Mark F Lythgoe

List of Publications by Year
in descending order

224	10,876	36303 51	42399 92
papers	citations	h-index	g-index

242	242	242	17695
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Imaging biomarker roadmap for cancer studies. Nature Reviews Clinical Oncology, 2017, 14, 169-186.	27.6	792
2	De novo cardiomyocytes from within the activated adult heart after injury. Nature, 2011, 474, 640-644.	27.8	602
3	In vivo imaging of glucose uptake and metabolism in tumors. Nature Medicine, 2013, 19, 1067-1072.	30.7	427
4	Compartment models of the diffusion MR signal in brain white matter: A taxonomy and comparison. NeuroImage, 2012, 59, 2241-2254.	4.2	372
5	Deep in vivo photoacoustic imaging of mammalian tissues using a tyrosinase-based genetic reporter. Nature Photonics, 2015, 9, 239-246.	31.4	362
6	Impaired glymphatic function and clearance of tau in an Alzheimerâ€™s disease model. Brain, 2020, 143, 2576-2593.	7.6	227
7	A rat decellularized small bowel scaffold that preserves villus-crypt architecture for intestinal regeneration. Biomaterials, 2012, 33, 3401-3410.	11.4	188
8	Magnetic Resonance Imaging of Mesenchymal Stem Cells Homing to Pulmonary Metastases Using Biocompatible Magnetic Nanoparticles. Cancer Research, 2009, 69, 8862-8867.	0.9	187
9	Noninvasive Quantification of Solid Tumor Microstructure Using VERDICT MRI. Cancer Research, 2014, 74, 1902-1912.	0.9	185
10	Application of neurite orientation dispersion and density imaging (NODDI) to a tau pathology model of Alzheimer's disease. NeuroImage, 2016, 125, 739-744.	4.2	179
11	Characterization of tau positron emission tomography tracer [¹⁸F]AVâ€1451 binding to postmortem tissue in Alzheimer's disease,Âprimary tauopathies, and other dementias. Alzheimer's and Dementia, 2016, 12, 1116-1124.	0.8	161
12	Amniotic fluid stem cells improve survival and enhance repair of damaged intestine in necrotising enterocolitis via a COX-2 dependent mechanism. Gut, 2014, 63, 300-309.	12.1	155
13	Clusters of iron-rich cells in the upper beak of pigeons are macrophages not magnetosensitive neurons. Nature, 2012, 484, 367-370.	27.8	150
14	Somatic activating mutations in Pik3ca cause sporadic venous malformations in mice and humans. Science Translational Medicine, 2016, 8, 332ra43.	12.4	138
15	Astrocytes monitor cerebral perfusion and control systemic circulation to maintain brain blood flow. Nature Communications, 2020, 11, 131.	12.8	137
16	Early changes in water diffusion, perfusion, T1, and T2 during focal cerebral ischemia in the rat studied at 8.5 T. Magnetic Resonance in Medicine, 1999, 41, 479-485.	3.0	130
17	Post-mortem examination of human fetuses: a comparison of whole-body high-field MRI at 9Â·4 T with conventional MRI and invasive autopsy. Lancet, The, 2009, 374, 467-475.	13.7	130
18	Directing cell therapy to anatomic target sites in vivo with magnetic resonance targeting. Nature Communications, 2015, 6, 8009.	12.8	126

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19	Magnetic Tagging Increases Delivery of Circulating Progenitors in Vascular Injury. JACC: Cardiovascular Interventions, 2009, 2, 794-802.	2.9	124
20	Superparamagnetic iron oxide nanoparticle targeting of MSCs in vascular injury. Biomaterials, 2013, 34, 1987-1994.	11.4	124
21	fMRI response to blue light delivery in the naÃ¯ve brain: Implications for combined optogenetic fMRI studies. NeuroImage, 2013, 66, 634-641.	4.2	122
22	Acupuncture needling sensation: The neural correlates of deqi using fMRI. Brain Research, 2010, 1315, 111-118.	2.2	113
23	The measurement of diffusion and perfusion in biological systems using magnetic resonance imaging. Physics in Medicine and Biology, 2000, 45, R97-R138.	3.0	112
24	Non-invasive imaging of CSF-mediated brain clearance pathways via assessment of perivascular fluid movement with diffusion tensor MRI. ELife, 2018, 7, .	6.0	112
25	Targeted magnetic delivery and tracking of cells using a magnetic resonance imaging system. Biomaterials, 2010, 31, 5366-5371.	11.4	109
26	The Chronic Vascular and Haemodynamic Response after Permanent Bilateral Common Carotid Occlusion in Newborn and Adult Rats. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 1066-1075.	4.3	108
27	Goldâ€“silica quantum rattles for multimodal imaging and therapy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1959-1964.	7.1	107
28	Amniotic Fluid Stem Cells Are Cardioprotective Following Acute Myocardial Infarction. Stem Cells and Development, 2011, 20, 1985-1994.	2.1	104
29	An MRAS, SHOC2, and SCRIB Complex Coordinates ERK Pathway Activation with Polarity and Tumorigenic Growth. Molecular Cell, 2013, 52, 679-692.	9.7	96
30	Non-invasive MRI of brain clearance pathways using multiple echo time arterial spin labelling: an aquaporin-4 study. NeuroImage, 2019, 188, 515-523.	4.2	92
31	Computational fluid dynamics with imaging of cleared tissue and of in vivo perfusion predicts drug uptake and treatment responses in tumours. Nature Biomedical Engineering, 2018, 2, 773-787.	22.5	91
32	A One-Pot Three-Component Radiochemical Reaction for Rapid Assembly of ¹²⁵I-Labeled Molecular Probes. Journal of the American Chemical Society, 2013, 135, 703-709.	13.7	86
33	In Vitro and In Vivo Cardiomyogenic Differentiation of Amniotic Fluid Stem Cells. Stem Cell Reviews and Reports, 2011, 7, 364-380.	5.6	82
34	Control of ventricular excitability by neurons of the dorsal motor nucleus of the vagus nerve. Heart Rhythm, 2015, 12, 2285-2293.	0.7	82
35	In vivo imaging of tau pathology using multi-parametric quantitative MRI. NeuroImage, 2015, 111, 369-378.	4.2	77
36	Brain imaging of acupuncture: Comparing superficial with deep needling. Neuroscience Letters, 2008, 434, 144-149.	2.1	73

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37	In vivo photoacoustic imaging of mouse embryos. Journal of Biomedical Optics, 2012, 17, 061220.	2.6	71
38	Incorporation of paramagnetic, fluorescent and PET/SPECT contrast agents into liposomes for multimodal imaging. Biomaterials, 2013, 34, 1179-1192.	11.4	69
39	Implementation of quantitative FAIR perfusion imaging with a short repetition time in time-course studies. Magnetic Resonance in Medicine, 1999, 41, 829-840.	3.0	68
40	Nanoparticles functionalised with recombinant single chain Fv antibody fragments (scFv) for the magnetic resonance imaging of cancer cells. Biomaterials, 2010, 31, 1307-1315.	11.4	68
41	Thymosin Î²4-sulfoxide attenuates inflammatory cell infiltration and promotes cardiac wound healing. Nature Communications, 2013, 4, 2081.	12.8	66
42	Effects of diffusion anisotropy on lesion delineation in a rat model of cerebral ischemia. Magnetic Resonance in Medicine, 1997, 38, 662-668.	3.0	65
43	Advanced cell therapies: targeting, tracking and actuation of cells with magnetic particles. Regenerative Medicine, 2015, 10, 757-772.	1.7	65
44	Mechanosensory Signaling in Astrocytes. Journal of Neuroscience, 2020, 40, 9364-9371.	3.6	61
45	Neuroprotective Effects of Virally Delivered HSPs in Experimental Stroke. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 371-381.	4.3	60
46	Automatic Structural Parcellation of Mouse Brain MRI Using Multi-Atlas Label Fusion. PLoS ONE, 2014, 9, e86576.	2.5	60
47	In vivo hadamard encoded continuous arterial spin labeling (H-CASL). Magnetic Resonance in Medicine, 2010, 63, 1111-1118.	3.0	58
48	Mitochondrial cyclophilin-D as a potential therapeutic target for post-myocardial infarction heart failure. Journal of Cellular and Molecular Medicine, 2011, 15, 2443-2451.	3.6	58
49	Magnetic resonance virtual histology for embryos: 3D atlases for automated high-throughput phenotyping. NeuroImage, 2011, 54, 769-778.	4.2	57
50	Neuroprotective effects of HSP70 overexpression after cerebral ischaemiaâ€"An MRI study. Experimental Neurology, 2005, 195, 257-266.	4.1	56
51	Sulfonium Salts as Leaving Groups for Aromatic Labelling of Drug-like Small Molecules with Fluorine-18. Scientific Reports, 2015, 5, 9941.	3.3	55
52	Vagal determinants of exercise capacity. Nature Communications, 2017, 8, 15097.	12.8	55
53	Impaired brain glymphatic flow in experimental hepatic encephalopathy. Journal of Hepatology, 2019, 70, 40-49.	3.7	55
54	Hyperthermia treatment of tumors by mesenchymal stem cell-delivered superparamagnetic iron oxide nanoparticles. International Journal of Nanomedicine, 2016, 11, 1973.	6.7	53

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55	A quantitative method for fast diffusion imaging using magnetization-prepared turboFLASH. Magnetic Resonance in Medicine, 1998, 39, 950-960.	3.0	50
56	Regional Variation of Cerebral Blood Flow and Arterial Transit Time in the Normal and Hypoperfused Rat Brain Measured Using Continuous Arterial Spin Labeling MRI. Journal of Cerebral Blood Flow and Metabolism, 2006, 26, 274-282.	4.3	50
57	Multifunctional receptor-targeted nanocomplexes for the delivery of therapeutic nucleic acids to the Brain. Biomaterials, 2013, 34, 9190-9200.	11.4	49
58	A Critical Role for Purinergic Signalling in the Mechanisms Underlying Generation of BOLD fMRI Responses. Journal of Neuroscience, 2015, 35, 5284-5292.	3.6	49
59	Mutation of the Diamond-Blackfan Anemia Gene Rps7 in Mouse Results in Morphological and Neuroanatomical Phenotypes. PLoS Genetics, 2013, 9, e1003094.	3.5	47
60	PEGylation improves the receptor-mediated transfection efficiency of peptide-targeted, self-assembling, anionic nanocomplexes. Journal of Controlled Release, 2014, 174, 177-187.	9.9	47
61	Overexpression of Heat Shock Protein 27 Reduces Cortical Damage after Cerebral Ischemia. Journal of Cerebral Blood Flow and Metabolism, 2010, 30, 849-856.	4.3	45
62	Loss ofProx1in striated muscle causes slow to fast skeletal muscle fiber conversion and dilated cardiomyopathy. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 9515-9520.	7.1	45
63	Dexamethasone exacerbates cerebral edema and brain injury following lithium-pilocarpine induced status epilepticus. Neurobiology of Disease, 2014, 63, 229-236.	4.4	45
64	Tissue magnetic susceptibility mapping as a marker of tau pathology in Alzheimer's disease. NeuroImage, 2017, 159, 334-345.	4.2	45
65	Reduction of errors in ASL cerebral perfusion and arterial transit time maps using image deâ€noising. Magnetic Resonance in Medicine, 2010, 64, 715-724.	3.0	43
66	Acute changes in MRI diffusion, perfusion,T1, andT2 in a rat model of oligemia produced by partial occlusion of the middle cerebral artery. Magnetic Resonance in Medicine, 2000, 44, 706-712.	3.0	42
67	In vivo magnetic resonance imaging of endogenous neuroblasts labelled with a ferumoxideâ€“polycation complex. NeuroImage, 2009, 44, 1239-1246.	4.2	42
68	A coming of age: advanced imaging technologies for characterising the developing mouse. Trends in Genetics, 2013, 29, 700-711.	6.7	42
69	Imaging the accumulation and suppression of tau pathology using multiparametric MRI. Neurobiology of Aging, 2016, 39, 184-194.	3.1	42
70	Origins of the vagal drive controlling left ventricular contractility. Journal of Physiology, 2016, 594, 4017-4030.	2.9	42
71	Assessment of Tumor Redox Status through (S)-4-(3-[18F]fluoropropyl)-<scp>L</scp>-Glutamic Acid PET Imaging of System xcâ^' Activity. Cancer Research, 2022, 79, 853-863.	0.9	42
72	pHâ€Activatable MnOâ€Based Fluorescence and Magnetic Resonance Bimodal Nanoprobe for Cancer Imaging. Advanced Healthcare Materials, 2016, 5, 721-729.	7.6	40

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73	Measuring Biexponential Transverse Relaxation of the ASL Signal at 9.4 T to Estimate Arterial Oxygen Saturation and the Time of Exchange of Labeled Blood Water into Cortical Brain Tissue. Journal of Cerebral Blood Flow and Metabolism, 2013, 33, 215-224.	4.3	39
74	fMRI mapping of the visual system in the mouse brain with interleaved snapshot GE-EPI. NeuroImage, 2016, 139, 337-345.	4.2	38
75	Planar cell polarity genes Celsr1 and Vangl2 are necessary for kidney growth, differentiation, and rostrocaudal patterning. Kidney International, 2016, 90, 1274-1284.	5.2	37
76	Comparison of In Vivo and Ex Vivo MRI for the Detection of Structural Abnormalities in a Mouse Model of Tauopathy. Frontiers in Neuroinformatics, 2017, 11, 20.	2.5	37
77	Neuroimaging of animal models of brain disease. British Medical Bulletin, 2003, 65, 235-257.	6.9	36
78	Proteome changes associated with hippocampal MRI abnormalities in the lithium pilocarpine-induced model of convulsive status epilepticus. Proteomics, 2007, 7, 1336-1344.	2.2	35
79	Myocardial regeneration: expanding the repertoire of thymosin Î²4 in the ischemic heart. Annals of the New York Academy of Sciences, 2012, 1269, 92-101.	3.8	35
80	Imaging seizure-induced inflammation using an antibody targeted iron oxide contrast agent. NeuroImage, 2012, 60, 1149-1155.	4.2	35
81	Estimation of pore size in a microstructure phantom using the optimised gradient waveform diffusion weighted NMR sequence. Journal of Magnetic Resonance, 2012, 214, 51-60.	2.1	35
82	Cardiac arterial spin labeling using segmented ECGâ€gated Lookâ€Locker FAIR: Variability and repeatability in preclinical studies. Magnetic Resonance in Medicine, 2013, 69, 238-247.	3.0	35
83	Structural abnormality of the hippocampus associated with depressive symptoms in heart failure rats. NeuroImage, 2015, 105, 84-92.	4.2	35
84	Potential of Magnetic Hyperthermia to Stimulate Localized Immune Activation. Small, 2021, 17, e2005241.	10.0	35
85	Effect of renal maturation on the clearance of technetium-99m mercaptoacetyltriglycine. European Journal of Nuclear Medicine and Molecular Imaging, 1994, 21, 1333-1337.	2.1	34
86	Quantitative MRI predicts status epilepticus-induced hippocampal injury in the lithiumâ€“pilocarpine rat model. Epilepsy Research, 2010, 88, 221-230.	1.6	34
87	Cardiac phenotyping in ex vivo murine embryos using ÂµMRI. NMR in Biomedicine, 2009, 22, 857-866.	2.8	33
88	Characterizing the Origin of the Arterial Spin Labelling Signal in MRI Using a Multiecho Acquisition Approach. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 1836-1845.	4.3	33
89	Cardiovascular Magnetic Resonance Imaging in Experimental Models. Open Cardiovascular Medicine Journal, 2010, 4, 278-292.	0.3	33
90	Lipid peptide nanocomplexes for gene delivery and magnetic resonance imaging in the brain. Journal of Controlled Release, 2012, 162, 340-348.	9.9	32

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91	Investigating Low-Velocity Fluid Flow in Tumors with Convection-MRI. Cancer Research, 2018, 78, 1859-1872.	0.9	32
92	Measurement of Tumor Antioxidant Capacity and Prediction of Chemotherapy Resistance in Preclinical Models of Ovarian Cancer by Positron Emission Tomography. Clinical Cancer Research, 2019, 25, 2471-2482.	7.0	32
93	Lung delivery of MSCs expressing anti-cancer protein TRAIL visualised with 89Zr-oxine PET-CT. Stem Cell Research and Therapy, 2020, 11, 256.	5.5	32
94	Hypertension in paediatrics: can pre- and post-captopril technetium-99m dimercaptosuccinie acid renal scans exclude renovascular disease?. European Journal of Nuclear Medicine and Molecular Imaging, 1993, 20, 699-702.	2.1	31
95	Assessment of various parameters in the estimation of differential renal function using technetium-99m mercaptoacetyltriglycine. European Journal of Nuclear Medicine and Molecular Imaging, 1999, 26, 155-162.	6.4	31
96	Magnetic cell delivery for peripheral arterial disease: A theoretical framework. Medical Physics, 2011, 38, 3932-3943.	3.0	29
97	Post-mortem cerebral magnetic resonance imaging T1 and T2 in fetuses, newborns and infants. European Journal of Radiology, 2012, 81, e232-e238.	2.6	29
98	Preferential Targeting of Disseminated Liver Tumors Using a Recombinant Adeno-Associated Viral Vector. Human Gene Therapy, 2015, 26, 94-103.	2.7	29
99	In vivo three-dimensional photoacoustic imaging of the renal vasculature in preclinical rodent models. American Journal of Physiology - Renal Physiology, 2018, 314, F1145-F1153.	2.7	29
100	Cancer invasion regulates vascular complexity in a three-dimensional biomimetic model. European Journal of Cancer, 2019, 119, 179-193.	2.8	29
101	Radio-metal cross-linking of alginate hydrogels for non-invasive in vivo imaging. Biomaterials, 2020, 243, 119930.	11.4	29
102	Noninvasive diffusion magnetic resonance imaging of brain tumour cell size for the early detection of therapeutic response. Scientific Reports, 2020, 10, 9223.	3.3	29
103	Comparison of segmentation methods for MRI measurement of cardiac function in rats. Journal of Magnetic Resonance Imaging, 2010, 32, 869-877.	3.4	28
104	Structural correlates of active-staining following magnetic resonance microscopy in the mouse brain. NeuroImage, 2011, 56, 974-983.	4.2	28
105	Rapid assessment of myocardial infarct size in rodents using multi-slice inversion recovery late gadolinium enhancement CMR at 9.4T. Journal of Cardiovascular Magnetic Resonance, 2011, 13, 44.	3.3	28
106	Amniotic Fluid Stem Cells Prevent Development of Ascites in a Neonatal Rat Model of Necrotizing Enterocolitis. European Journal of Pediatric Surgery, 2014, 24, 057-060.	1.3	28
107	Hydroxychloroquine Protects against Cardiac Ischaemia/Reperfusion Injury In Vivo via Enhancement of ERK1/2 Phosphorylation. PLoS ONE, 2015, 10, e0143771.	2.5	27
108	A critical role for the ATP-sensitive potassium channel subunit K_{IR}6.1 in the control of cerebral blood flow. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 2089-2095.	4.3	27

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109	B0dependence of the on-resonance longitudinal relaxation time in the rotating frame (T1Ï) in protein phantoms and rat brain in vivo. Magnetic Resonance in Medicine, 2004, 51, 4-8.	3.0	26
110	Longitudinal in vivo MRI in a Huntingtonâ€™s disease mouse model: Global atrophy in the absence of white matter microstructural damage. Scientific Reports, 2016, 6, 32423.	3.3	26
111	Longitudinal Photoacoustic Imaging of the Pharmacodynamic Effect of Vascular Targeted Therapy on Tumors. Clinical Cancer Research, 2019, 25, 7436-7447.	7.0	26
112	Is Your System Calibrated? MRI Gradient System Calibration for Pre-Clinical, High-Resolution Imaging. PLoS ONE, 2014, 9, e96568.	2.5	26
113	Protective Effect of Post-Ischaemic Viral Delivery of Heat Shock Proteins in vivo. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 254-263.	4.3	25
114	Multifunctional receptor-targeted nanocomplexes for magnetic resonance imaging and transfection of tumours. Biomaterials, 2012, 33, 7241-7250.	11.4	25
115	Increased Cerebral Vascular Reactivity in the Tau Expressing rTg4510 Mouse: Evidence against the Role of Tau Pathology to Impair Vascular Health in Alzheimer's Disease. Journal of Cerebral Blood Flow and Metabolism, 2015, 35, 359-362.	4.3	25
116	Bone marrow mononuclear cells reduce myocardial reperfusion injury by activating the PI3K/Akt survival pathway. Atherosclerosis, 2010, 213, 67-76.	0.8	24
117	Chemically Treated 3D Printed Polymer Scaffolds for Biomineral Formation. ACS Omega, 2018, 3, 4342-4351.	3.5	24
118	High-Fidelity Meshes from Tissue Samples for Diffusion MRI Simulations. Lecture Notes in Computer Science, 2010, 13, 404-411.	1.3	24
119	Estimation and relevance of depth correction in paediatric renal studies. European Journal of Nuclear Medicine and Molecular Imaging, 1998, 25, 115-119.	6.4	23
120	Simultaneous noninvasive measurement of CBF and CBV using double-echo FAIR (DEFAIR). Magnetic Resonance in Medicine, 2001, 45, 853-863.	3.0	23
121	MR image-guided investigation of regional signal transducers and activators of transcription-1 activation in a rat model of focal cerebral ischemia. Neuroscience, 2004, 127, 333-339.	2.3	23
122	In vivo measurement of the longitudinal relaxation time of arterial blood (T1a) in the mouse using a pulsed arterial spin labeling approach. Magnetic Resonance in Medicine, 2006, 55, 943-947.	3.0	23
123	Magnetic hyperthermia controlled drug release in the GI tract: solving the problem of detection. Scientific Reports, 2016, 6, 34271.	3.3	23
124	CO2 signaling mediates neurovascular coupling in the cerebral cortex. Nature Communications, 2022, 13, 2125.	12.8	23
125	Viable and fixed white matter: Diffusion magnetic resonance comparisons and contrasts at physiological temperature. Magnetic Resonance in Medicine, 2014, 72, 1151-1161.	3.0	22
126	Early microgliosis precedes neuronal loss and behavioural impairment in mice with a frontotemporal dementia-causing CHMP2B mutation. Human Molecular Genetics, 2017, 26, ddx003.	2.9	22

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127	Study the Longitudinal in vivo and Cross-Sectional ex vivo Brain Volume Difference for Disease Progression and Treatment Effect on Mouse Model of Tauopathy Using Automated MRI Structural Parcellation. Frontiers in Neuroscience, 2019, 13, 11.	2.8	22
128	Selective Interleukin-6 Trans-Signaling Blockade Is More Effective Than Panantagonism in Reperfused MyocardialÂInfarction. JACC Basic To Translational Science, 2021, 6, 431-443.	4.1	22
129	The relationship between magnetic resonance diffusion imaging and autoradiographic markers of cerebral blood flow and hypoxia in an animal stroke model. Magnetic Resonance in Medicine, 1999, 41, 706-714.	3.0	20
130	Bimodal Imaging of Inflammation with SPECT/CT and MRI Using Iodine-125 Labeled VCAM-1 Targeting Microparticle Conjugates. Bioconjugate Chemistry, 2015, 26, 1542-1549.	3.6	20
131	Caval Subtraction 2D Phase-Contrast MRI to Measure Total Liver and Hepatic Arterial Blood Flow. Investigative Radiology, 2017, 52, 170-176.	6.2	20
132	Increased bloodâ€“brain barrier permeability to water in the aging brain detected using noninvasive multiâ€TE ASL MRI. Magnetic Resonance in Medicine, 2021, 85, 326-333.	3.0	20
133	Comparative Study of the FAIR Technique of Perfusion Quantification with the Hydrogen Clearance Method. Journal of Cerebral Blood Flow and Metabolism, 2003, 23, 689-699.	4.3	19
134	Development of [¹⁸F]AldoView as the First Highly Selective Aldosterone Synthase PET Tracer for Imaging of Primary Hyperaldosteronism. Journal of Medicinal Chemistry, 2021, 64, 9321-9329.	6.4	19
135	Fully-Automated Î¼MRI Morphometric Phenotyping of the Tc1 Mouse Model of Down Syndrome. PLoS ONE, 2016, 11, e0162974.	2.5	19
136	Hepatic arterial spin labelling MRI: an initial evaluation in mice. NMR in Biomedicine, 2015, 28, 272-280.	2.8	18
137	Development of Fluorine-18 Labeled Metabolically Activated Tracers for Imaging of Drug Efflux Transporters with Positron Emission Tomography. Journal of Medicinal Chemistry, 2015, 58, 6058-6080.	6.4	18
138	Coordination chemistry of amide-functionalised tetraazamacrocycles: structural, relaxometric and cytotoxicity studies. Dalton Transactions, 2010, 39, 10056.	3.3	17
139	Quantification of light attenuation in optically cleared mouse brains. Journal of Biomedical Optics, 2015, 20, 080503.	2.6	17
140	Vascular assessment of liver diseaseâ€”towards a new frontier in MRI. British Journal of Radiology, 2016, 89, 20150675.	2.2	17
141	Optic nerve thinning and neurosensory retinal degeneration in the rTg4510 mouse model of frontotemporal dementia. Acta Neuropathologica Communications, 2019, 7, 4.	5.2	17
142	Monitoring the Growth of an Orthotopic Tumour Xenograft Model: Multi-Modal Imaging Assessment with Benchtop MRI (1T), High-Field MRI (9.4T), Ultrasound and Bioluminescence. PLoS ONE, 2016, 11, e0156162.	2.5	17
143	Rapid Simultaneous Mapping of T2 and T2* by Multiple Acquisition of Spin and Gradient Echoes Using Interleaved Echo Planar Imaging (MASAGE-IEPI). NeuroImage, 2002, 15, 992-1002.	4.2	16
144	A viable isolated tissue system: A tool for detailed MR measurements and controlled perturbation in physiologically stable tissue. Magnetic Resonance in Medicine, 2013, 69, 1603-1610.	3.0	16

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145	Multislice cardiac arterial spin labeling using improved myocardial perfusion quantification with simultaneously measured blood pool input function. Magnetic Resonance in Medicine, 2013, 70, 1125-1136.	3.0	16
146	Detecting intratumoral heterogeneity of EGFR activity by liposome-based in vivo transfection of a fluorescent biosensor. Oncogene, 2017, 36, 3618-3628.	5.9	16
147	Cerebrovascular Reactivity Following Focal Brain Ischemia in the Rat: A Functional Magnetic Resonance Imaging Study. NeuroImage, 2001, 13, 339-350.	4.2	15
148	Development of Purine-Derived ¹⁸F-Labeled Pro-drug Tracers for Imaging of MRP1 Activity with PET. Journal of Medicinal Chemistry, 2014, 57, 1023-1032.	6.4	15
149	Decomposition of spontaneous fluctuations in tumour oxygenation using BOLD MRI and independent component analysis. British Journal of Cancer, 2015, 113, 1168-1177.	6.4	15
150	Using the robust principal component analysis algorithm to remove RF spike artifacts from MR images. Magnetic Resonance in Medicine, 2016, 75, 2517-2525.	3.0	15
151	Non-invasive MRI biomarkers for the early assessment of iron overload in a humanized mouse model of Î²-thalassemia. Scientific Reports, 2017, 7, 43439.	3.3	15
152	Surface radio-mineralisation mediates chelate-free radiolabelling of iron oxide nanoparticles. Chemical Science, 2019, 10, 2592-2597.	7.4	15
153	Reperfusion in a Gerbil Model of Forebrain Ischemia Using Serial Magnetic Resonance FAIR Perfusion Imaging. Stroke, 1999, 30, 1263-1270.	2.0	14
154	Understanding and optimizing the amplitude modulated control for multiple-slice continuous arterial spin labeling. Magnetic Resonance in Medicine, 2005, 54, 594-604.	3.0	14
155	Segmentation propagation using a 3D embryo atlas for highâ€throughput MRI phenotyping: Comparison and validation with manual segmentation. Magnetic Resonance in Medicine, 2013, 69, 877-883.	3.0	14
156	Significant Therapeutic Efficacy with Combined Radioimmunotherapy and Cetuximab in Preclinical Models of Colorectal Cancer. Journal of Nuclear Medicine, 2015, 56, 1239-1245.	5.0	14
157	Multi-modal imaging probe for assessing the efficiency of stem cell delivery to orthotopic breast tumours. Nanoscale, 2020, 12, 16570-16585.	5.6	14
158	Autoradiographic imaging of cerebral ischaemia using a combination of blood flow and hypoxic markers in an animal model. European Journal of Nuclear Medicine and Molecular Imaging, 1997, 24, 16-20.	2.1	13
159	High resolution MRI reveals global changes in brains of Cln3 mutant mice. European Journal of Paediatric Neurology, 2001, 5, 103-107.	1.6	13
160	Rapid magnetic cell delivery for large tubular bioengineered constructs. Journal of the Royal Society Interface, 2012, 9, 3008-3016.	3.4	13
161	Acute changes in liver tumour perfusion measured non-invasively with arterial spin labelling. British Journal of Cancer, 2016, 114, 897-904.	6.4	13
162	Estimation of contrast agent bolus arrival delays for improved reproducibility of liver DCE MRI. Physics in Medicine and Biology, 2016, 61, 6905-6918.	3.0	12

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163	Volumetric Spatial Correlations of Neurovascular Coupling Studied using Single Pulse Opto-fMRI. Scientific Reports, 2017, 7, 41583.	3.3	12
164	Remote and Selective Control of Astrocytes by Magnetomechanical Stimulation. Advanced Science, 2022, 9, e2104194.	11.2	12
165	MRI of Animal Models of Brain Disease. Methods in Enzymology, 2004, 386, 149-177.	1.0	11
166	Quantifying the area-at-risk of myocardial infarction in-vivo using arterial spin labeling cardiac magnetic resonance. Scientific Reports, 2017, 7, 2271.	3.3	11
167	Scalable magnet geometries enhance tumour targeting of magnetic nano-carriers. Materials and Design, 2020, 191, 108610.	7.0	11
168	Pharmacological MRI with Simultaneous Measurement of Cerebral Perfusion and Blood-Cerebrospinal Fluid Barrier Function using Interleaved Echo-Time Arterial Spin Labelling. NeuroImage, 2021, 238, 118270.	4.2	11
169	Two-Compartment Models of the Diffusion MR Signal in Brain White Matter. Lecture Notes in Computer Science, 2009, 12, 329-336.	1.3	11
170	The importance of RF bandwidth for effective tagging in pulsed arterial spin labeling MRI at 9.4T. NMR in Biomedicine, 2012, 25, 1139-1143.	2.8	10
171	Enhanced tissue differentiation in the developing mouse brain using magnetic resonance microâ€histology. Magnetic Resonance in Medicine, 2013, 70, 1380-1388.	3.0	10
172	Aberrant developmental titin splicing and dysregulated sarcomere length in Thymosin Î²4 knockout mice. Journal of Molecular and Cellular Cardiology, 2017, 102, 94-107.	1.9	10
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