## Kazuhiro Ichikawa

List of Publications by Year in descending order

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77 1,737 22 41
papers citations h-index g-index

84 84 84 1937 all docs docs citations times ranked citing authors

#	Article	IF	CITATIONS
1	Direct Evidence for Increased Hydroxyl Radicals Originating From Superoxide in the Failing Myocardium. Circulation Research, 2000, 86, 152-157.	4.5	389
2	Simultaneous molecular imaging of redox reactions monitored by Overhauser-enhanced MRI with 14N-and 15N-labeled nitroxyl radicals. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 1463-1468.	7.1	146
3	Enhanced Generation of Reactive Oxygen Species in the Limb Skeletal Muscles From a Murine Infarct Model of Heart Failure. Circulation, 2001, 104, 134-136.	1.6	115
4	A platform for designing hyperpolarized magnetic resonance chemical probes. Nature Communications, 2013, 4, 2411.	12.8	70
5	Esters of 5-Carboxyl-5-methyl-1-pyrrolineN-Oxide:Â A Family of Spin Traps for Superoxide. Journal of Organic Chemistry, 2003, 68, 7811-7817.	3.2	64
6	Dynamic nuclear polarization properties of nitroxyl radicals used in Overhauser-enhanced MRI for simultaneous molecular imaging. Journal of Magnetic Resonance, 2006, 182, 273-282.	2.1	51
7	Influence of Conformation on the EPR Spectrum of 5,5-Dimethyl-1-hydroperoxy-1-pyrrolidinyloxyl:Â A Spin Trapped Adduct of Superoxide. Journal of Organic Chemistry, 2004, 69, 1321-1330.	3.2	50
8	In vivo toxicity and antitumor activity of mangosteen extract. Journal of Natural Medicines, 2013, 67, 255-263.	2.3	47
9	Quantitative analysis for the enhancement of hydroxyl radical generation by phenols during ozonation of water. Water Research, 1998, 32, 3261-3266.	11.3	45
10	Direct Monitoring of γâ€Glutamyl Transpeptidase Activity In Vivo Using a Hyperpolarized <sup>13</sup> C‣abeled Molecular Probe. Angewandte Chemie - International Edition, 2016, 55, 10626-10629.	13.8	40
11	Design of a 15N Molecular Unit to Achieve Long Retention of Hyperpolarized Spin State. Scientific Reports, 2017, 7, 40104.	3.3	39
12	Advantageous application of a surface coil to EPR irradiation in overhauser-enhanced MRI. Magnetic Resonance in Medicine, 2007, 57, 806-811.	3.0	37
13	Design of a Hyperpolarized Molecular Probe for Detection of Aminopeptidase N Activity. Angewandte Chemie - International Edition, 2016, 55, 1765-1768.	13.8	36
14	Hyperpolarized [1-13C]-Pyruvate Magnetic Resonance Spectroscopic Imaging of Prostate Cancer <i>In Vivo</i> Predicts Efficacy of Targeting the Warburg Effect. Clinical Cancer Research, 2018, 24, 3137-3148.	7.0	36
15	In vivo ESR measurements of free radical reactions in living mice. Toxicology Letters, 1995, 82-83, 561-565.	0.8	31
16	Whole-body kinetic image of a redox probe in mice using Overhauser-enhanced MRI. Free Radical Biology and Medicine, 2012, 53, 328-336.	2.9	30
17	Oxidative Stress Imaging in Live Animals with Techniques Based on Electron Paramagnetic Resonance. Radiation Research, 2012, 177, 514-523.	1.5	28
18	Overhauser-enhanced magnetic resonance imaging characterization of mitochondria functional changes in the 6-hydroxydopamine rat model. Neurochemistry International, 2011, 59, 804-811.	3.8	27

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19	Design of a <sup>13</sup> C Magnetic Resonance Probe Using a Deuterated Methoxy Group as a Longâ€Lived Hyperpolarization Unit. Angewandte Chemie - International Edition, 2012, 51, 10114-10117.	13.8	27
20	Dendrimeric-Containing Nitronyl Nitroxides as Spin Traps for Nitric Oxide:Â Synthesis, Kinetic, and Stability Studies. Macromolecules, 2003, 36, 1021-1027.	4.8	26
21	Design of a hyperpolarized sup > 15 < /sup > N NMR probe that induces a large chemical-shift change upon binding of calcium ions. Chemical Communications, 2015, 51, 12290-12292.	4.1	25
22	[41] Nitroxyl probes for brain research and their application to brain imaging. Methods in Enzymology, 2002, 352, 494-506.	1.0	22
23	Nitroxide conjugate of a thermally responsive elastin-like polypeptide for noninvasive thermometry. Medical Physics, 2004, 31, 2755-2762.	3.0	20
24	Dynamic nuclear polarization studies of redox-sensitive nitroxyl spin probes in liposomal solution. Journal of Magnetic Resonance, 2010, 204, 131-138.	2.1	20
25	Nitroxides prevent exacerbation of indomethacin-induced gastric damage in adjuvant arthritis rats. Free Radical Biology and Medicine, 2011, 51, 1799-1805.	2.9	20
26	Long-term culture of primary rat hepatocytes with high albumin secretion using membrane-supported collagen sandwich. Cytotechnology, 1993, 11, 213-218.	1.6	19
27	Generation of p-semiquinone radicals from chlorophenols in water during ozonation. Water Research, 1998, 32, 1978-1981.	11.3	18
28	A kinetic study of 3-chlorophenol enhanced hydroxyl radical generation during ozonation. Water Research, 2003, 37, 4924-4928.	11.3	18
29	Dynamic nuclear polarization magnetic resonance imaging and the oxygen-sensitive paramagnetic agent OX63 provide a noninvasiveÂquantitative evaluation of kidneyÂhypoxia in diabetic mice. Kidney International, 2019, 96, 787-792.	5.2	17
30	Enhancement of hydroxyl radical generation by phenols and their reaction intermediates during ozonation. Water Science and Technology, 1998, 38, 147.	2.5	14
31	Reduction of Image Artifacts in Mice by Bladder Flushing with a Novel Double-Lumen Urethral Catheter. Molecular Imaging, 2006, 5, 7290.2006.00020.	1.4	14
32	Application of micronucleus in vitro assay to micropollutants in river water. Water Science and Technology, 1997, 35, 9-13.	2.5	13
33	Imaging <i>in vivo</i> redox status in high spatial resolution with OMRI. Free Radical Research, 2012, 46, 1004-1010.	3.3	12
34	A Strategy to Design Hyperpolarized <sup>13</sup> C Magnetic Resonance Probes Using [1â€≺sup>13C]αâ€Amino Acid as a Scaffold Structure. Chemistry - an Asian Journal, 2017, 12, 949-953.	3.3	12
35	In Vivo Imaging of the Intra- and Extracellular Redox Status in Rat Stomach with Indomethacin-Induced Gastric Ulcers Using Overhauser-Enhanced Magnetic Resonance Imaging. Antioxidants and Redox Signaling, 2019, 30, 1147-1161.	5.4	12
36	Mouse lactate dehydrogenase X: A promising magnetic resonance reporter protein using hyperpolarized pyruvic acid derivative Y. Chemical Science, 2012, 3, 800-806.	7.4	11

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37	Nitroxyl radicals-modified dendritic poly( <scp>l</scp> -lysine) as a contrast agent for Overhauser-enhanced MRI. Journal of Biomaterials Science, Polymer Edition, 2014, 25, 1425-1439.	3.5	11
38	Quantitative comparison of rat hepatocyte functions in two improved culture systems with or without rat liver epithelial cell line. Cytotechnology, 1996, 21, 243-252.	1.6	10
39	Observation of Glycolytic Metabolites in Tumor Cell Lysate by Using Hyperpolarization of Deuterated Glucose. Biological and Pharmaceutical Bulletin, 2014, 37, 1416-1421.	1.4	10
40	Design of a Hyperpolarized Molecular Probe for Detection of Aminopeptidase N Activity. Angewandte Chemie, 2016, 128, 1797-1800.	2.0	10
41	Permeability Studies of Redox-Sensitive Nitroxyl Spin Probes Through Lipid Membranes Using an L-Band ESR Spectrometer. Applied Magnetic Resonance, 2013, 44, 439-447.	1.2	9
42	Rational Design of [ <sup>13</sup> C,D <sub>14</sub> ] <i>Tert</i> â€butylbenzene as a Scaffold Structure for Designing Longâ€ived Hyperpolarized <sup>13</sup> C Probes. Chemistry - an Asian Journal, 2018, 13, 280-283.	3.3	8
43	Application of In Vivo ESR/Spin-Probe Technique to Monitor Tumor In Vivo in Mouse Footpad. Antioxidants and Redox Signaling, 2007, 9, 1699-1708.	5.4	7
44	Direct Monitoring of γâ€Glutamyl Transpeptidase Activity In Vivo Using a Hyperpolarized 13 C‣abeled Molecular Probe. Angewandte Chemie, 2016, 128, 10784-10787.	2.0	7
45	Enhancement of hydroxyl radical generation by phenols and their reaction intermediates during ozonation. Water Science and Technology, 1998, 38, 147-154.	2.5	6
46	An ESR contrast agent is transported to rat liver through organic anion transporter. Free Radical Research, 2006, 40, 403-408.	3.3	5
47	Analysis of Nitroxyl Spin Probes in Mouse Brain by X-Band ESR with Microdialysis Technique. Journal of Pharmaceutical Sciences, 2008, 97, 4101-4107.	3.3	5
48	Development of a PET/OMRI combined system for simultaneous imaging of positron and free radical probes for small animals. Medical Physics, 2016, 43, 5676-5684.	3.0	5
49	<i>In Vitro</i> and <i>In Vivo</i> Detection of Drug-induced Apoptosis Using Annexin V-conjugated Ultrasmall Superparamagnetic Iron Oxide (USPIO): A Pilot Study. Magnetic Resonance in Medical Sciences, 2019, 18, 142-149.	2.0	5
50	Primary culture of rat hepatocytes using membrane-supported collagen sandwich with hormone-free medium. Biotechnology Letters, 1994, 8, 385-388.	0.5	2
51	Long-term cytotoxicities of various pesticides evaluated by albumin secretion of primary cultured rat hepatocytes. Biotechnology Letters, 1996, 10, 99-102.	0.5	2
52	Application of micronucleus assay to micropollutants in river water. Water Science and Technology, 1997, 35, 9.	2.5	2
53	Change in Overhauser Effect-enhanced MRI Signal in Response to uPA Highly Expressing in Tumor. Chemistry Letters, 2014, 43, 999-1001.	1.3	2
54	Construction of 0.15 Tesla Overhauser Enhanced MRI. Advances in Experimental Medicine and Biology, 2017, 977, 393-398.	1.6	2

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55	Biomedical Overhauser Magnetic Resonance Imaging (OMRI): Noninvasive Imaging of Redox Processes. Biological Magnetic Resonance, 2020, , 221-229.	0.4	2
56	Genotoxicity and Cytotoxicity of Tama River Water Estimated with in vitro Micronucleus Test and Colony Formation Inhibition Test Journal of Japan Society on Water Environment, 1997, 20, 716-721.	0.4	1
57	In Vitro Bioassay System Closely Related to Whole Body Toxicity Journal of Japan Society on Water Environment, 1997, 20, 701-704.	0.4	1
58	Quantification of hydroxyl radical during ozonation in batch system Journal of Japan Society on Water Environment, 1999, 22, 921-925.	0.4	1
59	Redox Imaging of lung inflammation in mice. Free Radical Biology and Medicine, 2012, 53, S223.	2.9	1
60	Effect of ionic interaction between a hyperpolarized magnetic resonance chemical probe and a gadolinium contrast agent for the hyperpolarized lifetime after dissolution. Journal of Magnetic Resonance, 2016, 270, 157-160.	2.1	1
61	Imaging Doxorubicin Free Radical in Mice with Overhauser Enhanced MRI and its Tumor Suppression Effect in Mice. Applied Magnetic Resonance, 2018, 49, 869-879.	1.2	1
62	Dual channel EPR excitation coil array for Overhauser-enhanced MRI. Journal of Magnetic Resonance, 2021, 323, 106890.	2.1	1
63	A kinetic study of resorcinol-enhanced hydroxyl radical generation during ozonation with a power law type equation. Journal of Water and Environment Technology, 2008, 6, 1-7.	0.7	O
64	Application of a Homebuilt Overhauser-enhanced MRI using in vivo EPR Spectrometer to Mice Redox Imaging. Free Radical Biology and Medicine, 2010, 49, S185.	2.9	0
65	Permeability studies of nitroxyl spin probes through lipid membranes using L-band ESR spectrometer. , 2012, , .		O
66	The Japanese Emperor Bestows Medal with Purple Ribbon onAntioxidants and Redox SignalingEditor Hideo Utsumi for Contributions to Redox Biology. Antioxidants and Redox Signaling, 2012, 16, 463-467.	5 <b>.</b> 4	0
67	Non-invasive Redox Imaging of Cisplatin-Induced Nephrotoxicity Using Overhauser-MRI. Free Radical Biology and Medicine, 2013, 65, S126.	2.9	O
68	Electron spin resonance spectroscopy studies on [sup $15$ ]N-labeled and their deuterated nitroxyl spin probes used in molecular imaging., $2013$ ,,.		0
69	Molecular dynamics dependence of overhauser-enhanced magnetic resonance imaging (OMRI): An ESR study. , 2013, , .		0
70	Permeability studies of redox-sensitive nitroxyl radicals through bilayer lipid membranes. , 2013, , .		0
71	Diffusion studies on permeable nitroxyl spin probe through lipid bilayer membrane. , 2014, , .		0
72	Diffusion studies on permeable nitroxyl spin probes through bilayer lipid membranes: A low frequency ESR study. AIP Conference Proceedings, 2015, , .	0.4	0

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73	Imaging analysis for multiple paramagnetic agents using OMRI and electrophoresis. Journal of Clinical Biochemistry and Nutrition, 2021, 70, 103-107.	1.4	O
74	In Vivo ESR Measurement of Free Radical Reactions in Living Mice. , 1998, , 13-22.		0
75	The In vitro Bioassay System as it Closely Correlate with Toxicity Levels in the Body Waste Management Research, 1998, 9, 379-383.	0.0	0
76	Bioassay for Endocrine Disrupting Chemicals Waste Management Research, 1999, 10, 263-270.	0.0	0
77	Research and development of pre-clinical OMRI. Antioxidants and Redox Signaling, 2022, , .	5.4	0