Ayako Makino

List of Publications by Year
in descending order

101 papers	3,444 citations	117453 34 h-index	155451 55 g-index
103 all docs	103 docs citations	103 times ranked	4529 citing authors

#	Article	IF	Citations
1	Notch3 signaling promotes the development of pulmonary arterial hypertension. Nature Medicine, 2009, 15, 1289-1297.	15.2	303
2	Increased Renal Medullary Oxidative Stress Produces Hypertension. Hypertension, 2002, 39, 667-672.	1.3	155
3	Increased Renal Medullary H2O2Leads to Hypertension. Hypertension, 2003, 42, 25-30.	1.3	127
4	Endothelial HIF-2Î± Contributes to Severe Pulmonary Hypertension by Inducing Endothelial-to-Mesenchymal Transition. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2018, 314, ajplung.00096.2.	1.3	121
5	Enhanced Ca ²⁺ -Sensing Receptor Function in Idiopathic Pulmonary Arterial Hypertension. Circulation Research, 2012, 111, 469-481.	2.0	105
6	Mechanisms underlying the attenuation of endothelium-dependent vasodilatation in the mesenteric arterial bed of the streptozotocin-induced diabetic rat. British Journal of Pharmacology, 2000, 130, 549-556.	2.7	95
7	Upregulated expression of STIM2, TRPC6, and Orai2 contributes to the transition of pulmonary arterial smooth muscle cells from a contractile to proliferative phenotype. American Journal of Physiology - Cell Physiology, 2015, 308, C581-C593.	2.1	91
8	Regulation of mitochondrial morphology and function by <i>O</i>-GlcNAcylation in neonatal cardiac myocytes. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 300, R1296-R1302.	0.9	90
9	Notch Activation of Ca²⁺ Signaling in the Development of Hypoxic Pulmonary Vasoconstriction and Pulmonary Hypertension. American Journal of Respiratory Cell and Molecular Biology, 2015, 53, 355-367.	1.4	86
10	STIM2 Contributes to Enhanced Storeâ€Operated Ca²⁺ Entry in Pulmonary Artery Smooth Muscle Cells from Patients with Idiopathic Pulmonary Arterial Hypertension. Pulmonary Circulation, 2011, 1, 84-94.	0.8	78
11	Deficiency of Akt1, but not Akt2, attenuates the development of pulmonary hypertension. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 308, L208-L220.	1.3	75
12	SGLT inhibitors attenuate NO-dependent vascular relaxation in the pulmonary artery but not in the coronary artery. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2015, 309, L1027-L1036.	1.3	75
13	Chronic hypoxia selectively enhances L- and T-type voltage-dependent Ca2+ channel activity in pulmonary artery by upregulating Cav1.2 and Cav3.2. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2013, 305, L154-L164.	1.3	73
14	Downregulation of connexin40 is associated with coronary endothelial cell dysfunction in streptozotocin-induced diabetic mice. American Journal of Physiology - Cell Physiology, 2008, 295, C221-C230.	2.1	72
15	Elevated plasma endothelin-1 level in streptozotocin-induced diabetic rats and responsiveness of the mesenteric arterial bed to endothelin-1. British Journal of Pharmacology, 1998, 123, 1065-1072.	2.7	71
16	Mitochondrial function in vascular endothelial cell in diabetes. Journal of Smooth Muscle Research, 2012, 48, 1-26.	0.7	71
17	Pathogenic role of calcium-sensing receptors in the development and progression of pulmonary hypertension. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 310, L846-L859.	1.3	69
18	ATP promotes cell survival via regulation of cytosolic [Ca²⁺] and Bcl-2/Bax ratio in lung cancer cells. American Journal of Physiology - Cell Physiology, 2016, 310, C99-C114.	2.1	68

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19	Coronary endothelial dysfunction and mitochondrial reactive oxygen species in type 2 diabetic mice. American Journal of Physiology - Cell Physiology, 2013, 305, C1033-C1040.	2.1	65
20	STIM1 Restores Coronary Endothelial Function in Type 1 Diabetic Mice. Circulation Research, 2012, 111, 1166-1175.	2.0	57
21	Thyroid Hormone Receptor-Î² Is Associated with Coronary Angiogenesis during Pathological Cardiac Hypertrophy. Endocrinology, 2009, 150, 2008-2015.	1.4	54
22	Flow shear stress enhances intracellular Ca²⁺signaling in pulmonary artery smooth muscle cells from patients with pulmonary arterial hypertension. American Journal of Physiology - Cell Physiology, 2014, 307, C373-C383.	2.1	54
23	Calcium-Sensing Receptor Regulates Cytosolic [Ca2+] and Plays a Major Role in the Development of Pulmonary Hypertension. Frontiers in Physiology, 2016, 7, 517.	1.3	51
24	The role of oxysterols in control of endothelial stiffness. Journal of Lipid Research, 2012, 53, 1348-1358.	2.0	50
25	<i>O</i>-GlcNAcase overexpression reverses coronary endothelial cell dysfunction in type 1 diabetic mice. American Journal of Physiology - Cell Physiology, 2015, 309, C593-C599.	2.1	50
26	Role of Reactive Oxygen Species and Redox in Regulating the Function of Transient Receptor Potential Channels. Antioxidants and Redox Signaling, 2011, 15, 1549-1565.	2.5	47
27	Pathogenic Role of mTORC1 and mTORC2 in Pulmonary Hypertension. JACC Basic To Translational Science, 2018, 3, 744-762.	1.9	47
28	VDAC: old protein with new roles in diabetes. American Journal of Physiology - Cell Physiology, 2012, 303, C1055-C1060.	2.1	45
29	STIM2 (Stromal Interaction Molecule 2)â€"Mediated Increase in Resting Cytosolic Free Ca ²⁺ Concentration Stimulates PASMC Proliferation in Pulmonary Arterial Hypertension. Hypertension, 2018, 71, 518-529.	1.3	45
30	Dihydropyridine Ca ²⁺ Channel Blockers Increase Cytosolic [Ca ²⁺] by Activating Ca ²⁺ -sensing Receptors in Pulmonary Arterial Smooth Muscle Cells. Circulation Research, 2013, 112, 640-650.	2.0	42
31	Upregulation of Piezo1 (Piezo Type Mechanosensitive Ion Channel Component 1) Enhances the Intracellular Free Calcium in Pulmonary Arterial Smooth Muscle Cells From Idiopathic Pulmonary Arterial Hypertension Patients. Hypertension, 2021, 77, 1974-1989.	1.3	42
32	Nitrosyl-Cobinamide, a New and Direct Nitric Oxideâ€"Releasing Drug Effective <i>In Vivo</i>. Experimental Biology and Medicine, 2007, 232, 1432-1440.	1.1	41
33	Divergent changes of p53 in pulmonary arterial endothelial and smooth muscle cells involved in the development of pulmonary hypertension. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2019, 316, L216-L228.	1.3	41
34	Mechanotransduction in leukocyte activation: a review. Biorheology, 2007, 44, 221-49.	1.2	39
35	Endothelial and Smooth Muscle Cell Ion Channels in Pulmonary Vasoconstriction and Vascular Remodeling. , 2011, 1, 1555-1602.		38
36	Chloroquine is a potent pulmonary vasodilator that attenuates hypoxiaâ€induced pulmonary hypertension. British Journal of Pharmacology, 2017, 174, 4155-4172.	2.7	37

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37	Tetramethylpyrazine: A promising drug for the treatment of pulmonary hypertension. British Journal of Pharmacology, 2020, 177, 2743-2764.	2.7	36
38	Apolipoprotein E Enhances Endothelial-NO Production by Modulating Caveolin 1 Interaction With Endothelial NO Synthase. Hypertension, 2012, 60, 1040-1046.	1.3	34
39	Akt2 (Protein Kinase B Beta) Stabilizes ATP7A, a Copper Transporter for Extracellular Superoxide Dismutase, in Vascular Smooth Muscle. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 529-541.	1.1	31
40	Capsaicin-induced Ca²⁺signaling is enhanced via upregulated TRPV1 channels in pulmonary artery smooth muscle cells from patients with idiopathic PAH. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 312, L309-L325.	1.3	30
41	Aortic pathology from protein kinase G activation is prevented by an antioxidant vitamin B12 analog. Nature Communications, 2019, 10, 3533.	5.8	30
42	mTOR Signaling in Pulmonary Vascular Disease: Pathogenic Role and Therapeutic Target. International Journal of Molecular Sciences, 2021, 22, 2144.	1.8	29
43	Endothelial upregulation of mechanosensitive channel Piezo1 in pulmonary hypertension. American Journal of Physiology - Cell Physiology, 2021, 321, C1010-C1027.	2.1	29
44	Hypoxia selectively upregulates cation channels and increases cytosolic [Ca²⁺] in pulmonary, but not coronary, arterial smooth muscle cells. American Journal of Physiology - Cell Physiology, 2018, 314, C504-C517.	2.1	28
45	Overexpression of p53 due to excess protein O-GlcNAcylation is associated with coronary microvascular disease in type 2 diabetes. Cardiovascular Research, 2020, 116, 1186-1198.	1.8	28
46	Thyroid hormone receptor-Î± and vascular function. American Journal of Physiology - Cell Physiology, 2012, 302, C1346-C1352.	2.1	27
47	Altered Airway Microbiota Composition in Patients With Pulmonary Hypertension. Hypertension, 2020, 76, 1589-1599.	1.3	27
48	A comparative study on the rat aorta and mesenteric arterial bed of the possible role of nitric oxide in the desensitization of the vasoconstrictor response to an Î±1 -adrenoceptor agonist. British Journal of Pharmacology, 1997, 120, 1221-1228.	2.7	26
49	MicroRNA-mediated downregulation of K⁺ channels in pulmonary arterial hypertension. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2020, 318, L10-L26.	1.3	25
50	Mechanisms underlying increased release of endothelin-1 from aorta in diabetic rats. Peptides, 2001, 22, 639-645.	1.2	24
51	Mitochondrial connexin40 regulates mitochondrial calcium uptake in coronary endothelial cells. American Journal of Physiology - Cell Physiology, 2017, 312, C398-C406.	2.1	23
52	TRPC6, a therapeutic target for pulmonary hypertension. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2021, 321, L1161-L1182.	1.3	22
53	In vivo selective expression of thyroid hormone receptor Î±1 in endothelial cells attenuates myocardial injury in experimental myocardial infarction in mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2014, 307, R340-R346.	0.9	21
54	Diabetes Mellitus Associates with Increased Right Ventricular Afterload and Remodeling in Pulmonary Arterial Hypertension. American Journal of Medicine, 2018, 131, 702.e7-702.e13.	0.6	20

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55	Overexpression of hexokinase 2 reduces mitochondrial calcium overload in coronary endothelial cells of type 2 diabetic mice. American Journal of Physiology - Cell Physiology, 2018, 314, C732-C740.	2.1	20
56	Hypoxiaâ€induced pulmonary hypertension in type 2 diabetic mice. Pulmonary Circulation, 2017, 7, 175-185.	0.8	19
57	Functional characterization of voltage-dependent Ca²⁺ channels in mouse pulmonary arterial smooth muscle cells: divergent effect of ROS. American Journal of Physiology - Cell Physiology, 2013, 304, C1042-C1052.	2.1	18
58	Notch enhances Ca²⁺ entry by activating calcium-sensing receptors and inhibiting voltage-gated K⁺ channels. American Journal of Physiology - Cell Physiology, 2020, 318, C954-C968.	2.1	18
59	Revisiting the mechanism of hypoxic pulmonary vasoconstriction using isolated perfused/ventilated mouse lung. Pulmonary Circulation, 2020, 10, 1-18.	0.8	15
60	Halofuginone, a promising drug for treatment of pulmonary hypertension. British Journal of Pharmacology, 2021, 178, 3373-3394.	2.7	15
61	Tension measurement in isolated rat and mouse pulmonary artery. Drug Discovery Today: Disease Models, 2010, 7, 123-130.	1.2	14
62	Mechanosensitive channel Piezo1 is required for pulmonary artery smooth muscle cell proliferation. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2022, 322, L737-L760.	1.3	14
63	Isolation of Mouse Coronary Endothelial Cells. Journal of Visualized Experiments, 2016, , .	0.2	13
64	Pulmonary vascular dysfunction in metabolic syndrome. Journal of Physiology, 2019, 597, 1121-1141.	1.3	13
65	Endothelial plateletâ€derived growth factorâ€mediated activation of smooth muscle plateletâ€derived growth factor receptors in pulmonary arterial hypertension. Pulmonary Circulation, 2020, 10, 1-15.	0.8	13
66	Endothelial eNAMPT drives EndMT and preclinical PH: rescue by an eNAMPTâ€neutralizing mAb. Pulmonary Circulation, 2021, 11, 1-14.	0.8	13
67	Transcriptomic profiles in pulmonary arterial hypertension associate with disease severity and identify novel candidate genes. Pulmonary Circulation, 2020, 10, 1-5.	0.8	11
68	HuR/Cx40 downregulation causes coronary microvascular dysfunction in type 2 diabetes. JCI Insight, 2021, 6, .	2.3	11
69	Chronic Hypoxia Decreases Endothelial Connexin 40, Attenuates Endotheliumâ€Dependent Hyperpolarizationâ€“Mediated Relaxation in Small Distal Pulmonary Arteries, and Leads to Pulmonary Hypertension. Journal of the American Heart Association, 2020, 9, e018327.	1.6	10
70	Flavored and Nicotine-Containing E-Cigarettes Induce Impaired Angiogenesis and Diabetic Wound Healing via Increased Endothelial Oxidative Stress and Reduced NO Bioavailability. Antioxidants, 2022, 11, 904.	2.2	10
71	Effects of Chronic Administration of L-Arginine on Vasoactive Responses induced by Endothelin-1 and its Plasma Level in Streptozotocin-Induced Diabetic Rats.. Journal of Smooth Muscle Research, 2002, 38, 101-115.	0.7	8
72	Chloroquine differentially modulates coronary vasodilation in control and diabetic mice. British Journal of Pharmacology, 2020, 177, 314-327.	2.7	8

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73	Mouse model of experimental pulmonary hypertension: Lung angiogram and right heart catheterization. Pulmonary Circulation, 2021, 11, 1-17.	0.8	8
74	Fenfluramineâ€Induced Gene Dysregulation in Human Pulmonary Artery Smooth Muscle and Endothelial Cells. Pulmonary Circulation, 2011, 1, 405-418.	0.8	7
75	Pulmonary vessel casting in a rat model of monocrotalineâ€mediated pulmonary hypertension. Pulmonary Circulation, 2020, 10, 1-7.	0.8	6
76	Efferocytosis of vascular cells in cardiovascular disease. , 2022, 229, 107919.		6
77	Mitochondrial Ion Channels in Metabolic Disease. , 2016, , 397-419.		6
78	Pathogenic and Therapeutic Role of MicroRNA in Pulmonary Arterial Hypertension. , 2017, , 31-54.		2
79	miRNAâ€29b Directly Downregulates K + Channel Expression and Function in IPAHâ€PASMC. FASEB Journal, 2015, 29, 662.16.	0.2	2
80	Upregulation of Calcium Homeostasis Modulators in Contractile-To-Proliferative Phenotypical Transition of Pulmonary Arterial Smooth Muscle Cells. Frontiers in Physiology, 2021, 12, 714785.	1.3	1
81	Smooth Muscle Cell Ion Channels in Pulmonary Arterial Hypertension: Pathogenic Role in Pulmonary Vasoconstriction and Vascular Remodeling. , 2016, , 295-324.		1
82	Increased expression of microRNAâ€29b attenuates function of Ca²⁺â€activated K⁺ channels in human PASMC from idiopathic PAH patients. FASEB Journal, 2018, 32, 581.11.	0.2	1
83	Decreased MicroRNAâ€153 Promotes Endothelialâ€toâ€Mesenchymal Transition in Idiopathic Pulmonary Arterial Hypertension. FASEB Journal, 2020, 34, 1-1.	0.2	1
84	G Proteinâ€coupled Receptor as a Mechanosensor for Fluid Shear in Neutrophil. FASEB Journal, 2006, 20, A281.	0.2	0
85	Role of Connexin40 in Coronary Endothelial Cell Dysfunction in Type 1 Diabetic Mice. FASEB Journal, 2008, 22, 964.16.	0.2	0
86	A TRIBUTE TO DR. YUAN-CHENG B. FUNG. , 2009, , 339-342.		0
87	Selectively upregulated microRNAs in pulmonary artery smooth muscle cells from patients with idiopathic pulmonary arterial hypertension. FASEB Journal, 2011, 25, lb516.	0.2	0
88	microRNA 29b is upregulated in pulmonary artery smooth muscle cells from patients with idiopathic pulmonary arterial hypertension and inhibits K+ channel expression and function. FASEB Journal, 2012, 26, 884.10.	0.2	0
89	Oâ€GlcNacase overexpression restores coronary endothelial dysfunction in type 1 diabetic mice (1076.1). FASEB Journal, 2014, 28, 1076.1.	0.2	0
90	Raptor and Rictor Both Contribute to the Development and Progression of Pulmonary Arterial Hypertension. FASEB Journal, 2015, 29, 662.17.	0.2	0

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91	Different Pattern of ATPâ€mediated Increases in [Ca 2+] cyt Contributes to ATPâ€induced Increase in Bclâ€2/Bax Ratio in Lung Cancer Cells But Not in Normal Control Cells. FASEB Journal, 2015, 29, 54.1.	0.2	0
92	Coronary microvascular dysfunction in diabetes: Role of HuR. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, SY57-2.	0.0	0
93	Calcium signaling in pulmonary hypertension: Role of STIM2. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, SY57-1.	0.0	0
94	Chronic Hypoxia Attenuates Endotheliumâ€dependent Hyperpolarizationâ€induced Vascular Relaxation in Pulmonary Artery and Leads to Pulmonary Hypertension. FASEB Journal, 2018, 32, .	0.2	0
95	Endothelialâ€dependent activation of smooth muscle PDGF Receptors enhances PASMC proliferation in IPAH. FASEB Journal, 2018, 32, lb444.	0.2	0
96	MicroRNA Profiling in Coronary Endothelial Cells in Type 2 Diabetic Mice. FASEB Journal, 2019, 33, lb516.	0.2	0
97	MicroRNAâ€181b Regulates Ca 2+ Influx by Targeting TRPC6 in PASMC from Patients with Idiopathic Pulmonary Arterial Hypertension. FASEB Journal, 2019, 33, .	0.2	0
98	Gap Junction Intercellular Communication and Coronary Microvascular Disease in Type 2 Diabetes. FASEB Journal, 2020, 34, 1-1.	0.2	0
99	Using Pulmonary Angiogram to Estimate Vascular Remodeling in Mice. FASEB Journal, 2020, 34, 1-1.	0.2	0
100	Calcium Homeostasis Modulator (CALHM1/2) and Pulmonary Arterial Hypertension. FASEB Journal, 2020, 34, 1-1.	0.2	0
101	Hypoxic Pulmonary Vasoconstriction in Isolated Mouse Lungs. FASEB Journal, 2020, 34, 1-1.	0.2	0