

Seong-Gi Kim

List of Publications by Year in descending order

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196
papers

16,794
citations

11651

70
h-index

17105

122
g-index

203
all docs

203
docs citations

203
times ranked

10544
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantification of relative cerebral blood flow change by flow-sensitive alternating inversion recovery (FAIR) technique: Application to functional mapping. <i>Magnetic Resonance in Medicine</i> , 1995, 34, 293-301.	3.0	990
2	Magnetic field and tissue dependencies of human brain longitudinal $^1\text{H}_2\text{O}$ relaxation in vivo. <i>Magnetic Resonance in Medicine</i> , 2007, 57, 308-318.	3.0	546
3	Motor Area Activity During Mental Rotation Studied by Time-Resolved Single-Trial fMRI. <i>Journal of Cognitive Neuroscience</i> , 2000, 12, 310-320.	2.3	461
4	Biophysical and Physiological Origins of Blood Oxygenation Level-Dependent fMRI Signals. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 1188-1206.	4.3	429
5	High-resolution mapping of iso-orientation columns by fMRI. <i>Nature Neuroscience</i> , 2000, 3, 164-169.	14.8	366
6	Effect of Basal Conditions on the Magnitude and Dynamics of the Blood Oxygenation Level-Dependent fMRI Response. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2002, 22, 1042-1053.	4.3	338
7	Microvascular BOLD contribution at 4 and 7 T in the human brain: Gradient-echo and spin-echo fMRI with suppression of blood effects. <i>Magnetic Resonance in Medicine</i> , 2003, 49, 1019-1027.	3.0	331
8	Origin of Negative Blood Oxygenation Level-Dependent fMRI Signals. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2002, 22, 908-917.	4.3	329
9	Spin-echo fMRI in humans using high spatial resolutions and high magnetic fields. <i>Magnetic Resonance in Medicine</i> , 2003, 49, 655-664.	3.0	284
10	Diffusion-weighted spin-echo fMRI at 9.4 T: Microvascular/tissue contribution to BOLD signal changes. <i>Magnetic Resonance in Medicine</i> , 1999, 42, 919-928.	3.0	279
11	Functional magnetic resonance imaging of Broca's area during internal speech. <i>NeuroReport</i> , 1993, 4, 675-678.	1.2	263
12	Determination of relative CMRO ₂ from CBF and BOLD changes: Significant increase of oxygen consumption rate during visual stimulation. <i>Magnetic Resonance in Medicine</i> , 1999, 41, 1152-1161.	3.0	257
13	Relative changes of cerebral arterial and venous blood volumes during increased cerebral blood flow: Implications for BOLD fMRI. <i>Magnetic Resonance in Medicine</i> , 2001, 45, 791-800.	3.0	248
14	Functional MRI of calcium-dependent synaptic activity: Cross correlation with CBF and BOLD measurements. <i>Magnetic Resonance in Medicine</i> , 2000, 43, 383-392.	3.0	242
15	Reduction of signal fluctuation in functional MRI using navigator echoes. <i>Magnetic Resonance in Medicine</i> , 1994, 31, 495-503.	3.0	239
16	Cortical layer-dependent BOLD and CBV responses measured by spin-echo and gradient-echo fMRI: Insights into hemodynamic regulation. <i>NeuroImage</i> , 2006, 30, 1149-1160.	4.2	239
17	Perfusion imaging by a flow-sensitive alternating inversion recovery (Fair) technique: Application to functional brain imaging. <i>Magnetic Resonance in Medicine</i> , 1997, 37, 425-435.	3.0	238
18	MR imaging of the amide-proton transfer effect and the pH-sensitive nuclear overhauser effect at 9.4 T. <i>Magnetic Resonance in Medicine</i> , 2013, 69, 760-770.	3.0	238

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19	Limitations of temporal resolution in functional MRI. <i>Magnetic Resonance in Medicine</i> , 1997, 37, 631-636.	3.0	233
20	Simultaneous Blood Oxygenation Level-Dependent and Cerebral Blood Flow Functional Magnetic Resonance Imaging during Forepaw Stimulation in the Rat. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 1999, 19, 871-879.	4.3	230
21	Potential pitfalls of functional MRI using conventional gradient-recalled echo techniques. <i>NMR in Biomedicine</i> , 1994, 7, 69-74.	2.8	218
22	Ultrahigh field magnetic resonance imaging and spectroscopy. <i>Magnetic Resonance Imaging</i> , 2003, 21, 1263-1281.	1.8	218
23	Comparison of blood oxygenation and cerebral blood flow effect in fMRI: Estimation of relative oxygen consumption change. <i>Magnetic Resonance in Medicine</i> , 1997, 38, 59-65.	3.0	210
24	Time-resolved fMRI of mental rotation. <i>NeuroReport</i> , 1997, 8, 3697-3702.	1.2	189
25	Relationship between Neural, Vascular, and BOLD Signals in Isoflurane-Anesthetized Rat Somatosensory Cortex. <i>Cerebral Cortex</i> , 2006, 17, 942-950.	2.9	187
26	Multiscale Pattern Analysis of Orientation-Selective Activity in the Primary Visual Cortex. <i>Journal of Neuroscience</i> , 2010, 30, 325-330.	3.6	183
27	Spatial and temporal limits in cognitive neuroimaging with fMRI. <i>Trends in Cognitive Sciences</i> , 1999, 3, 207-216.	7.8	182
28	Spatiotemporal dynamics of the BOLD fMRI signals: Toward mapping submillimeter cortical columns using the early negative response. <i>Magnetic Resonance in Medicine</i> , 2000, 44, 231-242.	3.0	181
29	Arterial versus Total Blood Volume Changes during Neural Activity-Induced Cerebral Blood Flow Change: Implication for BOLD fMRI. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007, 27, 1235-1247.	4.3	172
30	Spin-locking versus chemical exchange saturation transfer MRI for investigating chemical exchange process between water and labile metabolite protons. <i>Magnetic Resonance in Medicine</i> , 2011, 65, 1448-1460.	3.0	169
31	Early Temporal Characteristics of Cerebral Blood Flow and Deoxyhemoglobin Changes during Somatosensory Stimulation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2000, 20, 201-206.	4.3	157
32	Magnetic resonance imaging of the Amine- ¹ H Proton EXchange (APEX) dependent contrast. <i>NeuroImage</i> , 2012, 59, 1218-1227.	4.2	150
33	High-resolution, spin-echo BOLD, and CBF fMRI at 4 and 7 T. <i>Magnetic Resonance in Medicine</i> , 2002, 48, 589-593.	3.0	145
34	Functional mapping in the human brain using high magnetic fields. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 1999, 354, 1195-1213.	4.0	144
35	Dose-dependent effect of isoflurane on neurovascular coupling in rat cerebral cortex. <i>European Journal of Neuroscience</i> , 2009, 30, 242-250.	2.6	144
36	In Vivo Measurements of Brain Glucose Transport Using the Reversible Michaelis-Menten Model and Simultaneous Measurements of Cerebral Blood Flow Changes during Hypoglycemia. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2001, 21, 653-663.	4.3	140

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37	Cortical layer-dependent dynamic blood oxygenation, cerebral blood flow and cerebral blood volume responses during visual stimulation. <i>NeuroImage</i> , 2008, 43, 1-9.	4.2	138
38	Sequential activity in human motor areas during a delayed cued finger movement task studied by time-resolved fMRI. <i>NeuroReport</i> , 1997, 8, 1257-1261.	1.2	133
39	Mental Rotation Studied by Functional Magnetic Resonance Imaging at High Field (4 Tesla): Performance and Cortical Activation. <i>Journal of Cognitive Neuroscience</i> , 1997, 9, 419-432.	2.3	126
40	Functional magnetic resonance imaging of cerebellar activation during the learning of a visuomotor dissociation task. <i>Human Brain Mapping</i> , 1996, 4, 210-226.	3.6	123
41	Reproducibility of BOLD-based functional MRI obtained at 4 T. , 1999, 7, 267-283.		120
42	Effect of hyperoxia, hypercapnia, and hypoxia on cerebral interstitial oxygen tension and cerebral blood flow. <i>Magnetic Resonance in Medicine</i> , 2001, 45, 61-70.	3.0	119
43	Cortical depth-dependent gradient-echo and spin-echo BOLD fMRI at 9.4T. <i>Magnetic Resonance in Medicine</i> , 2004, 51, 518-524.	3.0	118
44	Cerebral blood volume MRI with intravascular superparamagnetic iron oxide nanoparticles. <i>NMR in Biomedicine</i> , 2013, 26, 949-962.	2.8	114
45	A soft, transparent, freely accessible cranial window for chronic imaging and electrophysiology. <i>Scientific Reports</i> , 2016, 6, 27818.	3.3	113
46	Functional magnetic resonance imaging of mental rotation and memory scanning: a multidimensional scaling analysis of brain activation patterns1Published on the World Wide Web on 24 February 1998.1. <i>Brain Research Reviews</i> , 1998, 26, 106-112.	9.0	112
47	In vivo MR measurements of regional arterial and venous blood volume fractions in intact rat brain. <i>Magnetic Resonance in Medicine</i> , 2000, 43, 393-402.	3.0	111
48	Functional magnetic resonance imaging of the human brain. <i>Journal of Neuroscience Methods</i> , 1997, 74, 229-243.	2.5	110
49	Imaging blood flow in brain tumors using arterial spin labeling. <i>Magnetic Resonance in Medicine</i> , 2000, 44, 169-173.	3.0	109
50	Effects of the α_2 -adrenergic receptor agonist dexmedetomidine on neural, vascular and BOLD fMRI responses in the somatosensory cortex. <i>European Journal of Neuroscience</i> , 2013, 37, 80-95.	2.6	109
51	Spatial relationship between neuronal activity and BOLD functional MRI. <i>NeuroImage</i> , 2004, 21, 876-885.	4.2	108
52	A neuroimaging biomarker for sustained experimental and clinical pain. <i>Nature Medicine</i> , 2021, 27, 174-182.	30.7	108
53	Quantitative measurements of cerebral blood flow in rats using the FAIR technique: Correlation with previous Iodoantipyrine autoradiographic studies. <i>Magnetic Resonance in Medicine</i> , 1998, 39, 564-573.	3.0	106
54	Temporal Dynamics and Spatial Specificity of Arterial and Venous Blood Volume Changes during Visual Stimulation: Implication for Bold Quantification. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2011, 31, 1211-1222.	4.3	100

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55	Changes in Human Regional Cerebral Blood Flow and Cerebral Blood Volume during Visual Stimulation Measured by Positron Emission Tomography. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2001, 21, 608-612.	4.3	98
56	Spatial specificity of cerebral blood volume-weighted fMRI responses at columnar resolution. <i>NeuroImage</i> , 2005, 27, 416-424.	4.2	95
57	Mapping Iso-Orientation Columns by Contrast Agent-Enhanced Functional Magnetic Resonance Imaging: Reproducibility, Specificity, and Evaluation by Optical Imaging of Intrinsic Signal. <i>Journal of Neuroscience</i> , 2006, 26, 11821-11832.	3.6	95
58	Neural Interpretation of Blood Oxygenation Level-Dependent fMRI Maps at Submillimeter Columnar Resolution. <i>Journal of Neuroscience</i> , 2007, 27, 6892-6902.	3.6	95
59	Multi-slice perfusion-based functional MRI using the FAIR technique: comparison of CBF and BOLD effects. <i>NMR in Biomedicine</i> , 1997, 10, 191-196.	2.8	92
60	The Effect of Stimulus-Response Compatibility on Cortical Motor Activation. <i>NeuroImage</i> , 2001, 13, 1-14.	4.2	91
61	Hypercapnic normalization of BOLD fMRI: comparison across field strengths and pulse sequences. <i>NeuroImage</i> , 2004, 23, 613-624.	4.2	91
62	Mapping Brain Glucose Uptake with Chemical Exchange-Sensitive Spin-Lock Magnetic Resonance Imaging. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2014, 34, 1402-1410.	4.3	86
63	Fast interleaved echo-planar imaging with navigator: High resolution anatomic and functional images at 4 tesla. <i>Magnetic Resonance in Medicine</i> , 1996, 35, 895-902.	3.0	84
64	Magnetic Resonance Studies of Brain Function and Neurochemistry. <i>Annual Review of Biomedical Engineering</i> , 2000, 2, 633-660.	12.3	84
65	Pseudo-continuous arterial spin labeling technique for measuring CBF dynamics with high temporal resolution. <i>Magnetic Resonance in Medicine</i> , 1999, 42, 425-429.	3.0	83
66	Neural and Hemodynamic Responses Elicited by Forelimb- and Photo-stimulation in Channelrhodopsin-2 Mice: Insights into the Hemodynamic Point Spread Function. <i>Cerebral Cortex</i> , 2014, 24, 2908-2919.	2.9	82
67	Improved cortical-layer specificity of vascular space occupancy fMRI with slab inversion relative to spin-echo BOLD at 9.4T. <i>NeuroImage</i> , 2008, 40, 59-67.	4.2	80
68	Brain Switch for Reflex Micturition Control Detected by fMRI in Rats. <i>Journal of Neurophysiology</i> , 2009, 102, 2719-2730.	1.8	80
69	Retinal Structures and Visual Cortex Activity are Impaired Prior to Clinical Vision Loss in Glaucoma. <i>Scientific Reports</i> , 2016, 6, 31464.	3.3	80
70	Review and consensus recommendations on clinical ^{3T}-weighted imaging approaches at ^{3T}: Application to brain tumors. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 546-574.	3.0	79
71	Changes in Cerebral Arterial, Tissue and Venous Oxygenation with Evoked Neural Stimulation: Implications for Hemoglobin-Based Functional Neuroimaging. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2010, 30, 428-439.	4.3	78
72	Quantification of cerebral arterial blood volume and cerebral blood flow using MRI with modulation of tissue and vessel (MOTIVE) signals. <i>Magnetic Resonance in Medicine</i> , 2005, 54, 333-342.	3.0	75

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73	MRI techniques to measure arterial and venous cerebral blood volume. <i>NeuroImage</i> , 2019, 187, 17-31.	4.2	75
74	The Challenge of Connecting the Dots in the B.R.A.I.N.. <i>Neuron</i> , 2013, 80, 270-274.	8.1	73
75	Improved spatial localization of post-stimulus BOLD undershoot relative to positive BOLD. <i>NeuroImage</i> , 2007, 34, 1084-1092.	4.2	72
76	Effects of movement predictability on cortical motor activation. <i>Neuroscience Research</i> , 1998, 32, 65-74.	1.9	71
77	Sensitivity and Source of Amine-Proton Exchange and Amide-Proton Transfer Magnetic Resonance Imaging in Cerebral Ischemia. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 118-132.	3.0	71
78	Inhibitory Neuron Activity Contributions to Hemodynamic Responses and Metabolic Load Examined Using an Inhibitory Optogenetic Mouse Model. <i>Cerebral Cortex</i> , 2018, 28, 4105-4119.	2.9	71
79	Perfusion imaging using dynamic arterial spin labeling (DASL). <i>Magnetic Resonance in Medicine</i> , 2001, 45, 1021-1029.	3.0	69
80	Frequency-dependent neural activity, CBF, and BOLD fMRI to somatosensory stimuli in isoflurane-anesthetized rats. <i>NeuroImage</i> , 2010, 52, 224-233.	4.2	68
81	Neural and Hemodynamic Responses to Optogenetic and Sensory Stimulation in the Rat Somatosensory Cortex. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2015, 35, 922-932.	4.3	67
82	Layer-dependent functional connectivity methods. <i>Progress in Neurobiology</i> , 2021, 207, 101835.	5.7	67
83	Mouse fMRI under ketamine and xylazine anesthesia: Robust contralateral somatosensory cortex activation in response to forepaw stimulation. <i>NeuroImage</i> , 2018, 177, 30-44.	4.2	66
84	Accurate T1 determination from inversion recovery images: Application to human brain at 4 Tesla. <i>Magnetic Resonance in Medicine</i> , 1994, 31, 445-449.	3.0	65
85	Simultaneous oxygenation and perfusion imaging study of functional activity in primary visual cortex at different visual stimulation frequency: Quantitative correlation between BOLD and CBF changes. <i>Magnetic Resonance in Medicine</i> , 1998, 40, 703-711.	3.0	65
86	Multicompartment analysis of blood flow and tissue perfusion employing D2O as a freely diffusible tracer: A novel deuterium NMR technique demonstrated via application with murine RIF-1 tumors. <i>Magnetic Resonance in Medicine</i> , 1988, 8, 410-426.	3.0	64
87	Enhancing sensitivity of pH-weighted MRI with combination of amide and guanidyl CEST. <i>NeuroImage</i> , 2017, 157, 341-350.	4.2	64
88	Comparison of diffusion-weighted high-resolution CBF and spin-echo BOLD fMRI at 9.4 T. <i>Magnetic Resonance in Medicine</i> , 2002, 47, 736-741.	3.0	62
89	Insights into new techniques for high resolution functional MRI. <i>Current Opinion in Neurobiology</i> , 2002, 12, 607-615.	4.2	61
90	Layer-Specific fMRI Responses to Excitatory and Inhibitory Neuronal Activities in the Olfactory Bulb. <i>Journal of Neuroscience</i> , 2015, 35, 15263-15275.	3.6	61

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91	Increases in Oxygen Consumption without Cerebral Blood Volume Change during Visual Stimulation under Hypotension Condition. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2006, 26, 1043-1051.	4.3	59
92	Cortical layer-dependent arterial blood volume changes: Improved spatial specificity relative to BOLD fMRI. <i>NeuroImage</i> , 2010, 49, 1340-1349.	4.2	59
93	Functional magnetic resonance imaging of the retina. <i>Investigative Ophthalmology and Visual Science</i> , 2002, 43, 1176-81.	3.3	58
94	Vascular dynamics and BOLD fMRI: CBF level effects and analysis considerations. <i>NeuroImage</i> , 2006, 32, 1642-1655.	4.2	56
95	Advantages of chemical exchange-sensitive spinlock (CESL) over chemical exchange saturation transfer (CEST) for hydroxyl- and amine-water proton exchange studies. <i>NMR in Biomedicine</i> , 2014, 27, 1313-1324.	2.8	56
96	High-resolution functional magnetic resonance imaging of the animal brain. <i>Methods</i> , 2003, 30, 28-41.	3.8	55
97	Imaging brain vasculature with BOLD microscopy: MR detection limits determined by in vivo two-photon microscopy. <i>Magnetic Resonance in Medicine</i> , 2008, 59, 855-865.	3.0	55
98	Change of the cerebrospinal fluid volume during brain activation investigated by T1-weighted fMRI. <i>NeuroImage</i> , 2010, 51, 1378-1383.	4.2	51
99	Magic Angle-Enhanced MRI of Fibrous Microstructures in Sclera and Cornea With and Without Intraocular Pressure Loading. , 2014, 55, 5662.		51
100	Quantification of cerebral arterial blood volume using arterial spin labeling with intravoxel incoherent motion-sensitive gradients. <i>Magnetic Resonance in Medicine</i> , 2006, 55, 1047-1057.	3.0	50
101	Trial-by-trial relationship between neural activity, oxygen consumption, and blood flow responses. <i>NeuroImage</i> , 2008, 40, 442-450.	4.2	48
102	Mouse BOLD fMRI at ultrahigh field detects somatosensory networks including thalamic nuclei. <i>NeuroImage</i> , 2019, 195, 203-214.	4.2	48
103	Functional Magnetic Resonance Imaging of Visual Object Construction and Shape Discrimination: Relations among Task, Hemispheric Lateralization, and Gender. <i>Journal of Cognitive Neuroscience</i> , 2001, 13, 72-89.	2.3	46
104	Characteristics of fMRI responses to visual stimulation in anesthetized vs. awake mice. <i>NeuroImage</i> , 2021, 226, 117542.	4.2	46
105	Functional changes of apparent diffusion coefficient during visual stimulation investigated by diffusion-weighted gradient-echo fMRI. <i>NeuroImage</i> , 2008, 41, 801-812.	4.2	45
106	Sources of phase changes in BOLD and CBV-weighted fMRI. <i>Magnetic Resonance in Medicine</i> , 2007, 57, 520-527.	3.0	44
107	Chemical exchange saturation transfer imaging of phosphocreatine in the muscle. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 3476-3487.	3.0	43
108	Layer-dependent BOLD and CBV-weighted fMRI responses in the rat olfactory bulb. <i>NeuroImage</i> , 2014, 91, 237-251.	4.2	39

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109	Gradient-echo and spin-echo blood oxygenation level-dependent functional MRI at ultrahigh fields of 9.4 and 15.2 Tesla. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 1237-1246.	3.0	39
110	Quantification of regional blood flow by monitoring of exogenous tracer via nuclear magnetic resonance spectroscopy. <i>Magnetic Resonance in Medicine</i> , 1990, 14, 266-282.	3.0	38
111	Spatial specificity of the enhanced dip inherently induced by prolonged oxygen consumption in cat visual cortex: Implication for columnar resolution functional MRI. <i>NeuroImage</i> , 2006, 30, 70-87.	4.2	38
112	Sources of functional apparent diffusion coefficient changes investigated by diffusion-weighted spin-echo fMRI. <i>Magnetic Resonance in Medicine</i> , 2006, 56, 1283-1292.	3.0	38
113	Compressed sensing fMRI using gradient-recalled echo and EPI sequences. <i>NeuroImage</i> , 2014, 92, 312-321.	4.2	38
114	Contribution of Excitatory and Inhibitory Neuronal Activity to BOLD fMRI. <i>Cerebral Cortex</i> , 2021, 31, 4053-4067.	2.9	38
115	Optogenetic investigation of the variable neurovascular coupling along the interhemispheric circuits. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018, 38, 627-640.	4.3	37
116	Chemical exchange-sensitive spin-lock (CESL) MRI of glucose and analogs in brain tumors. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 488-495.	3.0	37
117	Early fMRI responses to somatosensory and optogenetic stimulation reflect neural information flow. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	37
118	Source of nonlinearity in echo-time-dependent BOLD fMRI. <i>Magnetic Resonance in Medicine</i> , 2006, 55, 1281-1290.	3.0	36
119	BOLD responses to different temporal frequency stimuli in the lateral geniculate nucleus and visual cortex: Insights into the neural basis of fMRI. <i>NeuroImage</i> , 2011, 58, 82-90.	4.2	35
120	In Vivo Assessment of Aqueous Humor Dynamics Upon Chronic Ocular Hypertension and Hypotensive Drug Treatment Using Gadolinium-Enhanced MRI. , 2014, 55, 3747.		35
121	Glucose metabolism-weighted imaging with chemical exchange-sensitive MRI of 2-deoxyglucose (2DG) in brain: Sensitivity and biological sources. <i>NeuroImage</i> , 2016, 143, 82-90.	4.2	35
122	Functional MRI with magnetization transfer effects: Determination of BOLD and arterial blood volume changes. <i>Magnetic Resonance in Medicine</i> , 2008, 60, 1518-1523.	3.0	34
123	Top-down influence on the visual cortex of the blind during sensory substitution. <i>NeuroImage</i> , 2016, 125, 932-940.	4.2	34
124	Cerebral oxygen delivery and consumption during evoked neural activity. <i>Frontiers in Neuroenergetics</i> , 2010, 2, 11.	5.3	33
125	Characterization of non-hemodynamic functional signal measured by spin-lock fMRI. <i>NeuroImage</i> , 2013, 78, 385-395.	4.2	30
126	Spatiotemporal characteristics and vascular sources of neural-specific and -nonspecific fMRI signals at submillimeter columnar resolution. <i>NeuroImage</i> , 2013, 64, 91-103.	4.2	29

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127	Macroscale variation in resting-state neuronal activity and connectivity assessed by simultaneous calcium imaging, hemodynamic imaging and electrophysiology. <i>NeuroImage</i> , 2018, 169, 352-362.	4.2	29
128	Chemical exchange-sensitive spin-lock MRI of glucose analog 3-O-methyl-D-glucose in normal and ischemic brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2018, 38, 869-880.	4.3	29
129	Dynamics of oxygen delivery and consumption during evoked neural stimulation using a compartment model and CBF and tissue PO ₂ measurements. <i>NeuroImage</i> , 2008, 42, 49-59.	4.2	27
130	Evolution of the Dynamic Changes in Functional Cerebral Oxidative Metabolism from Tissue Mitochondria to Blood Oxygen. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2012, 32, 745-758.	4.3	27
131	Contributions of dynamic venous blood volume versus oxygenation level changes to BOLD fMRI. <i>NeuroImage</i> , 2012, 60, 2238-2246.	4.2	27
132	In Vivo Evaluation of White Matter Integrity and Anterograde Transport in Visual System After Excitotoxic Retinal Injury With Multimodal MRI and OCT. , 2015, 56, 3788.		27
133	Neurovascular Coupling under Chronic Stress Is Modified by Altered GABAergic Interneuron Activity. <i>Journal of Neuroscience</i> , 2019, 39, 10081-10095.	3.6	25
134	Dissection of brain-wide resting-state and functional somatosensory circuits by fMRI with optogenetic silencing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	7.1	25
135	Quantitative chemical exchange sensitive MRI using irradiation with toggling inversion preparation. <i>Magnetic Resonance in Medicine</i> , 2012, 68, 1056-1064.	3.0	24
136	Functional MRI of human motor cortices during overt and imagined finger movements. <i>International Journal of Imaging Systems and Technology</i> , 1995, 6, 271-279.	4.1	23
137	Role of anterior cingulate cortex inputs to periaqueductal gray for pain avoidance. <i>Current Biology</i> , 2022, 32, 2834-2847.e5.	3.9	22
138	Characterization of brain-wide somatosensory BOLD fMRI in mice under dexmedetomidine/isoflurane and ketamine/xylazine. <i>Scientific Reports</i> , 2021, 11, 13110.	3.3	21
139	Reply to "Can current fMRI techniques reveal the micro-architecture of cortex?". <i>Nature Neuroscience</i> , 2000, 3, 414-414.	14.8	20
140	Lessons from fMRI about Mapping Cortical Columns. <i>Neuroscientist</i> , 2008, 14, 287-299.	3.5	20
141	Excitation-Inhibition Imbalance Leads to Alteration of Neuronal Coherence and Neurovascular Coupling under Acute Stress. <i>Journal of Neuroscience</i> , 2020, 40, 9148-9162.	3.6	20
142	BOLD fMRI and hemodynamic responses to somatosensory stimulation in anesthetized mice: spontaneous breathing vs. mechanical ventilation. <i>NMR in Biomedicine</i> , 2020, 33, e4311.	2.8	20
143	Theory of chemical exchange saturation transfer MRI in the context of different magnetic fields. <i>NMR in Biomedicine</i> , 2022, 35, .	2.8	19
144	A new T ₂ *-weighting technique for magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 1993, 30, 512-517.	3.0	18

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145	Spatial dependence of CBV-fMRI: a comparison between VASO and contrast agent based methods. , 2006, 2006, 25-8.		18
146	Neuronal and Physiological Correlation to Hemodynamic Resting-State Fluctuations in Health and Disease. Brain Connectivity, 2014, 4, 727-740.	1.7	18
147	Biophysics of BOLD fMRI investigated with animal models. Journal of Magnetic Resonance, 2018, 292, 82-89.	2.1	18
148	Excitatory neuronal CHD8 in the regulation of neocortical development and sensory-motor behaviors. Cell Reports, 2021, 34, 108780.	6.4	18
149	Quantitative MRI of Cerebral Arterial Blood Volume. Open Neuroimaging Journal, 2011, 5, 136-145.	0.2	18
150	Perfusion-based functional magnetic resonance imaging. Concepts in Magnetic Resonance, 2003, 16A, 16-27.	1.3	17
151	Dominance of layer-specific microvessel dilation in contrast-enhanced high-resolution fMRI: Comparison between hemodynamic spread and vascular architecture with CLARITY. NeuroImage, 2019, 197, 657-667.	4.2	17
152	Role of chemical exchange on the relayed nuclear Overhauser enhancement signal in saturation transfer MRI. Magnetic Resonance in Medicine, 2022, 87, 365-376.	3.0	17
153	Sensitivity and specificity of high-resolution balanced steady-state free precession fMRI at high field of 9.4T. NeuroImage, 2011, 58, 168-176.	4.2	16
154	Regional Cerebral Blood Flow and Arterial Blood Volume and Their Reactivity to Hypercapnia in Hypertensive and Normotensive Rats. Journal of Cerebral Blood Flow and Metabolism, 2014, 34, 408-414.	4.3	16
155	Foundations of layer-specific fMRI and investigations of neurophysiological activity in the laminarized neocortex and olfactory bulb of animal models. NeuroImage, 2019, 199, 718-729.	4.2	14
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