Shigeo Ohta

List of Publications by Year in descending order

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53 papers	5,916 citations	186265 28 h-index	214800 47 g-index
59	59	59	4266
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Hydrogen acts as a therapeutic antioxidant by selectively reducing cytotoxic oxygen radicals. Nature Medicine, 2007, 13, 688-694.	30.7	1,847
2	Inhalation of hydrogen gas reduces infarct size in the rat model of myocardial ischemia–reperfusion injury. Biochemical and Biophysical Research Communications, 2008, 373, 30-35.	2.1	426
3	Inhalation of hydrogen gas suppresses hepatic injury caused by ischemia/reperfusion through reducing oxidative stress. Biochemical and Biophysical Research Communications, 2007, 361, 670-674.	2.1	367
4	Molecular hydrogen as a preventive and therapeutic medical gas: initiation, development and potential of hydrogen medicine., 2014, 144, 1-11.		330
5	Recent Progress Toward Hydrogen Medicine: Potential of Molecular Hydrogen for Preventive and Therapeutic Applications. Current Pharmaceutical Design, 2011, 17, 2241-2252.	1.9	237
6	Consumption of Molecular Hydrogen Prevents the Stress-Induced Impairments in Hippocampus-Dependent Learning Tasks during Chronic Physical Restraint in Mice. Neuropsychopharmacology, 2009, 34, 501-508.	5.4	224
7	Molecular Hydrogen Improves Obesity and Diabetes by Inducing Hepatic FGF21 and Stimulating Energy Metabolism in <i>db/db</i> Mice. Obesity, 2011, 19, 1396-1403.	3.0	172
8	Molecular hydrogen is a novel antioxidant to efficiently reduce oxidative stress with potential for the improvement of mitochondrial diseases. Biochimica Et Biophysica Acta - General Subjects, 2012, 1820, 586-594.	2.4	155
9	Protection of the Retina by Rapid Diffusion of Hydrogen: Administration of Hydrogen-Loaded Eye Drops in Retinal Ischemia–Reperfusion Injury. , 2010, 51, 487.		154
10	Blue light-induced oxidative stress in live skin. Free Radical Biology and Medicine, 2017, 108, 300-310.	2.9	140
11	Molecular Hydrogen as a Novel Antioxidant. Methods in Enzymology, 2015, 555, 289-317.	1.0	136
12	Defect in modification at the anticodon wobble nucleotide of mitochondrial tRNALyswith the MERRF encephalomyopathy pathogenic mutation. FEBS Letters, 2000, 467, 175-178.	2.8	117
13	Dysfunction of mitochondria and oxidative stress in the pathogenesis of Alzheimer's disease: On defects in the cytochrome c oxidase complex and aldehyde detoxification. Journal of Alzheimer's Disease, 2006, 9, 155-166.	2.6	114
14	Hydrogen Gas Inhalation Treatment in Acute Cerebral Infarction: A Randomized Controlled Clinical Study on Safety and Neuroprotection. Journal of Stroke and Cerebrovascular Diseases, 2017, 26, 2587-2594.	1.6	105
15	Hydrogen Inhalation During Normoxic Resuscitation Improves Neurological Outcome in a Rat Model of Cardiac Arrest Independently of Targeted Temperature Management. Circulation, 2014, 130, 2173-2180.	1.6	104
16	Inhibition of Endothelial p53 Improves Metabolic Abnormalities Related to Dietary Obesity. Cell Reports, 2014, 7, 1691-1703.	6.4	95
17	Molecular hydrogen regulates gene expression by modifying the free radical chain reaction-dependent generation of oxidized phospholipid mediators. Scientific Reports, 2016, 6, 18971.	3.3	94
18	H ₂ Gas Improves Functional Outcome After Cardiac Arrest to an Extent Comparable to Therapeutic Hypothermia in a Rat Model. Journal of the American Heart Association, 2012, 1, e003459.	3.7	88

#	Article	IF	CITATIONS
19	Mitochondrial ALDH2 Deficiency as an Oxidative Stress. Annals of the New York Academy of Sciences, 2004, 1011, 36-44.	3.8	84
20	Taurine supplementation for prevention of stroke-like episodes in MELAS: a multicentre, open-label, 52-week phase III trial. Journal of Neurology, Neurosurgery and Psychiatry, 2019, 90, 529-536.	1.9	79
21	Effects of Molecular Hydrogen Assessed by an Animal Model and a Randomized Clinical Study on Mild Cognitive Impairment. Current Alzheimer Research, 2018, 15, 482-492.	1.4	75
22	Feasibility and Safety of Hydrogen Gas Inhalation for Post-Cardiac Arrest Syndrome – First-in-Human Pilot Study –. Circulation Journal, 2016, 80, 1870-1873.	1.6	64
23	Mitochondrial ALDH2 Deficiency as an Oxidative Stress. , 2004, 1011, 36-44.		59
24	Molecular hydrogen stimulates the gene expression of transcriptional coactivator PGC- $1\hat{l}\pm$ to enhance fatty acid metabolism. Npj Aging and Mechanisms of Disease, 2016, 2, 16008.	4.5	49
25	Genetic deficiency of a mitochondrial aldehyde dehydrogenase increases serum lipid peroxides in community-dwelling females. Journal of Human Genetics, 2003, 48, 404-409.	2.3	48
26	Oxidative stress accelerates amyloid deposition and memory impairment in a double-transgenic mouse model of Alzheimer's disease. Neuroscience Letters, 2015, 587, 126-131.	2.1	48
27	Real-Time Monitoring of Oxidative Stress in Live Mouse Skin. Journal of Investigative Dermatology, 2014, 134, 1701-1709.	0.7	45
28	Molecular hydrogen protects chondrocytes from oxidative stress and indirectly alters gene expressions through reducing peroxynitrite derived from nitric oxide. Medical Gas Research, 2011, 1, 18.	2.3	44
29	A Multi-Functional Organelle Mitochondrion is Involved in Cell Death, Proliferation and Disease. Current Medicinal Chemistry, 2003, 10, 2485-2494.	2.4	42
30	Clinical Effects of Hydrogen Administration: From Animal and Human Diseases to Exercise Medicine. International Journal of Clinical Medicine, 2016, 07, 32-76.	0.2	41
31	Drinking hydrogen water enhances endurance and relieves psychometric fatigue: a randomized, double-blind, placebo-controlled study. Canadian Journal of Physiology and Pharmacology, 2019, 97, 857-862.	1.4	34
32	The histone 3 lysine 9 methyltransferase inhibitor chaetocin improves prognosis in a rat model of high salt diet-induced heart failure. Scientific Reports, 2017, 7, 39752.	3.3	28
33	Accumulation of Somatic Mutation in Mitochondrial DNA and Atherosclerosis in Diabetic Patients. Annals of the New York Academy of Sciences, 2004, 1011, 193-204.	3.8	27
34	ALDH2/ADH2 Polymorphism Associated with Vasculopathy and Neuropathy in Type 2 Diabetes. Alcoholism: Clinical and Experimental Research, 2004, 28, 111S-116S.	2.4	25
35	Protective effect of molecular hydrogen against oxidative stress caused by peroxynitrite derived from nitric oxide in rat retina. Clinical and Experimental Ophthalmology, 2015, 43, 568-577.	2.6	25
36	Combination therapy with transductive anti-death FNK protein and FK506 ameliorates brain damage with focal transient ischemia in rat. Journal of Neurochemistry, 2008, 106, 258-270.	3.9	22

#	Article	IF	Citations
37	Intravenous transplantation of bone marrow-derived mononuclear cells prevents memory impairment in transgenic mouse models of Alzheimer's disease. Brain Research, 2015, 1605, 49-58.	2.2	22
38	The 2011 Medical Molecular Hydrogen Symposium: An inaugural symposium of the journal Medical Gas Research. Medical Gas Research, 2011, 1, 10.	2.3	20
39	Molecular hydrogen suppresses free-radical-induced cell death by mitigating fatty acid peroxidation and mitochondrial dysfunction. Canadian Journal of Physiology and Pharmacology, 2019, 97, 999-1005.	1.4	20
40	Acute immobilization stress following contextual fear conditioning reduces fear memory: timing is essential. Behavioral and Brain Functions, 2016, 12, 8.	3.3	17
41	Review and prospect of the biomedical effects of hydrogen. Medical Gas Research, 2014, 4, 19.	2.3	16
42	Association of alcohol dehydrogenase 2^*1 allele with liver damage and insulin concentration in the Japanese. Journal of Human Genetics, 2006, 51 , $31-37$.	2.3	15
43	Direct Targets and Subsequent Pathways for Molecular Hydrogen to Exert Multiple Functions: Focusing on Interventions in Radical Reactions. Current Pharmaceutical Design, 2021, 27, 595-609.	1.9	13
44	Bacterial cell death induced by human pro-apoptotic Bax is blocked by an RNase E mutant that functions in an anti-oxidant pathway. Genes To Cells, 2000, 5, 155-167.	1.2	12
45	Intermittent intense exercise protects against cognitive decline in a similar manner to moderate exercise in chronically stressed mice. Behavioural Brain Research, 2018, 345, 59-64.	2.2	10
46	Circumscribed myxoedema of lichen myxoedematosus as a sign of faulty formation of the proteoglycan macromolecule. British Journal of Dermatology, 1981, 105, 239-245.	1.5	9
47	Development of Hydrogen Medicine and Biology: Potential for Various Applications in Diverse Fields. Current Pharmaceutical Design, 2021, 27, 583-584.	1.9	8
48	Decreased Expression of Bcl-x Protein during Hepatocarcinogenesis Induced Exogenously and Endogenously in Rats. Japanese Journal of Cancer Research, 2001, 92, 1270-1277.	1.7	6
49	Cisplatin selects short forms of the mitochondrial DNA OriB variant (16184–16193 poly-cytosine tract), which confer resistance to cisplatin. Scientific Reports, 2017, 7, 46240.	3.3	3
50	Response to Letter Regarding Article, "Hydrogen Inhalation During Normoxic Resuscitation Improves Neurological Outcome in a Rat Model of Cardiac Arrest Independently of Targeted Temperature Management― Circulation, 2015, 132, e148-e148.	1.6	1
51	The Super Anti-Apoptotic Factor Bcl-xFNK: A Novel Mutant of Rat Bcl-XI with a Gain-of-Function Phenotype. Scientific World Journal, The, 2001, 1, 91-91.	2.1	0
52	Time-lag combination therapy for cerebral ischemia using the FNK protein transduction technology and an immunosuppressant, I: In vivo study. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, S57-S57.	4.3	0
53	Neuroprotecting Mechanisms of Ischemic Preconditioning. Nihon Ika Daigaku Igakkai Zasshi, 2006, 2, 178-179.	0.0	0