Philip Eaton

List of Publications by Year
in descending order

105 papers	6,226 citations	76031 42 h-index	78623 77 g-index
110 all docs	110 docs citations	110 times ranked	7985 citing authors

#	Article	IF	Citations
1	Redox-dependent internalization of the purinergic P2Y ₆ receptor limits colitis progression. Science Signaling, 2022, 15, eabj0644.	1.6	12
2	Nitroxyl Donor CXL-1020 Lowers Blood Pressure by Targeting C195 in Cyclic Guanosine-3â€™,5â€™-Monophosphate-Dependent Protein Kinase I. Hypertension, 2022, 79, 946-956.	1.3	2
3	NOS2 and S -nitrosothiol signaling induces DNA hypomethylation and LINE-1 retrotransposon expression. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2200022119.	3.3	12
4	Redox Regulation of Soluble Epoxide Hydrolaseâ€”Implications for Cardiovascular Health and Disease. Cells, 2022, 11, 1932.	1.8	4
5	Oxidation of Protein Kinase A Regulatory Subunit PKARIÎ± Protects Against Myocardial Ischemia-Reperfusion Injury by Inhibiting Lysosomal-Triggered Calcium Release. Circulation, 2021, 143, 449-465.	1.6	29
6	Heart failureâ€”emerging roles for the mitochondrial pyruvate carrier. Cell Death and Differentiation, 2021, 28, 1149-1158.	5.0	22
7	Enhanced Heart Failure in Redoxâ€Dead Cys17Ser PKARIÎ± Knockâ€In Mice. Journal of the American Heart Association, 2021, 10, e021985.	1.6	0
8	Cysteine trisulfide oxidizes protein thiols and induces electrophilic stress in human cells. Redox Biology, 2021, 47, 102155.	3.9	14
9	A thiol redox sensor in soluble epoxide hydrolase enables oxidative activation by intra-protein disulfide bond formation. Redox Biology, 2021, 46, 102107.	3.9	3
10	Hydrogen peroxide signaling via its transformation to a stereospecific alkyl hydroperoxide that escapes reductive inactivation. Nature Communications, 2021, 12, 6626.	5.8	6
11	Long-lasting blood pressure lowering effects of nitrite are NO-independent and mediated by hydrogen peroxide, persulfides, and oxidation of protein kinase G1Î± redox signalling. Cardiovascular Research, 2020, 116, 51-62.	1.8	31
12	Complex interrelationships between nitro-alkene-dependent inhibition of soluble epoxide hydrolase, inflammation and tumor growth. Redox Biology, 2020, 29, 101405.	3.9	11
13	Mitochondrial pyruvate carrier abundance mediates pathological cardiac hypertrophy. Nature Metabolism, 2020, 2, 1223-1231.	5.1	68
14	15-deoxy-Î”12,14-Prostaglandin J2 inhibits human soluble epoxide hydrolase by a dual orthosteric and allosteric mechanism. Communications Biology, 2019, 2, 188.	2.0	16
15	Oxidation of PKGIÎ± mediates an endogenous adaptation to pulmonary hypertension. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13016-13025.	3.3	12
16	Blood Pressureâ€“Lowering by the Antioxidant Resveratrol Is Counterintuitively Mediated by Oxidation of cGMP-Dependent Protein Kinase. Circulation, 2019, 140, 126-137.	1.6	57
17	Ndufs2, a Core Subunit of Mitochondrial Complex I, Is Essential for Acute Oxygen-Sensing and Hypoxic Pulmonary Vasoconstriction. Circulation Research, 2019, 124, 1727-1746.	2.0	67
18	Singlet molecular oxygen regulates vascular tone and blood pressure in inflammation. Nature, 2019, 566, 548-552.	13.7	84

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19	Response by Prysyazhna et al to Letter Regarding Article, â€œBlood Pressureâ€“Lowering by the Antioxidant Resveratrol Is Counterintuitively Mediated by Oxidation of cGMP-Dependent Protein Kinaseâ€• Circulation, 2019, 140, e810-e811.	1.6	1
20	â€œA Step and a Ceilingâ€• mechanical properties of Ca ²⁺ spark vasoregulation in resistance arteries by pressureâ€•induced oxidative activation of PKG. Physiological Reports, 2019, 7, e14260.	0.7	0
21	Expression, purification, and characterisation of human soluble Epoxide Hydrolase (hsEH) and of its functional C-terminal domain. Protein Expression and Purification, 2019, 153, 105-113.	0.6	9
22	Cysteine-Based Redox Sensing and Its Role in Signaling by Cyclic Nucleotideâ€“Dependent Kinases in the Cardiovascular System. Annual Review of Physiology, 2019, 81, 63-87.	5.6	18
23	PKG1Î± oxidation negatively regulates food seeking behaviour and reward. Redox Biology, 2019, 21, 101077.	3.9	7
24	Evidence against Stable Protein S-Nitrosylation as a Widespread Mechanism of Post-translational Regulation. Molecular Cell, 2018, 69, 438-450.e5.	4.5	84
25	Oxidation of cardiac myofilament proteins: Priming for dysfunction?. Molecular Aspects of Medicine, 2018, 63, 47-58.	2.7	17
26	The TAB1-p38Î± complex aggravates myocardial injury and can be targeted by small molecules. JCI Insight, 2018, 3, .	2.3	15
27	How widespread is stable protein S-nitrosylation as an end-effector of protein regulation?. Free Radical Biology and Medicine, 2017, 109, 156-166.	1.3	49
28	Oxidant sensor in the cGMP-binding pocket of PKGIÎ± regulates nitroxyl-mediated kinase activity. Scientific Reports, 2017, 7, 9938.	1.6	22
29	Proof of Principle for a Novel Class of Antihypertensives That Target the Oxidative Activation of PKG Iα (Protein Kinase G Iα). Hypertension, 2017, 70, 577-586.	1.3	21
30	Examining a role for PKG Iα oxidation in the pathogenesis of cardiovascular dysfunction during diet-induced obesity. Free Radical Biology and Medicine, 2017, 110, 390-398.	1.3	8
31	Redox-dependent dimerization of p38Î± mitogen-activated protein kinase with mitogen-activated protein kinase kinase 3. Journal of Biological Chemistry, 2017, 292, 16161-16173.	1.6	24
32	Phosphodiesterase 5 Inhibition Limits Doxorubicin-induced Heart Failure by Attenuating Protein Kinase G Iα Oxidation. Journal of Biological Chemistry, 2016, 291, 17427-17436.	1.6	40
33	Pressure-induced oxidative activation of PKG enables vasoregulation by Ca ²⁺ sparks and BK channels. Science Signaling, 2016, 9, ra100.	1.6	35
34	Disulfide-activated protein kinase G Iα regulates cardiac diastolic relaxation and fine-tunes the Frankâ€“Starling response. Nature Communications, 2016, 7, 13187.	5.8	46
35	Transcriptional Regulation of Cystathionine-Î³-Lyase in Endothelial Cells by NADPH Oxidase 4-Dependent Signaling. Journal of Biological Chemistry, 2016, 291, 1774-1788.	1.6	43
36	Oxidant-induced Interprotein Disulfide Formation in Cardiac Protein DJ-1 Occurs via an Interaction with Peroxiredoxin 2. Journal of Biological Chemistry, 2016, 291, 10399-10410.	1.6	36

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37	Persistent Activation of cGMP-Dependent Protein Kinase by a Nitrated Cyclic Nucleotide via Site Specific Protein S-Guanylation. Biochemistry, 2016, 55, 751-761.	1.2	25
38	S â€glutathiolation impairs phosphoregulation and function of cardiac myosinâ€binding protein C in human heart failure. FASEB Journal, 2016, 30, 1849-1864.	0.2	38
39	Analysis of Mitochondrial Proteins in the Surviving Myocardium after Ischemia Identifies Mitochondrial Pyruvate Carrier Expression as Possible Mediator of Tissue Viability. Molecular and Cellular Proteomics, 2016, 15, 246-255.	2.5	23
40	Redox regulation of cGMP-dependent protein kinase Iα in the cardiovascular system. Frontiers in Pharmacology, 2015, 6, 139.	1.6	21
41	Prevention of PKG1α oxidation augments cardioprotection in the stressed heart. Journal of Clinical Investigation, 2015, 125, 2468-2472.	3.9	64
42	Polarized Cell Motility Induces Hydrogen Peroxide to Inhibit Cofilin via Cysteine Oxidation. Current Biology, 2015, 25, 1520-1525.	1.8	64
43	Deficient angiogenesis in redox-dead Cys17Ser PKARIα knock-in mice. Nature Communications, 2015, 6, 7920.	5.8	41
44	Intensity matters: Ryanodine receptor regulation during exercise. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15271-15272.	3.3	2
45	Protein Kinase G Iα Oxidation Paradoxically Underlies Blood Pressure Lowering by the Reductant Hydrogen Sulfide. Hypertension, 2014, 64, 1344-1351.	1.3	89
46	Oxidant-Induced Activation of cGMP-Dependent Protein Kinase Iα Mediates Neuropathic Pain After Peripheral Nerve Injury. Antioxidants and Redox Signaling, 2014, 21, 1504-1515.	2.5	18
47	Preface for redox signalling in the cardiovascular system. Journal of Molecular and Cellular Cardiology, 2014, 73, 1.	0.9	2
48	Protection from hypertension in mice by the Mediterranean diet is mediated by nitro fatty acid inhibition of soluble epoxide hydrolase. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 8167-8172.	3.3	79
49	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>ssociation <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 Journal of Heart Failure, 2014, 16, 6-14.	2.9	1
50	Biochemical methods for monitoring protein thiol redox states in biological systems. Redox Biology, 2014, 2, 803-813.	3.9	95
51	Gel-based methods in redox proteomics. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 830-837.	1.1	20
52	Protein kinase G oxidation is a major cause of injury during sepsis. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9909-9913.	3.3	47
53	The PEG-switch assay: A fast semi-quantitative method to determine protein reversible cysteine oxidation. Journal of Pharmacological and Toxicological Methods, 2013, 68, 297-301.	0.3	41
54	Response to Detailed Aspects of Redox Signaling in Cardiac Physiology and Pathology. Circulation Research, 2013, 112, e2.	2.0	3

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55	Approaches for Monitoring PKG1Î± Oxidative Activation. Methods in Molecular Biology, 2013, 1020, 163-173.	0.4	3
56	Detecting Disulfide-Bound Complexes and the Oxidative Regulation of Cyclic Nucleotide-Dependent Protein Kinases by H2O2. Methods in Enzymology, 2013, 528, 111-128.	0.4	13
57	Hydrogen Peroxide Sensing and Signaling by Protein Kinases in the Cardiovascular System. Antioxidants and Redox Signaling, 2013, 18, 1042-1052.	2.5	178
58	cGMP-Dependent Activation of Protein Kinase G Precludes Disulfide Activation. Hypertension, 2012, 60, 1301-1308.	1.3	73
59	Nitroglycerin Fails to Lower Blood Pressure in Redox-Dead Cys42Ser PKG1Î± Knock-In Mouse. Circulation, 2012, 126, 287-295.	1.6	44
60	Pathological Cardiac Hypertrophy Alters Intracellular Targeting of Phosphodiesterase Type 5 From Nitric Oxide Synthase-3 to Natriuretic Peptide Signaling. Circulation, 2012, 126, 942-951.	1.6	39
61	Single atom substitution in mouse protein kinase G eliminates oxidant sensing to cause hypertension. Nature Medicine, 2012, 18, 286-290.	15.2	155
62	Redox Signaling in Cardiac Physiology and Pathology. Circulation Research, 2012, 111, 1091-1106.	2.0	397
63	Redox modification of cell signaling in the cardiovascular system. Journal of Molecular and Cellular Cardiology, 2012, 52, 550-558.	0.9	89
64	Glyceraldehyde 3-Phosphate Dehydrogenase is Unlikely to Mediate Hydrogen Peroxide Signaling: Studies with a Novel Anti-Dimedone Sulfenic Acid Antibody. Antioxidants and Redox Signaling, 2011, 14, 49-60.	2.5	74
65	Nitrosative protein oxidation is modulated during early endotoxemia. Nitric Oxide - Biology and Chemistry, 2011, 25, 118-124.	1.2	19
66	Frontiers in nitric oxide and redox signaling. Nitric Oxide - Biology and Chemistry, 2011, 25, 57-58.	1.2	4
67	Contemporary techniques for detecting and identifying proteins susceptible to reversible thiol oxidation. Biochemical Society Transactions, 2011, 39, 1260-1267.	1.6	21
68	Endothelial Nox4 NADPH Oxidase Enhances Vasodilatation and Reduces Blood Pressure In Vivo. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 1368-1376.	1.1	278
69	Redox Regulation of Soluble Epoxide Hydrolase by 15-Deoxy-Î”-Prostaglandin J ₂ Controls Coronary Hypoxic Vasodilation. Circulation Research, 2011, 108, 324-334.	2.0	50
70	Oxidant Sensing by Protein Kinases A and G Enables Integration of Cell Redox State with Phosphoregulation. Sensors, 2010, 10, 2731-2751.	2.1	15
71	Phospholemman Ser69 phosphorylation contributes to sildenafil-induced cardioprotection against reperfusion injury. American Journal of Physiology - Heart and Circulatory Physiology, 2010, 299, H827-H836.	1.5	39
72	A Rapid Approach for the Detection, Quantification, and Discovery of Novel Sulfenic Acid or S-Nitrosothiol Modified Proteins Using a Biotin-Switch Method. Methods in Enzymology, 2010, 473, 281-303.	0.4	39

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73	Mechanisms of Redox Signaling in Cardiovascular Disease. , 2010, , 43-60.		0
74	Transnitrosylating Nitric Oxide Species Directly Activate Type I Protein Kinase A, Providing a Novel Adenylate Cyclase-independent Cross-talk to Î²-Adrenergic-like Signaling. Journal of Biological Chemistry, 2009, 284, 29260-29268.	1.6	53
75	Redox signalling in cardiovascular disease. Proteomics - Clinical Applications, 2008, 2, 823-836.	0.8	20
76	Peroxynitrite: in vivo cardioprotectant or arrhythmogen?. British Journal of Pharmacology, 2008, 155, 972-973.	2.7	6
77	Hydrogen peroxide as an endogenous mediator and exogenous tool in cardiovascular research: issues and considerations. Current Opinion in Pharmacology, 2008, 8, 153-159.	1.7	137
78	Characterization of the phospholemman knockout mouse heart: depressed left ventricular function with increased Na-K-ATPase activity. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H613-H621.	1.5	42
79	Cardiac peroxiredoxins undergo complex modifications during cardiac oxidant stress. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H425-H433.	1.5	44
80	Cysteine Redox Sensor in PKGIa Enables Oxidant-Induced Activation. Science, 2007, 317, 1393-1397.	6.0	429
81	Protein Sulfenation as a Redox Sensor. Molecular and Cellular Proteomics, 2007, 6, 1473-1484.	2.5	177
82	ROLE OF p38-MITOGEN-ACTIVATED PROTEIN KINASE IN ISCHAEMIC PRECONDITIONING IN RAT HEART. Clinical and Experimental Pharmacology and Physiology, 2007, 35, 070924173348001-???.	0.9	23
83	Direct activation of Type I PKA by oxidants independently of cAMP is mediated by RI subunit interprotein disulphide bond formation. Journal of Molecular and Cellular Cardiology, 2006, 40, 928-929.	0.9	1
84	Protein thiol oxidation in health and disease: Techniques for measuring disulfides and related modifications in complex protein mixtures. Free Radical Biology and Medicine, 2006, 40, 1889-1899.	1.3	228
85	Oxidized Proteins in Cardiac Ischemia and Reperfusion. , 2006, , 605-649.		2
86	The Utility of N,N-Biotinyl Glutathione Disulfide in the Study of Protein S-Glutathiolation. Molecular and Cellular Proteomics, 2006, 5, 215-225.	2.5	120
87	Oxidant-induced Activation of Type I Protein Kinase A Is Mediated by RI Subunit Interprotein Disulfide Bond Formation. Journal of Biological Chemistry, 2006, 281, 21827-21836.	1.6	216
88	Serine 68 phosphorylation of phospholemman: acute isoform-specific activation of cardiac Na/K ATPase. Cardiovascular Research, 2005, 65, 93-103.	1.8	108
89	Ischemic Preconditioning: A Potential Role for Protein S-Thiolation?. Antioxidants and Redox Signaling, 2005, 7, 882-888.	2.5	15
90	Protein S-Thiolation: Emphasis on Cell Signaling and Gene Expression. Antioxidants and Redox Signaling, 2005, 7, 839-840.	2.5	1

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91	Widespread sulfenic acid formation in tissues in response to hydrogen peroxide. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 17982-17987.	3.3	268
92	Ischemiaâ€induced phosphorylation of phospholemman directly activates rat cardiac Na/K ATPase. FASEB Journal, 2004, 18, 197-199.	0.2	107
93	Detection and Mapping of Widespread Intermolecular Protein Disulfide Formation during Cardiac Oxidative Stress Using Proteomics with Diagonal Electrophoresis. Journal of Biological Chemistry, 2004, 279, 41352-41360.	1.6	175
94	Reversible Cysteine-Targeted Oxidation of Proteins during Renal Oxidative Stress. Journal of the American Society of Nephrology: JASN, 2003, 14, S290-S296.	3.0	53
95	Cardiac ischemia causes inhibition of the Na/K ATPase by a labile cytosolic compound whose production is linked to oxidant stress. Cardiovascular Research, 2003, 57, 1044-1051.	1.8	87
96	S-Thiolation of HSP27 Regulates Its Multimeric Aggregate Size Independently of Phosphorylation. Journal of Biological Chemistry, 2002, 277, 21189-21196.	1.6	65
97	Glyceraldehyde Phosphate Dehydrogenase Oxidation During Cardiac Ischemia and Reperfusion. Journal of Molecular and Cellular Cardiology, 2002, 34, 1549-1560.	0.9	116
98	Detection, Quantitation, Purification, and Identification of Cardiac Proteins S-Thiolated during Ischemia and Reperfusion. Journal of Biological Chemistry, 2002, 277, 9806-9811.	1.6	157
99	Purification of Proteins Susceptible to Oxidation at Cysteine Residues: Identification of Malate Dehydrogenase as a Target for Sâ€Glutathiolation. Annals of the New York Academy of Sciences, 2002, 973, 529-532.	1.8	26
100	Î± B Crystallin Translocation and Phosphorylation: Signal Transduction Pathways and Preconditioning in the Isolated Rat Heart. Journal of Molecular and Cellular Cardiology, 2001, 33, 1659-1671.	0.9	54
101	Differential Centrifugation Separates Cardiac Sarcolemmal and Endosomal Membranes from Langendorff-Perfused Rat Hearts. Analytical Biochemistry, 2001, 293, 216-223.	1.1	40
102	Lipid hydroperoxide modification of proteins during myocardial ischaemia. Cardiovascular Research, 2001, 51, 294-303.	1.8	30
103	Ischemic Preconditioning: a Potential Role for Constitutive Low Molecular Weight Stress Protein Translocation and Phosphorylation?. Journal of Molecular and Cellular Cardiology, 2000, 32, 961-971.	0.9	28
104	Formation of 4-hydroxy-2-nonenal-modified proteins in ischemic rat heart. American Journal of Physiology - Heart and Circulatory Physiology, 1999, 276, H935-H943.	1.5	95
105	Effects of medium fatty acid concentration, epinephrine, and glucose on palmitate-l-C14 oxidation and incorporation into neutral lipids by skeletal muscle in vitro. Journal of Lipid Research, 1961, 2, 376-382.	2.0	170