

Kamil Ugurbil

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317
papers

35,061
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182
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341
ext. papers

42,556
ext. citations

5.9
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L-index

#	Paper	IF	Citations
317	The WU-Minn Human Connectome Project: an overview. <i>NeuroImage</i> , 2013 , 80, 62-79	7.9	2585
316	A multi-modal parcellation of human cerebral cortex. <i>Nature</i> , 2016 , 536, 171-178	50.4	2046
315	Multiband multislice GE-EPI at 7 tesla, with 16-fold acceleration using partial parallel imaging with application to high spatial and temporal whole-brain fMRI. <i>Magnetic Resonance in Medicine</i> , 2010 , 63, 1144-53	4.4	954
314	Multiplexed echo planar imaging for sub-second whole brain FMRI and fast diffusion imaging. <i>PLoS ONE</i> , 2010 , 5, e15710	3.7	889
313	Resting-state fMRI in the Human Connectome Project. <i>NeuroImage</i> , 2013 , 80, 144-68	7.9	865
312	ICA-based artefact removal and accelerated fMRI acquisition for improved resting state network imaging. <i>NeuroImage</i> , 2014 , 95, 232-47	7.9	708
311	Advances in diffusion MRI acquisition and processing in the Human Connectome Project. <i>NeuroImage</i> , 2013 , 80, 125-43	7.9	596
310	Functional connectomics from resting-state fMRI. <i>Trends in Cognitive Sciences</i> , 2013 , 17, 666-82	14	560
309	Temporally-independent functional modes of spontaneous brain activity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 3131-6	11.5	555
308	A positive-negative mode of population covariation links brain connectivity, demographics and behavior. <i>Nature Neuroscience</i> , 2015 , 18, 1565-7	25.5	551
307	Pushing spatial and temporal resolution for functional and diffusion MRI in the Human Connectome Project. <i>NeuroImage</i> , 2013 , 80, 80-104	7.9	534
306	Sustained negative BOLD, blood flow and oxygen consumption response and its coupling to the positive response in the human brain. <i>Neuron</i> , 2002 , 36, 1195-210	13.9	487
305	The Human Connectome Project@ neuroimaging approach. <i>Nature Neuroscience</i> , 2016 , 19, 1175-87	25.5	482
304	Magnetic field and tissue dependencies of human brain longitudinal 1H2O relaxation in vivo. <i>Magnetic Resonance in Medicine</i> , 2007 , 57, 308-18	4.4	455
303	Distinct basal ganglia territories are engaged in early and advanced motor sequence learning. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 12566-71	11.5	452
302	Analysis of fMRI and finger tracking training in subjects with chronic stroke. <i>Brain</i> , 2002 , 125, 773-88	11.2	450
301	Diffusion tensor fiber tracking shows distinct corticostriatal circuits in humans. <i>Annals of Neurology</i> , 2004 , 55, 522-9	9.4	438

300	Motor area activity during mental rotation studied by time-resolved single-trial fMRI. <i>Journal of Cognitive Neuroscience</i> , 2000 , 12, 310-20	3.1	418
299	High-field fMRI unveils orientation columns in humans. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 10607-12	11.5	414
298	Imaging brain function in humans at 7 Tesla. <i>Magnetic Resonance in Medicine</i> , 2001 , 45, 588-94	4.4	371
297	Mirror-symmetric tonotopic maps in human primary auditory cortex. <i>Neuron</i> , 2003 , 40, 859-69	13.9	363
296	BOLD based functional MRI at 4 Tesla includes a capillary bed contribution: echo-planar imaging correlates with previous optical imaging using intrinsic signals. <i>Magnetic Resonance in Medicine</i> , 1995 , 33, 453-9	4.4	358
295	B(1) destructive interferences and spatial phase patterns at 7 T with a head transceiver array coil. <i>Magnetic Resonance in Medicine</i> , 2005 , 54, 1503-18	4.4	353
294	Tesla gradient recalled echo characteristics of photic stimulation-induced signal changes in the human primary visual cortex. <i>Magnetic Resonance in Medicine</i> , 1993 , 30, 380-6	4.4	352
293	Transmit and receive transmission line arrays for 7 Tesla parallel imaging. <i>Magnetic Resonance in Medicine</i> , 2005 , 53, 434-45	4.4	313
292	Evaluation of slice accelerations using multiband echo planar imaging at 3 T. <i>NeuroImage</i> , 2013 , 83, 991-1001	10.1	306
291	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, 1042-53	7.3	302
290	An integrative model for neuronal activity-induced signal changes for gradient and spin echo functional imaging. <i>NeuroImage</i> , 2009 , 48, 150-65	7.9	298
289	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, 1019-27	4.4	296
288	Reconstruction of the orientation distribution function in single- and multiple-shell q-ball imaging within constant solid angle. <i>Magnetic Resonance in Medicine</i> , 2010 , 64, 554-66	4.4	270
287	In vivo ¹ H NMR spectroscopy of the human brain at high magnetic fields: metabolite quantification at 4T vs. 7T. <i>Magnetic Resonance in Medicine</i> , 2009 , 62, 868-79	4.4	268
286	Diffusion-weighted spin-echo fMRI at 9.4 T: microvascular/tissue contribution to BOLD signal changes. <i>Magnetic Resonance in Medicine</i> , 1999 , 42, 919-28	4.4	254
285	Spin-echo fMRI in humans using high spatial resolutions and high magnetic fields. <i>Magnetic Resonance in Medicine</i> , 2003 , 49, 655-64	4.4	253
284	Ocular dominance in human V1 demonstrated by functional magnetic resonance imaging. <i>Journal of Neurophysiology</i> , 1997 , 77, 2780-7	3.2	248
283	Local B1+ shimming for prostate imaging with transceiver arrays at 7T based on subject-dependent transmit phase measurements. <i>Magnetic Resonance in Medicine</i> , 2008 , 59, 396-409	4.4	242

282	9.4T human MRI: preliminary results. <i>Magnetic Resonance in Medicine</i> , 2006 , 56, 1274-82	4.4	235
281	In vivo NAD assay reveals the intracellular NAD contents and redox state in healthy human brain and their age dependences. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 2876-81	11.5	230
280	Robust detection of ocular dominance columns in humans using Hahn Spin Echo BOLD functional MRI at 7 Tesla. <i>NeuroImage</i> , 2007 , 37, 1161-77	7.9	223
279	T1 weighted brain images at 7 Tesla unbiased for Proton Density, T2* contrast and RF coil receive B1 sensitivity with simultaneous vessel visualization. <i>NeuroImage</i> , 2009 , 46, 432-46	7.9	221
278	Evaluation of the early response in fMRI in individual subjects using short stimulus duration. <i>Magnetic Resonance in Medicine</i> , 1997 , 37, 877-84	4.4	220
277	Sustained neuronal activation raises oxidative metabolism to a new steady-state level: evidence from ¹ H NMR spectroscopy in the human visual cortex. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007 , 27, 1055-63	7.3	219
276	Cortical layer-dependent BOLD and CBV responses measured by spin-echo and gradient-echo fMRI: insights into hemodynamic regulation. <i>NeuroImage</i> , 2006 , 30, 1149-60	7.9	215
275	MR imaging contrast enhancement based on intermolecular zero quantum coherences. <i>Science</i> , 1998 , 281, 247-51	33.3	207
274	Contextual Feedback to Superficial Layers of V1. <i>Current Biology</i> , 2015 , 25, 2690-5	6.3	202
273	Spatio-temporal point-spread function of fMRI signal in human gray matter at 7 Tesla. <i>NeuroImage</i> , 2007 , 35, 539-52	7.9	200
272	Ultrahigh field magnetic resonance imaging and spectroscopy. <i>Magnetic Resonance Imaging</i> , 2003 , 21, 1263-81	3.3	199
271	Whole-body imaging at 7T: preliminary results. <i>Magnetic Resonance in Medicine</i> , 2009 , 61, 244-8	4.4	198
270	Respiration-induced B0 fluctuations and their spatial distribution in the human brain at 7 Tesla. <i>Magnetic Resonance in Medicine</i> , 2002 , 47, 888-95	4.4	194
269	Potential pitfalls of functional MRI using conventional gradient-recalled echo techniques. <i>NMR in Biomedicine</i> , 1994 , 7, 69-74	4.4	194
268	Limitations of temporal resolution in functional MRI. <i>Magnetic Resonance in Medicine</i> , 1997 , 37, 631-6	4.4	188
267	Analysis of wave behavior in lossy dielectric samples at high field. <i>Magnetic Resonance in Medicine</i> , 2002 , 47, 982-9	4.4	184
266	Monitoring disease progression in transgenic mouse models of Alzheimer's disease with proton magnetic resonance spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005 , 102, 11906-10	11.5	176
265	Time-resolved fMRI of mental rotation. <i>NeuroReport</i> , 1997 , 8, 3697-702	1.7	175

264	Localized in vivo ¹³ C-NMR of glutamate metabolism in the human brain: initial results at 4 tesla. <i>Developmental Neuroscience</i> , 1998 , 20, 380-8	2.2	175
263	Steady-state cerebral glucose concentrations and transport in the human brain. <i>Journal of Neurochemistry</i> , 1998 , 70, 397-408	6	173
262	An assessment of current brain targets for deep brain stimulation surgery with susceptibility-weighted imaging at 7 tesla. <i>Neurosurgery</i> , 2010 , 67, 1745-56; discussion 1756	3.2	170
261	A voxel-wise encoding model for early visual areas decodes mental images of remembered scenes. <i>NeuroImage</i> , 2015 , 105, 215-28	7.9	164
260	Heritability of fractional anisotropy in human white matter: a comparison of Human Connectome Project and ENIGMA-DTI data. <i>NeuroImage</i> , 2015 , 111, 300-11	7.9	159
259	Spatially constrained hierarchical parcellation of the brain with resting-state fMRI. <i>NeuroImage</i> , 2013 , 76, 313-24	7.9	158
258	Quantitative imaging of energy expenditure in human brain. <i>NeuroImage</i> , 2012 , 60, 2107-17	7.9	158
257	Parallel imaging performance as a function of field strength--an experimental investigation using electrodynamic scaling. <i>Magnetic Resonance in Medicine</i> , 2004 , 52, 953-64	4.4	156
256	Signal and noise characteristics of Hahn SE and GE BOLD fMRI at 7 T in humans. <i>NeuroImage</i> , 2005 , 24, 738-50	7.9	153
255	Combined imaging-histological study of cortical laminar specificity of fMRI signals. <i>NeuroImage</i> , 2006 , 29, 879-87	7.9	147
254	How accurate is magnetic resonance imaging of brain function?. <i>Trends in Neurosciences</i> , 2003 , 26, 108-14	3.3	146
253	Scan-specific robust artificial-neural-networks for k-space interpolation (RAKI) reconstruction: Database-free deep learning for fast imaging. <i>Magnetic Resonance in Medicine</i> , 2019 , 81, 439-453	4.4	145
252	Tightly coupled brain activity and cerebral ATP metabolic rate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008 , 105, 6409-14	11.5	141
251	Layer-specific fMRI reflects different neuronal computations at different depths in human V1. <i>PLoS ONE</i> , 2012 , 7, e32536	3.7	141
250	The UNC/UMN Baby Connectome Project (BCP): An overview of the study design and protocol development. <i>NeuroImage</i> , 2019 , 185, 891-905	7.9	140
249	A functional magnetic resonance imaging study of the role of left posterior superior temporal gyrus in speech production: implications for the explanation of conduction aphasia. <i>Neuroscience Letters</i> , 2000 , 287, 156-60	3.3	136
248	Human primary visual cortex and lateral geniculate nucleus activation during visual imagery. <i>NeuroReport</i> , 1998 , 9, 3669-74	1.7	136
247	Encoding of natural sounds at multiple spectral and temporal resolutions in the human auditory cortex. <i>PLoS Computational Biology</i> , 2014 , 10, e1003412	5	126

246	Metabolic and hemodynamic events after changes in neuronal activity: current hypotheses, theoretical predictions and in vivo NMR experimental findings. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 441-63	7.3	126
245	Mapping the organization of axis of motion selective features in human area MT using high-field fMRI. <i>PLoS ONE</i> , 2011 , 6, e28716	3.7	125
244	Zoomed functional imaging in the human brain at 7 Tesla with simultaneous high spatial and high temporal resolution. <i>NeuroImage</i> , 2002 , 17, 272-86	7.9	125
243	The nature of spatiotemporal changes in cerebral hemodynamics as manifested in functional magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 1997 , 37, 511-8	4.4	124
242	The BRAIN Initiative: developing technology to catalyse neuroscience discovery. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2015 , 370,	5.8	119
241	Cortical depth dependent functional responses in humans at 7T: improved specificity with 3D GRASE. <i>PLoS ONE</i> , 2013 , 8, e60514	3.7	119
240	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, 419-32	3.1	119
239	Regional myocardial blood volume and flow: first-pass MR imaging with polylysine-Gd-DTPA. <i>Journal of Magnetic Resonance Imaging</i> , 1995 , 5, 227-37	5.6	119
238	Development of (17)O NMR approach for fast imaging of cerebral metabolic rate of oxygen in rat brain at high field. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002 , 99, 13194-9	11.5	113
237	Frequency preference and attention effects across cortical depths in the human primary auditory cortex. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, 16036-41	11.5	112
236	A 16-channel combined loop-dipole transceiver array for 7 Tesla body MRI. <i>Magnetic Resonance in Medicine</i> , 2017 , 77, 884-894	4.4	107
235	Functional magnetic resonance imaging of cerebellar activation during the learning of a visuomotor dissociation task. <i>Human Brain Mapping</i> , 1996 , 4, 210-26	5.9	107
234	Study of tricarboxylic acid cycle flux changes in human visual cortex during hemifield visual stimulation using (1)H-[(13)C] MRS and fMRI. <i>Magnetic Resonance in Medicine</i> , 2001 , 45, 349-55	4.4	106
233	Dynamics of motor-related functional integration during motor sequence learning. <i>NeuroImage</i> , 2010 , 49, 759-66	7.9	104
232	Functional magnetic resonance imaging of mental rotation and memory scanning: a multidimensional scaling analysis of brain activation patterns. <i>Brain Research Reviews</i> , 1998 , 26, 106-12		104
231	Extending the Human Connectome Project across ages: Imaging protocols for the Lifespan Development and Aging projects. <i>NeuroImage</i> , 2018 , 183, 972-984	7.9	101
230	Multiband accelerated spin-echo echo planar imaging with reduced peak RF power using time-shifted RF pulses. <i>Magnetic Resonance in Medicine</i> , 2013 , 69, 1261-7	4.4	100
229	Sensitivity of single-voxel 1H-MRS in investigating the metabolism of the activated human visual cortex at 7 T. <i>Magnetic Resonance Imaging</i> , 2006 , 24, 343-8	3.3	98

228	Investigation of the initial dip in fMRI at 7 Tesla. <i>NMR in Biomedicine</i> , 2001 , 14, 408-12	4.4	98
227	Functional magnetic resonance imaging as a management tool for cerebral arteriovenous malformations. <i>Neurosurgery</i> , 1995 , 37, 619-25; discussion 625-6	3.2	97
226	Potential and feasibility of parallel MRI at high field. <i>NMR in Biomedicine</i> , 2006 , 19, 368-78	4.4	96
225	Determination of blood longitudinal relaxation time (T1) at high magnetic field strengths. <i>Magnetic Resonance Imaging</i> , 2007 , 25, 733-5	3.3	95
224	Functional and bioenergetic consequences of postinfarction left ventricular remodeling in a new porcine model. MRI and 31 P-MRS study. <i>Circulation</i> , 1996 , 94, 1089-100	16.7	94
223	Measurement of unidirectional Pi to ATP flux in human visual cortex at 7 T by using in vivo 31P magnetic resonance spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 14409-14	11.5	90
222	Spatial relationship between neuronal activity and BOLD functional MRI. <i>NeuroImage</i> , 2004 , 21, 876-85	7.9	90
221	In vivo 13C NMR spectroscopy and metabolic modeling in the brain: a practical perspective. <i>Magnetic Resonance Imaging</i> , 2006 , 24, 527-39	3.3	89
220	Functional imaging of brain activity in conscious monkeys responding to sexually arousing cues. <i>NeuroReport</i> , 2001 , 12, 2231-6	1.7	87
219	Regional neurochemical profiles in the human brain measured by 1H MRS at 7 T using local B0 shimming. <i>NMR in Biomedicine</i> , 2012 , 25, 152-60	4.4	86
218	Mechanisms underlying decoding at 7 T: ocular dominance columns, broad structures, and macroscopic blood vessels in V1 convey information on the stimulated eye. <i>NeuroImage</i> , 2010 , 49, 1957-64	7.9	86
217	Noninvasive measurements of [1-(13)C]glycogen concentrations and metabolism in rat brain in vivo. <i>Journal of Neurochemistry</i> , 1999 , 73, 1300-8	6	86
216	Functional magnetic resonance imaging of the human brain. <i>Journal of Neuroscience Methods</i> , 1997 , 74, 229-43	3	84
215	The spatial dependence of the poststimulus undershoot as revealed by high-resolution BOLD- and CBV-weighted fMRI. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2006 , 26, 634-44	7.3	84
214	The effect of stimulus-response compatibility on cortical motor activation. <i>NeuroImage</i> , 2001 , 13, 1-14	7.9	84
213	High resolution proton NMR studies of perfused rat hearts. <i>FEBS Letters</i> , 1984 , 167, 73-8	3.8	84
212	Magnetic resonance imaging at ultrahigh fields. <i>IEEE Transactions on Biomedical Engineering</i> , 2014 , 61, 1364-79	5	81
211	Validation of glutathione quantitation from STEAM spectra against edited 1H NMR spectroscopy at 4T: application to schizophrenia. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2005 , 18, 276-82	2.8	81

210	Observation of resolved glucose signals in ¹ H NMR spectra of the human brain at 4 Tesla. <i>Magnetic Resonance in Medicine</i> , 1996 , 36, 1-6	4.4	81
209	Spatial organization of frequency preference and selectivity in the human inferior colliculus. <i>Nature Communications</i> , 2013 , 4, 1386	17.4	79
208	Hippocampal sclerosis in temporal lobe epilepsy: findings at 7 T. <i>Radiology</i> , 2011 , 261, 199-209	20.5	78
207	Magnetic resonance studies of brain function and neurochemistry. <i>Annual Review of Biomedical Engineering</i> , 2000 , 2, 633-60	12	78
206	Hypercapnic normalization of BOLD fMRI: comparison across field strengths and pulse sequences. <i>NeuroImage</i> , 2004 , 23, 613-24	7.9	76
205	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	4.4	76
204	Increase of creatine kinase activity in the visual cortex of human brain during visual stimulation: a 31P magnetization transfer study. <i>Magnetic Resonance in Medicine</i> , 1997 , 38, 551-7	4.4	75
203	The Lifespan Human Connectome Project in Aging: An overview. <i>NeuroImage</i> , 2019 , 185, 335-348	7.9	74
202	High-Resolution Mapping of Myeloarchitecture In Vivo: Localization of Auditory Areas in the Human Brain. <i>Cerebral Cortex</i> , 2015 , 25, 3394-405	5.1	71
201	The Human Connectome Project 7 Tesla retinotopy dataset: Description and population receptive field analysis. <i>Journal of Vision</i> , 2018 , 18, 23	0.4	69
200	Tradeoffs in pushing the spatial resolution of fMRI for the 7T Human Connectome Project. <i>NeuroImage</i> , 2017 , 154, 23-32	7.9	68
199	Functional magnetic resonance imaging with intermolecular multiple-quantum coherences. <i>Magnetic Resonance Imaging</i> , 2000 , 18, 489-94	3.3	67
198	Myocardial oxygenation during high work states in hearts with postinfarction remodeling. <i>Circulation</i> , 1999 , 99, 942-8	16.7	67
197	Fusion in diffusion MRI for improved fibre orientation estimation: An application to the 3T and 7T data of the Human Connectome Project. <i>NeuroImage</i> , 2016 , 134, 396-409	7.9	67
196	A new class of Gd-based DO3A-ethylamine-derived targeted contrast agents for MR and optical imaging. <i>Bioconjugate Chemistry</i> , 2006 , 17, 773-80	6.3	66
195	BOLD fMRI and psychophysical measurements of contrast response to broadband images. <i>Vision Research</i> , 2004 , 44, 669-83	2.1	66
194	Effects of movement predictability on cortical motor activation. <i>Neuroscience Research</i> , 1998 , 32, 65-74	2.9	65
193	An inverted-microstrip resonator for human head proton MR imaging at 7 tesla. <i>IEEE Transactions on Biomedical Engineering</i> , 2005 , 52, 495-504	5	65

192	The impact of ultra-high field MRI on cognitive and computational neuroimaging. <i>NeuroImage</i> , 2018 , 168, 366-382	7.9	64
191	Comparison of pulsed arterial spin labeling encoding schemes and absolute perfusion quantification. <i>Magnetic Resonance Imaging</i> , 2009 , 27, 1039-45	3.3	64
190	Accurate T1 determination from inversion recovery images: application to human brain at 4 Tesla. <i>Magnetic Resonance in Medicine</i> , 1994 , 31, 445-9	4.4	64
189	Spatial dependence of the nonlinear BOLD response at short stimulus duration. <i>NeuroImage</i> , 2003 , 18, 990-1000	7.9	63
188	Whole brain high-resolution functional imaging at ultra high magnetic fields: an application to the analysis of resting state networks. <i>NeuroImage</i> , 2011 , 57, 1031-44	7.9	61
187	A 32-channel lattice transmission line array for parallel transmit and receive MRI at 7 tesla. <i>Magnetic Resonance in Medicine</i> , 2010 , 63, 1478-85	4.4	61
186	Neural correlates of visual form and visual spatial processing. <i>Human Brain Mapping</i> , 1999 , 8, 60-71	5.9	61
185	Imaging at ultrahigh magnetic fields: History, challenges, and solutions. <i>NeuroImage</i> , 2018 , 168, 7-32	7.9	60
184	ConnectomeDB--Sharing human brain connectivity data. <i>NeuroImage</i> , 2016 , 124, 1102-1107	7.9	59
183	Anatomical correlates of the functional organization in the human occipitotemporal cortex. <i>Magnetic Resonance Imaging</i> , 2006 , 24, 583-90	3.3	59
182	³¹ P NMR spectroscopy of the human heart at 4 T: detection of substantially uncontaminated cardiac spectra and differentiation of subepicardium and subendocardium. <i>Magnetic Resonance in Medicine</i> , 1992 , 26, 368-76	4.4	59
181	Further evaluation of the initial negative response in functional magnetic resonance imaging. <i>Magnetic Resonance in Medicine</i> , 1999 , 41, 436-41	4.4	58
180	Fast anatomical imaging of the heart and assessment of myocardial perfusion with arrhythmia insensitive magnetization preparation. <i>Magnetic Resonance in Medicine</i> , 1995 , 34, 530-6	4.4	57
179	Functional magnetic resonance imaging of the retina. <i>Investigative Ophthalmology and Visual Science</i> , 2002 , 43, 1176-81		57
178	Processing of natural sounds: characterization of multiplex spectral tuning in human auditory cortex. <i>Journal of Neuroscience</i> , 2013 , 33, 11888-98	6.6	55
177	Simultaneous multislice multiband parallel radiofrequency excitation with independent slice-specific transmit B1 homogenization. <i>Magnetic Resonance in Medicine</i> , 2013 , 70, 630-8	4.4	55
176	CyLoP-1: a novel cysteine-rich cell-penetrating peptide for cytosolic delivery of cargoes. <i>Bioconjugate Chemistry</i> , 2011 , 22, 319-28	6.3	55
175	Self-supervised learning of physics-guided reconstruction neural networks without fully sampled reference data. <i>Magnetic Resonance in Medicine</i> , 2020 , 84, 3172-3191	4.4	54

174	Toward imaging the body at 10.5 tesla. <i>Magnetic Resonance in Medicine</i> , 2017 , 77, 434-443	4.4	54
173	Performance of external and internal coil configurations for prostate investigations at 7 T. <i>Magnetic Resonance in Medicine</i> , 2010 , 64, 1625-39	4.4	54
172	Reconstructing the spectrotemporal modulations of real-life sounds from fMRI response patterns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017 , 114, 4799-4804	11.5	53
171	Subchronic in vivo effects of a high static magnetic field (9.4 T) in rats. <i>Journal of Magnetic Resonance Imaging</i> , 2000 , 12, 122-39	5.6	53
170	fMRI analysis of ankle movement tracking training in subject with stroke. <i>Experimental Brain Research</i> , 2004 , 154, 281-90	2.3	52
169	Dynamics of lactate concentration and blood oxygen level-dependent effect in the human visual cortex during repeated identical stimuli. <i>Journal of Neuroscience Research</i> , 2007 , 85, 3340-6	4.4	51
168	Dynamically applied B1+ shimming solutions for non-contrast enhanced renal angiography at 7.0 Tesla. <i>Magnetic Resonance in Medicine</i> , 2013 , 69, 114-26	4.4	50
167	The road to functional imaging and ultrahigh fields. <i>NeuroImage</i> , 2012 , 62, 726-35	7.9	50
166	Frontiers of brain mapping using MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2006 , 23, 945-57	5.6	50
165	Modeling and analysis of mechanisms underlying fMRI-based decoding of information conveyed in cortical columns. <i>NeuroImage</i> , 2011 , 56, 627-42	7.9	49
164	Cell-penetrating peptides and peptide nucleic acid-coupled MRI contrast agents: evaluation of cellular delivery and target binding. <i>Bioconjugate Chemistry</i> , 2009 , 20, 1860-8	6.3	49
163	Simplified methods for calculating cerebral metabolic rate of oxygen based on ¹⁷ O magnetic resonance spectroscopic imaging measurement during a short ¹⁷ O ₂ inhalation. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2004 , 24, 840-8	7.3	47
162	Noninvasive and three-dimensional imaging of CMRO(2) in rats at 9.4 T: reproducibility test and normothermia/hypothermia comparison study. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2007 , 27, 1225-34	7.3	46
161	Functional activation using apparent diffusion coefficient-dependent contrast allows better spatial localization to the neuronal activity: evidence using diffusion tensor imaging and fiber tracking. <i>NeuroImage</i> , 2003 , 20, 955-61	7.9	46
160	Toward 20T magnetic resonance for human brain studies: opportunities for discovery and neuroscience rationale. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 2016 , 29, 617-39	2.8	46
159	Cardiac imaging at 7 Tesla: Single- and two-spoke radiofrequency pulse design with 16-channel parallel excitation. <i>Magnetic Resonance in Medicine</i> , 2013 , 70, 1210-9	4.4	45
158	Functional magnetic resonance imaging using RASER. <i>NeuroImage</i> , 2011 , 54, 350-60	7.9	44
157	New insights into central roles of cerebral oxygen metabolism in the resting and stimulus-evoked brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2009 , 29, 10-8	7.3	44

156	In vivo micro-MRI of intracortical neurovasculature. <i>NeuroImage</i> , 2006 , 32, 62-9	7.9	44
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