Richard Bowtell

List of Publications by Year
in descending order

241 papers	16,116 citations	18482 62 h-index	20961 115 g-index
261 all docs	261 docs citations	261 times ranked	12410 citing authors

#	Article	IF	Citations
1	?sparse? temporal sampling in auditory fMRI. Human Brain Mapping, 1999, 7, 213-223.	3.6	801
2	Moving magnetoencephalography towards real-world applications with a wearable system. Nature, 2018, 555, 657-661.	27.8	795
3	Representation of Pleasant and Aversive Taste in the Human Brain. Journal of Neurophysiology, 2001, 85, 1315-1321.	1.8	605
4	Representations of Pleasant and Painful Touch in the Human Orbitofrontal and Cingulate Cortices. Cerebral Cortex, 2003, 13, 308-317.	2.9	432
5	The representation of pleasant touch in the brain and its relationship with taste and olfactory areas. NeuroReport, 1999, 10, 453-459.	1.2	411
6	Sensory-specific satiety-related olfactory activation of the human orbitofrontal cortex. NeuroReport, 2000, 11, 893-897.	1.2	364
7	Application of a Fourier-based method for rapid calculation of field inhomogeneity due to spatial variation of magnetic susceptibility. Concepts in Magnetic Resonance Part B, 2005, 25B, 65-78.	0.7	347
8	A new generation of magnetoencephalography: Room temperature measurements using optically-pumped magnetometers. NeuroImage, 2017, 149, 404-414.	4.2	329
9	Fiber orientation-dependent white matter contrast in gradient echo MRI. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18559-18564.	7.1	294
10	fMRI at 1.5, 3 and 7 T: Characterising BOLD signal changes. NeuroImage, 2009, 47, 1425-1434.	4.2	240
11	Susceptibility mapping in the human brain using thresholdâ€based kâ€space division. Magnetic Resonance in Medicine, 2010, 63, 1292-1304.	3.0	229
12	Sensory-specific satiety-related olfactory activation of the human orbitofrontal cortex. NeuroReport, 2000, 11, 399-403.	1.2	224
13	Water proton T 1 measurements in brain tissue at 7, 3, and 1.5T using IR-EPI, IR-TSE, and MPRAGE: results and optimization. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2008, 21, 121-130.	2.0	222
14	fMRI of the Responses to Vibratory Stimulation of Digit Tips. NeuroImage, 2000, 11, 188-202.	4.2	209
15	Visualization of nigrosome 1 and its loss in PD. Neurology, 2013, 81, 534-540.	1.1	208
16	T2* measurements in human brain at 1.5, 3 and 7 T. Magnetic Resonance Imaging, 2007, 25, 748-753.	1.8	198
17	Mapping Human Somatosensory Cortex in Individual Subjects With 7T Functional MRI. Journal of Neurophysiology, 2010, 103, 2544-2556.	1.8	197
18	High resolution magnetic susceptibility mapping of the substantia nigra in Parkinson's disease. Journal of Magnetic Resonance Imaging, 2012, 35, 48-55.	3.4	189

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19	Pharmaceutical applications of magnetic resonance imaging (MRI). Advanced Drug Delivery Reviews, 2005, 57, 1191-1209.	13.7	186
20	Optically pumped magnetometers: From quantum origins to multi-channel magnetoencephalography. NeuroImage, 2019, 199, 598-608.	4.2	186
21	Properties of the ballistocardiogram artefact as revealed by EEG recordings at 1.5, 3 and 7 T static magnetic field strength. International Journal of Psychophysiology, 2008, 67, 189-199.	1.0	182
22	Whole-brain susceptibility mapping at high field: A comparison of multiple- and single-orientation methods. NeuroImage, 2010, 53, 515-525.	4.2	172
23	Magnetic-field-induced vertigo: A theoretical and experimental investigation. Bioelectromagnetics, 2007, 28, 349-361.	1.6	165
24	Multi-channel whole-head OPM-MEG: Helmet design and a comparison with a conventional system. NeuroImage, 2020, 219, 116995.	4.2	164
25	Correction of spatial distortion in EPI due to inhomogeneous static magnetic fields using the reversed gradient method. Journal of Magnetic Resonance Imaging, 2004, 19, 499-507.	3.4	159
26	Novel gradient coils designed using a boundary element method. Concepts in Magnetic Resonance Part B, 2007, 31B, 162-175.	0.7	144
27	Structure and behaviour in hydrophilic matrix sustained release dosage forms: 2. NMR-imaging studies of dimensional changes in the gel layer and core of HPMC tablets undergoing hydration. Journal of Controlled Release, 1994, 31, 121-128.	9.9	143
28	A bi-planar coil system for nulling background magnetic fields in scalp mounted magnetoencephalography. NeuroImage, 2018, 181, 760-774.	4.2	143
29	Microstructural imaging of the human brain with a â€˜super-scannerâ€™: 10 key advantages of ultra-strong gradients for diffusion MRI. NeuroImage, 2018, 182, 8-38.	4.2	138
30	On the Potential of a New Generation of Magnetometers for MEG: A Beamformer Simulation Study. PLoS ONE, 2016, 11, e0157655.	2.5	138
31	Evidence that the negative BOLD response is neuronal in origin: A simultaneous EEGâ€“BOLDâ€“CBF study in humans. NeuroImage, 2014, 94, 263-274.	4.2	137
32	Functional magnetic resonance imaging of single motor events reveals human presupplementary motor area. Annals of Neurology, 1997, 42, 632-637.	5.3	136
33	Abnormal cortical sensory activation in dystonia: An fMRI study. Movement Disorders, 2003, 18, 673-682.	3.9	128
34	Fetal brain activity demonstrated by functional magnetic resonance imaging. Lancet, The, 1999, 354, 645-646.	13.7	120
35	Within-Digit Functional Parcellation of Brodmann Areas of the Human Primary Somatosensory Cortex Using Functional Magnetic Resonance Imaging at 7 Tesla. Journal of Neuroscience, 2012, 32, 15815-15822.	3.6	118
36	Modulation and task effects in auditory processing measured using fMRI. Human Brain Mapping, 2000, 10, 107-119.	3.6	116

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37	Functional neuroimaging studies of human somatosensory cortex. Behavioural Brain Research, 2002, 135, 147-158.	2.2	116
38	Effects of white matter microstructure on phase and susceptibility maps. Magnetic Resonance in Medicine, 2015, 73, 1258-1269.	3.0	116
39	Sound-Level Measurements and Calculations of Safe Noise Dosage During EPI at 3 T. Journal of Magnetic Resonance Imaging, 2000, 12, 157-163.	3.4	110
40	Structure and behavior in hydrophilic matrix sustained release dosage forms: 4. Studies of water mobility and diffusion coefficients in the gel layer of HPMC tablets using NMR imaging. Pharmaceutical Research, 1996, 13, 376-380.	3.5	108
41	Automatic compensation of motion artifacts in MRI. Magnetic Resonance in Medicine, 1999, 41, 163-170.	3.0	108
42	Using magnetic field simulation to study susceptibility-related phase contrast in gradient echo MRI. NeuroImage, 2009, 48, 126-137.	4.2	108
43	fMRI analysis of active, passive and electrically stimulated ankle dorsiflexion. NeuroImage, 2009, 44, 469-479.	4.2	106
44	Multiple spin echoes in liquids in a high magnetic field. Journal of Magnetic Resonance, 1990, 88, 643-651.	0.5	101
45	Vertex Stimulation as a Control Site for Transcranial Magnetic Stimulation: A Concurrent TMS/fMRI Study. Brain Stimulation, 2016, 9, 58-64.	1.6	100
46	A tool for functional brain imaging with lifespan compliance. Nature Communications, 2019, 10, 4785.	12.8	96
47	Time-course of the auditory BOLD response to scanner noise. Magnetic Resonance in Medicine, 2000, 43, 601-606.	3.0	94
48	Direct visualization of the subthalamic nucleus and its iron distribution using highâ€resolution susceptibility mapping. Human Brain Mapping, 2012, 33, 2831-2842.	3.6	91
49	Magnetoencephalography with optically pumped magnetometers (OPM-MEG): the next generation of functional neuroimaging. Trends in Neurosciences, 2022, 45, 621-634.	8.6	91
50	MRI detection of weak magnetic fields due to an extended current dipole in a conducting sphere: A model for direct detection of neuronal currents in the brain. Magnetic Resonance in Medicine, 2003, 50, 40-49.	3.0	88
51	Reference layer artefact subtraction (RLAS): A novel method of minimizing EEG artefacts during simultaneous fMRI. NeuroImage, 2014, 84, 307-319.	4.2	88
52	Towards OPM-MEG in a virtual reality environment. NeuroImage, 2019, 199, 408-417.	4.2	87
53	Active Acoustic Screening: Reduction of Noise in Gradient Coils by Lorentz Force Balancing. Magnetic Resonance in Medicine, 1995, 33, 276-281.	3.0	84
54	Increased iron accumulation occurs in the earliest stages of demyelinating disease: an ultra-high field susceptibility mapping study in Clinically Isolated Syndrome. Multiple Sclerosis Journal, 2013, 19, 896-903.	3.0	83

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55	Poststimulus undershoots in cerebral blood flow and BOLD fMRI responses are modulated by poststimulus neuronal activity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13636-13641.	7.1	83
56	Wearable neuroimaging: Combining and contrasting magnetoencephalography and electroencephalography. NeuroImage, 2019, 201, 116099.	4.2	82
57	Functional magnetic resonance imaging measurements of sound-level encoding in the absence of background scanner noise. Journal of the Acoustical Society of America, 2001, 109, 1559-1570.	1.1	81
58	Theta power during encoding predicts subsequentâ€memory performance and default mode network deactivation. Human Brain Mapping, 2013, 34, 2929-2943.	3.6	79
59	The effect of scanner sound in visual, motor, and auditory functional MRI. Magnetic Resonance in Medicine, 1999, 41, 1230-1235.	3.0	78
60	Eventâ€related fMRI at 7T reveals overlapping cortical representations for adjacent fingertips in S1 of individual subjects. Human Brain Mapping, 2014, 35, 2027-2043.	3.6	77
61	Functional quantitative susceptibility mapping (fQSM). NeuroImage, 2014, 100, 112-124.	4.2	76
62	Triaxial detection of the neuromagnetic field using optically-pumped magnetometry: feasibility and application in children. NeuroImage, 2022, 252, 119027.	4.2	76
63	Structural Investigations with the Dipolar Demagnetizing Field in Solution NMR. Physical Review Letters, 1996, 76, 4971-4974.	7.8	75
64	Single-subject fMRI mapping at 7 T of the representation of fingertips in S1: a comparison of event-related and phase-encoding designs. Journal of Neurophysiology, 2013, 109, 2293-2305.	1.8	75
65	Effects of simultaneous EEG recording on MRI data quality at 1.5, 3 and 7Âtesla. International Journal of Psychophysiology, 2008, 67, 178-188.	1.0	73
66	Theoretical advantages of a triaxial optically pumped magnetometer magnetoencephalography system. NeuroImage, 2021, 236, 118025.	4.2	73
67	In vivo perfusion measurements in the human placenta using echo planar imaging at 0.5 T. Magnetic Resonance in Medicine, 1998, 40, 467-473.	3.0	72
68	Balanced, bi-planar magnetic field and field gradient coils for field compensation in wearable magnetoencephalography. Scientific Reports, 2019, 9, 14196.	3.3	72
69	Measuring functional connectivity with wearable MEG. NeuroImage, 2021, 230, 117815.	4.2	72
70	Gradient echo based fiber orientation mapping using R2* and frequency difference measurements. NeuroImage, 2013, 83, 1011-1023.	4.2	71
71	Identifying the sources of the pulse artefact in EEG recordings made inside an MR scanner. NeuroImage, 2013, 71, 75-83.	4.2	66
72	Improved artifact correction for combined electroencephalography/functional MRI by means of synchronization and use of vectorcardiogram recordings. Journal of Magnetic Resonance Imaging, 2008, 27, 607-616.	3.4	65

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73	Simultaneous EEG source localisation and artifact rejection during concurrent fMRI by means of spatial filtering. NeuroImage, 2008, 40, 1090-1104.	4.2	65
74	Reducing the gradient artefact in simultaneous EEG-fMRI by adjusting the subject's axial position. NeuroImage, 2011, 54, 1942-1950.	4.2	64
75	NMR microscopy of hydrating hydrophilic matrix pharmaceutical tablets. Magnetic Resonance Imaging, 1994, 12, 361-364.	1.8	61
76	A comparison of fMRI adaptation and multivariate pattern classification analysis in visual cortex. NeuroImage, 2010, 49, 1632-1640.	4.2	61
77	Brain Activations in Response to Vibrotactile Tooth Stimulation: a Psychophysical and fMRI Study. Journal of Neurophysiology, 2010, 104, 2257-2265.	1.8	59
78	Theoretical optimization of multi-echo fMRI data acquisition. Physics in Medicine and Biology, 2007, 52, 1801-1813.	3.0	58
79	Gradient coil design using active magnetic screening. Magnetic Resonance in Medicine, 1991, 17, 15-21.	3.0	57
80	Magnetic resonance imaging of controlled release pharmaceutical dosage forms. Pharmaceutical Science & Technology Today, 1998, 1, 32-39.	0.7	57
81	MR tagging of human lungs using hyperpolarized3He gas. Journal of Magnetic Resonance Imaging, 2003, 17, 142-146.	3.4	57
82	Modeling and optimization of lookâ€locker spin labeling for measuring perfusion and transit time changes in activation studies taking into account arterial blood volume. Magnetic Resonance in Medicine, 2008, 59, 316-325.	3.0	56
83	Understanding gradient artefacts in simultaneous EEG/fMRI. NeuroImage, 2009, 46, 459-471.	4.2	56
84	Motion-related artefacts in EEG predict neuronally plausible patterns of activation in fMRI data. NeuroImage, 2012, 59, 261-270.	4.2	56
85	Cognitive neuroscience using wearable magnetometer arrays: Non-invasive assessment of language function. NeuroImage, 2018, 181, 513-520.	4.2	56
86	Mouth magnetoencephalography: A unique perspective on the human hippocampus. NeuroImage, 2021, 225, 117443.	4.2	56
87	Physical modeling of pulse artefact sources in simultaneous EEG/fMRI. Human Brain Mapping, 2010, 31, 604-620.	3.6	55
88	Regional structural differences across functionally parcellated Brodmann areas of human primary somatosensory cortex. NeuroImage, 2014, 93, 221-230.	4.2	55
89	Detecting activations in event-related fMRI using analysis of variance. Magnetic Resonance in Medicine, 1999, 42, 1117-1122.	3.0	54
90	Precision magnetic field modelling and control for wearable magnetoencephalography. NeuroImage, 2021, 241, 118401.	4.2	54

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91	Exploring the feasibility of simultaneous electroencephalography/functional magnetic resonance imaging at 7 T. Magnetic Resonance Imaging, 2008, 26, 968-977.	1.8	53
92	Imaging the human hippocampus with optically-pumped magnetoencephalography. NeuroImage, 2019, 203, 116192.	4.2	52
93	In Vivo Relaxation Time Measurements in the Human Placenta Using Echo Planar Imaging at 0.5 T. Magnetic Resonance Imaging, 1998, 16, 241-247.	1.8	51
94	Correspondence of human visual areas identified using functional and anatomical MRI in vivo at 7 T. Journal of Magnetic Resonance Imaging, 2012, 35, 287-299.	3.4	51
95	Thresholds for perceiving metallic taste at high magnetic field. Journal of Magnetic Resonance Imaging, 2007, 26, 1357-1361.	3.4	50
96	A functional-magnetic-resonance-imaging investigation of cortical activation from moving vibrotactile stimuli on the fingertip. Journal of the Acoustical Society of America, 2009, 125, 1033-1039.	1.1	50
97	Electric fields induced in the human body by time-varying magnetic field gradients in MRI: numerical calculations and correlation analysis. Physics in Medicine and Biology, 2007, 52, 2337-2353.	3.0	49
98	Cortical Responses to Single Mechanoreceptive Afferent Microstimulation Revealed with fMRI. NeuroImage, 2001, 13, 613-622.	4.2	47
99	Active acoustic screening: design principles for quiet gradient coils in MRI. Measurement Science and Technology, 1994, 5, 1021-1025.	2.6	46
100	Quite transverse gradiant coils: Lorentz force balanced designs using geometrical similitude. Magnetic Resonance in Medicine, 1995, 34, 494-497.	3.0	46
101	Initial attempts at directly detecting alpha wave activity in the brain using MRI. Magnetic Resonance Imaging, 2004, 22, 1413-1427.	1.8	45
102	Imaging the Long-Range Dipolar Field in Structured Liquid State Samples. Journal of Magnetic Resonance, 2001, 150, 147-155.	2.1	44
103	Multilayer Gradient Coil Design. Journal of Magnetic Resonance, 1998, 131, 286-294.	2.1	43
104	Analytic calculations of the E-fields induced by time-varying magnetic fields generated by cylindrical gradient coils. Magnetic Resonance in Medicine, 2000, 44, 782-790.	3.0	43
105	Optically pumped magnetoencephalography in epilepsy. Annals of Clinical and Translational Neurology, 2020, 7, 397-401.	3.7	43
106	Nuclear magnetic resonance microscopy in liquids using the dipolar field. Journal of Chemical Physics, 1997, 106, 467-476.	3.0	40
107	Phase vs. magnitude information in functional magnetic resonance imaging time series: toward understanding the noise. Magnetic Resonance Imaging, 2009, 27, 1046-1057.	1.8	40
108	NMR Microscopy of Single Neurons Using Spin Echo and Line Narrowed 2DFT Imaging. Magnetic Resonance in Medicine, 1995, 33, 790-794.	3.0	39

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109	Investigation of Carbohydrate Metabolism and Transport in Castor Bean Seedlings by CyclicJCross Polarization Imaging and Spectroscopy. Journal of Magnetic Resonance, 1998, 132, 109-124.	2.1	39
110	Lip-Reading Ability and Patterns of Cortical Activation Studied Using fMRI. International Journal of Audiology, 2000, 34, 225-230.	0.7	39
111	Combining EEG and fMRI. Methods in Molecular Biology, 2011, 711, 303-326.	0.9	38
112	A comparison of phase imaging and quantitative susceptibility mapping in the imaging of multiple sclerosis lesions at ultrahigh field. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2016, 29, 543-557.	2.0	38
113	Mapping the absolute value ofM0 using dipolar field effects. Magnetic Resonance in Medicine, 2002, 47, 871-879.	3.0	37
114	Increase in the iron content of the substantia nigra and red nucleus in multiple sclerosis and clinically isolated syndrome: A 7 Tesla MRI study. Journal of Magnetic Resonance Imaging, 2015, 41, 1065-1070.	3.4	37
115	The haemodynamics of the human placenta in utero. PLoS Biology, 2020, 18, e3000676.	5.6	37
116	A Modified Imaging Sequence for Accurate T2 Measurements Using NMR Microscopy. Journal of Magnetic Resonance Series B, 1995, 109, 66-69.	1.6	36
117	Analytic approach to the design of transverse gradient coils with co-axial return paths. Magnetic Resonance in Medicine, 1999, 41, 600-608.	3.0	36
118	Improved echo volumar imaging (EVI) for functional MRI. Magnetic Resonance in Medicine, 2006, 56, 1320-1327.	3.0	36
119	Measurement of electric fields induced in a human subject due to natural movements in static magnetic fields or exposure to alternating magnetic field gradients. Physics in Medicine and Biology, 2008, 53, 361-373.	3.0	36
120	Multi-site harmonization of 7 tesla MRI neuroimaging protocols. NeuroImage, 2020, 206, 116335.	4.2	36
121	Modulating Brain Networks With Transcranial Magnetic Stimulation Over the Primary Motor Cortex: A Concurrent TMS/fMRI Study. Frontiers in Human Neuroscience, 2020, 14, 31.	2.0	36
122	Spatial location and strength of BOLD activation in highâ€spatialâ€resolution fMRI of the motor cortex: a comparison of spin echo and gradient echo fMRI at 7â€‰T. NMR in Biomedicine, 2012, 25, 717-725.	2.8	35
123	Volume parcellation for improved dynamic shimming. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2008, 21, 31-40.	2.0	34
124	Single-shotT*2 measurement to establish optimum echo time for fMRI: Studies of the visual, motor, and auditory cortices at 3.0 T. Magnetic Resonance in Medicine, 2001, 45, 930-933.	3.0	33
125	Sensitivity to local dipole fields in the CRAZED experiment: An approach to bright spot MRI. Journal of Magnetic Resonance, 2006, 182, 315-324.	2.1	33
126	Mapping quantal touch using 7 Tesla functional magnetic resonance imaging and single-unit intraneural microstimulation. ELife, 2016, 5, .	6.0	33

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127	Using OPM-MEG in contrasting magnetic environments. NeuroImage, 2022, 253, 119084.	4.2	33
128	Spatial and temporal distribution of solutes in the developing carrot taproot measured at single-cell resolution. Journal of Experimental Botany, 2000, 51, 567-577.	4.8	32
129	Split gradient coils for simultaneous PETâ€MRI. Magnetic Resonance in Medicine, 2009, 62, 1106-1111.	3.0	32
130	Source localisation in concurrent EEG/fMRI: Applications at 7T. NeuroImage, 2009, 45, 440-452.	4.2	32
131	Best Current Practice for Obtaining High Quality EEG Data During Simultaneous fMRI. Journal of Visualized Experiments, 2013, , .	0.3	32
132	Using optically pumped magnetometers to measure magnetoencephalographic signals in the human cerebellum. Journal of Physiology, 2019, 597, 4309-4324.	2.9	31
133	Dynamics of the nuclear magnetic resonance COSY-revamped by asymmetricz-gradients (CRAZED) experiment. Journal of Chemical Physics, 2001, 114, 10854-10859.	3.0	30
134	Investigating the coating-dependent release mechanism of a pulsatile capsule using NMR microscopy. Journal of Controlled Release, 2003, 92, 341-347.	9.9	30
135	Ultrahigh field systems and applications at 7 T and beyond: Progress, pitfalls, and potential. Magnetic Resonance in Medicine, 2012, 67, 317-321.	3.0	29
136	Indirect detection via the dipolar demagnetizing field. Journal of Magnetic Resonance, 1992, 100, 1-17.	0.5	28
137	Investigating the effect of blood susceptibility on phase contrast in the human brain. NeuroImage, 2010, 50, 491-498.	4.2	28
138	Optimizing the sequence parameters for double-quantum CRAZED imaging. Magnetic Resonance in Medicine, 2004, 51, 148-157.	3.0	26
139	Measurement of electric fields due to time-varying magnetic field gradients using dipole probes. Physics in Medicine and Biology, 2007, 52, 5119-5130.	3.0	26
140	Forward electric field calculation using BEM for time-varying magnetic field gradients and motion in strong static fields. Engineering Analysis With Boundary Elements, 2009, 33, 1074-1088.	3.7	26
141	Magnetic Field Mapping and Correction for Moving OP-MEG. IEEE Transactions on Biomedical Engineering, 2022, 69, 528-536.	4.2	26
142	Screened coil designs for NMR imaging in magnets with transverse field geometry. Measurement Science and Technology, 1990, 1, 431-439.	2.6	24
143	Electric fields induced in a spherical volume conductor by temporally varying magnetic field gradients. Physics in Medicine and Biology, 2002, 47, 557-576.	3.0	24
144	Optimal Inverse Design of Magnetic Field Profiles in a Magnetically Shielded Cylinder. Physical Review Applied, 2020, 14, .	3.8	24

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145	PEG coating reduces NMR relaxivity ofMn_{0.5}Zn_{0.5}Gd_{0.02}Fe_{1.98}O₄ nanoparticles. Journal of Magnetic Resonance Imaging, 2011, 34, 1192-1198.	3.3	23
146	Pragmatic spatial sampling for wearable MEG arrays. Scientific Reports, 2020, 10, 21609.	3.3	23
147	Self-diffusion and molecular mobility in PVA-based dissolution-controlled systems for drug delivery. Magnetic Resonance Imaging, 1998, 16, 691-694.	1.8	22
148	Multilayer transverse gradient coil design. Concepts in Magnetic Resonance, 2003, 16B, 38-46.	1.3	22
149	Global signal modulation of single-trial fMRI response variability: Effect on positive vs negative BOLD response relationship. NeuroImage, 2016, 133, 62-74.	4.2	22
150	Measuring the cortical tracking of speech with optically-pumped magnetometers. NeuroImage, 2021, 233, 117969.	4.2	22
151	Histological Basis of Laminar MRI Patterns in High Resolution Images of Fixed Human Auditory Cortex. Frontiers in Neuroscience, 2016, 10, 455.	2.8	21
152	Strong diffusion gradients allow the separation of intra- and extra-axonal gradient-echo signals in the human brain. NeuroImage, 2020, 217, 116793.	4.2	21
153	Phenotypic and genetic associations of quantitative magnetic susceptibility in UK Biobank brain imaging. Nature Neuroscience, 2022, 25, 818-831.	14.8	21
154	Hemispherical gradient coils for magnetic resonance imaging. Magnetic Resonance in Medicine, 2005, 54, 656-668.	3.0	20
155	High resolution SE-fMRI in humans at 3 and 7 T using a motor task. Magnetic Resonance Materials in Physics, Biology, and Medicine, 2008, 21, 113-120.	2.0	20
156	Frequency difference mapping applied to the corpus callosum at 7T. Magnetic Resonance in Medicine, 2019, 81, 3017-3031.	3.0	20
157	Multi-centre, multi-vendor reproducibility of 7T QSM and R2* in the human brain: Results from the UK7T study. NeuroImage, 2020, 223, 117358.	4.2	20
158	NMR imaging and structure measurements using the long-range dipolar field in liquids. Physical Review E, 2002, 66, 041201.	2.1	19
159	Calculation of the electric field resulting from human body rotation in a magnetic field. Physics in Medicine and Biology, 2012, 57, 4739-4753.	3.0	19
160	Actively shielded multi-layer gradient coil designs with improved cooling properties. Journal of Magnetic Resonance, 2003, 165, 196-207.	2.1	18
161	Neuroimaging paradigms for tonotopic mapping (I): The influence of sound stimulus type. NeuroImage, 2014, 100, 650-662.	4.2	18
162	Magnetic resonance imaging: Applications of novel methods in studies of porous media. Magnetic Resonance Imaging, 1992, 10, 741-746.	1.8	17

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163	Measuring Patterson functions of inhomogeneous liquids using the nuclear dipolar field. Journal of Chemical Physics, 1997, 107, 702-706.	3.0	17
164	European Ultrahighâ€Field Imaging Network for Neurodegenerative Diseases (EUFIND). Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2019, 11, 538-549.	2.4	17
165	High-resolution echo-planar imaging at 3.0 T. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1994, 2, 241-245.	2.0	16
166	Magic-Angle Gradient-Coil Design. Journal of Magnetic Resonance Series A, 1995, 115, 55-59.	1.6	16
167	Dataâ€driven model optimization for optically pumped magnetometer sensor arrays. Human Brain Mapping, 2019, 40, 4357-4369.	3.6	16
168	Is Human Auditory Cortex Organization Compatible With the Monkey Model? Contrary Evidence From Ultra-High-Field Functional and Structural MRI. Cerebral Cortex, 2019, 29, 410-428.	2.9	16
169	Ingress of water into solid nylon 6.6. Journal of Magnetic Resonance, 1992, 99, 507-524.	0.5	15
170	Biplanar gradient coil design by simulated annealing. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1994, 2, 387-389.	2.0	15
171	Simultaneous EEGâ€“fMRI: evaluating the effect of the cabling configuration on the gradient artefact. Physics in Medicine and Biology, 2015, 60, N241-N250.	3.0	15
172	Multiple spin echoes in multicomponent liquids. Journal of Magnetic Resonance, 1991, 93, 516-532.	0.5	14
173	Structural properties of the corticospinal tract in the human brain: a magnetic resonance imaging study at 7 Tesla. Brain Structure and Function, 2011, 216, 255-262.	2.3	14
174	Investigating intrinsic connectivity networks using simultaneous BOLD and CBF measurements. NeuroImage, 2014, 99, 111-121.	4.2	14
175	Assessing the Spatial Precision of SE and GE-BOLD Contrast at 7 Tesla. Brain Topography, 2015, 28, 62-65.	1.8	14
176	Practical real-time MEG-based neural interfacing with optically pumped magnetometers. BMC Biology, 2021, 19, 158.	3.8	14
177	Echo-planar microscopy of porous rocks. Magnetic Resonance Imaging, 1996, 14, 875-877.	1.8	13
178	Using the vector potential in evaluating the likelihood of peripheral nerve stimulation due to switched magnetic field gradients. Magnetic Resonance in Medicine, 2003, 50, 405-410.	3.0	13
179	Localised mapping of water movement and hydration inside a developing bioadhesive bond. Journal of Controlled Release, 2004, 95, 435-446.	9.9	13
180	Planar Coil Optimization in a Magnetically Shielded Cylinder. Physical Review Applied, 2021, 15, .	3.8	13

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181	Magnetic field design in a cylindrical high-permeability shield: The combination of simple building blocks and a genetic algorithm. Journal of Applied Physics, 2022, 131, .	2.5	13
182	Gastric motility by tagged EPI. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1994, 2, 295-298.	2.0	12
183	Intermolecular multiple quantum coherences at high magnetic field: The nonlinear regime. Journal of Chemical Physics, 2005, 123, 164311.	3.0	12
184	Echo-shifted multislice EPI for high-speed fMRI. Magnetic Resonance Imaging, 2006, 24, 433-442.	1.8	12
185	Exploring the relative efficacy of motion artefact correction techniques for EEG data acquired during simultaneous fMRI. Human Brain Mapping, 2019, 40, 578-596.	3.6	12
186	Continuous saturation EPI with diffusion weighting at 3.0 T. NMR in Biomedicine, 1999, 12, 440-450.	2.8	11
187	Colourful future for MRI. Nature, 2008, 453, 993-994.	27.8	11
188	Safety Implications of High-Field MRI: Actuation of Endogenous Magnetic Iron Oxides in the Human Body. PLoS ONE, 2009, 4, e5431.	2.5	11
189	Quantification of blood velocity and flow rates in the uterine vessels using echo planar imaging at 0.5 Tesla. Journal of Magnetic Resonance Imaging, 2010, 31, 921-927.	3.4	11
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