Mark J Crabtree

List of Publications by Year
in descending order

58 papers	3,493 citations	147566 31 h-index	161609 54 g-index
58 all docs	58 docs citations	58 times ranked	4964 citing authors

#	Article	IF	Citations
1	Atrial nitroso-redox balance and refractoriness following on-pump cardiac surgery: a randomized trial of atorvastatin. Cardiovascular Research, 2022, 118, 184-195.	1.8	9
2	Hepatic miR-144 Drives Fumarase Activity Preventing NRF2 Activation During Obesity. Gastroenterology, 2021, 161, 1982-1997.e11.	0.6	34
3	Hyperglycemia Induces Trained Immunity in Macrophages and Their Precursors and Promotes Atherosclerosis. Circulation, 2021, 144, 961-982.	1.6	109
4	Endothelial GTPCH (GTP Cyclohydrolase 1) and Tetrahydrobiopterin Regulate Gestational Blood Pressure, Uteroplacental Remodeling, and Fetal Growth. Hypertension, 2021, 78, 1871-1884.	1.3	10
5	Itaconate as an inflammatory mediator and therapeutic target in cardiovascular medicine. Biochemical Society Transactions, 2021, 49, 2189-2198.	1.6	7
6	Nitric oxide modulates cardiomyocyte pH control through a biphasic effect on sodium/hydrogen exchanger-1. Cardiovascular Research, 2020, 116, 1958-1971.	1.8	16
7	Isolation and culture of murine bone marrow-derived macrophages for nitric oxide and redox biology. Nitric Oxide - Biology and Chemistry, 2020, 100-101, 17-29.	1.2	37
8	Nitric Oxide Modulates Metabolic Remodeling in Inflammatory Macrophages through TCA Cycle Regulation and Itaconate Accumulation. Cell Reports, 2019, 28, 218-230.e7.	2.9	149
9	Oxidation resistance 1 regulates post-translational modifications of peroxiredoxin 2 in the cerebellum. Free Radical Biology and Medicine, 2019, 130, 151-162.	1.3	23
10	Roles for endothelial cell and macrophage Gch1 and tetrahydrobiopterin in atherosclerosis progression. Cardiovascular Research, 2018, 114, 1385-1399.	1.8	38
11	Effects Of Endothelin-1 On Intracellular Tetrahydrobiopterin Levels In Vascular Tissue. Scandinavian Cardiovascular Journal, 2018, 52, 163-169.	0.4	4
12	Regulation of mycobacterial infection by macrophage Gch1 and tetrahydrobiopterin. Nature Communications, 2018, 9, 5409.	5.8	24
13	Tetrahydrobiopterin modulates ubiquitin conjugation to UBC13/UBE2N and proteasome activity by S-nitrosation. Scientific Reports, 2018, 8, 14310.	1.6	5
14	A key role for tetrahydrobiopterinâ€dependent endothelial NOS regulation in resistance arteries: studies in endothelial cell tetrahydrobiopterinâ€deficient mice. British Journal of Pharmacology, 2017, 174, 657-671.	2.7	37
15	A novel role for endothelial tetrahydrobiopterin in mitochondrial redox balance. Free Radical Biology and Medicine, 2017, 104, 214-225.	1.3	49
16	Protection against ventricular fibrillation via cholinergic receptor stimulation and the generation of nitric oxide. Journal of Physiology, 2016, 594, 3981-3992.	1.3	25
17	Mildly compromised tetrahydrobiopterin cofactor biosynthesis due to Pts variants leads to unusual body fat distribution and abdominal obesity in mice. Journal of Inherited Metabolic Disease, 2016, 39, 309-319.	1.7	10
18	A requirement for Gch1 and tetrahydrobiopterin in embryonic development. Developmental Biology, 2015, 399, 129-138.	0.9	30

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19	Regulation of iNOS function and cellular redox state by macrophage Gch1 reveals specific requirements for tetrahydrobiopterin in NRF2 activation. Free Radical Biology and Medicine, 2015, 79, 206-216.	1.3	115
20	Parkinsonâ€™s disease in GTP cyclohydrolase 1 mutation carriers. Brain, 2015, 138, e348-e348.	3.7	4
21	CAPON Modulates Neuronal Calcium Handling and Cardiac Sympathetic Neurotransmission During Dysautonomia in Hypertension. Hypertension, 2015, 65, 1288-1297.	1.3	21
22	Molecular mechanisms of myocardial nitroso-redox imbalance during on-pump cardiac surgery. Lancet, The, 2015, 385, S49.	6.3	7
23	Overexpression of GTP Cyclohydrolase 1 Feedback Regulatory Protein Is Protective in a Murine Model of Septic Shock. Shock, 2014, 42, 432-439.	1.0	11
24	Endothelial Cellâ€“Specific Reactive Oxygen Species Production Increases Susceptibility to Aortic Dissection. Circulation, 2014, 129, 2661-2672.	1.6	96
25	Î±-Synuclein and mitochondrial bioenergetics regulate tetrahydrobiopterin levels in a human dopaminergic model of Parkinson disease. Free Radical Biology and Medicine, 2014, 67, 58-68.	1.3	26
26	Cell-Autonomous Role of Endothelial GTP Cyclohydrolase 1 and Tetrahydrobiopterin in Blood Pressure Regulation. Hypertension, 2014, 64, 530-540.	1.3	50
27	Tetrahydrobiopterin in Cardiovascular Health and Disease. Antioxidants and Redox Signaling, 2014, 20, 3040-3077.	2.5	181
28	Abstract 167: A Cell-Autonomous Role for Endothelial GTP Cyclohydrolase 1 and Tetrahydrobiopterin in Blood Pressure Regulation. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, .	1.1	0
29	Abstract 13082: On-Pump Cardiac Surgery in Humans Induces Myocardial Nitric Oxide Synthase Dysfunction via S-Glutathionylation of eNOS. Circulation, 2014, 130, .	1.6	0
30	Nitric Oxide Synthases in Heart Failure. Antioxidants and Redox Signaling, 2013, 18, 1078-1099.	2.5	137
31	Integrated Redox Sensor and Effector Functions for Tetrahydrobiopterin- and Glutathionylation-dependent Endothelial Nitric-oxide Synthase Uncoupling. Journal of Biological Chemistry, 2013, 288, 561-569.	1.6	75
32	Endothelial cell repopulation after stenting determines in-stent neointima formation: effects of bare-metal vs. drug-eluting stents and genetic endothelial cell modification. European Heart Journal, 2013, 34, 3378-3388.	1.0	58
33	A Pivotal Role for Tryptophan 447 in Enzymatic Coupling of Human Endothelial Nitric Oxide Synthase (eNOS). Journal of Biological Chemistry, 2013, 288, 29836-29845.	1.6	20
34	Gene Delivery Strategies Targeting Stable Atheromatous Plaque. Current Pharmaceutical Design, 2013, 19, 1626-1637.	0.9	4
35	Regulation of Endothelial Nitric-oxide Synthase (NOS) S-Glutathionylation by Neuronal NOS. Journal of Biological Chemistry, 2012, 287, 43665-43673.	1.6	42
36	Cardiomyocyte GTP Cyclohydrolase 1 and Tetrahydrobiopterin Increase NOS1 Activity and Accelerate Myocardial Relaxation. Circulation Research, 2012, 111, 718-727.	2.0	38

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37	Systemic and Vascular Oxidation Limits the Efficacy of Oral Tetrahydrobiopterin Treatment in Patients With Coronary Artery Disease. Circulation, 2012, 125, 1356-1366.	1.6	144
38	Endothelial-specific Nox2 overexpression increases vascular superoxide and macrophage recruitment in ApoEâ^'/â^' mice. Cardiovascular Research, 2012, 94, 20-29.	1.8	93
39	Recoupling the Cardiac Nitric Oxide Synthases: Tetrahydrobiopterin Synthesis and Recycling. Current Heart Failure Reports, 2012, 9, 200-210.	1.3	107
40	Synthesis and recycling of tetrahydrobiopterin in endothelial function and vascular disease. Nitric Oxide - Biology and Chemistry, 2011, 25, 81-88.	1.2	180
41	Gene Therapy Targeting Inflammation in Atherosclerosis. Current Pharmaceutical Design, 2011, 17, 4210-4223.	0.9	42
42	Dihydrofolate reductase protects endothelial nitric oxide synthase from uncoupling in tetrahydrobiopterin deficiency. Free Radical Biology and Medicine, 2011, 50, 1639-1646.	1.3	93
43	Targeting Vascular Redox Biology Through Antioxidant Gene Delivery: A Historical View and Current Perspectives. Recent Patents on Cardiovascular Drug Discovery, 2011, 6, 89-102.	1.5	6
44	Tetrahydrobiopterin supplementation reduces atherosclerosis and vascular inflammation in apolipoprotein E-knockout mice. Clinical Science, 2010, 119, 131-142.	1.8	37
45	GTP Cyclohydrolase I Expression, Protein, and Activity Determine Intracellular Tetrahydrobiopterin Levels, Independent of GTP Cyclohydrolase Feedback Regulatory Protein Expression. Journal of Biological Chemistry, 2009, 284, 13660-13668.	1.6	54
46	Quantitative Regulation of Intracellular Endothelial Nitric-oxide Synthase (eNOS) Coupling by Both Tetrahydrobiopterin-eNOS Stoichiometry and Biopterin Redox Status. Journal of Biological Chemistry, 2009, 284, 1136-1144.	1.6	171
47	Critical Role for Tetrahydrobiopterin Recycling by Dihydrofolate Reductase in Regulation of Endothelial Nitric-oxide Synthase Coupling. Journal of Biological Chemistry, 2009, 284, 28128-28136.	1.6	184
48	Dihydrofolate reductase and biopterin recycling in cardiovascular disease. Journal of Molecular and Cellular Cardiology, 2009, 47, 749-751.	0.9	10
49	Ratio of 5,6,7,8-tetrahydrobiopterin to 7,8-dihydrobiopterin in endothelial cells determines glucose-elicited changes in NO vs. superoxide production by eNOS. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H1530-H1540.	1.5	176
50	Profound biopterin oxidation and protein tyrosine nitration in tissues of ApoE-null mice on an atherogenic diet: contribution of inducible nitric oxide synthase. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H2878-H2887.	1.5	32
51	Altered Plasma Versus Vascular Biopterins in Human Atherosclerosis Reveal Relationships Between Endothelial Nitric Oxide Synthase Coupling, Endothelial Function, and Inflammation. Circulation, 2007, 116, 2851-2859.	1.6	138
52	Nitrosative Stress and Myocardial Sarcoplasmic Endoreticular Calcium Adenosine Triphosphatase Subtype 2a Activity after Lung Resection in Swine. Anesthesiology, 2007, 107, 954-962.	1.3	13
53	Contribution of inducible nitric oxide synthase to protein tyrosine nitration and biopterin oxidation in ApoEâ€null mice. FASEB Journal, 2007, 21, A1146.	0.2	0
54	Systemic oxidative stress associated with lung resection during single lung ventilation. European Journal of Cardio-thoracic Surgery, 2006, 30, 568-569.	0.6	4

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55	Prevention and Reversal of Premature Endothelial Cell Senescence and Vasculopathy in Obesity-Induced Diabetes by Ebselen. Circulation Research, 2004, 94, 377-384.	2.0	195
56	Nephropathy in Zucker Diabetic Fat Rat Is Associated with Oxidative and Nitrosative Stress: Prevention by Chronic Therapy with a Peroxynitrite Scavenger Ebselen. Journal of the American Society of Nephrology: JASN, 2004, 15, 2391-2403.	3.0	166
57	Involvement of mitochondria in acetaminophen-induced apoptosis and hepatic injury. Toxicology and Applied Pharmacology, 2003, 191, 118-129.	1.3	141
58	Detection of Cysteine S-Nitrosylation and Tyrosine 3-Nitration in Kidney Proteins. , 2003, 86, 373-384.		6