David Kleinfeld

List of Publications by Year
in descending order

165 papers	17,321 citations	15504 65 h-index	16650 123 g-index
179 all docs	179 docs citations	179 times ranked	13938 citing authors

#	Article	IF	Citations
1	In vivo dendritic calcium dynamics in neocortical pyramidal neurons. Nature, 1997, 385, 161-165.	27.8	795
2	ReaChR: a red-shifted variant of channelrhodopsin enables deep transcranial optogenetic excitation. Nature Neuroscience, 2013, 16, 1499-1508.	14.8	721
3	'Where' and 'what' in the whisker sensorimotor system. Nature Reviews Neuroscience, 2008, 9, 601-612.	10.2	534
4	Correlations of Neuronal and Microvascular Densities in Murine Cortex Revealed by Direct Counting and Colocalization of Nuclei and Vessels. Journal of Neuroscience, 2009, 29, 14553-14570.	3.6	500
5	The cortical angiome: an interconnected vascular network with noncolumnar patterns of blood flow. Nature Neuroscience, 2013, 16, 889-897.	14.8	471
6	Traveling Electrical Waves in Cortex. Neuron, 2001, 29, 33-44.	8.1	410
7	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, 1277-1309.	4.3	405
8	Chronic optical access through a polished and reinforced thinned skull. Nature Methods, 2010, 7, 981-984.	19.0	382
9	Quality Metrics to Accompany Spike Sorting of Extracellular Signals. Journal of Neuroscience, 2011, 31, 8699-8705.	3.6	358
10	Rhythmic Whisking by Rat: Retraction as Well as Protraction of the Vibrissae Is Under Active Muscular Control. Journal of Neurophysiology, 2003, 89, 104-117.	1.8	347
11	Active sensation: insights from the rodent vibrissa sensorimotor system. Current Opinion in Neurobiology, 2006, 16, 435-444.	4.2	347
12	Suppressed Neuronal Activity and Concurrent Arteriolar Vasoconstriction May Explain Negative Blood Oxygenation Level-Dependent Signal. Journal of Neuroscience, 2007, 27, 4452-4459.	3.6	345
13	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, 365-370.	7.1	341
14	Two-Photon Imaging of Cortical Surface Microvessels Reveals a Robust Redistribution in Blood Flow after Vascular Occlusion. PLoS Biology, 2006, 4, e22.	5.6	329
15	Automatic sorting of multiple unit neuronal signals in the presence of anisotropic and non-Gaussian variability. Journal of Neuroscience Methods, 1996, 69, 175-188.	2.5	319
16	Targeted insult to subsurface cortical blood vessels using ultrashort laser pulses: three models of stroke. Nature Methods, 2006, 3, 99-108.	19.0	306
17	Cerebrospinal fluid influx drives acute ischemic tissue swelling. Science, 2020, 367, .	12.6	300
18	The smallest stroke: occlusion of one penetrating vessel leads to infarction and a cognitive deficit. Nature Neuroscience, 2013, 16, 55-63.	14.8	284

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19	Hierarchy of orofacial rhythms revealed through whisking and breathing. Nature, 2013, 497, 205-210.	27.8	280
20	Fluctuating and sensory-induced vasodynamics in rodent cortex extend arteriole capacity. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 8473-8478.	7.1	257
21	A Proposal for a Coordinated Effort for the Determination of Brainwide Neuroanatomical Connectivity in Model Organisms at a Mesoscopic Scale. PLoS Computational Biology, 2009, 5, e1000334.	3.2	242
22	Entrainment of Arteriole Vasomotor Fluctuations by Neural Activity Is a Basis of Blood-Oxygenation-Level-Dependent â€œResting-Stateâ€•Connectivity. Neuron, 2017, 96, 936-948.e3.	8.1	233
23	Central Versus Peripheral Determinants of Patterned Spike Activity in Rat Vibrissa Cortex During Whisking. Journal of Neurophysiology, 1997, 78, 1144-1149.	1.8	215
24	Distributed representation of vibrissa movement in the upper layers of somatosensory cortex revealed with voltage-sensitive dyes. Journal of Comparative Neurology, 1996, 375, 89-108.	1.6	213
25	All-Optical Histology Using Ultrashort Laser Pulses. Neuron, 2003, 39, 27-41.	8.1	204
26	Texture Coding in the Rat Whisker System: Slip-Stick Versus Differential Resonance. PLoS Biology, 2008, 6, e215.	5.6	202
27	Invited Review Anatomical loops and their electrical dynamics in relation to whisking by rat. Somatosensory & Motor Research, 1999, 16, 69-88.	0.9	187
28	The capillary bed offers the largest hemodynamic resistance to the cortical blood supply. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 52-68.	4.3	186
29	Stimulus-Induced Changes in Blood Flow and 2-Deoxyglucose Uptake Dissociate in Ipsilateral Somatosensory Cortex. Journal of Neuroscience, 2008, 28, 14347-14357.	3.6	184
30	Cell type specificity of neurovascular coupling in cerebral cortex. ELife, 2016, 5, .	6.0	176
31	Primary Motor Cortex Reports Efferent Control of Vibrissa Motion on Multiple Timescales. Neuron, 2011, 72, 344-356.	8.1	167
32	Phase-to-rate transformations encode touch in cortical neurons of a scanning sensorimotor system. Nature Neuroscience, 2009, 12, 492-501.	14.8	164
33	Topological basis for the robust distribution of blood to rodent neocortex. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12670-12675.	7.1	158
34	How the brainstem controls orofacial behaviors comprised of rhythmic actions. Trends in Neurosciences, 2014, 37, 370-380.	8.6	158
35	Sniffing and whisking in rodents. Current Opinion in Neurobiology, 2012, 22, 243-250.	4.2	155
36	Neuronal Basis for Object Location in the Vibrissa Scanning Sensorimotor System. Neuron, 2011, 72, 455-468.	8.1	152

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37	Large-Scale Automated Histology in the Pursuit of Connectomes. Journal of Neuroscience, 2011, 31, 16125-16138.	3.6	151
38	Active Spatial Perception in the Vibrissa Scanning Sensorimotor System. PLoS Biology, 2007, 5, e15.	5.6	147
39	Reversing cerebellar long-term depression. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 15989-15993.	7.1	144
40	Biomechanics of the Vibrissa Motor Plant in Rat: Rhythmic Whisking Consists of Triphasic Neuromuscular Activity. Journal of Neuroscience, 2008, 28, 3438-3455.	3.6	142
41	Cell-based reporters reveal in vivo dynamics of dopamine and norepinephrine release in murine cortex. Nature Methods, 2014, 11, 1245-1252.	19.0	141
42	Spatio-temporally focused femtosecond laser pulses for nonreciprocal writing in optically transparent materials. Optics Express, 2010, 18, 24673.	3.4	138
43	Rapid determination of particle velocity from space-time images using the Radon transform. Journal of Computational Neuroscience, 2010, 29, 5-11.	1.0	129
44	Active Dilation of Penetrating Arterioles Restores Red Blood Cell Flux to Penumbral Neocortex after Focal Stroke. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 738-751.	4.3	125
45	Adaptive Filtering of Vibrissa Input in Motor Cortex of Rat. Neuron, 2002, 34, 1021-1034.	8.1	119
46	Temporally focused femtosecond laser pulses for low numerical aperture micromachining through optically transparent materials. Optics Express, 2010, 18, 18086.	3.4	118
47	Coherent Electrical Activity Between Vibrissa Sensory Areas of Cerebellum and Neocortex Is Enhanced During Free Whisking. Journal of Neurophysiology, 2002, 87, 2137-2148.	1.8	117
48	Femtosecond laser-drilled capillary integrated into a microfluidic device. Applied Physics Letters, 2005, 86, 201106.	3.3	115
49	Vibrissa Self-Motion and Touch Are Reliably Encoded along the Same Somatosensory Pathway from Brainstem through Thalamus. PLoS Biology, 2015, 13, e1002253.	5.6	113
50	Ultra-Slow Single-Vessel BOLD and CBV-Based fMRI Spatiotemporal Dynamics and Their Correlation with Neuronal Intracellular Calcium Signals. Neuron, 2018, 97, 925-939.e5.	8.1	113
51	Ultra-large field-of-view two-photon microscopy. Optics Express, 2015, 23, 13833.	3.4	111
52	An in vivo biosensor for neurotransmitter release and in situ receptor activity. Nature Neuroscience, 2010, 13, 127-132.	14.8	110
53	Closed-loop Neuronal Computations: Focus on Vibrissa Somatosensation in Rat. Cerebral Cortex, 2003, 13, 53-62.	2.9	109
54	Positive Feedback in a Brainstem Tactile Sensorimotor Loop. Neuron, 2005, 45, 447-457.	8.1	108

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55	Severe Bloodâ€"Brain Barrier Disruption and Surrounding Tissue Injury. Stroke, 2009, 40, e666-74.	2.0	107
56	Ultra-slow Oscillations in fMRI and Resting-State Connectivity: Neuronal and Vascular Contributions and Technical Confounds. Neuron, 2020, 107, 782-804.	8.1	105
57	MPScope: A versatile software suite for multiphoton microscopy. Journal of Neuroscience Methods, 2006, 156, 351-359.	2.5	104
58	A Polished and Reinforced Thinned-skull Window for Long-term Imaging of the Mouse Brain. Journal of Visualized Experiments, 2012, , .	0.3	104
59	Depth-dependent flow and pressure characteristics in cortical microvascular networks. PLoS Computational Biology, 2017, 13, e1005392.	3.2	99
60	More than a rhythm of life: breathing as a binder of orofacial sensation. Nature Neuroscience, 2014, 17, 647-651.	14.8	92
61	Coordination of Orofacial Motor Actions into Exploratory Behavior by Rat. Current Biology, 2017, 27, 688-696.	3.9	87
62	Identification of Neural Circuits by Imaging Coherent Electrical Activity with FRET-Based Dyes. Neuron, 1999, 23, 449-459.	8.1	86
63	The glial cell response is an essential component of hypoxia-induced erythropoiesis in mice. Journal of Clinical Investigation, 2009, 119, 3373-83.	8.2	82
64	Current Flow in Vibrissa Motor Cortex Can Phase-Lock With Exploratory Rhythmic Whisking in Rat. Journal of Neurophysiology, 2004, 92, 1700-1707.	1.8	81
65	Plasma-mediated ablation: an optical tool for submicrometer surgery on neuronal and vascular systems. Current Opinion in Biotechnology, 2009, 20, 90-99.	6.6	81
66	Robust and Fragile Aspects of Cortical Blood Flow in Relation to the Underlying Angioarchitecture. Microcirculation, 2015, 22, 204-218.	1.8	78
67	Vibrissa Movement Elicited by Rhythmic Electrical Microstimulation to Motor Cortex in the Aroused Rat Mimics Exploratory Whisking. Journal of Neurophysiology, 2003, 90, 2950-2963.	1.8	75
68	The Challenge of Connecting the Dots in the B.R.A.I.N.. Neuron, 2013, 80, 270-274.	8.1	73
69	Specific populations of basal ganglia output neurons target distinct brain stem areas while collateralizing throughout the diencephalon. Neuron, 2021, 109, 1721-1738.e4.	8.1	72
70	A Guide to Delineate the Logic of Neurovascular Signaling in the Brain. Frontiers in Neuroenergetics, 2011, 3, 1.	5.3	71
71	Analysis of Neuronal Spike Trains, Deconstructed. Neuron, 2016, 91, 221-259.	8.1	71
72	Direct wavefront sensing enables functional imaging of infragranular axons and spines. Nature Methods, 2019, 16, 615-618.	19.0	71

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73	Brain Capillary Networks Across Species: A few Simple Organizational Requirements Are Sufficient to Reproduce Both Structure and Function. Frontiers in Physiology, 2019, 10, 233.	2.8	70
74	Goal-directed whisking increases phase-locking between vibrissa movement and electrical activity in primary sensory cortex in rat. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12348-12353.	7.1	67
75	Unilateral vibrissa contact: changes in amplitude but not timing of rhythmic whisking. Somatosensory & Motor Research, 2003, 20, 163-169.	0.9	63
76	Inhibition, Not Excitation, Drives Rhythmic Whisking. Neuron, 2016, 90, 374-387.	8.1	63
77	Acute Vascular Disruption and Aquaporin 4 Loss After Stroke. Stroke, 2009, 40, 2182-2190.	2.0	62
78	Chattering and Differential Signal Processing in Identified Motion-Sensitive Neurons of Parallel Visual Pathways in the Chick Tectum. Journal of Neuroscience, 2001, 21, 6440-6446.	3.6	60
79	Finding coherence in spontaneous oscillations. Nature Neuroscience, 2008, 11, 991-993.	14.8	59
80	Voltage-sensitive dyes for monitoring multineuronal activity in the intact central nervous system. The Histochemical Journal, 1998, 30, 169-187.	0.6	58
81	Circuits in the Rodent Brainstem that Control Whisking in Concert with Other Orofacial Motor Actions. Neuroscience, 2018, 368, 152-170.	2.3	57
82	Brain microvasculature has a common topology with local differences in geometry that match metabolic load. Neuron, 2021, 109, 1168-1187.e13.	8.1	57
83	Supralinear Summation of Synaptic Inputs by an Invertebrate Neuron: Dendritic Gain Is Mediated by an â€œInward Rectifierâ€•K+ Current. Journal of Neuroscience, 1999, 19, 5875-5888.	3.6	56
84	Frisking the Whiskers. Neuron, 2004, 41, 181-184.	8.1	56
85	Automatic Identification of Fluorescently Labeled Brain Cells for Rapid Functional Imaging. Journal of Neurophysiology, 2010, 104, 1803-1811.	1.8	53
86	Cortical imaging through the intact mouse skull using two-photon excitation laser scanning microscopy. Microscopy Research and Technique, 2002, 56, 304-305.	2.2	51
87	The impact of vessel size, orientation and intravascular contribution on the neurovascular fingerprint of BOLD bSSFP fMRI. NeuroImage, 2017, 163, 13-23.	4.2	49
88	Awake Mouse Imaging: From Two-Photon Microscopy to Blood Oxygen Levelâ€"Dependent Functional Magnetic Resonance Imaging. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2019, 4, 533-542.	1.5	49
89	Reversibly Modulating the Bloodâ€"Brain Barrier by Laser Stimulation of Molecular-Targeted Nanoparticles. Nano Letters, 2021, 21, 9805-9815.	9.1	49
90	Ultra-miniature headstage with 6-channel drive and vacuum-assisted micro-wire implantation for chronic recording from the neocortex. Journal of Neuroscience Methods, 1999, 90, 37-46.	2.5	46

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91	Can One Concurrently Record Electrical Spikes from Every Neuron in a Mammalian Brain?. Neuron, 2019, 103, 1005-1015.	8.1	46
92	Spectral mixing of rhythmic neuronal signals in sensory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15176-15181.	7.1	45
93	Imaging Reveals Synaptic Targets of a Swim-Terminating Neuron in the Leech CNS. Journal of Neuroscience, 2003, 23, 11402-11410.	3.6	45
94	Prospect for feedback guided surgery with ultra-short pulsed laser light. Current Opinion in Neurobiology, 2012, 22, 24-33.	4.2	42
95	The roadmap for estimation of cell-type-specific neuronal activity from non-invasive measurements. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150356.	4.0	41
96	Advancing multifocal nonlinear microscopy: development and application of a novel multibeam Yb:KGd(WO_4)_2 oscillator. Optics Express, 2008, 16, 17574.	3.4	40
97	Dorsorostral Snout Muscles in the Rat Subserve Coordinated Movement for Whisking and Sniffing. Anatomical Record, 2012, 295, 1181-1191.	1.4	40
98	Activation of Nucleus Basalis Facilitates Cortical Control of a Brain Stem Motor Program. Journal of Neurophysiology, 2005, 94, 699-711.	1.8	39
99	Whisking, Sniffing, and the Hippocampal Î¸-Rhythm: A Tale of Two Oscillators. PLoS Biology, 2016, 14, e1002385.	5.6	39
100	Large two-photon absorptivity of hemoglobin in the infrared range of 780â€“880nm. Journal of Chemical Physics, 2007, 126, 025102.	3.0	38
101	Chapter 10 In Vivo Measurements of Blood Flow and Glial Cell Function with Twoâ€Photon Laserâ€Scanning Microscopy. Methods in Enzymology, 2008, 444, 231-254.	1.0	38
102	The Musculature That Drives Active Touch by Vibrissae and Nose in Mice. Anatomical Record, 2015, 298, 1347-1358.	1.4	37
103	Exploratory Whisking by Rat Is Not Phase Locked to the Hippocampal Theta Rhythm. Journal of Neuroscience, 2006, 26, 6518-6522.	3.6	36
104	Parallel Inhibitory and Excitatory Trigemino-Facial Feedback Circuitry for Reflexive Vibrissa Movement. Neuron, 2017, 95, 673-682.e4.	8.1	36
105	Characterizing Ligand-Gated Ion Channel Receptors with Genetically Encoded Ca++ Sensors. PLoS ONE, 2011, 6, e16519.	2.5	35
106	Photon counting, censor corrections, and lifetime imaging for improved detection in two-photon microscopy. Journal of Neurophysiology, 2011, 105, 3106-3113.	1.8	35
107	Optimizing the fluorescent yield in two-photon laser scanning microscopy with dispersion compensation. Optics Express, 2010, 18, 13661.	3.4	34
108	Fluorescently Labeled Peptide Increases Identification of Degenerated Facial Nerve Branches during Surgery and Improves Functional Outcome. PLoS ONE, 2015, 10, e0119600.	2.5	31

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109	Precision mapping of the vibrissa representation within murine primary somatosensory cortex. Philosophical Transactions of the Royal Society B: Biological Sciences, 2016, 371, 20150351.	4.0	31
110	Orofacial Movements Involve Parallel Corticobulbar Projections from Motor Cortex to Trigeminal Premotor Nuclei. Neuron, 2019, 104, 765-780.e3.	8.1	30
111	Vectorization of optically sectioned brain microvasculature: Learning aids completion of vascular graphs by connecting gaps and deleting open-ended segments. Medical Image Analysis, 2012, 16, 1241-1258.	11.6	28
112	Deflection of a vibrissa leads to a gradient of strain across mechanoreceptors in a mystacial follicle. Journal of Neurophysiology, 2015, 114, 138-145.	1.8	28
113	The Brainstem Oscillator for Whisking and the Case for Breathing as the Master Clock for Orofacial Motor Actions. Cold Spring Harbor Symposia on Quantitative Biology, 2014, 79, 29-39.	1.1	27
114	Contribution of animal models toward understanding resting state functional connectivity. NeuroImage, 2021, 245, 118630.	4.2	27
115	An active texture-based digital atlas enables automated mapping of structures and markers across brains. Nature Methods, 2019, 16, 341-350.	19.0	26
116	Distributed and Partially Separate Pools of Neurons Are Correlated with Two Different Components of the Gill-Withdrawal Reflex in<i>Aplysia</i>. Journal of Neuroscience, 2000, 20, 8485-8492.	3.6	25
117	Developmental regulation of active and passive membrane properties in rat vibrissa motoneurones. Journal of Physiology, 2004, 556, 203-219.	2.9	25
118	Simulations of blood as a suspension predicts a depth dependent hematocrit in the circulation throughout the cerebral cortex. PLoS Computational Biology, 2018, 14, e1006549.	3.2	25
119	Constructing an adult orofacial premotor atlas in Allen mouse CCF. ELife, 2021, 10, .	6.0	24
120	From Art to Engineering? The Rise of In Vivo Mammalian Electrophysiology via Genetically Targeted Labeling and Nonlinear Imaging. PLoS Biology, 2005, 3, e355.	5.6	21
121	Coding of Stimulus Frequency by Latency in Thalamic Networks Through the Interplay of GABAB-Mediated Feedback and Stimulus Shape. Journal of Neurophysiology, 2006, 95, 1735-1750.	1.8	21
122	Muscles Involved in Naris Dilation and Nose Motion in Rat. Anatomical Record, 2015, 298, 546-553.	1.4	21
123	Dendritic Ca2+-Activated K+Conductances Regulate Electrical Signal Propagation in an Invertebrate Neuron. Journal of Neuroscience, 1999, 19, 8319-8326.	3.6	20
124	In Vivo Two-Photon Laser Scanning Microscopy with Concurrent Plasma-Mediated Ablation Principles and Hardware Realization. Frontiers in Neuroscience, 2009, , 59-115.	0.0	20
125	All-optical osteotomy to create windows for transcranial imaging in mice. Optics Express, 2013, 21, 23160.	3.4	20
126	Circuits in the Ventral Medulla That Phase-Lock Motoneurons for Coordinated Sniffing and Whisking. Neural Plasticity, 2016, 2016, 1-9.	2.2	20

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127	Two-Photon Imaging of Blood Flow in the Rat Cortex. Cold Spring Harbor Protocols, 2013, 2013, pdb.prot076513.	0.3	18
128	Feedback in the brainstem: An excitatory disynaptic pathway for control of whisking. Journal of Comparative Neurology, 2015, 523, 921-942.	1.6	18
129	Voxelized simulation of cerebral oxygen perfusion elucidates hypoxia in aged mouse cortex. PLoS Computational Biology, 2021, 17, e1008584.	3.2	16
130	Comparing two classes of biological distribution systems using network analysis. PLoS Computational Biology, 2018, 14, e1006428.	3.2	15
131	Functional brain stem circuits for control of nose motion. Journal of Neurophysiology, 2019, 121, 205-217.	1.8	15
132	Seeing What the Mouse Sees with Its Vibrissae: A Matter of Behavioral State. Neuron, 2006, 50, 524-526.	8.1	14
133	Spectral Methods for Functional Brain Imaging. Cold Spring Harbor Protocols, 2014, 2014, pdb.top081075.	0.3	14
134	Probing Neuropeptide Volume Transmission In Vivo by Simultaneous Nearâ€Infrared Lightâ€Triggered Release and Optical Sensing**. Angewandte Chemie - International Edition, 2022, 61, .	13.8	14
135	Mediation of Muscular Control of Rhinarial Motility in Rats by the Nasal Cartilaginous Skeleton. Anatomical Record, 2013, 296, 1821-1832.	1.4	13
136	Activation and measurement of free whisking in the lightly anesthetized rodent. Nature Protocols, 2014, 9, 1792-1802.	12.0	13
137	Mathematical synthesis of the cortical circulation for the whole mouse brainâ€”part II: Microcirculatory closure. Microcirculation, 2021, 28, e12687.	1.8	13
138	Optically Induced Occlusion of Single Blood Vessels in Rodent Neocortex. Cold Spring Harbor Protocols, 2013, 2013, pdb.prot079509.	0.3	12
139	Reinforcement learning links spontaneous cortical dopamine impulses to reward. Current Biology, 2021, 31, 4111-4119.e4.	3.9	12
140	Is There a Common Origin to Surround-Inhibition as Seen Through Electrical Activity Versus Hemodynamic Changes? Focus on â€œDuration-Dependent Response in SI to Vibrotactile Stimulation in Squirrel Monkeyâ€• Journal of Neurophysiology, 2007, 97, 1880-1882.	1.8	11
141	Construction of Cell-based Neurotransmitter Fluorescent Engineered Reporters (CNiFERs) for Optical Detection of Neurotransmitters In Vivo. Journal of Visualized Experiments, 2016, , .	0.3	11
142	Cortical blood flow through individual capillaries in rat vibrissa S1 cortex: stimulus-induced changes in flow are comparable to the underlying fluctuations in flow. International Congress Series, 2002, 1235, 115-122.	0.2	10
143	Differential Multiphoton Laser Scanning Microscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 14-28.	2.9	10
144	Spectral Mixing in Nervous Systems: Experimental Evidence and Biologically Plausible Circuits. Progress of Theoretical Physics Supplement, 2006, 161, 86-98.	0.1	9

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145	Assessment of single-vessel cerebral blood velocity by phase contrast fMRI. PLoS Biology, 2021, 19, e3000923.	5.6	9
146	Abortive intussusceptive angiogenesis causes multi-cavernous vascular malformations. ELife, 2021, 10, .	6.0	8
147	Imaging Vasodynamics in the Awake Mouse Brain with Two-Photon Microscopy. Neuromethods, 2014, , 55-73.	0.3	8
148	Juxtacellular Monitoring and Localization of Single Neurons within Sub-cortical Brain Structures of Alert, Head-restrained Rats. Journal of Visualized Experiments, 2015, , .	0.3	7
149	Cutting Tissue With Ultrashort Pulsed Laser Light. Optics and Photonics News, 2004, 15, 24.	0.5	6
150	A suite of neurophotonic tools to underpin the contribution of internal brain states in fMRI. Current Opinion in Biomedical Engineering, 2021, 18, 100273.	3.4	6
151	A vibrissa pathway that activates the limbic system. ELife, 2022, 11, .	6.0	5
152	Endothelial struts enable the generation of large lumenized blood vessels de novo. Nature Cell Biology, 2021, 23, 322-329.	10.3	4
153	Wilder Penfield in the Age of YouTube: Visualizing the Sequential Activation of Sensorimotor Areas across Neocortex. Neuron, 2007, 56, 760-762.	8.1	3
154	Neurovascular and Immuno-Imaging: From Mechanisms to Therapies. Proceedings of the Inaugural Symposium. Frontiers in Neuroscience, 2016, 10, 46.	2.8	3
155	The Central Pattern Generator for Rhythmic Whisking. , 2015, , 149-165.		3
156	The global configuration of visual stimuli alters co-fluctuations of cross-hemispheric human brain activity. Journal of Neuroscience, 2021, 41, JN-RM-3214-20.	3.6	3
157	Erratum to `Automatic sorting of multiple unit neuronal signals in the presence of anisotropic and non-Gaussian variability'. Journal of Neuroscience Methods, 1997, 71, 233.	2.5	1
158	Enter the ratrix. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 19209-19210.	7.1	1
159	Roger Tsien 1952â€"2016. Nature Neuroscience, 2016, 19, 1269-1270.	14.8	1
160	PIP ₂ as the â€œcoin of the realmâ€• for neurovascular coupling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	1
161	Two-Photon Microscopy to Measure Blood Flow and Concurrent Brain Cell Activity. Neuromethods, 2014, , 273-290.	0.3	1
162	Probing Neuropeptide Volume Transmission In Vivo by Simultaneous Nearâ€Infrared Light Triggered Release and Optical Sensing. Angewandte Chemie, 0, , .	2.0	1

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163	Two-Photon Laser Scanning Microscopy as a Tool to Study Cortical Vasodynamics Under Normal and Ischemic Conditions. , 2009, , 245-261.		0
164	CNIFERS: CELL-BASED BIOSENSORS WITH NANOMOLAR SENSITIVITY TO <i>IN VIVO</i> CHANGES IN NEUROMODULATION. , 2019, , 19-32.		0
165	Targeted Occlusion to Surface and Deep Vessels in Neocortex Via Linear and Nonlinear Optical Absorption. Springer Series in Translational Stroke Research, 2019, , 145-162.	0.1	0