the structure and signalling of the receptor. <b>2001</b> , 268, 5696-704	24

2108	Theoretical evidence of a salt bridge disruption as the initiating process for the $\beta$ -adrenergic receptor activation: A molecular dynamics and docking study. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2001</b> , 43, 382-394	4.2	17
2107	Insights into peptide and protein function: a convergent approach. <b>2001</b> , 7, 63-73		4
2106	Peptide hormone binding to G-protein-coupled receptors: structural characterization via NMR techniques. <b>2001</b> , 21, 450-71		30
2105	Modeling the 3D structure of GPCRs from sequence. <b>2001</b> , 21, 472-83		60
2104	KAI1, a prostate metastasis suppressor: prediction of solvated structure and interactions with binding partners; integrins, cadherins, and cell-surface receptor proteins. <b>2001</b> , 32, 139-53		66
2103	Peptide interactions with G-protein coupled receptors. <b>2001</b> , 60, 246-77		67
2102	Peptide fragments as models to study the structure of a G-protein coupled receptor: the alpha-factor receptor of <i>Saccharomyces cerevisiae</i> . <b>2001</b> , 60, 334-50		21
2101	Biophysical methods to study ligand-receptor interactions of neuropeptide Y. <b>2001</b> , 60, 420-37		26
2100	Length analyses of mammalian G-protein-coupled receptors. <b>2001</b> , 211, 77-100		31
2099	Mass spectrometric analysis of cyanogen bromide fragments of integral membrane proteins at the picomole level: application to rhodopsin. <b>2001</b> , 292, 76-86		31
2098	Insect G protein-coupled receptors and signal transduction. <b>2001</b> , 48, 1-12		75
2097	Molecular and pharmacological properties of insect biogenic amine receptors: lessons from <i>Drosophila melanogaster</i> and <i>Apis mellifera</i> . <b>2001</b> , 48, 13-38		288
2096	Single Proteins Observed by Atomic Force Microscopy. <b>2001</b> , 2, 59-67		60
2095	G-protein-coupled receptors for light: the three-dimensional structure of rhodopsin. <b>2001</b> , 2, 513-6		2
2094	[The race for a new target. The human AT1 receptor]. <b>2001</b> , 30, 288-95		4
2093	Mid-Membrane Photolabeling of the Transmembrane Domain of Glycophorin A in Phospholipid Vesicles. <b>2001</b> , 113, 970-972		
2092	A Direct and Efficient $\beta$ -Selective Glycosylation Protocol for the Kedarcidin Sugar, L-Mycarose: AgPF6 as a Remarkable Activator of 2-Deoxythioglycosides. <b>2001</b> , 113, 972-975		13
2091	Das Licht weist den Weg $\beta$ -Leder: die Konformations $\beta$ -nderungen des Retinalchromophors im Sehpigment Rhodopsin nach Lichtanregung. <b>2001</b> , 113, 3065-3069		4

2090	Ligandengesteuerte Ionenkanäle. <b>2001</b> , 113, 3194-3211	9
2089	Auf dem Weg zu synthetischen Adrenalinrezeptoren - Formselektive Adrenalin-Erkennung in Wasser. <b>2001</b> , 113, 3244-3248	3
2088	Hydrophile channels: models for transmembrane, cation-conducting transporters. <b>2001</b> , 7, 33-9	43
2087	On the bioactive conformation of the rhodopsin chromophore: absolute sense of twist around the 6-s-cis bond. <b>2001</b> , 7, 4198-204	39
2086	Examples of hula-twist in photochemical cis- trans isomerization. <b>2001</b> , 7, 4537-44	73
2085	Mid-Membrane Photolabeling of the Transmembrane Domain of Glycophorin A in Phospholipid Vesicles. <b>2001</b> , 40, 944-946	9
2084	A Direct and Efficient Selective Glycosylation Protocol for the Kedarcidin Sugar, L-Mycarose: AgPF as a Remarkable Activator of 2-Deoxythioglycosides. <b>2001</b> , 40, 946-949	59
2083	The Light Shall Show the Way-Or: The Conformational Changes of the Retinal Chromophore in Rhodopsin upon Light Activation. <b>2001</b> , 40, 2977-81	14
2082	Ligand-Gated Ion Channels. <b>2001</b> , 40, 3100-3116	64
2081	Towards Synthetic Adrenaline Receptors-Shape-Selective Adrenaline Recognition in Water. <b>2001</b> , 40, 3148-3151	21
2080	The active 80S ribosome-Sec61 complex. <b>2001</b> , 66, 543-54	9
2079	Molecular dynamics of 5-HT1A and 5-HT2A serotonin receptors with methylated buspirone analogues. <b>2001</b> , 15, 1005-23	10
2078	Computational model of the complex between GR113808 and the 5-HT4 receptor guided by site-directed mutagenesis and the crystal structure of rhodopsin. <b>2001</b> , 15, 1025-33	18
2077	Molecular modeling of interactions of the non-peptide antagonist YM087 with the human vasopressin V1a, V2 receptors and with oxytocin receptors. <b>2001</b> , 15, 1085-104	21
2076	A sequence and structural study of transmembrane helices. <b>2001</b> , 15, 533-52	36
2075	MPtopo: A database of membrane protein topology. <b>2001</b> , 10, 455-8	150
2074	Modeling of the structural features of integral-membrane proteins reverse-environment prediction of integral membrane protein structure (REPIMPS). <b>2001</b> , 10, 1529-38	8
2073	Characterization of a G protein coupling "YL" motif of the human VPAC1 receptor, equivalent to the first two amino acids in the "DRY" motif of the rhodopsin family. <b>2001</b> , 17, 325-30	14

2072	Photoisomerization by hula-twist: a fundamental supramolecular photochemical reaction. <b>2001</b> , 34, 555-62	199	
2071	Lutropin receptor function: insights from natural, engineered, and computer-simulated mutations. <b>2001</b> , 51, 149-55	20	
2070	Constitutively active mutants of 5-HT <sub>4</sub> receptors are they in unique active states?. <b>2001</b> , 2, 61-7	26	
2069	Molecular evolution of a long wavelength-sensitive opsin in mimetic <i>Heliconius</i> butterflies (Lepidoptera: Nymphalidae). <b>2001</b> , 72, 435-449	19	
2068	Study of the bioactive conformation of novel 5-HT <sub>4</sub> receptor ligands: influence of an intramolecular hydrogen bond. <b>2001</b> , 57, 6745-6749	10	
2067	Dancing to the tune of chemokines. <b>2001</b> , 2, 129-34	506	
2066	C-terminal opening mimics 'inside-out' activation of integrin alpha5beta1. <b>2001</b> , 8, 412-6	215	
2065	How the G protein-coupled receptor activates GTP-binding protein. <b>2001</b> , 1, 225-8	1	
2064	Contrasting evolution of the human leukocyte N-formylpeptide receptor subtypes FPR and FPRL1R. <b>2001</b> , 2, 335-42	37	
2063	Regulation of transport of the dopamine D1 receptor by a new membrane-associated ER protein. <b>2001</b> , 3, 492-8	242	
2062	Membrane protein diffusion sets the speed of rod phototransduction. <b>2001</b> , 411, 90-4	148	
2061	Translational repression determines a neuronal potential in <i>Drosophila</i> asymmetric cell division. <b>2001</b> , 411, 94-8	156	
2060	How the olfactory system makes sense of scents. <b>2001</b> , 413, 211-8	863	
2059	G-protein-coupled receptor dimerization: modulation of receptor function. <b>2001</b> , 92, 71-87	262	
2058	Regulation of agonist binding to rat ET(B) receptors by cations and GTPgammaS. <i>Biochemical Pharmacology</i> , <b>2001</b> , 62, 537-45	6	1
2057	Sequestration and phosphorylation of the prostaglandin E2 EP4 receptor: dependence on the C-terminal tail. <i>Biochemical Pharmacology</i> , <b>2001</b> , 62, 997-1012	6	11
2056	Ligand induced conformational states of the 5-HT(1A) receptor. <b>2001</b> , 416, 33-41	36	
2055	Activation of rhodopsin: new insights from structural and biochemical studies. <b>2001</b> , 26, 318-24	362	

2054	Crystal structure of beta-arrestin at 1.9 Å: possible mechanism of receptor binding and membrane Translocation. <b>2001</b> , 9, 869-80	309
2053	Analytical pharmacology of G protein-coupled receptors by stoichiometric expression of the receptor and G(alpha) protein subunits. <b>2001</b> , 45, 3-16	16
2052	Confronting complexity: the interlink of phototransduction and retinoid metabolism in the vertebrate retina. <b>2001</b> , 20, 469-529	302
2051	Impact of human genome sequencing for in silico target discovery. <b>2001</b> , 6, 316-323	18
2050	Rhodopsin crystal structure: provides information on GPCR-ligand binding in general?. <b>2001</b> , 6, 288-289	3
2049	Helical membrane proteins: diversity of functions in the context of simple architecture. <b>2001</b> , 11, 370-6	81
2048	Lipids lost, lipids regained. <b>2001</b> , 11, 393-6	5
2047	Probing the mechanism of rhodopsin-catalyzed transducin activation. <b>2001</b> , 77, 202-10	35
2046	A full biological response to autoantibodies in Graves' disease requires a disulfide-bonded loop in the thyrotropin receptor N terminus homologous to a laminin epidermal growth factor-like domain. <b>2001</b> , 276, 14767-72	44
2045	Light-induced reorganization of phospholipids in rod disc membranes. <b>2001</b> , 276, 2538-43	49
2044	Maximal rate and nucleotide dependence of rhodopsin-catalyzed transducin activation: initial rate analysis based on a double displacement mechanism. <b>2001</b> , 276, 10000-9	135
2043	Direct identification of human oxytocin receptor-binding domains using a photoactivatable cyclic peptide antagonist: comparison with the human V1a vasopressin receptor. <b>2001</b> , 276, 26931-41	38
2042	Activation of the beta 2-adrenergic receptor involves disruption of an ionic lock between the cytoplasmic ends of transmembrane segments 3 and 6. <b>2001</b> , 276, 29171-7	490
2041	Signal transduction pathways as targets for therapeutics. <b>2001</b> , 2001, pe1	1
2040	Phe-308 and Phe-312 in transmembrane domain 7 are major sites of alpha 1-adrenergic receptor antagonist binding. Imidazoline agonists bind like antagonists. <b>2001</b> , 276, 25366-71	48
2039	Molecular modeling of ligand-gated ion channels: progress and challenges. <b>2001</b> , 48, 141-66	23
2038	Charged residues at the intracellular boundary of transmembrane helices 2 and 3 independently affect constitutive activity of Kaposi's sarcoma-associated herpesvirus G protein-coupled receptor. <b>2001</b> , 276, 1376-82	35
2037	Single-molecule spectroscopy of the beta(2) adrenergic receptor: observation of conformational substates in a membrane protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 8469-74	11.5 83

2036	Differences in conformational properties of the second intracellular loop (IL2) in 5HT(2C) receptors modified by RNA editing can account for G protein coupling efficiency. <b>2001</b> , 14, 409-14	27
2035	The second cytoplasmic loop of metabotropic glutamate receptor functions at the third loop position of rhodopsin. <b>2001</b> , 130, 149-55	18
2034	Cone opsin genes of african cichlid fishes: tuning spectral sensitivity by differential gene expression. <b>2001</b> , 18, 1540-50	210
2033	Functional diversification of lepidopteran opsins following gene duplication. <b>2001</b> , 18, 2270-9	56
2032	Surface dynamics of bacteriorhodopsin as revealed by (13)C NMR studies on [(13)C]Ala-labeled proteins: detection of millisecond or microsecond motions in interhelical loops and C-terminal alpha-helix. <b>2001</b> , 129, 373-82	27
2031	Molecular genetics and the evolution of ultraviolet vision in vertebrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 11731-6	11.5 136
2030	Molecular interactions of cyclam and bicyclam non-peptide antagonists with the CXCR4 chemokine receptor. <b>2001</b> , 276, 14153-60	191
2029	Identification of residues of the <i>Saccharomyces cerevisiae</i> G protein-coupled receptor contributing to alpha-factor pheromone binding. <b>2001</b> , 276, 37950-61	36
2028	The role of a conserved inter-transmembrane domain interface in regulating alpha(2a)-adrenergic receptor conformational stability and cell-surface turnover. <b>2001</b> , 59, 929-38	48
2027	Site-specific molecular design and its relevance to pharmacogenomics and chemical biology. <b>2001</b> , 1, 38-47	4
2026	[To see from light--biophysics of visual signal transduction]. <b>2001</b> , 11, 217-25	3
2025	Structural Mimicry in G Protein-Coupled Receptors: Implications of the High-Resolution Structure of Rhodopsin for Structure-Function Analysis of Rhodopsin-Like Receptors. <b>2001</b> , 60, 1-19	407
2024	Molecular mechanism for agonist-promoted alpha(2A)-adrenoceptor activation by norepinephrine and epinephrine. <b>2001</b> , 59, 1343-54	54
2023	Expression, purification, and characterization of a soluble form of the first extracellular domain of the human type 1 corticotropin releasing factor receptor. <b>2001</b> , 276, 31528-34	68
2022	Functionally different agonists induce distinct conformations in the G protein coupling domain of the beta 2 adrenergic receptor. <b>2001</b> , 276, 24433-6	319
2021	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. <b>2001</b> , 276, 27400-5	55
2020	Optimization of receptor-G protein coupling by bilayer lipid composition II: formation of metarhodopsin II-transducin complex. <b>2001</b> , 276, 42807-11	79
2019	Crystal structure of the ectodomain of Methuselah, a <i>Drosophila</i> G protein-coupled receptor associated with extended lifespan. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 3744-9	11.5 57

2018	Agonist-induced conformational changes in the G-protein-coupling domain of the beta 2 adrenergic receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 5997-6002	11.5	311
2017	Molecular characterization of the substance P*neurokinin-1 receptor complex: development of an experimentally based model. <b>2001</b> , 276, 22862-7		34
2016	Mutational and computational analysis of the alpha(1b)-adrenergic receptor. Involvement of basic and hydrophobic residues in receptor activation and G protein coupling. <b>2001</b> , 276, 46485-94		66
2015	An activation switch in the ligand binding pocket of the C5a receptor. <b>2001</b> , 276, 3394-400		68
2014	Solution 19F nuclear Overhauser effects in structural studies of the cytoplasmic domain of mammalian rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 4888-92	11.5	72
2013	Regulation of formyl peptide receptor agonist affinity by reconstitution with arrestins and heterotrimeric G proteins. <b>2001</b> , 276, 49204-12		37
2012	Polar residues drive association of polyleucine transmembrane helices. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 2250-5	11.5	351
2011	G protein gamma subunit interaction with a receptor regulates receptor-stimulated nucleotide exchange. <b>2001</b> , 276, 41742-7		24
2010	Logic gates using high Rydberg states. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 2973-8	11.5	25
2009	The human VPAC1 receptor: three-dimensional model and mutagenesis of the N-terminal domain. <b>2001</b> , 276, 10153-60		36
2008	Antibodies against the carboxyl-terminal end of the Trypanosoma cruzi ribosomal P proteins are pathogenic. <b>2001</b> , 15, 2602-12		49
2007	Polar side chains drive the association of model transmembrane peptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 880-5	11.5	310
2006	Conformations of the active and inactive states of opsin. <b>2001</b> , 276, 38487-93		93
2005	Mutant G protein alpha subunit activated by Gbeta gamma: a model for receptor activation?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 6150-5	11.5	80
2004	Agonist-induced conformational changes at the cytoplasmic side of transmembrane segment 6 in the beta 2 adrenergic receptor mapped by site-selective fluorescent labeling. <b>2001</b> , 276, 9279-90		123
2003	Signal transduction by the chemokine receptor CXCR5: structural requirements for G protein activation analyzed by chimeric CXCR1/CXCR5 molecules. <b>2001</b> , 382, 1387-97		25
2002	Lipid-facing correlated mutations and dimerization in G-protein coupled receptors. <b>2001</b> , 14, 759-67		49
2001	Mechanism of rhodopsin activation as examined with ring-constrained retinal analogs and the crystal structure of the ground state protein. <b>2001</b> , 276, 26148-53		35

2000	The Calpha ---H...O hydrogen bond: a determinant of stability and specificity in transmembrane helix interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 9056-61	11.5	436
1999	Signaling states of rhodopsin: absorption of light in active metarhodopsin II generates an all-trans-retinal bound inactive state. <b>2001</b> , 276, 30161-6		37
1998	Optimization of receptor-G protein coupling by bilayer lipid composition I: kinetics of rhodopsin-transducin binding. <b>2001</b> , 276, 42801-6		86
1997	D1 dopamine receptors. <b>2001</b> , 48, 65-139		24
1996	How activated receptors couple to G proteins. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 4819-21	11.5	182
1995	Single amino acid substitutions and deletions that alter the G protein coupling properties of the V2 vasopressin receptor identified in yeast by receptor random mutagenesis. <b>2001</b> , 276, 29382-92		51
1994	Review: Structural requirements for signalling and regulation of AT1-receptors. <b>2001</b> , 2, S16-S23		12
1993	Transmembrane domains 4 and 7 of the M(1) muscarinic acetylcholine receptor are critical for ligand binding and the receptor activation switch. <b>2001</b> , 276, 34098-104		75
1992	Mutational analysis of the fractalkine chemokine domain. Basic amino acid residues differentially contribute to CX3CR1 binding, signaling, and cell adhesion. <b>2001</b> , 276, 21632-41		43
1991	The TXP motif in the second transmembrane helix of CCR5. A structural determinant of chemokine-induced activation. <b>2001</b> , 276, 13217-25		111
1990	Palmitoylation of CCR5 is critical for receptor trafficking and efficient activation of intracellular signaling pathways. <b>2001</b> , 276, 23795-804		109
1989	A conserved Asn in transmembrane helix 7 is an on/off switch in the activation of the thyrotropin receptor. <b>2001</b> , 276, 22991-9		94
1988	Molecular basis for selectivity of high affinity peptide antagonists for the gastrin-releasing peptide receptor. <b>2001</b> , 276, 36652-63		33
1987	A single amino acid determines lysophospholipid specificity of the S1P1 (EDG1) and LPA1 (EDG2) phospholipid growth factor receptors. <b>2001</b> , 276, 49213-20		85
1986	Collecting and harvesting biological data: the GPCRDB and NucleaRDB information systems. <b>2001</b> , 29, 346-9		135
1985	Pleiotropic effects of substitutions of a highly conserved leucine in transmembrane helix III of the human lutropin/choriogonadotropin receptor with respect to constitutive activation and hormone responsiveness. <b>2001</b> , 15, 972-84		36
1984	Modeling and mutational analysis of a putative sodium-binding pocket on the dopamine D2 receptor. <b>2001</b> , 60, 373-81		72
1983	A free carboxylate oxygen in the side chain of position 674 in transmembrane domain 7 is necessary for TSH receptor activation. <b>2001</b> , 15, 1294-305		43



1982	Control of conformational equilibria in the human B2 bradykinin receptor. Modeling of nonpeptidic ligand action and comparison to the rhodopsin structure. <b>2001</b> , 276, 41100-11	53
1981	Ribose modified nucleosides and nucleotides as ligands for purine receptors. <b>2001</b> , 20, 333-41	6
1980	Modelling drugs and receptors using potentials: examples in the GPCRs' domain. <b>2001</b> , 12, 497-513	1
1979	Activation, deactivation, and adaptation in vertebrate photoreceptor cells. <b>2001</b> , 24, 779-805	324
1978	Electrostatic interactions in a neutral model phospholipid bilayer by molecular dynamics simulations. <b>2002</b> , 116, 3052-3057	80
1977	Methionine proximity assay, a novel method for exploring peptide ligand-receptor interaction. <b>2002</b> , 22, 297-313	41
1976	Analysis of agonism by dopamine at the dopaminergic D 2 G-protein coupled receptor based on comparative modelling of rhodopsin. <b>2002</b> , 28, 865-888	1
1975	Molecular modeling of opioid receptor-ligand complexes. <b>2002</b> , 40, 107-35	7
1974	Negative and positive regulatory epitopes in the C-terminal domains of the human B1 and B2 bradykinin receptor subtypes determine receptor coupling efficacy to G(q/11)-mediated [correction of G(9/11)-mediated] phospholipase Cbeta activity. <b>2002</b> , 62, 281-8	32
1973	G protein-coupled receptors as direct targets of inhaled anesthetics. <b>2002</b> , 61, 945-52	53
1972	Mutagenesis and modelling of the alpha(1b)-adrenergic receptor highlight the role of the helix 3/helix 6 interface in receptor activation. <b>2002</b> , 61, 1025-32	103
1971	Identification by site-directed mutagenesis of residues involved in ligand recognition and activation of the human A3 adenosine receptor. <b>2002</b> , 277, 19056-63	116
1970	The biologically crucial C terminus of cholecystinin and the non-peptide agonist SR-146,131 share a common binding site in the human CCK1 receptor. Evidence for a crucial role of Met-121 in the activation process. <b>2002</b> , 277, 7546-55	52
1969	Conformation of ligands bound to the muscarinic acetylcholine receptor. <b>2002</b> , 62, 778-87	41
1968	The effect of selection on a long wavelength-sensitive (LWS) opsin gene of Lake Victoria cichlid fishes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 15501-6 <sup>11.5</sup>	98
1967	Functional role of internal water molecules in rhodopsin revealed by X-ray crystallography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 5982-7	11.5 650
1966	Electron Crystallographic Studies of Rhodopsin. <b>2002</b> , 75, 1-10	
1965	Rhodopsin: insights from recent structural studies. <b>2002</b> , 31, 443-84	193

1964	(1)H and (13)C MAS NMR evidence for pronounced ligand-protein interactions involving the ionone ring of the retinylidene chromophore in rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 9101-6	11.5	109
1963	Refinement of the conformation of a critical region of charge-charge interaction between cholecystokinin and its receptor. <b>2002</b> , 61, 1041-52		44
1962	Molecular modeling and site-specific mutagenesis of the histamine-binding site of the histamine H4 receptor. <b>2002</b> , 62, 38-47		89
1961	A point mutation that confers constitutive activity to CXCR4 reveals that T140 is an inverse agonist and that AMD3100 and ALX40-4C are weak partial agonists. <b>2002</b> , 277, 24515-21		199
1960	Conformational changes that occur during M3 muscarinic acetylcholine receptor activation probed by the use of an in situ disulfide cross-linking strategy. <b>2002</b> , 277, 2247-57		63
1959	Differential internalization of the prostaglandin f(2alpha) receptor isoforms: role of protein kinase C and clathrin. <b>2002</b> , 302, 219-24		22
1958	Biomimetic self-assembly of a functional asymmetrical electronic device. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 4937-40	11.5	83
1957	Environment and mobility of a series of fluorescent reporters at the amino terminus of structurally related peptide agonists and antagonists bound to the cholecystokinin receptor. <b>2002</b> , 277, 18552-60		48
1956	Prediction of structure and function of G protein-coupled receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 12622-7	11.5	243
1955	Naturally occurring rhodopsin mutation in the dog causes retinal dysfunction and degeneration mimicking human dominant retinitis pigmentosa. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 6328-33	11.5	138
1954	Insertional mutagenesis and immunochemical analysis of visual arrestin interaction with rhodopsin. <b>2002</b> , 277, 11703-8		39
1953	The role of intersection topography in bond selectivity of cis-trans photoisomerization. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 1769-73	11.5	125
1952	A Y2 receptor mimetic aptamer directed against neuropeptide Y. <b>2002</b> , 277, 11416-22		32
1951	Residues in the first extracellular loop of a G protein-coupled receptor play a role in signal transduction. <b>2002</b> , 277, 30581-90		31
1950	Follicle-stimulating hormone interacts with exoloop 3 of the receptor. <b>2002</b> , 277, 50165-75		25
1949	Mutation of Asn293 to Asp in transmembrane helix VI abolishes agonist-induced but not constitutive activity of the beta(2)-adrenergic receptor. <b>2002</b> , 62, 1431-7		23
1948	Classifying G-protein coupled receptors with support vector machines. <b>2002</b> , 18, 147-59		232
1947	Molecular modelling and site-directed mutagenesis of human GALR1 galanin receptor defines determinants of receptor subtype specificity. <b>2002</b> , 15, 313-23		26

1946	Biochemical and physiological properties of rhodopsin regenerated with 11-cis-6-ring- and 7-ring-retinals. <b>2002</b> , 277, 42315-42324		35
1945	The role of transmembrane helix 5 in agonist binding to the human H3 receptor. <b>2002</b> , 301, 451-8		73
1944	The structures of the active center in dark-adapted bacteriorhodopsin by solution-state NMR spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 9765-70	11.5	44
1943	Functional interaction between bovine rhodopsin and G protein transducin. <b>2002</b> , 277, 40-6		51
1942	The 5-hydroxytryptamine(4a) receptor is palmitoylated at two different sites, and acylation is critically involved in regulation of receptor constitutive activity. <b>2002</b> , 277, 2534-46		59
1941	The signal peptide of the G protein-coupled human endothelin B receptor is necessary for translocation of the N-terminal tail across the endoplasmic reticulum membrane. <b>2002</b> , 277, 16131-8		51
1940	Constitutive activation of angiotensin II type 1 receptor alters the orientation of transmembrane Helix-2. <b>2002</b> , 277, 24299-305		50
1939	CCR5 and HIV Infection. <b>2002</b> , 8, 19-31		18
1938	Chicken neuropeptide Y-family receptor Y4: a receptor with equal affinity for pancreatic polypeptide, neuropeptide Y and peptide YY. <b>2002</b> , 28, 225-35		38
1937	tGRAP, the G-protein coupled receptors mutant database. <b>2002</b> , 30, 361-3		18
1936	The structural basis of g-protein-coupled receptor function and dysfunction in human diseases. <b>2002</b> , 144-227		6
1935	Lysine 183 and glutamic acid 157 of the TSH receptor: two interacting residues with a key role in determining specificity toward TSH and human CG. <b>2002</b> , 16, 722-35		49
1934	LH receptor defects. <b>2002</b> , 20, 199-204		40
1933	Solution NMR spectroscopy of [ $\alpha$ - $^{15}\text{N}$ ]lysine-labeled rhodopsin: The single peak observed in both conventional and TROSY-type HSQC spectra is ascribed to Lys-339 in the carboxyl-terminal peptide sequence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 3452-7	11.5	60
1932	Involvement of the second extracellular loop (E2) of the neurokinin-1 receptor in the binding of substance P. Photoaffinity labeling and modeling studies. <b>2002</b> , 277, 22386-94		21
1931	The chain length dependence of helix formation of the second transmembrane domain of a G protein-coupled receptor of <i>Saccharomyces cerevisiae</i> . <b>2002</b> , 277, 14483-92		10
1930	The serotonin binding site of human and murine 5-HT <sub>2B</sub> receptors: molecular modeling and site-directed mutagenesis. <b>2002</b> , 277, 17170-8		64
1929	Manipulation of cholesterol levels in rod disk membranes by methyl-beta-cyclodextrin: effects on receptor activation. <b>2002</b> , 277, 20139-45		111

1928	Purification and characterization of a receptor for human parathyroid hormone and parathyroid hormone-related peptide. <b>2002</b> , 277, 31774-80	22
1927	Rhodopsin with 11-cis-locked chromophore is capable of forming an active state photoproduct. <b>2002</b> , 277, 40229-34	20
1926	Molecular biology of serotonin receptors structure and function at the molecular level. <b>2002</b> , 2, 507-28	216
1925	G-protein-coupled receptors for neurotransmitter amino acids: C-terminal tails, crowded signalosomes. <b>2002</b> , 365, 329-36	62
1924	Introducing an Implicit Membrane in Generalized Born/Solvent Accessibility Continuum Solvent Models. <b>2002</b> , 106, 8726-8738	143
1923	Variant amino acids in the extracellular loops of murine and human vasopressin V2 receptors account for differences in cell surface expression and ligand affinity. <b>2002</b> , 16, 799-813	28
1922	Two mutations in extracellular loop 2 of the human GnRH receptor convert an antagonist to an agonist. <b>2002</b> , 16, 1079-88	38
1921	The nuclear receptor coactivators p300/CBP/cointegrator-associated protein (p/CIP) and transcription intermediary factor 2 (TIF2) differentially regulate PKA-stimulated transcriptional activity of steroidogenic factor 1. <b>2002</b> , 16, 757-73	57
1920	A model for constitutive lutropin receptor activation based on molecular simulation and engineered mutations in transmembrane helices 6 and 7. <b>2002</b> , 277, 32202-13	59
1919	Chimeras of the rat and human FSH receptors (FSHRs) identify residues that permit or suppress transmembrane 6 mutation-induced constitutive activation of the FSHR via rearrangements of hydrophobic interactions between helices 6 and 7. <b>2002</b> , 16, 1881-92	26
1918	Lysine 270 in the third intracellular domain of the oxytocin receptor is an important determinant for G alpha(q) coupling specificity. <b>2002</b> , 16, 814-23	18
1917	Application of ligand SAR, receptor modeling and receptor mutagenesis to the discovery and development of a new class of 5-HT(2A) ligands. <b>2002</b> , 2, 575-98	32
1916	A single residue (arg46) located within the N-terminus of the V1a vasopressin receptor is critical for binding vasopressin but not peptide or nonpeptide antagonists. <b>2002</b> , 16, 600-9	24
1915	Activation of the cAMP pathway by the TSH receptor involves switching of the ectodomain from a tethered inverse agonist to an agonist. <b>2002</b> , 16, 736-46	163
1914	Constitutive activity of G-protein coupled receptors: emphasis on serotonin receptors. <b>2002</b> , 2, 529-38	43
1913	5-HT(4) receptor antagonists: structure-affinity relationships and ligand-receptor interactions. <b>2002</b> , 2, 625-41	16
1912	Photoisomerization by Hula-twist. Photoactive biopigments. <b>2002</b> , 74, 1391-1396	18
1911	Revealing protein structures. <b>2002</b> ,	1

1910	Predicting the transmembrane secondary structure of ligand-gated ion channels. <b>2002</b> , 15, 443-54	37
1909	Medicinal chemistry in the new millennium. A glance into the future. <b>2002</b> , 74, 703-785	48
1908	Transition of arrestin into the active receptor-binding state requires an extended interdomain hinge. <b>2002</b> , 277, 43961-7	86
1907	The critical role of transmembrane prolines in human prostacyclin receptor activation. <b>2002</b> , 61, 1202-10	35
1906	The alpha-helix and the organization and gating of channels. <b>2002</b> , 31, 207-33	57
1905	Porcine odorant-binding protein selectively binds to a human olfactory receptor. <b>2002</b> , 27, 691-701	43
1904	Molecular basis of the selectivity of gastrin-releasing peptide receptor for gastrin-releasing peptide. <b>2002</b> , 61, 1435-43	33
1903	Conserved helix 7 tyrosine acts as a multistate conformational switch in the 5HT <sub>2C</sub> receptor. Identification of a novel "locked-on" phenotype and double revertant mutations. <b>2002</b> , 277, 36577-84	99
1902	Identification of the extracellular loop 2 as the point of interaction between the N terminus of the chemokine MIP-1alpha and its CCR1 receptor. <b>2002</b> , 62, 729-36	16
1901	Discovery of an ectopic activation site on the M(1) muscarinic receptor. <b>2002</b> , 61, 1297-302	188
1900	Three-dimensional representations of G protein-coupled receptor structures and mechanisms. <b>2002</b> , 343, 329-71	143
1899	Secondary structure of the third extracellular loop responsible for ligand selectivity of a mammalian gonadotropin-releasing hormone receptor. <b>2002</b> , 45, 1026-34	20
1898	Evidence for a model of agonist-induced activation of 5-hydroxytryptamine 2A serotonin receptors that involves the disruption of a strong ionic interaction between helices 3 and 6. <b>2002</b> , 277, 11441-9	142
1897	HEK293S cells have functional retinoid processing machinery. <b>2002</b> , 119, 593-612	30
1896	Activation and inhibition of G protein-coupled receptors by cell-penetrating membrane-tethered peptides. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 643-8 <sup>11.5</sup>	256
1895	Design, synthesis and pharmacological evaluation of 5-hydroxytryptamine(1a) receptor ligands to explore the three-dimensional structure of the receptor. <b>2002</b> , 62, 15-21	47
1894	Beta2 adrenergic receptor activation. Modulation of the proline kink in transmembrane 6 by a rotamer toggle switch. <b>2002</b> , 277, 40989-96	288
1893	Thyroid-stimulating hormone and thyroid-stimulating hormone receptor structure-function relationships. <b>2002</b> , 82, 473-502	323

1892	Prediction of heterodimerization interfaces of G-protein coupled receptors with a new subtractive correlated mutation method. <b>2002</b> , 15, 881-5	75
1891	A 5-HT <sub>4</sub> receptor transmembrane network implicated in the activity of inverse agonists but not agonists. <b>2002</b> , 277, 25502-11	35
1890	Metal ion-mediated agonism and agonist enhancement in melanocortin MC1 and MC4 receptors. <b>2002</b> , 277, 47662-70	88
1889	NK1 receptor fused to beta-arrestin displays a single-component, high-affinity molecular phenotype. <b>2002</b> , 62, 30-7	37
1888	Amphiphilicity index of polar amino acids as an aid in the characterization of amino acid preference at membrane-water interfaces. <b>2002</b> , 18, 608-16	156
1887	About the use of protein models. <b>2002</b> , 18, 934-8	35
1886	The origins of the concept of interference. <b>2002</b> , 360, 807-19	15
1885	Use of the substituted cysteine accessibility method to study the structure and function of G protein-coupled receptors. <b>2002</b> , 343, 137-56	48
1884	Rhodopsin and Retinitis Pigmentosa: Shedding Light on Structure and Function. <b>2002</b> , 8, 33-50	3
1883	Activating Mutations of the Lutropin Choriogonadotropin Receptor in Precocious Puberty. <b>2002</b> , 8, 3-18	11
1882	Bioorganic Studies on Rhodopsins. <b>2002</b> , 49, 443-451	2
1881	Recreating a functional ancestral archosaur visual pigment. <b>2002</b> , 19, 1483-9	123
1880	Cloning, structural characterization and functional expression of a zebrafish bradykinin B <sub>2</sub> -related receptor. <b>2002</b> , 364, 817-24	17
1879	Structural aspects and design of low-molecular-mass complement inhibitors. <b>2002</b> , 30, 1026-36	45
1878	Cannabinoid receptors. <b>2002</b> ,	
1877	Electrostatic properties of membrane lipids coupled to metarhodopsin II formation in visual transduction. <b>2002</b> , 124, 7690-701	47
1876	Strategies for mapping the binding site of the serotonin 5-HT <sub>2A</sub> receptor. <b>2002</b> , 343, 123-36	10
1875	Photoreceptor renewal: a role for peripherin/rds. <b>2002</b> , 217, 183-225	45

1874	Strategies for modeling the interactions of transmembrane helices of G protein-coupled receptors by geometric complementarity using the GRAMM computer algorithm. <b>2002</b> , 343, 313-28	17
1873	Evolutionary traces of functional surfaces along G protein signaling pathway. <b>2002</b> , 344, 536-56	28
1872	Beyond G proteins: The role of accessory proteins in G protein-coupled receptor signalling. <b>2002</b> , 161-173	
1871	Homology modeling suggests a functional role for parallel amino acid substitutions between bee and butterfly red- and green-sensitive opsins. <b>2002</b> , 19, 983-6	27
1870	The challenge of inhibiting Abeta polymerization. <b>2002</b> , 9, 1121-33	43
1869	Molecular evolution of the mammalian alpha 2B adrenergic receptor. <b>2002</b> , 19, 2150-60	21
1868	Structure of rhodopsin in monolayers at the air-water interface: a PM-IRRAS and X-ray reflectivity study. <b>2002</b> , 41, 13424-34	44
1867	Isomer-Specific Interaction of the Retinal Chromophore with Threonine-118 in Rhodopsin. <b>2002</b> , 106, 1969-1975	34
1866	Roles of specific extracellular domains of the glucagon receptor in ligand binding and signaling. <b>2002</b> , 41, 11795-803	41
1865	Conserved proline residue at position 189 in cone visual pigments as a determinant of molecular properties different from rhodopsins. <b>2002</b> , 41, 15245-52	55
1864	Use of an in situ disulfide cross-linking strategy to map proximities between amino acid residues in transmembrane domains I and VII of the M3 muscarinic acetylcholine receptor. <b>2002</b> , 41, 7647-58	35
1863	Function of extracellular loop 2 in rhodopsin: glutamic acid 181 modulates stability and absorption wavelength of metarhodopsin II. <b>2002</b> , 41, 3620-7	86
1862	The mast cell function-associated antigen and its interactions with the type I Fcepsilon receptor. <b>2002</b> , 41, 881-9	20
1861	Excited-State Dynamics of Pharaonis Phoborhodopsin Probed by Femtosecond Fluorescence Spectroscopy. <b>2002</b> , 106, 2091-2095	23
1860	Time-resolved resonance Raman analysis of chromophore structural changes in the formation and decay of rhodopsin's BSI intermediate. <b>2002</b> , 124, 4857-64	64
1859	Deciphering the role of individual acyl chains in the interaction network between phosphatidylserines and a single-spanning membrane protein. <b>2002</b> , 41, 13611-6	12
1858	Light-induced changes in the structure and accessibility of the cytoplasmic loops of rhodopsin in the activated MII state. <b>2002</b> , 41, 7875-84	31
1857	Conformation and stability of alpha-helical membrane proteins. 2. Influence of pH and salts on stability and unfolding of rhodopsin. <b>2002</b> , 41, 3536-45	33

1856	Impact of aromatic residues within transmembrane helix 6 of the human gonadotropin-releasing hormone receptor upon agonist and antagonist binding. <b>2002</b> , 41, 1129-36	46
1855	Solution and biologically relevant conformations of enantiomeric 11-cis-locked cyclopropyl retinals. <b>2002</b> , 124, 7294-302	34
1854	Identification of human vesicle monoamine transporter (VMAT2) luminal cysteines that form an intramolecular disulfide bond. <b>2002</b> , 41, 6346-53	19
1853	Spectral tuning in the mammalian short-wavelength sensitive cone pigments. <b>2002</b> , 41, 6860-5	99
1852	Angiotensin II vs its type I antagonists: conformational requirements for receptor binding assessed from NMR spectroscopic and receptor docking experiments. <b>2002</b> , 45, 4410-8	28
1851	Residue 19 of the parathyroid hormone (PTH) modulates ligand interaction with the juxtamembrane region of the PTH-1 receptor. <b>2002</b> , 41, 13224-33	24
1850	Kappa-opioid receptor model in a phospholipid bilayer: molecular dynamics simulation. <b>2002</b> , 45, 4838-46	20
1849	Mutation of a single TMVI residue, Phe(282), in the beta(2)-adrenergic receptor results in structurally distinct activated receptor conformations. <b>2002</b> , 41, 6045-53	31
1848	Spectral tuning and evolution of short wave-sensitive cone pigments in cottoid fish from Lake Baikal. <b>2002</b> , 41, 6019-25	51
1847	Structural studies of metarhodopsin II, the activated form of the G-protein coupled receptor, rhodopsin. <b>2002</b> , 41, 7318-24	57
1846	Intermolecular interactions between cholecystokinin-8 and the third extracellular loop of the cholecystokinin-2 receptor. <b>2002</b> , 41, 4560-6	39
1845	Evidence that helix 8 of rhodopsin acts as a membrane-dependent conformational switch. <b>2002</b> , 41, 8298-309	89
1844	Agonist-specific, high-affinity binding epitopes are contributed by an arginine in the N-terminus of the human oxytocin receptor. <b>2002</b> , 41, 5086-92	35
1843	Phototransduction by vertebrate ultraviolet visual pigments: protonation of the retinylidene Schiff base following photobleaching. <b>2002</b> , 41, 9842-51	39
1842	Disruption of the alpha5 helix of transducin impairs rhodopsin-catalyzed nucleotide exchange. <b>2002</b> , 41, 6988-94	50
1841	NMR and modeling studies of a synthetic extracellular loop II of the kappa opioid receptor in a DPC micelle. <b>2002</b> , 41, 61-8	37
1840	The lutropin/choriogonadotropin receptor, a 2002 perspective. <b>2002</b> , 23, 141-74	600
1839	Structure of docosahexaenoic acid-containing phospholipid bilayers as studied by (2)H NMR and molecular dynamics simulations. <b>2002</b> , 124, 298-309	130



1838	Reaction path analysis of the "tunable" photoisomerization selectivity of free and locked retinal chromophores. <b>2002</b> , 124, 4124-34	64
1837	Electrostatic and hydrophobic forces tether the proximal region of the angiotensin II receptor (AT1A) carboxyl terminus to anionic lipids. <b>2002</b> , 41, 7830-40	40
1836	Co- and posttranslational modification of the alpha(1B)-adrenergic receptor: effects on receptor expression and function. <b>2002</b> , 41, 4281-91	18
1835	Bleaching kinetics of artificial visual pigments with modifications near the ring-polyene chain connection. <b>2002</b> , 41, 2028-35	4
1834	The local environment at the cytoplasmic end of TM6 of the mu opioid receptor differs from those of rhodopsin and monoamine receptors: introduction of an ionic lock between the cytoplasmic ends of helices 3 and 6 by a L6.30(275)E mutation inactivates the mu opioid receptor and reduces the constitutive activity of its T6.34(279)K mutant. <b>2002</b> , 41, 11672-80	37
1833	The molecular basis of the coloration mechanism in lobster shell: beta-crustacyanin at 3.2-A resolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 9795-800	11.5 143
1832	N-(piperidin-1-yl)-5-(4-chlorophenyl)-1-(2,4-dichlorophenyl)-4-methyl-1H-pyrazole-3-carboxamide (SR141716A) interaction with LYS 3.28(192) is crucial for its inverse agonism at the cannabinoid CB1 receptor. <b>2002</b> , 62, 1274-87	162
1831	Dynamic aspects of membrane proteins and membrane-associated peptides as revealed by <sup>13</sup> C NMR: Lessons from bacteriorhodopsin as an intact protein. <b>2002</b> , 47, 39-108	33
1830	The role and perspective of ab initio molecular dynamics in the study of biological systems. <b>2002</b> , 35, 455-64	248
1829	Helices VII and X in the lactose permease of Escherichia coli: proximity and ligand-induced distance changes. <b>2002</b> , 315, 53-62	21
1828	X-ray diffraction of heavy-atom labelled two-dimensional crystals of rhodopsin identifies the position of cysteine 140 in helix 3 and cysteine 316 in helix 8. <b>2002</b> , 316, 693-709	16
1827	Conformational change of the E-F interhelical loop in the M photointermediate of bacteriorhodopsin. <b>2002</b> , 317, 471-8	29
1826	Mutagenic mapping of helical structures in the transmembrane segments of the yeast alpha-factor receptor. <b>2002</b> , 317, 765-88	35
1825	Characterization of an antibody Fv fragment that binds to the human, but not to the rat neurotensin receptor NTS-1. <b>2002</b> , 24, 505-12	3
1824	Green fluorescent protein as a reporter of human mu-opioid receptor overexpression and localization in the methylotrophic yeast Pichia pastoris. <b>2002</b> , 99, 23-39	47
1823	Pharmacogenomics and Drug Design. 143-157	
1822	The laser-induced blue state of bacteriorhodopsin: mechanistic and color regulatory roles of protein-protein interactions, protein-lipid interactions, and metal ions. <b>2002</b> , 124, 3418-30	13
1821	NMR structure of the second intracellular loop of the alpha 2A adrenergic receptor: evidence for a novel cytoplasmic helix. <b>2002</b> , 41, 3596-604	39

1820	Molecular pharmacology and modeling of vasopressin receptors. <b>2002</b> , 139, 179-96	70
1819	Expression of human vasopressin and oxytocin receptors in Escherichia coli. <b>2002</b> , 139, 163-77	2
1818	Update on current concepts of the molecular basis of beta2-adrenergic receptor signaling. <b>2002</b> , 110, S223-7	67
1817	Molecular modelling of the human A2b adenosine receptor and an analysis of the binding modes of its selective ligands. <b>2002</b> , 12, 211-212	7
1816	Discovery and structure-activity relationship of N-(ureidoalkyl)-benzyl-piperidines as potent small molecule CC chemokine receptor-3 (CCR3) antagonists. <b>2002</b> , 45, 3794-804	49
1815	Structure, function, and inhibition of chemokines. <b>2002</b> , 42, 469-99	492
1814	Benzimidazole derivatives. 3. 3D-QSAR/CoMFA model and computational simulation for the recognition of 5-HT(4) receptor antagonists. <b>2002</b> , 45, 4806-15	32
1813	Structural determinants of A(3) adenosine receptor activation: nucleoside ligands at the agonist/antagonist boundary. <b>2002</b> , 45, 4471-84	139
1812	Conformational memories and the endocannabinoid binding site at the cannabinoid CB1 receptor. <b>2002</b> , 45, 3649-59	57
1811	The binding site of aminergic G protein-coupled receptors: the transmembrane segments and second extracellular loop. <b>2002</b> , 42, 437-67	303
1810	Relative orientation between the beta-ionone ring and the polyene chain for the chromophore of rhodopsin in native membranes. <b>2002</b> , 41, 7549-55	46
1809	Free energy determinants of peptide association with lipid bilayers. <b>2002</b> , 52, 205-253	36
1808	Synthesis, molecular modeling studies, and pharmacological activity of selective A(1) receptor antagonists. <b>2002</b> , 45, 4875-87	43
1807	Design, synthesis and biological evaluation of novel N-alkyl- and N-acyl-(7-substituted-2-phenylimidazo[1,2-a][1,3,5]triazin-4-yl)amines (ITAs) as novel A(1) adenosine receptor antagonists. <b>2002</b> , 45, 5030-6	26
1806	Synthesis of a novel series of tricyclic indan derivatives as melatonin receptor agonists. <b>2002</b> , 45, 4222-39	111
1805	Conformational energetics of rhodopsin modulated by nonlamellar-forming lipids. <b>2002</b> , 41, 6354-68	153
1804	Anti-bovine rhodopsin monoclonal antibody recognizing light-dependent structural change. <b>2002</b> , 19, 651-9	4
1803	Structure of the third intracellular loop of the human cannabinoid 1 receptor. <b>2002</b> , 41, 11344-50	34

1802	Early steps of the intramolecular signal transduction in rhodopsin explored by molecular dynamics simulations. <b>2002</b> , 41, 10799-809		102
1801	New serotonin 5-HT(2A), 5-HT(2B), and 5-HT(2C) receptor antagonists: synthesis, pharmacology, 3D-QSAR, and molecular modeling of (aminoalkyl)benzo and heterocycloalkanones. <b>2002</b> , 45, 54-71		49
1800	Synthesis, biological properties, and molecular modeling investigation of the first potent, selective, and water-soluble human A(3) adenosine receptor antagonist. <b>2002</b> , 45, 3579-82		68
1799	Docking ligands to vasopressin and oxytocin receptors via genetic algorithm. <b>2002</b> , 22, 393-409		2
1798	Agonist channeling of $\beta$ -adrenoceptor function. <b>2002</b> , 181-192		
1797	Angiotensin II is bound to both receptors AT1 and AT2, parallel to the transmembrane domains and in an extended form. <b>2002</b> , 80, 418-25		24
1796	Salvinorin A: a potent naturally occurring nonnitrogenous kappa opioid selective agonist. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2002</b> , 99, 11934-9	11.5	618
1795	Molecular mapping in the CNS. <b>2002</b> , 8, 1547-70		9
1794	Interaction of a non-peptide agonist with angiotensin II AT1 receptor mutants. <b>2002</b> , 80, 413-7		5
1793	The alpha1b-adrenergic receptor subtype: molecular properties and physiological implications. <b>2002</b> , 22, 1-16		8
1792	Bioinformatics: from genome to drug targets. <b>2002</b> , 34, 306-12		12
1791	Comparison of the transmembrane helices of bovine rhodopsin in the crystal structure and the C $\beta$ template based on cryo-electron microscopy maps and sequence analysis of the G protein-coupled receptors. <b>2002</b> , 28, 845-851		4
1790	NMR studies of CCK-8/CCK1 complex support membrane-associated pathway for ligand-receptor interaction. <b>2002</b> , 80, 383-7		12
1789	The organizing principle in the formation of the T cell receptor-CD3 complex. <i>Cell</i> , <b>2002</b> , 111, 967-79	56.2	323
1788	Crystal structure of rhodopsin: a template for cone visual pigments and other G protein-coupled receptors. <b>2002</b> , 1565, 168-82		89
1787	Structural studies on rhodopsin. <b>2002</b> , 1565, 183-95		18
1786	Conformational and molecular modeling studies of sulfated cholecystokinin-15. <b>2002</b> , 293, 1053-9		10
1785	Mutagenesis and peptide analysis of the DRY motif in the alpha2A adrenergic receptor: evidence for alternate mechanisms in G protein-coupled receptors. <b>2002</b> , 293, 1233-41		47

1784	Novel missense mutations in red/green opsin genes in congenital color-vision deficiencies. <b>2002</b> , 294, 205-9	31
1783	A new technique to co-localise membrane proteins with Homer/vesl. <b>2002</b> , 295, 756-65	4
1782	Retinitis pigmentosa-associated rhodopsin mutations in three membrane-located cysteine residues present three different biochemical phenotypes. <b>2002</b> , 297, 847-53	12
1781	Reciprocal mutations of neuropeptide Y receptor Y2 in human and chicken identify amino acids important for antagonist binding. <b>2002</b> , 518, 5-9	27
1780	The eye photoreceptor protein rhodopsin. Structural implications for retinal disease. <b>2002</b> , 528, 17-22	29
1779	Amphioxus homologs of Go-coupled rhodopsin and peropsin having 11-cis- and all-trans-retinals as their chromophores. <b>2002</b> , 531, 525-8	90
1778	Identification of binding sites of prazosin, tamsulosin and KMD-3213 with alpha(1)-adrenergic receptor subtypes by molecular modeling. <b>2002</b> , 71, 2531-41	29
1777	Structure and orientation of a G protein fragment in the receptor bound state from residual dipolar couplings. <b>2002</b> , 322, 441-61	93
1776	Molecular mechanism of spontaneous pigment activation in retinal cones. <b>2002</b> , 83, 184-93	34
1775	Structure modeling of the chemokine receptor CCR5: implications for ligand binding and selectivity. <b>2002</b> , 83, 3012-31	66
1774	Molecular dynamics investigation of primary photoinduced events in the activation of rhodopsin. <b>2002</b> , 83, 3097-112	163
1773	Stability of bacteriorhodopsin alpha-helices and loops analyzed by single-molecule force spectroscopy. <b>2002</b> , 83, 3578-88	150
1772	Suramin affects coupling of rhodopsin to transducin. <b>2002</b> , 82, 793-802	14
1771	Influence of the environment in the conformation of alpha-helices studied by protein database search and molecular dynamics simulations. <b>2002</b> , 82, 3207-13	29
1770	Structure and dynamics of metallomacrocycles: recognition of zinc xylyl-bicyclam by an HIV coreceptor. <b>2002</b> , 124, 9105-12	127
1769	Use of fluorescence resonance energy transfer to analyze oligomerization of G-protein-coupled receptors expressed in yeast. <b>2002</b> , 27, 324-32	42
1768	Lessons from constitutively active mutants of G protein-coupled receptors. <b>2002</b> , 13, 336-43	160
1767	Molecular basis for lysophosphatidic acid receptor antagonist selectivity. <b>2002</b> , 1582, 309-17	69

1766	Zebrafish melanopsin: isolation, tissue localisation and phylogenetic position. <b>2002</b> , 107, 128-36	82
1765	Seven-transmembrane receptors: crystals clarify. <b>2002</b> , 23, 140-6	149
1764	Chemokines, chemokine receptors and small-molecule antagonists: recent developments. <b>2002</b> , 23, 459-67	189
1763	Aliphatic amino acids in helix VI of the AT(1) receptor play a relevant role in agonist binding and activity. <b>2002</b> , 106, 33-8	15
1762	Molecular evolution of color vision in vertebrates. <b>2002</b> , 300, 69-78	126
1761	Mutating the four extracellular cysteines in the chemokine receptor CCR6 reveals their differing roles in receptor trafficking, ligand binding, and signaling. <b>2002</b> , 41, 8332-41	38
1760	G protein-coupled receptors: dominant players in cell-cell communication. <b>2002</b> , 212, 63-132	47
1759	Synthesis, biological activity, and molecular modeling investigation of new pyrazolo[4,3-e]-1,2,4-triazolo[1,5-c]pyrimidine derivatives as human A(3) adenosine receptor antagonists. <b>2002</b> , 45, 770-80	90
1758	Structure-activity relationships in 1,4-benzodioxan-related compounds. 7. Selectivity of 4-phenylchroman analogues for alpha(1)-adrenoreceptor subtypes. <b>2002</b> , 45, 1633-43	76
1757	. <b>2002</b> ,	10
1756	Molecular Pharmacology of the Secretin Receptor. <b>2002</b> , 8, 189-200	2
1755	Conformation and stability of alpha-helical membrane proteins. 1. Influence of salts on conformational equilibria between active and inactive states of rhodopsin. <b>2002</b> , 41, 3529-35	26
1754	Interaction of gamma-COP with a transport motif in the D1 receptor C-terminus. <b>2002</b> , 81, 77-85	29
1753	Interaction of 1,2,4-substituted piperazines, new serotonin receptor ligands, with 5-HT1A and 5-HT2A receptors. <b>2002</b> , 57, 285-301	12
1752	A critical role for a tyrosine residue in the cannabinoid receptors for ligand recognition. <i>Biochemical Pharmacology</i> , <b>2002</b> , 63, 2121-36	6 58
1751	A new spin on protein dynamics. <b>2002</b> , 27, 288-95	362
1750	The third dimension for protein interactions and complexes. <b>2002</b> , 27, 633-8	82
1749	Early structural rearrangements in the photocycle of an integral membrane sensory receptor. <b>2002</b> , 10, 473-82	50

1748	Grafting segments from the extracellular surface of CCR5 onto a bacteriorhodopsin transmembrane scaffold confers HIV-1 coreceptor activity. <b>2002</b> , 10, 515-25	11
1747	Trichromatic concept optimizes MAD experiments in synchrotron X-ray crystallography. <b>2002</b> , 10, 1205-10	17
1746	Function first: a powerful approach to post-genomic drug discovery. <b>2002</b> , 7, 865-71	15
1745	G protein specificity: traffic direction required. <b>2002</b> , 14, 407-18	147
1744	Structure of rhodopsin and the superfamily of seven-helical receptors: the same and not the same. <b>2002</b> , 14, 189-95	94
1743	Membrane protein complexes. <b>2002</b> , 12, 239-43	32
1742	Structure-Function Analysis of Urotensin II and Its Use in the Construction of a Ligand-Receptor Working Model. <b>2002</b> , 114, 3064	2
1741	Towards synthetic adrenaline receptors--shape-selective adrenaline recognition in water. <b>2002</b> , 8, 1485-99	46
1740	Structure-function analysis of urotensin II and its use in the construction of a ligand-receptor working model. <b>2002</b> , 41, 2940-4	82
1739	Structural genomics of "non-standard" proteins: a chance for membrane proteins?. <b>2002</b> , 3, 39-48	12
1738	Heteronuclear multidimensional NMR spectroscopy of solubilized membrane proteins: resonance assignment of native bacteriorhodopsin. <b>2002</b> , 3, 1019-23	36
1737	The first orally active low molecular weight agonists for the LH receptor: thienopyr(im)idines with therapeutic potential for ovulation induction. <b>2002</b> , 3, 1023-6	73
1736	Drug design strategies for targeting G-protein-coupled receptors. <b>2002</b> , 3, 928-44	452
1735	Crystal structure of rhodopsin: a G-protein-coupled receptor. <b>2002</b> , 3, 963-7	36
1734	Active states of rhodopsin. <b>2002</b> , 3, 968-74	23
1733	Structure and orientation of ligands bound to membrane proteins are reflected by residual dipolar couplings in solution NMR measurements. <b>2002</b> , 3, 975-80	16
1732	Dynamics in rhodopsin. <b>2002</b> , 3, 981-6	18
1731	[Agonist or antagonist? Structure-activity relationships of opioids]. <b>2002</b> , 31, 60-8	

1730	[What takes place in the receptor? Ligand-receptor interaction in 5-HT agonists]. <b>2002</b> , 31, 470-8	
1729	Synthesis of 11-cis-locked bicyclo[5.1.0]octanyl retinal and an enantioselective binding to bovine opsin. <b>2002</b> , 14, 340-6	9
1728	Heterologous expression and purification systems for structural proteomics of mammalian membrane proteins. <b>2002</b> , 3, 511-7	11
1727	Receptor-dependent G-protein activation in lipidic cubic phase. <b>2002</b> , 67, 167-77	6
1726	Structural insight into the role of the second intracellular loop of the bradykinin 2 receptor in signaling and internalization. <b>2002</b> , 63, 239-46	13
1725	High resolution NMR analysis of the seven transmembrane domains of a heptahelical receptor in organic-aqueous medium. <b>2002</b> , 64, 161-76	29
1724	Trifluoroethanol and binding to model membranes stabilize a predicted turn in a peptide corresponding to the first extracellular loop of the angiotensin II AT(1A) receptor. <b>2002</b> , 65, 21-31	14
1723	Molecular determinants of glucagon receptor signaling. <b>2002</b> , 66, 218-35	33
1722	Structural models for dimerization of G-protein coupled receptors: the opioid receptor homodimers. <b>2002</b> , 66, 317-25	76
1721	Extracellular domains of the neurokinin-1 receptor: structural characterization and interactions with substance P. <b>2002</b> , 66, 339-49	24
1720	Polar mutations in membrane proteins as a biophysical basis for disease. <b>2002</b> , 66, 350-8	46
1719	Specification and visualization of anisotropic interaction tensors in polypeptides and numerical simulations in biological solid-state NMR. <b>2002</b> , 154, 28-45	102
1718	Generation of RNA aptamers to the G-protein-coupled receptor for neurotensin, NTS-1. <b>2002</b> , 305, 214-26	41
1717	Targeted disruption of peroxisomal proliferator-activated receptor beta (delta) results in distinct gender differences in mouse brain phospholipid and esterified FA levels. <b>2002</b> , 37, 495-500	18
1716	Opsins and mammalian photoentrainment. <b>2002</b> , 309, 57-71	81
1715	The cytoplasmic helix of cannabinoid receptor CB2, a conformational study by circular dichroism and (1)H NMR spectroscopy in aqueous and membrane-like environments. <b>2002</b> , 60, 169-77	20
1714	Development and validation of opioid ligand-receptor interaction models: the structural basis of mu vs delta selectivity. <b>2002</b> , 60, 329-35	42
1713	Agonist-induced conformational changes in the beta2 adrenergic receptor. <b>2002</b> , 60, 317-21	40

1712	Activation of the cannabinoid CB1 receptor may involve a W648/F336 rotamer toggle switch. <b>2002</b> , 60, 357-70	73
1711	Design, expression, and characterization of a synthetic human cannabinoid receptor and cannabinoid receptor/ G-protein fusion protein. <b>2002</b> , 60, 336-47	21
1710	Ligand based structural studies of the CB1 cannabinoid receptor. <b>2002</b> , 60, 348-56	26
1709	Molecular basis of agonist binding to the type A cholecystokinin receptor. <b>2002</b> , 91, 282-5	11
1708	Applications of fluorescence in the characterization of the ligand-binding domain and activation of the cholecystokinin receptor. <b>2002</b> , 91, 286-9	3
1707	Molecular models for cholecystokinin-A receptor. <b>2002</b> , 91, 290-6	13
1706	Structural basis for activation of G-protein-coupled receptors. <b>2002</b> , 91, 304-12	70
1705	Structure of cholecystokinin receptor binding sites and mechanism of activation/inactivation by agonists/antagonists. <b>2002</b> , 91, 313-20	34
1704	Constitutive activation and endocytosis of the complement factor 5a receptor: evidence for multiple activated conformations of a G protein-coupled receptor. <b>2002</b> , 3, 866-77	48
1703	Purification and characterization of the human adenosine A(2a) receptor functionally expressed in Escherichia coli. <b>2002</b> , 269, 82-92	169
1702	A novel synthesis of 7-aryl-8-fluoro-pyrrolo[1,2-a]pyrimid-4-ones as potent, stable GnRH receptor antagonists. <b>2002</b> , 12, 3491-5	27
1701	Experimental and computational studies of determinants of membrane-protein folding. <b>2002</b> , 6, 878-84	31
1700	The solution structure and activation of visual arrestin studied by small-angle X-ray scattering. <b>2002</b> , 269, 3801-9	32
1699	Molecular characterization of a ligand-tethered parathyroid hormone receptor. <b>2002</b> , 95, 165-72	27
1698	Structural motifs as functional microdomains in G-protein-coupled receptors: Energetic considerations in the mechanism of activation of the serotonin 5-HT2A receptor by disruption of the ionic lock of the arginine cage*. <b>2002</b> , 88, 65-75	42
1697	Agonist alkyl tail interaction with cannabinoid CB1 receptor V6.43/I6.46 groove induces a helix 6 active conformation. <b>2002</b> , 88, 76-86	42
1696	Using 1,3-butadiene and 1,3,5-hexatriene to model the cis-trans isomerization of retinal, the chromophore in the visual pigment rhodopsin. <b>2002</b> , 90, 1536-1546	11
1695	Interhelical hydrogen bonds and spatial motifs in membrane proteins: polar clamps and serine zippers. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2002</b> , 47, 209-18	4.2 141



1694	Protein-based virtual screening of chemical databases. II. Are homology models of G-Protein Coupled Receptors suitable targets?. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2003</b> , 50, 5-25	4.2	225
1693	Pepducin-based intervention of thrombin-receptor signaling and systemic platelet activation. <b>2002</b> , 8, 1161-5		230
1692	The use of constitutively active GPCRs in drug discovery and functional genomics. <b>2002</b> , 1, 599-608		86
1691	G-protein-coupled receptor oligomerization and its potential for drug discovery. <b>2002</b> , 1, 808-20		510
1690	Seven-transmembrane receptors. <b>2002</b> , 3, 639-50		2032
1689	CB(1) cannabinoid receptor-G protein association: a possible mechanism for differential signaling. <b>2002</b> , 121, 91-109		58
1688	Performance of the AM1, PM3, and SCC-DFTB methods in the study of conjugated Schiff base molecules. <b>2002</b> , 277, 91-103		74
1687	A computational study on the stability of the protonated Schiff base of retinal in rhodopsin. <b>2002</b> , 366, 670-675		23
1686	The molecular mechanism for the spectral shifts between vertebrate ultraviolet- and violet-sensitive cone visual pigments. <b>2002</b> , 367, 129-35		112
1685	Towards high-resolution solid-state NMR on large uniformly <sup>15</sup> N- and [ <sup>13</sup> C, <sup>15</sup> N]-labeled membrane proteins in oriented lipid bilayers. <b>2002</b> , 22, 225-47		47
1684	Towards an understanding of complex biological membranes from atomistic molecular dynamics simulations. <b>2002</b> , 22, 151-73		76
1683	Unique mechanisms of excitation energy transfer, electron transfer and photoisomerization in biological systems. <b>2002</b> , 28, 367-81		6
1682	Molecular modeling the human A1 adenosine receptor and study of the mechanisms of its selective ligand binding. <b>2002</b> , 386, 271-4		5
1681	A homology-based model of the human 5-HT <sub>2A</sub> receptor derived from an in silico activated G-protein coupled receptor. <b>2002</b> , 16, 511-20		44
1680	Construction of hypothetical three-dimensional structure of P2Y <sub>1</sub> receptor based on Fourier transform analysis. <b>2002</b> , 21, 537-45		10
1679	Key issues in the computational simulation of GPCR function: representation of loop domains. <b>2002</b> , 16, 841-53		48
1678	A model of the human M <sub>2</sub> muscarinic acetylcholine receptor. <b>2002</b> , 16, 795-801		27
1677	Functional reconstitution of purified metabotropic glutamate receptor expressed in the fly eye. <b>2002</b> , 3, 491-6		48

1676	Ligands act as pharmacological chaperones and increase the efficiency of delta opioid receptor maturation. <b>2002</b> , 21, 1628-37	213
1675	Structural aspects of luteinizing hormone receptor: information from molecular modeling and mutagenesis. <b>2002</b> , 18, 285-93	11
1674	Effects of membrane lipids on ion channel structure and function. <b>2003</b> , 38, 161-90	194
1673	Adenosine receptors and cardiovascular disease: the adenosine-1 receptor (A1) and A1 selective ligands. <b>2003</b> , 3, 71-88	11
1672	Conserved cholecystinin receptor transmembrane domain IV amino acids confer peptide affinity. <b>2003</b> , 20, 115-24	5
1671	N-(omega-(4-(2-methoxyphenyl)piperazin-1-yl)alkyl)carboxamides as dopamine D2 and D3 receptor ligands. <b>2003</b> , 46, 3883-99	97
1670	Biosynthesis of isotopically labeled gramicidins and tyrocidins by <i>Bacillus brevis</i> . <b>2003</b> , 26, 1-11	8
1669	Molecular modeling of the human A2a adenosine receptor. <b>2003</b> , 389, 94-7	6
1668	Exploring the molecular basis of selectivity in A1 adenosine receptors agonists: a case study. <b>2003</b> , 17, 39-51	10
1667	Modeling and docking of the three-dimensional structure of the human melanocortin 4 receptor. <b>2003</b> , 22, 335-44	23
1666	Benzimidazole derivatives. 4. The recognition of the voluminous substituent attached to the basic amino group of 5-HT4 receptor antagonists. <b>2003</b> , 17, 515-24	5
1665	Molecular modelling studies on the ORL1-receptor and ORL1-agonists. <b>2003</b> , 17, 739-54	36
1664	Pharmacophore and receptor models for neurokinin receptors. <b>2003</b> , 17, 765-83	13
1663	New technologies: bioluminescence resonance energy transfer (BRET) for the detection of real time interactions involving G-protein coupled receptors. <b>2003</b> , 6, 141-51	38
1662	Functional over-expression of the <i>Stm1</i> protein, a G-protein-coupled receptor, in <i>Schizosaccharomyces pombe</i> . <b>2003</b> , 25, 267-72	3
1661	Privileged structure-based combinatorial libraries targeting G protein-coupled receptors. <b>2003</b> , 1, 579-92	43
1660	CCR2: characterization of the antagonist binding site from a combined receptor modeling/mutagenesis approach. <b>2003</b> , 46, 4070-86	91
1659	Specific isomerization of rhodopsin-bound 11-cis-retinal to all-trans-retinal under thermal denaturation. <b>2003</b> , 60, 2532-7	10

1658	Heterologous expression of G-protein-coupled receptors: comparison of expression systems from the standpoint of large-scale production and purification. <b>2003</b> , 60, 1529-46	203
1657	Molecular cloning and characterization of rainbow trout ( <i>Oncorhynchus mykiss</i> ) C5a anaphylatoxin receptor. <b>2003</b> , 55, 640-6	16
1656	Molecular dynamics study of 4-OH-phenylacetyl- D-Y(Me)FQNRPR-NH2 selectivity to V1a receptor. <b>2003</b> , 9, 372-8	7
1655	Structure of the metabotropic glutamate receptor. <b>2003</b> , 13, 271-8	97
1654	From subgenome analysis to protein structure. <b>2003</b> , 13, 353-8	2
1653	VA opsin, melanopsin, and an inherent light response within retinal interneurons. <b>2003</b> , 13, 1269-78	66
1652	Building a stage for interhelical play in rhodopsin. <b>2003</b> , 28, 399-402	10
1651	Phototransduction: crystal clear. <b>2003</b> , 28, 479-87	140
1650	The new face of active receptor bound arrestin attracts new partners. <b>2003</b> , 11, 1037-42	91
1649	GPCRs: an update on structural approaches to drug discovery. <b>2003</b> , 2, 19-25	29
1648	Rhodopsin phosphorylation: 30 years later. <b>2003</b> , 22, 417-34	116
1647	In silico characterisation and chromosomal localisation of human RRH (peropsin)—implications for opsin evolution. <b>2003</b> , 4, 3	22
1646	Application of comparative genomics in the identification and analysis of novel families of membrane-associated receptors in bacteria. <b>2003</b> , 4, 34	67
1645	Spiro[9,10-dihydroanthracene]-9,3'-pyrrolidine—a structurally unique tetracyclic 5-HT2A receptor antagonist. <b>2003</b> , 482, 335-7	5
1644	Important amino acids for the function of the human MT1 melatonin receptor. <i>Biochemical Pharmacology</i> , <b>2003</b> , 65, 1463-71	6 34
1643	Mutagenesis studies of the human MT2 melatonin receptor. <i>Biochemical Pharmacology</i> , <b>2003</b> , 66, 315-206	33
1642	G-protein coupled receptor oligomerization in neuroendocrine pathways. <b>2003</b> , 24, 254-78	74
1641	Purine and deazapurine nucleosides: synthetic approaches, molecular modelling and biological activity. <b>2003</b> , 58, 193-204	12

1640	Allosteric activation of plasma membrane receptors--physiological implications and structural origins. <b>2003</b> , 81, 219-40	11
1639	G-proteins as transducers in transmembrane signalling. <b>2003</b> , 83, 101-30	203
1638	Role of palmitoylation/depalmitoylation reactions in G-protein-coupled receptor function. <b>2003</b> , 97, 1-33	201
1637	Evolution, structure, and activation mechanism of family 3/C G-protein-coupled receptors. <b>2003</b> , 98, 325-54	498
1636	Raman spectroscopy--a prospective tool in the life sciences. <b>2003</b> , 4, 14-30	254
1635	Recent developments in the field of A3 adenosine receptor antagonists. <b>2003</b> , 58, 315-329	27
1634	Molecular characterization of the chemokine receptor CXCR3: evidence for the involvement of distinct extracellular domains in a multi-step model of ligand binding and receptor activation. <b>2003</b> , 33, 2927-36	75
1633	Zur Rolle von Thr 94 und Wat2b bei der Protonierung des Retinalchromophors in Rhodopsin. <b>2003</b> , 115, 3365-3367	1
1632	Multivariate analysis of G protein-coupled receptors. <b>2003</b> , 17, 82-92	17
1631	Modelling of photointermediates suggests a mechanism of the flip of the beta-ionone moiety of the retinylidene chromophore in the rhodopsin photocascade. <b>2003</b> , 4, 228-31	13
1630	Thr94 and Wat2b effect protonation of the retinal chromophore in rhodopsin. <b>2003</b> , 42, 3245-7	19
1629	Fourier transform IR spectroscopy study for new insights into molecular properties and activation mechanisms of visual pigment rhodopsin. <b>2003</b> , 72, 133-48	27
1628	Homology model of the CB1 cannabinoid receptor: sites critical for nonclassical cannabinoid agonist interaction. <b>2003</b> , 71, 169-89	63
1627	An assessment of protein-ligand binding site polarizability. <b>2003</b> , 70, 201-11	8
1626	Biosynthesis and biophysical analysis of domains of a yeast G protein-coupled receptor. <b>2003</b> , 71, 516-31	18
1625	Structural basis for thrombin activation of a protease-activated receptor: inhibition of intramolecular liganding. <b>2003</b> , 10, 1033-41	64
1624	Initial step of the photoprocess leading to vision only requires minimal atom displacements in the retinal molecule. <b>2003</b> , 376, 704-709	9
1623	Trienylboronic acid, a versatile coupling tool for retinoid synthesis; stereospecific synthesis of 13-aryl substituted (11Z)-retinal. <b>2003</b> , 44, 3093-3096	20

1622	Design and synthesis of S-(-)-2-[[4-(napht-1-yl)piperazin-1-yl]methyl]-1,4-dioxoperhydropyrrolo[1,2-a]pyrazine (CSP-2503) using computational simulation. A 5-HT1A receptor agonist. <b>2003</b> , 13, 1429-32		15
1621	Ring substituted analogues of 5-aminomethyl-10,11-dihydro-dibenzo[a,d]cycloheptene (AMDH): potential modes of binding to the 5-HT(2A) receptor. <b>2003</b> , 13, 2565-8		2
1620	Effect of 3-5 monocyclizations of angiotensin II and 4-aminoPhe6-Ang II on AT2 receptor affinity. <b>2003</b> , 11, 2947-54		12
1619	N-Glycan structures of squid rhodopsin. <b>2003</b> , 270, 2627-32		38
1618	Identification of CD4 and transferrin receptor antibodies by CXCR4 antibody-guided Pathfinder selection. <b>2003</b> , 270, 4497-506		12
1617	Structure and signalling pathways of kinin receptors. <b>2003</b> , 35, 17-23		50
1616	The interaction with the cytoplasmic loops of rhodopsin plays a crucial role in arrestin activation and binding. <b>2003</b> , 84, 1040-50		29
1615	Further evidence that the CCK2 receptor is coupled to two transduction pathways using site-directed mutagenesis. <b>2003</b> , 85, 454-61		21
1614	Fluorescence resonance energy transfer to probe human M1 muscarinic receptor structure and drug binding properties. <b>2003</b> , 85, 768-78		60
1613	Evaluation of the role of the retinal G protein-coupled receptor (RGR) in the vertebrate retina in vivo. <b>2003</b> , 85, 944-56		67
1612	Molecular and functional characterization of an octopamine receptor from honeybee ( <i>Apis mellifera</i> ) brain. <b>2003</b> , 86, 725-35		142
1611	Structure-based identification of binding sites, native ligands and potential inhibitors for G-protein coupled receptors. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2003</b> , 51, 423-33	4.2	78
1610	Discrimination of native loop conformations in membrane proteins: decoy library design and evaluation of effective energy scoring functions. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2003</b> , 52, 492-509	4.2	24
1609	Effective energy function for proteins in lipid membranes. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2003</b> , 52, 176-92	4.2	218
1608	Sequence analysis reveals how G protein-coupled receptors transduce the signal to the G protein. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2003</b> , 52, 553-60	4.2	26
1607	3D structural model of the G-protein-coupled cannabinoid CB2 receptor. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2003</b> , 53, 307-19	4.2	99
1606	Surface plasmon resonance spectroscopy in the study of membrane-mediated cell signalling. <b>2003</b> , 9, 77-89		51
1605	Conformational features of a synthetic model of the first extracellular loop of the angiotensin II AT1A receptor. <b>2003</b> , 9, 229-43		9

1604	Creation, expression, and characterization of a constitutively active mutant of the human serotonin 5-HT <sub>6</sub> receptor. <b>2003</b> , 47, 218-24	35
1603	Origin of the bathochromic shift in the early photointermediates of the rhodopsin visual cycle: A CASSCF/CASPT2 study. <b>2003</b> , 95, 882-889	21
1602	Progress in methodology. Improved reporter gene assays used to identify ligands acting on orphan seven-transmembrane receptors. <b>2003</b> , 93, 249-58	53
1601	Merging functional studies with structures of inward-rectifier K(+) channels. <b>2003</b> , 4, 957-67	209
1600	Evolutionarily conserved networks of residues mediate allosteric communication in proteins. <b>2003</b> , 10, 59-69	652
1599	Opioid receptor random mutagenesis reveals a mechanism for G protein-coupled receptor activation. <i>Nature Structural and Molecular Biology</i> , <b>2003</b> , 10, 629-36	17.6 81
1598	Different domains of the glucagon and glucagon-like peptide-1 receptors provide the critical determinants of ligand selectivity. <b>2003</b> , 138, 787-94	83
1597	Control of signalling efficacy by palmitoylation of the rat Y1 receptor. <b>2003</b> , 139, 501-12	19
1596	Molecular mechanisms of ligand-receptor interactions in transmembrane domain V of the alpha <sub>2A</sub> -adrenoceptor. <b>2003</b> , 140, 347-58	23
1595	Proton-sensing G-protein-coupled receptors. <b>2003</b> , 425, 93-8	506
1594	Atomic-force microscopy: Rhodopsin dimers in native disc membranes. <b>2003</b> , 421, 127-8	679
1593	Coulomb fission: Rayleigh jets from levitated microdroplets. <b>2003</b> , 421, 128	298
1592	Beta 1-adrenergic receptor polymorphisms confer differential function and predisposition to heart failure. <b>2003</b> , 9, 1300-5	293
1591	Therapeutic potential of venom peptides. <b>2003</b> , 2, 790-802	554
1590	Molecular mechanism of agonism and inverse agonism in the melanocortin receptors: Zn(2+) as a structural and functional probe. <b>2003</b> , 994, 1-11	58
1589	Loops and links: structural insights into the remarkable function of the agouti-related protein. <b>2003</b> , 994, 27-35	14
1588	Functional role, structure, and evolution of the melanocortin-4 receptor. <b>2003</b> , 994, 74-83	22
1587	Length analyses of <i>Drosophila</i> odorant receptors. <b>2003</b> , 223, 27-37	9

1586	Recent developments in the field of A2A and A3 adenosine receptor antagonists. <b>2003</b> , 38, 367-82	34
1585	3-Indolyl-1-naphthylmethanes: new cannabimimetic indoles provide evidence for aromatic stacking interactions with the CB(1) cannabinoid receptor. <b>2003</b> , 11, 539-49	122
1584	Atomic refinement with correlated solid-state NMR restraints. <b>2003</b> , 163, 300-9	24
1583	2- and 8-alkynyladenosines: conformational studies and docking to human adenosine A3 receptor can explain their different biological behavior. <b>2003</b> , 21, 253-62	27
1582	Separation methods in the analysis of protein membrane complexes. <b>2003</b> , 797, 191-216	70
1581	Pyrazolo[4,3-e]-1,2,4-triazolo[1,5-c]pyrimidine derivatives as adenosine receptor antagonists. Influence of the N5 substituent on the affinity at the human A3 and A2B adenosine receptor subtypes: a molecular modeling investigation. <b>2003</b> , 46, 4287-96	50
1580	[Rhodopsin structure: some light into the shadows of retinal degenerations]. <b>2003</b> , 121, 153-7	1
1579	Characterization of rhodopsin congenital night blindness mutant T94I. <b>2003</b> , 42, 2009-15	60
1578	Aromatic residues at the extracellular ends of transmembrane domains 5 and 6 promote ligand activation of the G protein-coupled alpha-factor receptor. <b>2003</b> , 42, 293-301	42
1577	G protein-coupled receptor rhodopsin: a prospectus. <b>2003</b> , 65, 851-79	202
1576	Molecular modeling of the three-dimensional structure of dopamine 3 (D3) subtype receptor: discovery of novel and potent D3 ligands through a hybrid pharmacophore- and structure-based database searching approach. <b>2003</b> , 46, 4377-92	134
1575	Sequence analyses of G-protein-coupled receptors: similarities to rhodopsin. <b>2003</b> , 42, 2759-67	320
1574	Construction of a sequence motif characteristic of aminergic G protein-coupled receptors. <b>2003</b> , 12, 1360-7	51
1573	A conformational trigger for activation of a G protein by a G protein-coupled receptor. <b>2003</b> , 42, 1365-8	42
1572	Molecular dynamics simulations of the ligand-induced chemical information transfer in the 5-HT(1A) receptor. <b>2003</b> , 43, 1520-31	26
1571	Active peptidic mimics of the second intracellular loop of the V(1A) vasopressin receptor are structurally related to the second intracellular rhodopsin loop: a combined 1H NMR and biochemical study. <b>2003</b> , 42, 8204-13	25
1570	Mutations of F110 and C126 of the formyl peptide receptor interfere with G-protein coupling and chemotaxis. <b>2003</b> , 74, 475-84	22
1569	Membrane Environment Reduces the Accessible Conformational Space Available to an Integral Membrane Protein. <b>2003</b> , 107, 338-343	40

1568	The G protein-coupled receptor GPR4 suppresses ERK activation in a ligand-independent manner. <b>2003</b> , 42, 12181-91	60
1567	Effect of anion binding on the thermal reverse reaction of bathiodopsin: anion stabilizes two forms of iodopsin. <b>2003</b> , 42, 12700-7	5
1566	Optimization of the pharmacophore model for 5-HT7R antagonism. Design and synthesis of new naphtholactam and naphthosultam derivatives. <b>2003</b> , 46, 5638-50	67
1565	Molecular basis of spectral tuning in the newt short wavelength sensitive visual pigment. <b>2003</b> , 42, 6025-34	83
1564	An opsin mutant with increased thermal stability. <b>2003</b> , 42, 1995-2001	76
1563	An aromatic microdomain at the cannabinoid CB(1) receptor constitutes an agonist/inverse agonist binding region. <b>2003</b> , 46, 5139-52	176
1562	Slow binding of retinal to rhodopsin mutants G90D and T94D. <b>2003</b> , 42, 2002-8	33
1561	Conformational similarities in the beta-ionone ring region of the rhodopsin chromophore in its ground state and after photoactivation to the metarhodopsin-I intermediate. <b>2003</b> , 42, 13371-8	36
1560	Structural changes of water molecules during the photoactivation processes in bovine rhodopsin. <b>2003</b> , 42, 9619-25	65
1559	Sequences in the intracellular loops of the yeast pheromone receptor Ste2p required for G protein activation. <b>2003</b> , 42, 3004-17	29
1558	Dimerization in aminergic G-protein-coupled receptors: application of a hidden-site class model of evolution. <b>2003</b> , 42, 14522-31	38
1557	Theoretical conformational analysis for neurotransmitters in the gas phase and in aqueous solution. Norepinephrine. <b>2003</b> , 125, 2770-85	50
1556	Synthesis of covalent probes for the radiolabeling of the cannabinoid receptor. <b>2003</b> , 68, 55-61	22
1555	Highly conserved serine in the third transmembrane helix of the luteinizing hormone/human chorionic gonadotropin receptor regulates receptor activation. <b>2003</b> , 42, 3708-15	13
1554	Deactivation of rhodopsin in the transition from the signaling state meta II to meta III involves a thermal isomerization of the retinal chromophore C[double bond]D. <b>2003</b> , 42, 9863-74	44
1553	The Flexing/Twirling Helix: Exploring the Flexibility about Molecular Hinges Formed by Proline and Glycine Motifs in Transmembrane Helices. <b>2003</b> , 107, 627-636	50
1552	Evidence for structural changes in carboxyl-terminal peptides of transducin alpha-subunit upon binding a soluble mimic of light-activated rhodopsin. <b>2003</b> , 42, 302-11	20
1551	Three-dimensional model for meta-II rhodopsin, an activated G-protein-coupled receptor. <b>2003</b> , 42, 9110-20	46



1550	Metal ion enhanced binding of AMD3100 to Asp262 in the CXCR4 receptor. <b>2003</b> , 42, 710-7	129
1549	Structural genomics of membrane proteins. <b>2003</b> , 36, 199-206	19
1548	Rhodopsin exhibits a preference for solvation by polyunsaturated docosohexaenoic acid. <b>2003</b> , 125, 4434-5	88
1547	Binding of 2-aryl-4-(piperidin-1-yl)butanamines and 1,3,4-trisubstituted pyrrolidines to human CCR5: a molecular modeling-guided mutagenesis study of the binding pocket. <b>2003</b> , 42, 1544-50	75
1546	Two intermediates appear on the lumirhodopsin time scale after rhodopsin photoexcitation. <b>2003</b> , 42, 5091-8	16
1545	Differential inhibition of receptor activation by two mouse monoclonal antibodies specific for the human leukotriene B4 receptor, BLT1. <b>2003</b> , 3, 1829-39	6
1544	Molecular dynamics simulation of dark-adapted rhodopsin in an explicit membrane bilayer: coupling between local retinal and larger scale conformational change. <b>2003</b> , 333, 493-514	88
1543	Blocking receptors on the inside: pepducin-based intervention of PAR signaling and thrombosis. <b>2003</b> , 74, 255-62	46
1542	Functional expression and direct visualization of the human alpha 2B -adrenergic receptor and alpha 2B -AR-green fluorescent fusion protein in mammalian cell using Semliki Forest virus vectors. <b>2003</b> , 32, 265-75	18
1541	Effect of dodecyl maltoside detergent on rhodopsin stability and function. <b>2003</b> , 43, 3055-61	24
1540	Assessing structural elements that influence Schiff base stability: mutants E113Q and D190N destabilize rhodopsin through different mechanisms. <b>2003</b> , 43, 2991-3002	29
1539	Receptor-Ligand Interaction. <b>2003</b> , 107-135	2
1538	Three-dimensional models for beta-adrenergic receptor complexes with agonists and antagonists. <b>2003</b> , 46, 4450-62	56
1537	The rod opsin pigments from two marsupial species, the South American bare-tailed woolly opossum and the Australian fat-tailed dunnart. <b>2003</b> , 323, 157-62	5
1536	Overexpression and purification of the vanilloid receptor in yeast ( <i>Saccharomyces cerevisiae</i> ). <b>2003</b> , 310, 196-201	13
1535	Identification of a hexapeptide binding region in the nociceptin (ORL1) receptor by photo-affinity labelling with Ac-Arg-Bpa-Tyr-Arg-Trp-Arg-NH <sub>2</sub> . <b>2003</b> , 310, 992-1001	21
1534	Discovery of a potent, non-peptide bradykinin B1 receptor antagonist. <b>2003</b> , 125, 7516-7	78
1533	Lipid bilayer simulations of CXCR4 with inverse agonists and weak partial agonists. <b>2003</b> , 278, 47136-44	98

1532	GPCR (G-Protein-Coupled Receptor) Structure. <b>2003</b> , 188-196	1
1531	Higher-order interhelical spatial interactions in membrane proteins. <b>2003</b> , 327, 251-72	46
1530	Elucidation of the nature of the conformational changes of the EF-interhelical loop in bacteriorhodopsin and of the helix VIII on the cytoplasmic surface of bovine rhodopsin: a time-resolved fluorescence depolarization study. <b>2003</b> , 328, 705-19	76
1529	Structure-based analysis of GPCR function: conformational adaptation of both agonist and receptor upon leukotriene B4 binding to recombinant BLT1. <b>2003</b> , 329, 801-14	142
1528	Structure-based analysis of GPCR function: evidence for a novel pentameric assembly between the dimeric leukotriene B4 receptor BLT1 and the G-protein. <b>2003</b> , 329, 815-29	253
1527	NMR studies of the fifth transmembrane segment of sarcoplasmic reticulum Ca <sup>2+</sup> -ATPase reveals a hinge close to the Ca <sup>2+</sup> -ligating residues. <b>2003</b> , 544, 50-6	8
1526	Depicting a protein's two faces: GPCR classification by phylogenetic tree-based HMMs. <b>2003</b> , 554, 95-9	23
1525	Evolutionary analysis of rhodopsin and cone pigments: connecting the three-dimensional structure with spectral tuning and signal transfer. <b>2003</b> , 555, 151-9	14
1524	Seven evolutionarily conserved human rhodopsin G protein-coupled receptors lacking close relatives. <b>2003</b> , 554, 381-8	200
1523	Neuropsin (Opn5): a novel opsin identified in mammalian neural tissue. <b>2003</b> , 554, 410-6	115
1522	Solution structure of the third extracellular loop of human thromboxane A2 receptor. <b>2003</b> , 414, 287-93	24
1521	Chimeric exchanges within the bradykinin B2 receptor intracellular face with the prostaglandin EP2 receptor as the donor: importance of the second intracellular loop for cAMP synthesis. <b>2003</b> , 415, 54-62	6
1520	Evidence of the residues involved in ligand recognition in the second extracellular loop of the prostacyclin receptor characterized by high resolution 2D NMR techniques. <b>2003</b> , 418, 25-33	15
1519	Downstream coding region determinants of bacterio-opsin, muscarinic acetylcholine receptor and adrenergic receptor expression in <i>Halobacterium salinarum</i> . <b>2003</b> , 1610, 109-23	11
1518	Expression and purification of truncated, non-glycosylated turkey beta-adrenergic receptors for crystallization. <b>2003</b> , 1610, 133-40	77
1517	In vitro folding of alpha-helical membrane proteins. <b>2003</b> , 1610, 57-62	67
1516	G protein-coupled receptor overexpression with the baculovirus-insect cell system: a tool for structural and functional studies. <b>2003</b> , 1610, 77-89	73
1515	Semliki Forest virus vectors for rapid and high-level expression of integral membrane proteins. <b>2003</b> , 1610, 90-6	61

1514	Somatostatin receptors. <b>2003</b> , 1616, 1-84	257
1513	Altered functionality in rhodopsin point mutants associated with retinitis pigmentosa. <b>2003</b> , 303, 294-301	29
1512	Determination of ligand-receptor interactions of cholecystokinin by nuclear magnetic resonance. <b>2003</b> , 73, 705-13	7
1511	Concentration-dependent tetramerization of bovine visual arrestin. <b>2003</b> , 85, 1186-95	51
1510	Molecular dynamics simulation of bacteriorhodopsin's photoisomerization using ab initio forces for the excited chromophore. <b>2003</b> , 85, 1440-9	126
1509	Three-dimensional structure of the mammalian tachykinin peptide neurokinin A bound to lipid micelles. <b>2003</b> , 85, 4002-11	23
1508	Molecular dynamics simulations on SDF-1alpha: binding with CXCR4 receptor. <b>2003</b> , 84, 171-84	61
1507	Solution structure of the tachykinin peptide eleodoisin. <b>2003</b> , 84, 655-64	22
1506	Teleost multiple tissue (tmt) opsin: a candidate photopigment regulating the peripheral clocks of zebrafish?. <b>2003</b> , 112, 135-45	81
1505	The spectral tuning in the short wavelength-sensitive type 2 pigments. <b>2003</b> , 306, 91-8	38
1504	Rhodopsin crystal: new template yielding realistic models of G-protein-coupled receptors?. <b>2003</b> , 24, 36-40	110
1503	DHA-rich phospholipids optimize G-Protein-coupled signaling. <b>2003</b> , 143, S80-6	52
1502	Modeling the adenosine receptors: comparison of the binding domains of A2A agonists and antagonists. <b>2003</b> , 46, 4847-59	119
1501	Pharmacological characterization and immunoaffinity purification of metabotropic glutamate receptor from Drosophila overexpressed in Sf9 cells. <b>2003</b> , 30, 275-82	18
1500	Detergent organisation in crystals of monomeric outer membrane phospholipase A. <b>2003</b> , 141, 122-31	18
1499	Evolution of the thyrotropin receptor: a G protein coupled receptor with an intrinsic capacity to dimerize. <b>2003</b> , 78, 275-90	23
1498	Distribution analysis of nonsynonymous polymorphisms within the G-protein-coupled receptor gene family. <b>2003</b> , 81, 245-8	26
1497	Motif-based construction of a functional map for mammalian olfactory receptors. <b>2003</b> , 81, 443-56	48

1496	Cotranslational protein integration into the ER membrane is mediated by the binding of nascent chains to translocon proteins. <b>2003</b> , 12, 329-41	94
1495	Angiotensin receptors: form and function and distribution. <b>2003</b> , 35, 774-9	66
1494	Molecular biology in diagnostic histopathology. Part 3: signal transduction. <b>2003</b> , 9, 397-407	1
1493	Arresting angiotensin type 1 receptors. <b>2003</b> , 14, 130-6	31
1492	Location, location, location. <b>2003</b> , 14, 100-2	14
1491	Melanin-concentrating hormone: from fish skin to skinny mammals. <b>2003</b> , 14, 243-8	83
1490	Naturally occurring mutations of the extracellular Ca <sup>2+</sup> -sensing receptor: implications for its structure and function. <b>2003</b> , 14, 282-8	101
1489	Exploring the Opsin shift with ab initio methods: Geometry and counterion effects on the electronic spectrum of retinal. <b>2003</b> , 119, 12045-12048	50
1488	The G-protein-coupled receptors in the human genome form five main families. Phylogenetic analysis, paralogon groups, and fingerprints. <b>2003</b> , 63, 1256-72	2106
1487	Adenosine receptor agonists: from basic medicinal chemistry to clinical development. <b>2003</b> , 8, 537-76	100
1486	Conformational changes of G protein-coupled receptors during their activation by agonist binding. <b>2003</b> , 23, 123-53	51
1485	Cis-trans isomerization of organic molecules and biomolecules: implications and applications. <b>2003</b> , 103, 2475-532	791
1484	Angiotensin II AT1 receptor antagonists. Clinical implications of active metabolites. <b>2003</b> , 46, 2261-70	102
1483	D2 dopamine receptor homodimerization is mediated by multiple sites of interaction, including an intermolecular interaction involving transmembrane domain 4. <b>2003</b> , 42, 11023-31	117
1482	Mechanism of action of the diazabicyclononanone-type kappa-agonists. <b>2003</b> , 46, 1383-9	26
1481	Difference spectra measurement of squid rhodopsin in the submillimeter wave region. <b>2003</b> , 2, 1303-6	1
1480	A green cone-like pigment in the 'blind' mole-rat <i>Spalax ehrenbergi</i> : functional expression and photochemical characterization. <b>2003</b> , 2, 1287-91	8
1479	Photochemical reactivity of polyenes: from dienes to rhodopsin, from microseconds to femtoseconds. <b>2003</b> , 2, 835-44	38

1478	Diversity of visual pigments from the viewpoint of G protein activation--comparison with other G protein-coupled receptors. <b>2003</b> , 2, 1237-46	19
1477	Demystifying the three dimensional structure of G protein-coupled receptors (GPCRs) with the aid of molecular modeling. <b>2003</b> , 2949-56	36
1476	Structural changes in lumirhodopsin and metarhodopsin I studied by their photoreactions at 77 K. <b>2003</b> , 42, 8494-500	12
1475	Rhodopsin structure, dynamics, and activation: a perspective from crystallography, site-directed spin labeling, sulfhydryl reactivity, and disulfide cross-linking. <b>2003</b> , 63, 243-90	295
1474	Opioid Research. <b>2003</b> ,	1
1473	G Protein Signaling. <b>2003</b> ,	
1472	Gene and protein domain-specific patterns of genetic variability within the G-protein coupled receptor superfamily. <b>2003</b> , 3, 65-71	23
1471	A2-rhodopsin: a new fluorophore isolated from photoreceptor outer segments. <b>2003</b> , 1, 1101-5	70
1470	Retinitis pigmentosa rhodopsin mutations L125R and A164V perturb critical interhelical interactions: new insights through compensatory mutations and crystal structure analysis. <b>2003</b> , 278, 39020-8	26
1469	Current perspective on the pathogenesis of Graves' disease and ophthalmopathy. <b>2003</b> , 24, 802-35	345
1468	Binding of the general anesthetics chloroform and 2,2,2-trichloroethanol to the hydrophobic core of a four-alpha-helix bundle proteins. <b>2003</b> , 77, 89-95	11
1467	Activation of CCR5 by chemokines involves an aromatic cluster between transmembrane helices 2 and 3. <b>2003</b> , 278, 1892-903	80
1466	Ligand-independent dimerization of CXCR4, a principal HIV-1 coreceptor. <b>2003</b> , 278, 3378-85	173
1465	The fourth transmembrane segment forms the interface of the dopamine D2 receptor homodimer. <b>2003</b> , 278, 4385-8	242
1464	Insights into G protein structure, function, and regulation. <b>2003</b> , 24, 765-81	498
1463	Molecular analysis of the evolutionary significance of ultraviolet vision in vertebrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 8308-13	11.5 150
1462	Importance of amino acids of the central portion of the second intracellular loop of the gastrin-releasing Peptide receptor for phospholipase C activation, internalization, and chronic down-regulation. <b>2003</b> , 307, 597-607	5
1461	Helix 8 of the leukotriene B4 receptor is required for the conformational change to the low affinity state after G-protein activation. <b>2003</b> , 278, 41500-9	49

1460	A novel cyclic peptide immunization strategy for preventing HIV-1/AIDS infection and progression. <b>2003</b> , 278, 32335-43	18
1459	Allosteric site on muscarinic acetylcholine receptors: identification of two amino acids in the muscarinic M2 receptor that account entirely for the M2/M5 subtype selectivities of some structurally diverse allosteric ligands in N-methylscopolamine-occupied receptors. <b>2003</b> , 64, 21-31	82
1458	Selective interaction of ARF1 with the carboxy-terminal tail domain of the 5-HT2A receptor. <b>2003</b> , 64, 1239-50	54
1457	Identification of tyrosine 189 and asparagine 358 of the cholecystokinin 2 receptor in direct interaction with the crucial C-terminal amide of cholecystokinin by molecular modeling, site-directed mutagenesis, and structure/affinity studies. <b>2003</b> , 63, 973-82	22
1456	Adenosine A2A-dopamine D2 receptor-receptor heteromerization: qualitative and quantitative assessment by fluorescence and bioluminescence energy transfer. <b>2003</b> , 278, 46741-9	353
1455	GPCRDB information system for G protein-coupled receptors. <b>2003</b> , 31, 294-7	281
1454	Automated generation and refinement of protein signatures: case study with G-protein coupled receptors. <b>2003</b> , 19, 727-34	11
1453	Rhodopsin determinants for transducin activation: a gain-of-function approach. <b>2003</b> , 278, 37574-81	36
1452	Differences in the central nervous system distribution and pharmacology of the mouse 5-hydroxytryptamine-6 receptor compared with rat and human receptors investigated by radioligand binding, site-directed mutagenesis, and molecular modeling. <b>2003</b> , 64, 1295-308	189
1451	Oligomerization, biogenesis, and signaling is promoted by a glycoporphin A-like dimerization motif in transmembrane domain 1 of a yeast G protein-coupled receptor. <b>2003</b> , 278, 49369-77	115
1450	Stability of dark state rhodopsin is mediated by a conserved ion pair in intradiscal loop E-2. <b>2003</b> , 278, 16982-91	69
1449	Random mutagenesis of the M3 muscarinic acetylcholine receptor expressed in yeast. Identification of point mutations that "silence" a constitutively active mutant M3 receptor and greatly impair receptor/G protein coupling. <b>2003</b> , 278, 30248-60	41
1448	Selective interactions between helix VIII of the human mu-opioid receptors and the C terminus of periplakin disrupt G protein activation. <b>2003</b> , 278, 33400-7	46
1447	Mutational analysis and molecular modeling of the allosteric binding site of a novel, selective, noncompetitive antagonist of the metabotropic glutamate 1 receptor. <b>2003</b> , 278, 8340-7	111
1446	G-protein-coupled receptors at a glance. <b>2003</b> , 116, 4867-9	233
1445	Molecular determinants of melanocortin 4 receptor ligand binding and MC4/MC3 receptor selectivity. <b>2003</b> , 304, 1217-27	74
1444	Perspectives on the counterion switch-induced photoactivation of the G protein-coupled receptor rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 9105-7	11.5 30
1443	Genetically engineered mice with an additional class of cone photoreceptors: implications for the evolution of color vision. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 11706-11	11.5 81

1442	The molecular basis for the high photosensitivity of rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 14639-44	11.5	24
1441	Signaling states of rhodopsin. Formation of the storage form, metarhodopsin III, from active metarhodopsin II. <b>2003</b> , 278, 3162-9		95
1440	Conserved motifs in somatostatin, D2-dopamine, and alpha 2B-adrenergic receptors for inhibiting the Na-H exchanger, NHE1. <b>2003</b> , 278, 15128-35		23
1439	Three distinct epitopes on the extracellular face of the glucagon receptor determine specificity for the glucagon amino terminus. <b>2003</b> , 278, 28005-10		61
1438	Constitutive activation of CCR5 and CCR2 induced by conformational changes in the conserved TXP motif in transmembrane helix 2. <b>2003</b> , 278, 36513-21		34
1437	Constitutive activation of the angiotensin II type 1 receptor alters the spatial proximity of transmembrane 7 to the ligand-binding pocket. <b>2003</b> , 278, 36628-36		50
1436	Palmitoylation of the V2 vasopressin receptor carboxyl tail enhances beta-arrestin recruitment leading to efficient receptor endocytosis and ERK1/2 activation. <b>2003</b> , 278, 41541-51		70
1435	Modeling and mutagenesis of the binding site of Calhex 231, a novel negative allosteric modulator of the extracellular Ca(2+)-sensing receptor. <b>2003</b> , 278, 49487-94		105
1434	Spatial approximation between two residues in the mid-region of secretin and the amino terminus of its receptor. Incorporation of seven sets of such constraints into a three-dimensional model of the agonist-bound secretin receptor. <b>2003</b> , 278, 48300-12		35
1433	Inferring functional constraints and divergence in protein families using 3D mapping of phylogenetic information. <b>2003</b> , 31, 790-7		30
1432	Multiple differences in agonist and antagonist pharmacology between human and guinea pig histamine H1-receptor. <b>2003</b> , 305, 1104-15		74
1431	Truncation of the A1 adenosine receptor reveals distinct roles of the membrane-proximal carboxyl terminus in receptor folding and G protein coupling. <b>2003</b> , 278, 30283-93		58
1430	Structure function differences in nonpeptide CCR1 antagonists for human and mouse CCR1. <b>2003</b> , 170, 1910-6		26
1429	Hierarchy of polymorphic variation and desensitization permutations relative to beta 1- and beta 2-adrenergic receptor signaling. <b>2003</b> , 278, 10784-9		57
1428	Membrane Protein Crystallization. <b>2003</b> , 143-160		7
1427	High affinity agonistic metal ion binding sites within the melanocortin 4 receptor illustrate conformational change of transmembrane region 3. <b>2003</b> , 278, 51521-6		39
1426	Is the olfactory receptor a metalloprotein?. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 3035-9	11.5	114
1425	A new method for mapping discontinuous antibody epitopes to reveal structural features of proteins. <b>2003</b> , 10, 555-67		35

1424	Constitutively active G protein-coupled receptor mutants: implications on receptor function and drug action. <b>2003</b> , 1, 311-6		14
1423	Synthesis, biological evaluation, and receptor docking simulations of 2-[(acylamino)ethyl]-1,4-benzodiazepines as kappa-opioid receptor agonists endowed with antinociceptive and anti-amnesic activity. <b>2003</b> , 46, 3853-64		27
1422	Role of the conserved NPxxY(x)5,6F motif in the rhodopsin ground state and during activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 2290-5	11.5	289
1421	The conformation of neurotensin bound to its G protein-coupled receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2003</b> , 100, 10706-11	11.5	213
1420	Synthesis and biophysical characterization of a multidomain peptide from a <i>Saccharomyces cerevisiae</i> G protein-coupled receptor. <b>2003</b> , 278, 52537-45		13
1419	Spatial approximation between a photolabile residue in position 13 of secretin and the amino terminus of the secretin receptor. <b>2003</b> , 63, 993-1001		36
1418	The three-dimensional structure of bovine rhodopsin determined by electron cryomicroscopy. <b>2003</b> , 278, 50217-25		37
1417	Fatty alcohol phosphates are subtype-selective agonists and antagonists of lysophosphatidic acid receptors. <b>2003</b> , 63, 1032-42		81
1416	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> , <b>2003</b> , 100, 9262-7	11.5	182
1415	Identification of the binding sites of the SR49059 nonpeptide antagonist into the V1a vasopressin receptor using sulfhydryl-reactive ligands and cysteine mutants as chemical sensors. <b>2003</b> , 278, 40010-9		40
1414	Zinc-induced decrease of the thermal stability and regeneration of rhodopsin. <b>2003</b> , 278, 4719-24		28
1413	Identification of essential residues involved in the allosteric modulation of the human A(3) adenosine receptor. <b>2003</b> , 63, 1021-31		73
1412	Molecular basis of partial agonism: orientation of indoleamine ligands in the binding pocket of the human serotonin 5-HT <sub>2A</sub> receptor determines relative efficacy. <b>2003</b> , 63, 36-43		62
1411	Mutational analysis and molecular modeling of the binding pocket of the metabotropic glutamate 5 receptor negative modulator 2-methyl-6-(phenylethynyl)-pyridine. <b>2003</b> , 64, 823-32		140
1410	Sensory Processing in Aquatic Environments. <b>2003</b> ,		31
1409	TM2-TM7 interaction in coupling movement of transmembrane helices to activation of the angiotensin II type-1 receptor. <b>2003</b> , 278, 3720-5		46
1408	C5a receptor oligomerization. I. Disulfide trapping reveals oligomers and potential contact surfaces in a G protein-coupled receptor. <b>2003</b> , 278, 35345-53		98
1407	Pharmacological characterization and identification of amino acids involved in the positive modulation of metabotropic glutamate receptor subtype 2. <b>2003</b> , 64, 798-810		154



1406	Identification of cytoplasmic domains of hVPAC1 receptor required for activation of adenylyl cyclase. Crucial role of two charged amino acids strictly conserved in class II G protein-coupled receptors. <b>2003</b> , 278, 24759-66	44
1405	Ligand channeling within a G-protein-coupled receptor. The entry and exit of retinals in native opsin. <b>2003</b> , 278, 24896-24903	98
1404	The unique ligand-binding pocket for the human prostacyclin receptor. Site-directed mutagenesis and molecular modeling. <b>2003</b> , 278, 4250-7	50
1403	Pharmacophores for ligand recognition and activation/inactivation of the cannabinoid receptors. <b>2003</b> , 9, 1607-33	74
1402	The second intracellular loop of metabotropic glutamate receptors recognizes C termini of G-protein alpha-subunits. <b>2003</b> , 278, 35063-70	29
1401	Identification of an allosteric binding site for Zn <sup>2+</sup> on the beta2 adrenergic receptor. <b>2003</b> , 278, 352-6	71
1400	Pharmacological chaperone-mediated in vivo folding and stabilization of the P23H-opsin mutant associated with autosomal dominant retinitis pigmentosa. <b>2003</b> , 278, 14442-14450	158
1399	Structural and functional role of helices I and II in rhodopsin. A novel interplay evidenced by mutations at Gly-51 and Gly-89 in the transmembrane domain. <b>2003</b> , 278, 20203-9	30
1398	Unusual thermal and conformational properties of the rhodopsin congenital night blindness mutant Thr-94 --> Ile. <b>2003</b> , 278, 6427-32	35
1397	Organization of the G protein-coupled receptors rhodopsin and opsin in native membranes. <b>2003</b> , 278, 21655-21662	490
1396	The structural evolution of a P2Y-like G-protein-coupled receptor. <b>2003</b> , 278, 35531-41	50
1395	Molecular mechanism of citalopram and cocaine interactions with neurotransmitter transporters. <b>2003</b> , 307, 34-41	52
1394	Motif3D: Relating protein sequence motifs to 3D structure. <b>2003</b> , 31, 3333-6	10
1393	Thyrotropin-releasing hormone receptors -- similarities and differences. <b>2003</b> , 30, 87-97	145
1392	Agonist- and protein kinase C-induced phosphorylation have similar functional consequences for gastrin-releasing peptide receptor signaling via Gq. <b>2003</b> , 64, 890-904	15
1391	Analysis of the mechanism by which the small-molecule CCR5 antagonists SCH-351125 and SCH-350581 inhibit human immunodeficiency virus type 1 entry. <b>2003</b> , 77, 5201-8	189
1390	G protein selectivity is regulated by multiple intracellular regions of GPCRs. <b>2003</b> , 12, 1-12	113
1389	Membrane topology of a metabotropic glutamate receptor. <b>2003</b> , 278, 30294-301	35

1388	Blockade of G protein-coupled receptors and the dopamine transporter by a transmembrane domain peptide: novel strategy for functional inhibition of membrane proteins in vivo. <b>2003</b> , 307, 481-9	26
1387	Medicinal chemistry and pharmacology of A2B adenosine receptors. <b>2003</b> , 3, 427-43	76
1386	Intermolecular interactions between peptidic and nonpeptidic agonists and the third extracellular loop of the cholecystokinin 1 receptor. <b>2003</b> , 46, 3476-82	16
1385	Characterization of the 5-HT(7) receptor. Determination of the pharmacophore for 5-HT(7) receptor agonism and CoMFA-based modeling of the agonist binding site. <b>2003</b> , 46, 5365-74	35
1384	Recombinant opioid receptors. Structure-function relationship. <b>2003</b> , 84, 185-203	
1383	PRECIS: protein reports engineered from concise information in SWISS-PROT. <b>2003</b> , 19, 1664-71	9
1382	The crystallographic model of rhodopsin and its use in studies of other G protein-coupled receptors. <b>2003</b> , 32, 375-97	99
1381	The role of a conserved region of the second intracellular loop in AT1 angiotensin receptor activation and signaling. <b>2003</b> , 144, 2220-8	99
1380	Mutation Ala(171)Thr stabilizes the gonadotropin-releasing hormone receptor in its inactive conformation, causing familial hypogonadotropic hypogonadism. <b>2003</b> , 88, 1873-9	47
1379	Identification of a contact site for residue 19 of parathyroid hormone (PTH) and PTH-related protein analogs in transmembrane domain two of the type 1 PTH receptor. <b>2003</b> , 17, 2647-58	50
1378	Structural Analysis of the Mammalian D2, D3 and D4 Dopamine Receptors. <b>2003</b> , 71-128	2
1377	HIV biological variability unveiled. <b>2003</b> , 17, 2561-2569	50
1376	Construction of helix-bundle membrane proteins. <b>2003</b> , 63, 19-46	36
1375	Reporter Gene Assay Systems for the Investigation of G-protein-coupled Receptors. <b>2003</b> , 73-94	
1374	Antagonists of the corticotropin releasing factor receptor. <b>2003</b> , 41, 195-247	20
1373	Recent developments in our understanding of the physiological role of PP-fold peptide receptor subtypes. <b>2003</b> , 228, 217-44	216
1372	Advances in protein chemistry. Preface. <b>2003</b> , 63, xi-xvi	
1371	Intensive mutational analysis of G protein-coupled receptors in yeast. <i>Methods in Molecular Biology</i> , <b>2004</b> , 237, 105-20	1.4 20

1370 Dysfunction of G Protein-Regulated Pathways and Endocrine Diseases. 201-232

1369 In Vitro and In Vivo Mutagenesis. **2003,**

1368 Evidence for a direct interaction between the Thr11 residue of vasoactive intestinal polypeptide and Tyr184 located in the first extracellular loop of the VPAC2 receptor. **2003,** 370, 1003-9 2

1367 Photolabelling the rat urotensin II/GPR14 receptor identifies a ligand-binding site in the fourth transmembrane domain. **2003,** 370, 829-38 43

1366 Structure and activation of muscarinic acetylcholine receptors. **2003,** 31, 29-34 65

1365 Crystallization of Membrane Proteins. **2003,** 27-54

1364 Prospects for High-Throughput Structure Determination by X-Ray Crystallography. **2003,** 55-94

1363 Spectral Sensitivity Tuning in the Deep-Sea. **2003,** 323-342 18

1362 Molecular basis for ultraviolet vision in invertebrates. **2003,** 23, 10873-8 81

1361 . **2003,** 52

1360 . **2003,** 9

1359 . **2003,** 18

1358 [How do G-protein-coupled receptors work? The case of metabotropic glutamate and GABA receptors]. **2003,** 19, 559-65 1

1357 Transmembrane Signaling and the Regulation of Histidine Kinase Activity. **2003,** 73-122 4

1356 Molecular analysis of the structure and function of the angiotensin II type 1 receptor. **2003,** 26, 937-43 89

1355 [New insights into the pharmacology of the extracellular calcium sensing receptor]. **2004,** 20, 980-5 2

1354 Progress in the development of melanocortin receptor selective ligands. **2004,** 10, 3443-79 42

1353 . **2004,** 15

1352	. 2004,	250
1351	. 2004,	6
1350	. 2004,	5
1349	G protein-coupled receptor fusion proteins in drug discovery. 2004, 10, 1989-2001	35
1348	Features of transmembrane helices useful for membrane protein prediction. 2004, 4, 110-120	5
1347	Use of NMR and fluorescence spectroscopy as well as theoretical conformational analysis in conformation-activity studies of cyclic enkephalin analogues. 2004, 4, 123-33	9
1346	Functional characterization of melanocortin-3 receptor variants identify a loss-of-function mutation involving an amino acid critical for G protein-coupled receptor activation. 2004, 89, 3936-42	70
1345	Insight into mutation-induced activation of the luteinizing hormone receptor: molecular simulations predict the functional behavior of engineered mutants at M398. 2004, 18, 1499-508	34
1344	Spatial approximation between the amino terminus of a peptide agonist and the top of the sixth transmembrane segment of the secretin receptor. 2004, 279, 2894-903	63
1343	Chemotaxis receptors and signaling. 2004, 68, 393-444	24
1342	Key amino acids located within the transmembrane domains 5 and 7 account for the pharmacological specificity of the human V1b vasopressin receptor. 2004, 18, 2777-89	20
1341	Receptor mutagenesis strategies for examination of structure-function relationships. <i>Methods in Molecular Biology</i> , 2004, 259, 307-22	1.4 5
1340	Reviews of Physiology, Biochemistry and Pharmacology. 2004,	1
1339	Recent advances in the investigation of the bioactive conformation of peptides active at the micro-opioid receptor. conformational analysis of endomorphins. 2004, 4, 105-21	48
1338	The basic residues in the membrane-proximal C-terminal tail of the rat melanin-concentrating hormone receptor 1 are required for receptor function. 2004, 145, 3712-23	69
1337	The 5-hydroxytryptamine(1A) receptor is stably palmitoylated, and acylation is critical for communication of receptor with Gi protein. 2004, 279, 3280-91	60
1336	Identification of fundamental building blocks in protein sequences using statistical association measures. 2004,	6
1335	Sequential binding of agonists to the beta2 adrenoceptor. Kinetic evidence for intermediate conformational states. 2004, 279, 686-91	285

1334	Analysis of the thyrotropin receptor-thyrotropin interaction by comparative modeling. <b>2004</b> , 14, 991-1011	54
1333	X-ray crystallography of rhodopsin. <b>2004</b> , 77, 21-29	2
1332	Predicted 3-D structures for mouse I7 and rat I7 olfactory receptors and comparison of predicted odor recognition profiles with experiment. <b>2004</b> , 29, 595-616	70
1331	Molecular alignment of rigid rods in nonrigid spherical pores. <b>2004</b> , 121, 1578-86	
1330	9. Molecular Dynamics Simulations in Biology, Chemistry and Physics. <b>2004</b> , 177-206	3
1329	A cluster of aromatic amino acids in the i2 loop plays a key role for Gs coupling in prostaglandin EP2 and EP3 receptors. <b>2004</b> , 279, 11016-26	11
1328	A highly conserved candidate chemoreceptor expressed in both olfactory and gustatory tissues in the malaria vector <i>Anopheles gambiae</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 5058-63	11.5 167
1327	Different structural states of the proteolipid membrane are produced by ligand binding to the human delta-opioid receptor as shown by plasmon-waveguide resonance spectroscopy. <b>2004</b> , 65, 1248-57	58
1326	8R-lisuride is a potent stereospecific histamine H1-receptor partial agonist. <b>2004</b> , 65, 538-49	30
1325	Sequence of interactions in receptor-G protein coupling. <b>2004</b> , 279, 24283-90	70
1324	A naturally occurring mutation of the opsin gene (T4R) in dogs affects glycosylation and stability of the G protein-coupled receptor. <b>2004</b> , 279, 53828-39	48
1323	Homology modeling of the transmembrane domain of the human calcium sensing receptor and localization of an allosteric binding site. <b>2004</b> , 279, 7254-63	124
1322	Measurement of intermolecular distances for the natural agonist Peptide docked at the cholecystokinin receptor expressed in situ using fluorescence resonance energy transfer. <b>2004</b> , 65, 28-35	24
1321	Loss-of-function polymorphic variants of the human angiotensin II type 1 receptor. <b>2004</b> , 65, 770-7	20
1320	Ligand selectivity and affinity of chemokine receptor CXCR1. Role of N-terminal domain. <b>2004</b> , 279, 30000-8	85
1319	The heptahelical domain of GABA(B2) is activated directly by CGP7930, a positive allosteric modulator of the GABA(B) receptor. <b>2004</b> , 279, 29085-91	168
1318	Identification of CC chemokine receptor 7 residues important for receptor activation. <b>2004</b> , 279, 42383-92	23
1317	Arthropod 5-HT2 receptors: a neurohormonal receptor in decapod crustaceans that displays agonist independent activity resulting from an evolutionary alteration to the DRY motif. <b>2004</b> , 24, 3421-35	70

1316	Conformational changes in the phosphorylated C-terminal domain of rhodopsin during rhodopsin arrestin interactions. <b>2004</b> , 279, 51203-7	25
1315	Dynamic confinement of NK2 receptors in the plasma membrane. Improved FRAP analysis and biological relevance. <b>2004</b> , 279, 45057-67	39
1314	A microdomain formed by the extracellular ends of the transmembrane domains promotes activation of the G protein-coupled alpha-factor receptor. <b>2004</b> , 24, 2041-51	27
1313	Critical role of transmembrane segment zinc binding in the structure and function of rhodopsin. <b>2004</b> , 279, 35932-41	36
1312	Torsion potential works in rhodopsin. <b>2004</b> , 79, 476-86	10
1311	Structural mimicry in class A G protein-coupled receptor rotamer toggle switches: the importance of the F3.36(201)/W6.48(357) interaction in cannabinoid CB1 receptor activation. <b>2004</b> , 279, 48024-37	123
1310	G protein-coupled receptor oligomerization: implications for G protein activation and cell signaling. <b>2004</b> , 94, 17-27	165
1309	Certain 1,4-disubstituted aromatic piperidines and piperazines with extreme selectivity for the dopamine D4 receptor interact with a common receptor microdomain. <b>2004</b> , 66, 1491-9	36
1308	Receptor Signal Transduction Protocols. <b>2004</b> ,	
1307	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. <b>2004</b> , 78, 4134-44	41
1306	Membrane topology and nicastrin-enhanced endoproteolysis of APH-1, a component of the gamma-secretase complex. <b>2004</b> , 279, 3685-93	58
1305	STAM: simple transmembrane alignment method. <b>2004</b> , 20, 758-69	22
1304	Modulation of ligand selectivity associated with activation of the transmembrane region of the human follitropin receptor. <b>2004</b> , 18, 2061-73	76
1303	Variety of genotypes in males diagnosed as dichromatic on a conventional clinical anomaloscope. <b>2004</b> , 21, 205-16	56
1302	Species specificity in rodent pheromone receptor repertoires. <b>2004</b> , 14, 603-8	38
1301	Identification of core amino acids stabilizing rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 7246-51	11.5 130
1300	Subunits of a yeast oligomeric G protein-coupled receptor are activated independently by agonist but function in concert to activate G protein heterotrimers. <b>2004</b> , 279, 16091-100	27
1299	Positive and negative allosteric modulators of the Ca <sup>2+</sup> -sensing receptor interact within overlapping but not identical binding sites in the transmembrane domain. <b>2004</b> , 279, 18990-7	167

1298	Selectivity, cooperativity, and reciprocity in the interactions between the delta-opioid receptor, its ligands, and G-proteins. <b>2004</b> , 279, 44673-82		47
1297	Model of glycoprotein hormone receptor ligand binding and signaling. <b>2004</b> , 279, 44442-59		59
1296	Production of the Human D2S Receptor in the Methylotrophic Yeast <i>P. pastoris</i> ?. <b>2004</b> , 10, 37-50		19
1295	Bulk is a determinant of oxymetazoline affinity for the alpha1A-adrenergic receptor. <b>2004</b> , 10, 109-16		4
1294	Mechanistic diversity of cytokine receptor signaling across cell membranes. <b>2004</b> , 2004, re7		69
1293	Protein kinase C regulates alpha(2A/D)-adrenoceptor constitutive activity. <b>2004</b> , 71, 80-90		4
1292	G protein signaling: insights from new structures. <b>2004</b> , 2004, re3		40
1291	Molecular mechanism of AMD3100 antagonism in the CXCR4 receptor: transfer of binding site to the CXCR3 receptor. <b>2004</b> , 279, 3033-41		188
1290	Regulation of gonadotropin-releasing hormone receptors by protein kinase C: inside out signalling and evidence for multiple active conformations. <b>2004</b> , 145, 3594-602		43
1289	The second extracellular loop of the dopamine D2 receptor lines the binding-site crevice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 440-5	11.5	198
1288	Functional characterization of rhodopsin monomers and dimers in detergents. <b>2004</b> , 279, 54663-75		108
1287	A role for heterodimerization of mu and delta opiate receptors in enhancing morphine analgesia. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 5135-9	11.5	345
1286	A model of inverse agonist action at thyrotropin-releasing hormone receptor type 1: role of a conserved tryptophan in helix 6. <b>2004</b> , 66, 1192-200		15
1285	Rhodopsin activation exposes a key hydrophobic binding site for the transducin alpha-subunit C terminus. <b>2004</b> , 279, 29767-73		85
1284	Structural determinants regulating expression of the high affinity leukotriene B4 receptor: involvement of dileucine motifs and alpha-helix VIII. <b>2004</b> , 279, 10338-45		22
1283	Coupling of retinal isomerization to the activation of rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 10048-53	11.5	127
1282	Predicted 3D structure for the human beta 2 adrenergic receptor and its binding site for agonists and antagonists. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 2736-41	11.5	118
1281	Vertebrate ultraviolet visual pigments: protonation of the retinylidene Schiff base and a counterion switch during photoactivation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 941-6	11.5	44

- 1280 The hydrodynamic properties of dark- and light-activated states of n-dodecyl beta-D-maltoside-solubilized bovine rhodopsin support the dimeric structure of both conformations. **2004**, 279, 39565-73 32
- 1279 Muscarinic toxin 7 selectivity is dictated by extracellular receptor loops. **2004**, 279, 50923-9 27
- 1278 Analysis of the third transmembrane domain of the human type 1 angiotensin II receptor by cysteine scanning mutagenesis. **2004**, 279, 51415-23 38
- 1277 Key differences in molecular complexes of the cholecystokinin receptor with structurally related peptide agonist, partial agonist, and antagonist. **2004**, 66, 545-52 16
- 1276 NMR structure and peptide hormone binding site of the first extracellular domain of a type B1 G protein-coupled receptor. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 12836-41 11.5 180
- 1275 Evolutionary trace of G protein-coupled receptors reveals clusters of residues that determine global and class-specific functions. **2004**, 279, 8126-32 157
- 1274 Transition of rhodopsin into the active metarhodopsin II state opens a new light-induced pathway linked to Schiff base isomerization. **2004**, 279, 48102-11 34
- 1273 Retinoids assist the cellular folding of the autosomal dominant retinitis pigmentosa opsin mutant P23H. **2004**, 279, 16278-84 119
- 1272 Pharmacochaperones post-translationally enhance cell surface expression by increasing conformational stability of wild-type and mutant vasopressin V2 receptors. **2004**, 279, 47254-63 125
- 1271 Agonist versus antagonist action of ATP at the P2Y4 receptor is determined by the second extracellular loop. **2004**, 279, 11456-64 34
- 1270 Species selectivity of nonpeptide antagonists of the gonadotropin-releasing hormone receptor is determined by residues in extracellular loops II and III and the amino terminus. **2004**, 279, 34115-22 20
- 1269 Oligomerization of wild type and nonfunctional mutant angiotensin II type I receptors inhibits galphaq protein signaling but not ERK activation. **2004**, 279, 24108-15 64
- 1268 Differential dynamics in the G protein-coupled receptor rhodopsin revealed by solution NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 3409-13 11.5 57
- 1267 Rhodopsin signaling and organization in heterozygote rhodopsin knockout mice. **2004**, 279, 48189-96 106
- 1266 Role of the retinal hydrogen bond network in rhodopsin Schiff base stability and hydrolysis. **2004**, 279, 55886-94 58
- 1265 "Network leaning" as a mechanism of insurmountable antagonism of the angiotensin II type 1 receptor by non-peptide antagonists. **2004**, 279, 15248-57 41
- 1264 Encyclopedic Reference of Molecular Pharmacology. **2004**, 933-933
- 1263 Three dimensional structure of mammalian tachykinin peptide neurokinin B bound to lipid micelles. **2004**, 22, 137-48 21



1262	Ab initio, tight-binding and QM/MM calculations of the rhodopsin chromophore in its binding pocket. <b>2004</b> , 77, 31-45	10
1261	Some early history of membrane molecular biology. <b>2004</b> , 66, 1-27	48
1260	Structural origins of constitutive activation in rhodopsin: Role of the K296/E113 salt bridge. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 12508-13	11.5 96
1259	Numerical Simulations in Biological Solid-State NMR Spectroscopy. <b>2004</b> , 54, 243-293	6
1258	Optimizing an Empirical Scoring Function for Transmembrane Protein Structure Determination. <b>2004</b> , 16, 406-418	17
1257	Transmembrane proteins in the Protein Data Bank: identification and classification. <b>2004</b> , 20, 2964-72	188
1256	Making sense of olfaction through predictions of the 3-D structure and function of olfactory receptors. <b>2004</b> , 29, 269-90	69
1255	Computational analysis of alpha-helical membrane protein structure: implications for the prediction of 3D structural models. <b>2004</b> , 17, 613-24	37
1254	Identification of duplicated fourth alpha2-adrenergic receptor subtype by cloning and mapping of five receptor genes in zebrafish. <b>2004</b> , 21, 14-28	52
1253	The ants go marching two by two: oligomeric structure of G-protein-coupled receptors. <b>2004</b> , 66, 1077-82	85
1252	NMR structure of the thromboxane A2 receptor ligand recognition pocket. <b>2004</b> , 271, 3006-16	26
1251	The role of helix 8 and of the cytosolic C-termini in the internalization and signal transduction of B(1) and B(2) bradykinin receptors. <b>2005</b> , 272, 129-40	20
1250	The use of membrane translocating peptides to identify sites of interaction between the C5a receptor and downstream effector proteins. <b>2004</b> , 112, 590-6	5
1249	Identification of a novel family of G protein-coupled receptor associated sorting proteins. <b>2004</b> , 89, 766-75	88
1248	Structural determinants for membrane trafficking and G protein selectivity of a mouse olfactory receptor. <b>2004</b> , 90, 1453-63	64
1247	A novel constitutively active mutation in the second cytoplasmic loop of metabotropic glutamate receptor. <b>2004</b> , 91, 484-92	11
1246	Molecular modeling of human MT2 melatonin receptor: the role of Val204, Leu272 and Tyr298 in ligand binding. <b>2004</b> , 91, 836-42	31
1245	Proteins and peptides at work. <b>2004</b> , 271, 59-125	

1244	Disease-causing V(2) vasopressin receptors are retained in different compartments of the early secretory pathway. <b>2004</b> , 5, 993-1005	72
1243	Pharmacological characterization of loss of function mutations of the human melanocortin 1 receptor that are associated with red hair. <b>2004</b> , 123, 917-23	87
1242	Structure-aided drug design's next generation. <b>2004</b> , 22, 513-9	21
1241	Identification of amino acid residues crucial for chemokine receptor dimerization. <b>2004</b> , 5, 216-23	166
1240	The state of GPCR research in 2004. <b>2004</b> , 3, 575, 577-626	70
1239	Electron crystallography reveals the structure of metarhodopsin I. <b>2004</b> , 23, 3609-20	269
1238	Ligand-induced rearrangement of the dimeric metabotropic glutamate receptor 1alpha. <i>Nature Structural and Molecular Biology</i> , <b>2004</b> , 11, 637-42	17.6 152
1237	New insights into the human 5-HT4 receptor binding site: exploration of a hydrophobic pocket. <b>2004</b> , 143, 361-70	30
1236	Citric acid cycle intermediates as ligands for orphan G-protein-coupled receptors. <b>2004</b> , 429, 188-93	615
1235	Structural determinants involved in the activation and regulation of G protein-coupled receptors: lessons from the alpha1-adrenergic receptor subtypes. <b>2004</b> , 96, 327-333	12
1234	Structural and functional characterization of pi bulges and other short intrahelical deformations. <b>2004</b> , 12, 133-44	46
1233	Probing the energy landscape of the membrane protein bacteriorhodopsin. <b>2004</b> , 12, 871-9	74
1232	Optimization of protein production in mammalian cells with a coexpressed fluorescent marker. <b>2004</b> , 12, 1355-60	76
1231	A molecular dissection of the glycoprotein hormone receptors. <b>2004</b> , 29, 119-26	292
1230	Screening the receptorome to discover the molecular targets for plant-derived psychoactive compounds: a novel approach for CNS drug discovery. <b>2004</b> , 102, 99-110	81
1229	Molecular mechanisms of ligand binding, signaling, and regulation within the superfamily of G-protein-coupled receptors: molecular modeling and mutagenesis approaches to receptor structure and function. <b>2004</b> , 103, 21-80	459
1228	Functions of 5-HT2A receptor and its antagonists in the cardiovascular system. <b>2004</b> , 104, 59-81	138
1227	Mutant G-protein-coupled receptors as a cause of human diseases. <b>2004</b> , 104, 173-206	230

1226	Dark adaptation and the retinoid cycle of vision. <b>2004</b> , 23, 307-80		523
1225	Utility of homology models in the drug discovery process. <b>2004</b> , 9, 659-69		233
1224	A database for G proteins and their interaction with GPCRs. <b>2004</b> , 5, 208		31
1223	Mutagenesis at the human tachykinin NK(2) receptor to define the binding site of a novel class of antagonists. <b>2004</b> , 488, 61-9		12
1222	Allosteric modulation of G-protein coupled receptors. <b>2004</b> , 21, 407-20		96
1221	Pharmacology of polymorphic variants of the human 5-HT <sub>1A</sub> receptor. <i>Biochemical Pharmacology</i> , <b>2004</b> , 67, 479-90	6	22
1220	Site-directed mutagenesis at the human B <sub>2</sub> receptor and molecular modelling to define the pharmacophore of non-peptide bradykinin receptor antagonists. <i>Biochemical Pharmacology</i> , <b>2004</b> , 67, 601-9	6	29
1219	Intrinsic activity and comparative molecular dynamics of buspirone analogues at the 5-HT <sub>1A</sub> receptors. <i>Biochemical Pharmacology</i> , <b>2004</b> , 67, 2219-30	6	15
1218	Agonist binding and activation of the rat beta(1)-adrenergic receptor: role of Trp(134(3.28)), Ser(190(4.57)) and Tyr(356(7.43)). <i>Biochemical Pharmacology</i> , <b>2004</b> , 68, 675-88	6	3
1217	Shift in purine/pyrimidine base recognition upon exchanging extracellular domains in P <sub>2Y</sub> 1/6 chimeric receptors. <i>Biochemical Pharmacology</i> , <b>2004</b> , 68, 2075-86	6	9
1216	Chemokine receptor CCR5: insights into structure, function, and regulation. <b>2004</b> , 16, 1201-10		233
1215	Femtosecond dynamics of intramolecular energy transition in visual pigment rhodopsin. <b>2004</b> , 396, 125-7		1
1214	Dipolar assisted rotational resonance NMR of tryptophan and tyrosine in rhodopsin. <b>2004</b> , 29, 11-20		49
1213	Detection of pairwise residue proximity by covariation analysis for 3D-structure prediction of G-protein-coupled receptors. <b>2004</b> , 23, 427-35		7
1212	Towards higher-throughput membrane protein production for structural genomics initiatives. <b>2004</b> , 5, 167-72		38
1211	Recognition of privileged structures by G-protein coupled receptors. <b>2004</b> , 47, 888-99		185
1210	Development of a 3D model for the human cannabinoid CB <sub>1</sub> receptor. <b>2004</b> , 47, 3048-57		77
1209	Divergent mechanisms for the tuning of shortwave sensitive visual pigments in vertebrates. <b>2004</b> , 3, 713-20		57

1208	A molecular spring for vision. <b>2004</b> , 126, 15328-9		88
1207	Effects of mutations in the N terminal region of the yeast G protein alpha-subunit Gpa1p on signaling by pheromone receptors. <b>2004</b> , 271, 237-48		6
1206	The early stages of the intracellular transport of membrane proteins: clinical and pharmacological implications. <b>2004</b> , 151, 45-91		22
1205	Potential impact of an X-ray free electron laser on structural biology. <b>2004</b> , 71, 905-916		53
1204	Modelling of third cytoplasmic loop of bovine rhodopsin by multicanonical molecular dynamics. <b>2004</b> , 23, 59-68		7
1203	Insect olfactory receptors: contributions of molecular biology to chemical ecology. <b>2004</b> , 30, 2359-97		87
1202	Wnt-frizzled signaling to G-protein-coupled effectors. <b>2004</b> , 61, 69-75		55
1201	When 6 is 9: 'uncoupled' AT1 receptors turn signalling on its head. <b>2004</b> , 61, 2687-94		13
1200	Statistical sequence analyses of G-protein-coupled receptors: structural and functional characteristics viewed with periodicities of entropy, hydrophobicity, and volume. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 56, 650-60	4.2	4
1199	Toward the active conformations of rhodopsin and the beta2-adrenergic receptor. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 56, 67-84	4.2	66
1198	Structural features of the inactive and active states of the melanin-concentrating hormone receptors: insights from molecular simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 56, 430-48	4.2	21
1197	PREDICT modeling and in-silico screening for G-protein coupled receptors. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 57, 51-86	4.2	90
1196	Patterns of retinal light absorption related to retinitis pigmentosa mutants from in silico model structures of rhodopsin. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 57, 392-9	4.2	14
1195	Conformational sampling and dynamics of membrane proteins from 10-nanosecond computer simulations. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 57, 783-91	4.2	86
1194	Prediction of interfaces for oligomerizations of G-protein coupled receptors. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2005</b> , 58, 644-60	4.2	34
1193	Photoaffinity scanning in the mapping of the peptide receptor interface of class II G protein-coupled receptors. <b>2004</b> , 10, 179-203		26
1192	Missense mutations in transmembrane domains of proteins: phenotypic propensity of polar residues for human disease. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 54, 648-56	4.2	80
1191	Novel approaches for modeling of the A1 adenosine receptor and its agonist binding site. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2004</b> , 54, 705-15	4.2	19

1190	Primary events in dim light vision: a chemical and spectroscopic approach toward understanding protein/chromophore interactions in rhodopsin. <b>2004</b> , 4, 120-35	25
1189	Molecular dynamics of strained retinal in various electronic states. <b>2004</b> , 96, 219-225	
1188	The molecular basis of olfactory chemoreception. <b>2004</b> , 43, 6410-2	21
1187	Non-xanthine antagonists for the adenosine A1 receptor. <b>2004</b> , 1, 1591-626	15
1186	Sexual conjugation in yeast: A paradigm to study G-protein-coupled receptor domain structure. <b>2004</b> , 76, 119-28	17
1185	Die molekulare Basis der olfaktorischen Chemorezeption. <b>2004</b> , 116, 6570-6573	5
1184	Shape-mimetics of G-protein-coupled receptors in therapeutic drug design and screening. <b>2004</b> , 62, 336-348	
1183	K317, R319, and E320 within the proximal C-terminus of the bradykinin B2 receptor form a motif important for phospholipase C and phospholipase A2 but not connective tissue growth factor related signaling. <b>2004</b> , 92, 547-59	6
1182	Proteins, recognition networks and developing interfaces for macromolecular biosensing. <b>2004</b> , 17, 198-208	5
1181	Recent advances in selective opioid receptor agonists and antagonists. <b>2004</b> , 24, 182-212	133
1180	Improved pulse sequences for pure exchange solid-state NMR spectroscopy. <b>2004</b> , 42, 285-90	7
1179	Structural models of the photointermediates in the rhodopsin photocascade, lumirhodopsin, metarhodopsin I, and metarhodopsin II. <b>2004</b> , 5, 298-310	17
1178	Comparative analysis of putative agonist-binding modes in the human A1 adenosine receptor. <b>2004</b> , 5, 841-9	9
1177	Ligand-binding modes in cationic biogenic amine receptors. <b>2004</b> , 5, 1210-9	13
1176	Structure-activity relationships of thiazole and thiadiazole derivatives as potent and selective human adenosine A3 receptor antagonists. <b>2004</b> , 12, 613-23	106
1175	Exploring distal regions of the A3 adenosine receptor binding site: sterically constrained N6-(2-phenylethyl)adenosine derivatives as potent ligands. <b>2004</b> , 12, 2021-34	53
1174	A predictive pharmacophore model of human melanocortin-4 receptor as derived from the solution structures of cyclic peptides. <b>2004</b> , 12, 2671-7	25
1173	Modulation of adenosine receptor affinity and intrinsic efficacy in adenine nucleosides substituted at the 2-position. <b>2004</b> , 12, 2995-3007	45

1172	Molecular docking and 3D QSAR studies on 1-amino-2-phenyl-4-(piperidin-1-yl)-butanes based on the structural modeling of human CCR5 receptor. <b>2004</b> , 12, 6193-208	47
1171	Biochimie des hormones et leurs mcanismes d'action : rcepteurs membranaires. <b>2004</b> , 1, 169-199	
1170	Characterize dynamic conformational space of human CCR5 extracellular domain by molecular modeling and molecular dynamics simulation. <b>2004</b> , 673, 133-143	9
1169	DFT calculations of the 1H chemical shifts and 13C chemical shift tensors of retinal isomers. <b>2004</b> , 711, 141-147	8
1168	Ligand identification for G-protein-coupled receptors: a lead generation perspective. <b>2004</b> , 8, 287-96	40
1167	Site-directed mutagenesis of the rat beta1-adrenoceptor. Involvement of Tyr356 (7.43) in (+/-)cyanopindolol but not (+/-)[125Iodo]cyanopindolol binding. <b>2004</b> , 39, 625-31	3
1166	Homology modelling and binding site mapping of the human histamine H1 receptor. <b>2004</b> , 39, 959-67	30
1165	Influence of salts on rhodopsin photoproduct equilibria and protein stability. <b>2004</b> , 9, 133-138	19
1164	Classifying G-protein coupled receptors with bagging classification tree. <b>2004</b> , 28, 275-80	44
1163	Antagonist binding in the rat muscarinic receptor A study by docking and X-ray crystallography. <b>2004</b> , 28, 375-85	13
1162	Contemporary paradigms for cholinergic ligand design guided by biological structure. <b>2004</b> , 14, 1875-7	1
1161	Biological photosensors. <b>2004</b> , 3, E3-4	
1160	Dopamine receptor microdomains involved in molecular recognition and the regulation of drug affinity and function. <b>2004</b> , 24, 207-39	27
1159	Ab Initio Modeling of the Spatial, Electronic, and Vibrational Structure of Schiff Base Models for Visual Photoreceptors. <b>2004</b> , 108, 13560-13572	20
1158	Solid-state NMR analysis of ligand--receptor interactions reveals an induced misfit in the binding site of isorhodopsin. <b>2004</b> , 43, 16011-8	18
1157	Evidence for the proximity of the extreme N-terminus of the neurokinin-2 (NK2) tachykinin receptor to Cys167 in the putative fourth transmembrane helix. <b>2004</b> , 43, 3027-38	8
1156	Role of the 9-methyl group of retinal in cone visual pigments. <b>2004</b> , 43, 5532-8	39
1155	Protein-induced bonding perturbation of the rhodopsin chromophore detected by double-quantum solid-state NMR. <b>2004</b> , 126, 3948-53	52

1154	Criteria for the design and biological characterization of radiolabeled peptide-based pharmaceuticals. <b>2004</b> , 18, 279-95	16
1153	Techniques and applications of NMR to membrane proteins. <b>2004</b> , 21, 129-41	34
1152	Modeling of Neuropeptide Receptors Y1, Y4, Y5, and Docking Studies with Neuropeptide Antagonist Analogues: Implications for Selectivity. <b>2004</b> , 22, 497-508	1
1151	Counterion controlled photoisomerization of retinal chromophore models: a computational investigation. <b>2004</b> , 126, 16018-37	84
1150	Generalization of a targeted library design protocol: application to 5-HT7 receptor ligands. <b>2004</b> , 44, 2207-15	9
1149	Structural characterization and pharmacology of a potent (Cys101-Cys119, Cys110-Cys117) bicyclic agouti-related protein (AGRP) melanocortin receptor antagonist. <b>2004</b> , 47, 5662-73	14
1148	Probing rhodopsin-transducin interactions by surface modification and mass spectrometry. <b>2004</b> , 43, 11153-62	37
1147	Residues in the hydrophilic face of putative helix 8 of oxytocin receptor are important for receptor function. <b>2004</b> , 43, 3490-8	27
1146	Steric trigger as a mechanism for CB1 cannabinoid receptor activation. <b>2004</b> , 44, 1466-76	13
1145	Successful virtual screening for a submicromolar antagonist of the neurokinin-1 receptor based on a ligand-supported homology model. <b>2004</b> , 47, 5381-92	171
1144	Oligomerization of G protein-coupled receptors: past, present, and future. <b>2004</b> , 43, 15643-56	202
1143	Topology scanning and putative three-dimensional structure of the extracellular binding domains of the apical sodium-dependent bile acid transporter (SLC10A2). <b>2004</b> , 43, 11380-92	59
1142	NMR spectroscopy of phosphorylated wild-type rhodopsin: mobility of the phosphorylated C-terminus of rhodopsin in the dark and upon light activation. <b>2004</b> , 43, 1126-33	37
1141	Stereochemical studies of the monocyclic agouti-related protein (103-122) Arg-Phe-Phe residues: conversion of a melanocortin-4 receptor antagonist into an agonist and results in the discovery of a potent and selective melanocortin-1 agonist. <b>2004</b> , 47, 6702-10	16
1140	Computational design of water-soluble analogues of the potassium channel KcsA. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 1828-33	11.5 91
1139	Architecture of P2Y nucleotide receptors: structural comparison based on sequence analysis, mutagenesis, and homology modeling. <b>2004</b> , 47, 5393-404	128
1138	Conformational and molecular modeling studies of beta-cyclodextrin-heptagastrin and the third extracellular loop of the cholecystokinin 2 receptor. <b>2004</b> , 43, 2724-31	12
1137	The Nature of the Complex Counterion of the Chromophore in Rhodopsin. <b>2004</b> , 108, 3673-3680	28

1136	A virtual screening approach to finding novel and potent antagonists at the melanin-concentrating hormone 1 receptor. <b>2004</b> , 47, 3962-71	83
1135	Investigations of polypeptide rotational diffusion in aligned membranes by 2H and 15N solid-state NMR spectroscopy. <b>2004</b> , 126, 16676-83	72
1134	Time-resolved photointermediate changes in rhodopsin glutamic acid 181 mutants. <b>2004</b> , 43, 12614-21	24
1133	Acid-base equilibria in rhodopsin: dependence of the protonation state of glu134 on its environment. <b>2004</b> , 43, 6858-64	24
1132	Identification of putative agouti-related protein(87-132)-melanocortin-4 receptor interactions by homology molecular modeling and validation using chimeric peptide ligands. <b>2004</b> , 47, 2194-207	62
1131	Study on affinity profile toward native human and bovine adenosine receptors of a series of 1,8-naphthyridine derivatives. <b>2004</b> , 47, 3019-31	27
1130	Refinement of a homology model of the mu-opioid receptor using distance constraints from intrinsic and engineered zinc-binding sites. <b>2004</b> , 43, 8700-10	55
1129	Molecular recognition in purinergic receptors. 1. A comprehensive computational study of the h-P2Y1-receptor. <b>2004</b> , 47, 4391-404	28
1128	Tilt and rotational pitch angle of membrane-inserted polypeptides from combined 15N and 2H solid-state NMR spectroscopy. <b>2004</b> , 43, 10502-12	62
1127	Inherited diseases involving g proteins and g protein-coupled receptors. <b>2004</b> , 55, 27-39	191
1126	How the Counterion Affects Ground- and Excited-State Properties of the Rhodopsin Chromophore. <b>2004</b> , 108, 20419-20426	42
1125	4-((2R)-[3-Aminopropionylamido]-3-(2,4-dichlorophenyl)propionyl)-1-{2-[(2-thienyl)ethylaminomethyl]phenyl}piperazine as a potent and selective melanocortin-4 receptor antagonist--design, synthesis, and characterization. <b>2004</b> , 47, 6821-30	34
1124	1,2,4-triazolo[4,3-a]quinoxalin-1-one moiety as an attractive scaffold to develop new potent and selective human A3 adenosine receptor antagonists: synthesis, pharmacological, and ligand-receptor modeling studies. <b>2004</b> , 47, 3580-90	61
1123	AT1 receptor heterodimers and angiotensin II responsiveness in preeclampsia. <b>2004</b> , 24, 115-9	44
1122	Overview of protein structural and functional folds. <b>2004</b> , Chapter 17, Unit 17.1	6
1121	A concept for G protein activation by G protein-coupled receptor dimers: the transducin/rhodopsin interface. <b>2004</b> , 3, 628-38	150
1120	Synthesis, biological properties, and molecular modeling investigations of novel 3,4-diarylpyrazolines as potent and selective CB(1) cannabinoid receptor antagonists. <b>2004</b> , 47, 627-43	167
1119	Gonadotropin-releasing hormone receptors. <b>2004</b> , 25, 235-75	620



1118	Prediction of the odorant binding site of olfactory receptor proteins by human-mouse comparisons. <b>2004</b> , 13, 240-54	134
1117	Modeling and simulation of the human delta opioid receptor. <b>2004</b> , 13, 1997-2008	18
1116	Analysis of side-chain rotamers in transmembrane proteins. <b>2004</b> , 87, 3460-9	48
1115	An automatic method for predicting transmembrane protein structures using cryo-EM and evolutionary data. <b>2004</b> , 87, 3448-59	48
1114	QM/MM study of energy storage and molecular rearrangements due to the primary event in vision. <b>2004</b> , 87, 2931-41	95
1113	Helical packing patterns in membrane and soluble proteins. <b>2004</b> , 87, 4075-86	84
1112	A sequence alignment-independent method for protein classification. <b>2004</b> , 3, 137-48	15
1111	Functional Consequences of Mutations and Polymorphisms in Gonadotropin and Gonadotropin Receptor Genes. <b>2004</b> , 55-78	
1110	Neuropeptide Y and Related Peptides. <b>2004</b> ,	8
1109	A purified agonist-activated G-protein coupled receptor: truncated octopus Acid Metarhodopsin. <b>2004</b> , 21, 245-50	10
1108	Agonist-independent nuclear localization of the Apelin, angiotensin AT1, and bradykinin B2 receptors. <b>2004</b> , 279, 7901-8	148
1107	Characterization of peptides corresponding to the seven transmembrane domains of human adenosine A2a receptor. <b>2004</b> , 43, 12945-54	42
1106	Automated protein structure homology modeling: a progress report. <b>2004</b> , 5, 405-16	93
1105	Synthesis, screening, and molecular modeling of new potent and selective antagonists at the alpha 1d adrenergic receptor. <b>2004</b> , 47, 1900-18	48
1104	G Protein-Coupled Signal Transmission Pathways. <b>2004</b> , 179-229	1
1103	The spectrum of human rhodopsin disease mutations through the lens of interspecific variation. <b>2004</b> , 332, 107-18	37
1102	Molecular cloning, expression, and sequence analysis of GPRC6A, a novel family C G-protein-coupled receptor. <b>2004</b> , 335, 37-46	134
1101	Identification of a novel aminergic-like G protein-coupled receptor in the cnidarian <i>Renilla koellikeri</i> . <b>2004</b> , 341, 67-75	11

1100	Role of the fourth intracellular loop of D1-like dopaminergic receptors in conferring subtype-specific signaling properties. <b>2004</b> , 576, 461-7	11
1099	Structural studies of the putative helix 8 in the human beta(2) adrenergic receptor: an NMR study. <b>2004</b> , 1663, 74-81	34
1098	Computer simulations of membrane proteins. <b>2004</b> , 1666, 158-89	205
1097	How lipids affect the activities of integral membrane proteins. <b>2004</b> , 1666, 62-87	907
1096	Structure-activity function for binding and signaling in CHO-K1 and COS-7 cells expressing the cholecystokinin A receptor. <b>2004</b> , 314, 861-9	
1095	Binding crevice for TT-232 in a homology model of type 1 somatostatin receptor. <b>2004</b> , 316, 1059-64	7
1094	Binding site analysis of full-length alpha1a adrenergic receptor using homology modeling and molecular docking. <b>2004</b> , 319, 493-500	33
1093	Computational development of an alpha1A-adrenoceptor model in a membrane mimic. <b>2004</b> , 324, 916-21	12
1092	Analysis of L-cone/M-cone visual pigment gene arrays in Japanese males with protan color-vision deficiency. <b>2004</b> , 44, 2241-52	19
1091	A cAMP receptor-like G protein-coupled receptor with roles in growth regulation and development. <b>2004</b> , 265, 433-45	27
1090	The human and mouse repertoire of the adhesion family of G-protein-coupled receptors. <b>2004</b> , 84, 23-33	184
1089	Evolutionary divergence of thyrotropin receptor structure. <b>2004</b> , 81, 322-34	7
1088	The molecular acrobatics of arrestin activation. <b>2004</b> , 25, 105-11	293
1087	Historical review: a brief history and personal retrospective of seven-transmembrane receptors. <b>2004</b> , 25, 413-22	318
1086	Decreases in yeast expression yields of the human adenosine A2a receptor are a result of translational or post-translational events. <b>2004</b> , 37, 134-43	25
1085	Mutagenesis of the AT1 receptor reveals different binding modes of angiotensin II and [Sar1]-angiotensin II. <b>2004</b> , 119, 183-8	31
1084	Functional characterization and purification of the secretin receptor expressed in baculovirus-infected insect cells. <b>2004</b> , 123, 217-23	8
1083	A Calpha model for the transmembrane alpha helices of gap junction intercellular channels. <b>2004</b> , 15, 879-88	100

1082	Pro7.33(303) of the human GnRH receptor regulates selective binding of mammalian GnRH. <b>2004</b> , 219, 47-59		13
1081	Helix packing moments reveal diversity and conservation in membrane protein structure. <b>2004</b> , 337, 713-29		81
1080	Rhodopsin photoproducts in 2D crystals. <b>2004</b> , 338, 597-609		27
1079	The retinal conformation and its environment in rhodopsin in light of a new 2.2 Å crystal structure. <b>2004</b> , 342, 571-83		943
1078	The ring of the rhodopsin chromophore in a hydrophobic activation switch within the binding pocket. <b>2004</b> , 343, 719-30		46
1077	Crystals of native and modified bovine rhodopsins and their heavy atom derivatives. <b>2004</b> , 343, 1439-50		50
1076	Structure of bovine rhodopsin in a trigonal crystal form. <b>2004</b> , 343, 1409-38		676
1075	Crystallization of transmembrane proteins in cubo: mechanisms of crystal growth and defect formation. <b>2004</b> , 343, 1243-54		34
1074	Structural and functional characterization of the first intracellular loop of human thromboxane A2 receptor. <b>2004</b> , 423, 253-65		28
1073	Histologic study of retinitis pigmentosa due to a mutation in the RP13 gene (PRPC8): comparison with rhodopsin Pro23His, Cys110Arg, and Glu181Lys. <b>2004</b> , 137, 946-8		16
1072	Acute myeloid leukemia presenting as bilateral proptosis from diffuse extraocular muscle infiltration. <b>2004</b> , 137, 948-50		26
1071	The supramolecular structure of the GPCR rhodopsin in solution and native disc membranes. <b>2004</b> , 21, 435-46		67
1070	Opioid receptors. <b>2004</b> , 73, 953-90		593
1069	The evolution of transmembrane helix kinks and the structural diversity of G protein-coupled receptors. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 959-63	11.5	191
1068	G protein-coupled receptors: in silico drug discovery in 3D. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2004</b> , 101, 11304-9	11.5	143
1067	Inner retinal photoreceptors (IRPs) in mammals and teleost fish. <b>2004</b> , 3, 617-27		20
1066	Design, synthesis, structural studies, biological evaluation, and computational simulations of novel potent AT(1) angiotensin II receptor antagonists based on the 4-phenylquinoline structure. <b>2004</b> , 47, 2574-86		69
1065	Climbing Mount Everest, the GPCR way. <b>2004</b> , 3, 2-4		2

1064	The G protein-coupled receptor rhodopsin in the native membrane. <b>2004</b> , 564, 281-288	179
1063	Automated large-scale purification of a G protein-coupled receptor for neurotensin. <b>2004</b> , 564, 289-93	66
1062	The arrestin-bound conformation and dynamics of the phosphorylated carboxy-terminal region of rhodopsin. <b>2004</b> , 564, 307-11	18
1061	Heavier-than-air flying machines are impossible. <b>2004</b> , 564, 269-73	47
1060	High-throughput modeling of human G-protein coupled receptors: amino acid sequence alignment, three-dimensional model building, and receptor library screening. <b>2004</b> , 44, 1162-76	76
1059	Neurotransmitter Receptors. <b>2004</b> , 299-334	0
1058	Intracellular Signaling. <b>2004</b> , 335-370	
1057	Sphingosine 1-phosphate and lysophosphatidic acid receptors: agonist and antagonist binding and progress toward development of receptor-specific ligands. <b>2004</b> , 15, 467-76	37
1056	Ser and Thr residues modulate the conformation of pro-kinked transmembrane alpha-helices. <b>2004</b> , 86, 105-15	83
1055	Designing human m1 muscarinic receptor-targeted hydrophobic eigenmode matched peptides as functional modulators. <b>2004</b> , 86, 1308-31	6
1054	First principles predictions of the structure and function of g-protein-coupled receptors: validation for bovine rhodopsin. <b>2004</b> , 86, 1904-21	92
1053	Membrane model for the G-protein-coupled receptor rhodopsin: hydrophobic interface and dynamical structure. <b>2004</b> , 86, 2078-100	124
1052	Constitutive Activity of Brain Serotonin Receptors: Inverse Agonist Activity of Antipsychotic Drugs. <b>2004</b> , 1, 399-408	2
1051	Fluctuations of complex networks: electrical properties of single-protein nanodevices. <b>2004</b> , 5472, 172	2
1050	Biochimie des hormones et leurs mcanismes d'action: rcepteurs membranaires. <b>2004</b> , 1, 1-21	1
1049	Integrative bioinformatics for functional genome annotation: trawling for G protein-coupled receptors. <b>2004</b> , 15, 693-701	10
1048	Purification and biochemical characterization of the D6 chemokine receptor. <b>2004</b> , 379, 263-72	65
1047	Cloning, tissue distribution, pharmacology and three-dimensional modelling of melanocortin receptors 4 and 5 in rainbow trout suggest close evolutionary relationship of these subtypes. <b>2004</b> , 380, 475-86	65

1046	A misassembled transmembrane domain of a polytopic protein associates with signal peptide peptidase. <b>2004</b> , 384, 9-17	29
1045	X-ray crystallographic studies for ligand-protein interaction changes in rhodopsin. <b>2004</b> , 32, 738-41	19
1044	Interactions between G-protein-coupled receptors and periplakin: a selective means to regulate G-protein activation. <b>2004</b> , 32, 878-80	13
1043	Kinetics of G-protein-coupled receptor signalling and desensitization. <b>2004</b> , 32, 1029-31	26
1042	Evidence to support a spectrum of active states for the glucagon receptor. <b>2004</b> , 32, 1037-9	4
1041	The third extracellular loop of G-protein-coupled receptors: more than just a linker between two important transmembrane helices. <b>2004</b> , 32, 1048-50	35
1040	Medium Effects on Photochemical Processes. <b>2004</b> , 553-618	
1039	Structural Recognition Between Odorants, Olfactory-Binding Proteins and Olfactory Receptors - First Events in Odour Coding. 86-150	4
1038	[A molecular basis for odorant recognition: olfactory receptor pharmacology]. <b>2004</b> , 124, 201-9	4
1037	Identification of endogenous surrogate ligands for human P2Y receptors through an in silico search. <b>2004</b> , 95, 81-93	16
1036	Production of the human D2S receptor in the methylotrophic yeast <i>P. pastoris</i> . <b>2004</b> , 10, 37-50	7
1035	Bulk is a Determinant of Oxymetazoline Affinity for the $\alpha$ A-Adrenergic Receptor. <b>2004</b> , 10, 109-116	1
1034	Topographic representation of odorant molecular features in the rat olfactory bulb. <b>2004</b> , 92, 2413-27	108
1033	Constitutively Active Serotonin Receptors. <b>2005</b> , 223-241	
1032	Teaching resources. Structure of G-protein-coupled receptors and G proteins. <b>2005</b> , 2005, tr10	1
1031	Potent and Selective A2A Adenosine Receptor Antagonists: Recent Improvements. <b>2005</b> , 2, 49-62	
1030	High-Throughput Flow Cytometry. <b>2005</b> , 185-226	
1029	Identifying G-protein coupled receptors using weighted Levenshtein distance and the nearest neighbor method. <b>2005</b> , 3, 252-7	2

1028	The Photoreceptor Membrane as a Model System in the Study of Biological Signal Transduction. <b>2005</b> , 1, 181-206	
1027	GnRH Receptors in Fish: Differences in Structure-Function Relations between Mammalian and Non-mammalian GnRH Receptors. <b>2005</b> , 40-75	1
1026	Receptors, G proteins, and their interactions. <b>2005</b> , 103, 1066-78	49
1025	Transduction of biochemical signals across cell membranes. <b>2005</b> , 38, 321-30	14
1024	The Molecular and Cellular Biology of CC Chemokines and Their Receptors. <b>2005</b> , 73-102	2
1023	The Relationship between Endocannabinoid Conformation and Endocannabinoid Interaction at the Cannabinoid Receptors. <b>2005</b> ,	
1022	Activation of an alpha2A-adrenoceptor-Galphao1 fusion protein dynamically regulates the palmitoylation status of the G protein but not of the receptor. <b>2005</b> , 385, 197-206	15
1021	Problems in Computational Structural Genomics. <b>2005</b> , 223-250	
1020	Evaluation of the odor activity of pyrazine derivatives using structural and electronic parameters derived from conformational study by molecular mechanics (MM3) and ab initio calculations. <b>2005</b> , 749, 169-176	3
1019	2-aryl-8-chloro-1,2,4-triazolo[1,5-a]quinoxalin-4-amines as highly potent A1 and A3 adenosine receptor antagonists. <b>2005</b> , 13, 705-15	33
1018	The repertoire of trace amine G-protein-coupled receptors: large expansion in zebrafish. <b>2005</b> , 35, 470-82	78
1017	Chemical modification of the naphthoyl 3-position of JWH-015: in search of a fluorescent probe to the cannabinoid CB2 receptor. <b>2005</b> , 15, 3758-62	33
1016	A phylogenetic method to assign ligand-binding relationships between 7TM receptors. <b>2005</b> , 15, 3707-12	60
1015	Novel 3,4-diarylpyrazolines as potent cannabinoid CB1 receptor antagonists with lower lipophilicity. <b>2005</b> , 15, 4794-8	52
1014	Modeling of benzocaine analog interactions with the D4S6 segment of NaV4.1 voltage-gated sodium channels. <b>2005</b> , 113, 1-7	7
1013	Using synthetic lipids to stabilize purified beta2 adrenoceptor in detergent micelles. <b>2005</b> , 343, 344-6	56
1012	A neoceptor approach to unraveling microscopic interactions between the human A2A adenosine receptor and its agonists. <b>2005</b> , 12, 237-47	38
1011	Homology models of the cannabinoid CB1 and CB2 receptors. A docking analysis study. <b>2005</b> , 40, 75-83	72

1010	Atypical and typical antipsychotic drug interactions with the dopamine D2 receptor. <b>2005</b> , 40, 185-94	24
1009	Structure-function relationships of the luteinizing hormone receptor. <b>2005</b> , 1061, 41-54	21
1008	Oligomerization of the fifth transmembrane domain from the adenosine A2A receptor. <b>2005</b> , 14, 2177-86	46
1007	Models of glycoprotein hormone receptor interaction. <b>2005</b> , 26, 189-205	36
1006	Mutations in human gonadotropin and gonadotropin-receptor genes. <b>2005</b> , 26, 207-17	120
1005	Gonadotropin receptors: role of post-translational modifications and post-transcriptional regulation. <b>2005</b> , 26, 249-57	29
1004	Class II G protein-coupled receptors and their ligands in neuronal function and protection. <b>2005</b> , 7, 3-36	61
1003	Opioid receptors and their interacting proteins. <b>2005</b> , 7, 51-9	30
1002	Once and future signaling: G protein-coupled receptor kinase control of neuronal sensitivity. <b>2005</b> , 7, 129-47	24
1001	Monomeric G-protein-coupled receptor as a functional unit. <b>2005</b> , 44, 9395-403	196
1000	Syntheses, biological evaluation, and molecular modeling of 18F-labeled 4-anilidopiperidines as mu-opioid receptor imaging agents. <b>2005</b> , 48, 7720-32	25
999	Overview of signal transduction. <b>2006</b> , Chapter 2, Unit2.1	1
998	Hallucinogen actions on 5-HT receptors reveal distinct mechanisms of activation and signaling by G protein-coupled receptors. <b>2006</b> , 7, E871-84	27
997	Virtual screening of novel CB2 ligands using a comparative model of the human cannabinoid CB2 receptor. <b>2005</b> , 48, 7166-71	57
996	Mutagenesis analysis of the serotonin 5-HT <sub>2C</sub> receptor and a <i>Caenorhabditis elegans</i> 5-HT <sub>2</sub> homologue: conserved residues of helix 4 and helix 7 contribute to agonist-dependent activation of 5-HT <sub>2</sub> receptors. <b>2005</b> , 92, 375-87	11
995	A family of octopamine [corrected] receptors that specifically induce cyclic AMP production or Ca <sup>2+</sup> release in <i>Drosophila melanogaster</i> . <b>2005</b> , 93, 440-51	130
994	G protein-coupled receptors: a count of 1001 conformations. <b>2005</b> , 19, 45-56	68
993	Protease-activated receptors in hemostasis, thrombosis and vascular biology. <b>2005</b> , 3, 1800-14	791

992	The molecular basis of variation in human color vision. <b>2005</b> , 67, 369-77		91
991	Roles of residues 3 and 4 in cyclic tetrapeptide ligand recognition by the kappa-opioid receptor. <b>2005</b> , 65, 333-42		20
990	Biosynthesis and purification of a hydrophobic peptide from transmembrane domains of G-protein-coupled CB2 receptor. <b>2005</b> , 65, 450-8		16
989	Purification and mass spectroscopic analysis of human CB1 cannabinoid receptor functionally expressed using the baculovirus system. <b>2005</b> , 66, 138-50		23
988	Molecular mechanisms of constitutive activity: mutations at position 111 of the angiotensin AT1 receptor. <b>2005</b> , 66, 236-48		24
987	Colour vision and speciation in Lake Victoria cichlids of the genus Pundamilia. <b>2005</b> , 14, 4341-53		133
986	The second extracellular loop: a damper for G protein-coupled receptors?. <i>Nature Structural and Molecular Biology</i> , <b>2005</b> , 12, 287-8	17.6	41
985	Essential role for the second extracellular loop in C5a receptor activation. <i>Nature Structural and Molecular Biology</i> , <b>2005</b> , 12, 320-6	17.6	139
984	Model for growth hormone receptor activation based on subunit rotation within a receptor dimer. <i>Nature Structural and Molecular Biology</i> , <b>2005</b> , 12, 814-21	17.6	313
983	Conserved structural, pharmacological and functional properties among the three human and five zebrafish alpha 2-adrenoceptors. <b>2005</b> , 144, 165-77		51
982	Linking agonist binding to histamine H1 receptor activation. <b>2005</b> , 1, 98-103		79
981	Endocrinology: fertility hormone in repose. <b>2005</b> , 433, 203-4		20
980	Climatology: will soil amplify climate change?. <b>2005</b> , 433, 204-5		93
979	The study of G-protein coupled receptor oligomerization with computational modeling and bioinformatics. <b>2005</b> , 272, 2926-38		87
978	Molecular modelling of drug targets: the past, the present and the future. <b>2005</b> , 96, 151-5		24
977	Melanocortin-1 receptor structure and functional regulation. <b>2005</b> , 18, 393-410		183
976	The functional role of cysteines adjacent to the NRY motif of the human MT1 melatonin receptor. <b>2005</b> , 39, 1-11		21
975	Two ligands for a GPCR, proton vs lysolipid. <b>2005</b> , 26, 1435-41		27



974	The regulatory mechanisms of export trafficking of G protein-coupled receptors. <b>2005</b> , 17, 1457-65	120
973	Binding domains of the oxytocin receptor for the selective oxytocin receptor antagonist barusiban in comparison to the agonists oxytocin and carbetocin. <b>2005</b> , 510, 9-16	27
972	How did the neurotransmitter cross the bilayer? A closer view. <b>2005</b> , 15, 296-304	37
971	Identification of key amino acids in the gastrin-releasing peptide receptor (GRPR) responsible for high affinity binding of gastrin-releasing peptide (GRP). <i>Biochemical Pharmacology</i> , <b>2005</b> , 69, 579-93	6 17
970	Predicting ligands for orphan GPCRs. <b>2005</b> , 10, 69-73	10
969	Structure of Galpha(i1) bound to a GDP-selective peptide provides insight into guanine nucleotide exchange. <b>2005</b> , 13, 1069-80	63
968	Amphiphilic helices drive signaling. <b>2005</b> , 13, 946-7	2
967	Structural genomics of GPCRs. <b>2005</b> , 23, 103-8	77
966	Membrane proteins--pumping along. <b>2005</b> , 15, 375-7	1
965	Structure of rhodopsin and the metarhodopsin I photointermediate. <b>2005</b> , 15, 408-15	74
964	A method for the prediction of GPCRs coupling specificity to G-proteins using refined profile Hidden Markov Models. <b>2005</b> , 6, 104	37
963	Genome wide survey of G protein-coupled receptors in <i>Tetraodon nigroviridis</i> . <b>2005</b> , 5, 41	27
962	Cross genome phylogenetic analysis of human and <i>Drosophila</i> G protein-coupled receptors: application to functional annotation of orphan receptors. <b>2005</b> , 6, 106	46
961	The GRAFS classification system of G-protein coupled receptors in comparative perspective. <b>2005</b> , 142, 94-101	185
960	Exploring the potential energy surface of retinal, a comparison of the performance of different methods. <b>2005</b> , 26, 738-42	23
959	Phenotology of disease-linked proteins. <b>2005</b> , 25, 90-7	10
958	Solvent and protein effects on the structure and dynamics of the rhodopsin chromophore. <b>2005</b> , 6, 1836-47	62
957	Bradykinin B2 receptor signaling: structural and functional characterization of the C-terminus. <b>2005</b> , 80, 367-73	16

956	Receptor fragment approach to the binding between CCK8 peptide and cholecystokinin receptors: a fluorescence study on type B receptor fragment CCK(B)-R (352-379). <b>2005</b> , 77, 205-11	5
955	Investigation of ligand-receptor systems by high-resolution solid-state NMR: recent progress and perspectives. <b>2005</b> , 338, 217-28	17
954	Reciprocal mutations in TM2/TM3 in a D2 dopamine receptor background confirms the importance of this microdomain as a selective determinant of para-halogenated 1,4-disubstituted aromatic piperazines. <b>2005</b> , 338, 268-75	9
953	Rhodopsin: a structural primer for G-protein coupled receptors. <b>2005</b> , 338, 209-16	30
952	Delineation of receptor-ligand interactions at the human histamine H1 receptor by a combined approach of site-directed mutagenesis and computational techniques - or - how to bind the H1 receptor. <b>2005</b> , 338, 248-59	27
951	Microbial Rhodopsins: Phylogenetic and Functional Diversity. <b>2005</b> , 1-23	45
950	Visual Pigments as Photoreceptors. <b>2005</b> , 43-76	7
949	Structural and Functional Aspects of the Mammalian Rod-Cell Photoreceptor Rhodopsin. <b>2005</b> , 77-92	2
948	Location and nature of the residues important for ligand recognition in G-protein coupled receptors. <b>2005</b> , 18, 60-72	46
947	Current trends in the structure-activity relationship studies of the endogenous agouti-related protein (AGRP) melanocortin receptor antagonist. <b>2005</b> , 25, 545-56	17
946	Homology modeling and molecular dynamics simulations of the mu opioid receptor in a membrane-aqueous system. <b>2005</b> , 6, 853-9	40
945	Rod and cone opsin families differ in spectral tuning domains but not signal transducing domains as judged by saturated evolutionary trace analysis. <b>2005</b> , 61, 75-89	25
944	Stable expression of constitutively activated mutant h5HT6 and h5HT7 serotonin receptors: inverse agonist activity of antipsychotic drugs. <b>2005</b> , 179, 461-9	21
943	Model of a specific human histamine H3 receptor (hH3R) binding pocket suitable for virtual drug design. <b>2005</b> , 54 Suppl 1, S50-1	8
942	The structure and functions of the presenilins. <b>2005</b> , 62, 1109-19	16
941	Area detectors technology and opticsâRelations to nature. <b>2005</b> , 551, 52-65	1
940	New piperidinyl- and 1,2,3,6-tetrahydropyridinyl-pyrimidine derivatives as selective 5-HT1A receptor agonists with highly potent anti-ischemic effects. <b>2005</b> , 15, 2990-3	27
939	Structural biology of G protein-coupled receptors. <b>2005</b> , 15, 3654-7	21

938	Molecular dynamics simulations of bovine rhodopsin: influence of protonation states and different membrane-mimicking environments. <b>2005</b> , 12, 49-64		34
937	Organization of rhodopsin molecules in native membranes of rod cells--an old theoretical model compared to new experimental data. <b>2005</b> , 11, 385-91		10
936	A hypothesis for GPCR activation. <b>2005</b> , 11, 407-15		18
935	Moduler lâëction du glutamate dans le cerveau: de nouvelles pistes ouvertes grâe aux rëpteurs mtabotropiques. <b>2005</b> , 3, 132-142		
934	Residual backbone and side-chain 13C and 15N resonance assignments of the intrinsic transmembrane light-harvesting 2 protein complex by solid-state Magic Angle Spinning NMR spectroscopy. <b>2005</b> , 31, 279-93		45
933	Bacterial expression and one-step purification of an isotope-labeled heterotrimeric G-protein alpha-subunit. <b>2005</b> , 32, 31-40		16
932	Modelling the interaction of catecholamines with the alpha 1A adrenoceptor towards a ligand-induced receptor structure. <b>2005</b> , 19, 357-67		2
931	Large-scale expression and purification of a G-protein-coupled receptor for structure determination -- an overview. <b>2005</b> , 6, 159-63		51
930	A structural study of new potent and selective antagonists to the A2B adenosine receptor. <b>2005</b> , 61, 569-76		
929	A C-terminal segment of the V1R vasopressin receptor is unstructured in the crystal structure of its chimera with the maltose-binding protein. <b>2005</b> , 61, 341-5		9
928	Study of New Oxytocin Antagonist Barusiban (Fe200 440) Affinity Toward Human Oxytocin Receptor Versus Vasopressin V1a and V2 Receptors âMolecular Dynamics Simulation in POPC Bilayer. <b>2005</b> , 24, 603-610		12
927	QSAR Strategy and Experimental Validation for the Development of a GPCR Focused Library. <b>2005</b> , 24, 508-516		10
926	Properties of integral membrane protein structures: derivation of an implicit membrane potential. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2005</b> , 59, 252-65	4.2	162
925	G-protein-coupled receptor domain overexpression in Halobacterium salinarum: long-range transmembrane interactions in heptahelical membrane proteins. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2005</b> , 60, 412-23	4.2	7
924	Focused library design in GPCR projects on the example of 5-HT(2c) agonists: comparison of structure-based virtual screening with ligand-based search methods. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2005</b> , 61, 938-52	4.2	36
923	A chemogenomic analysis of the transmembrane binding cavity of human G-protein-coupled receptors. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2006</b> , 62, 509-38	4.2	186
922	Multipass membrane protein structure prediction using Rosetta. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2006</b> , 62, 1010-25	4.2	260
921	QM/MM Simulation of the First Step of Vision. <b>2005</b> , 237-243		

920	Constitutive Activity at the $\beta$ -Adrenoceptors: Past and Future Implications. <b>2005</b> , 159-176	1
919	Constitutive Activity of Muscarinic Acetylcholine Receptors: Implications for Receptor Activation and Physiological Relevance. <b>2005</b> , 177-193	
918	Molecular Mechanisms of GPCR Activation. <b>2005</b> , 27-42	
917	Molecular and Cellular Determinants of GPCR Splice Variant Constitutive Activity. <b>2005</b> , 43-54	2
916	Constitutive Activity of $\beta$ -Adrenoceptors: Analysis in Membrane Systems. <b>2005</b> , 121-140	1
915	New prospects for drug discovery from structural studies of rhodopsin. <b>2005</b> , 11, 2243-56	11
914	Lactisole interacts with the transmembrane domains of human T1R3 to inhibit sweet taste. <b>2005</b> , 280, 15238-46	215
913	Retinal versus 13-demethyl-retinal inside the rhodopsin binding pocketâ QM/MM Study. <b>2005</b> , 78, 11-15	2
912	HIV-1 gp120 V3 loop for structure-based drug design. <b>2005</b> , 6, 413-22	46
911	The function of the extracellular regions in opioid receptor binding: insights from computational biology. <b>2005</b> , 5, 357-67	11
910	CB1 and CB2 cannabinoid receptor binding studies based on modeling and mutagenesis approaches. <b>2005</b> , 5, 651-8	10
909	CB1 cannabinoid receptor ligands. <b>2005</b> , 5, 631-40	64
908	Plasmon resonance methods in GPCR signaling and other membrane events. <b>2005</b> , 6, 293-312	36
907	Structural activation pathways from dynamic olfactory receptor-odorant interactions. <b>2005</b> , 30, 781-92	44
906	G protein-coupled receptor structural motifs: relevance to the opioid receptors. <b>2005</b> , 5, 315-24	28
905	Mutations remote from the human gonadotropin-releasing hormone (GnRH) receptor-binding sites specifically increase binding affinity for GnRH II but not GnRH I: evidence for ligand-selective, receptor-active conformations. <b>2005</b> , 280, 29796-803	44
904	Thermal Fluctuations Of A GPCR: A Two Force Constant Model. <b>2005</b> ,	3
903	International union of pharmacology. XLV. Classification of the kinin receptor family: from molecular mechanisms to pathophysiological consequences. <b>2005</b> , 57, 27-77	768

902	Antagonist efficacy in MOR5196L mutant is affected by the interaction between transmembrane domains of the opioid receptor. <b>2005</b> , 313, 216-26	9
901	Investigating the putative glycine hinge in Shaker potassium channel. <b>2005</b> , 126, 213-26	74
900	Differential spatial approximation between cholecystokinin residue 30 and receptor residues in active and inactive conformations. <b>2005</b> , 67, 1892-900	8
899	Molecular characterization of the gerbil C5a receptor and identification of a transmembrane domain V amino acid that is crucial for small molecule antagonist interaction. <b>2005</b> , 280, 40617-23	19
898	The G Protein-Coupled Receptors Handbook. <b>2005</b> ,	3
897	G protein-coupled receptors show unusual patterns of intrinsic unfolding. <b>2005</b> , 18, 103-10	40
896	Atypical muscarinic allosteric modulation: cooperativity between modulators and their atypical binding topology in muscarinic M2 and M2/M5 chimeric receptors. <b>2005</b> , 68, 1597-610	45
895	Molecular and Cellular Signaling. <b>2005</b> ,	
894	Elephants and human color-blind deuteranopes have identical sets of visual pigments. <b>2005</b> , 170, 335-44	53
893	Random mutagenesis of the M3 muscarinic acetylcholine receptor expressed in yeast: identification of second-site mutations that restore function to a coupling-deficient mutant M3 receptor. <b>2005</b> , 280, 5664-75	30
892	Critical amino acid residues of the common allosteric site on the M2 muscarinic acetylcholine receptor: more similarities than differences between the structurally divergent agents gallamine and bis(ammonio)alkane-type hexamethylene-bis-[dimethyl-(3-phthalimidopropyl)ammonium]dibromide. <b>2005</b> , 68, 769-78	53
891	Carboxyl tail cysteine mutants of the thyrotropin-releasing hormone receptor type 1 exhibit constitutive signaling: role of palmitoylation. <b>2005</b> , 68, 204-9	6
890	A GPCR that is not "DRY". <b>2005</b> , 68, 1-3	55
889	Zero-length cross-linking reveals that tight interactions between the extracellular and transmembrane domains of the luteinizing hormone receptor persist during receptor activation. <b>2005</b> , 19, 2086-98	24
888	Femtochemistry of orange II in solution and in chemical and biological nanocavities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 18807-12	11.5 62
887	Development of the Human Mu, Kappa, and Delta Opioid Receptors and Docking with Morphine. <b>2005</b> , 66, 107-117	2
886	Eyeshine and spectral tuning of long wavelength-sensitive rhodopsins: no evidence for red-sensitive photoreceptors among five Nymphalini butterfly species. <b>2005</b> , 208, 687-96	38
885	Molecular determinants for the interaction of the valvulopathic anorexigen norfenfluramine with the 5-HT2B receptor. <b>2005</b> , 68, 20-33	56

884	Crosstalk in G protein-coupled receptors: changes at the transmembrane homodimer interface determine activation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 17495-500	11.5	252
883	Modeling membrane proteins based on low-resolution electron microscopy maps: a template for the TM domains of the oxalate transporter OxIT. <b>2005</b> , 18, 119-25		14
882	Hormone binding to the follicle-stimulating hormone receptor--crystal clear!. <b>2005</b> , 113, 245-7		2
881	The Design and Docking of Virtual Compound Libraries to Structures of Drug Targets. <b>2005</b> , 1, 103-127		15
880	The N-terminal juxtamembrane segment of the V1a vasopressin receptor provides two independent epitopes required for high-affinity agonist binding and signaling. <b>2005</b> , 19, 2871-81		20
879	Engineering and functional immobilization of opioid receptors. <b>2005</b> , 18, 153-60		9
878	Structural determinants for g protein activation and selectivity in the second intracellular loop of the thyrotropin receptor. <b>2005</b> , 146, 477-85		31
877	Inhibition of human type i gonadotropin-releasing hormone receptor (GnRHR) function by expression of a human type II GnRHR gene fragment. <b>2005</b> , 146, 2639-49		36
876	Fluctuation Models Of Irregular Impedance Networks. <b>2005</b> ,		
875	A point mutation in the human melanin concentrating hormone receptor 1 reveals an important domain for cellular trafficking. <b>2005</b> , 19, 2579-90		57
874	Molecular recognition at adenine nucleotide (P2) receptors in platelets. <b>2005</b> , 31, 205-16		15
873	A hydrophobic cluster in the center of the third extracellular loop is important for thyrotropin receptor signaling. <b>2005</b> , 146, 5197-203		33
872	Novel thyrotropin receptor germline mutation (Ile568Val) in a Saxonian family with hereditary nonautoimmune hyperthyroidism. <b>2005</b> , 15, 1089-94		36
871	Light Sensing in Plants. <b>2005</b> ,		15
870	Rhodopsin C terminus, the site of mutations causing retinal disease, regulates trafficking by binding to ADP-ribosylation factor 4 (ARF4). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 3301-6	11.5	156
869	NMR structural comparison of the cytoplasmic juxtamembrane domains of G-protein-coupled CB1 and CB2 receptors in membrane mimetic dodecylphosphocholine micelles. <b>2005</b> , 280, 3605-12		26
868	Calindol, a positive allosteric modulator of the human Ca(2+) receptor, activates an extracellular ligand-binding domain-deleted rhodopsin-like seven-transmembrane structure in the absence of Ca(2+). <b>2005</b> , 280, 37013-20		47
867	Periplakin interferes with G protein activation by the melanin-concentrating hormone receptor-1 by binding to the proximal segment of the receptor C-terminal tail. <b>2005</b> , 280, 8208-20		30

866	Protein recognition of macrocycles: binding of anti-HIV metalocyclams to lysozyme. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 2288-92	11.5	64
865	The formation of a salt bridge between helices 3 and 6 is responsible for the constitutive activity and lack of hormone responsiveness of the naturally occurring L457R mutation of the human lutropin receptor. <b>2005</b> , 280, 26169-76		46
864	A region in the seven-transmembrane domain of the human Ca <sup>2+</sup> receptor critical for response to Ca <sup>2+</sup> . <b>2005</b> , 280, 5113-20		71
863	Protechemometric mapping of the interaction of organic compounds with melanocortin receptor subtypes. <b>2005</b> , 67, 50-9		35
862	Charged residues of the conserved DRY triplet of the vasopressin V1a receptor provide molecular determinants for cell surface delivery and internalization. <b>2005</b> , 68, 1172-82		23
861	A novel C-terminal motif is necessary for the export of the vasopressin V1b/V3 receptor to the plasma membrane. <b>2005</b> , 280, 2300-8		63
860	Oligomerization of G-protein-coupled receptors: lessons from the yeast <i>Saccharomyces cerevisiae</i> . <b>2005</b> , 4, 1963-70		33
859	Possible role of the 11-cis-retinyl conformation in controlling the dual decay processes of excited rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 10783-7	11.5	9
858	Disulfide trapping to localize small-molecule agonists and antagonists for a G protein-coupled receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 2719-24	11.5	68
857	Leukotriene B4 receptor and the function of its helix 8. <b>2005</b> , 280, 32049-52		50
856	Identification of an agonist-induced conformational change occurring adjacent to the ligand-binding pocket of the M(3) muscarinic acetylcholine receptor. <b>2005</b> , 280, 34849-58		41
855	Mining the receptorome. <b>2005</b> , 280, 5129-32		64
854	Constitutively active G protein-coupled receptor mutants block dictyostelium development. <b>2005</b> , 16, 562-72		9
853	The apical targeting signal of the P2Y2 receptor is located in its first extracellular loop. <b>2005</b> , 280, 29169-75		23
852	Bioluminescence resonance energy transfer reveals ligand-induced conformational changes in CXCR4 homo- and heterodimers. <b>2005</b> , 280, 9895-903		200
851	Biological spectra analysis: Linking biological activity profiles to molecular structure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 261-6	11.5	179
850	Cysteine 2.59(89) in the second transmembrane domain of human CB2 receptor is accessible within the ligand binding crevice: evidence for possible CB2 deviation from a rhodopsin template. <b>2005</b> , 68, 69-83		40
849	Mammalian G proteins and their cell type specific functions. <b>2005</b> , 85, 1159-204		792

848	Nucleoside modification and concerted mutagenesis of the human A3 adenosine receptor to probe interactions between the 2-position of adenosine analogs and Gln167 in the second extracellular loop. <b>2005</b> , 24, 1507-17		12
847	Insect G Protein-Coupled Receptors: Recent Discoveries and Implications. <b>2005</b> , 143-171		3
846	An update of the pathophysiology of human gonadotrophin subunit and receptor gene mutations and polymorphisms. <b>2005</b> , 130, 263-74		84
845	Unconventional homologous internalization of the angiotensin II type-1 receptor induced by G-protein-independent signals. <b>2005</b> , 46, 419-25		36
844	Partial agonism in a G Protein-coupled receptor: role of the retinal ring structure in rhodopsin activation. <b>2005</b> , 280, 34259-67		39
843	Comparative agonist/antagonist responses in mutant human C5a receptors define the ligand binding site. <b>2005</b> , 280, 17831-40		37
842	Site-directed mutagenesis of CC chemokine receptor 1 reveals the mechanism of action of UCB 35625, a small molecule chemokine receptor antagonist. <b>2005</b> , 280, 4808-16		60
841	Genetic basis of spectral tuning in the violet-sensitive visual pigment of African clawed frog, <i>Xenopus laevis</i> . <b>2005</b> , 171, 1153-60		26
840	Single mutations at Asn295 and Leu305 in the cytoplasmic half of transmembrane alpha-helix domain 7 of the AT1 receptor induce promiscuous agonist specificity for angiotensin II fragments: a pseudo-constitutive activity. <b>2005</b> , 68, 347-55		16
839	Snapshot of activated G proteins at the membrane: the G $\alpha$ q-GRK2-G $\beta$ ta $\gamma$ complex. <i>Science</i> , <b>2005</b> , 310, 1686-90	33.3	234
838	Adaptive molecular evolution in the opsin genes of rapidly speciating cichlid species. <b>2005</b> , 22, 1412-22		112
837	Parallelism of amino acid changes at the RH1 affecting spectral sensitivity among deep-water cichlids from Lakes Tanganyika and Malawi. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 5448-53	11.5	90
836	A rhodopsin exhibiting binding ability to agonist all-trans-retinal. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 6303-8	11.5	44
835	Site-specific disulfide capture of agonist and antagonist peptides on the C5a receptor. <b>2005</b> , 280, 4009-12		28
834	Fluorescence resonance energy transfer analysis of the antagonist- and partial agonist-occupied states of the cholecystinin receptor. <b>2005</b> , 280, 18631-5		13
833	Molecular characterization of a purified 5-HT <sub>4</sub> receptor: a structural basis for drug efficacy. <b>2005</b> , 280, 20253-60		123
832	Spectral differentiation of blue opsins between phylogenetically close but ecologically distant goldfish and zebrafish. <b>2005</b> , 280, 9460-6		30
831	An activation switch in the rhodopsin family of G protein-coupled receptors: the thyrotropin receptor. <b>2005</b> , 280, 17135-41		88



830	Pronounced conformational changes following agonist activation of the M(3) muscarinic acetylcholine receptor. <b>2005</b> , 280, 24870-9	31
829	Classical transmitters and their receptors in flatworms. <b>2005</b> , 131 Suppl, S19-40	80
828	Subtype-specific sorting of the ETA endothelin receptor by a novel endocytic recycling signal for G protein-coupled receptors. <b>2005</b> , 67, 1581-90	50
827	Pharmacological differences between human and guinea pig histamine H1 receptors: Asn84 (2.61) as key residue within an additional binding pocket in the H1 receptor. <b>2005</b> , 67, 1045-52	43
826	Prediction of the coupling specificity of GPCRs to four families of G-proteins using hidden Markov models and artificial neural networks. <b>2005</b> , 21, 4101-6	41
825	Teaching resources. G-protein-coupled receptors. <b>2005</b> , 2005, tr11	2
824	Heterotrimeric G-protein alpha-subunit adopts a "preactivated" conformation when associated with betagamma-subunits. <b>2005</b> , 280, 38071-80	22
823	Sequence variation in G-protein-coupled receptors: analysis of single nucleotide polymorphisms. <b>2005</b> , 33, 1710-21	37
822	Different environments for a realistic simulation of GPCRs-application to the M2 muscarinic receptor. <b>2005</b> , 338, 260-7	2
821	Structure of human follicle-stimulating hormone in complex with its receptor. <b>2005</b> , 433, 269-77	461
820	The opsins. <b>2005</b> , 6, 213	382
819	Signaling in the Endocrine and Nervous Systems Through GPCRs. <b>2005</b> , 275-303	
818	Intracellularly truncated human alpha2B-adrenoceptors: stable and functional GPCRs for structural studies. <b>2005</b> , 25, 99-124	3
817	Molecular properties of rod and cone visual pigments from purified chicken cone pigments to mouse rhodopsin in situ. <b>2005</b> , 4, 667-74	27
816	Rhodopsin activation follows precoupling with transducin: inferences from computational analysis. <b>2005</b> , 44, 14695-700	37
815	A dark and constitutively active mutant of the tiger salamander UV pigment. <b>2005</b> , 44, 799-804	11
814	Molecular interactions of nonpeptide agonists and antagonists with the melanocortin-4 receptor. <b>2005</b> , 44, 14494-508	26
813	Determining the environment of the ligand binding pocket of the human angiotensin II type I (hAT1) receptor using the methionine proximity assay. <b>2005</b> , 280, 27121-9	58

812	Structural basis for a broad but selective ligand spectrum of a mouse olfactory receptor: mapping the odorant-binding site. <b>2005</b> , 25, 1806-15	248
811	Strongly hydrogen-bonded water molecules in the Schiff base region of rhodopsins. <b>2005</b> , 4, 661-6	44
810	Using bioinformatics for drug target identification from the genome. <b>2005</b> , 5, 387-96	25
809	An automated system for the analysis of G protein-coupled receptor transmembrane binding pockets: alignment, receptor-based pharmacophores, and their application. <i>Journal of Chemical Information and Modeling</i> , <b>2005</b> , 45, 1324-36	6.1 53
808	Primary photoprocess in vision: minimal motion to reach the photo- and bathorhodopsin intermediates. <b>2005</b> , 109, 9104-10	14
807	Amino acid residues responsible for the meta-III decay rates in rod and cone visual pigments. <b>2005</b> , 44, 2208-15	31
806	Receptor-antagonist interactions in the complexes of agouti and agouti-related protein with human melanocortin 1 and 4 receptors. <b>2005</b> , 44, 3418-31	43
805	Biosynthesis and NMR analysis of a 73-residue domain of a <i>Saccharomyces cerevisiae</i> G protein-coupled receptor. <b>2005</b> , 44, 11795-810	34
804	Characterization of the long-wavelength opsin from Mecoptera and Siphonaptera: does a flea see?. <b>2005</b> , 22, 1165-74	27
803	The G protein-coupled receptors: pharmacogenetics and disease. <b>2005</b> , 42, 311-92	71
802	1,2,4-Triazolo[1,5-a]quinoxaline as a versatile tool for the design of selective human A3 adenosine receptor antagonists: synthesis, biological evaluation, and molecular modeling studies of 2-(hetero)aryl- and 2-carboxy-substituted derivatives. <b>2005</b> , 48, 7932-45	48
801	Cysteine residues in the human cannabinoid receptor: only C257 and C264 are required for a functional receptor, and steric bulk at C386 impairs antagonist SR141716A binding. <b>2005</b> , 44, 8757-69	52
800	Peptergents: peptide detergents that improve stability and functionality of a membrane protein, glycerol-3-phosphate dehydrogenase. <b>2005</b> , 44, 16912-9	71
799	The DRY motif as a molecular switch of the human oxytocin receptor. <b>2005</b> , 44, 9990-10008	34
798	6-Acylamino-2-aminoquinolines as potent melanin-concentrating hormone 1 receptor antagonists. Identification, structure-activity relationship, and investigation of binding mode. <b>2005</b> , 48, 5684-97	50
797	Synthesis, biological evaluation, and molecular modeling of ribose-modified adenosine analogues as adenosine receptor agonists. <b>2005</b> , 48, 1550-62	34
796	Comparison of class A and D G protein-coupled receptors: common features in structure and activation. <b>2005</b> , 44, 8959-75	75
795	Interactions of human melanocortin 4 receptor with nonpeptide and peptide agonists. <b>2005</b> , 44, 11329-41	80

794	Architecture of the human urotensin II receptor: comparison of the binding domains of peptide and non-peptide urotensin II agonists. <b>2005</b> , 48, 2480-92	30
793	Coupling interaction between thromboxane A2 receptor and alpha-13 subunit of guanine nucleotide-binding protein. <b>2005</b> , 4, 1681-6	120
792	The seventh transmembrane domains of the delta and kappa opioid receptors have different accessibility patterns and interhelical interactions. <b>2005</b> , 44, 16014-25	22
791	(N)-methanocarpa 2,N6-disubstituted adenine nucleosides as highly potent and selective A3 adenosine receptor agonists. <b>2005</b> , 48, 1745-58	85
790	Reviews of Physiology, Biochemistry and Pharmacology. <b>2005</b> ,	
789	Development of spin-labeled probes for adenosine receptors. <b>2005</b> , 48, 2108-14	19
788	Selective interface detection: mapping binding site contacts in membrane proteins by NMR spectroscopy. <b>2005</b> , 127, 5734-5	24
787	Multiple signaling states of G-protein-coupled receptors. <b>2005</b> , 57, 147-61	216
786	Unambiguous assignment of intramolecular chemical cross-links in modified mammalian membrane proteins by Fourier transform-tandem mass spectrometry. <b>2005</b> , 77, 5101-6	39
785	Solution NMR spectroscopy of the human vasopressin V2 receptor, a G protein-coupled receptor. <b>2005</b> , 127, 8010-1	47
784	Evidence for a mechanism by which omega-3 polyunsaturated lipids may affect membrane protein function. <b>2005</b> , 44, 10164-9	77
783	Agonists and partial agonists of rhodopsin: retinals with ring modifications. <b>2005</b> , 44, 11684-99	44
782	Role of cholesterol and polyunsaturated chains in lipid-protein interactions: molecular dynamics simulation of rhodopsin in a realistic membrane environment. <b>2005</b> , 127, 4576-7	122
781	Modeling the similarity and divergence of dopamine D2-like receptors and identification of validated ligand-receptor complexes. <b>2005</b> , 48, 694-709	41
780	FTIR studies of the photoactivation processes in squid retinochrome. <b>2005</b> , 44, 7988-97	13
779	Structural changes of the complex between pharaonis phoborhodopsin and its cognate transducer upon formation of the M photointermediate. <b>2005</b> , 44, 2909-15	47
778	Coulombic and hydrophobic interactions in the first intracellular loop are vital for bradykinin B2 receptor ligand binding and consequent signal transduction. <b>2005</b> , 44, 5295-306	8
777	Differential docking of high-affinity peptide ligands to type A and B cholecystokinin receptors demonstrated by photoaffinity labeling. <b>2005</b> , 44, 6693-700	21

776	Synthesis and structure-activity relationships of a new model of arylpiperazines. 8. Computational simulation of ligand-receptor interaction of 5-HT(1A)R agonists with selectivity over alpha1-adrenoceptors. <b>2005</b> , 48, 2548-58	54
775	Structure, spectroscopy, and spectral tuning of the gas-phase retinal chromophore: the beta-ionone "handle" and alkyl group effect. <b>2005</b> , 109, 6597-605	79
774	G-protein-coupled receptor affinity prediction based on the use of a profiling dataset: QSAR design, synthesis, and experimental validation. <b>2005</b> , 48, 6563-74	35
773	(-)-7'-Isothiocyanato-11-hydroxy-1',1'-dimethylheptylhexahydrocannabinol (AM841), a high-affinity electrophilic ligand, interacts covalently with a cysteine in helix six and activates the CB1 cannabinoid receptor. <b>2005</b> , 68, 1623-35	79
772	Structure-Function Relationships in G Protein-Coupled Receptors. <b>2005</b> , 3-31	1
771	Oligomerization Domains of G Protein-Coupled Receptors. <b>2005</b> , 243-265	4
770	Modulation of Receptor Pharmacology by G Protein-Coupled Receptor Dimerization. <b>2005</b> , 323-346	
769	Changes in interhelical hydrogen bonding upon rhodopsin activation. <b>2005</b> , 347, 803-12	99
768	The role of Glu181 in the photoactivation of rhodopsin. <b>2005</b> , 353, 345-56	92
767	Mechanisms of cell death in rhodopsin retinitis pigmentosa: implications for therapy. <b>2005</b> , 11, 177-85	290
766	Predicted 3D-structure of melanopsin, the non-rod, non-cone photopigment of the mammalian circadian clock, from Djungarian hamsters ( <i>Phodopus sungorus</i> ). <b>2005</b> , 376, 76-80	9
765	Autoantibodies against the serotonergic 5-HT <sub>4</sub> receptor and congenital heart block: a reassessment. <b>2005</b> , 25, 72-6	31
764	Model structures of alpha-2 adrenoceptors in complex with automatically docked antagonist ligands raise the possibility of interactions dissimilar from agonist ligands. <b>2005</b> , 150, 126-43	27
763	Screening the receptorome for plant-based psychoactive compounds. <b>2005</b> , 78, 506-11	15
762	Nine new human Rhodopsin family G-protein coupled receptors: identification, sequence characterisation and evolutionary relationship. <b>2005</b> , 1722, 235-46	52
761	Immobilization of native membrane-bound rhodopsin on biosensor surfaces. <b>2005</b> , 1724, 324-32	32
760	A structural model of a seven-transmembrane helix receptor: the Duffy antigen/receptor for chemokine (DARC). <b>2005</b> , 1724, 288-306	55
759	The conformation of the cytoplasmic helix 8 of the CB1 cannabinoid receptor using NMR and circular dichroism. <b>2005</b> , 1668, 1-9	41

758	Parathyroid hormone and parathyroid hormone-related peptide, and their receptors. <b>2005</b> , 328, 666-78	230
757	Binding modes of dihydroquinolones in a homology model of bradykinin receptor 1. <b>2005</b> , 331, 159-66	19
756	Ligand binding to the human MT2 melatonin receptor: the role of residues in transmembrane domains 3, 6, and 7. <b>2005</b> , 332, 726-34	25
755	Antagonist and agonist binding models of the human gonadotropin-releasing hormone receptor. <b>2005</b> , 333, 568-82	42
754	Comparative molecular dynamics simulations of uncomplexed, 'agonist-bound' and 'antagonist-bound' alpha1A adrenoceptor models. <b>2005</b> , 333, 737-41	4
753	Identification of endogenous surrogate ligands for human P2Y12 receptors by in silico and in vitro methods. <b>2005</b> , 337, 281-8	95
752	The gene repertoire and the common evolutionary history of glutamate, pheromone (V2R), taste(1) and other related G protein-coupled receptors. <b>2005</b> , 362, 70-84	70
751	The Molecular Basis of G Protein-Coupled Receptor Activation. <b>2018</b> , 87, 897-919	389
750	A distinct abundant group of microbial rhodopsins discovered using functional metagenomics. <b>2018</b> , 558, 595-599	106
749	Orange-spotted grouper melanocortin-4 receptor: Modulation of signaling by MRAP2. <b>2019</b> , 284, 113234	16
748	Cryo-EM structure of the native rhodopsin dimer in nanodiscs. <b>2019</b> , 294, 14215-14230	34
747	Unsupervised Classification of G-Protein Coupled Receptors and Their Conformational States Using IChem Intramolecular Interaction Patterns. <i>Journal of Chemical Information and Modeling</i> , <b>2019</b> , 59, 3611-3618	61
746	Evaluation of Sweetener Synergy in Humans by Isobole Analyses. <b>2019</b> , 44, 571-582	9
745	Identification of two novel RHO mutations in Chinese retinitis pigmentosa patients. <b>2019</b> , 188, 107726	3
744	Probing the Existence of a Metastable Binding Site at the $\beta$ Adrenergic Receptor with Homobivalent Bitopic Ligands. <b>2019</b> , 62, 7806-7839	6
743	FTIR Study of S180A Mutant of Primate Red-sensitive Pigment. <b>2019</b> , 48, 1142-1144	3
742	Structures of the Rhodopsin-Transducin Complex: Insights into G-Protein Activation. <b>2019</b> , 75, 781-790.e3	41
741	Mechanism of the Thermal Z/E Isomerization of a Stable Silene; Experiment and Theory. <b>2019</b> , 58, 14524-14528	3

- 740 Multi-scale, numerical modeling of spatio-temporal signaling in cone phototransduction. **2019**, 14, e0219848 4
- 739 Mechanism of the Thermal Z?E Isomerization of a Stable Silene; Experiment and Theory. **2019**, 131, 14666-14670
- 738 Flip-Flopping Retinal in Microbial Rhodopsins as a Template for a Farnesyl/Prenyl Flip-Flop Model in Eukaryote GPCRs. **2019**, 13, 465 2
- 737 Structure and Function of GPCRs. **2019**,
- 736 Structure and dynamics of dynorphin peptide and its receptor. **2019**, 111, 17-47 10
- 735 Molecular pharmacology of metabotropic receptors targeted by neuropsychiatric drugs. *Nature Structural and Molecular Biology*, **2019**, 26, 535-544 17.6 21
- 734 Unravelling the Weak Interactions in Binary Clusters of Serotonin and Amino Acid Residues. **2019**, 4, 9978-99863
- 733 Structural Insights from Recent CB1 X-Ray Crystal Structures. **2019**, 1
- 732 Basal Histamine H Receptor Activation: Agonist Mimicry by the Diphenylalanine Motif. **2019**, 25, 14613-14624 7
- 731 Synthetic terpenoids in the world of fragrances: Iso E Super is the showcase. **2019**, 15, 2590-2602 10
- 730 LWS visual pigment in owls: Spectral tuning inferred by genetics. **2019**, 165, 90-97 2
- 729 The retinal pigments of the whale shark () and their role in visual foraging ecology. **2019**, 36, E011 7
- 728 Orexins as Novel Therapeutic Targets in Inflammatory and Neurodegenerative Diseases. **2019**, 10, 709 14
- 727 The Dopaminergic System. **2019**, 1-39
- 726 Excited-state relaxation processes of three newly synthesized multi-branched alkyl-triphenylamine end-capped triazines. **2019**, 736, 136800
- 725 Conformational Differences among Metarhodopsin I, Metarhodopsin II, and Opsin Probed by Wide-Angle X-ray Scattering. **2019**, 123, 9134-9142 1
- 724 Adrenergic Receptors as Pharmacological Targets for Neuroinflammation and Neurodegeneration in Parkinsonâs Disease. **2019**, 1
- 723 Artificial Signal Transduction across Membranes. **2019**, 20, 2569-2580 12

722	Universal Activation Index for Class A GPCRs. <i>Journal of Chemical Information and Modeling</i> , <b>2019</b> , 59, 3938-3945	6.1	4
721	Extramembranous Regions in G Protein-Coupled Receptors: Cinderella in Receptor Biology?. <b>2019</b> , 252, 483-497		12
720	Can Allosteric Receptor-Protein Interactions in Receptor Complexes Be a Molecular Mechanism Involved in Cancer Immune Therapy?. <b>2019</b> , 10, 574		
719	G protein-coupled receptors of class A harness the energy of membrane potential to increase their sensitivity and selectivity. <b>2019</b> , 1861, 183051		6
718	Recent Insights from Molecular Dynamics Simulations for G Protein-Coupled Receptor Drug Discovery. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	9
717	The counterion-retinylidene Schiff base interaction of an invertebrate rhodopsin rearranges upon light activation. <b>2019</b> , 2, 180		14
716	Structural investigations of cell-free expressed G protein-coupled receptors. <b>2019</b> , 401, 97-116		2
715	The Role of the CXCL12/CXCR4/ACKR3 Axis in Autoimmune Diseases. <b>2019</b> , 10, 585		55
714	Pharmacological characterization, cellular localization and expression profile of NPY receptor subtypes Y2 and Y7 in large yellow croaker, <i>Larimichthys crocea</i> . <b>2019</b> , 238, 110347		1
713	Advances in Membrane Proteins. <b>2019</b> ,		1
712	Molecular Mechanism of S1P Binding and Activation of the S1P Receptor. <i>Journal of Chemical Information and Modeling</i> , <b>2019</b> , 59, 4402-4412	6.1	10
711	The structural basis of the arrestin binding to GPCRs. <b>2019</b> , 484, 34-41		21
710	Distinct Roles of Extracellular Domains in the Epstein-Barr Virus-Encoded BILF1 Receptor for Signaling and Major Histocompatibility Complex Class I Downregulation. <b>2019</b> , 10,		10
709	Predicting Secondary Structure for Human Proteins Based on Chou-Fasman Method. <b>2019</b> , 232-241		
708	Light-activated chimeric GPCRs: limitations and opportunities. <b>2019</b> , 57, 196-203		12
707	Topology prediction of insect olfactory receptors. <b>2019</b> , 55, 194-203		1
706	Encoding the Arrestin Trafficking Fate of Ghrelin Receptor GHSR1a: C-Tail-Independent Molecular Determinants in GPCRs. <b>2019</b> , 2, 230-246		4
705	Structure and Activation Mechanism of GPCRs. <b>2019</b> , 53-64		3

704	Protein Lipidation. <i>Methods in Molecular Biology</i> , <b>2019</b> ,	1.4	0
703	Purification of the Rhodopsin-Transducin Complex for Structural Studies. <i>Methods in Molecular Biology</i> , <b>2019</b> , 2009, 307-315	1.4	1
702	A benchmark study of loop modeling methods applied to G protein-coupled receptors. <b>2019</b> , 33, 573-595		9
701	Vision using multiple distinct rod opsins in deep-sea fishes. <i>Science</i> , <b>2019</b> , 364, 588-592	33.3	88
700	The role of NMR spectroscopy in mapping the conformational landscape of GPCRs. <b>2019</b> , 57, 145-156		18
699	The Aminotriazole Antagonist Cmpd-1 Stabilises a Distinct Inactive State of the Adenosine 2A Receptor. <b>2019</b> , 131, 9499-9503		1
698	Artificial Intelligence Applications and Innovations. <b>2019</b> ,		1
697	The Aminotriazole Antagonist Cmpd-1 Stabilises a Distinct Inactive State of the Adenosine 2A Receptor. <b>2019</b> , 58, 9399-9403		3
696	Revealing the Mechanism of Agonist-Mediated Cannabinoid Receptor 1 (CB1) Activation and Phospholipid-Mediated Allosteric Modulation. <b>2019</b> , 62, 5638-5654		10
695	Investigating targets for neuropharmacological intervention by molecular dynamics simulations. <b>2019</b> , 47, 909-918		0
694	Molecular modeling approaches for the discovery of adenosine A receptor antagonists: current status and future perspectives. <b>2019</b> , 24, 1854-1864		21
693	Cartography of rhodopsin-like G protein-coupled receptors across vertebrate genomes. <i>Scientific Reports</i> , <b>2019</b> , 9, 7058	4.9	8
692	Symmetry, Rigidity, and Allosteric Signaling: From Monomeric Proteins to Molecular Machines. <b>2019</b> , 119, 6788-6821		41
691	Quantum Chemistry for Studying Electronic Spectroscopy and Dynamics of Complex Molecular Systems. <b>2019</b> , 79-118		1
690	Sensing and transduction of nutritional and chemical signals in filamentous fungi: Impact on cell development and secondary metabolites biosynthesis. <b>2019</b> , 37, 107392		14
689	Gene and Induced Pluripotent Stem Cell Therapy for Retinal Diseases. <b>2019</b> , 20, 201-216		18
688	In silico profiling the interaction mechanism of 2,5-diketopiperazine derivatives as oxytocin antagonists. <b>2019</b> , 89, 178-191		3
687	Computational design for thermostabilization of GPCRs. <b>2019</b> , 55, 25-33		7



686	Characterization of channel catfish ( <i>Ictalurus punctatus</i> ) melanocortin-3 receptor reveals a potential network in regulation of energy homeostasis. <b>2019</b> , 277, 90-103		13
685	Ligand Binding Mechanisms in Human Cone Visual Pigments. <b>2019</b> , 44, 629-639		2
684	Bacteriorhodopsin: Structural Insights Revealed Using X-Ray Lasers and Synchrotron Radiation. <b>2019</b> , 88, 59-83		30
683	Protease-Activated Receptors. <b>2019</b> , 243-257		6
682	Electrophysiological Changes During Early Steps of Retinitis Pigmentosa. <b>2019</b> , 60, 933-943		5
681	Refinement of the gonadotropin releasing hormone receptor I homology model by applying molecular dynamics. <b>2019</b> , 89, 147-155		2
680	Mutations in the NPxxY motif stabilize pharmacologically distinct conformational states of the $\beta$ and $\beta$ adrenoreceptors. <b>2019</b> , 12,		11
679	Mechanisms of neurodegeneration in a preclinical autosomal dominant retinitis pigmentosa knock-in model with a Rho mutation. <b>2019</b> , 76, 3657-3665		5
678	Influence of Cholesterol and Its Stereoisomers on Members of the Serotonin Receptor Family. <b>2019</b> , 431, 1633-1649		9
677	G-Protein Coupled Receptors in the Aging Brain. <b>2019</b> , 11, 89		29
676	Evaluating the performance of MM/PBSA for binding affinity prediction using class A GPCR crystal structures. <b>2019</b> , 33, 487-496		11
675	A Brief History of the $\beta$ Arrestins. <i>Methods in Molecular Biology</i> , <b>2019</b> , 1957, 3-8	1.4	6
674	Protodomains: Symmetry-Related Supersecondary Structures in Proteins and Self-Complementarity. <i>Methods in Molecular Biology</i> , <b>2019</b> , 1958, 187-219	1.4	2
673	Human red and green cone opsins are -glycosylated at an N-terminal Ser/Thr-rich domain conserved in vertebrates. <b>2019</b> , 294, 8123-8133		5
672	The Role of Photon Statistics in Visual Perception. <b>2019</b> , 207-237		
671	Druggable Targets in Cyclic Nucleotide Signaling Pathways in Apicomplexan Parasites and Kinetoplastids against Disabling Protozoan Diseases in Humans. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	6
670	Abnormal Cannabidiol Modulates Vitamin A Metabolism by Acting as a Competitive Inhibitor of CRBP1. <b>2019</b> , 14, 434-448		13
669	Modulation of Membrane Fluidity Performed on Model Phospholipid Membrane and Live Cell Membrane: Revealing through Spatiotemporal Approaches of FLIM, FAIM, and TRFS. <b>2019</b> , 91, 4337-4345		12

668	Specificity of the chromophore-binding site in human cone opsins. <b>2019</b> , 294, 6082-6093		7
667	Open-Boundary Molecular Mechanics/Coarse-Grained Framework for Simulations of Low-Resolution G-Protein-Coupled Receptor-Ligand Complexes. <b>2019</b> , 15, 2101-2109		11
666	Recurrent convergent evolution at amino acid residue 261 in fish rhodopsin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 18473-18478	11.5	23
665	Computational design and characterization of nanobody-derived peptides that stabilize the active conformation of the $\beta$ adrenergic receptor ( $\beta$ AR). <i>Scientific Reports</i> , <b>2019</b> , 9, 16555	4.9	7
664	The Retinoid and Non-Retinoid Ligands of the Rod Visual G Protein-Coupled Receptor. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	8
663	. <b>2019</b> ,		8
662	Graph-Based Approach to Systematic Molecular Coarse-Graining. <b>2019</b> , 15, 1199-1208		34
661	Mechanisms of Drug Action. <b>2019</b> , 2-19		1
660	GPCR drug discovery: integrating solution NMR data with crystal and cryo-EM structures. <b>2019</b> , 18, 59-82		109
659	Seeing and sensing single G protein-coupled receptors by atomic force microscopy. <b>2019</b> , 57, 25-32		12
658	Recent Advances in Multidimensional Separation for Proteome Analysis. <b>2019</b> , 91, 264-276		23
657	Chaperones and retinal disorders. <b>2019</b> , 114, 85-117		6
656	Biased perspectives on formyl peptide receptors. <b>2019</b> , 1866, 305-316		36
655	Therapeutic strategies for diseases caused by loss-of-function mutations in G protein-coupled receptors. <i>Progress in Molecular Biology and Translational Science</i> , <b>2019</b> , 161, 181-210	4	3
654	Conducting Nanomaterial Sensor Using Natural Receptors. <b>2019</b> , 119, 36-93		100
653	Arginine 313 of the putative 8th helix mediates G $\beta$ coupling of human CC chemokine receptors CCR2a and CCR2b. <b>2019</b> , 53, 170-183		4
652	A signal to condense. <b>2019</b> , 15, 5-6		0
651	Ligand binding to human prostaglandin E receptor EP at the lipid-bilayer interface. <b>2019</b> , 15, 18-26		58

650	Structures shed light on prostanoid signaling. <b>2019</b> , 15, 3-5	4
649	Emerging structural biology of lipid G protein-coupled receptors. <b>2019</b> , 28, 292-304	33
648	<sup>19</sup> F-Labeled amino acids for NMR structure analysis of membrane-bound peptides. <b>2019</b> , 349-395	2
647	Understanding GPCR dimerization. <b>2019</b> , 149, 155-178	9
646	Mutations and Polymorphisms, and Their Functional Consequences, in Gonadotropin and Gonadotropin Receptor Genes. <b>2019</b> , 127-148	1
645	Reliability of Docking-Based Virtual Screening for GPCR Ligands with Homology Modeled Structures: A Case Study of the Angiotensin II Type I Receptor. <b>2019</b> , 10, 677-689	17
644	Computational chemistry in drug lead discovery and design. <b>2019</b> , 119, e25678	29
643	Small Molecule Allosteric Modulators of G-Protein-Coupled Receptors: Drug-Target Interactions. <b>2019</b> , 62, 24-45	83
642	Oligomerization and cooperativity in GPCRs from the perspective of the angiotensin AT1 and dopamine D2 receptors. <b>2019</b> , 700, 30-37	11
641	Pharmacology and function of the orphan GPR139 G protein-coupled receptor. <b>2020</b> , 126 Suppl 6, 35-46	11
640	Intracellular Signaling. <b>2020</b> , 24-46.e12	
639	Progress in GPCR structure determination. <b>2020</b> , 3-22	2
638	Regulation of melanocortin-1 receptor pharmacology by melanocortin receptor accessory protein 2 in orange-spotted grouper ( <i>Epinephelus coioides</i> ). <b>2020</b> , 285, 113291	3
637	Comparative Genomic Analysis of the Pheromone Receptor Class 1 Family (V1R) Reveals Extreme Complexity in Mouse Lemurs (Genus, <i>Microcebus</i> ) and a Chromosomal Hotspot across Mammals. <b>2020</b> , 12, 3562-3579	10
636	Archaeal Glycolipid S-TGA-1 Is Crucial for Trimer Formation and Photocycle Activity of Bacteriorhodopsin. <b>2020</b> , 15, 197-204	2
635	GPCRs in thromboinflammation and hemostasis. <b>2020</b> , 393-414	1
634	Fragment-Based Computational Method for Designing GPCR Ligands. <i>Journal of Chemical Information and Modeling</i> , <b>2020</b> , 60, 4339-4349	6.1 8
633	RCSB Protein Data Bank: Enabling biomedical research and drug discovery. <b>2020</b> , 29, 52-65	107

632	Targeting arrestin interactions with its partners for therapeutic purposes. <b>2020</b> , 121, 169-197		1
631	Structural diversity in ligand recognition by GPCRs. <b>2020</b> , 43-63		1
630	NMR-based approaches to the study of GPCRs and GPCR-ligand interactions. <b>2020</b> , 65-80		0
629	Supramolecular structure of opsins. <b>2020</b> , 81-95		1
628	Photochemical characterization of flavobacterial rhodopsin: The importance of the helix E region for heat stability. <b>2020</b> , 1861, 148092		0
627	Contact with the environment: sight. <b>2020</b> , 149-228		
626	Enigmatic rhodopsin mutation creates an exceptionally strong splice acceptor site. <b>2020</b> , 29, 295-304		4
625	Probing Structure and Reaction Dynamics of Proteins Using Time-Resolved Resonance Raman Spectroscopy. <b>2020</b> , 120, 3577-3630		21
624	Diffuse or hitch a ride: how photoreceptor lipidated proteins get from here to there. <b>2020</b> , 401, 573-584		9
623	Structure-Function Analyses of Human Bitter Taste Receptors-Where Do We Stand?. <b>2020</b> , 25,		6
622	Molecular dynamics of the histamine H3 membrane receptor reveals different mechanisms of GPCR signal transduction. <i>Scientific Reports</i> , <b>2020</b> , 10, 16889	4.9	1
621	Cryo-EM as a powerful tool for drug discovery. <b>2020</b> , 30, 127524		19
620	Alanine Scanning Mutagenesis of the DRYxxI Motif and Intracellular Loop 2 of Human Melanocortin-4 Receptor. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	6
619	A Paradigm for Peptide Hormone-GPCR Analyses. <b>2020</b> , 25,		4
618	Sodium butyrate promotes milk fat synthesis in bovine mammary epithelial cells via GPR41 and its downstream signalling pathways. <b>2020</b> , 259, 118375		10
617	Orthologous Divergence and Paralogous Anticonvergence in Molecular Evolution of Triplicated Green Opsin Genes in Medaka Fish, Genus <i>Oryzias</i> . <b>2020</b> , 12, 911-923		3
616	Structure/Function Study of Photoreceptive Proteins by FTIR Spectroscopy. <b>2020</b> , 93, 904-926		19
615	The GABA Receptor-Structure, Ligand Binding and Drug Development. <b>2020</b> , 25,		22

614	Accelerated evolution and positive selection of rhodopsin in Tibetan loaches living in high altitude. <b>2020</b> , 165, 2598-2606		1
613	The importance of the membrane for biophysical measurements. <b>2020</b> , 16, 1285-1292		10
612	G protein-coupled estrogen receptor-1: homology modeling approaches and application in screening new GPER-1 modulators. <b>2020</b> , 1-11		1
611	The visual ecology of Holocentridae, a nocturnal coral reef fish family with a deep-sea-like multibank retina. <b>2021</b> , 224,		2
610	Unique Retinal Binding Pocket of Primate Blue-Sensitive Visual Pigment. <b>2020</b> , 59, 2602-2607		2
609	Shedding new light on the generation of the visual chromophore. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 19629-19638	11.5	23
608	Illuminating the impact of diel vertical migration on visual gene expression in deep-sea shrimp. <b>2020</b> , 29, 3494-3510		6
607	Pharmacological clearance of misfolded rhodopsin for the treatment of RHO-associated retinitis pigmentosa. <b>2020</b> , 34, 10146-10167		0
606	The computational modeling of allosteric modulation of metabotropic glutamate receptors. <b>2020</b> , 88, 1-33		1
605	Disruption of Hydrogen-Bond Network in Rhodopsin Mutations Cause Night Blindness. <b>2020</b> , 432, 5378-5389		2
604	Light Dynamics of the Retinal-Disease-Relevant G90D Bovine Rhodopsin Mutant. <b>2020</b> , 132, 15786-15794		1
603	Zinc Binding to Heliorhodopsin. <b>2020</b> , 11, 8604-8609		4
602	Illuminating the Path to Target GPCR Structures and Functions. <b>2020</b> , 59, 3783-3795		
601	Druggable Lipid GPCRs: Past, Present, and Prospects. <b>2020</b> , 1274, 223-258		8
600	The Dynamics of the Neuropeptide Y Receptor Type 1 Investigated by Solid-State NMR and Molecular Dynamics Simulation. <b>2020</b> , 25,		4
599	Role of Immune System in Kidney Cancer. <b>2020</b> ,		
598	Adenosine A receptor antagonists: from caffeine to selective non-xanthines. <b>2020</b> ,		19
597	G Protein-Coupled Receptors in Asthma Therapy: Pharmacology and Drug Action. <b>2020</b> , 72, 1-49		33

596	The expression of opsins in the human skin and its implications for photobiomodulation: A Systematic Review. <b>2020</b> , 36, 329-338		10
595	Structure of human GABA receptor in an inactive state. <b>2020</b> , 584, 304-309		32
594	Recent advances in development of biosensors for taste-related analyses. <b>2020</b> , 129, 115925		13
593	P2Y1-like nucleotide receptorsâStructures, molecular modeling, mutagenesis, and oligomerization. <b>2020</b> , 10, e1464		7
592	The European Research Network on Signal Transduction (ERNEST): Toward a Multidimensional Holistic Understanding of G Protein-Coupled Receptor Signaling. <b>2020</b> , 3, 361-370		9
591	Light organ photosensitivity in deep-sea shrimp may suggest a novel role in counterillumination. <i>Scientific Reports</i> , <b>2020</b> , 10, 4485	4-9	7
590	Performance of virtual screening against GPCR homology models: Impact of template selection and treatment of binding site plasticity. <b>2020</b> , 16, e1007680		21
589	Causal Link between n-3 Polyunsaturated Fatty Acid Deficiency and Motivation Deficits. <b>2020</b> , 31, 755-772.e7		9
588	Structural basis of ligand binding modes at the human formyl peptide receptor 2. <b>2020</b> , 11, 1208		34
587	Light-induced difference Fourier-transform infrared spectroscopy of photoreceptive proteins. <b>2020</b> , 23-57		0
586	Cannabinoids and Cannabinoid Receptors: The Story so Far. <b>2020</b> , 23, 101301		50
585	Light Dynamics of the Retinal-Disease-Relevant G90D Bovine Rhodopsin Mutant. <b>2020</b> , 59, 15656-15664		2
584	IDPs and their complexes in GPCR and nuclear receptor signaling. <i>Progress in Molecular Biology and Translational Science</i> , <b>2020</b> , 174, 105-155	4	3
583	The relaxin family peptide receptor 1 (RXFP1): An emerging player in human health and disease. <b>2020</b> , 8, e1194		8
582	Activation of Estrogen Receptor G Protein-Coupled Receptor 30 Enhances Cholesterol Cholelithogenesis in Female Mice. <b>2020</b> , 72, 2077-2089		4
581	mTOR may interact with PARP-1 to regulate visible light-induced parthanatos in photoreceptors. <b>2020</b> , 18, 27		18
580	Structure and Functional Characterization of Membrane Integral Proteins in the Lipid Cubic Phase. <b>2020</b> , 432, 5104-5123		10
579	Biofunctional Molecules Inspired by Protein Mimicry and Manipulation. <b>2020</b> , 93, 138-153		4

578	Opsins for vision restoration. <b>2020</b> , 527, 325-330	9
577	The Evolving Role of Structural Biology in Drug Discovery. <b>2020</b> , 1-22	2
576	Impact of Recently Determined Crystallographic Structures of GPCRs on Drug Discovery. <b>2020</b> , 449-477	1
575	Membrane Protein Crystallization. <b>2020</b> , 187-210	0
574	Rapid identification of highly potent human anti-GPCR antagonist monoclonal antibodies. <b>2020</b> , 12, 1755069	3
573	Characterization of cancer-related somatic mutations in the adenosine A receptor. <b>2020</b> , 880, 173126	6
572	Computational Investigations on the Binding Mode of Ligands for the Cannabinoid-Activated G Protein-Coupled Receptor GPR18. <b>2020</b> , 10,	9
571	Endoplasmic reticulum stress: New insights into the pathogenesis and treatment of retinal degenerative diseases. <b>2020</b> , 79, 100860	12
570	Molecular components affecting ocular carotenoid and retinoid homeostasis. <b>2021</b> , 80, 100864	11
569	Retinoids in the visual cycle: role of the retinal G protein-coupled receptor. <b>2021</b> , 62, 100040	11
568	Activation of the G-Protein-Coupled Receptor Rhodopsin by Water. <b>2021</b> , 60, 2288-2295	7
567	Activation of the G-Protein-Coupled Receptor Rhodopsin by Water. <b>2021</b> , 133, 2318-2325	2
566	Sensory Perception of Non-Deuterated and Deuterated Organic Compounds. <b>2021</b> , 27, 1046-1056	1
565	G protein-coupled receptor-G protein interactions: a single-molecule perspective. <b>2021</b> , 101, 857-906	10
564	Development of Selective TGR5 Ligands Based on the 5,6,7,8-Tetrahydro-5,5,8,8-tetramethylnaphthalene Skeleton. <b>2021</b> , 16, 458-462	0
563	Synthesis and pharmacological evaluation of enantiomerically pure -configured KOR agonists with 2-azabicyclo[3.2.1]octane scaffold. <b>2021</b> , 19, 8384-8396	2
562	Targeting Islet GPCRs to Improve Insulin Secretion. <b>2021</b> ,	
561	Ferroptosis drives photoreceptor degeneration in mice with defects in all-trans-retinal clearance. <b>2021</b> , 296, 100187	12

560	Approaches Towards Synthetic Signal Transduction in Phospholipid Bilayers. <b>2021</b> , 1-24	0
559	Conserved C-terminal motifs in odorant receptors instruct their cell surface expression and cAMP signaling. <b>2021</b> , 35, e21274	2
558	Intracellular Trafficking of G Protein-Coupled Receptors to the Cell Surface Plasma Membrane in Health and Disease. <b>2021</b> , 375-412	1
557	Structures of the archaerhodopsin-3 transporter reveal that disordering of internal water networks underpins receptor sensitization. <b>2021</b> , 12, 629	10
556	Classical targets in drug discovery. <b>2021</b> , 111-183	
555	Light-induced difference FTIR spectroscopy of primate blue-sensitive visual pigment at 163 K. <b>2021</b> , 18, 40-49	1
554	Supramolecular organization of rhodopsin in rod photoreceptor cell membranes. <b>2021</b> , 473, 1361-1376	0
553	Multiple mechanisms of photoreceptor spectral tuning following loss of UV color vision in <i>Heliconius</i> butterflies.	2
552	Update on GPCR-based targets for the development of novel antidepressants. <b>2021</b> ,	5
551	Identification of OPN3 as associated with non-syndromic oligodontia in a Japanese population. <b>2021</b> , 66, 769-775	0
550	Evolutionary Constraint on Visual and Nonvisual Mammalian Opsins. <b>2021</b> , 36, 109-126	4
549	A highly selective and potent CXCR4 antagonist for hepatocellular carcinoma treatment. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5 12
548	Ligand based conformational space studies of the Ebpioid receptor. <b>2021</b> , 1865, 129838	0
547	Identification of additional outer segment targeting signals in zebrafish rod opsin. <b>2021</b> , 134,	
546	Effect of conditional deletion of cytoplasmic dynein heavy chain DYNC1H1 on postnatal photoreceptors. <b>2021</b> , 16, e0248354	3
545	Structural aspects of rod opsin and their implication in genetic diseases. <b>2021</b> , 473, 1339-1359	5
544	The Open Question of How GPCRs Interact with GPCR Kinases (GRKs). <b>2021</b> , 11,	5
543	Biological Functions of RBP4 and Its Relevance for Human Diseases. <b>2021</b> , 12, 659977	19



542 Importance of Homology Modeling for Predicting the Structures of GPCRs.

541 Efficient G protein coupling is not required for agonist-mediated internalization and membrane reorganization of the adenosine A receptor. **2021**, 35, e21211

1

540 Molecular Modeling of Histamine Receptors-Recent Advances in Drug Discovery. **2021**, 26,

7

539 Molecular mechanisms regulating Proteinase-Activated Receptors (PARs). **2021**, 288, 2697-2726

8

538 Structure-Based Drug Design for G Protein-Coupled Receptors. 1-59

537 She's got nerve: roles of octopamine in insect female reproduction. **2021**, 35, 132-153

6

536 Correlated Motions of Conserved Polar Motifs Lay out a Plausible Mechanism of G Protein-Coupled Receptor Activation. **2021**, 11,

1

535 [Chemical Biology Studies Using Vitamin A Analogs]. **2021**, 141, 557-577

0

534 Analysis of Missense Variants in the Human Histamine Receptor Family Reveals Increased Constitutive Activity of E410K Variant in the Histamine H Receptor. *International Journal of Molecular Sciences*, **2021**, 22,

6.3

0

533 BIO-GATS: A Tool for Automated GPCR Template Selection Through a Biophysical Approach for Homology Modeling. **2021**, 8, 617176

0

532 Opioid Receptor Ligands. 1-171

531 Loss of Motor Protein MYO1C Causes Rhodopsin Mislocalization and Results in Impaired Visual Function. **2021**, 10,

1

530 Effect of Sodium Valproate on the Conformational Stability of the Visual G Protein-Coupled Receptor Rhodopsin. **2021**, 26,

0

529 Characterization of binding kinetics of AR to G $\beta$ protein by surface plasmon resonance. **2021**, 120, 1641-1649

3

528 G-Protein Coupled Receptors (GPCRs): Signaling Pathways, Characterization, and Functions in Insect Physiology and Toxicology. *International Journal of Molecular Sciences*, **2021**, 22,

6.3

4

527 Entry Pathway for the Inverse Agonist Ligand in the G Protein-Coupled Receptor Rhodopsin.

526 Drug-Target Interaction Identification via Dual-Graph Regularized Robust PCA in Heterogeneous Networks. **2021**,

525 Not just shades of grey: life is full of colour for the ocellate river stingray (*Potamotrygon motoro*). **2021**, 224,

3

524	Positive selection of the long-wavelength opsin gene in South American cichlid fishes. <b>2021</b> , 848, 3805-3815	1
523	Cell cycle dependence on the mevalonate pathway: Role of cholesterol and non-sterol isoprenoids. <i>Biochemical Pharmacology</i> , <b>2021</b> , 196, 114623	6 1
522	Structures and Dynamics of Native-State Transmembrane Protein Targets and Bound Lipids. <b>2021</b> , 11,	3
521	Implications of the simple chemical structure of the odorant molecules interacting with the olfactory receptor 1A1. <b>2021</b> , 19, e18	
520	Critical APJ receptor residues in extracellular domains that influence effector selectivity. <b>2021</b> , 288, 6543-6562	
519	A rat model for retinitis pigmentosa with rapid retinal degeneration enables drug evaluation in vivo. <b>2021</b> , 23, 11	1
518	Polyphenols and Visual Health: Potential Effects on Degenerative Retinal Diseases. <b>2021</b> , 26,	4
517	Vitamin A/A chromophore exchange: Its role in spectral tuning and visual plasticity. <b>2021</b> , 475, 145-155	3
516	Chimeric human opsins as optogenetic light sensitizers. <b>2021</b> , 224,	1
515	Biomimetic Silica Encapsulation of Lipid Nanodiscs and Sheet-Stabilized Diacylglycerol Kinase. <b>2021</b> , 32, 1742-1752	0
514	Motions around conserved helical weak spots facilitate GPCR activation. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2021</b> , 89, 1577-1586	4.2 0
513	Draft Genome of the Mirrorwing Flyingfish (). <b>2021</b> , 12, 695700	
512	Structures of rhodopsin in complex with G-protein-coupled receptor kinase 1. <b>2021</b> , 595, 600-605	20
511	Structural dynamics bridge the gap between the genetic and functional levels of GPCRs. <b>2021</b> , 69, 150-159	3
510	Mechanisms of vitamin A metabolism and deficiency in the mammalian and fly visual system. <b>2021</b> , 476, 68-78	3
509	The Visual Opsin Gene Repertoires of Teleost Fishes: Evolution, Ecology, and Function. <b>2021</b> , 37, 441-468	10
508	Functional integrity of membrane protein rhodopsin solubilized by styrene-maleic acid copolymer. <b>2021</b> , 120, 3508-3515	2
507	Electronic Couplings and Electrostatic Interactions Behind the Light Absorption of Retinal Proteins. <b>2021</b> , 8, 752700	1

506	G protein-coupled receptor-effector macromolecular membrane assemblies (GEMMAs). <b>2021</b> , 107977		6
505	Deconstructing the transmembrane core of class A G protein-coupled receptors. <b>2021</b> , 46, 1017-1029		2
504	Universal Properties and Specificities of the $\beta$ -Adrenergic Receptor-G Protein Complex Activation Mechanism Revealed by All-Atom Molecular Dynamics Simulations. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	1
503	Cholesterol footprint in high-resolution structures of serotonin receptors: Where are we now and what does it mean?. <b>2021</b> , 239, 105120		1
502	Structure determination of GPCRs: cryo-EM compared with X-ray crystallography. <b>2021</b> , 49, 2345-2355		10
501	The Antagonist pGlu- $\beta$ -Glu-Pro-NH Binds to an Allosteric Site of the Thyrotropin-Releasing Hormone Receptor. <b>2021</b> , 26,		1
500	[Biophysical and Biochemical Research of Animal Rhodopsins]. <b>2021</b> , 141, 1155-1160		
499	Homology Modeling of Class A G-Protein-Coupled Receptors in the Age of the Structure Boom. <i>Methods in Molecular Biology</i> , <b>2021</b> , 2315, 73-97	1.4	1
498	G protein-coupled receptors: structure- and function-based drug discovery. <b>2021</b> , 6, 7		44
497	Receptor Targets in Drug Discovery and Development. <b>2003</b> , 319-355		2
496	Chemokine and Cytokine Modulators. <b>2003</b> , 119-192		1
495	Narcotic Analgesics. <b>2003</b> , 331-482		6
494	Cell-Surface Receptors: Structure, Activation, and Signaling. 1		1
493	Strategies in the Design of Antiviral Drugs. 1		6
492	Structural Insights into Cholesterol Interactions with G-Protein-Coupled Receptors. 231-253		2
491	Bacteriorhodopsin and Its Potential in Technical Applications. 146		4
490	Microbial Rhodopsins. 1		1
489	Toward Tomorrow's Drugs: The Synthesis of Compound Libraries by Solid-Phase Chemistry. 343-375		1

488	Optimization of the Human Adenosine A2a Receptor Yields in <i>Saccharomyces cerevisiae</i> . <b>2006</b> , 22, 1249-1255	28
487	A molecular dissection of the glycoprotein hormone receptors. <b>2006</b> , 151-166	2
486	A Template-Based Mixed-Integer Linear Programming Sequence Alignment Model. <b>2007</b> , 343-360	1
485	Misfolded proteins and retinal dystrophies. <b>2010</b> , 664, 115-21	54
484	A novel missense mutation in both OPN1LW and OPN1MW cone opsin genes causes X-linked cone dystrophy (XLCOD5). <b>2012</b> , 723, 595-601	2
483	Mechanism of GPCR-directed autoantibodies in diseases. <b>2012</b> , 749, 187-99	18
482	The Evolution and Function of Melanopsin in Craniates. <b>2014</b> , 23-63	5
481	The Evolution of Invertebrate Photopigments and Photoreceptors. <b>2014</b> , 105-135	12
480	The Evolution of Photoreceptors and Visual Photopigments in Vertebrates. <b>2014</b> , 163-217	7
479	Overview of Non-CB1/CB2 Cannabinoid Receptors: Chemistry and Modeling. <b>2013</b> , 29-51	1
478	Bioinformatic Tools in Crop Improvement. <b>2013</b> , 49-122	4
477	G protein-coupled receptor accessory proteins and signaling: pharmacogenomic insights. <i>Methods in Molecular Biology</i> , <b>2014</b> , 1175, 121-52	1.4 14
476	The G protein-coupled receptor rhodopsin: a historical perspective. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1271, 3-18	1.4 11
475	Mammalian expression, purification, and crystallization of rhodopsin variants. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1271, 39-54	1.4 3
474	The rhodopsin-arrestin-1 interaction in bicelles. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1271, 77-95	1.4 2
473	G protein-coupled receptors: an overview of signaling mechanisms and screening assays. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1272, 3-19	1.4 10
472	Immunopathogenesis of Graves's Disease. <b>2015</b> , 5-20	2
471	Nuts and Bolts of CF3 and CH 3 NMR Toward the Understanding of Conformational Exchange of GPCRs. <i>Methods in Molecular Biology</i> , <b>2015</b> , 1335, 39-51	1.4 7

470	Functional Mechanisms of G Protein-Coupled Receptors in a Structural Context. <b>2004</b> , 235-266		3
469	Molecular Pharmacology of the Metabotropic Glutamate Receptors. <b>2004</b> , 47-82		2
468	Biophysical and Biochemical Methods to Study GPCR Oligomerization. <b>2005</b> , 217-241		2
467	Conformational Plasticity of GPCR Binding Sites. <b>2005</b> , 363-388		1
466	GPCR Folding and Maturation. <b>2005</b> , 71-93		1
465	The Structural Biology of Chemokines. <b>2007</b> , 9-30		4
464	Molecular Biology and Genomic Organization of G Protein-Coupled Serotonin Receptors. <b>2006</b> , 1-38		5
463	Structure and Function Reveal Insights in the Pharmacology of 5-HT Receptor Subtypes. <b>2006</b> , 39-58		3
462	Free energy calculations applied to membrane proteins. <i>Methods in Molecular Biology</i> , <b>2008</b> , 443, 121-441.4		6
461	In silico identification of novel G protein coupled receptors. <i>Methods in Molecular Biology</i> , <b>2009</b> , 528, 25-36	1.4	4
460	Application of fluorescence resonance energy transfer techniques to establish ligand-receptor orientation. <i>Methods in Molecular Biology</i> , <b>2009</b> , 552, 293-304	1.4	2
459	Homology modeling of GPCRs. <i>Methods in Molecular Biology</i> , <b>2009</b> , 552, 97-113	1.4	8
458	Structural Basis of Dopamine Receptor Activation. <b>2010</b> , 47-73		3
457	Ligand macromolecule interactions: theoretical principles of molecular recognition. <i>Methods in Molecular Biology</i> , <b>2009</b> , 572, 13-29	1.4	4
456	Mammalian membrane receptors expression as inclusion bodies in Escherichia coli. <i>Methods in Molecular Biology</i> , <b>2010</b> , 601, 39-48	1.4	11
455	Critical review of general guidelines for membrane proteins model building and analysis. <i>Methods in Molecular Biology</i> , <b>2010</b> , 654, 363-85	1.4	3
454	The family of G protein-coupled receptors: an example of membrane proteins. <i>Methods in Molecular Biology</i> , <b>2010</b> , 654, 441-54	1.4	5
453	Pharmacology, biodistribution, and efficacy of GPCR-based pepducins in disease models. <i>Methods in Molecular Biology</i> , <b>2011</b> , 683, 259-75	1.4	62

452	Vertebrate and Invertebrate Rhodopsins: Light Control of G-Protein Signaling. <b>2011</b> , 133-146		1
451	The use of site-directed mutagenesis to study GPCRs. <i>Methods in Molecular Biology</i> , <b>2011</b> , 746, 85-98	1.4	3
450	Novel Assay Technologies for the Discovery of G Protein-Coupled Receptor Drugs. <b>2011</b> , 231-253		1
449	Deciphering the Evolution of G Protein-Coupled Receptors in Vertebrates. <b>2011</b> , 71-102		1
448	Databases in SenseLab for the genomics, proteomics, and function of olfactory receptors. <i>Methods in Molecular Biology</i> , <b>2013</b> , 1003, 3-22	1.4	4
447	Crystallization of membrane proteins. <i>Methods in Molecular Biology</i> , <b>2013</b> , 1033, 67-83	1.4	4
446	Advances in Structure Determination of G Protein-Coupled Receptors by SFX. <b>2018</b> , 301-329		1
445	The role of protein 3D-structures in the drug discovery process. <b>2003</b> , 157-81		5
444	Chemosensorial G-proteins-coupled receptors: a perspective from computational methods. <b>2014</b> , 805, 441-57		4
443	Gonadotrophin Receptors. <b>2016</b> , 1-46		1
442	Molecular Aspects of Histamine Receptors. <b>2016</b> , 1-49		3
441	Modeling of Membrane Proteins. <b>2019</b> , 371-451		2
440	Classifying G-protein Coupled Receptors with Support Vector Machine. <b>2004</b> , 448-452		2
439	Chemogenomics strategies for G-protein coupled receptor hit finding. <b>2006</b> , 21-9		3
438	Endocannabinoid receptor pharmacology. <b>2009</b> , 1, 37-63		24
437	Assessing Biological Samples with Scanning Probes. <b>2010</b> , 417-431		3
436	Computer Assisted Peptide Design and Optimization with Topology Preserving Neural Networks. <b>2010</b> , 132-139		1
435	Structure-Activity Relationships of Nonpeptide Neuropeptide Y Receptor Antagonists. <b>2004</b> , 505-546		5

434	NPY Receptor Subtypes and Their Signal Transduction. <b>2004</b> , 45-73	8
433	Direct Numerical Simulation of Boundary Layer Separation along a Curved Wall with Oscillating Oncoming Flow. <b>2003</b> , 113-123	2
432	GPCRs: Past, present, and future. <b>2010</b> , 251-278	1
431	Topology prediction of membrane proteins: how distantly related homologs come into play. <b>2010</b> , 61-82	1
430	Protein SequenceâStructureâFunctionâNetwork Links Discovered with the ANNOTATOR Software Suite: Application to ELYS/Mel-28. <b>2012</b> , 111-143	5
429	Mechanical Stress Induces Cardiomyocyte Hypertrophy Through Agonist-Independent Activation of Angiotensin II Type 1 Receptor. <b>2010</b> , 83-95	2
428	Ligand Binding and Activation of the CGRP Receptor. <b>2010</b> , 23-40	1
427	Functional and structural studies of TRP channels heterologously expressed in budding yeast. <b>2011</b> , 704, 25-40	14
426	The GPCR crystallography boom: providing an invaluable source of structural information and expanding the scope of homology modeling. <b>2014</b> , 796, 3-13	20
425	Bioinformatics tools for predicting GPCR gene functions. <b>2014</b> , 796, 205-24	3
424	Modeling of G protein-coupled receptors using crystal structures: from monomers to signaling complexes. <b>2014</b> , 796, 15-33	11
423	How the dynamic properties and functional mechanisms of GPCRs are modulated by their coupling to the membrane environment. <b>2014</b> , 796, 55-74	21
422	Coarse-grained molecular dynamics provides insight into the interactions of lipids and cholesterol with rhodopsin. <b>2014</b> , 796, 75-94	25
421	Semliki Forest virus vectors: versatile tools for efficient large-scale expression of membrane receptors. <b>2001</b> , 131-139	2
420	<sup>2</sup> H, <sup>15</sup> N and <sup>31</sup> P solid-state NMR spectroscopy of polypeptides reconstituted into oriented phospholipid membranes. <b>2001</b> , 45-53	2
419	Numerical simulations for experiment design and extraction of structural parameters in biological solid-state NMR spectroscopy. <b>2001</b> , 95-109	1
418	G Protein-Coupled-Receptor Mediated STAT Activation. <b>2003</b> , 191-206	1
417	Opiates: basic mechanisms. <b>2006</b> , 427-442	14

416	Biochemical Cascade of Phototransduction. <b>2011</b> , 394-410	4
415	The Role of Chemokine Receptors in HIV Infection of Host Cells. <b>2003</b> , 191-196	2
414	G-Protein Organization and Signaling. <b>2003</b> , 335-341	1
413	Chemokine Receptors. <b>2002</b> , 87-98	1
412	Gastrointestinal Hormones and Neurotransmitters. <b>2010</b> , 3-19.e4	4
411	The domino effect triggered by the tethered ligand of the protease activated receptors. <b>2020</b> , 196, 87-98	8
410	How Do Branched Detergents Stabilize GPCRs in Micelles?. <b>2020</b> , 59, 2125-2134	12
409	Differential Aggregation Properties of Mutant Human and Bovine Rhodopsin. <b>2021</b> , 60, 6-18	0
408	Residue-Residue Mutual Work Analysis of Retinal-Opsin Interaction in Rhodopsin: Implications for Protein-Ligand Binding. <b>2020</b> , 16, 1834-1842	3
407	CHAPTER 5:Fragment Screening of G Protein-Coupled Receptors. <b>2015</b> , 101-125	1
406	CHAPTER 6:D3 Receptor Agonists and Antagonists as Anti-Parkinsonian Therapeutic Agents. <b>2013</b> , 126-148	1
405	Molecular Pharmacology of the Dopamine Receptors. <b>2009</b> , 63-87	8
404	The molecular genetics and evolution of red and green color vision in vertebrates. <b>2001</b> , 158, 1697-710	154
403	The cytoplasmic end of transmembrane domain 3 regulates the activity of the <i>Saccharomyces cerevisiae</i> G-protein-coupled alpha-factor receptor. <b>2002</b> , 160, 429-43	29
402	Cell surface receptors, virus entry and tropism of primate lentiviruses. <b>2002</b> , 83, 1809-1829	161
401	RosettaGPCR: Multiple Template Homology Modeling of GPCRs with Rosetta.	1
400	The visual ecology of Holocentridae, a nocturnal coral reef fish family with a deep-sea-like multibank retina.	1
399	CRISPR/Cas9-mediated generation of biallelic G0 anemonefish ( <i>Amphiprion ocellaris</i> ) mutants.	2



398	Fetal stage melanopsin (OPN4) and GNAQ (G $\alpha$ ) signaling regulates vascular development of the eye.	1
397	A complex view of GPCR signal transduction: Molecular dynamics of the histamine H3 membrane receptor.	1
396	Gated electron transport in rhodopsin and its relevance to GPCR activation.	0
395	The expanding toolkit for structural biology: synchrotrons, X-ray lasers and cryoEM. <b>2019</b> , 6, 167-177	27
394	Purine receptors: GPCR structure and agonist design. <b>2004</b> , 4, 337-47	11
393	Determination of amino acid residues that are accessible from the ligand binding crevice in the seventh transmembrane-spanning region of the human A(1) adenosine receptor. <b>2001</b> , 59, 1187-95	16
392	Role of aspartate7.32(302) of the human gonadotropin-releasing hormone receptor in stabilizing a high-affinity ligand conformation. <b>2001</b> , 60, 1280-7	43
391	A Key Role for Transmembrane Prolines in Calcitonin Receptor-Like Receptor Agonist Binding and Signalling: Implications for Family B G-Protein-Coupled Receptors. <b>2005</b> , 67, 20-31	49
390	Post-Translational Modifications of G Protein-Coupled Receptors Control Cellular Signaling Dynamics in Space and Time. <b>2021</b> , 73, 120-151	24
389	Pheromones and Pheromone Receptors in Schizophyllum commune Mate Recognition: Retrospective of a Half-Century of Progress and a Look Ahead. 301-315	3
388	Autosomal recessive retinitis pigmentosa E150K opsin mice exhibit photoreceptor disorganization. <b>2013</b> , 123, 121-37	26
387	Molecular pharmacodynamics of emixustat in protection against retinal degeneration. <b>2015</b> , 125, 2781-94	44
386	Endogenous Peptides for Delta Opioid Receptors and Analogues. <b>2003</b> ,	1
385	G-Protein-Coupled Receptors. <b>2003</b> , 521-559	2
384	Computational methods in drug design: Modeling G protein-coupled receptor monomers, dimers, and oligomers. <b>2006</b> , 8, E322	2
383	Oligomerisation of G-protein-coupled receptors. <b>2001</b> , 114, 1265-1271	95
382	The cellular fate of mutant rhodopsin: quality control, degradation and aggresome formation. <b>2002</b> , 115, 2907-2918	242
381	The molecular basis for spectral tuning of rod visual pigments in deep-sea fish. <b>2001</b> , 204, 3333-3344	123

380	β-Arrestin 1/2 Aggravates Podocyte Apoptosis of Diabetic Nephropathy via Wnt/β-Catenin Pathway. <b>2018</b> , 24, 1724-1732	11
379	Recent innovations in membrane-protein structural biology. <b>2019</b> , 8,	14
378	Dynamic Cholesterol-Conditioned Dimerization of the G Protein Coupled Chemokine Receptor Type 4. <b>2016</b> , 12, e1005169	61
377	Predicting peak spectral sensitivities of vertebrate cone visual pigments using atomistic molecular simulations. <b>2018</b> , 14, e1005974	9
376	Improving homology modeling from low-sequence identity templates in Rosetta: A case study in GPCRs. <b>2020</b> , 16, e1007597	15
375	The origins of novel protein interactions during animal opsin evolution. <b>2007</b> , 2, e1054	86
374	A family of chemoreceptors in <i>Tribolium castaneum</i> (Tenebrionidae: Coleoptera). <b>2007</b> , 2, e1319	44
373	Using sequence similarity networks for visualization of relationships across diverse protein superfamilies. <b>2009</b> , 4, e4345	287
372	New mechanism for voltage induced charge movement revealed in GPCRs--theory and experiments. <b>2010</b> , 5, e8752	7
371	The roles of transmembrane domain helix-III during rhodopsin photoactivation. <b>2011</b> , 6, e17398	4
370	Multidimensional scaling reveals the main evolutionary pathways of class A G-protein-coupled receptors. <b>2011</b> , 6, e19094	29
369	Topological and functional characterization of an insect gustatory receptor. <b>2011</b> , 6, e24111	84
368	The E92K melanocortin 1 receptor mutant induces cAMP production and arrestin recruitment but not ERK activity indicating biased constitutive signaling. <b>2011</b> , 6, e24644	23
367	The role of palmitoylation in signalling, cellular trafficking and plasma membrane localization of protease-activated receptor-2. <b>2011</b> , 6, e28018	34
366	Novel information on the epitope of an inverse agonist monoclonal antibody provides insight into the structure of the TSH receptor. <b>2012</b> , 7, e31973	5
365	Congenital hypogonadotropic hypogonadism due to GnRH receptor mutations in three brothers reveal sites affecting conformation and coupling. <b>2012</b> , 7, e38456	32
364	Homology modeling of dopamine D2 and D3 receptors: molecular dynamics refinement and docking evaluation. <b>2012</b> , 7, e44316	53
363	Identifying ligand binding conformations of the β-adrenergic receptor by using its agonists as computational probes. <b>2012</b> , 7, e50186	13

362	Constitutively active CCR5 chemokine receptors differ in mediating HIV envelope-dependent fusion. <b>2013</b> , 8, e54532	11
361	Coarse-grained/molecular mechanics of the TAS2R38 bitter taste receptor: experimentally-validated detailed structural prediction of agonist binding. <b>2013</b> , 8, e64675	61
360	Classification of helical membrane proteins using predicted helix architectures. <b>2013</b> , 8, e77491	3
359	Regulation of rhodopsin-eGFP distribution in transgenic xenopus rod outer segments by light. <b>2013</b> , 8, e80059	10
358	Force transduction and lipid binding in MscL: a continuum-molecular approach. <b>2014</b> , 9, e113947	29
357	On the modularity of the intrinsic flexibility of the $\mu$ opioid receptor: a computational study. <b>2014</b> , 9, e115856	13
356	Functional characterization of the vitamin K2 biosynthetic enzyme UBIAD1. <b>2015</b> , 10, e0125737	30
355	Crystallographic Study of the LUMI Intermediate of Squid Rhodopsin. <b>2015</b> , 10, e0126970	8
354	Comparative MD Simulations Indicate a Dual Role for Arg1323.50 in Dopamine-Dependent D2R Activation. <b>2016</b> , 11, e0146612	8
353	Structure-Activity Relationship Studies of N- and C-Terminally Modified Secretin Analogs for the Human Secretin Receptor. <b>2016</b> , 11, e0149359	5
352	Deep Brain Photoreceptor (val-opsin) Gene Knockout Using CRISPR/Cas Affects Chorion Formation and Embryonic Hatching in the Zebrafish. <b>2016</b> , 11, e0165535	5
351	Structural and Functional Effect of an Oscillating Electric Field on the Dopamine-D3 Receptor: A Molecular Dynamics Simulation Study. <b>2016</b> , 11, e0166412	2
350	Low-Temperature Trapping of Photointermediates of the Rhodopsin E181Q Mutant. <b>2014</b> , 1,	3
349	Minute Impurities Contribute Significantly to Olfactory Receptor Ligand Studies: Tales from Testing the Vibration Theory. <b>2017</b> , 4,	14
348	Search for Active-State Conformation of Drug Target GPCR Using Real-Coded Genetic Algorithm. <b>2009</b> , 24, 386-396	4
347	Introduction to the symposium-in-print: photoisomerization pathways, torsional relaxation and the hula twists. <b>2002</b> , 76, 580-3	18
346	Constraints of opsin structure on the ligand-binding site: studies with ring-fused retinals. <b>2002</b> , 76, 606-15	6
345	Serial femtosecond crystallography opens new avenues for Structural Biology. <b>2016</b> , 23, 255-72	4

344	Exogenous hormonal regulation in breast cancer cells by phytoestrogens and endocrine disruptors. <b>2014</b> , 21, 1129-45	16
343	Advances in the Understanding of the Cannabinoid Receptor 1 - Focusing on the Inverse Agonists Interactions. <b>2019</b> , 26, 1908-1919	15
342	Gonadotropin-Releasing Hormone and GnRH Receptor: Structure, Function and Drug Development. <b>2020</b> , 27, 6136-6158	9
341	In Silico Studies Targeting G-protein Coupled Receptors for Drug Research Against Parkinson's Disease. <b>2018</b> , 16, 786-848	10
340	Sense of Smell: Structural, Functional, Mechanistic Advancements and Challenges in Human Olfactory Research. <b>2019</b> , 17, 891-911	20
339	In silico studies on DARC. <b>2009</b> , 9, 289-303	10
338	Single step purification of 2S albumin from Theobroma cacao. <b>2017</b> , 4, 57-61	1
337	Primary Photoreaction Processes in Vision.. <b>2003</b> , 31, 184-189	2
336	CCR7 and CXCR4 Expression in Primary Head and Neck Squamous Cell Carcinomas and Nodal Metastases – Clinical and Immunohistochemical Study. <b>2017</b> , 18, 1093-1104	7
335	Molecular modelling of fentanyl analogs. <b>2004</b> , 69, 843-854	6
334	Putative Dynamics of Vasopressin in its V1a Receptor Binding Site. <b>2003</b> , 9, 93-106	4
333	Scanning Mutagenesis Studies of the M 1 Muscarinic Acetylcholine Receptor. <b>2003</b> , 9, 215-228	11
332	Current Research on the Structure and Function of the Growth Hormone Releasing Hormone Receptor. <b>2006</b> , 21, 173	1
331	Central dogma in thyroid dysfunction: a review on structure modification of TSHR as a cornerstone for thyroid abnormalities. <b>2011</b> , 14, 170-81	10
330	Early structural anomalies observed by high-resolution imaging in two related cases of autosomal-dominant retinitis pigmentosa. <b>2014</b> , 45, 469-473	17
329	G protein-coupled receptors: the evolution of structural insight. <b>2017</b> , 4, 491-527	26
328	Common evolutionary binding mode of rhodopsin-like GPCRs: Insights from structural bioinformatics. <b>2017</b> , 4, 543-556	4
327	Insights into the structural biology of G-protein coupled receptors impacts drug design for central nervous system neurodegenerative processes. <b>2013</b> , 8, 2290-302	6

326	Molecular-Docking-Based Drug Design and Discovery. <b>2016</b> , 158-185	2
325	Optogenetics for retinal disorders. <b>2014</b> , 9, 374-82	13
324	G-protein-coupled receptors and their (Bio) chemical significance win 2012 Nobel Prize in Chemistry. <b>2013</b> , 36, 118-24	21
323	Molecular dynamics simulations of a DNA photolyase protein: High-mobility and conformational changes of the FAD molecule at low temperatures. <b>2012</b> , 03, 169-180	4
322	Binding Mode Prediction of 5-Hydroxytryptamine 2C Receptor Ligands by Homology Modeling and Molecular Docking Analysis. <b>2011</b> , 32, 2008-2014	3
321	Prediction of Binding Mode between Chemokine Receptor CCR2 and Its Known Antagonists using Ligand Supported Homology Modeling. <b>2012</b> , 33, 717-720	2
320	Impact of the Protein Data Bank Across Scientific Disciplines. <b>2020</b> , 19, 25	9
319	Chemical modification of transducin with dansyl chloride hinders its binding to light-activated rhodopsin. <b>2004</b> , 37, 260-7	7
318	Insights from the analysis of conserved motifs and permitted amino acid exchanges in the human, the fly and the worm GPCR clusters. <b>2011</b> , 7, 15-20	4
317	FRET Sensors Reveal the Retinal Entry Pathway in the G Protein-Coupled Receptor Rhodopsin.	0
316	Bioluminescence and Photoreception in Unicellular Organisms: Light-Signalling in a Bio-Communication Perspective. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3 1
315	Whale shark rhodopsin adapted to its vertically wide-ranging lifestyle.	
314	Regulation of melanocortin-5 receptor pharmacology by two isoforms of MRAP2 in ricefield eel ( <i>Monopterus albus</i> ). <b>2021</b> , 314, 113928	1
313	Ligand-Receptor Interactions Regulating Cell Trafficking and Signaling of the Human PTH1Rc: An in Silica Examination. <b>2001</b> , 424-425	
312	???????. <b>2001</b> , 30, 70-71	
311	Regions of G-Protein-Coupled Receptors Identified by Multiple Sequence Alignment. <b>2001</b> , 886-887	
310	Tethering of the Proximal Region of the Angiotensin II Receptor (AT1A) C-Terminus to the Cell Membrane. <b>2001</b> , 293-294	
309	Computational Chemistry and Opioidmimetics: Receptor-Ligand Interactions of Dmt-Tic Peptides. <b>2001</b> , 851-852	

308 Light and Life. **2001**, 1273-1357

307 Refolded G protein-coupled receptors from E. coli inclusion bodies. **2001**, 123-130

306 Neurohypophyseal Receptors-Ligands: Where We Are After the Landmark Rhodopsin Structure Determination. **2001**, 896-897

1

305 Solid-Phase Synthesis and Chemical Ligation of Transmembrane Segments of Rhodopsin. **2001**, 836-837

304 Characterizing the Interactions Between Cholecystokinin and the G-Protein Coupled Receptors CCK1 and CCK2: An NMR-Based Study. **2001**, 902-904

303 An ab-initio molecular dynamics modeling of the primary photochemical event in vision. **2001**, 111-122

1

302 Verification of a  $\mu$ Opioid Receptor Model by Site-Directed Mutagenesis. **2001**, 834-835

301 Conformational Model of Signal Transduction in the Transmembrane Region of the AT-1 Receptor. **2001**, 853-854

300 Applications: Pharmaceuticals and Life Sciences. **2002**, 71-81

299 Understanding the Mutation-Induced Activation of the Lutropin Receptor from Computer Simulation. **2002**, 29-38

298 Cell Membranes: Protein Components and Functions. **2002**,

297 The Binding Pocket of G-Protein-Coupled Receptors for Biogenic Amines, Retinal, and Other Ligands. **2003**, 155-160

296 Human Olfactory Receptors. **2003**, 145-147

295 Ion Transport Across Biological Membranes. **2003**, 99-108

294 Structure and Function of G-Protein-Coupled Receptors: Lessons from the Crystal Structure of Rhodopsin. **2003**, 139-143

293 Thyrotropin-Releasing Hormone Receptor Signaling. **2003**, 502-510

292 Structures of Heterotrimeric G Proteins and Their Complexes. **2003**, 127-135

291 Glycoprotein Hormone Receptors: A Unique Paradigm for Ligand Binding and GPCR Activation. **2003**, 161-166

290 Retinoids. **2003**, 316-348

289 Heterotrimeric G Proteins.

288 Electrons and X-Rays Reveal the Structure of Rhodopsin: A Prototypical G Protein-Coupled Receptor-Implications for Colour Vision. **2003**, 3-13

287 Photochemical Aspect of Rhodopsin. **2003**,

1

286 Molecular Electronic Switches in Photobiology. **2003**,

285 The Bleaching of Visual Pigments. **2003**,

284 CD and Visual Science. **2004**, 237-251

283 Rhodopsin.

282 Structure and activation of muscarinic acetylcholine receptors. **2004**, 55-62

281 Dopamine Receptors. **2005**, 3-43

280 Physiological Function of G Protein-Coupled Receptors (GPCRs) and Research Trends for Orphan GPCRs. **2005**, 20, 185

279 Molecular and Functional Diversity of Visual Pigments: Clues from the Photosensitive Opsin-Like Proteins of the Animal Model Hydra. **2005**, 225-234

278 ?????????????????????? ??????????????????????. **2005**, 36, 126-128

277 Intermolecular Forces and Molecular Modeling. **2005**, 77-115

276 ?????????????????????? : ??????????GPCR?????. **2006**, 23, 3-9

275 Rhodopsin deactivation is affected by mutations of Tyr191. **2006**, 82, 1442-6

2

274 G-Protein-Coupled Receptors. **2006**, 636-639

273 Pharmacology and In Vivo Efficacy of Pepducins in Hemostasis and Arterial Thrombosis. **2006**, 267-280

272 Visual Pigment Genes: Evolution.

271 In Silico Molecular Homology Modeling of Neurotransmitter Receptors. **2007**, 293-304

270 Structural Genomics. **2007**, 1-27

269 Opioides. **2007**, 437-453

268 Synthesis, biosynthesis, and characterization of transmembrane domains of a G protein-coupled receptor. *Methods in Molecular Biology*, **2007**, 386, 95-121 1.4 1

267 Chromophore formation and phosphorylation analysis of constitutively active rhodopsin mutants. **2007**, 17, 783-790

266 The Mammalian Rod Cell Photoreceptor Rhodopsin.

265 The New Paradigm of the GPCR Analysis: The Knowledge that We Obtained from Comparison of New Structures. **2008**, 48, 335-337

264 Single-Molecule Microscopy and Force Spectroscopy of Membrane Proteins. **2008**, 279-311

263 Hallucinogen Actions on 5-HT Receptors Reveal Distinct Mechanisms of Activation and Signaling by G Protein-Coupled Receptors. **2008**, 265-286

262 Homology Modeling of Opioid Receptor-Ligand Complexes Using Experimental Constraints. **2008**, 559-584

261 Analysis of Receptor-Ligand Interaction. 107

260 Expression of Proteins in Isotopically Enriched Form. 1

259 Visual Pigment Genes: Evolution.

258 Endocytosis: Receptor-Mediated.

257 Evaluation of the Proposed Inhibitory Effect of the Aqueous Stem-Bark Extract of *Ficus exasperata* on Uterine Preparations in vitro. **2008**, 5, 94-97 1

256 Computational Methods for the Prediction of GPCRs Coupling Selectivity. **2009**, 167-181

255 The FSH Receptor: One Receptor with Multiple Forms or a Family of Receptors. **2009**, 161-174



- 254 Muscarinic Acetylcholine Receptor. **2009**, 418-439 1
- 253 Crystal Structures of the  $\beta$ -Adrenergic Receptor. **2009**, 217-230
- 252 Expression of double transmembrane domain GPCR fragments for biophysical analysis. **2009**, 611, 303-4
- 251 Organizing bioactive compound discovery in target families. *Methods in Molecular Biology*, **2009**, 575, 1-19 1.4
- 250 G-protein-coupled receptor structure: what can we learn?. **2009**, 1, 11 2
- 249 Evolutionary Signature of Information Transfer Complexity in Cellular Membrane Proteomes. **2009**, 7, 111-121 1
- 248 Traditional GPCR Pharmacology and Beyond. **2010**, 3-24
- 247 Molecular Modeling and Reengineering of A3 Adenosine Receptors. **2010**, 149-161
- 246 Cloning of Rod Opsin Genes Isolated from Olive Flounder *Paralichthys olivaceus*, Japanese Eel *Anguilla japonica*, and Common Carp *Cyprinus carpio*. **2009**, 12, 265-275
- 245 Resource for structure related information on transmembrane proteins. **2010**, 45-59
- 244 10.1007/s11497-008-2011-9. **2010**, 5, 131
- 243 Recent Advances in Biology of Crysteinyl Leukotriene. **2010**, 52, 69-75 1
- 242 HIV-1âReceptor Interactions. **2010**, 97-101
- 241 Prediction of re-entrant regions and other structural features beyond traditional topology models. **2010**, 123-136 0
- 240 Gonadotropin-Releasing Hormones. **2010**, 2098-2117
- 239 Hormone Signaling Via G ProteinâCoupled Receptors. **2010**, 83-105 0
- 238 The Structure of Matter. **2010**, 155-169
- 237 Structural Studies on Membrane Proteins in Biological Macromolecular Assemblies in Japan. **2010**, 52, 3-7

- 236 Thyroid Regulatory Factors. **2010**, 1384-1408 1
- 235 PROGRESS ON MOLECULAR EVOLUTION OF VERTEBRATE OPSIN GENES. **2010**, 33, 1193-1197
- 234 High-Throughput Flow Cytometry. 1
- 233 Pushing Optical Microscopy to the Limit: From Single-Molecule Fluorescence Microscopy to Label-Free Detection and Tracking of Biological Nano-Objects. 113
- 232 Homology Modeling of 5-HT<sub>2C</sub> Receptors. **2011**, 97-127
- 231 Applications of G Protein-coupled Receptors in Clinical Medicine. **2010**, 1, 15-23
- 230 Neuroendocrine Control of Gonadotropins in Mammals. **2011**, 25-43
- 229 Molecular Science of Rhodopsins. **2011**, 5, A0043 o
- 228 Neuroendocrine Control of Gonadotropins in Mammals. **2011**, 25-43
- 227 Towards Structural Determination of Eukaryotic Multi-Protein Complexes. **2012**, 54, 292-299
- 226 Recent Aspects of Angiotensin II Action in the Heart. Implications for Myocardial Ischemia and Heart Failure. **2012**, 367-378
- 225 Rhodopsin Chromophore Formation and Thermal Stabilities in the Opsin Mutant E134Q/M257Y. **2012**, 22, 863-870
- 224 Discovery of Nonpeptide Vasopressin V<sub>2</sub> Receptor Antagonists. 187-209
- 223 Les r cepteurs coupl s aux prot ines G : caract ristiques g n rales et m canismes d'activation. **2012**, 196, 1765-1775
- 222 Novel homodimer model of the  adrenergic receptor in complex with free fatty acids and cholesterol: first-principles calculation studies. **2012**, 8, 1245-8
- 221 Crystal Structure Analysis of Adenosine A<sub>2A</sub> Receptor in Complex with Functional Antibody Fragment. **2013**, 55, 103-109
- 220 Molecular Aspects of Evolution and Diversity of Animal Photoreception. **2013**, 1-22
- 219 Active Structure of G Protein Coupled Receptors. **2013**, 53, 034-036

- 218 Protein-Protein Interactions in the Solid State: The Troubles of Crystallizing Protein-Protein Complexes. **2013**, 113-134 0
- 217 Stem cells and receptors connected with G-proteins – In the vanguard of science again. **2013**, 85, 96-106 1
- 216 Receptor Proteins on Cell Membrane – What are They for, or How Different Cells of the Organism Perceive the Environment?. **2013**, 32-38
- 215 Rescue of Defective G Protein-Coupled Receptor Function by Intermolecular Cooperation. **2014**, 239-255 1
- 214 Inducing Conformational Changes in G Protein-Coupled Receptors by Domain Coupling. **2014**, 219-237
- 213 Conformational Dynamics of a G Protein-Coupled Receptor Opsin and Its Constitutively Active Mutant. **2014**, 54, 111-112
- 212 G Protein Deactivation Mechanisms in Vertebrate Phototransduction. **2014**, 9-22
- 211 Olfactory Receptor Proteins. **2014**, 47-68
- 210 Intracellular Signaling. **2014**, 22-39.e8
- 209 Production of Olfactory Receptors and Nanovesicles Using Heterologous Cell Systems for Bioelectronic Nose. **2014**, 145-170
- 208 Role and Mechanism of Ciliary Transport. **2014**, 139-165 1
- 207 FTIR Study of Primate Color Pigments. **2014**, 54, 267-268
- 206 Structural and Computational Approaches in Drug Design for G Protein-Coupled Receptors. **2015**, 479-489 2
- 205 Imaging of rhodopsin crystals with two-photon microscopy. *Methods in Molecular Biology*, **2015**, 1271, 55-64 1.4
- 204 Line Narrowing in Oriented-Sample NMR of Membrane Proteins. **2015**, 159-185
- 203 Current Progress of Structural Studies on  $\beta$  Adrenergic Receptor. **2015**, 03, 1-10
- 202 Science Signaling Podcast: 10 March 2015. **2015**, 8,
- 201 G Protein-Coupled Receptors. **2016**, 1-37

- 200 Ab Initio Investigation of Photochemical Reaction Mechanisms: From Isolated Molecules to Complex Environments. **2016**, 1-52
- 199 Cone-like rhodopsin expressed in the all cone retina of the colubrid pine snake as a potential adaptation to diurnality.
- 198 Molecular-Docking-Based Drug Design and Discovery. **2017**, 656-682
- 197 Overview of Arrestin Mediated Signaling with Receptors and Non-receptor Binding Partners. **2017**, 19-29
- 196 An improved method for the expression screening of membrane protein-GFP fusions in yeast.
- 195 G-protein Coupled Receptors: A Potential Candidate for Drug Discovery. **2017**, 13, 846-863 4
- 194 G Protein-Coupled Receptors. **2018**, 85-120 1
- 193 Modeling of receptor-ligand complex and ligand design. **2018**, 43, 54-59
- 192 Identifying G protein-coupled receptor dimers from crystal packings.
- 191 A Historical Perspective of G Protein-Coupled Receptor Structural Biology. **2019**, 31-47
- 190 Molecular Pathway and Fluorescence In Situ Hybridization Testing of ERBB2 (HER2) Gene Amplification in Invasive Ductal Carcinoma of Breast. **2019**, 237-268
- 189 Class A GPCRs use the membrane potential to increase their sensitivity and selectivity.
- 188 Elaborate expansion of syntenic V1R hotspots correlates with high species diversity in nocturnal mouse and dwarf lemurs.
- 187 Residue-Residue Mutual Work Analysis of Retinal-Opsin Interaction in Rhodopsin: Implications for Protein-Ligand Binding.
- 186 Physiological Relevance of Spectral Property of Visual Opsins in Jumping Spiders. **2019**, 36, 175-181
- 185 Molecular Basis for the Evolved Instability of a Human G-Protein Coupled Receptor.
- 184 Sweet and Umami Taste. **2020**, 211-230
- 183 Phototransduction in Vertebrate Rods and Cones. **2020**, 261-274

- 182 Improving protein alignment algorithms using amino-acid hydrophobicities - Applications of TMATCH, A new algorithms. 1
- 181 Unique retinal binding pocket of primate blue-sensitive visual pigment.
- 180 Light-induced difference FTIR spectroscopy of primate blue-sensitive visual pigment at 163 K.
- 179 Motor Protein MYO1C is Critical for Photoreceptor Opsin Trafficking and Visual Function.
- 178 MODELLING OF 3D-STRUCTURES OF THE RARE MELANOCORTIN-1-RECEPTOR MUTATIONS ASSOCIATED TO MELANISM IN THE BANANAQUIT. **2020**, 26, 30-41
- 177 Short-wavelength-sensitive 2 (Sws2) visual photopigment models combined with atomistic molecular simulations to predict spectral peaks of absorbance.
- 176 The constitutive activity of the viral-encoded G protein-coupled receptor US28 supports a complex signalling network contributing to cancer development. **2020**, 48, 1493-1504 2
- 175 Nonantimicrobial Actions of Macrolides: Overview and Perspectives for Future Development. **2021**, 73, 233-262 5
- 174 Extracellular loop 2 of G protein-coupled olfactory receptors is critical for odorant recognition.
- 173 Towards the Idea of Molecular Brains. *International Journal of Molecular Sciences*, **2021**, 22, 6.3 6
- 172 Magic angle spinning NMR of G protein-coupled receptors.. **2022**, 128, 25-43
- 171 Hypothesis and Theory: Evaluating the Co-Evolution of the Melanocortin-2 Receptor and the Accessory Protein MRAP1. **2021**, 12, 747843 1
- 170 ??????????????????. **2020**, 46, 126-132
- 169 Free energy calculations of the functional selectivity of 5-HT2B G protein-coupled receptor. **2020**, 15, e0243313 2
- 168 Pharmacological insight into the activation of the human neuropeptide FF2 receptor. **2020**, 134, 170406 0
- 167 The evolution of a bitter taste receptor gene in primates. **2021**, 46, 0
- 166 Phote-HrTH (Phormia terraenovae Hypertrehalosaemic Hormone), the Metabolic Hormone of the Fruit Fly: Solution Structure and Receptor Binding Model. **2020**, 73, 202 1
- 165 Observing Structure and Dynamics of Membrane Proteins by High-Resolution Microscopy. **2005**, 119-134

- 164 Proteins at Lipid Mattresses. **2005**, 137-145
- 163 Endo- und parakrine Regulation der Gonadenfunktion. **2006**, 581-605
- 162 Structural Dynamics of the Signal Termination Process in Rhodopsin. **2005**, 203-212
- 161 Signal Transduction Pathways as Targets for Therapeutics. **2001**, 2001, pe1-pe1
- 160 Molecular Mechanisms Involved in the Activation of Rhodopsin-Like Seven-Transmembrane Receptors. **2005**, 33-70
- 159 Bond torsion affects the product distribution in the photoreaction of retinal model chromophores. 713-721
- 158 cDNA-Derived Amino Acid Sequence from Rat Brain A2aR Possesses Conserved Motifs PMNYM of TM 5 Domain, Which May Be Involved in Dimerization of A2aR. **2007**, 41-50
- 157 Pattern Recognition of Single-Molecule Force Spectroscopy Data. **2007**, 3-13
- 156 Short-wavelength-sensitive 2 (Sws2) visual photopigment models combined with atomistic molecular simulations to predict spectral peaks of absorbance. **2020**, 16, e1008212 1
- 155 Indol-2-Carboxylic Acid Esters Containing N-Phenylpiperazine Moiety - Preparation and Cholinesterase-inhibiting Activity. **2020**, 17, 576-587 1
- 154 Finding and interpreting genetic variations that are important to ophthalmologists. **2003**, 101, 437-84 33
- 153 G protein-coupled receptor drug discovery: implications from the crystal structure of rhodopsin. **2001**, 4, 561-74 44
- 152 Calnexin is not essential for mammalian rod opsin biogenesis. **2008**, 14, 2466-74 19
- 151 Search for a correlation between telomere length and severity of retinitis pigmentosa due to the dominant rhodopsin Pro23His mutation. **2009**, 15, 592-7 4
- 150 Modeling G Protein-Coupled Receptors: a Concrete Possibility. **2010**, 28, 26-31 17
- 149 A tale of two sites: How ubiquitination of a G protein-coupled receptor is coupled to its lysosomal trafficking from distinct receptor domains. **2011**, 4, 528-31 7
- 148 Binding of rhodopsin and rhodopsin analogues to transducin, rhodopsin kinase and arrestin-1. **2014**, 5, 254-68 1
- 147 Molecular determinants of ligand binding at the human histamine H receptor: Site-directed mutagenesis results analyzed with ligand docking and molecular dynamics studies at H homology and crystal structure models. **2012**, 4, 2937-2951 10

146	G protein-coupled receptors--recent advances. <b>2012</b> , 59, 515-29			36
145	Haplotypes of RHO polymorphisms and susceptibility to age-related macular degeneration. <b>2015</b> , 8, 3174-9			2
144	Biochemical Measurements of Free Opsin in Macular Degeneration Eyes: Examining the 11- Retinal Deficiency Hypothesis of Delayed Dark Adaptation (An American Ophthalmological Society Thesis). <b>2017</b> , 115, T1			1
143	Odorant Receptors Containing Conserved Amino Acid Sequences in Transmembrane Domain 7 Display Distinct Expression Patterns in Mammalian Tissues. <b>2017</b> , 40, 954-965			1
142	Conformational insights into the C-terminal mutations of human rhodopsin in retinitis pigmentosa. <b>2022</b> , 110, 108076			0
141	GPCR activation mechanisms across classes and macro/microscales. <i>Nature Structural and Molecular Biology</i> , <b>2021</b> , 28, 879-888	17.6		10
140	GPCR Dock 2021: a blind docking competition in the 'post AlphaFold2 era. <b>2021</b> , 100024			
139	Naturally occurring mutations in G protein-coupled receptors associated with obesity and type 2 diabetes mellitus. <b>2021</b> , 108044			1
138	Biophysical and functional characterization of the human TAS1R2 sweet taste receptor overexpressed in a HEK293S inducible cell line. <i>Scientific Reports</i> , <b>2021</b> , 11, 22238	4.9		3
137	Molecular basis for the evolved instability of a human G-protein coupled receptor. <b>2021</b> , 37, 110046			1
136	Probing Allosteric Regulation Mechanism of W7.35 on Agonist-Induced Activity for DR by Mutation Simulation. <i>Journal of Chemical Information and Modeling</i> , <b>2021</b> ,	6.1		0
135	Multi-State Modeling of G-protein Coupled Receptors at Experimental Accuracy.			0
134	Rhodopsins at a glance. <b>2021</b> , 134,			3
133	Lipopeptide Pepducins as Therapeutic Agents. <i>Methods in Molecular Biology</i> , <b>2022</b> , 2383, 307-333	1.4		1
132	Dimeric Rhodopsin R135L Mutant-Transducin-like Complex Sheds Light on Retinitis Pigmentosa Misfunctions. <b>2021</b> , 125, 12958-12971			
131	Spectroscopy and photoisomerization of protonated Schiff-base retinal derivatives. <b>2021</b> ,			
130	Structural and Energetic Insights Into the Interaction of Niacin With the GPR109A Receptor. <b>2021</b> , 15, 11779322211056122			0
129	Rhodopsin as a Molecular Target to Mitigate Retinitis Pigmentosa.. <b>2021</b> ,			1

128	Structure-Based Virtual Screening for Ligands of G Protein-Coupled Receptors: What Can Molecular Docking Do for You?. <b>2021</b> , 73, 527-565	4
127	A general method for searching for homometric structures.. <b>2022</b> , 78, 14-19	
126	Brighten the Future: Photobiomodulation and Optogenetics. <b>2022</b> , 20, 36-44	0
125	Impact of Ultrafast Electric Field Changes on Photoreceptor Protein Dynamics.. <b>2022</b> ,	0
124	Molecular determinants of GPCR pharmacogenetics: Deconstructing the population variants in <del>the</del> adrenergic receptor.. <b>2022</b> , 128, 361-396	0
123	Novel Molecular Targets of Antidepressants.. <b>2022</b> , 27,	3
122	Red Light Optogenetics in Neuroscience.. <b>2021</b> , 15, 778900	0
121	Optophysiology: Illuminating cell physiology with optogenetics.. <b>2022</b> ,	4
120	Development of enhanced conformational sampling methods to probe the activation landscape of GPCRs.. <b>2022</b> , 128, 325-359	0
119	Visualizing G protein-coupled receptor homomers using photoactivatable dye localization microscopy. <b>2022</b> ,	
118	Synthesis of 8-aminomorphans with high KOR affinity.. <b>2022</b> , 230, 114079	
117	Computer modeling of allosteric modulators at G protein-coupled receptors. <b>2022</b> , 31-46	
116	Exploring the use of intracellular and extracellular allosteric modulators to understand GPCR signaling. <b>2022</b> , 135-160	0
115	Melanocortin-1 receptor mutations and pigmentation: Insights from large animals. <i>Progress in Molecular Biology and Translational Science</i> , <b>2022</b> ,	4 1
114	Macromolecular Crystallography at SPring-8. <b>2022</b> , 64, 2-9	
113	In silico drug discovery of melatonin receptor ligands with therapeutic potential.. <b>2022</b> , 1-12	1
112	Retinoid Homeostasis and Beyond: How Retinol Binding Protein 4 Contributes to Health and Disease.. <b>2022</b> , 14,	2
111	Molecular evolution and depth-related adaptations of rhodopsin in the adaptive radiation of cichlid fishes in Lake Tanganyika.. <b>2022</b> ,	1



110	Toward a first principles understanding of the activation and deactivation mechanisms of class A G-protein coupled receptors and voltage-gated cation channels.		0
109	Discovery of HTL26119. <b>2022</b> , 179-200		
108	Ligand-Dependent Modulation of the Dynamics of Intracellular Loops Dictates Functional Selectivity of 5-HT <sub>2A</sub> . <i>Journal of Chemical Information and Modeling</i> , <b>2022</b> ,	6.1	0
107	Multiple mechanisms of photoreceptor spectral tuning in <i>Heliconius</i> butterflies.. <b>2022</b> ,		3
106	Calcineurin-fusion facilitates Cryo-EM Structure Determination of a Family A GPCR.		0
105	Interaction of Bisphenol A with G Protein: Coupled Receptors - New Paradigms in Breast Cancer.		
104	Computational rewiring of allosteric pathways reprograms GPCR selective responses to ligands.		
103	A Coiled-Coil-Based Design Strategy for the Thermostabilization of G-Protein-Coupled Receptors.		
102	Comparison of Bovine and Carp Fish Visual Pigment Photo-intermediates at Room Temperature.. <b>2022</b> ,		
101	"Selective" serotonin 5-HT receptor antagonists.. <i>Biochemical Pharmacology</i> , <b>2022</b> , 115028	6	2
100	Seeing Picasso: an investigation into the visual system of the triggerfish, <i>Rhinecanthus aculeatus</i> .. <b>2022</b> ,		0
99	Integration and Spatial Organization of Signaling by G Protein-Coupled Receptor Homo- and Heterodimers.. <b>2021</b> , 11,		2
98	Overcoming Depression with 5-HT Receptor Ligands.. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 23,	6.3	1
97	Preventive Effects of $\beta$ -Cryptoxanthin, a Potent Antioxidant and Provitamin A Carotenoid, on Lifestyle-Related Diseases-A Central Focus on Its Effects on Non-Alcoholic Fatty Liver Disease (NAFLD).. <b>2021</b> , 11,		1
96	GPR180 is a component of TGF $\beta$ signalling that promotes thermogenic adipocyte function and mediates the metabolic effects of the adipocyte-secreted factor CTHRC1. <b>2021</b> , 12, 7144		3
95	CRISPR/Cas9-mediated generation of biallelic F0 anemonefish ( <i>Amphiprion ocellaris</i> ) mutants.. <b>2021</b> , 16, e0261331		0
94	Recent Advances in Structure, Function, and Pharmacology of Class A Lipid GPCRs: Opportunities and Challenges for Drug Discovery.. <b>2021</b> , 15,		1
93	Differential Bio-Optoelectronic Gating of Semiconducting Carbon Nanotubes by Varying the Covalent Attachment Residue of a Green Fluorescent Protein. 2112374		1

92	Chemogenomics Strategies for G-Protein Coupled Receptor Hit Finding. <b>2006</b> , 21-29		
91	Image_1.pdf. <b>2018</b> ,		
90	Table_1.docx. <b>2018</b> ,		
89	Table_2.DOCX. <b>2018</b> ,		
88	Image_1.TIF. <b>2018</b> ,		
87	Image_2.TIFF. <b>2018</b> ,		
86	Image_3.TIFF. <b>2018</b> ,		
85	Image_4.TIFF. <b>2018</b> ,		
84	Image_5.TIFF. <b>2018</b> ,		
83	Table_1.docx. <b>2018</b> ,		
82	Table_2.DOCX. <b>2018</b> ,		
81	Table_1.docx. <b>2019</b> ,		
80	Table_2.docx. <b>2019</b> ,		
79	The vertebrate phototransduction cascade: amplification and termination mechanisms. <b>2005</b> , 101		
78	Non-retinoid chaperones improve rhodopsin homeostasis in a mouse model of retinitis pigmentosa.. <i>JCI Insight</i> , <b>2022</b> ,	9.9	0
77	Photoperiodic regulation of avian physiology: From external coincidence to seasonal reproduction.. <i>Journal of Experimental Zoology Part A: Ecological and Integrative Physiology</i> , <b>2022</b> ,	1.9	1
76	GPCR-mediated $\beta$ -arrestin activation deconvoluted with single-molecule precision.. <i>Cell</i> , <b>2022</b> ,	56.2	0
75	Multi-State Modeling of G-protein Coupled Receptors at Experimental Accuracy.. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>2022</b> ,	4.2	5

74	True-atomic-resolution insights into the structure and functional role of linear chains and low-barrier hydrogen bonds in proteins.. <i>Nature Structural and Molecular Biology</i> , <b>2022</b> ,	17.6	2
73	Photoreceptor distributions, visual pigments and the opsin repertoire of Atlantic halibut ( <i>Hippoglossus hippoglossus</i> ).. <i>Scientific Reports</i> , <b>2022</b> , 12, 8062	4.9	0
72	Computational Design of Photochromic Proteins. <b>2022</b> , 1059-1083		
71	Rhodopsins: An Excitingly Versatile Protein Species for Research, Development and Creative Engineering. <i>Frontiers in Chemistry</i> , 10,	5	0
70	Structure of the GOLD-domain seven-transmembrane helix protein family member TMEM87A.		0
69	Common and selective signal transduction mechanisms of GPCRs. <i>Progress in Molecular Biology and Translational Science</i> , <b>2022</b> ,	4	
68	Heterologous Expression and Purification of GPCRs. <i>Methods in Molecular Biology</i> , <b>2022</b> , 295-312	1.4	1
67	Ancient whale rhodopsin reconstructs dim-light vision over a major evolutionary transition: Implications for ancestral diving behavior. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119,	11.5	1
66	In Silico Study of Allosteric Communication Networks in GPCR Signaling Bias. <i>International Journal of Molecular Sciences</i> , <b>2022</b> , 23, 7809	6.3	
65	Structural Validation by the G-Factor Properly Regulates Boost Potentials Imposed in Conformational Sampling of Proteins. <i>Journal of Chemical Information and Modeling</i> ,	6.1	1
64	Vitamin A, systemic T-cells, and the eye: Focus on degenerative retinal disease. <i>Frontiers in Nutrition</i> , 9,	6.2	1
63	Recent advances in function and structure of two leukotriene B4 receptors: BLT1 and BLT2. <i>Biochemical Pharmacology</i> , <b>2022</b> , 115178	6	0
62	The Gluopsins: Opsins without the Retinal Binding Lysine. <b>2022</b> , 11, 2441		0
61	Functional characteristics of animal opsins as optical control tools.. <b>2022</b> , 39, 84-91		
60	Extracellular loop 2 of G protein-coupled olfactory receptors is critical for odorant recognition. <b>2022</b> , 102331		0
59	Molecular Basis of Inhibitory Mechanism of Naltrexone and Its Metabolites through Structural and Energetic Analyses. <b>2022</b> , 27, 4919		
58	Structural insights from G-protein-coupled receptor complexes enable the rational engineering of improved light-activated designer receptors. <b>2022</b> , 30, 1043-1045		
57	Genetic characterization of the visual pigments of the red-eared turtle ( <i>Trachemys scripta elegans</i> ) and computational predictions of the spectral sensitivity. <b>2022</b> , 100141		0

- 56 Importance of Structure and Dynamics in the Rational Drug Design of G Protein-Coupled Receptor ( GPCR ) Modulators. **2022**, 424-457 ○
- 55 Molecular Biology of Microbial Rhodopsins. **2022**, 53-69 ○
- 54 Opioid Receptors and Neuronal Signal Transduction. **2022**, 175-195 ○
- 53 Genetics behind Cerebral Disease with Ocular Comorbidity: Finding Parallels between the Brain and Eye Molecular Pathology. **2022**, 23, 9707 ○
- 52 Ten Years of GPCR Structures. **2022**, 299-345 ○
- 51 19F NMR: A promising tool for dynamic conformational studies of G protein-coupled receptors. **2022**, 30, 1372-1384 ○
- 50 Interdisciplinary biophysical studies of membrane proteins bacteriorhodopsin and rhodopsin. ○
- 49 Retinal Cone Mosaic in sws1-Mutant Medaka (*Oryzias latipes*), A Teleost. **2022**, 63, 21 ○
- 48 Structural basis for recognition of antihistamine drug by human histamine receptor. **2022**, 13, 1
- 47 The Neurokinin-1 Receptor: Structure Dynamics and Signaling. **2022**, 1, 54-71 ○
- 46 Hidden GPCR structural transitions addressed by multiple walker supervised molecular dynamics (mwSuMD). ○
- 45 Diurnality shapes the visual opsin genes of colorful Neotropical frogs. ○
- 44 Mind the Gap! Deciphering GPCR Pharmacology Using 3D Pharmacophores and Artificial Intelligence. **2022**, 15, 1304 ○
- 43 Rhodopsin, light-sensor of vision. **2022**, 101116 ○
- 42 Advances in X-ray crystallography methods to study structural dynamics of macromolecules. **2023**, 309-355 ○
- 41 MODELE ODDZIAŃWAŁIGANDŃW ARYLOPIPERAZYNYLOWYCH Z RECEPTORAMI SEROTONINOWYMI 5-HT1A, 5-HT2A I 5-HT7. **2010**, 8, 13-21 ○
- 40 G Protein-Coupled Receptors Regulated by Membrane Potential. **2022**, 23, 13988 2
- 39 Retinal development and the expression profiles of opsin genes during larval development in *Takifugu rubripes*. ○

- 38 Structure of the GOLD-domain seven-transmembrane helix protein family member TMEM87A. 11, 0
- 37 Dynamic and thermodynamic impact of L94A, W100A, and W100L mutations on the D2 dopamine receptor bound to risperidone. 0
- 36 Ultrafast Two-Dimensional Infrared Spectroscopy Resolved a Structured Lysine 159 on the Cytoplasmic Surface of the Microbial Photoreceptor Bacteriorhodopsin. 0
- 35 Single-Step Protocol for Isolating the Recombinant Extracellular Domain of the Luteinizing Hormone Receptor from the *Ovis aries* Testis. **2022**, 44, 5718-5727 0
- 34 Early Proton Transfer Reaction in a Primate Blue-Sensitive Visual Pigment. 0
- 33 The evolutionary history and spectral tuning of vertebrate visual opsins. **2023**, 493, 40-66 0
- 32 Dynamic and thermodynamic impact of L94A, W100A, and W100L mutations on the D2 dopamine receptor bound to risperidone. **2022**, 12, 34359-34368 0
- 31 Pharmacology of orange-spotted grouper (*Epinephelus coioides*) melanocortin-5 receptor and its modulation by Mrap2. **2023**, 332, 114180 0
- 30 Problems of Quantum-Classical Modeling Of the Primary Photoreaction in Rhodopsin. **2022**, 17, 360-385 0
- 29 Protein Structure Validation Derives a Smart Conformational Search in a Physically Relevant Configurational Subspace. **2022**, 62, 6217-6227 0
- 28 Characterizing Molecular Dynamics Simulation on Commodity Platforms. **2022**, 0
- 27 G Protein-Regulated Signaling Dysfunction in Human Disease. **2003**, 51, 194-214 0
- 26 Present State of Knowledge of Chemistry of Our Vision: Photoreceptor Molecules and Vision Cycle. **2023**, 7, 309-320 0
- 25 Mandibulofacial dysostosis with alopecia results from gain-of-ETAR function via allosteric effects on ligand binding. 0
- 24 New simulation insights on the structural transition mechanism of Bovine Rhodopsin activation. 0
- 23 G Protein-Coupled Receptors: Conformational Gatekeepers of Transmembrane Signal Transduction and Diversification. **2011**, 188-229 0
- 22 Functional Optimization of Light-Activatable Opto-GPCRs: Illuminating the Importance of the Proximal C-terminus in G-protein Specificity. 1
- 21 Convergent evolution of animal and microbial rhodopsins. **2023**, 13, 5367-5381 0

- 20 Modeling of Olfactory Receptors. **2023**, 183-193
- 19 Ultrafast structural changes direct the first molecular events of vision. **2023**, 615, 939-944
- 18 Non-image-forming functional roles of OPN3, OPN4 and OPN5 photopigments. **2023**, 15, 100177
- 17 Vitamin A: Three Vitamer Forms: Retinol, Retinal, and Retinoic Acid. **2018**, 330-351
- 16 Cellular and Molecular Mechanisms of Pathogenesis Underlying Inherited Retinal Dystrophies. **2023**, 13, 271
- 15 Molecular Mechanism of Spectral Tuning by Chloride Binding in Monkey Green Sensitive Visual Pigment. **2023**, 14, 1784-1793
- 14 Repositioning Lomitapide to block ZDHHC5-dependant palmitoylation on SSTR5 leads to anti-proliferation effect in preclinical pancreatic cancer models. **2023**, 9,
- 13 Structural analysis of human G-protein-coupled receptor 17 ligand binding sites. **2023**, 124, 533-544
- 12 Allosteric modulation of G protein-coupled receptor signaling. 14,
- 11 Protein Design Strategies for the Structural&Functional Studies of G Protein-Coupled Receptors. **2023**, 88, S192-S226
- 10 All-Atom Molecular Dynamics Simulations Indicated the Involvement of a Conserved Polar Signaling Channel in the Activation Mechanism of the Type I Cannabinoid Receptor. **2023**, 24, 4232
- 9 Correction of rhodopsin serial crystallography diffraction intensities for a lattice-translocation defect. **2023**, 79, 224-233
- 8 Electronic Absorption. **2023**, 137-244
- 7 Functional optimization of light-activatable Opto-GPCRs: Illuminating the importance of the proximal C-terminus in G-protein specificity. 11,
- 6 Intermediate-state-trapped mutants pinpoint G protein-coupled receptor conformational allostery. **2023**, 14,
- 5 Earliest molecular events of vision revealed. **2023**, 615, 802-803
- 4 Difference FTIR Spectroscopy of Jumping Spider Rhodopsin-1 at 77 K. **2023**, 62, 1347-1359
- 3 Convergent evolutionary shifts in rhodopsin retinal release explain shared opsin repertoires in monotremes and crocodilians. **2023**, 290,

- 2 Supramolecular Chemistry of Multiblock Amphiphiles. **2023**, 1055-1083 ○
- 1 Counterion at an atypical position: Investigating the mechanism of photoisomerization in jellyfish rhodopsin. **2023**, 104726 ○