Sadashiva S Karnik

List of Publications by Year in descending order

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99 papers 6,294 citations

43 h-index 76 76 g-index

103 all docs 103
docs citations

103 times ranked 6314 citing authors

#	Article	IF	CITATIONS
1	Independent Â-arrestin 2 and G protein-mediated pathways for angiotensin II activation of extracellular signal-regulated kinases 1 and 2. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10782-10787.	7.1	620
2	THE CONCISE GUIDE TO PHARMACOLOGY 2021/22: G proteinâ€coupled receptors. British Journal of Pharmacology, 2021, 178, S27-S156.	5 . 4	337
3	Structure of the Angiotensin Receptor Revealed by Serial Femtosecond Crystallography. Cell, 2015, 161, 833-844.	28.9	315
4	International Union of Basic and Clinical Pharmacology. XCIX. Angiotensin Receptors: Interpreters of Pathophysiological Angiotensinergic Stimuli. Pharmacological Reviews, 2015, 67, 754-819.	16.0	245
5	Multiple Signaling States of G-Protein-Coupled Receptors. Pharmacological Reviews, 2005, 57, 147-161.	16.0	229
6	Side-Chain Substitutions within Angiotensin II Reveal Different Requirements for Signaling, Internalization, and Phosphorylation of Type 1A Angiotensin Receptors. Molecular Pharmacology, 2002, 61, 768-777.	2.3	227
7	Angiotensin II and Its Receptor Subtypes in the Human Retina. , 2007, 48, 3301.		198
8	Activation of G-protein-coupled receptors: a common molecular mechanism. Trends in Endocrinology and Metabolism, $2003, 14, 431-437$.	7.1	173
9	The Active State of the AT1Angiotensin Receptor Is Generated by Angiotensin II Inductionâ€. Biochemistry, 1996, 35, 16435-16442.	2.5	149
10	Structural Basis for Ligand Recognition and Functional Selectivity at Angiotensin Receptor. Journal of Biological Chemistry, 2015, 290, 29127-29139.	3.4	145
11	The Docking of Arg2 of Angiotensin II with Asp281 of AT1 Receptor Is Essential for Full Agonism. Journal of Biological Chemistry, 1995, 270, 12846-12850.	3.4	144
12	Tetrazole and Carboxylate Groups of Angiotensin Receptor Antagonists Bind to the Same Subsite by Different Mechanisms. Journal of Biological Chemistry, 1995, 270, 2284-2289.	3.4	142
13	Review: Angiotensin II type 1 receptor blockers: class effects versus molecular effects. JRAAS - Journal of the Renin-Angiotensin-Aldosterone System, 2011, 12, 1-7.	1.7	129
14	Ligand-independent signals from angiotensin II type 2 receptor induce apoptosis. EMBO Journal, 2000, 19, 4026-4035.	7.8	124
15	Unique MicroRNA Profile in End-stage Heart Failure Indicates Alterations in Specific Cardiovascular Signaling Networks. Journal of Biological Chemistry, 2009, 284, 27487-27499.	3.4	121
16	Molecular Mechanism Underlying Inverse Agonist of Angiotensin II Type 1 Receptor. Journal of Biological Chemistry, 2006, 281, 19288-19295.	3.4	118
17	SARS-CoV-2 and ACE2: The biology and clinical data settling the ARB and ACEI controversy. EBioMedicine, 2020, 58, 102907.	6.1	110
18	Interaction of Phe8 of Angiotensin II with Lys199 and His256 of AT1 Receptor in Agonist Activation. Journal of Biological Chemistry, 1995, 270, 28511-28514.	3.4	100

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19	Modulation of GDP Release from Transducin by the Conserved Glu134-Arg135 Sequence in Rhodopsin. Journal of Biological Chemistry, 1996, 271, 25406-25411.	3.4	98
20	Agonist-induced Phosphorylation of the Angiotensin II (AT1A) Receptor Requires Generation of a Conformation That Is Distinct from the Inositol Phosphate-signaling State. Journal of Biological Chemistry, 2000, 275, 2893-2900.	3.4	95
21	Molecular Analysis of the Structure and Function of the Angiotensin II Type 1 Receptor. Hypertension Research, 2003, 26, 937-943.	2.7	95
22	Role of Aromaticity of Agonist Switches of Angiotensin II in the Activation of the AT1 Receptor. Journal of Biological Chemistry, 1999, 274, 7103-7110.	3.4	92
23	Mechanism of Constitutive Activation of the AT1Receptor: Influence of the Size of the Agonist Switch Binding Residue Asn111â€. Biochemistry, 1998, 37, 15791-15798.	2.5	86
24	Angiotensin II-regulated microRNA 483-3p directly targets multiple components of the renin–angiotensin system. Journal of Molecular and Cellular Cardiology, 2014, 75, 25-39.	1.9	86
25	Transducin-α C-terminal Peptide Binding Site Consists of C-D and E-F Loops of Rhodopsin. Journal of Biological Chemistry, 1997, 272, 6519-6524.	3.4	81
26	Constitutively Active Homo-oligomeric Angiotensin II Type 2 Receptor Induces Cell Signaling Independent of Receptor Conformation and Ligand Stimulation. Journal of Biological Chemistry, 2005, 280, 18237-18244.	3.4	80
27	Differential Bonding Interactions of Inverse Agonists of Angiotensin II Type 1 Receptor in Stabilizing the Inactive State. Molecular Endocrinology, 2008, 22, 139-146.	3.7	77
28	G-Protein-Dependent Cell Surface Dynamics of the Human Serotonin1AReceptor Tagged to Yellow Fluorescent Proteinâ€. Biochemistry, 2004, 43, 15852-15862.	2.5	74
29	Distinct Multisite Synergistic Interactions Determine Substrate Specificities of Human Chymase and Rat Chymase-1 for Angiotensin II Formation and Degradation. Journal of Biological Chemistry, 1997, 272, 2963-2968.	3.4	72
30	Significance of angiotensin 1–7 coupling with MAS1 receptor and other GPCRs to the reninâ€angiotensin system: IUPHAR Review 22. British Journal of Pharmacology, 2017, 174, 737-753.	5.4	71
31	Role of nuclear unphosphorylated STAT3 in angiotensin II type 1 receptor-induced cardiac hypertrophy. Cardiovascular Research, 2010, 85, 90-99.	3.8	70
32	Domain coupling in GPCRs: the engine for induced conformational changes. Trends in Pharmacological Sciences, 2012, 33, 79-88.	8.7	70
33	Current topics in angiotensin II type 1 receptor research: Focus on inverse agonism, receptor dimerization and biased agonism. Pharmacological Research, 2017, 123, 40-50.	7.1	68
34	Angiotensin II type 1 and type 2 receptors bind angiotensin II through different types of epitope recognition. Journal of Hypertension, 1999 , 17 , $397-404$.	0.5	66
35	Angiotensin Receptors: Structure, Function, Signaling and Clinical Applications. , 2016, 1, .		65
36	Ligand-specific Conformation of Extracellular Loop-2 in the Angiotensin II Type 1 Receptor. Journal of Biological Chemistry, 2010, 285, 16341-16350.	3.4	63

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37	Human Prochymase Activation. Journal of Biological Chemistry, 1995, 270, 2218-2223.	3.4	56
38	Constitutive Activation of Angiotensin II Type 1 Receptor Alters the Orientation of Transmembrane Helix-2. Journal of Biological Chemistry, 2002, 277, 24299-24305.	3.4	54
39	TM2-TM7 Interaction in Coupling Movement of Transmembrane Helices to Activation of the Angiotensin II Type-1 Receptor. Journal of Biological Chemistry, 2003, 278, 3720-3725.	3.4	50
40	Critical Role for Lysine 685 in Gene Expression Mediated by Transcription Factor Unphosphorylated STAT3. Journal of Biological Chemistry, 2014, 289, 30763-30771.	3.4	48
41	Angiotensin Receptors: Structure, Function, Signaling and Clinical Applications. Journal of Cell Signaling, 2017, 01, .	0.3	48
42	Unique binding behavior of the recently approved angiotensin II receptor blocker azilsartan compared with that of candesartan. Hypertension Research, 2013, 36, 134-139.	2.7	47
43	Activation of Extracellular Signal-Activated Kinase by Angiotensin II-Induced Gq-Independent Epidermal Growth Factor Receptor Transactivation. Hypertension Research, 2004, 27, 765-770.	2.7	47
44	Molecular mechanisms of the antagonistic action between AT1 and AT2 receptors. Biochemical and Biophysical Research Communications, 2010, 391, 85-90.	2.1	46
45	A small difference in the molecular structure of angiotensin II receptor blockers induces AT1 receptor-dependent and -independent beneficial effects. Hypertension Research, 2010, 33, 1044-1052.	2.7	45
46	"Network Leaning―as a Mechanism of Insurmountable Antagonism of the Angiotensin II Type 1 Receptor by Non-peptide Antagonists. Journal of Biological Chemistry, 2004, 279, 15248-15257.	3.4	41
47	Atypical Signaling and Functional Desensitization Response of MAS Receptor to Peptide Ligands. PLoS ONE, 2014, 9, e103520.	2.5	39
48	Unconventional Homologous Internalization of the Angiotensin II Type-1 Receptor Induced by G-Protein–Independent Signals. Hypertension, 2005, 46, 419-425.	2.7	38
49	Angiotensinergic stimulation of vascular endothelium in mice causes hypotension, bradycardia, and attenuated angiotensin response. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 19087-19092.	7.1	37
50	Constitutive Activity in the Angiotensin II Type 1 Receptor. Advances in Pharmacology, 2014, 70, 155-174.	2.0	31
51	Long Range Effect of Mutations on Specific Conformational Changes in the Extracellular Loop 2 of Angiotensin II Type 1 Receptor. Journal of Biological Chemistry, 2013, 288, 540-551.	3.4	30
52	Model of the whole rat AT1 receptor and the ligand-binding site. Journal of Molecular Modeling, 2006, 12, 325-337.	1.8	29
53	Structure-Function Basis of Attenuated Inverse Agonism of Angiotensin II Type 1 Receptor Blockers for Active-State Angiotensin II Type 1 Receptor. Molecular Pharmacology, 2015, 88, 488-501.	2.3	28
54	A unique microRNA profile in end-stage heart failure indicates alterations in specific cardiovascular signaling networks. PLoS ONE, 2017, 12, e0170456.	2.5	26

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55	Reversible inactivation of AT2angiotensin II receptor from cysteine-disulfide bond exchange. FEBS Letters, 2000, 484, 133-138.	2.8	23
56	Small Molecules with Similar Structures Exhibit Agonist, Neutral Antagonist or Inverse Agonist Activity toward Angiotensin II Type 1 Receptor. PLoS ONE, 2012, 7, e37974.	2.5	23
57	G Protein-Coupled Receptors Directly Bind Filamin A with High Affinity and Promote Filamin Phosphorylation. Biochemistry, 2015, 54, 6673-6683.	2.5	23
58	Mechanism of Hormone Peptide Activation of a GPCR: Angiotensin II Activated State of AT ₁ R Initiated by van der Waals Attraction. Journal of Chemical Information and Modeling, 2019, 59, 373-385.	5.4	23
59	Clinical and Pharmacotherapeutic Relevance of the Double-Chain Domain of the Angiotensin II Type 1 Receptor Blocker Olmesartan. Clinical and Experimental Hypertension, 2010, 32, 129-136.	1.3	22
60	Mechanism of GPCR-Directed Autoantibodies in Diseases. Advances in Experimental Medicine and Biology, 2012, 749, 187-199.	1.6	22
61	Angiotensin Type 1 Receptor Blockers in Heart Failure. Current Drug Targets, 2020, 21, 125-131.	2.1	22
62	Angiotensin II increases angiogenesis by NFâ€Pââ€"mediated transcriptional activation of angiogenic factor AGGF1. FASEB Journal, 2018, 32, 5051-5062.	0.5	21
63	Role of Transmembrane Helix IV in G-protein Specificity of the Angiotensin II Type 1 Receptor. Journal of Biological Chemistry, 1999, 274, 35546-35552.	3.4	20
64	Small GTPases SAR1A and SAR1B regulate the trafficking of the cardiac sodium channel Nav1.5. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 3672-3684.	3.8	20
65	Retinal angiotensin II and angiotensin-(1-7) response to hyperglycemia and an intervention with captopril. JRAAS - Journal of the Renin-Angiotensin-Aldosterone System, 2018, 19, 147032031878932.	1.7	20
66	Cardiac angiotensin II receptors as predictors of transplant coronary artery disease following heart transplantation. European Heart Journal, 2004, 25, 377-385.	2.2	18
67	MicroRNAsâ€"Regulators of Signaling Networks in Dilated Cardiomyopathy. Journal of Cardiovascular Translational Research, 2010, 3, 225-234.	2.4	16
68	Novel allosteric ligands of the angiotensin receptor AT1R as autoantibody blockers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118 , .	7.1	16
69	Interaction of G-Protein $\hat{l}^2\hat{l}^3$ Complex with Chromatin Modulates GPCR-Dependent Gene Regulation. PLoS ONE, 2013, 8, e52689.	2.5	16
70	Angiotensin II type 1 receptor-function affected by mutations in cytoplasmic loop CD. FEBS Letters, 2000, 470, 331-335.	2.8	15
71	Manifold active-state conformations in GPCRs: Agonist-activated constitutively active mutant AT1receptor preferentially couples to Gq compared to the wild-type AT1receptor. FEBS Letters, 2007, 581, 2517-2522.	2.8	15
72	Reassessment of the Unique Mode of Binding between Angiotensin II Type 1 Receptor and Their Blockers. PLoS ONE, 2013, 8, e79914.	2.5	14

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73	A Mechanism of Global Shape-dependent Recognition and Phosphorylation of Filamin by Protein Kinase A. Journal of Biological Chemistry, 2015, 290, 8527-8538.	3.4	14
74	Divergent Spatiotemporal Interaction of Angiotensin Receptor Blocking Drugs with Angiotensin Type 1 Receptor. Journal of Chemical Information and Modeling, 2018, 58, 182-193.	5 . 4	14
75	β-Arrestin–Biased Agonist Targeting the Brain AT ₁ R (Angiotensin II Type 1 Receptor) Increases Aversion to Saline and Lowers Blood Pressure in Deoxycorticosterone Acetate–Salt Hypertension. Hypertension, 2021, 77, 420-431.	2.7	14
76	Selective Reporter Expression in Mast Cells Using a Chymase Promoter. Journal of Biological Chemistry, 1997, 272, 2969-2976.	3.4	12
77	Thymidine phosphorylase inhibits vascular smooth muscle cell proliferation via upregulation of STAT3. Biochimica Et Biophysica Acta - Molecular Cell Research, 2012, 1823, 1316-1323.	4.1	12
78	Angiotensin II receptors., 2020,, 415-427.		12
79	Integrated multiomics analysis identifies molecular landscape perturbations during hyperammonemia in skeletal muscle and myotubes. Journal of Biological Chemistry, 2021, 297, 101023.	3.4	10
80	MAS C-Terminal Tail Interacting Proteins Identified by Mass Spectrometry- Based Proteomic Approach. PLoS ONE, 2015, 10, e0140872.	2.5	8
81	Angiotensin II Receptor–Induced Cardiac Remodeling in Mice Without Angiotensin II. Hypertension, 2012, 59, 542-544.	2.7	7
82	The nonâ€biphenylâ€tetrazole angiotensin AT ₁ receptor antagonist eprosartan is a unique and robust inverse agonist of the active state of the AT ₁ receptor. British Journal of Pharmacology, 2018, 175, 2454-2469.	5.4	7
83	Angiotensin-Converting Enzyme Inhibitors Versus Angiotensin II Receptor Blockers. Circulation: Cardiovascular Quality and Outcomes, 2020, 13, e007115.	2.2	6
84	Current Trends in GPCR Allostery. Journal of Membrane Biology, 2021, 254, 293-300.	2.1	6
85	Low-density lipoprotein encapsulated thiosemicarbazone metal complexes is active targeting vehicle for breast, lung, and prostate cancers. Drug Delivery, 2022, 29, 2206-2216.	5.7	6
86	Connective tissue growth factor dependent collagen gene expression induced by MAS agonist AR234960 in human cardiac fibroblasts. PLoS ONE, 2017, 12, e0190217.	2.5	5
87	Structural perspectives on the mechanism of signal activation, ligand selectivity and allosteric modulation in angiotensin receptors: IUPHAR Review 34. British Journal of Pharmacology, 2022, 179, 4461-4472.	5.4	5
88	Abilities of candesartan and other AT $<$ sub $>$ 1 $<$ /sub $>$ receptor blockers to impair angiotensin II-induced AT $<$ sub $>$ 1 $<$ /sub $>$ receptor activation after wash-out. JRAAS - Journal of the Renin-Angiotensin-Aldosterone System, 2012, 13, 76-83.	1.7	4
89	AT1 Receptor Induced Alterations in Histone H2A Reveal Novel Insights into GPCR Control of Chromatin Remodeling. PLoS ONE, 2010, 5, e12552.	2.5	4
90	Analysis of structure-function from expression of G protein-coupled receptor fragments. Methods in Enzymology, 2002, 343, 248-259.	1.0	3

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91	Site-specific Cleavage of G Protein-coupled Receptor-engaged \hat{l}^2 -Arrestin. Journal of Biological Chemistry, 2008, 283, 21612-21620.	3.4	3
92	A Protein Tyrosine Phosphatase Inhibitor, Pervanadate, Inhibits Angiotensin II-Induced \hat{I}^2 -Arrestin Cleavage. Molecules and Cells, 2009, 28, 25-30.	2.6	3
93	A unique microRNA profile in end-stage heart failure indicates alterations in specific cardiovascular signaling networks Journal of Biological Chemistry, 2016, 291, 14914.	3.4	1
94	Effect of novel GPCR ligands on blood pressure and vascular homeostasis. Methods in Cell Biology, 2019, 149, 215-238.	1.1	1
95	Inducing Conformational Changes in G Protein-Coupled Receptors by Domain Coupling. Methods in Pharmacology and Toxicology, 2014, , 219-237.	0.2	1
96	Angiotensinergic stimulation of vascular endothelium in mice causes hypotension, bradycardia and attenuated angiotensin response. Journal of Molecular and Cellular Cardiology, 2008, 45, S24.	1.9	0
97	There is no overkill in biochemistry. Resonance, 2012, 17, 1157-1164.	0.3	O
98	Receptors Angiotensin Receptors., 2021,, 110-121.		0
99	Functional Selectivity at Non-Opioid Peptide Receptors. , 2009, , 267-281.		O