Christoph Maack

List of Publications by Year in descending order

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Version: 2024-02-01

84 papers

6,332 citations

94433 37 h-index 69250 77 g-index

88 all docs 88 docs citations

88 times ranked 8442 citing authors

#	Article	IF	CITATIONS
1	Oxygen Free Radical Release in Human Failing Myocardium Is Associated With Increased Activity of Rac1-GTPase and Represents a Target for Statin Treatment. Circulation, 2003, 108, 1567-1574.	1.6	396
2	Metabolic remodelling in heart failure. Nature Reviews Cardiology, 2018, 15, 457-470.	13.7	392
3	Calcium Signaling and Reactive Oxygen Species in Mitochondria. Circulation Research, 2018, 122, 1460-1478.	4.5	381
4	Impact of Oxidative Stress on the HeartÂand Vasculature. Journal of the American College of Cardiology, 2017, 70, 212-229.	2.8	362
5	Elevated Cytosolic Na + Decreases Mitochondrial Ca 2+ Uptake During Excitation-Contraction Coupling and Impairs Energetic Adaptation in Cardiac Myocytes. Circulation Research, 2006, 99, 172-182.	4.5	335
6	Reversal of Mitochondrial Transhydrogenase Causes Oxidative Stress in Heart Failure. Cell Metabolism, 2015, 22, 472-484.	16.2	307
7	Pathophysiological role of oxidative stress in systolic and diastolic heart failure and its therapeutic implications. European Heart Journal, 2015, 36, 2555-2564.	2.2	306
8	Mitofusin 2-Containing Mitochondrial-Reticular Microdomains Direct Rapid Cardiomyocyte Bioenergetic Responses Via Interorganelle Ca ²⁺ Crosstalk. Circulation Research, 2012, 111, 863-875.	4.5	286
9	Elevated Cytosolic Na ⁺ Increases Mitochondrial Formation of Reactive Oxygen Species in Failing Cardiac Myocytes. Circulation, 2010, 121, 1606-1613.	1.6	273
10	Mitochondrial reactive oxygen species production and elimination. Journal of Molecular and Cellular Cardiology, 2014, 73, 26-33.	1.9	243
11	Excitation-contraction coupling and mitochondrial energetics. Basic Research in Cardiology, 2007, 102, 369-392.	5.9	221
12	HDAC4 controls histone methylation in response to elevated cardiac load. Journal of Clinical Investigation, 2013, 123, 1359-1370.	8.2	157
13	Cardiac CaM Kinase II Genes \hat{l}' and \hat{l}^3 Contribute to Adverse Remodeling but Redundantly Inhibit Calcineurin-Induced Myocardial Hypertrophy. Circulation, 2014, 130, 1262-1273.	1.6	149
14	Treatments targeting inotropy. European Heart Journal, 2019, 40, 3626-3644.	2.2	123
15	Myocardial energetics in heart failure. Basic Research in Cardiology, 2013, 108, 358.	5.9	117
16	SR and mitochondria: Calcium cross-talk between kissing cousins. Journal of Molecular and Cellular Cardiology, 2013, 55, 42-49.	1.9	116
17	Cardiac effects of SGLT2 inhibitors: the sodium hypothesis. Cardiovascular Research, 2018, 114, 12-18.	3.8	114
18	Ca <scp>M</scp> Kinase <scp>II</scp> mediates maladaptive postâ€infarct remodeling and proâ€inflammatory chemoattractant signaling but not acute myocardial ischemia/reperfusion injury. EMBO Molecular Medicine, 2014, 6, 1231-1245.	6.9	94

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19	Calcium release microdomains and mitochondria. Cardiovascular Research, 2013, 98, 259-268.	3.8	90
20	A proteolytic fragment of histone deacetylase 4 protects the heart from failure by regulating the hexosamine biosynthetic pathway. Nature Medicine, 2018, 24, 62-72.	30.7	88
21	Low STAT3 expression sensitizes to toxic effects of \hat{l}^2 -adrenergic receptor stimulation in peripartum cardiomyopathy. European Heart Journal, 2017, 38, ehw086.	2.2	87
22	Adverse Bioenergetic Consequences of Na ⁺ -Ca ²⁺ Exchanger–Mediated Ca ²⁺ Influx in Cardiac Myocytes. Circulation, 2010, 122, 2273-2280.	1.6	76
23	Targeting Mitochondrial Oxidative Stress in Heart Failure. Journal of the American College of Cardiology, 2011, 58, 83-86.	2.8	76
24	Therapeutic approaches in heart failure with preserved ejection fraction: past, present, and future. Clinical Research in Cardiology, 2020, 109, 1079-1098.	3.3	74
25	Cardiac RKIP induces a beneficial β-adrenoceptor–dependent positive inotropy. Nature Medicine, 2015, 21, 1298-1306.	30.7	67
26	Mitochondrial energetics and calcium coupling in the heart. Journal of Physiology, 2017, 595, 3753-3763.	2.9	67
27	Targeting Mitochondrial Calcium Handling and Reactive Oxygen Species in Heart Failure. Current Heart Failure Reports, 2017, 14, 338-349.	3.3	67
28	Cellular and mitochondrial mechanisms of atrial fibrillation. Basic Research in Cardiology, 2020, 115, 72.	5.9	62
29	Barth syndrome cardiomyopathy. Cardiovascular Research, 2017, 113, 399-410.	3.8	58
30	Mitochondrial ROS and mitochondria-targeted antioxidants in the aged heart. Free Radical Biology and Medicine, 2021, 167, 109-124.	2.9	55
31	Inhibition of MicroRNA-146a and Overexpression of Its Target Dihydrolipoyl Succinyltransferase Protect Against Pressure Overload-Induced Cardiac Hypertrophy and Dysfunction. Circulation, 2017, 136, 747-761.	1.6	53
32	Cardiac Sodium-Calcium Exchanger Is Regulated by Allosteric Calcium and Exchanger Inhibitory Peptide at Distinct Sites. Circulation Research, 2005, 96, 91-99.	4.5	52
33	Intracellular Na+ and cardiac metabolism. Journal of Molecular and Cellular Cardiology, 2013, 61, 20-27.	1.9	52
34	Raf kinase inhibitor protein mediates myocardial fibrosis under conditions of enhanced myocardial oxidative stress. Basic Research in Cardiology, 2018, 113, 42.	5.9	50
35	Deranged sodium to sudden death. Journal of Physiology, 2015, 593, 1331-1345.	2.9	46
36	Duration of chronic heart failure affects outcomes with preserved effects of heart rate reduction with ivabradine: findings from SHIFT. European Journal of Heart Failure, 2018, 20, 373-381.	7.1	41

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37	Exercise attenuates inflammation and limits scar thinning after myocardial infarction in mice. American Journal of Physiology - Heart and Circulatory Physiology, 2015, 309, H345-H359.	3.2	38
38	Regulation of titin-based cardiac stiffness by unfolded domain oxidation (UnDOx). Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 24545-24556.	7.1	37
39	Bidirectional Relationship Between Cancer and Heart Failure: Old and New Issues in Cardio-oncology. Cardiac Failure Review, 2019, 5, 106-111.	3.0	36
40	Endogenous Activation of Mitochondrial K ATP Channels Protects Human Failing Myocardium From Hydroxyl Radical–Induced Stunning. Circulation Research, 2009, 105, 811-817.	4.5	35
41	Energetic drain driving hypertrophic cardiomyopathy. FEBS Letters, 2019, 593, 1616-1626.	2.8	34
42	Recent advances in cardioâ€oncology: a report from the †Heart Failure Association 2019 and World Congress on Acute Heart Failure 2019'. ESC Heart Failure, 2019, 6, 1140-1148.	3.1	34
43	Mitochondria Do Not Survive Calcium Overload During Transplantation. Circulation Research, 2020, 126, 784-786.	4.5	32
44	CaMKII does not control mitochondrial Ca ²⁺ uptake in cardiac myocytes. Journal of Physiology, 2020, 598, 1361-1376.	2.9	31
45	Metabolic alterations in a rat model of takotsubo syndrome. Cardiovascular Research, 2022, 118, 1932-1946.	3.8	31
46	Mitofusin 2 Is Essential for IP3-Mediated SR/Mitochondria Metabolic Feedback in Ventricular Myocytes. Frontiers in Physiology, 2019, 10, 733.	2.8	30
47	Loss of Mitochondrial Ca ²⁺ Uniporter Limits Inotropic Reserve and Provides Trigger and Substrate for Arrhythmias in Barth Syndrome Cardiomyopathy. Circulation, 2021, 144, 1694-1713.	1.6	30
48	Metabolic Alterations in Inherited Cardiomyopathies. Journal of Clinical Medicine, 2019, 8, 2195.	2.4	28
49	Selective NADH communication from \hat{l} ±-ketoglutarate dehydrogenase to mitochondrial transhydrogenase prevents reactive oxygen species formation under reducing conditions in the heart. Basic Research in Cardiology, 2020, 115, 53.	5.9	28
50	Repeated exposure to transient obstructive sleep apnea–related conditions causes an atrial fibrillation substrate in a chronic rat model. Heart Rhythm, 2021, 18, 455-464.	0.7	26
51	Redox signaling in heart failure and therapeutic implications. Free Radical Biology and Medicine, 2021, 171, 345-364.	2.9	26
52	Interplay of Defective Excitation-Contraction Coupling, Energy Starvation, and Oxidative Stress in Heart Failure. Trends in Cardiovascular Medicine, 2011, 21, 69-73.	4.9	23
53	Cancer Mortality in Trials of Heart Failure With Reduced Ejection Fraction: A Systematic Review and Metaâ€Analysis. Journal of the American Heart Association, 2020, 9, e016309.	3.7	23
54	Mitochondria as Therapeutic Targets in Heart Failure. Current Heart Failure Reports, 2022, 19, 27-37.	3.3	23

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55	Medical treatment of heart failure with reduced ejection fraction: the dawn of a new era of personalized treatment?. European Heart Journal - Cardiovascular Pharmacotherapy, 2021, 7, 539-546.	3.0	22
56	Cardiolipin remodeling in Barth syndrome and other hereditary cardiomyopathies. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2020, 1866, 165803.	3.8	19
57	Phosphodiesterase 4 inhibition but not beta-adrenergic stimulation suppresses tumor necrosis factor-alpha release in peripheral blood mononuclear cells in septic shock. Critical Care, 2008, 12, R159.	5. 8	18
58	Mitochondrial Therapies in Heart Failure. Handbook of Experimental Pharmacology, 2016, 243, 491-514.	1.8	18
59	Loss of autophagy protein ATG5 impairs cardiac capacity in mice and humans through diminishing mitochondrial abundance and disrupting Ca2+ cycling. Cardiovascular Research, 2022, 118, 1492-1505.	3 . 8	18
60	Endogenous nitric oxide formation in cardiac myocytes does not control respiration during βâ€adrenergic stimulation. Journal of Physiology, 2017, 595, 3781-3798.	2.9	16
61	A pathophysiological compass to personalize antianginal drug treatment. Nature Reviews Cardiology, 2021, 18, 838-852.	13.7	15
62	The endothelium as Achilles' heel in COVID-19 patients. Cardiovascular Research, 2020, 116, e195-e197.	3.8	14
63	A systematic review and meta-analysis of murine models of uremic cardiomyopathy. Kidney International, 2022, 101, 256-273.	5.2	13
64	Pharmacological inhibition of GLUT1 as a new immunotherapeutic approach after myocardial infarction. Biochemical Pharmacology, 2021, 190, 114597.	4.4	12
65	The α2-isoform of the Na ⁺ /K ⁺ -ATPase protects against pathological remodeling and β-adrenergic desensitization after myocardial infarction. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 321, H650-H662.	3.2	12
66	Metabolic cardiomyopathies: fighting the next epidemic. Cardiovascular Research, 2017, 113, 367-369.	3.8	10
67	Cathepsin A contributes to left ventricular remodeling by degrading extracellular superoxide dismutase in mice. Journal of Biological Chemistry, 2020, 295, 12605-12617.	3.4	10
68	Orphaned mitochondria in heart failure. Cardiovascular Research, 2016, 109, 6-8.	3.8	7
69	Response by Bertero et al to Letter Regarding Article, "Mitochondria Do Not Survive Calcium Overload". Circulation Research, 2020, 126, e58-e59.	4.5	7
70	Haematopoietic and cardiac GPR55 synchronize post-myocardial infarction remodelling. Scientific Reports, 2021, 11, 14385.	3.3	7
71	Immuno-metabolic interfaces in cardiac disease and failure. Cardiovascular Research, 2022, 118, 37-52.	3.8	6
72	The Partial AdeNosine A1 receptor agonist in patients with Chronic Heart failure and preserved Ejection fraction (PANACHE) trial. Cardiovascular Research, 2019, 115, e71-e73.	3.8	4

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73	Mechanoâ€energetic aspects of Barth syndrome. Journal of Inherited Metabolic Disease, 2022, 45, 82-98.	3.6	4
74	Rethinking Mitchell's Chemiosmotic Theory: Potassium Dominates Over Proton Flux to Drive Mitochondrial F1Fo-ATP Synthase. Function, 2022, 3, zqac012.	2.3	3
75	Targeted therapies for cardiac diseases. Nature Reviews Cardiology, 2022, 19, 343-344.	13.7	3
76	Pericardial effusion associated with hypothyroidism in an adult female with down syndrome. American Journal of Medical Genetics, Part A, 2015, 167, 1674-1675.	1.2	2
77	The cardiac reâ€AKTâ€ion to chronic volume overload. European Journal of Heart Failure, 2016, 18, 372-374.	7.1	2
78	Let's face the fats: palmitate restores cellular redox state in the diabetic heart. Journal of Physiology, 2020, 598, 1283-1284.	2.9	2
79	REPORT-HF reveals global inequalities in health care provision and prognosis of patients with acute heart failure. Cardiovascular Research, 2020, 116, e112-e114.	3.8	2
80	Grandfather's moonlighting: hydralazine's novel liaison with mitochondria. Cardiovascular Research, 2021, , .	3.8	2
81	Meeting highlights from the 2013 <scp>E</scp> uropean <scp>S</scp> ociety of <scp>C</scp> ardiology <scp>H</scp> eart <scp>F</scp> ailure <scp>A</scp> sociation <scp>W</scp> inter <scp>M</scp> eeting on <scp>T</scp> ranslational <scp>H</scp> eart <scp>F</scp> ailure <scp>R</scp> esearch. European lournal of Heart Failure. 2014. 16. 6-14.	7.1	1
82	Response to â€The possible role of insulin and glucagon in patients with heart failure and Type 2 diabetes'. European Heart Journal, 2020, 41, 326-327.	2.2	1
83	How low should we go on low-carbohydrate diets?. European Heart Journal, 2020, 41, 1057-1057.	2.2	1
84	Cereblon, a novel target in heart failure: but is calcium really everything?. European Heart Journal, 2022, , .	2.2	1