

# Satoko Kawauchi

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

555  
citations

623734

14  
h-index

642732

23  
g-index

58  
all docs

58  
docs citations

58  
times ranked

642  
citing authors

#	ARTICLE	IF	CITATIONS
1	Targeted increase in cerebral blood flow by transcranial near-infrared laser irradiation. <i>Lasers in Surgery and Medicine</i> , 2010, 42, 566-576.	2.1	115
2	Pathophysiology of the inner ear after blast injury caused by laser-induced shock wave. <i>Scientific Reports</i> , 2016, 6, 31754.	3.3	40
3	Diffuse light reflectance signals as potential indicators of loss of viability in brain tissue due to hypoxia: charge-coupled-device-based imaging and fiber-based measurement. <i>Journal of Biomedical Optics</i> , 2013, 18, 015003.	2.6	38
4	Real-Time Optical Diagnosis of the Rat Brain Exposed to a Laser-Induced Shock Wave: Observation of Spreading Depolarization, Vasoconstriction and Hypoxemia-Oligemia. <i>PLoS ONE</i> , 2014, 9, e82891.	2.5	37
5	Simultaneous measurement of changes in light absorption due to the reduction of cytochrome c oxidase and light scattering in rat brains during loss of tissue viability. <i>Applied Optics</i> , 2008, 47, 4164.	2.1	35
6	Nanosecond, high-intensity pulsed laser ablation of myocardium tissue at the ultraviolet, visible, and near-infrared wavelengths: In-vitro study. <i>Lasers in Surgery and Medicine</i> , 2001, 29, 464-473.	2.1	34
7	Light scattering change precedes loss of cerebral adenosine triphosphate in a rat global ischemic brain model. <i>Neuroscience Letters</i> , 2009, 459, 152-156.	2.1	25
8	Multispectral imaging of absorption and scattering properties of <i>in vivo</i> exposed rat brain using a digital red-green-blue camera. <i>Journal of Biomedical Optics</i> , 2015, 20, 051026.	2.6	23
9	Real-time photoacoustic imaging system for burn diagnosis. <i>Journal of Biomedical Optics</i> , 2014, 19, 086013.	2.6	22
10	Evaluation of Cerebral Hemodynamics and Tissue Morphology of In Vivo Rat Brain Using Spectral Diffuse Reflectance Imaging. <i>Applied Spectroscopy</i> , 2017, 71, 866-878.	2.2	21
11	Light-scattering signal may indicate critical time zone to rescue brain tissue after hypoxia. <i>Journal of Biomedical Optics</i> , 2011, 16, 027002.	2.6	17
12	Highly site-selective transvascular drug delivery by the use of nanosecond pulsed laser-induced photomechanical waves. <i>Journal of Controlled Release</i> , 2014, 192, 228-235.	9.9	15
13	Evaluation of light scattering and absorption properties of <i>in vivo</i> rat liver using a single-reflectance fiber probe during preischemia, ischemia, reperfusion, and postmortem. <i>Journal of Biomedical Optics</i> , 2015, 20, 076010.	2.6	14
14	Correlation Between Oxygen Consumption and Photobleaching During In Vitro Photodynamic Treatment with ATX-S10A·Na(II) Using Pulsed Light Excitation: Dependence of Pulse Repetition Rate and Irradiation Time. <i>Photochemistry and Photobiology</i> , 2004, 80, 216.	2.5	11
15	RGB camera-based imaging of cerebral tissue oxygen saturation, hemoglobin concentration, and hemodynamic spontaneous low-frequency oscillations in rat brain following induction of cortical spreading depression. <i>Biomedical Optics Express</i> , 2018, 9, 933.	2.9	8
16	In Vivo Evaluation of Cerebral Hemodynamics and Tissue Morphology in Rats during Changing Fraction of Inspired Oxygen Based on Spectrocolorimetric Imaging Technique. <i>International Journal of Molecular Sciences</i> , 2018, 19, 491.	4.1	8
17	A novel mouse model of mild traumatic brain injury using laser-induced shock waves. <i>Neuroscience Letters</i> , 2020, 721, 134827.	2.1	8
18	Multispectral imaging of cortical vascular and hemodynamic responses to a shock wave: observation of spreading depolarization and oxygen supply-demand mismatch. <i>Journal of Biomedical Optics</i> , 2019, 24, 1.	2.6	8

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19	Thoracic shock wave injury causes behavioral abnormalities in mice. <i>Acta Neurochirurgica</i> , 2015, 157, 2111-2120.	1.7	7
20	Correlation between oxygen consumption and photobleaching during in vitro photodynamic treatment with ATX-S10A-Na(II) using pulsed light excitation: Dependence of pulse repetition rate and irradiation time. <i>Photochemistry and Photobiology</i> , 2004, 80, 216-223.	2.5	7
21	Blood-oxygen-level-dependent (BOLD) functional magnetic resonance imaging (fMRI) during transcranial near-infrared laser irradiation. <i>Brain Stimulation</i> , 2017, 10, 1136-1138.	1.6	6
22	Intracellular kinetics of ATX-S10A-Na(II) and its correlation with photochemical reaction dynamics during a pulsed photosensitization process: effect of pulse repetition rate. <i>Journal of Biomedical Optics</i> , 2006, 11, 014005.	2.6	3
23	Near-infrared diffuse reflectance imaging of infarct core and peri-infarct depolarization in a rat middle cerebral artery occlusion model. , 2014, , .		3
24	Time courses of BOLD responses during transcranial near-infrared laser irradiation. <i>Brain Stimulation</i> , 2019, 12, 778-780.	1.6	3
25	In Vivo Determination of Tissue Optical Properties using Single Reflectance Fiber Probe with Two Source-collector Geometries. <i>Nippon Laser Igakkaishi</i> , 2012, 32, 394-401.	0.0	2
26	Near-infrared diffuse reflectance signals for monitoring spreading depolarizations and progression of the lesion in a male rat focal cerebral ischemia model. <i>Journal of Neuroscience Research</i> , 2018, 96, 875-888.	2.9	2
27	In vivo diffuse reflectance spectroscopic analysis of fatty liver with inflammation in mice. <i>Surgery Open Science</i> , 2021, 6, 21-28.	1.2	2
28	Evaluation of the Stage of Hemorrhage Using Optical Diffuse Reflectance Spectroscopy: An In Vivo Study. <i>Acta Neurochirurgica Supplementum</i> , 2013, 118, 45-48.	1.0	2
29	Changes in intrinsic optical signals during loss of tissue viability of brains in rats: effect of brain temperature. , 2007, , .		1
30	Correlation Between Oxygen Consumption and Photobleaching During <i>In Vitro</i> Photodynamic Treatment with ATX-S10A-Na(II) Using Pulsed Light Excitation: Dependence of Pulse Repetition Rate and Irradiation Time. <i>Photochemistry and Photobiology</i> , 2004, 80, 216-223.	2.5	1
31	Near-infrared scattering imaging of depolarization waves in a rat hypoxic brain model and its application to assessment of brain tissue reversibility. , 2011, , .		1
32	Optical monitoring of shock wave-induced spreading depolarization and concomitant hypoxemia in rat brain. , 2014, , .		1
33	<i>In vivo</i> imaging of scattering and absorption properties of exposed brain using a digital red-green-blue camera. <i>Proceedings of SPIE</i> , 2014, , .	0.8	1
34	In vivo imaging of cerebral hemodynamics and regional oxygen saturation in rats with a digital red-green-blue camera. <i>Proceedings of SPIE</i> , 2016, , .	0.8	1
35	In vivo imaging of tissue scattering parameter and cerebral hemodynamics in rat brain with a digital red-green-blue camera. , 2017, , .		1
36	Simultaneous Evaluation of Cerebral Hemodynamics and Light Scattering Properties of the <i>In Vivo</i> Rat Brain Using Multispectral Diffuse Reflectance Imaging. <i>Journal of Visualized Experiments</i> , 2017, , .	0.3	1

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37	Real-time Monitoring of Hypoxic-Ischemic Brain Damage in Neonatal Rats Using Diffuse Light Reflectance Spectroscopy. Reproductive Sciences, 2020, 27, 172-181.	2.5	1
38	Pulsed photodynamic inactivation of gram-negative bacteria . Nippon Laser Igakkaishi, 2004, 25, 129-134.	0.0	1
39	Effects of Isolated and Combined Exposure of the Brain and Lungs to a Laser-Induced Shock Wave(s) on Physiological and Neurological Responses in Rats. Journal of Neurotrauma, 2022, 39, 1533-1546.	3.4	1
40	Correlation between light scattering signal and tissue reversibility in rat brain exposed to hypoxia. , 2010, , .		0
41	Dynamic Phenomena caused by a Shock Wave in the Brain: Real-Time Diagnoses of the Rat Exposed to a Laser-Induced Shock Wave. Nippon Laser Igakkaishi, 2014, 35, 132-139.	0.0	0
42	Multichannel fiber-based diffuse reflectance spectroscopy for the rat brain exposed to a laser-induced shock wave: comparison between ipsi- and contralateral hemispheres. , 2015, , .		0
43	<i>In vivo</i> estimation of light scattering and absorption properties of rat brain using single reflectance fiber probe during anoxic depolarization. Proceedings of SPIE, 2015, , .	0.8	0
44	In vivo multispectral imaging of the absorption and scattering properties of exposed brain using a digital redâ€“greenâ€“blue camera. Optical Review, 2015, 22, 374-384.	2.0	0
45	Validation of IRFEL-induced vibrational excitation effects on ester using fluorescent dye. The Review of Laser Engineering, 2001, 29, 221-222,224.	0.0	0
46	Mechanism of Photodynamic Cytotoxicity with Nanosecond Pulsed Light Excitation. The Review of Laser Engineering, 2007, 35, 498-502.	0.0	0
47	Evaluation of Light Absorption and Scattering Properties of in vivo Rat Brain Using Single Refl ection Probe with Multiple Fibers. The Review of Laser Engineering, 2012, 40, 299.	0.0	0
48	Optical Monitoring of Brain Tissue Viability. The Review of Laser Engineering, 2012, 40, 236.	0.0	0
49	Effects of Transcranial Near-Infrared Light on Cerebral Blood Flow. The Review of Laser Engineering, 2012, 40, 265.	0.0	0
50	Measuring and Imaging of Optical Properties of Brain Tissue by Diffuse Refl ectance Spectroscopy. The Review of Laser Engineering, 2013, 41, 596.	0.0	0
51	1C02 Investigation of the mechanism of blast-induced TBI by use of laser-induced shock wave. The Proceedings of the Bioengineering Conference Annual Meeting of BED/JSME, 2013, 2013.25, 81-82.	0.0	0
52	J023016 Endoscopic molecular delivery system based on photomechanical waves. The Proceedings of Mechanical Engineering Congress Japan, 2013, 2013, _J023016-1-_J023016-3.	0.0	0
53	Visualization of hemodynamics and light scattering in exposed brain of rat using multispectral image reconstruction based on Wiener estimation method. , 2015, , .		0
54	In vivo Estimation of Optical Coefficients of Rat Brain based on Diffuse Reflectance Spectroscopy. The Review of Laser Engineering, 2016, 44, 225.	0.0	0

#	ARTICLE	IF	CITATIONS
55	Study on the cellular and molecular responses to a shock wave in the rat brain. , 2019, , .		0
56	Spectral Diffuse Reflectance Imaging Based on Numerical Simulation for Light Transport in Biological Tissues. Nippon Laser Igakkaishi, 2020, 40, 359-368.	0.0	0
57	Rabbit Model without Intubation for Cardiac Surgery. Ika Kikaigaku, 2001, 71, 425-430.	0.0	0