Yang K Xiang

List of Publications by Year
in descending order

88 papers	5,970 citations	81743 39 h-index	74018 75 g-index
94 all docs	94 docs citations	94 times ranked	8090 citing authors

#	Article	IF	Citations
1	PACS-2 controls endoplasmic reticulumâ€"mitochondria communication and Bid-mediated apoptosis. EMBO Journal, 2005, 24, 717-729.	3.5	469
2	Probing cellular protein complexes using single-molecule pull-down. Nature, 2011, 473, 484-488.	13.7	375
3	Î²2-Adrenoreceptor is a regulator of the Î±-synuclein gene driving risk of Parkinsonâ€™s disease. Science, 2017, 357, 891-898.	6.0	341
4	PACS-1 Defines a Novel Gene Family of Cytosolic Sorting Proteins Required for trans-Golgi Network Localization. Cell, 1998, 94, 205-216.	13.5	337
5	Sequential Binding of Agonists to the Î²2 Adrenoceptor. Journal of Biological Chemistry, 2004, 279, 686-691.	1.6	311
6	Receptor Number and Caveolar Co-localization Determine Receptor Coupling Efficiency to Adenylyl Cyclase. Journal of Biological Chemistry, 2001, 276, 42063-42069.	1.6	233
7	Caveolar Localization Dictates Physiologic Signaling of Î²2-Adrenoceptors in Neonatal Cardiac Myocytes. Journal of Biological Chemistry, 2002, 277, 34280-34286.	1.6	219
8	Myocyte Adrenoceptor Signaling Pathways. Science, 2003, 300, 1530-1532.	6.0	192
9	Single-molecule pull-down for studying protein interactions. Nature Protocols, 2012, 7, 445-452.	5.5	172
10	Epigenetic Regulation of Phosphodiesterases 2A and 3A Underlies Compromised Î²-Adrenergic Signaling in an iPSC Model of Dilated Cardiomyopathy. Cell Stem Cell, 2015, 17, 89-100.	5.2	170
11	Oleic Acid Stimulates Complete Oxidation of Fatty Acids through Protein Kinase A-dependent Activation of SIRT1-PGC1Î± Complex. Journal of Biological Chemistry, 2013, 288, 7117-7126.	1.6	159
12	Empagliflozin Ameliorates Obesity-Related Cardiac Dysfunction by Regulating Sestrin2-Mediated AMPK-mTOR Signaling and Redox Homeostasis in High-Fat Dietâ€"Induced Obese Mice. Diabetes, 2020, 69, 1292-1305.	0.3	121
13	Mechanochemical Delivery and Dynamic Tracking of Fluorescent Quantum Dots in the Cytoplasm and Nucleus of Living Cells. Nano Letters, 2009, 9, 2193-2198.	4.5	119
14	Phosphodiesterase 4D is required for Â2 adrenoceptor subtype-specific signaling in cardiac myocytes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 909-914.	3.3	116
15	Dosage-dependent switch from G protein-coupled to G protein-independent signaling by a GPCR. EMBO Journal, 2007, 26, 53-64.	3.5	103
16	The PDZ Binding Motif of the Î²1 Adrenergic Receptor Modulates Receptor Trafficking and Signaling in Cardiac Myocytes. Journal of Biological Chemistry, 2002, 277, 33783-33790.	1.6	99
17	Inhibiting Insulin-Mediated Î² ₂ -Adrenergic Receptor Activation Prevents Diabetes-Associated Cardiac Dysfunction. Circulation, 2017, 135, 73-88.	1.6	98
18	Organization of Î²-adrenoceptor signaling compartments by sympathetic innervation of cardiac myocytes. Journal of Cell Biology, 2007, 176, 521-533.	2.3	93

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19	The PDZ-binding motif of the Â2-adrenoceptor is essential for physiologic signaling and trafficking in cardiac myocytes. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10776-10781.	3.3	88
20	Compartmentalization of Î²-Adrenergic Signals in Cardiomyocytes. Circulation Research, 2011, 109, 231-244.	2.0	86
21	Î²2 Adrenergic Receptor, Protein Kinase A (PKA) and c-Jun N-terminal Kinase (JNK) Signaling Pathways Mediate Tau Pathology in Alzheimer Disease Models. Journal of Biological Chemistry, 2013, 288, 10298-10307.	1.6	81
22	Insulin Inhibits Cardiac Contractility by Inducing a Gi-Biased Î²2-Adrenergic Signaling in Hearts. Diabetes, 2014, 63, 2676-2689.	0.3	77
23	Binding of amyloid Î² peptide to Î² ₂ adrenergic receptor induces PKAâ€dependent AMPA receptor hyperactivity. FASEB Journal, 2010, 24, 3511-3521.	0.2	73
24	Amyloid Î² Peptide-(1â€"42) Induces Internalization and Degradation of Î²2 Adrenergic Receptors in Prefrontal Cortical Neurons. Journal of Biological Chemistry, 2011, 286, 31852-31863.	1.6	72
25	Phosphodiesterases coordinate cAMP propagation induced by two stimulatory G protein-coupled receptors in hearts. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6578-6583.	3.3	67
26	A multi-protein receptor-ligand complex underlies combinatorial dendrite guidance choices in C. elegans. ELife, 2016, 5, .	2.8	62
27	Adenylyl Cyclase Anchoring by a Kinase Anchor Protein AKAP5 (AKAP79/150) Is Important for Postsynaptic Î²-Adrenergic Signaling. Journal of Biological Chemistry, 2013, 288, 17918-17931.	1.6	61
28	Phosphorylation of Ca _v 1.2 on S1928 uncouples the Lâ€type Ca ²⁺ channel from the Î² ₂ adrenergic receptor. EMBO Journal, 2016, 35, 1330-1345.	3.5	61
29	GÎ± _s -Biased Î² ₂ -Adrenergic Receptor Signaling from Restoring Synchronous Contraction in the Failing Heart. Science Translational Medicine, 2011, 3, 100ra88.	5.8	60
30	Differential Association of Phosphodiesterase 4D Isoforms with Î²2-Adrenoceptor in Cardiac Myocytes. Journal of Biological Chemistry, 2009, 284, 33824-33832.	1.6	59
31	Norepinephrine- and Epinephrine-induced Distinct Î²2-Adrenoceptor Signaling Is Dictated by GRK2 Phosphorylation in Cardiomyocytes. Journal of Biological Chemistry, 2008, 283, 1799-1807.	1.6	57
32	A Dendritic Guidance Receptor Complex Brings Together Distinct Actin Regulators to Drive Efficient F-Actin Assembly and Branching. Developmental Cell, 2018, 45, 362-375.e3.	3.1	56
33	Agonist Dose-dependent Phosphorylation by Protein Kinase A and G Protein-coupled Receptor Kinase Regulates Î²2 Adrenoceptor Coupling to Gi Proteins in Cardiomyocytes. Journal of Biological Chemistry, 2009, 284, 32279-32287.	1.6	55
34	Postsynaptic Î±-2 Adrenergic Receptors are Critical for the Antidepressant-Like Effects of Desipramine on Behavior. Neuropsychopharmacology, 2009, 34, 1067-1077.	2.8	53
35	Dynamic Protein Kinase A Activities Induced by Î²-Adrenoceptors Dictate Signaling Propagation for Substrate Phosphorylation and Myocyte Contraction. Circulation Research, 2009, 104, 770-779.	2.0	50
36	Arrestin Orchestrates Crosstalk Between G Protein-Coupled Receptors to Modulate the Spatiotemporal Activation of ERK MAPK. Circulation Research, 2010, 106, 79-88.	2.0	48

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37	FRET-based direct detection of dynamic protein kinase A activity on the sarcoplasmic reticulum in cardiomyocytes. Biochemical and Biophysical Research Communications, 2011, 404, 581-586.	1.0	45
38	The phosphorylation state of an autoregulatory domain controls PACS-1-directed protein traffic. EMBO Journal, 2003, 22, 6234-6244.	3.5	44
39	Genetically Encoded Biosensors Reveal PKA Hyperphosphorylation on the Myofilaments in Rabbit Heart Failure. Circulation Research, 2016, 119, 931-943.	2.0	43
40	Cardiomyocytes with disrupted CFTR function require CaMKII and Ca²⁺â€activated Cl^{âˆ’} channel activity to maintain contraction rate. Journal of Physiology, 2010, 588, 2417-2429.	1.3	42
41	Heterologous desensitization of cardiac Î²-adrenergic signal via hormone-induced Î²AR/arrestin/PDE4 complexes. Cardiovascular Research, 2017, 113, 656-670.	1.8	41
42	Inhibition of type 5 phosphodiesterase counteracts Î²2-adrenergic signalling in beating cardiomyocytes. Cardiovascular Research, 2015, 106, 408-420.	1.8	40
43	Whole-Cell cAMP and PKA Activity are Epiphenomena, Nanodomain Signaling Matters. Physiology, 2019, 34, 240-249.	1.6	40
44	Insulin and Î² Adrenergic Receptor Signaling: Crosstalk in Heart. Trends in Endocrinology and Metabolism, 2017, 28, 416-427.	3.1	39
45	Î²â€adrenergicâ€mediated dynamic augmentation of sarcolemmal Ca_V1.2 clustering and coâ€operativity in ventricular myocytes. Journal of Physiology, 2019, 597, 2139-2162.	1.3	38
46	Intracellular Î² ₁ -Adrenergic Receptors and Organic Cation Transporter 3 Mediate Phospholamban Phosphorylation to Enhance Cardiac Contractility. Circulation Research, 2021, 128, 246-261.	2.0	38
47	Adenylyl cyclase 5â€"generated cAMP controls cerebral vascular reactivity during diabetic hyperglycemia. Journal of Clinical Investigation, 2019, 129, 3140-3152.	3.9	35
48	Phosphodiesterase 4 and Phosphatase 2A Differentially Regulate cAMP/Protein Kinase A Signaling for Cardiac Myocyte Contraction under Stimulation of Î²1 Adrenergic Receptor. Molecular Pharmacology, 2008, 74, 1453-1462.	1.0	34
49	The Third Intracellular Loop and the Carboxyl Terminus of Î²2-Adrenergic Receptor Confer Spontaneous Activity of the Receptor. Molecular Pharmacology, 2003, 64, 1048-1058.	1.0	33
50	A Gs-coupled purinergic receptor boosts Ca2+ influx and vascular contractility during diabetic hyperglycemia. ELife, 2019, 8, .	2.8	33
51	Equilibrium between Adenylyl Cyclase and Phosphodiesterase Patterns Adrenergic Agonist Dose-Dependent Spatiotemporal cAMP/Protein Kinase A Activities in Cardiomyocytes. Molecular Pharmacology, 2010, 78, 340-349.	1.0	32
52	Insulin induces IRS2-dependent and GRK2-mediated Î²2AR internalization to attenuate Î²AR signaling in cardiomyocytes. Cellular Signalling, 2015, 27, 707-715.	1.7	31
53	Phosphodiesterase 5 Associates With Î²2 Adrenergic Receptor to Modulate Cardiac Function in Type 2 Diabetic Hearts. Journal of the American Heart Association, 2019, 8, e012273.	1.6	30
54	Functionally distinct and selectively phosphorylated GPCR subpopulations co-exist in a single cell. Nature Communications, 2018, 9, 1050.	5.8	28

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55	A Long Lasting Î²1 Adrenergic Receptor Stimulation of cAMP/Protein Kinase A (PKA) Signal in Cardiac Myocytes. Journal of Biological Chemistry, 2014, 289, 14771-14781.	1.6	27
56	Î²1-adrenergic receptor O-glycosylation regulates N-terminal cleavage and signaling responses in cardiomyocytes. Scientific Reports, 2017, 7, 7890.	1.6	27
57	The non-receptor tyrosine kinase Lyn controls neutrophil adhesion by recruiting the CrkLâ€"C3G complex and activating Rap1 at the leading edge. Journal of Cell Science, 2011, 124, 2153-2164.	1.2	23
58	Compartmentalization of Î²-adrenergic signals in cardiomyocytes. Trends in Cardiovascular Medicine, 2013, 23, 250-256.	2.3	23
59	Genetic suppression of Î²2-adrenergic receptors ameliorates tau pathology in a mouse model of tauopathies. Human Molecular Genetics, 2014, 23, 4024-4034.	1.4	22
60	AKAP5 complex facilitates purinergic modulation of vascular L-type Ca2+ channel CaV1.2. Nature Communications, 2020, 11, 5303.	5.8	22
61	A Myt1 family transcription factor defines neuronal fate by repressing non-neuronal genes. ELife, 2019, 8, .	2.8	21
62	Insulin receptor substrates differentially exacerbate insulin-mediated left ventricular remodeling. JCI Insight, 2020, 5, .	2.3	19
63	N-Ethylmaleimide-Sensitive Factor Regulates Î²2 Adrenoceptor Trafficking and Signaling in Cardiomyocytes. Molecular Pharmacology, 2007, 72, 429-439.	1.0	18
64	Trafficking of Î²-Adrenergic Receptors. Progress in Molecular Biology and Translational Science, 2015, 132, 151-188.	0.9	17
65	Carvedilol induces biased Î²1 adrenergic receptor-nitric oxide synthase 3-cyclic guanylyl monophosphate signalling to promote cardiac contractility. Cardiovascular Research, 2021, 117, 2237-2251.	1.8	16
66	GRK5 Controls SAP97-Dependent Cardiotoxic Î² ₁ Adrenergic Receptor-CaMKII Signaling in Heart Failure. Circulation Research, 2020, 127, 796-810.	2.0	16
67	Cross-Talk Between Insulin Signaling and G Proteinâ€"Coupled Receptors. Journal of Cardiovascular Pharmacology, 2017, 70, 74-86.	0.8	15
68	Nanodelivery of a functional membrane receptor to manipulate cellular phenotype. Scientific Reports, 2018, 8, 3556.	1.6	15
69	Illuminating cell signaling with genetically encoded FRET biosensors in adult mouse cardiomyocytes. Journal of General Physiology, 2018, 150, 1567-1582.	0.9	15
70	Orally Available Soluble Epoxide Hydrolase/Phosphodiesterase 4 Dual Inhibitor Treats Inflammatory Pain. Journal of Medicinal Chemistry, 2018, 61, 3541-3550.	2.9	14
71	SAP97 Controls the Trafficking and Resensitization of the Beta-1-Adrenergic Receptor through Its PDZ2 and I3 Domains. PLoS ONE, 2013, 8, e63379.	1.1	14
72	Monoamine Oxidases Desensitize Intracellular Î² ₁ AR Signaling in Heart Failure. Circulation Research, 2021, 129, 965-967.	2.0	13

#	ARTICLE	IF	CITATIONS
73	Î²-blockers augment L-type Ca2+ channel activity by targeting spatially restricted Î²2AR signaling in neurons. ELife, 2019, 8, .	2.8	12
74	Hyperinsulinemia promotes heterologous desensitization of Î²₂adrenergic receptor in airway smooth muscle in obesity. FASEB Journal, 2020, 34, 3996-4008.	0.2	10
75	Monoamine oxidase A and organic cation transporter 3 coordinate intracellular Î²1AR signaling to calibrate cardiac contractile function. Basic Research in Cardiology, 2022, 117, .	2.5	9
76	With or Without Langendorff. Circulation Research, 2016, 119, 888-890.	2.0	7
77	Highâ€fat diet induces protein kinase A and Gâ€protein receptor kinase phosphorylation of Î²₂â€adrenergic receptor and impairs cardiac adrenergic reserve in animal hearts. Journal of Physiology, 2017, 595, 1973-1986.	1.3	7
78	Î²-Adrenergic Receptor, Amyloid Î²-Peptide, and Alzheimer's Disease. Current Topics in Membranes, 2011, 67, 205-228.	0.5	6
79	GÎ±12 and GÎ±13: Versatility in Physiology and Pathology. Frontiers in Cell and Developmental Biology, 2022, 10, 809425.	1.8	6
80	Subcellular Propagation of Cardiomyocyte Î²-Adrenergic Activation of Calcium Uptake Involves Internal Î²-Receptors and AKAP7. Function, 2022, 3, .	1.1	6
81	Deciphering cellular signals in adult mouse sinoatrial node cells. IScience, 2022, 25, 103693.	1.9	4
82	Three Recombinant Engineered Antibodies against Recombinant Tags with High Affinity and Specificity. PLoS ONE, 2016, 11, e0150125.	1.1	3
83	Wrapped around the heart. Nature, 2014, 507, 43-44.	13.7	1
84	Profiling of Differential Expression of Genes in Mice Carrying Both Mutant Presenilin 1 and Amyloid Precursor Protein Transgenes with or without Knockout of Î²2 Adrenergic Receptor Gene. Journal of Applied Bioinformatics & Computational Biology, 2018, 07, .	0.2	1
85	Compartmentalized cAMP signaling in arterial myocytes. FASEB Journal, 2021, 35, .	0.2	0
86	Norepinephrine and epinephrine induce distinct beta2 adrenoceptor signaling in cardiac myocytes. FASEB Journal, 2006, 20, .	0.2	0
87	FRET studies on distinct cAMP/PKA signaling induced by beta adrenergic receptor subtypes. FASEB Journal, 2009, 23, 709.1.	0.2	0
88	Equilibrium between adenylyl cyclase and phosphodiesterase patterns adrenergic agonist doseâ€dependent spatiotemporal cAMP/PKA activities. FASEB Journal, 2011, 25, 1012.3.	0.2	0