Arun Kumar Shukla

List of Publications by Year
in descending order

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97 papers	7,152 citations	109321 35 h-index	60623 81 g-index
129 all docs	129 docs citations	129 times ranked	6128 citing authors

#	Article	IF	Citations
1	An intrabody sensor to monitor conformational activation of Î²-arrestins. Methods in Cell Biology, 2022, , 267-278.	1.1	10
2	Scratching the itch with cryo-EM. Nature Chemical Biology, 2022, , .	8.0	0
3	In-cellulo chemical cross-linking to visualize protein-protein interactions. Methods in Cell Biology, 2022, , 295-307.	1.1	5
4	Community guidelines for GPCR ligand bias: IUPHAR review 32. British Journal of Pharmacology, 2022, 179, 3651-3674.	5.4	84
5	Making the switch: The role of Gq in driving GRK selectivity at GPCRs. Science Signaling, 2022, 15, eabo4949.	3.6	0
6	Targeting the cell's gatekeepers for novel drug discovery. British Journal of Pharmacology, 2022, , .	5.4	0
7	Emerging structural insights into GPCRâ€“Î²-arrestin interaction and functional outcomes. Current Opinion in Structural Biology, 2022, 75, 102406.	5.7	25
8	Feeling at home: Structure of the NTSR1â€“Gi complex in a lipid environment. Nature Structural and Molecular Biology, 2021, 28, 331-333.	8.2	0
9	Emerging paradigms in activation, signaling, and regulation of G proteinâ€coupled receptors. FEBS Journal, 2021, 288, 2458-2460.	4.7	3
10	Biased ligands at opioid receptors: Current status and future directions. Science Signaling, 2021, 14, .	3.6	58
11	Structural insights into ligand recognition and activation of angiotensin receptors. Trends in Pharmacological Sciences, 2021, 42, 577-587.	8.7	12
12	Intrinsic bias at non-canonical, Î²-arrestin-coupled seven transmembrane receptors. Molecular Cell, 2021, 81, 4605-4621.e11.	9.7	69
13	Preface. Methods in Cell Biology, 2021, 166, xvii.	1.1	0
14	Biphasic activation of Î²-arrestin 1 upon interaction with a GPCR revealed by methyl-TROSY NMR. Nature Communications, 2021, 12, 7158.	12.8	22
15	India â€" stop looking down on international collaborations. Nature, 2021, 600, 361-361.	27.8	3
16	The Inside Story: Crystal Structure of the Chemokine Receptor CCR7 with an Intracellular Allosteric Antagonist. Biochemistry, 2020, 59, 12-14.	2.5	5
17	Reversible biotinylation of purified proteins for measuring proteinâ€“protein interactions. Methods in Enzymology, 2020, 633, 281-294.	1.0	1
18	Site-directed labeling of Î²-arrestin with monobromobimane for measuring their interaction with G protein-coupled receptors. Methods in Enzymology, 2020, 633, 271-280.	1.0	2

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19	The Complement C5a-C5aR1 GPCR Axis in COVID-19 Therapeutics. Trends in Immunology, 2020, 41, 965-967.	6.8	44
20	Transmitting the Signal: Structure of the Î²1-Adrenergic Receptor-Gs Protein Complex. Molecular Cell, 2020, 80, 3-5.	9.7	4
21	Distinct phosphorylation sites in a prototypical GPCR differently orchestrate Î²-arrestin interaction, trafficking, and signaling. Science Advances, 2020, 6, .	10.3	55
22	Molecular basis of Î²-arrestin coupling to formoterol-bound Î²1-adrenoceptor. Nature, 2020, 583, 862-866.	27.8	177
23	Purification of native CCL7 and its functional interaction with selected chemokine receptors. Protein Expression and Purification, 2020, 171, 105617.	1.3	6
24	Terminating G-Protein Coupling: Structural Snapshots of GPCR-Î²-Arrestin Complexes. Cell, 2020, 180, 1041-1043.	28.9	21
25	Crystal Structure of Î²-Arrestin 2 in Complex with CXCR7 Phosphopeptide. Structure, 2020, 28, 1014-1023.e4.	3.3	38
26	Structure and function of Î²-arrestins, their emerging role in breast cancer, and potential opportunities for therapeutic manipulation. Advances in Cancer Research, 2020, 145, 139-156.	5.0	13
27	Preface. Methods in Enzymology, 2020, 633, xiii.	1.0	0
28	Calcium as a biased cofactor. Science, 2020, 368, 369-370.	12.6	2
29	Emerging Insights into the Structure and Function of Complement C5a Receptors. Trends in Biochemical Sciences, 2020, 45, 693-705.	7.5	57
30	Genetically encoded intrabody sensors report the interaction and trafficking of Î²-arrestin 1 upon activation of G-proteinâ€“coupled receptors. Journal of Biological Chemistry, 2020, 295, 10153-10167.	3.4	29
31	Key phosphorylation sites in <scp>GPCR</scp> s orchestrate the contribution of Î²â€Arrestin 1 in <scp>ERK</scp> 1/2 activation. EMBO Reports, 2020, 21, e49886.	4.5	48
32	The Gut Feeling: GPCRs Enlighten the Way. Cell Host and Microbe, 2019, 26, 160-162.	11.0	5
33	Preface. Methods in Enzymology, 2019, 621, xvii.	1.0	0
34	Preface. Methods in Enzymology, 2019, 622, xvii.	1.0	0
35	Conformational Sensors and Domain Swapping Reveal Structural and Functional Differences between Î²-Arrestin Isoforms. Cell Reports, 2019, 28, 3287-3299.e6.	6.4	54
36	Partial ligand-receptor engagement yields functional bias at the human complement receptor, C5aR1. Journal of Biological Chemistry, 2019, 294, 9416-9429.	3.4	34

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37	Preface. Methods in Cell Biology, 2019, 149, xvii.	1.1	0
38	Structural Basis of Partial Agonism at the Î²2-Adrenergic Receptor. Biochemistry, 2019, 58, 137-139.	2.5	5
39	Measuring surface expression and endocytosis of GPCRs using whole-cell ELISA. Methods in Cell Biology, 2019, 149, 131-140.	1.1	28
40	Measuring agonist-induced ERK MAP kinase phosphorylation for G-protein-coupled receptors. Methods in Cell Biology, 2019, 149, 141-153.	1.1	10
41	Emerging Paradigm of Intracellular Targeting of G Protein-Coupled Receptors. Trends in Biochemical Sciences, 2018, 43, 533-546.	7.5	34
42	GPCR Signaling: The Interplay of GÎ±i and Î²-arrestin. Current Biology, 2018, 28, R324-R327.	3.9	16
43	Cellular Signalling â€“ Special issue to celebrate 75th birthday of Prof. Robert J. Lefkowitz. Cellular Signalling, 2018, 41, 1.	3.6	1
44	Entering the Pocket: Crystal Structure of a Prostaglandin D2 Receptor. Molecular Cell, 2018, 72, 3-6.	9.7	7
45	Illuminating GPCR Signaling by Cryo-EM. Trends in Cell Biology, 2018, 28, 591-594.	7.9	49
46	Molecular mechanism of modulating arrestin conformation by GPCR phosphorylation. Nature Structural and Molecular Biology, 2018, 25, 538-545.	8.2	87
47	Biased Opioid Receptor Ligands: Gain without Pain. Trends in Endocrinology and Metabolism, 2017, 28, 247-249.	7.1	13
48	Distinct conformations of GPCRâ€“Î²-arrestin complexes mediate desensitization, signaling, and endocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2562-2567.	7.1	281
49	Core engagement with Î²-arrestin is dispensable for agonist-induced vasopressin receptor endocytosis and ERK activation. Molecular Biology of the Cell, 2017, 28, 1003-1010.	2.1	87
50	Novel Structural Insights into GPCRâ€“Î²-Arrestin Interaction and Signaling. Trends in Cell Biology, 2017, 27, 851-862.	7.9	90
51	A synthetic intrabody-based selective and generic inhibitor of GPCR endocytosis. Nature Nanotechnology, 2017, 12, 1190-1198.	31.5	42
52	Frozen in action: cryo-EM structure of a GPCRâ€“G-protein complex. Nature Structural and Molecular Biology, 2017, 24, 500-502.	8.2	10
53	Preface. Advances in Immunology, 2017, 136, xi-xii.	2.2	0
54	Editorial overview: Multi-protein assemblies in signaling. Current Opinion in Structural Biology, 2016, 41, v-vii.	5.7	1

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55	G Protein-Coupled Receptors (GPCRs). International Journal of Biochemistry and Cell Biology, 2016, 77, 183.	2.8	1
56	GPCR Signaling: Î²-arrestins Kiss and Remember. Current Biology, 2016, 26, R285-R288.	3.9	29
57	GPCR-G Protein-Î²-Arrestin Super-Complex Mediates Sustained G Protein Signaling. Cell, 2016, 166, 907-919.	28.9	443
58	Functional competence of a partially engaged GPCRâ€“Î²-arrestin complex. Nature Communications, 2016, 7, 13416.	12.8	144
59	Preface. European Journal of Pharmacology, 2015, 763, 135.	3.5	0
60	Methodological advances: the unsung heroes of the GPCR structural revolution. Nature Reviews Molecular Cell Biology, 2015, 16, 69-81.	37.0	175
61	Antibody Fragments for Stabilization and Crystallization of G Protein-Coupled Receptors and Their Signaling Complexes. Methods in Enzymology, 2015, 557, 247-258.	1.0	10
62	From Recombinant Expression to Crystals. Methods in Enzymology, 2015, 556, 549-561.	1.0	5
63	Emerging Functional Divergence of Î²-Arrestin Isoforms in GPCR Function. Trends in Endocrinology and Metabolism, 2015, 26, 628-642.	7.1	124
64	Emerging Approaches to GPCR Ligand Screening for Drug Discovery. Trends in Molecular Medicine, 2015, 21, 687-701.	6.7	68
65	Preface. Methods in Enzymology, 2015, 556, xxiii-xxiv.	1.0	0
66	SnapShot: GPCR-Ligand Interactions. Cell, 2014, 159, 1712-1712.e1.	28.9	15
67	Biasing GPCR Signaling from Inside. Science Signaling, 2014, 7, pe3.	3.6	39
68	Emerging structural insights into biased GPCR signaling. Trends in Biochemical Sciences, 2014, 39, 594-602.	7.5	97
69	Visualization of arrestin recruitment by a G-protein-coupled receptor. Nature, 2014, 512, 218-222.	27.8	433
70	Discovery of Î²2 Adrenergic Receptor Ligands Using Biosensor Fragment Screening of Tagged Wild-Type Receptor. ACS Medicinal Chemistry Letters, 2013, 4, 1005-1010.	2.8	65
71	Structure of active Î²-arrestin-1 bound to a G-protein-coupled receptor phosphopeptide. Nature, 2013, 497, 137-141.	27.8	393
72	Crystal structure of active Betaâ€arrestin1 bound to phosphorylated carboxyâ€terminus of a G proteinâ€coupled receptor. FASEB Journal, 2013, 27, lb549.	0.5	0

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73	Molecular Mechanism of Î²-Arrestin-Biased Agonism at Seven-Transmembrane Receptors. Annual Review of Pharmacology and Toxicology, 2012, 52, 179-197.	9.4	536
74	Emerging paradigms of Î²-arrestin-dependent seven transmembrane receptor signaling. Trends in Biochemical Sciences, 2011, 36, 457-469.	7.5	380
75	Distinct Phosphorylation Sites on the Î² ₂ -Adrenergic Receptor Establish a Barcode That Encodes Differential Functions of Î²-Arrestin. Science Signaling, 2011, 4, ra51.	3.6	535
76	Multiple ligand-specific conformations of the Î²2-adrenergic receptor. Nature Chemical Biology, 2011, 7, 692-700.	8.0	229
77	Global phosphorylation analysis of Î²-arrestinâ€“mediated signaling downstream of a seven transmembrane receptor (7TMR). Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15299-15304.	7.1	182
78	Arresting a Transient Receptor Potential (TRP) Channel. Journal of Biological Chemistry, 2010, 285, 30115-30125.	3.4	92
79	Î²-Arrestinâ€“dependent activation of Ca2+/calmodulin kinase II after Î²1â€“adrenergic receptor stimulation. Journal of Cell Biology, 2010, 189, 573-587.	5.2	142
80	Î²-Arrestinâ€“dependent activation of Ca²⁺/calmodulin kinase II after Î²₁â€“adrenergic receptor stimulation. Journal of General Physiology, 2010, 135, i5-i5.	1.9	0
81	Î²-Arrestin-dependent signaling and trafficking of 7-transmembrane receptors is reciprocally regulated by the deubiquitinase USP33 and the E3 ligase Mdm2. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 6650-6655.	7.1	146
82	Î²-Arrestin1 mediates nicotinic acidâ€“induced flushing, but not its antilipolytic effect, in mice. Journal of Clinical Investigation, 2009, 119, 1312-1321.	8.2	203
83	The Structure of the Neuropeptide Bradykinin Bound to the Human Gâ€Protein Coupled Receptor Bradykinin B2 as Determined by Solidâ€State NMR Spectroscopy. Angewandte Chemie - International Edition, 2008, 47, 1668-1671.	13.8	86
84	A crystal clear view of the Î²2-adrenergic receptor. Nature Biotechnology, 2008, 26, 189-191.	17.5	26
85	Employing Rhodobacter sphaeroides to functionally express and purify human G protein-coupled receptors. Biological Chemistry, 2008, 389, 69-78.	2.5	21
86	Distinct conformational changes in Î²-arrestin report biased agonism at seven-transmembrane receptors. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9988-9993.	7.1	226
87	Crystallizing Thinking about the Î²2-Adrenergic Receptor. Molecular Pharmacology, 2008, 73, 1333-1338.	2.3	35
88	Ubiquitination of Î²-Arrestin Links Seven-transmembrane Receptor Endocytosis and ERK Activation. Journal of Biological Chemistry, 2007, 282, 29549-29562.	3.4	121
89	Functional specialization of Î²-arrestin interactions revealed by proteomic analysis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 12011-12016.	7.1	371
90	Heterologous expression and characterization of the recombinant bradykinin B2 receptor using the methylotrophic yeast Pichia pastoris. Protein Expression and Purification, 2007, 55, 1-8.	1.3	17

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91	Heterologous expression and comparative characterization of the human neuromedin U subtype II receptor using the methylotrophic yeast Pichia pastoris and mammalian cells. International Journal of Biochemistry and Cell Biology, 2007, 39, 931-942.	2.8	22
92	Dimethylsulphoxide as a tool to increase functional expression of heterologously produced GPCRs in mammalian cells. FEBS Letters, 2006, 580, 4261-4265.	2.8	20
93	Comparative analysis of the human angiotensin II type 1a receptor heterologously produced in insect cells and mammalian cells. Biochemical and Biophysical Research Communications, 2006, 349, 6-14.	2.1	17
94	Functional overexpression and characterization of human bradykinin subtype 2 receptor in insect cells using the baculovirus system. Journal of Cellular Biochemistry, 2006, 99, 868-877.	2.6	16
95	Rec A-independent homologous recombination induced by a putative fold-back tetraplex DNA. Biological Chemistry, 2006, 387, 251-256.	2.5	10
96	Biochemical and pharmacological characterization of the human bradykinin subtype 2 receptor produced in mammalian cells using the Semliki Forest virus system. Biological Chemistry, 2006, 387, 569-76.	2.5	18
97	A Palindromic Repeat Sequence Adopts a Stable Fold Back Structure under Supercoiling. Journal of Biochemistry, 2006, 139, 35-39.	1.7	3