

Robert J Lefkowitz

List of Publications by Year in Descending Order

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

150
papers

36,765
citations

86
h-index

157
g-index

157
ext. papers

39,815
ext. citations

20.4
avg. IF

7.35
L-index

#	Paper	IF	Citations
150	The GPCR- β -arrestin complex allosterically activates C-Raf by binding its amino terminus. <i>Journal of Biological Chemistry</i> , 2021 , 297, 101369	5.4	1
149	Signaling at the endosome: cryo-EM structure of a GPCR-G protein- β -arrestin mega-complex. <i>FEBS Journal</i> , 2021 , 288, 2562-2569	5.7	7
148	β -Arrestin-Biased Allosteric Modulator Potentiates Carvedilol-Stimulated Adrenergic Receptor Cardioprotection. <i>Molecular Pharmacology</i> , 2021 , 100, 568-579	4.3	3
147	Unique Positive Cooperativity Between the β -Arrestin-Biased β -Blocker Carvedilol and a Small Molecule Positive Allosteric Modulator of the α_2 -Adrenergic Receptor. <i>Molecular Pharmacology</i> , 2021 , 100, 513-525	4.3	3
146	The β -Arrestin-biased β -adrenergic receptor blocker carvedilol enhances skeletal muscle contractility. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 12435-12443	11.5	10
145	β -Arrestin-Biased Angiotensin II Receptor Agonists for COVID-19. <i>Circulation</i> , 2020 , 142, 318-320	16.7	10
144	Conformational Basis of G Protein-Coupled Receptor Signaling Versatility. <i>Trends in Cell Biology</i> , 2020 , 30, 736-747	18.3	43
143	Angiotensin and biased analogs induce structurally distinct active conformations within a GPCR. <i>Science</i> , 2020 , 367, 888-892	33.3	74
142	Molecular mechanism of biased signaling in a prototypical G protein-coupled receptor. <i>Science</i> , 2020 , 367, 881-887	33.3	74
141	Structure of the M2 muscarinic receptor- β -arrestin complex in a lipid nanodisc. <i>Nature</i> , 2020 , 579, 297-302	50.4	123
140	Allosteric activation of proto-oncogene kinase Src by GPCR- β -arrestin complexes. <i>Journal of Biological Chemistry</i> , 2020 , 295, 16773-16784	5.4	11
139	Synthetic nanobodies as angiotensin receptor blockers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 20284-20291	11.5	14
138	SnapShot: β -Arrestin Functions. <i>Cell</i> , 2020 , 182, 1362-1362.e1	56.2	7
137	Detergent- and phospholipid-based reconstitution systems have differential effects on constitutive activity of G-protein-coupled receptors. <i>Journal of Biological Chemistry</i> , 2019 , 294, 13218-13223	5.4	19
136	Mechanism of β AR regulation by an intracellular positive allosteric modulator. <i>Science</i> , 2019 , 364, 1283-1287	33.3	36
135	Structure of an endosomal signaling GPCR-G protein- β -arrestin mega-complex. <i>Nature Structural and Molecular Biology</i> , 2019 , 26, 1123-1131	17.6	80
134	Angiotensin Analogs with Divergent Bias Stabilize Distinct Receptor Conformations. <i>Cell</i> , 2019 , 176, 468-478	47.8	114

133	Distinctive Activation Mechanism for Angiotensin Receptor Revealed by a Synthetic Nanobody. <i>Cell</i> , 2019 , 176, 479-490.e12	56.2	93
132	Biased signalling: from simple switches to allosteric microprocessors. <i>Nature Reviews Drug Discovery</i> , 2018 , 17, 243-260	64.1	319
131	Sortase ligation enables homogeneous GPCR phosphorylation to reveal diversity in β arrestin coupling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 3834-3839	11.5	39
130	A Serendipitous Scientist. <i>Annual Review of Pharmacology and Toxicology</i> , 2018 , 58, 17-32	17.9	1
129	GPCR signaling: conformational activation of arrestins. <i>Cell Research</i> , 2018 , 28, 783-784	24.7	11
128	G protein-coupled receptor kinases (GRKs) orchestrate biased agonism at the β adrenergic receptor. <i>Science Signaling</i> , 2018 , 11,	8.8	30
127	β Arrestin 1 regulates β -adrenergic receptor-mediated skeletal muscle hypertrophy and contractility. <i>Skeletal Muscle</i> , 2018 , 8, 39	5.1	21
126	Manifold roles of β arrestins in GPCR signaling elucidated with siRNA and CRISPR/Cas9. <i>Science Signaling</i> , 2018 , 11,	8.8	116
125	Small-Molecule Positive Allosteric Modulators of the β -Adrenoceptor Isolated from DNA-Encoded Libraries. <i>Molecular Pharmacology</i> , 2018 , 94, 850-861	4.3	42
124	Allosteric "beta-blocker" isolated from a DNA-encoded small molecule library. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 1708-1713	11.5	90
123	Distinct conformations of GPCR- β arrestin complexes mediate desensitization, signaling, and endocytosis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 2562-2567	11.5	194
122	β Arrestin2 Couples Metabotropic Glutamate Receptor 5 to Neuronal Protein Synthesis and Is a Potential Target to Treat Fragile X. <i>Cell Reports</i> , 2017 , 18, 2807-2814	10.6	41
121	Mechanism of intracellular allosteric β AR antagonist revealed by X-ray crystal structure. <i>Nature</i> , 2017 , 548, 480-484	50.4	100
120	β Arrestin2 mediates progression of murine primary myelofibrosis. <i>JCI Insight</i> , 2017 , 2,	9.9	4
119	Allosteric nanobodies reveal the dynamic range and diverse mechanisms of G-protein-coupled receptor activation. <i>Nature</i> , 2016 , 535, 448-52	50.4	205
118	Conformationally selective RNA aptamers allosterically modulate the β -adrenoceptor. <i>Nature Chemical Biology</i> , 2016 , 12, 709-16	11.7	53
117	GPCR-G Protein- β Arrestin Super-Complex Mediates Sustained G Protein Signaling. <i>Cell</i> , 2016 , 166, 907-916	56.2	324
116	The role of β arrestin2-dependent signaling in thoracic aortic aneurysm formation in a murine model of Marfan syndrome. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2015 , 309, H1516-27	5.2	14

115	Arrestin2 Is Necessary for Development of MPLW515L Mutant Primary Myelofibrosis. <i>Blood</i> , 2015 , 126, 486-486	2.2	
114	Divergent transducer-specific molecular efficacies generate biased agonism at a G protein-coupled receptor (GPCR). <i>Journal of Biological Chemistry</i> , 2014 , 289, 14211-24	5.4	82
113	Visualization of arrestin recruitment by a G-protein-coupled receptor. <i>Nature</i> , 2014 , 512, 218-222	50.4	349
112	Regulation of β -adrenergic receptor function by conformationally selective single-domain intrabodies. <i>Molecular Pharmacology</i> , 2014 , 85, 472-81	4.3	97
111	Recent developments in biased agonism. <i>Current Opinion in Cell Biology</i> , 2014 , 27, 18-24	9	220
110	Allosteric modulation of Arrestin-biased angiotensin II type 1 receptor signaling by membrane stretch. <i>Journal of Biological Chemistry</i> , 2014 , 289, 28271-83	5.4	44
109	Discovery of β Adrenergic Receptor Ligands Using Biosensor Fragment Screening of Tagged Wild-Type Receptor. <i>ACS Medicinal Chemistry Letters</i> , 2013 , 4, 1005-1010	4.3	55
108	Arrestins come of age: a personal historical perspective. <i>Progress in Molecular Biology and Translational Science</i> , 2013 , 118, 3-18	4	44
107	Structure of active Arrestin-1 bound to a G-protein-coupled receptor phosphopeptide. <i>Nature</i> , 2013 , 497, 137-41	50.4	310
106	A brief history of G-protein coupled receptors (Nobel Lecture). <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 6366-78	16.4	171
105	Eine kurze Geschichte der G-Protein-gekoppelten Rezeptoren (Nobel-Aufsatz). <i>Angewandte Chemie</i> , 2013 , 125, 6494-6507	3.6	9
104	Crystal structure of active Beta-arrestin1 bound to phosphorylated carboxy-terminus of a G protein-coupled receptor. <i>FASEB Journal</i> , 2013 , 27, lb549	0.9	
103	Targeting Arrestin2 Enhances Survival in a Murine Model of Chronic Myeloid Leukemia. <i>Blood</i> , 2013 , 122, 857-857	2.2	
102	Molecular mechanism of Arrestin-biased agonism at seven-transmembrane receptors. <i>Annual Review of Pharmacology and Toxicology</i> , 2012 , 52, 179-97	17.9	461
101	A stress response pathway regulates DNA damage through β -adrenoreceptors and Arrestin-1. <i>Nature</i> , 2011 , 477, 349-53	50.4	280
100	Therapeutic potential of Arrestin- and G protein-biased agonists. <i>Trends in Molecular Medicine</i> , 2011 , 17, 126-39	11.5	413
99	Arrestin-mediated receptor trafficking and signal transduction. <i>Trends in Pharmacological Sciences</i> , 2011 , 32, 521-33	13.2	519
98	Emerging paradigms of Arrestin-dependent seven transmembrane receptor signaling. <i>Trends in Biochemical Sciences</i> , 2011 , 36, 457-69	10.3	345

97	Distinct phosphorylation sites on the β_2 -adrenergic receptor establish a barcode that encodes differential functions of β arrestin. <i>Science Signaling</i> , 2011 , 4, ra51	8.8	418
96	Quantifying ligand bias at seven-transmembrane receptors. <i>Molecular Pharmacology</i> , 2011 , 80, 367-77	4.3	281
95	β arrestin deficiency protects against pulmonary fibrosis in mice and prevents fibroblast invasion of extracellular matrix. <i>Science Translational Medicine</i> , 2011 , 3, 74ra23	17.5	66
94	A tale of two callings. <i>Journal of Clinical Investigation</i> , 2011 , 121, 4201-3	15.9	2
93	Teaching old receptors new tricks: biasing seven-transmembrane receptors. <i>Nature Reviews Drug Discovery</i> , 2010 , 9, 373-86	64.1	644
92	Beta-arrestin- but not G protein-mediated signaling by the "decoy" receptor CXCR7. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010 , 107, 628-32	11.5	424
91	[beta]-arrestin 1 mediates angiotensin II induced ubiquitination and down-regulation of TRPV4. <i>FASEB Journal</i> , 2009 , 23, 944.3	0.9	
90	beta-arrestin-biased agonism at the beta2-adrenergic receptor. <i>Journal of Biological Chemistry</i> , 2008 , 283, 5669-76	5.4	208
89	Beta-arrestin-mediated signaling regulates protein synthesis. <i>Journal of Biological Chemistry</i> , 2008 , 283, 10611-20	5.4	76
88	Pharmacological characterization of membrane-expressed human trace amine-associated receptor 1 (TAAR1) by a bioluminescence resonance energy transfer cAMP biosensor. <i>Molecular Pharmacology</i> , 2008 , 74, 585-594	4.3	104
87	The annual ASCI meeting: does nostalgia have a future?. <i>Journal of Clinical Investigation</i> , 2008 , 118, 1231-3	3.9	2
86	Beta-arrestins and cell signaling. <i>Annual Review of Physiology</i> , 2007 , 69, 483-510	23.1	1135
85	The active conformation of beta-arrestin1: direct evidence for the phosphate sensor in the N-domain and conformational differences in the active states of beta-arrestins1 and -2. <i>Journal of Biological Chemistry</i> , 2007 , 282, 21370-81	5.4	99
84	A unique mechanism of beta-blocker action: carvedilol stimulates beta-arrestin signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 16657-62	11.5	466
83	Introduction to Special Section on β Arrestins. <i>Annual Review of Physiology</i> , 2007 , 69,	23.1	25
82	Beta-arrestin-mediated beta1-adrenergic receptor transactivation of the EGFR confers cardioprotection. <i>Journal of Clinical Investigation</i> , 2007 , 117, 2445-58	15.9	344
81	Distinct beta-arrestin- and G protein-dependent pathways for parathyroid hormone receptor-stimulated ERK1/2 activation. <i>Journal of Biological Chemistry</i> , 2006 , 281, 10856-64	5.4	383
80	beta-arrestin-dependent, G protein-independent ERK1/2 activation by the beta2 adrenergic receptor. <i>Journal of Biological Chemistry</i> , 2006 , 281, 1261-73	5.4	585

79	New roles for beta-arrestins in cell signaling: not just for seven-transmembrane receptors. <i>Molecular Cell</i> , 2006 , 24, 643-652	17.6	247
78	Conformational Changes in β arrestin1: The Importance of β arrestin1 N-domain. <i>FASEB Journal</i> , 2006 , 20, A114	0.9	
77	Transduction of receptor signals by beta-arrestins. <i>Science</i> , 2005 , 308, 512-7	33.3	1394
76	Summary of Wenner-Gren international symposium receptor-receptor interactions among heptaspanning membrane receptors: from structure to function. <i>Journal of Molecular Neuroscience</i> , 2005 , 26, 293-4	3.3	5
75	Historical Background and Introduction. <i>Methods and Principles in Medicinal Chemistry</i> , 2005 , 1-10	0.4	1
74	Functional antagonism of different G protein-coupled receptor kinases for beta-arrestin-mediated angiotensin II receptor signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 1442-7	11.5	282
73	Different G protein-coupled receptor kinases govern G protein and beta-arrestin-mediated signaling of V2 vasopressin receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 1448-53	11.5	268
72	Constitutive protease-activated receptor-2-mediated migration of MDA MB-231 breast cancer cells requires both beta-arrestin-1 and -2. <i>Journal of Biological Chemistry</i> , 2004 , 279, 55419-24	5.4	144
71	Differential kinetic and spatial patterns of beta-arrestin and G protein-mediated ERK activation by the angiotensin II receptor. <i>Journal of Biological Chemistry</i> , 2004 , 279, 35518-25	5.4	402
70	Stable interaction between beta-arrestin 2 and angiotensin type 1A receptor is required for beta-arrestin 2-mediated activation of extracellular signal-regulated kinases 1 and 2. <i>Journal of Biological Chemistry</i> , 2004 , 279, 48255-61	5.4	67
69	Activation-dependent conformational changes in β -arrestin 2. <i>Journal of Biological Chemistry</i> , 2004 , 279, 55744-53	5.4	111
68	Reciprocal regulation of angiotensin receptor-activated extracellular signal-regulated kinases by beta-arrestins 1 and 2. <i>Journal of Biological Chemistry</i> , 2004 , 279, 7807-11	5.4	143
67	beta-arrestins: traffic cops of cell signaling. <i>Current Opinion in Cell Biology</i> , 2004 , 16, 162-8	9	250
66	Historical review: a brief history and personal retrospective of seven-transmembrane receptors. <i>Trends in Pharmacological Sciences</i> , 2004 , 25, 413-22	13.2	318
65	The stability of the G protein-coupled receptor-beta-arrestin interaction determines the mechanism and functional consequence of ERK activation. <i>Journal of Biological Chemistry</i> , 2003 , 278, 6258-67	5.4	282
64	Desensitization, internalization, and signaling functions of beta-arrestins demonstrated by RNA interference. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 1740-4	11.5	193
63	Keeping G proteins at bay: a complex between G protein-coupled receptor kinase 2 and Gbetagamma. <i>Science</i> , 2003 , 300, 1256-62	33.3	327
62	Independent beta-arrestin 2 and G protein-mediated pathways for angiotensin II activation of extracellular signal-regulated kinases 1 and 2. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 10782-7	11.5	569

61	Beta-arrestin-2 regulates the development of allergic asthma. <i>Journal of Clinical Investigation</i> , 2003 , 112, 566-74	15.9	86
60	Beta-arrestin-2 regulates the development of allergic asthma. <i>Journal of Clinical Investigation</i> , 2003 , 112, 566-574	15.9	147
59	Seven-transmembrane-spanning receptors and heart function. <i>Nature</i> , 2002 , 415, 206-12	50.4	763
58	Seven-transmembrane receptors. <i>Nature Reviews Molecular Cell Biology</i> , 2002 , 3, 639-50	48.7	2032
57	Protein kinase A-mediated phosphorylation of the beta 2-adrenergic receptor regulates its coupling to Gs and Gi. Demonstration in a reconstituted system. <i>Journal of Biological Chemistry</i> , 2002 , 277, 31249-56	5.4	148
56	Beta-arrestin scaffolding of the ERK cascade enhances cytosolic ERK activity but inhibits ERK-mediated transcription following angiotensin AT1a receptor stimulation. <i>Journal of Biological Chemistry</i> , 2002 , 277, 9429-36	5.4	314
55	Dancing with different partners: protein kinase A phosphorylation of seven membrane-spanning receptors regulates their G protein-coupling specificity. <i>Molecular Pharmacology</i> , 2002 , 62, 971-4	4.3	148
54	Phosphorylation of beta-arrestin2 regulates its function in internalization of beta(2)-adrenergic receptors. <i>Biochemistry</i> , 2002 , 41, 10692-9	3.2	81
53	The role of beta-arrestins in the termination and transduction of G-protein-coupled receptor signals. <i>Journal of Cell Science</i> , 2002 , 115, 455-465	5.3	788
52	The role of beta-arrestins in the termination and transduction of G-protein-coupled receptor signals. <i>Journal of Cell Science</i> , 2002 , 115, 455-65	5.3	729
51	Augmentation of cardiac contractility mediated by the human beta(3)-adrenergic receptor overexpressed in the hearts of transgenic mice. <i>Circulation</i> , 2001 , 104, 2485-91	16.7	71
50	Classical and new roles of beta-arrestins in the regulation of G-protein-coupled receptors. <i>Nature Reviews Neuroscience</i> , 2001 , 2, 727-33	13.5	371
49	Mu-opioid receptor desensitization by beta-arrestin-2 determines morphine tolerance but not dependence. <i>Nature</i> , 2000 , 408, 720-3	50.4	709
48	Intracoronary adenovirus-mediated delivery and overexpression of the beta(2)-adrenergic receptor in the heart : prospects for molecular ventricular assistance. <i>Circulation</i> , 2000 , 101, 408-14	16.7	122
47	alpha-Actinin is a potent regulator of G protein-coupled receptor kinase activity and substrate specificity in vitro. <i>FEBS Letters</i> , 2000 , 473, 280-4	3.8	38
46	Beta-arrestin 2: a receptor-regulated MAPK scaffold for the activation of JNK3. <i>Science</i> , 2000 , 290, 1574-7	33.3	675
45	Altered airway and cardiac responses in mice lacking G protein-coupled receptor kinase 3. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1999 , 276, R1214-21	3.2	27
44	Enhanced morphine analgesia in mice lacking beta-arrestin 2. <i>Science</i> , 1999 , 286, 2495-8	33.3	815

43	Myocardial G protein-coupled receptor kinases: implications for heart failure therapy. <i>Proceedings of the Association of American Physicians</i> , 1999 , 111, 399-405		28
42	The beta2-adrenergic receptor interacts with the Na ⁺ /H ⁺ -exchanger regulatory factor to control Na ⁺ /H ⁺ exchange. <i>Nature</i> , 1998 , 392, 626-30	50.4	532
41	Palmitoylation increases the kinase activity of the G protein-coupled receptor kinase, GRK6. <i>Biochemistry</i> , 1998 , 37, 16053-9	3.2	41
40	G protein-coupled receptor kinases. <i>Annual Review of Biochemistry</i> , 1998 , 67, 653-92	29.1	1074
39	Gbetagamma subunits mediate Src-dependent phosphorylation of the epidermal growth factor receptor. A scaffold for G protein-coupled receptor-mediated Ras activation. <i>Journal of Biological Chemistry</i> , 1997 , 272, 4637-44	5.4	366
38	Switching of the coupling of the beta2-adrenergic receptor to different G proteins by protein kinase A. <i>Nature</i> , 1997 , 390, 88-91	50.4	1090
37	Identification of the G protein-coupled receptor kinase phosphorylation sites in the human beta2-adrenergic receptor. <i>Journal of Biological Chemistry</i> , 1996 , 271, 13796-803	5.4	193
36	Role of c-Src tyrosine kinase in G protein-coupled receptor- and Gbetagamma subunit-mediated activation of mitogen-activated protein kinases. <i>Journal of Biological Chemistry</i> , 1996 , 271, 19443-50	5.4	435
35	Physiological effects of inverse agonists in transgenic mice with myocardial overexpression of the beta 2-adrenoceptor. <i>Nature</i> , 1995 , 374, 272-6	50.4	401
34	Receptor-tyrosine-kinase- and G beta gamma-mediated MAP kinase activation by a common signalling pathway. <i>Nature</i> , 1995 , 376, 781-4	50.4	526
33	Protein kinases that phosphorylate activated G protein-coupled receptors. <i>FASEB Journal</i> , 1995 , 9, 175-82	9	460
32	Distinct pathways of Gi- and Gq-mediated mitogen-activated protein kinase activation. <i>Journal of Biological Chemistry</i> , 1995 , 270, 17148-53	5.4	357
31	A region of adenylyl cyclase 2 critical for regulation by G protein beta gamma subunits. <i>Science</i> , 1995 , 268, 1166-9	33.3	240
30	Activation of the cloned muscarinic potassium channel by G protein beta gamma subunits. <i>Nature</i> , 1994 , 370, 143-6	50.4	446
29	Identification, quantification, and localization of mRNA for three distinct alpha 1 adrenergic receptor subtypes in human prostate. <i>Journal of Urology</i> , 1993 , 150, 546-51	2.5	282
28	Isoprenylation in regulation of signal transduction by G-protein-coupled receptor kinases. <i>Nature</i> , 1992 , 359, 147-50	50.4	285
27	Mechanisms involved in adrenergic receptor desensitization. <i>Biochemical Society Transactions</i> , 1990 , 18, 541-4	5.1	26
26	Turning off the signal: desensitization of adrenergic receptor function. <i>FASEB Journal</i> , 1990 , 4, 2881-2889	9	1077

25	Response : Analysis of Ligand Binding Specificity of Receptor Chimeras. <i>Science</i> , 1989 , 243, 237-237	33.3	
24	Removal of phosphorylation sites from the beta 2-adrenergic receptor delays onset of agonist-promoted desensitization. <i>Nature</i> , 1988 , 333, 370-3	50.4	413
23	The genomic clone G-21 which resembles a beta-adrenergic receptor sequence encodes the 5-HT1A receptor. <i>Nature</i> , 1988 , 335, 358-60	50.4	583
22	Cloning of the cDNA and genes for the hamster and human beta 2-adrenergic receptors. <i>Journal of Receptors and Signal Transduction</i> , 1988 , 8, 7-21		13
21	Regulation of the beta 2-adrenergic receptor and its mRNA in the rat ventral prostate by testosterone. <i>FEBS Letters</i> , 1988 , 233, 173-6	3.8	38
20	Cross-talk between cellular signalling pathways suggested by phorbol-ester-induced adenylate cyclase phosphorylation. <i>Nature</i> , 1987 , 327, 67-70	50.4	502
19	An intronless gene encoding a potential member of the family of receptors coupled to guanine nucleotide regulatory proteins. <i>Nature</i> , 1987 , 329, 75-9	50.4	489
18	Cloning of the gene and cDNA for mammalian beta-adrenergic receptor and homology with rhodopsin. <i>Nature</i> , 1986 , 321, 75-9	50.4	1175
17	Light-dependent phosphorylation of rhodopsin by beta-adrenergic receptor kinase. <i>Nature</i> , 1986 , 321, 869-72	50.4	180
16	Identification of the subunit structure of rat pineal adrenergic receptors by photoaffinity labeling. <i>Journal of Neurochemistry</i> , 1986 , 46, 1153-60	6	12
15	Molecular mechanisms of receptor desensitization using the beta-adrenergic receptor-coupled adenylate cyclase system as a model. <i>Nature</i> , 1985 , 317, 124-9	50.4	701
14	A role for Ni in the hormonal stimulation of adenylate cyclase. <i>Nature</i> , 1985 , 318, 293-5	50.4	99
13	Effect of pertussis toxin on alpha 2-adrenoceptors: decreased formation of the high-affinity state for agonists. <i>FEBS Letters</i> , 1984 , 172, 95-8	3.8	18
12	Pure beta-adrenergic receptor: the single polypeptide confers catecholamine responsiveness to adenylate cyclase. <i>Nature</i> , 1983 , 306, 562-6	50.4	104
11	Molecular mechanisms of coupling in hormone receptor-adenylate cyclase systems. <i>Advances in Enzymology and Related Areas of Molecular Biology</i> , 1982 , 53, 1-43		16
10	Polymeric drugs by direct copolymerization: Polymer of beta-adrenergic antagonist alprenolol and its binding to receptors and antibodies. <i>Die Makromolekulare Chemie</i> , 1981 , 182, 1945-1950		6
9	Dihydroergocryptine binding and alpha-adrenoreceptors in smooth muscle. <i>Nature</i> , 1980 , 283, 109-10	50.4	6
8	Differential regulation of the alpha 2-adrenergic receptor by Na ⁺ and guanine nucleotides. <i>Nature</i> , 1980 , 288, 709-11	50.4	117

- 7 Beta-adrenoreceptors determine affinity but not intrinsic activity of adenylate cyclase stimulants. *Nature*, **1979**, 280, 502-4 50.4 23
- 6 Chronic guanethidine treatment increases cardiac beta-adrenergic receptors. *Nature*, **1978**, 273, 240-2 50.4 84
- 5 Beta-adrenergic receptors: regulatory role of agonists. *Journal of Supramolecular Structure*, **1978**, 8, 501-10 7
- 4 Comparison of specificity of agonist and antagonist radioligand binding to beta adrenergic receptors. *Nature*, **1977**, 268, 453-4 50.4 17
- 3 Temperature immutability of adenylyl cyclase-coupled beta adrenergic receptors. *Nature*, **1974**, 249, 258-60 50.4 30
- 2 ACTH-receptor interaction in the adrenal: a model for the initial step in the action of hormones that stimulate adenylyl cyclase. *Annals of the New York Academy of Sciences*, **1971**, 185, 195-209 6.5 90
- 1 Costimulation of Adenylyl Cyclase and Phospholipase C by a Mutant β -Adrenergic Receptor Transgene Promotes Malignant Transformation of Thyroid Follicular Cells 6