Heikki Juhani Ruskoaho

List of Publications by Year
in descending order

112 papers	4,429 citations	87888 38 h-index	114465 63 g-index
115 all docs	115 docs citations	115 times ranked	5392 citing authors

#	Article	IF	Citations
1	Cardiac fibrosis in myocardial infarctionâ€"from repair and remodeling to regeneration. Cell and Tissue Research, 2016, 365, 563-581.	2.9	617
2	GATA transcription factors in the developing and adult heart. Cardiovascular Research, 2004, 63, 196-207.	3.8	349
3	Cardiac Hormones as Diagnostic Tools in Heart Failure. Endocrine Reviews, 2003, 24, 341-356.	20.1	224
4	Effects of dexmedetomidine, a selective Î±2-adrenoceptor agonist, on hemodynamic control mechanisms. Clinical Pharmacology and Therapeutics, 1989, 46, 33-42.	4.7	203
5	GATA-4 Is a Nuclear Mediator of Mechanical Stretch-activated Hypertrophic Program. Journal of Biological Chemistry, 2003, 278, 23807-23816.	3.4	106
6	Distinct Upregulation of Extracellular Matrix Genes in Transition From Hypertrophy to Hypertensive Heart Failure. Hypertension, 2005, 45, 927-933.	2.7	106
7	Mitogen-activated Protein Kinases p38 and ERK 1/2 Mediate the Wall Stress-induced Activation of GATA-4 Binding in Adult Heart. Journal of Biological Chemistry, 2004, 279, 24852-24860.	3.4	90
8	Adrenomedullin Gene Expression in the Rat Heart is Stimulated by Acute Pressure Overload: Blunted Effect in Experimental Hypertension. Endocrinology, 1997, 138, 2636-2639.	2.8	84
9	Apelin Increases Cardiac Contractility via Protein Kinase CÎµ- and Extracellular Signal-Regulated Kinase-Dependent Mechanisms. PLoS ONE, 2014, 9, e93473.	2.5	82
10	Drugâ€Loaded Multifunctional Nanoparticles Targeted to the Endocardial Layer of the Injured Heart Modulate Hypertrophic Signaling. Small, 2017, 13, 1701276.	10.0	82
11	Pressure Overload Increases GATA4 Binding Activity via Endothelin-1. Circulation, 2001, 103, 730-735.	1.6	79
12	InÂvivo biocompatibility of porous silicon biomaterials for drug delivery to the heart. Biomaterials, 2014, 35, 8394-8405.	11.4	73
13	Distinct Roles of Mitogen-activated Protein Kinase Pathways in GATA-4 Transcription Factor-mediated Regulation of B-type Natriuretic Peptide Gene. Journal of Biological Chemistry, 2002, 277, 13752-13760.	3.4	72
14	InÂvitro and inÂvivo assessment of heart-homing porous silicon nanoparticles. Biomaterials, 2016, 94, 93-104.	11.4	72
15	Mechanical load-induced alterations in B-type natriuretic peptide gene expression. Canadian Journal of Physiology and Pharmacology, 2001, 79, 646-653.	1.4	68
16	Mechanisms of mechanical load-induced atrial natriuretic peptide secretion: role of endothelin, nitric oxide, and angiotensin II. Journal of Molecular Medicine, 1997, 75, 876-885.	3.9	67
17	Gene Structure of a New Cardiac Peptide Hormone: A Model for Heart-Specific Gene Expression1. Endocrinology, 2000, 141, 731-740.	2.8	66
18	GATA-4 Is an Angiogenic Survival Factor of the Infarcted Heart. Circulation: Heart Failure, 2010, 3, 440-450.	3.9	62

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19	Vascular endothelial growth factor-B gene transfer prevents angiotensin II-induced diastolic dysfunction via proliferation and capillary dilatation in rats. Cardiovascular Research, 2011, 89, 204-213.	3.8	62
20	Dualâ€Drug Delivery Using Dextranâ€Functionalized Nanoparticles Targeting Cardiac Fibroblasts for Cellular Reprogramming. Advanced Functional Materials, 2018, 28, 1705134.	14.9	60
21	Identification of Cell Cycle Regulatory and Inflammatory Genes As Predominant Targets of p38 Mitogen-Activated Protein Kinase in the Heart. Circulation Research, 2006, 99, 485-493.	4.5	59
22	p38 Kinase rescues failing myocardium after myocardial infarction: evidence for angiogenic and antiâ€apoptotic mechanisms. FASEB Journal, 2006, 20, 1907-1909.	0.5	58
23	Fabrication and Characterization of Drug-Loaded Conductive Poly(glycerol) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 587 Td (seb Materials & Interfaces, 2020, 12, 6899-6909.	8.0	57
24	Endothelin-1 Is Involved in Stretch-Induced Early Activation of B-Type Natriuretic Peptide Gene Expression in Atrial but Not in Ventricular Myocytes. Circulation, 1997, 96, 3053-3062.	1.6	57
25	Multifunctional 3Dâ€Printed Patches for Longâ€Term Drug Release Therapies after Myocardial Infarction. Advanced Functional Materials, 2020, 30, 2003440.	14.9	53
26	Mechanical stretch induced transcriptomic profiles in cardiac myocytes. Scientific Reports, 2018, 8, 4733.	3.3	51
27	Cellular Internalizationâ€“Induced Aggregation of Porous Silicon Nanoparticles for Ultrasound Imaging and Proteinâ€Mediated Protection of Stem Cells. Small, 2019, 15, e1804332.	10.0	51
28	Inhibition of Letâ€7 micro<scp>RNA</scp> attenuates myocardial remodeling and improves cardiac function postinfarction in mice. Pharmacology Research and Perspectives, 2014, 2, e00056.	2.4	49
29	Natriuretic Peptides Stimulate Steroidogenesis in the Fetal Rat Testis1. Biology of Reproduction, 2001, 65, 595-600.	2.7	48
30	Connective Tissue Growth Factor Inhibition Enhances Cardiac Repair and Limits Fibrosis After Myocardial Infarction. JACC Basic To Translational Science, 2019, 4, 83-94.	4.1	48
31	Discovery of Small Molecules Targeting the Synergy of Cardiac Transcription Factors GATA4 and NKX2-5. Journal of Medicinal Chemistry, 2017, 60, 7781-7798.	6.4	46
32	Direct left ventricular wall stretch activates GATAff4 binding in perfused rat heart: involvement of autocrine/paracrine pathways. Pflugers Archiv European Journal of Physiology, 2002, 443, 362-369.	2.8	43
33	Intramyocardial BNP Gene Delivery Improves Cardiac Function Through Distinct Context-Dependent Mechanisms. Circulation: Heart Failure, 2011, 4, 483-495.	3.9	42
34	Dual-peptide functionalized acetalated dextran-based nanoparticles for sequential targeting of macrophages during myocardial infarction. Nanoscale, 2020, 12, 2350-2358.	5.6	42
35	Evidence for a Functional Role of Angiotensin II Type 2 Receptor in the Cardiac Hypertrophic Process In Vivo in the Rat Heart. Circulation, 2003, 108, 2414-2422.	1.6	41
36	GATA4 Mediates Activation of the B-Type Natriuretic Peptide Gene Expression in Response to Hemodynamic Stress. Endocrinology, 2001, 142, 4693-4700.	2.8	40

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37	Endothelin Peptides: Biological Activities, Cellular Signalling and Clinical Significance. Annals of Medicine, 1992, 24, 153-161.	3.8	39
38	Posttranscriptional Control of BNP Gene Expression in Angiotensin IIâ€“Induced Hypertension. Hypertension, 2002, 39, 803-808.	2.7	39
39	(Pro)renin Receptor Triggers Distinct Angiotensin II-Independent Extracellular Matrix Remodeling and Deterioration of Cardiac Function. PLoS ONE, 2012, 7, e41404.	2.5	39
40	Hypoxic pressor response, cardiac size, and natriuretic peptides are modified by long-term intermittent hypoxia. Journal of Applied Physiology, 1999, 87, 2025-2031.	2.5	38
41	Quinapril treatment and arterial smooth muscle responses in spontaneously hypertensive rats. British Journal of Pharmacology, 1993, 108, 980-990.	5.4	35
42	Endothelin-1-specific Activation of B-type Natriuretic Peptide Gene via p38 Mitogen-activated Protein Kinase and Nuclear ETS Factors. Journal of Biological Chemistry, 2003, 278, 3969-3975.	3.4	33
43	AT₁Receptor Blockade Improves Vasorelaxation in Experimental Renal Failure. Hypertension, 2003, 41, 1364-1371.	2.7	32
44	Cardiac BNP gene activation by angiotensin II in vivo. Molecular and Cellular Endocrinology, 2007, 273, 59-67.	3.2	31
45	Cardiac Actions of a Small Molecule Inhibitor Targeting GATA4â€“NKX2-5 Interaction. Scientific Reports, 2018, 8, 4611.	3.3	29
46	Stem cells are the most sensitive screening tool to identify toxicity of GATA4-targeted novel small-molecule compounds. Archives of Toxicology, 2018, 92, 2897-2911.	4.2	26
47	Nuclear Receptor-Like Structure and Interaction of Congenital Heart Disease-Associated Factors GATA4 and NKX2-5. PLoS ONE, 2015, 10, e0144145.	2.5	25
48	Immunohistochemical Localization of Somatostatin Receptor SST2A in the Rat Pancreas. Endocrinology, 1997, 138, 2636-2639.	2.8	23
49	Identification of PKCÎ± Isoform-Specific Effects in Cardiac Myocytes Using Antisense Phosphorothioate Oligonucleotides. Molecular Pharmacology, 2002, 62, 1482-1491.	2.3	22
50	Effects of high calcium diet on arterial smooth muscle function and electrolyte balance in mineralocorticoidâ€salt hypertensive rats. British Journal of Pharmacology, 1993, 108, 948-958.	5.4	21
51	Cellular Mechanisms of Valvular Thickening in Early and Intermediate Calcific Aortic Valve Disease. Current Cardiology Reviews, 2018, 14, 264-271.	1.5	21
52	Characterization of the Regulatory Mechanisms of Activating Transcription Factor 3 by Hypertrophic Stimuli in Rat Cardiomyocytes. PLoS ONE, 2014, 9, e105168.	2.5	20
53	p38Î± regulates SERCA2a function. Journal of Molecular and Cellular Cardiology, 2014, 67, 86-93.	1.9	20
54	Gene Structure of a New Cardiac Peptide Hormone: A Model for Heart-Specific Gene Expression. Endocrinology, 2000, 141, 731-740.	2.8	20

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55	Factors Derived from Adrenals Are Required for Activation of Cardiac Gene Expression in Angiotensin II-Induced Hypertension. Endocrinology, 2001, 142, 4256-4263.	2.8	19
56	Targeting GATA4 for cardiac repair. IUBMB Life, 2020, 72, 68-79.	3.4	19
57	Synthesis, Identification, and Structureâ€“Activity Relationship Analysis of GATA4 and NKX2-5 Proteinâ€“Protein Interaction Modulators. Journal of Medicinal Chemistry, 2019, 62, 8284-8310.	6.4	18
58	Heat shock protein 90 is downregulated in calcific aortic valve disease. BMC Cardiovascular Disorders, 2019, 19, 306.	1.7	18
59	GATA4-targeted compound exhibits cardioprotective actions against doxorubicin-induced toxicity in vitro and in vivo: establishment of a chronic cardiotoxicity model using human iPSC-derived cardiomyocytes. Archives of Toxicology, 2020, 94, 2113-2130.	4.2	18
60	GATA4 Mediates Activation of the B-Type Natriuretic Peptide Gene Expression in Response to Hemodynamic Stress. Endocrinology, 2001, 142, 4693-4700.	2.8	18
61	The effect of medetomidine, an Î±₂â€adrenoceptor agonist, on plasma atrial natriuretic peptide levels, haemodynamics and renal excretory function in spontaneously hypertensive and Wistarâ€Kyoto rats. British Journal of Pharmacology, 1989, 97, 125-132.	5.4	17
62	NG-Nitro-l-Arginine Methyl Esterâ€“Induced Hypertension and Natriuretic Peptide Gene Expression: Inhibition by Angiotensin II Type 1 Receptor Antagonism. Journal of Cardiovascular Pharmacology, 2002, 40, 478-486.	1.9	17
63	Impact of NO on ET-1- and AM-induced inotropic responses: potentiation by combined administration. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2000, 279, R569-R575.	1.8	16
64	Divergent Effects of Losartan and Metoprolol on Cardiac Remodeling, Câ€kit⁺ Cells, Proliferation and Apoptosis in the Left Ventricle after Myocardial Infarction. Clinical and Translational Science, 2009, 2, 422-430.	3.1	16
65	The Early-Onset Myocardial Infarction Associated PHACTR1 Gene Regulates Skeletal and Cardiac Alpha-Actin Gene Expression. PLoS ONE, 2015, 10, e0130502.	2.5	16
66	Differential regulation of cardiac adrenomedullin and natriuretic peptide gene expression by AT1 receptor antagonism and ACE inhibition in normotensive and hypertensive rats. Journal of Hypertension, 1999, 17, 1543-1552.	0.5	15
67	Targeting vasoactive peptides for managing calcific aortic valve disease. Annals of Medicine, 2017, 49, 63-74.	3.8	14
68	Inhibition of Hepatic Microsomal Drug Metabolism in Rats by Five Calcium Antagonists. Basic and Clinical Pharmacology and Toxicology, 1989, 64, 446-450.	0.0	13
69	Neoplastic extracellular matrix environment promotes cancer invasion in vitro. Experimental Cell Research, 2016, 344, 229-240.	2.6	13
70	SDF1 gradient associates with the distribution of c-Kit+ cardiac cells in the heart. Scientific Reports, 2018, 8, 1160.	3.3	13
71	In Vitro Evaluation of the Therapeutic Effects of Dualâ€Drug Loaded Sperminеâ€Acetalated Dextran Nanoparticles Coated with Tannic Acid for Cardiac Applications. Advanced Functional Materials, 2022, 32, 2109032.	14.9	13
72	Release of atrial natriuretic peptide from rat myocardium in vitro: effect of minoxidilâ€induced hypertrophy. British Journal of Pharmacology, 1990, 99, 701-708.	5.4	12

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73	Effect of phorbol ester on the release of atrial natriuretic peptide from the hypertrophied rat myocardium. British Journal of Pharmacology, 1991, 102, 453-461.	5.4	12
74	Early left ventricular gene expression profile in response to increase in blood pressure. Blood Pressure, 2006, 15, 375-383.	1.5	12
75	Phosphorylation of GATA4 at serine 105 is required for left ventricular remodelling process in angiotensin IIâ€induced hypertension in rats. Basic and Clinical Pharmacology and Toxicology, 2020, 127, 178-195.	2.5	12
76	Bone morphogenetic protein-2 â^' A potential autocrine/paracrine factor in mediating the stretch activated B-type and atrial natriuretic peptide expression in cardiac myocytes. Molecular and Cellular Endocrinology, 2015, 399, 9-21.	3.2	11
77	Vasoactive Peptide Release in Relation to Hemodynamic and Metabolic Changes During Rapid Ventricular Pacing. PACE - Pacing and Clinical Electrophysiology, 1999, 22, 1064-1070.	1.2	10
78	Prevention of Cardiac Hypertrophy by Longâ€term Treatment with Isosorbide Dinitrate and Prazosin but not by Minoxidil in Spontaneously Hypertensive Rats. Acta Pharmacologica Et Toxicologica, 1984, 54, 154-157.	0.0	10
79	Transcription factor PEX1 modulates extracellular matrix turnover through regulation of MMP-9 expression. Cell and Tissue Research, 2017, 367, 369-385.	2.9	10
80	A novel dual reporter embryonic stem cell line for toxicological assessment of teratogen-induced perturbation of anteriorâ€“posterior patterning of the heart. Archives of Toxicology, 2020, 94, 631-645.	4.2	10
81	Effect of atenolol and pindolol on the phorbol esterâ€induced coronary vasoconstriction in the isolated perfused heart of the rat. British Journal of Pharmacology, 1988, 94, 573-583.	5.4	9
82	EFFECT OF VASOACTIVE PEPTIDES ON TETRAHYMENA. CHEMOTACTIC PROPERTIES OF ENDOTHELINS (ET-1,) Tj ETQq0 0 0 rgBT /Overlo MECHANISM OF CHEMOTAXIS. Cell Biology International, 2001, 25, 1173-1177.	3.0	9
83	Pharmacological Protein Kinase C Modulators Reveal a Pro-hypertrophic Role for Novel Protein Kinase C Isoforms in Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes. Frontiers in Pharmacology, 2020, 11, 553852.	3.5	8
84	Conventional rigid 2D substrates cause complex contractile signals in monolayers of human induced pluripotent stem cellâ€derived cardiomyocytes. Journal of Physiology, 2022, 600, 483-507.	2.9	8
85	Hemodynamic Recovery, Atrial Natriuretic Peptide, and Catecholamines During Simulated Ventricular Tachycardia: Effects of Ventriculoatrial Conduction. PACE - Pacing and Clinical Electrophysiology, 1995, 18, 75-82.	1.2	7
86	A novel p38 MAPK target dyxin is rapidly induced by mechanical load in the heart. Blood Pressure, 2010, 19, 54-63.	1.5	7
87	WDR12, a Member of Nucleolar PeBoW-Complex, Is Up-Regulated in Failing Hearts and Causes Deterioration of Cardiac Function. PLoS ONE, 2015, 10, e0124907.	2.5	7
88	Distinct regulation of cardiac fibroblast proliferation and transdifferentiation by classical and novel protein kinase C isoforms: possible implications for new antifibrotic therapies. Molecular Pharmacology, 2020, 99, MOLPHARM-AR-2020-000094.	2.3	7
89	Circulating protein biomarkers predict incident hypertensive heart failure independently of Nâ€terminal proâ€Bâ€type natriuretic peptide levels. ESC Heart Failure, 2020, 7, 1891-1899.	3.1	7
90	GATA-targeted compounds modulate cardiac subtype cell differentiation in dual reporter stem cell line. Stem Cell Research and Therapy, 2021, 12, 190.	5.5	7

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91	Domain-Independent Inhibition of CBP/p300 Attenuates Î±-Synuclein Aggregation. ACS Chemical Neuroscience, 2021, 12, 2273-2279.	3.5	7
92	Plasma ANP and Cyclic GMP Levels Versus Left Ventricular Performance at Different AV Delays in AV Sequential Pacing. PACE - Pacing and Clinical Electrophysiology, 1994, 17, 627-636.	1.2	6
93	Inhibition of Atrial Wall Stretch-Induced Cardiac Hormone Secretion by Lavendustin A, a Potent Tyrosine Kinase Inhibitor¹. Endocrinology, 1999, 140, 4198-4207.	2.8	6
94	Mitogenâ€activated protein kinase p38 target regenerating isletâ€derived 3Î³ expression is upregulated in cardiac inflammatory response in the rat heart. Physiological Reports, 2016, 4, e12996.	1.7	6
95	cAMP- and cGMP-independent stretch-induced changes in the contraction of rat atrium. Pflugers Archiv European Journal of Physiology, 2000, 441, 65-68.	2.8	5
96	Effects of oxonic acid-induced hyperuricemia on mesenteric artery tone and cardiac load in experimental renal insufficiency. BMC Nephrology, 2015, 16, 35.	1.8	5
97	Inhibition of let-7c Regulates Cardiac Regeneration after Cryoinjury in Adult Zebrafish. Journal of Cardiovascular Development and Disease, 2019, 6, 16.	1.6	5
98	Cholecystokinin peptide signaling is regulated by a TBX5-MEF2 axis in the heart. Peptides, 2021, 136, 170459.	2.4	4
99	Hormonal, Haemodynamic, and Subjective Effects of Intravenously Infused Indomethacin: No Change in the Physiological Response to Hypertonic Saline Challenge. Basic and Clinical Pharmacology and Toxicology, 1989, 65, 231-235.	0.0	3
100	Depressant Effects of Lâ€Tyrosine on Isolated Perfused Rat and Rabbit Hearts. Basic and Clinical Pharmacology and Toxicology, 1990, 66, 209-212.	0.0	3
101	TSC-22 up-regulates collagen 3a1 gene expression in the rat heart. BMC Cardiovascular Disorders, 2015, 15, 122.	1.7	2
102	Effect of vasoactive peptides in Tetrahymena: chemotactic activities of adrenomedullin, proadrenomedullin N-terminal 20 peptide (PAMP) and calcitonin gene-related peptide (CGRP). Molecular and Cellular Biochemistry, 2016, 411, 271-280.	3.1	2
103	Inhibition of Atrial Wall Stretch-Induced Cardiac Hormone Secretion by Lavendustin A, a Potent Tyrosine Kinase Inhibitor. Endocrinology, 1999, 140, 4198-4207.	2.8	2
104	The Haemodynamic Effects of Losartan after Right Ventricle Infarct in Young Pigs. Basic and Clinical Pharmacology and Toxicology, 2001, 88, 325-330.	0.0	1
105	Upregulation of cardiac matrix Gla protein expression in response to hypertrophic stimuli. Blood Pressure, 2009, 18, 286-293.	1.5	1
106	Differential gene expressions of natriuretic peptides in left ventricular hypertrophy models in conscious rats. American Journal of Hypertension, 2001, 14, A161-A162.	2.0	0
107	Left ventricular expression of ANP, BNP and adrenomedullin are differentially regulated during beta receptor stimulation in rats in vivo. American Journal of Hypertension, 2001, 14, A206.	2.0	0
108	Circulating and cardiac levels of apelin, novel ligand of the orphan receptor APJ, in patients with heart failure. American Journal of Hypertension, 2003, 16, A15.	2.0	0

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109	The Effect of Aminophylline on Right Heart Function in Young Pigs after Ligation of the Right Coronary Artery. Basic and Clinical Pharmacology and Toxicology, 2008, 86, 192-196.	0.0	0
110	Calcium Carbonate versus Sevelamer Hydrochloride as Phosphate Binders after Long-Term Disease Progression in 5/6 Nephrectomized Rats. Advances in Nephrology, 2014, 2014, 1-10.	0.2	0
111	Identification of cardiomyocyte-enriched long non-coding RNAs as potential targets for induction of cardiac regeneration. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO2-3-46.	0.0	0
112	Stem cells are the most sensitive screening tool to identify toxicity of GATA4- targeted small-molecule compounds. Proceedings for Annual Meeting of the Japanese Pharmacological Society, 2018, WCP2018, PO4-9-32.	0.0	0