Nozomi Nishimura

List of Publications by Year in Descending Order

76 papers	4,136 citations	29 h-index	64 g-index
114 ext. papers	5,265 ext. citations	7.3 avg, IF	5.15 L-index

#	Paper	IF	Citations
76	Differential regulation of progranulin derived granulin peptides.. *Molecular Neurodegeneration*, **2022**, 17, 15	19	1
75	Neurological and Inflammatory Effects of Radio Frequency and Cryoablation in a Rat Sciatic Nerve Model of Submucosal Nerve Ablation.. *American Journal of Rhinology and Allergy*, **2022**, 19458924221099377	2.4	0
74	Genetically engineered mice for combinatorial cardiovascular optobiology. *ELife*, **2021**, 10,	8.9	1
73	Causes and consequences of baseline cerebral blood flow reductions in Alzheimer's disease. *Journal of Cerebral Blood Flow and Metabolism*, **2021**, 41, 1501-1516	7.3	12
72	High fat diet worsens Alzheimer's disease-related behavioral abnormalities and neuropathology in APP/PS1 mice, but not by synergistically decreasing cerebral blood flow. *Scientific Reports*, **2020**, 10, 9884	4.9	21
71	Intravital Microscopy of the Beating Murine Heart to Understand Cardiac Leukocyte Dynamics. *Frontiers in Immunology*, **2020**, 11, 92	8.4	7
70	Hyperspectral multiphoton microscopy for visualization of multiple, spectrally overlapped fluorescent labels. *Optica*, **2020**, 7, 1587-1601	8.6	12
69	Intravital Multiphoton Microscopy of the Beating Mouse Heart Reveals Altered Cardiomyocyte Contraction Dynamics and Increased Microvascular Patrolling by Leukocytes during Cardiac Hypertrophy. *FASEB Journal*, **2020**, 34, 1-1	0.9	
68	Microvessel occlusions alter amyloid-beta plaque morphology in a mouse model of Alzheimer's disease. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 2115-2131	7.3	5
67	A topological encoding convolutional neural network for segmentation of 3D multiphoton images of brain vasculature using persistent homology. *IEEE Computer Society Conference on Computer Vision and Pattern Recognition Workshops*, **2020**, 2020, 4262-4271	1.3	5
66	Special topic section: linkages among cerebrovascular, cardiovascular, and cognitive disorders: Preventing dementia by preventing stroke: The Berlin Manifesto. *International Journal of Stroke*, **2019**, 1747493019871915	6.3	8
65	Endothelial cells promote 3D invasion of GBM by IL-8-dependent induction of cancer stem cell properties. *Scientific Reports*, **2019**, 9, 9069	4.9	45
64	Brain Capillary Networks Across Species: A few Simple Organizational Requirements Are Sufficient to Reproduce Both Structure and Function. *Frontiers in Physiology*, **2019**, 10, 233	4.6	29
63	Deep convolutional neural networks for segmenting 3D in vivo multiphoton images of vasculature in Alzheimer disease mouse models. *PLoS ONE*, **2019**, 14, e0213539	3.7	29
62	Aspirin treatment does not increase microhemorrhage size in young or aged mice. *PLoS ONE*, **2019**, 14, e0204295	3.7	2
61	Neutrophil adhesion in brain capillaries reduces cortical blood flow and impairs memory function in Alzheimer's disease mouse models. *Nature Neuroscience*, **2019**, 22, 413-420	25.5	152
60	Preventing dementia by preventing stroke: The Berlin Manifesto. *Alzheimer's and Dementia*, **2019**, 15, 961-984	1.2	113

59	Advanced Circuit and Cellular Imaging Methods in Nonhuman Primates. *Journal of Neuroscience*, **2019**, 39, 8267-8274	6.6	12
58	Computed optical coherence microscopy of mouse brain ex vivo. *Journal of Biomedical Optics*, **2019**, 24, 1-18	3.5	4
57	In Vivo Multiphoton Microscopy of the Beating Mouse Heart in Health and Disease **2019**,		1
56	Comparison of convolutional neural and fully convolutional networks for segmentation of 3D in vivo multiphoton microscopy images of brain vasculature **2019**,		1
55	An intravital window to image the colon in real time. *Nature Communications*, **2019**, 10, 5647	17.4	13
54	In Vivo Femtosecond Laser Subsurface Cortical Microtransections Attenuate Acute Rat Focal Seizures. *Cerebral Cortex*, **2019**, 29, 3415-3426	5.1	2
53	Label-free imaging of atherosclerotic plaques using third-harmonic generation microscopy. *Biomedical Optics Express*, **2018**, 9, 214-229	3.5	9
52	Intestinal crypts recover rapidly from focal damage with coordinated motion of stem cells that is impaired by aging. *Scientific Reports*, **2018**, 8, 10989	4.9	14
51	Calcium Imaging of Cardiomyocytes in the Beating Mouse Heart With Multiphoton Microscopy. *Frontiers in Physiology*, **2018**, 9, 969	4.6	22
50	Experimentally constrained circuit model of cortical arteriole networks for understanding flow redistribution due to occlusion and neural activation. *Journal of Cerebral Blood Flow and Metabolism*, **2018**, 38, 38-44	7.3	5
49	Diverse Inflammatory Response After Cerebral Microbleeds Includes Coordinated Microglial Migration and Proliferation. *Stroke*, **2018**, 49, 1719-1726	6.7	27
48	In vivo three-photon imaging of activity of GCaMP6-labeled neurons deep in intact mouse brain. *Nature Methods*, **2017**, 14, 388-390	21.6	265
47	A Notch positive feedback in the intestinal stem cell niche is essential for stem cell self-renewal. *Molecular Systems Biology*, **2017**, 13, 927	12.2	29
46	Impaired prosaposin lysosomal trafficking in frontotemporal lobar degeneration due to progranulin mutations. *Nature Communications*, **2017**, 8, 15277	17.4	53
45	Simultaneous optical and electrical in vivo analysis of the enteric nervous system. *Nature Communications*, **2016**, 7, 11800	17.4	39
44	In-Vivo Three-Photon Excited Fluorescence Imaging in the Spinal Cord of Awake, Locomoting Mouse **2016**,		1
43	A circuit motif in the zebrafish hindbrain for a two alternative behavioral choice to turn left or right. *ELife*, **2016**, 5,	8.9	33
42	Higher-Order Multiphoton Microscopy of the Beating Mouse Heart Using Resonant Scanning **2016**,		2

41	Growth and hemodynamics after early embryonic aortic arch occlusion. *Biomechanics and Modeling in Mechanobiology*, **2015**, 14, 735-51	3.8	23
40	Robust and fragile aspects of cortical blood flow in relation to the underlying angioarchitecture. *Microcirculation*, **2015**, 22, 204-218	2.9	62
39	Use of Tethered Enzymes as a Platform Technology for Rapid Analyte Detection. *PLoS ONE*, **2015**, 10, e0142326	3.7	5
38	In vivo Three Photon Imaging of Neuronal Activities from Hippocampus in Intact Mouse Brain. *Microscopy and Microanalysis*, **2015**, 21, 1721-1722	0.5	
37	A mathematical model relating cortical oxygenated and deoxygenated hemoglobin flows and volumes to neural activity. *Journal of Neural Engineering*, **2015**, 12, 046013	5	
36	Comprehensive models of human primary and metastatic colorectal tumors in immunodeficient and immunocompetent mice by chemokine targeting. *Nature Biotechnology*, **2015**, 33, 656-60	44.5	25
35	Stalled cerebral capillary blood flow in mouse models of essential thrombocythemia and polycythemia vera revealed by in vivo two-photon imaging. *Journal of Thrombosis and Haemostasis*, **2014**, 12, 2120-30	15.4	30
34	In Vivo Three-photon Calcium Imaging of Brain Activity from Layer 6 Neurons in Mouse Brain **2014**,		10
33	Mechanistic insight into the TH1-biased immune response to recombinant subunit vaccines delivered by probiotic bacteria-derived outer membrane vesicles. *PLoS ONE*, **2014**, 9, e112802	3.7	33
32	Optoporation and genetic manipulation of cells using femtosecond laser pulses. *Biophysical Journal* , **2013**, 105, 862-71	2.9	47
31	Big effects from tiny vessels: imaging the impact of microvascular clots and hemorrhages on the brain. *Stroke*, **2013**, 44, S90-2	6.7	14
30	Three-photon excited fluorescence imaging of unstained tissue using a GRIN lens endoscope. *Biomedical Optics Express*, **2013**, 4, 652-8	3.5	31
29	Optically induced occlusion of single blood vessels in rodent neocortex. *Cold Spring Harbor Protocols*, **2013**, 2013, 1153-60	1.2	11
28	Stimulus-evoked calcium transients in somatosensory cortex are temporarily inhibited by a nearby microhemorrhage. *PLoS ONE*, **2013**, 8, e65663	3.7	25
27	Real-time imaging of perivascular transport of nanoparticles during convection-enhanced delivery in the rat cortex. *Annals of Biomedical Engineering*, **2012**, 40, 292-303	4.7	35
26	Two-photon microscopy as a tool to study blood flow and neurovascular coupling in the rodent brain. *Journal of Cerebral Blood Flow and Metabolism*, **2012**, 32, 1277-309	7.3	288
25	In vivo two-photon excited fluorescence microscopy reveals cardiac- and respiration-dependent pulsatile blood flow in cortical blood vessels in mice. *American Journal of Physiology - Heart and Circulatory Physiology*, **2012**, 302, H1367-77	5.2	95
24	Cortical microhemorrhages cause local inflammation but do not trigger widespread dendrite degeneration. *PLoS ONE*, **2011**, 6, e26612	3.7	56

23	Sub-surface, micrometer-scale incisions produced in rodent cortex using tightly-focused femtosecond laser pulses. *Lasers in Surgery and Medicine*, **2011**, 43, 382-91	3.6	10
22	Preictal and ictal neurovascular and metabolic coupling surrounding a seizure focus. *Journal of Neuroscience*, **2011**, 31, 13292-300	6.6	87
21	Occlusion of cortical ascending venules causes blood flow decreases, reversals in flow direction, and vessel dilation in upstream capillaries. *Journal of Cerebral Blood Flow and Metabolism*, **2011**, 31, 2243-54	7.3	64
20	Age-related intimal stiffening enhances endothelial permeability and leukocyte transmigration. *Science Translational Medicine*, **2011**, 3, 112ra122	17.5	254
19	Limitations of collateral flow after occlusion of a single cortical penetrating arteriole. *Journal of Cerebral Blood Flow and Metabolism*, **2010**, 30, 1914-27	7.3	88
18	In vivo deep tissue imaging with long wavelength multiphoton excitation **2010**,		1
17	Two-photon microscopy-guided femtosecond-laser photoablation of avian cardiogenesis: noninvasive creation of localized heart defects. *American Journal of Physiology - Heart and Circulatory Physiology*, **2010**, 299, H1728-35	5.2	29
16	Stimulus-Evoked Calcium Transients in Somatosensory Cortex are Inhibited After a Nearby Microhemorrhage **2010**,		1
15	In Vivo Imaging of Cerebral Circulation In Mouse Models of Polycythemia Vera. *Blood*, **2010**, 116, 4091-4091	9.9	
14	Flexible microfluidic devices supported by biodegradable insertion scaffolds for convection-enhanced neural drug delivery. *Biomedical Microdevices*, **2009**, 11, 915-24	3.7	50
13	Deep tissue multiphoton microscopy using longer wavelength excitation. *Optics Express*, **2009**, 17, 13354-64	3.9	391
12	Suppressed neuronal activity and concurrent arteriolar vasoconstriction may explain negative blood oxygenation level-dependent signal. *Journal of Neuroscience*, **2007**, 27, 4452-9	6.6	307
11	Penetrating arterioles are a bottleneck in the perfusion of neocortex. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 365-70	11.5	268
10	Two-photon imaging of cortical surface microvessels reveals a robust redistribution in blood flow after vascular occlusion. *PLoS Biology*, **2006**, 4, e22	9.7	274
9	In vivo manipulation of biological systems with femtosecond laser pulses **2006**,		7
8	Targeted insult to subsurface cortical blood vessels using ultrashort laser pulses: three models of stroke. *Nature Methods*, **2006**, 3, 99-108	21.6	235
7	All-optical thrombotic stroke model for near-surface blood vessels in rat: focal illumination of exogeneous photosensitizers combined with real-time two-photon imaging **2003**,		1
6	Principles, Design,and Construction of a Two-Photon Laser-Scanning Microscopefor In Vitro and In Vivo Brain Imaging. *Frontiers in Neuroscience*, **2002**,		16

5	Dynamics of femtosecond laser-induced breakdown in water from femtoseconds to microseconds. *Optics Express*, **2002**, 10, 196-203	3.3	191
4	Laser-induced microexplosions in transparent materials: microstructuring with nanojoules **1999**,		6
3	Thresholds for femtosecond laser-induced breakdown in bulk transparent solids and water **1998**, 3451, 2		12
2	Ultrafast laser-induced microexplosions: explosive dynamics and submicrometer structures **1998**, 3269, 36		15
1	Minimally disruptive laser-induced breakdown in water. *Optics Letters*, **1997**, 22, 1817-9	3	58