

Robert J Lefkowitz

List of Publications by Year in descending order

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146
papers

43,593
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3857

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h-index

7703

152
g-index

163
all docs

163
docs citations

163
times ranked

23686
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Seven-transmembrane receptors. <i>Nature Reviews Molecular Cell Biology</i> , 2002, 3, 639-650. | 37.3 | 2,391 |
| 2 | Transduction of Receptor Signals by β -Arrestins. <i>Science</i> , 2005, 308, 512-517. | 20.9 | 1,586 |
| 3 | β -Arrestins and Cell Signaling. <i>Annual Review of Physiology</i> , 2007, 69, 483-510. | 13.2 | 1,298 |
| 4 | Cloning of the gene and cDNA for mammalian β -adrenergic receptor and homology with rhodopsin. <i>Nature</i> , 1986, 321, 75-79. | 36.2 | 1,291 |
| 5 | G PROTEIN-COUPLED RECEPTOR KINASES. <i>Annual Review of Biochemistry</i> , 1998, 67, 653-692. | 11.2 | 1,208 |
| 6 | Switching of the coupling of the β -adrenergic receptor to different G proteins by protein kinase A. <i>Nature</i> , 1997, 390, 88-91. | 36.2 | 1,190 |
| 7 | Enhanced Morphine Analgesia in Mice Lacking β -Arrestin 2. <i>Science</i> , 1999, 286, 2495-2498. | 20.9 | 969 |
| 8 | The role of β -arrestins in the termination and transduction of G-protein-coupled receptor signals. <i>Journal of Cell Science</i> , 2002, 115, 455-465. | 2.1 | 946 |
| 9 | Seven-transmembrane-spanning receptors and heart function. <i>Nature</i> , 2002, 415, 206-212. | 36.2 | 878 |
| 10 | μ -Opioid receptor desensitization by β -arrestin-2 determines morphine tolerance but not dependence. <i>Nature</i> , 2000, 408, 720-723. | 36.2 | 844 |
| 11 | beta -Arrestin 2: A Receptor-Regulated MAPK Scaffold for the Activation of JNK3. , 2000, 290, 1574-1577. | | 763 |
| 12 | Molecular mechanisms of receptor desensitization using the β -adrenergic receptor-coupled adenylate cyclase system as a model. <i>Nature</i> , 1985, 317, 124-129. | 36.2 | 759 |
| 13 | Teaching old receptors new tricks: biasing seven-transmembrane receptors. <i>Nature Reviews Drug Discovery</i> , 2010, 9, 373-386. | 61.5 | 733 |
| 14 | β -Arrestin-dependent, G Protein-independent ERK1/2 Activation by the β Adrenergic Receptor. <i>Journal of Biological Chemistry</i> , 2006, 281, 1261-1273. | 3.5 | 660 |
| 15 | β -arrestin-mediated receptor trafficking and signal transduction. <i>Trends in Pharmacological Sciences</i> , 2011, 32, 521-533. | 8.6 | 640 |
| 16 | Independent β -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, 10782-10787. | 7.6 | 628 |
| 17 | The genomic clone G-21 which resembles a β -adrenergic receptor sequence encodes the 5-HT1A receptor. <i>Nature</i> , 1988, 335, 358-360. | 36.2 | 613 |
| 18 | The β -adrenergic receptor interacts with the Na ⁺ /H ⁺ -exchanger regulatory factor to control Na ⁺ /H ⁺ exchange. <i>Nature</i> , 1998, 392, 626-630. | 36.2 | 570 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Biased signalling: from simple switches to allosteric microprocessors. <i>Nature Reviews Drug Discovery</i> , 2018, 17, 243-260. | 61.5 | 562 |
| 20 | Distinct Phosphorylation Sites on the β_2 -Adrenergic Receptor Establish a Barcode That Encodes Differential Functions of β_2 -Arrestin. <i>Science Signaling</i> , 2011, 4, ra51. | 5.1 | 560 |
| 21 | Receptor-tyrosine-kinase- and $G_{12/13}$ -mediated MAP kinase activation by a common signalling pathway. <i>Nature</i> , 1995, 376, 781-784. | 36.2 | 555 |
| 22 | A unique mechanism of β_2 -blocker action: Carvedilol stimulates β_2 -arrestin signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 16657-16662. | 7.6 | 555 |
| 23 | Molecular Mechanism of β_2 -Arrestin-Biased Agonism at Seven-Transmembrane Receptors. <i>Annual Review of Pharmacology and Toxicology</i> , 2012, 52, 179-197. | 9.6 | 543 |
| 24 | Cross-talk between cellular signalling pathways suggested by phorbol-ester-induced adenylate cyclase phosphorylation. <i>Nature</i> , 1987, 327, 67-70. | 36.2 | 538 |
| 25 | An intronless gene encoding a potential member of the family of receptors coupled to guanine nucleotide regulatory proteins. <i>Nature</i> , 1987, 329, 75-79. | 36.2 | 515 |
| 26 | β_2 -arrestin- but not G protein-mediated signaling by the ϵ -receptor CXCR7. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 628-632. | 7.6 | 511 |
| 27 | Protein kinases that phosphorylate activated G protein-coupled receptors. <i>FASEB Journal</i> , 1995, 9, 175-182. | 0.5 | 496 |
| 28 | Role of c-Src Tyrosine Kinase in G Protein-coupled Receptor and $G_{12/13}$ Subunit-mediated Activation of Mitogen-activated Protein Kinases. <i>Journal of Biological Chemistry</i> , 1996, 271, 19443-19450. | 3.5 | 489 |
| 29 | Activation of the cloned muscarinic potassium channel by G protein $G_{12/13}$ subunits. <i>Nature</i> , 1994, 370, 143-146. | 36.2 | 485 |
| 30 | Therapeutic potential of β_2 -arrestin- and G protein-biased agonists. <i>Trends in Molecular Medicine</i> , 2011, 17, 126-139. | 7.1 | 475 |
| 31 | GPCR-G Protein- β_2 -Arrestin Super-Complex Mediates Sustained G Protein Signaling. <i>Cell</i> , 2016, 166, 907-919. | 27.8 | 468 |
| 32 | Differential Kinetic and Spatial Patterns of β_2 -Arrestin and G Protein-mediated ERK Activation by the Angiotensin II Receptor. <i>Journal of Biological Chemistry</i> , 2004, 279, 35518-35525. | 3.5 | 463 |
| 33 | Visualization of arrestin recruitment by a G-protein-coupled receptor. <i>Nature</i> , 2014, 512, 218-222. | 36.2 | 447 |
| 34 | Removal of phosphorylation sites from the β_2 -adrenergic receptor delays onset of agonist-promoted desensitization. <i>Nature</i> , 1988, 333, 370-373. | 36.2 | 439 |
| 35 | Physiological effects of inverse agonists in transgenic mice with myocardial overexpression of the β_2 -adrenoceptor. <i>Nature</i> , 1995, 374, 272-276. | 36.2 | 433 |
| 36 | Distinct β_2 -Arrestin- and G Protein-dependent Pathways for Parathyroid Hormone Receptor-stimulated ERK1/2 Activation. <i>Journal of Biological Chemistry</i> , 2006, 281, 10856-10864. | 3.5 | 429 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 37 | G β 3 Subunits Mediate Src-dependent Phosphorylation of the Epidermal Growth Factor Receptor. <i>Journal of Biological Chemistry</i> , 1997, 272, 4637-4644. | 3.5 | 424 |
| 38 | Classical and new roles of β -arrestins in the regulation of G-PROTEIN-COUPLED receptors. <i>Nature Reviews Neuroscience</i> , 2001, 2, 727-733. | 10.7 | 418 |
| 39 | Structure of active β -arrestin-1 bound to a G-protein-coupled receptor phosphopeptide. <i>Nature</i> , 2013, 497, 137-141. | 36.2 | 411 |
| 40 | β -Arrestin-mediated β 1-adrenergic receptor transactivation of the EGFR confers cardioprotection. <i>Journal of Clinical Investigation</i> , 2007, 117, 2445-2458. | 8.2 | 408 |
| 41 | Distinct Pathways of Gi- and Gq-mediated Mitogen-activated Protein Kinase Activation. <i>Journal of Biological Chemistry</i> , 1995, 270, 17148-17153. | 3.5 | 399 |
| 42 | Emerging paradigms of β -arrestin-dependent seven transmembrane receptor signaling. <i>Trends in Biochemical Sciences</i> , 2011, 36, 457-469. | 7.5 | 386 |
| 43 | Historical review: A brief history and personal retrospective of seven-transmembrane receptors. <i>Trends in Pharmacological Sciences</i> , 2004, 25, 413-422. | 8.6 | 369 |
| 44 | A stress response pathway regulates DNA damage through β 2-adrenoreceptors and β -arrestin-1. <i>Nature</i> , 2011, 477, 349-353. | 36.2 | 369 |
| 45 | Quantifying Ligand Bias at Seven-Transmembrane Receptors. <i>Molecular Pharmacology</i> , 2011, 80, 367-377. | 2.3 | 356 |
| 46 | β -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, 9429-9436. | 3.5 | 348 |
| 47 | Functional antagonism of different G protein-coupled receptor kinases for β -arrestin-mediated angiotensin II receptor signaling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1442-1447. | 7.6 | 326 |
| 48 | The Stability of the G Protein-coupled Receptor- β -Arrestin Interaction Determines the Mechanism and Functional Consequence of ERK Activation. <i>Journal of Biological Chemistry</i> , 2003, 278, 6258-6267. | 3.5 | 321 |
| 49 | Isoprenylation in regulation of signal transduction by G-protein-coupled receptor kinases. <i>Nature</i> , 1992, 359, 147-150. | 36.2 | 310 |
| 50 | Identification, Quantification, and Localization of mRNA for Three Distinct Alpha ₁ Adrenergic Receptor Subtypes in Human Prostate. <i>Journal of Urology</i> , 1993, 150, 546-551. | 3.8 | 310 |
| 51 | Allosteric nanobodies reveal the dynamic range and diverse mechanisms of G-protein-coupled receptor activation. <i>Nature</i> , 2016, 535, 448-452. | 36.2 | 306 |
| 52 | Different G protein-coupled receptor kinases govern G protein and β -arrestin-mediated signaling of V2 vasopressin receptor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 1448-1453. | 7.6 | 305 |
| 53 | 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. | 7.6 | 304 |
| 54 | New Roles for β -Arrestins in Cell Signaling: Not Just for Seven-Transmembrane Receptors. <i>Molecular Cell</i> , 2006, 24, 643-652. | 9.6 | 280 |

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|----|--|------|-----------|
| 55 | β^2 -arrestins: traffic cops of cell signaling. <i>Current Opinion in Cell Biology</i> , 2004, 16, 162-168. | 5.6 | 271 |
| 56 | Structure of the M2 muscarinic receptor β^2 -arrestin complex in a lipid nanodisc. <i>Nature</i> , 2020, 579, 297-302. | 36.2 | 256 |
| 57 | Recent developments in biased agonism. <i>Current Opinion in Cell Biology</i> , 2014, 27, 18-24. | 5.6 | 252 |
| 58 | A Brief History of G β -Protein Coupled Receptors (Nobel Lecture). <i>Angewandte Chemie - International Edition</i> , 2013, 52, 6366-6378. | 14.8 | 232 |
| 59 | β^2 -Arrestin-biased Agonism at the β^2 -Adrenergic Receptor. <i>Journal of Biological Chemistry</i> , 2008, 283, 5669-5676. | 3.5 | 226 |
| 60 | Desensitization, internalization, and signaling functions of β -arrestins demonstrated by RNA interference. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 1740-1744. | 7.6 | 216 |
| 61 | Angiotensin Analogs with Divergent Bias Stabilize Distinct Receptor Conformations. <i>Cell</i> , 2019, 176, 468-478.e11. | 27.8 | 212 |
| 62 | Identification of the G Protein-coupled Receptor Kinase Phosphorylation Sites in the Human β^2 -Adrenergic Receptor. <i>Journal of Biological Chemistry</i> , 1996, 271, 13796-13803. | 3.5 | 210 |
| 63 | Light-dependent phosphorylation of rhodopsin by β^2 -adrenergic receptor kinase. <i>Nature</i> , 1986, 321, 869-872. | 36.2 | 208 |
| 64 | Manifold roles of β^2 -arrestins in GPCR signaling elucidated with siRNA and CRISPR/Cas9. <i>Science Signaling</i> , 2018, 11, . | 5.1 | 181 |
| 65 | Protein Kinase A-mediated Phosphorylation of the β^2 -Adrenergic Receptor Regulates Its Coupling to Gs and Gi. <i>Journal of Biological Chemistry</i> , 2002, 277, 31249-31256. | 3.5 | 179 |
| 66 | Molecular mechanism of biased signaling in a prototypical G protein β -coupled receptor. <i>Science</i> , 2020, 367, 881-887. | 20.9 | 176 |
| 67 | β^2 -Arrestin-2 regulates the development of allergic asthma. <i>Journal of Clinical Investigation</i> , 2003, 112, 566-574. | 8.2 | 167 |
| 68 | Mechanism of intracellular allosteric β^2 AR antagonist revealed by X-ray crystal structure. <i>Nature</i> , 2017, 548, 480-484. | 36.2 | 166 |
| 69 | Conformational Basis of G Protein-Coupled Receptor Signaling Versatility. <i>Trends in Cell Biology</i> , 2020, 30, 736-747. | 8.1 | 163 |
| 70 | 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, 971-974. | 2.3 | 162 |
| 71 | Reciprocal Regulation of Angiotensin Receptor-activated Extracellular Signal-regulated Kinases by β^2 -Arrestins 1 and 2. <i>Journal of Biological Chemistry</i> , 2004, 279, 7807-7811. | 3.5 | 159 |
| 72 | Constitutive Protease-activated Receptor-2-mediated Migration of MDA MB-231 Breast Cancer Cells Requires Both β^2 -Arrestin-1 and -2. <i>Journal of Biological Chemistry</i> , 2004, 279, 55419-55424. | 3.5 | 157 |

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|----|---|------|-----------|
| 73 | Structure of an endosomal signaling GPCR-G protein- β -arrestin megacomplex. <i>Nature Structural and Molecular Biology</i> , 2019, 26, 1123-1131. | 8.1 | 156 |
| 74 | Distinctive Activation Mechanism for Angiotensin Receptor Revealed by a Synthetic Nanobody. <i>Cell</i> , 2019, 176, 479-490.e12. | 27.8 | 148 |
| 75 | 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. | 2.3 | 137 |
| 76 | Activation-dependent Conformational Changes in β -Arrestin 2. <i>Journal of Biological Chemistry</i> , 2004, 279, 55744-55753. | 3.5 | 136 |
| 77 | Allosteric β -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. | 7.6 | 126 |
| 78 | Regulation of β -Adrenergic Receptor Function by Conformationally Selective Single-Domain Intrabodies. <i>Molecular Pharmacology</i> , 2014, 85, 472-481. | 2.3 | 125 |
| 79 | Differential regulation of the β -adrenergic receptor by Na ⁺ and guanine nucleotides. <i>Nature</i> , 1980, 288, 709-711. | 36.2 | 123 |
| 80 | The Active Conformation of β -Arrestin1. <i>Journal of Biological Chemistry</i> , 2007, 282, 21370-21381. | 3.5 | 123 |
| 81 | Pure β -adrenergic receptor: the single polypeptide confers catecholamine responsiveness to adenylate cyclase. <i>Nature</i> , 1983, 306, 562-566. | 36.2 | 117 |
| 82 | Divergent Transducer-specific Molecular Efficacies Generate Biased Agonism at a G Protein-coupled Receptor (GPCR). <i>Journal of Biological Chemistry</i> , 2014, 289, 14211-14224. | 3.5 | 112 |
| 83 | A role for Ni in the hormonal stimulation of adenylate cyclase. <i>Nature</i> , 1985, 318, 293-295. | 36.2 | 107 |
| 84 | Turned on to ill effect. <i>Nature</i> , 1993, 365, 603-604. | 36.2 | 101 |
| 85 | β -Arrestin-2 regulates the development of allergic asthma. <i>Journal of Clinical Investigation</i> , 2003, 112, 566-574. | 8.2 | 100 |
| 86 | Chronic guanethidine treatment increases cardiac β -adrenergic receptors. <i>Nature</i> , 1978, 273, 240-242. | 36.2 | 89 |
| 87 | Phosphorylation of β -Arrestin2 Regulates Its Function in Internalization of β -Adrenergic Receptors. <i>Biochemistry</i> , 2002, 41, 10692-10699. | 2.6 | 87 |
| 88 | β -Arrestin-mediated Signaling Regulates Protein Synthesis. <i>Journal of Biological Chemistry</i> , 2008, 283, 10611-10620. | 3.5 | 84 |
| 89 | β -Arrestin Deficiency Protects Against Pulmonary Fibrosis in Mice and Prevents Fibroblast Invasion of Extracellular Matrix. <i>Science Translational Medicine</i> , 2011, 3, 74ra23. | 13.4 | 83 |
| 90 | Stable Interaction between β -Arrestin 2 and Angiotensin Type 1A Receptor Is Required for β -Arrestin 2-mediated Activation of Extracellular Signal-regulated Kinases 1 and 2. <i>Journal of Biological Chemistry</i> , 2004, 279, 48255-48261. | 3.5 | 78 |

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|-----|---|------|-----------|
| 91 | Small-Molecule Positive Allosteric Modulators of the β_2 -Adrenoceptor Isolated from DNA-Encoded Libraries. <i>Molecular Pharmacology</i> , 2018, 94, 850-861. | 2.3 | 71 |
| 92 | Conformationally selective RNA aptamers allosterically modulate the β_2 -adrenoceptor. <i>Nature Chemical Biology</i> , 2016, 12, 709-716. | 8.0 | 70 |
| 93 | Discovery of β_2 Adrenergic Receptor Ligands Using Biosensor Fragment Screening of Tagged Wild-Type Receptor. <i>ACS Medicinal Chemistry Letters</i> , 2013, 4, 1005-1010. | 3.1 | 66 |
| 94 | GPCR-mediated β_2 -arrestin activation deconvoluted with single-molecule precision. <i>Cell</i> , 2022, 185, 1661-1675.e16. | 27.8 | 64 |
| 95 | β_2 -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. | 6.3 | 61 |
| 96 | Sortase ligation enables homogeneous GPCR phosphorylation to reveal diversity in β_2 -arrestin coupling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3834-3839. | 7.6 | 61 |
| 97 | Allosteric Modulation of β_2 -Arrestin-biased Angiotensin II Type 1 Receptor Signaling by Membrane Stretch. <i>Journal of Biological Chemistry</i> , 2014, 289, 28271-28283. | 3.5 | 57 |
| 98 | G protein-coupled receptor kinases (GRKs) orchestrate biased agonism at the β_2 -adrenergic receptor. <i>Science Signaling</i> , 2018, 11, . | 5.1 | 52 |
| 99 | Arrestins Come of Age. <i>Progress in Molecular Biology and Translational Science</i> , 2013, 118, 3-18. | 1.8 | 51 |
| 100 | Palmitoylation Increases the Kinase Activity of the G Protein-Coupled Receptor Kinase, GRK6. <i>Biochemistry</i> , 1998, 37, 16053-16059. | 2.6 | 48 |
| 101 | Introduction to Special Section on β_2 -Arrestins. <i>Annual Review of Physiology</i> , 2007, 69, . | 13.2 | 43 |
| 102 | β_2 -arrestin 1 regulates β_2 -adrenergic receptor-mediated skeletal muscle hypertrophy and contractility. <i>Skeletal Muscle</i> , 2018, 8, 39. | 4.4 | 41 |
| 103 | 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. | 3.5 | 41 |
| 104 | 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. | 7.6 | 38 |
| 105 | Molecular Mechanisms of Coupling in Hormone Receptor-Adenylate Cyclase Systems. <i>Advances in Enzymology and Related Areas of Molecular Biology</i> , 2006, 53, 1-43. | 0.0 | 37 |
| 106 | Myocardial G Protein-Coupled Receptor Kinases: Implications for Heart Failure Therapy. <i>Proceedings of the Association of American Physicians</i> , 1999, 111, 399-405. | 2.3 | 35 |
| 107 | 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-R1221. | 1.9 | 34 |
| 108 | Temperature immutability of adenylyl cyclase-coupled β_2 adrenergic receptors. <i>Nature</i> , 1974, 249, 258-260. | 36.2 | 31 |

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|-----|---|------|-----------|
| 109 | Mechanisms involved in adrenergic receptor desensitization. <i>Biochemical Society Transactions</i> , 1990, 18, 541-544. | 3.4 | 31 |
| 110 | Allosteric activation of proto-oncogene kinase Src by GPCR β -arrestin complexes. <i>Journal of Biological Chemistry</i> , 2020, 295, 16773-16784. | 3.5 | 28 |
| 111 | β -Arrestin β -Biased Allosteric Modulator Potentiates Carvedilol-Stimulated β Adrenergic Receptor Cardioprotection. <i>Molecular Pharmacology</i> , 2021, 100, 568-579. | 2.3 | 27 |
| 112 | β -Adrenoreceptors determine affinity but not intrinsic activity of adenylate cyclase stimulants. <i>Nature</i> , 1979, 280, 502-504. | 36.2 | 25 |
| 113 | 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. | 7.6 | 25 |
| 114 | Receptor regulation: β -arrestin moves up a notch. <i>Nature Cell Biology</i> , 2005, 7, 1159-1161. | 10.0 | 22 |
| 115 | β -Arrestin β -Biased Angiotensin II Receptor Agonists for COVID-19. <i>Circulation</i> , 2020, 142, 318-320. | 9.3 | 21 |
| 116 | GPCR signaling: conformational activation of arrestins. <i>Cell Research</i> , 2018, 28, 783-784. | 12.2 | 20 |
| 117 | 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-H1527. | 3.4 | 19 |
| 118 | Unique Positive Cooperativity Between the β -Arrestin β -Biased β -Blocker Carvedilol and a Small Molecule Positive Allosteric Modulator of the β -Adrenergic Receptor. <i>Molecular Pharmacology</i> , 2021, 100, 513-525. | 2.3 | 19 |
| 119 | Comparison of specificity of agonist and antagonist radioligand binding to β adrenergic receptors. <i>Nature</i> , 1977, 268, 453-454. | 36.2 | 17 |
| 120 | Cloning of the cDNA and Genes for the Hamster and Human β -Adrenergic Receptors. <i>Journal of Receptors and Signal Transduction</i> , 1988, 8, 7-21. | 1.0 | 13 |
| 121 | The GPCR β -arrestin complex allosterically activates C-Raf by binding its amino terminus. <i>Journal of Biological Chemistry</i> , 2021, 297, 101369. | 3.5 | 13 |
| 122 | Translating science to medicine: The case for physician-scientists. <i>Science Translational Medicine</i> , 2022, 14, eabg7852. | 13.4 | 13 |
| 123 | Identification of the Subunit Structure of Rat Pineal Adrenergic Receptors by Photoaffinity Labeling. <i>Journal of Neurochemistry</i> , 1986, 46, 1153-1160. | 4.0 | 12 |
| 124 | Loss of biased signaling at a G protein-coupled receptor in overexpressed systems. <i>PLoS ONE</i> , 2023, 18, e0283477. | 2.5 | 10 |
| 125 | Eine kurze Geschichte der G-Protein-gekoppelten Rezeptoren (Nobel-Aufsatz). <i>Angewandte Chemie</i> , 2013, 125, 6494-6507. | 2.1 | 9 |
| 126 | Signal transduction at GPCRs: Allosteric activation of the ERK MAPK by β -arrestin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, . | 7.6 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | Beta-adrenergic receptors: Regulatory role of agonists. <i>Journal of Supramolecular Structure</i> , 1978, 8, 501-510. | 2.1 | 7 |
| 128 | Title is missing!. <i>Die Makromolekulare Chemie</i> , 1981, 182, 1945-1950. | 1.1 | 7 |
| 129 | Dihydroergocryptine binding and β -adrenoreceptors in smooth muscle. <i>Nature</i> , 1980, 283, 109-110. | 36.2 | 6 |
| 130 | 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, 293-294. | 2.4 | 6 |
| 131 | Costimulation of Adenylyl Cyclase and Phospholipase C by a Mutant β 1B-Adrenergic Receptor Transgene Promotes Malignant Transformation of Thyroid Follicular Cells. <i>Endocrinology</i> , 1997, 138, 369-378. | 2.8 | 6 |
| 132 | β 2-Arrestin2 mediates progression of murine primary myelofibrosis. <i>JCI Insight</i> , 2017, 2, . | 5.0 | 5 |
| 133 | A Serendipitous Scientist. <i>Annual Review of Pharmacology and Toxicology</i> , 2018, 58, 17-32. | 9.6 | 4 |
| 134 | Molecular Mechanism of Biased Signaling in a Prototypical G-protein-coupled Receptor. <i>Biophysical Journal</i> , 2020, 118, 162a. | 0.5 | 4 |
| 135 | A tale of two callings. <i>Journal of Clinical Investigation</i> , 2011, 121, 4201-4203. | 8.2 | 3 |
| 136 | How carvedilol does not activate β 2-adrenoceptors. <i>Nature Communications</i> , 2023, 14, . | 13.2 | 3 |
| 137 | Historical Background and Introduction. <i>Methods and Principles in Medicinal Chemistry</i> , 2005, , 1-10. | 0.0 | 2 |
| 138 | The annual ASCI meeting: does nostalgia have a future?. <i>Journal of Clinical Investigation</i> , 2008, 118, 1231-1233. | 8.2 | 2 |
| 139 | G Protein-Coupled Receptors: A Century of Research and Discovery. <i>Circulation Research</i> , 2024, 135, 174-197. | 10.7 | 2 |
| 140 | Marc G. Caron (1946-2022). <i>Nature Neuroscience</i> , 0, , . | 14.5 | 1 |
| 141 | Conformational Changes in β 2-Arrestin1: The Importance of β 2-Arrestin1's N-Terminal Domain. <i>FASEB Journal</i> , 2006, 20, A114. | 0.3 | 0 |
| 142 | β 2-Arrestin 1 mediates angiotensin II induced ubiquitination and down-regulation of TRPV4. <i>FASEB Journal</i> , 2009, 23, 944.3. | 0.5 | 0 |
| 143 | Crystal structure of active β 2-Arrestin1 bound to phosphorylated carboxy-terminus of a G protein-coupled receptor. <i>FASEB Journal</i> , 2013, 27, lb549. | 0.5 | 0 |
| 144 | Targeting β 2-arrestin2 Enhances Survival in a Murine Model of Chronic Myeloid Leukemia. <i>Blood</i> , 2013, 122, 857-857. | 1.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | <i>Response</i> : Analysis of Ligand Binding Specificity of Receptor Chimeras. <i>Science</i> , 1989, 243, 237-237. | 20.9 | 0 |
| 146 | β -arrestin2 Is Necessary for Development of MPLW515L Mutant Primary Myelofibrosis. <i>Blood</i> , 2015, 126, 486-486. | 1.4 | 0 |