John T Hancock

List of Publications by Year
in descending order

95 papers	13,884 citations	50170 46 h-index	48187 88 g-index
100 all docs	100 docs citations	100 times ranked	12581 citing authors

#	Article	IF	Citations
1	Hydrogen peroxide signalling. Current Opinion in Plant Biology, 2002, 5, 388-395.	3.5	1,107
2	Ethylene-induced stomatal closure in Arabidopsis occurs via AtrbohF-mediated hydrogen peroxide synthesis. Plant Journal, 2006, 47, 907-916.	2.8	1,089
3	ABA-induced NO generation and stomatal closure in Arabidopsis are dependent on H2O2synthesis. Plant Journal, 2006, 45, 113-122.	2.8	885
4	Regulation of the Arabidopsis Transcriptome by Oxidative Stress. Plant Physiology, 2001, 127, 159-172.	2.3	829
5	Nitric oxide signalling in plants. New Phytologist, 2003, 159, 11-35.	3.5	811
6	Hydrogen peroxide and nitric oxide as signalling molecules in plants. Journal of Experimental Botany, 2002, 53, 1237-1247.	2.4	810
7	Nitric oxide, stomatal closure, and abiotic stress. Journal of Experimental Botany, 2008, 59, 165-176.	2.4	663
8	A new role for an old enzyme: Nitrate reductase-mediated nitric oxide generation is required for abscisic acid-induced stomatal closure in Arabidopsis thaliana. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16314-16318.	3.3	633
9	Nitric Oxide Is a Novel Component of Abscisic Acid Signaling in Stomatal Guard Cells. Plant Physiology, 2002, 128, 13-16.	2.3	493
10	ABA, hydrogen peroxide and nitric oxide signalling in stomatal guard cells. Journal of Experimental Botany, 2003, 55, 205-212.	2.4	472
11	Nitric oxide synthesis and signalling in plants. Plant, Cell and Environment, 2008, 31, 622-631.	2.8	448
12	NO way back: nitric oxide and programmed cell death in Arabidopsis thaliana suspension cultures. Plant Journal, 2000, 24, 667-677.	2.8	406
13	Signaling through the Primary Cilium. Frontiers in Cell and Developmental Biology, 2018, 6, 8.	1.8	353
14	Role of reactive oxygen species in cell signalling pathways. Biochemical Society Transactions, 2001, 29, 345-50.	1.6	273
15	Hydrogen sulfide: environmental factor or signalling molecule?. Plant, Cell and Environment, 2013, 36, 1607-1616.	2.8	241
16	Harpin Induces Activation of the Arabidopsis Mitogen-Activated Protein Kinases AtMPK4 and AtMPK6. Plant Physiology, 2001, 126, 1579-1587.	2.3	223
17	Generation of active oxygen in elicited cells ofArabidopsis thalianais mediated by a NADPH oxidase-like enzyme. FEBS Letters, 1996, 382, 213-217.	1.3	197
18	A novel hydrogen sulfide donor causes stomatal opening and reduces nitric oxide accumulation. Plant Physiology and Biochemistry, 2010, 48, 931-935.	2.8	196

#	Article	IF	Citations
19	Production of reactive oxygen species and reactive nitrogen species by angiosperm stigmas and pollen: potential signalling crosstalk?. New Phytologist, 2006, 172, 221-228.	3.5	192
20	Hydrogen sulfide and cell signaling: Team player or referee?. Plant Physiology and Biochemistry, 2014, 78, 37-42.	2.8	190
21	A Role for ETR1 in Hydrogen Peroxide Signaling in Stomatal Guard Cells. Plant Physiology, 2005, 137, 831-834.	2.3	187
22	Proteomic identification of glyceraldehyde 3-phosphate dehydrogenase as an inhibitory target of hydrogen peroxide in Arabidopsis. Plant Physiology and Biochemistry, 2005, 43, 828-835.	2.8	183
23	Nitric oxide evolution and perception. Journal of Experimental Botany, 2007, 59, 25-35.	2.4	181
24	Role of Xanthine Oxidoreductase as an Antimicrobial Agent. Infection and Immunity, 2004, 72, 4933-4939.	1.0	152
25	Doing the unexpected: proteins involved in hydrogen peroxide perception. Journal of Experimental Botany, 2006, 57, 1711-1718.	2.4	146
26	Nitric oxide is a novel component of abscisic acid signaling in stomatal guard cells. Plant Physiology, 2002, 128, 13-6.	2.3	135
27	Hydrogen sulfide signaling: interactions with nitric oxide and reactive oxygen species. Annals of the New York Academy of Sciences, 2016, 1365, 5-14.	1.8	120
28	Hydrogen peroxide is a common signal for darkness- and ABA-induced stomatal closure in Pisum sativum. Functional Plant Biology, 2004, 31, 913.	1.1	114
29	Hydrogen peroxideâ€“induced gene expression in Arabidopsis thaliana. Free Radical Biology and Medicine, 2000, 28, 773-778.	1.3	113
30	Antimicrobial Properties of Milk: Dependence on Presence of Xanthine Oxidase and Nitrite. Antimicrobial Agents and Chemotherapy, 2002, 46, 3308-3310.	1.4	111
31	Does the redox status of cytochrome C act as a fail-safe mechanism in the regulation of programmed cell death?. Free Radical Biology and Medicine, 2001, 31, 697-703.	1.3	96
32	Cell signalling following plant/pathogen interactions involves the generation of reactive oxygen and reactive nitrogen species. Plant Physiology and Biochemistry, 2002, 40, 611-617.	2.8	94
33	Hydrogen sulfide and environmental stresses. Environmental and Experimental Botany, 2019, 161, 50-56.	2.0	94
34	Nitric oxide and ABA in the control of plant function. Plant Science, 2011, 181, 555-559.	1.7	93
35	Regulating the regulator: nitric oxide control of postâ€translational modifications. New Phytologist, 2020, 227, 1319-1325.	3.5	91
36	The evolutionarily conserved multifunctional glycineâ€rich <scp>RNA</scp>â€binding proteins play key roles in development and stress adaptation. Physiologia Plantarum, 2015, 153, 1-11.	2.6	90

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37	A proteomic analysis of oligo(dT)-bound mRNP containing oxidative stress-induced Arabidopsis thaliana RNA-binding proteins ATGRP7 and ATGRP8. Molecular Biology Reports, 2010, 37, 839-845.	1.0	89
38	Nitric Oxide: Its Generation and Interactions with Other Reactive Signaling Compounds. Plants, 2019, 8, 41.	1.6	87
39	Hydrogen sulfide effects on stomatal apertures. Plant Signaling and Behavior, 2011, 6, 1444-1446.	1.2	83
40	The Role of Redox Mechanisms in Cell Signalling. Molecular Biotechnology, 2009, 43, 162-166.	1.3	67
41	Harpin induces mitogen-activated protein kinase activity during defence responses in Arabidopsis thaliana suspension cultures. Planta, 1999, 210, 97-103.	1.6	65
42	Differential requirement for NO during ABAâ€induced stomatal closure in turgid and wilted leaves. Plant, Cell and Environment, 2009, 32, 46-57.	2.8	65
43	Hypoxia leads to significant changes in alternative splicing and elevated expression of CLK splice factor kinases in PC3 prostate cancer cells. BMC Cancer, 2018, 18, 355.	1.1	64
44	Pollen generates nitric oxide and nitrite: a possible link to pollen-induced allergic responses. Plant Physiology and Biochemistry, 2009, 47, 49-55.	2.8	56
45	Recommendations on terminology and experimental best practice associated with plant nitric oxide research. New Phytologist, 2020, 225, 1828-1834.	3.5	56
46	Signaling on the Stigma. Plant Signaling and Behavior, 2007, 2, 23-24.	1.2	50
47	[22] Assays of plasma membrane NADPH oxidase. Methods in Enzymology, 1994, 233, 222-229.	0.4	46
48	New frontiers in nitric oxide biology in plant. Plant Science, 2011, 181, 507-508.	1.7	46
49	Harnessing Evolutionary Toxins for Signaling: Reactive Oxygen Species, Nitric Oxide and Hydrogen Sulfide in Plant Cell Regulation. Frontiers in Plant Science, 2017, 8, 189.	1.7	44
50	Hydrogen sulfide in horticulture: Emerging roles in the era of climate change. Plant Physiology and Biochemistry, 2020, 155, 667-675.	2.8	39
51	Role of nitric oxide in regulating stomatal apertures. Plant Signaling and Behavior, 2009, 4, 467-469.	1.2	33
52	Molecular hydrogen in agriculture. Planta, 2021, 254, 56.	1.6	24
53	The use of diphenylene iodonium and its analogues to investigate the role of the nadph oxidase in the tumoricidal activity of macrophages in vitro. Free Radical Biology and Medicine, 1991, 11, 25-29.	1.3	23
54	Considerations of the importance of redox state for reactive nitrogen species action. Journal of Experimental Botany, 2019, 70, 4323-4331.	2.4	23

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55	Hydrogenases and the Role of Molecular Hydrogen in Plants. Plants, 2020, 9, 1136.	1.6	22
56	Nitric oxide, other reactive signalling compounds, redox, and reductive stress. Journal of Experimental Botany, 2021, 72, 819-829.	2.4	22
57	Cytochromec, Glutathione, and the Possible Role of Redox Potentials in Apoptosis. Annals of the New York Academy of Sciences, 2003, 1010, 446-448.	1.8	21
58	Nitric Oxide Signaling in Plants. Plants, 2020, 9, 1550.	1.6	21
59	Nitric oxideâ€releasing nanomaterials: from basic research to potential biotechnological applications in agriculture. New Phytologist, 2022, 234, 1119-1125.	3.5	21
60	New equations for redox and nano-signal transduction. Journal of Theoretical Biology, 2004, 226, 65-68.	0.8	20
61	Downstream Signalling from Molecular Hydrogen. Plants, 2021, 10, 367.	1.6	20
62	The inhibition of flavoproteins by phenoxaiodonium, a new iodonium analogue. European Journal of Pharmacology, 2000, 401, 115-120.	1.7	17
63	Leaf arginine spraying improves leaf gas exchange under water deficit and root antioxidant responses during the recovery period. Plant Physiology and Biochemistry, 2021, 162, 315-326.	2.8	15
64	The effects of seed priming with sodium hydrosulphide on drought tolerance of sunflower (<scp><i>Helianthus annuus</i></scp> L.) in germination and early growth. Annals of Applied Biology, 2021, 178, 400-413.	1.3	14
65	Detection of Thiol Modifications by Hydrogen Sulfide. Methods in Enzymology, 2015, 555, 233-251.	0.4	12
66	Molecular Hydrogen as Medicine: An Assessment of Administration Methods. Hydrogen, 2021, 2, 444-460.	1.7	12
67	Assessment of the influence of different sample processing and cold storage duration on plant free proline content analyses. Phytochemical Analysis, 2010, 21, 561-565.	1.2	11
68	Oxy-hydrogen Gas: The Rationale Behind Its Use as a Novel and Sustainable Treatment for COVID-19 and Other Respiratory Diseases. European Medical Journal (Chelmsford, England), 0, , .	3.0	11
69	Molecular Hydrogen: Redox Reactions and Possible Biological Interactions. Reactive Oxygen Species (Apex, N C), 0, 11, .	5.4	11
70	Implications of dealing with airborne substances and reactive oxygen species: what mammalian lungs, animals, and plants have to say?. Integrative and Comparative Biology, 2007, 47, 578-591.	0.9	10
71	Expression and localization of aquaporin water channels in adult pig urinary bladder. Journal of Cellular and Molecular Medicine, 2019, 23, 3772-3775.	1.6	10
72	The Identification of Genes Important in Pseudomonas syringae pv. phaseolicola Plant Colonisation Using In Vitro Screening of Transposon Libraries. PLoS ONE, 2015, 10, e0137355.	1.1	10

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73	Nitric oxide and nitrite are likely mediators of pollen interactions. Plant Signaling and Behavior, 2009, 4, 416-418.	1.2	9
74	Alone NO Longer. Advances in Botanical Research, 2016, 77, 1-14.	0.5	8
75	Oxygen Is Instrumental for Biological Signaling: An Overview. Oxygen, 2021, 1, 3-15.	1.6	8
76	Molecular Hydrogen: Is This a Viable New Treatment for Plants in the UK?. Plants, 2021, 10, 2270.	1.6	8
77	Hydrogen peroxide and nitric oxide in plant defence: Revealing potential targets for oxidative stress tolerance?. BioFactors, 2001, 15, 99-101.	2.6	7
78	Residual ground-water levels of the neonicotinoid thiacloprid perturb chemosensing of Caenorhabditis elegans. Ecotoxicology, 2017, 26, 981-990.	1.1	7
79	The NADPH oxidase of neutrophils and other cells. , 2000, , 21-46.		7
80	Hydrogen Gas, ROS Metabolism, and Cell Signaling: Are Hydrogen Spin States Important?. , 0, , .		7
81	An Overview of SARS-CoV-2 (COVID-19) Infection and the Importance of Molecular Hydrogen as an Adjunctive Therapy. , 0, , .		6
82	Hydrogen Sulfide and Reactive Friends: The Interplay with Reactive Oxygen Species and Nitric Oxide Signalling Pathways. Proceedings of the International Plant Sulfur Workshop, 2015, , 153-168.	0.1	5
83	The Role of Redox in Signal Transduction. Methods in Molecular Biology, 2008, 476, 1-9.	0.4	5
84	Cell signalling is the music of life. British Journal of Biomedical Science, 2008, 65, 205-208.	1.2	4
85	Investigating ROS, RNS, and H2S-Sensitive Signaling Proteins. Methods in Molecular Biology, 2019, 1990, 27-42.	0.4	4
86	Interacting Proteins, Polymorphisms and the Susceptibility of Animals to SARS-CoV-2. Animals, 2021, 11, 797.	1.0	4
87	A Brief History of Oxygen: 250 Years on. Oxygen, 2022, 2, 31-39.	1.6	4
88	Tools to Investigate ROS Sensitive Signalling Proteins. Methods in Molecular Biology, 2008, 476, 84-96.	0.4	3
89	Competition of Reactive Signals and Thiol Modifications of Proteins. Journal of Cell Signaling, 2017, 02, .	0.3	3
90	Nitric oxide scavenging by food: implications for in vivo effects of diet. British Journal of Biomedical Science, 2010, 67, 15-19.	1.2	2

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91	Equations to Support Redox Experimentation. Methods in Molecular Biology, 2019, 1990, 183-195.	0.4	2
92	Methods for the Addition of Redox Compounds. Methods in Molecular Biology, 2019, 1990, 13-25.	0.4	1
93	The Role of Redox in Signal Transduction. Methods in Molecular Biology, 2019, 1990, 1-11.	0.4	1
94	Reactive Oxygen Species, Nitric Oxide, and Signal Crosstalk. , 0, , 136-160.		0
95	Oxygen: A New Open Access Journal Focused on the Biology and Chemistry of This Essential Molecule. Oxygen, 2021, 1, 1-2.	1.6	0