Alan P Koretsky

List of Publications by Year
in descending order

224	19,660	14653 66	11607 135
papers	citations	h-index	g-index

233	233	233	16307
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Perfusion imaging. Magnetic Resonance in Medicine, 1992, 23, 37-45.	3.0	1,562
2	Magnetic resonance imaging of perfusion using spin inversion of arterial water.. Proceedings of the National Academy of Sciences of the United States of America, 1992, 89, 212-216.	7.1	1,423
3	In vivo detection of single cells by MRI. Magnetic Resonance in Medicine, 2006, 55, 242-249.	3.0	773
4	Dilated Cardiomyopathy in Transgenic Mice With Cardiac-Specific Overexpression of Tumor Necrosis Factor-Î±. Circulation Research, 1997, 81, 627-635.	4.5	694
5	High-field MRI of brain cortical substructure based on signal phase. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11796-11801.	7.1	610
6	Induction and apoptotic regression of lung adenocarcinomas by regulation of a K-Ras transgene in the presence and absence of tumor suppressor genes. Genes and Development, 2001, 15, 3249-3262.	5.9	544
7	MRI detection of single particles for cellular imaging. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10901-10906.	7.1	468
8	Transcranial amelioration of inflammation and cell death after brain injury. Nature, 2014, 505, 223-228.	27.8	464
9	Manganese ion enhances T₁â€weighted MRI during brain activation: An approach to direct imaging of brain function. Magnetic Resonance in Medicine, 1997, 38, 378-388.	3.0	459
10	Manganeseâ€enhanced magnetic resonance imaging (MEMRI): methodological and practical considerations. NMR in Biomedicine, 2004, 17, 532-543.	2.8	457
11	In vivo neuronal tract tracing using manganese-enhanced magnetic resonance imaging. Magnetic Resonance in Medicine, 1998, 40, 740-748.	3.0	434
12	Microvascular Injury in the Brains of Patients with Covid-19. New England Journal of Medicine, 2021, 384, 481-483.	27.0	421
13	Highly efficient endosomal labeling of progenitor and stem cells with large magnetic particles allows magnetic resonance imaging of single cells. Blood, 2003, 102, 867-872.	1.4	404
14	Tissue specific perfusion imaging using arterial spin labeling. NMR in Biomedicine, 1994, 7, 75-82.	2.8	301
15	Sizing it up: Cellular MRI using micron-sized iron oxide particles. Magnetic Resonance in Medicine, 2005, 53, 329-338.	3.0	287
16	Detection of Single Mammalian Cells by High-Resolution Magnetic Resonance Imaging. Biophysical Journal, 1999, 76, 103-109.	0.5	268
17	In vivo detection of neuroarchitecture in the rodent brain using manganese-enhanced MRI. NeuroImage, 2004, 22, 1046-1059.	4.2	246
18	Laminar specificity of functional MRI onset times during somatosensory stimulation in rat. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 15182-15187.	7.1	244

#	Article	IF	Citations
19	Tracing Odor-Induced Activation in the Olfactory Bulbs of Mice Using Manganese-Enhanced Magnetic Resonance Imaging. NeuroImage, 2002, 16, 441-448.	4.2	225
20	Opportunities in Interventional and Diagnostic Imaging by Using High-Performance Low-Field-Strength MRI. Radiology, 2019, 293, 384-393.	7.3	224
21	The role of creatine kinase in inhibition of mitochondrial permeability transition. FEBS Letters, 1997, 414, 253-257.	2.8	219
22	Manganeseâ€enhanced magnetic resonance imaging (MEMRI). NMR in Biomedicine, 2004, 17, 527-531.	2.8	217
23	Functional Reactivity of Cerebral Capillaries. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 961-972.	4.3	189
24	Effects of fatiguing exercise on high-energy phosphates, force, and EMG: Evidence for three phases of recovery. Muscle and Nerve, 1987, 10, 810-821.	2.2	161
25	Manganese-enhanced magnetic resonance imaging of mouse brain after systemic administration of MnCl2: Dose-dependent and temporal evolution ofT1 contrast. Magnetic Resonance in Medicine, 2005, 53, 640-648.	3.0	154
26	Detecting response of rat C6 glioma tumors to radiotherapy using hyperpolarized [1â€¹³C]pyruvate and ¹³C magnetic resonance spectroscopic imaging. Magnetic Resonance in Medicine, 2011, 65, 557-563.	3.0	152
27	Deciphering laminar-specific neural inputs with line-scanning fMRI. Nature Methods, 2014, 11, 55-58.	19.0	152
28	Imaging cortical anatomy by high-resolution MR at 3.0T: Detection of the stripe of Gennari in visual area 17. Magnetic Resonance in Medicine, 2002, 48, 735-738.	3.0	151
29	High-Resolution Mapping of Tumor Redox Status by Magnetic Resonance Imaging Using Nitroxides as Redox-Sensitive Contrast Agents. Clinical Cancer Research, 2006, 12, 2455-2462.	7.0	151
30	Multiâ€Slice MRI of Rat Brain Perfusion During Amphetamine Stimulation Using Arterial Spin Labeling. Magnetic Resonance in Medicine, 1995, 33, 209-214.	3.0	149
31	NMR Measurement of Perfusion Using Arterial Spin Labeling Without Saturation of Macromolecular Spins. Magnetic Resonance in Medicine, 1995, 33, 370-376.	3.0	147
32	Measurement of rat brain perfusion by NMR using spin labeling of arterial water:In vivo determination of the degree of spin labeling. Magnetic Resonance in Medicine, 1993, 29, 416-421.	3.0	142
33	NMR detection of creatine kinase expressed in liver of transgenic mice: determination of free ADP levels.. Proceedings of the National Academy of Sciences of the United States of America, 1990, 87, 3112-3116.	7.1	138
34	Respiratory control in the glucose perfused heart. FEBS Letters, 1987, 221, 270-276.	2.8	137
35	Magnetic resonance imaging of the migration of neuronal precursors generated in the adult rodent brain. NeuroImage, 2006, 32, 1150-1157.	4.2	137
36	Measurement of brain perfusion by volume-localized NMR spectroscopy using inversion of arterial water spins: Accounting for transit time and cross-relaxation. Magnetic Resonance in Medicine, 1992, 25, 362-371.	3.0	128

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37	Extensive heterogeneity in white matter intensity in high-resolution T2*-weighted MRI of the human brain at 7.0 T. NeuroImage, 2006, 32, 1032-1040.	4.2	128
38	Dynamic activityâ€induced manganeseâ€dependent contrast magnetic resonance imaging (DAIM MRI). Magnetic Resonance in Medicine, 2002, 48, 927-933.	3.0	126
39	Functional MRI impulse response for BOLD and CBV contrast in rat somatosensory cortex. Magnetic Resonance in Medicine, 2007, 57, 1110-1118.	3.0	126
40	31P NMR spectroscopy of rat organs, in situ, using chronically implanted radiofrequency coils.. Proceedings of the National Academy of Sciences of the United States of America, 1983, 80, 7491-7495.	7.1	121
41	Manganese-enhanced MRI of mouse heart during changes in inotropy. Magnetic Resonance in Medicine, 2001, 46, 884-890.	3.0	121
42	Micro-engineered local field control for high-sensitivity multispectral MRI. Nature, 2008, 453, 1058-1063.	27.8	121
43	Spatial flow-volume dissociation of the cerebral microcirculatory response to mild hypercapnia. NeuroImage, 2006, 32, 520-530.	4.2	118
44	Temporal dynamics of the BOLD fMRI impulse response. NeuroImage, 2005, 24, 667-677.	4.2	110
45	Near-simultaneous hemoglobin saturation and oxygen tension maps in mouse brain using an AOTF microscope. Biophysical Journal, 1997, 73, 1223-1231.	0.5	109
46	Mapping resting-state functional connectivity using perfusion MRI. NeuroImage, 2008, 40, 1595-1605.	4.2	109
47	Cardiac MRI of the normal and hypertrophied mouse heart. Magnetic Resonance in Medicine, 1998, 39, 980-987.	3.0	106
48	Estimation of water extraction fractions in rat brain using magnetic resonance measurement of perfusion with arterial spin labeling. Magnetic Resonance in Medicine, 1997, 37, 58-68.	3.0	102
49	Sensory and optogenetically driven single-vessel fMRI. Nature Methods, 2016, 13, 337-340.	19.0	98
50	Functional MRI of the rodent somatosensory pathway using multislice echo planar imaging. Magnetic Resonance in Medicine, 2004, 52, 89-99.	3.0	97
51	Targeting neural precursors in the adult brain rescues injured dopamine neurons. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13570-13575.	7.1	93
52	Evidence for the exchange of arterial spin-labeled water with tissue water in rat brain from diffusion-sensitized measurements of perfusion. Magnetic Resonance in Medicine, 1997, 38, 232-237.	3.0	92
53	Imaging Transgenic Animals. Annual Review of Biomedical Engineering, 1999, 1, 611-648.	12.3	92
54	MRI of the basement membrane using charged nanoparticles as contrast agents. Magnetic Resonance in Medicine, 2008, 60, 564-574.	3.0	90

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55	Changes in pyridine nucleotide levels alter oxygen consumption and extra-mitochondrial phosphates in isolated mitochondria: A 31P-NMR and NAD(P)H fluorescence study. Biochimica Et Biophysica Acta - Bioenergetics, 1987, 893, 398-408.	1.0	89
56	Direct imaging of macrovascular and microvascular contributions to BOLD fMRI in layers IVâ€“V of the rat whiskerâ€“barrel cortex. NeuroImage, 2012, 59, 1451-1460.	4.2	89
57	Magnetic resonance imaging of perfusion in the isolated rat heart using spin inversion of arterial water. Magnetic Resonance in Medicine, 1993, 30, 361-365.	3.0	88
58	Brain Redox Imaging Using Bloodâ€”Brain Barrier-Permeable Nitroxide MRI Contrast Agent. Journal of Cerebral Blood Flow and Metabolism, 2008, 28, 1165-1174.	4.3	86
59	Cell labeling for magnetic resonance imaging with theT1 agent manganese chloride. NMR in Biomedicine, 2006, 19, 50-59.	2.8	77
60	Improved neuronal tract tracing using manganese enhanced magnetic resonance imaging with fastT1 mapping. Magnetic Resonance in Medicine, 2006, 55, 604-611.	3.0	77
61	BOLD and CBV-weighted functional magnetic resonance imaging of the rat somatosensory system. Magnetic Resonance in Medicine, 2006, 55, 316-324.	3.0	76
62	Characterization of T₂* heterogeneity in human brain white matter. Magnetic Resonance in Medicine, 2009, 62, 1652-1657.	3.0	76
63	Functional MRI detection of bilateral cortical reorganization in the rodent brain following peripheral nerve deafferentation. NeuroImage, 2007, 37, 262-273.	4.2	75
64	Thalamocortical Inputs Show Post-Critical-Period Plasticity. Neuron, 2012, 74, 731-742.	8.1	73
65	Orientation-specific responses to sustained uniaxial stretching in focal adhesion growth and turnover. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E2352-61.	7.1	73
66	Octameric mitochondrial creatine kinase induces and stabilizes contact sites between the inner and outer membrane. Biochemical Journal, 2005, 385, 445-450.	3.7	72
67	Detection of cortical laminar architecture using manganese-enhanced MRI. Journal of Neuroscience Methods, 2008, 167, 246-257.	2.5	72
68	Perfusion imaging using dynamic arterial spin labeling (DASL). Magnetic Resonance in Medicine, 2001, 45, 1021-1029.	3.0	69
69	In vivo labeling of adult neural progenitors for MRI with micron sized particles of iron oxide: Quantification of labeled cell phenotype. NeuroImage, 2009, 44, 671-678.	4.2	68
70	Ipsilateral cortical fMRI responses after peripheral nerve damage in rats reflect increased interneuron activity. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 14114-14119.	7.1	67
71	Changes in the mitochondrial proteome from mouse hearts deficient in creatine kinase. Physiological Genomics, 2001, 6, 117-128.	2.3	64
72	Detection of inflammation following renal ischemia by magnetic resonance imaging. Kidney International, 2003, 64, 43-51.	5.2	64

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73	Phosphorus-31 NMR saturation transfer measurements of phosphorus exchange reactions in rat heart and kidney in situ. Biochemistry, 1986, 25, 77-84.	2.5	63
74	Cocaine Increases the Intracellular Calcium Concentration in Brain Independently of Its Cerebrovascular Effects. Journal of Neuroscience, 2006, 26, 11522-11531.	3.6	61
75	Manganese enhanced MRI reveals functional circuitry in response to odorant stimuliâˆ†. NeuroImage, 2009, 44, 363-372.	4.2	61
76	Antibody-mediated cell labeling of peripheral T cells with micron-sized iron oxide particles (MPIOs) allows single cell detection by MRI. Contrast Media and Molecular Imaging, 2007, 2, 147-153.	0.8	60
77	Fluorescence measurement of calcium transients in perfused rabbit heart using rhod 2. American Journal of Physiology - Heart and Circulatory Physiology, 1998, 274, H728-H741.	3.2	59
78	Î±-Adrenergic response and myofilament activity in mouse hearts lacking PKC phosphorylation sites on cardiac TnI. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 282, H2397-H2405.	3.2	59
79	MRI detection of ferritin iron overload and associated neuronal pathology in iron regulatory protein-2 knockout mice. Brain Research, 2003, 971, 95-106.	2.2	57
80	Convertible manganese contrast for molecular and cellular MRI. Magnetic Resonance in Medicine, 2008, 60, 265-269.	3.0	55
81	Temporal changes in the T₁ and T₂ relaxation rates (Î”R₁ and Î”R₂) in the rat brain are consistent with the tissueâ€clearance rates of elemental manganese. Magnetic Resonance in Medicine, 2009, 61, 1528-1532.	3.0	55
82	Synchronized Astrocytic Ca2+ Responses in Neurovascular Coupling during Somatosensory Stimulation and for the Resting State. Cell Reports, 2018, 23, 3878-3890.	6.4	55
83	Shape-changing magnetic assemblies as high-sensitivity NMR-readable nanoprobes. Nature, 2015, 520, 73-77.	27.8	53
84	Perfusion imaging of the rat kidney with MR.. Radiology, 1994, 190, 813-818.	7.3	51
85	Magnetic nanoclusters with hydrophilic spacing for dual drug delivery and sensitive magnetic resonance imaging. Journal of Materials Chemistry B, 2013, 1, 1142.	5.8	51
86	The Use of Silica Coated MnO Nanoparticles to Control MRI Relaxivity in Response to Specific Physiological Changes. Biomaterials, 2012, 33, 3560-3567.	11.4	50
87	Role of oxygen vs. glucose in energy metabolism in a mammary carcinoma perfused ex vivo: direct measurement by 31P NMR.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 2646-2650.	7.1	49
88	Controlled Aggregation of Ferritin to Modulate MRI Relaxivity. Biophysical Journal, 2008, 95, 342-351.	0.5	49
89	Low-frequency calcium oscillations accompany deoxyhemoglobin oscillations in rat somatosensory cortex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E4677-86.	7.1	49
90	Detection of Exchange Reactions Involving Small Metabolite Pools Using NMR Magnetization Transfer Techniques: Relevance to Subcellular Compartmentation of Creatine Kinase. Magnetic Resonance in Medicine, 1985, 2, 586-594.	3.0	48

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91	Creatine and cyclocreatine treatment of human colon adenocarcinoma xenografts: 31P and 1H magnetic resonance spectroscopic studies. British Journal of Cancer, 1999, 79, 278-285.	6.4	48
92	An in Vivo NMR probe circuit for improved sensitivity. Journal of Magnetic Resonance, 1983, 54, 526-532.	0.5	46
93	Ischemic dysfunction in transgenic mice expressing troponin I lacking protein kinase C phosphorylation sites. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H835-H843.	3.2	45
94	Noninvasive imaging of the functional effects of anti-VEGF therapy on tumor cell extravasation and regional blood volume in an experimental brain metastasis model. Clinical and Experimental Metastasis, 2009, 26, 403-414.	3.3	45
95	Layer specific tracing of corticocortical and thalamocortical connectivity in the rodent using manganese enhanced MRI. NeuroImage, 2009, 44, 923-931.	4.2	45
96	Manganese Enhanced Magnetic Resonance Imaging. Current Pharmaceutical Biotechnology, 2004, 5, 529-537.	1.6	45
97	Contrast-Enhanced In Vivo Imaging of Breast and Prostate Cancer Cells by MRI. Cell Cycle, 2006, 5, 113-119.	2.6	44
98	EPR oxygen imaging and hyperpolarized ¹³C MRI of pyruvate metabolism as noninvasive biomarkers of tumor treatment response to a glycolysis inhibitor 3â€bromopyruvate. Magnetic Resonance in Medicine, 2013, 69, 1443-1450.	3.0	44
99	Perfusion analysis using dynamic arterial spin labeling (DASL). Magnetic Resonance in Medicine, 1999, 41, 299-308.	3.0	42
100	Controlled transport of magnetic particles using soft magnetic patterns. Applied Physics Letters, 2008, 93, 203901.	3.3	42
101	Calibration of the calcium dissociation constant of Rhod2in the perfused mouse heartusing manganese quenching. Cell Calcium, 2001, 29, 217-227.	2.4	41
102	In situ 31P nuclear magnetic resonance for observation of polyphosphate and catabolite responses of chemostat-cultivated Saccharomyces cerevisiae after alkalinization. Applied and Environmental Microbiology, 1995, 61, 4448-4453.	3.1	41
103	The fabrication of uniform cylindrical nanoshells and their use as spectrally tunable MRI contrast agents. Nanotechnology, 2009, 20, 385301.	2.6	40
104	3D mapping of somatotopic reorganization with small animal functional MRI. NeuroImage, 2010, 49, 1667-1676.	4.2	40
105	Interpretation of 31P NMR saturation transfer experiments: what you can't see might confuse you. Focus on â€œStandard magnetic resonance-based measurements of the Piâ†'ATP rate do not index the rate of oxidative phosphorylation in cardiac and skeletal musclesâ€• American Journal of Physiology - Cell Physiology, 2011, 301, C12-C15.	4.6	40
106	Accounting for nonspecific enhancement in neuronal tract tracing using manganese enhanced magnetic resonance imaging. Magnetic Resonance Imaging, 2009, 27, 594-600.	1.8	38
107	Wireless Amplified Nuclear MR Detector (WAND) for High-Spatial-Resolution MR Imaging of Internal Organs: Preclinical Demonstration in a Rodent Model. Radiology, 2013, 268, 228-236.	7.3	38
108	Early development of arterial spin labeling to measure regional brain blood flow by MRI. NeuroImage, 2012, 62, 602-607.	4.2	35

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109	Combined myofibrillar and mitochondrial creatine kinase deficiency impairs mouse diaphragm isotonic function. Journal of Applied Physiology, 1997, 82, 1416-1423.	2.5	34
110	Transgenic livers expressing mitochondrial and cytosolic CK: mitochondrial CK modulates free ADP levels. American Journal of Physiology - Cell Physiology, 2002, 282, C338-C346.	4.6	33
111	Mapping Prefrontal CircuitsIn Vivowith Manganese-Enhanced Magnetic Resonance Imaging in Monkeys. Journal of Neuroscience, 2008, 28, 7637-7647.	3.6	33
112	Technological advances in MRI measurement of brain perfusion. Journal of Magnetic Resonance Imaging, 2005, 22, 751-753.	3.4	32
113	Noninvasive evaluation of liver repopulation by transplanted hepatocytes using31P MRS imaging in mice. Hepatology, 2006, 44, 1250-1258.	7.3	32
114	Differential effects of anesthetics on cocaineâ€™s pharmacokinetic and pharmacodynamic effects in brain. European Journal of Neuroscience, 2009, 30, 1565-1575.	2.6	32
115	Simultaneous Detection of Blood Volume, Oxygenation, and Intracellular Calcium Changes during Cerebral Ischemia and Reperfusion in vivo Using Diffuse Reflectance and Fluorescence. Journal of Cerebral Blood Flow and Metabolism, 2005, 25, 1078-1092.	4.3	31
116	Manganese enhanced magnetic resonance imaging of normal and ischemic canine heart. Magnetic Resonance in Medicine, 2005, 54, 196-200.	3.0	31
117	In vivo detection of individual glomeruli in the rodent olfactory bulb using manganese enhanced MRI. NeuroImage, 2010, 49, 1350-1356.	4.2	31
118	Rhod-2 based measurements of intracellular calcium in the perfused mouse heart: Cellular and subcellular localization and response to positive inotropy. Journal of Biomedical Optics, 2001, 6, 23.	2.6	29
119	<formula formulatype="inline"><tex Notation="TeX">B_1</tex> </formula> Homogenization in MRI by Multilayer Coupled Coils. IEEE Transactions on Medical Imaging, 2009, 28, 551-554.	8.9	29
120	Functional Equivalence of Creatine Kinase Isoforms in Mouse Skeletal Muscle. Journal of Biological Chemistry, 1997, 272, 17790-17794.	3.4	28
121	BOLD fMRI and somatosensory evoked potentials are well correlated over a broad range of frequency content of somatosensory stimulation of the rat forepaw. Brain Research, 2008, 1195, 67-76.	2.2	28
122	Anatomy, Functionality, and Neuronal Connectivity with Manganese Radiotracers for Positron Emission Tomography. Molecular Imaging and Biology, 2018, 20, 562-574.	2.6	28
123	Long-term optical imaging of neurovascular coupling in mouse cortex using GCaMP6f and intrinsic hemodynamic signals. NeuroImage, 2018, 165, 251-264.	4.2	28
124	NMR-Observed Phosphate Trafficking and Polyphosphate Dynamics in Wild-Type and vph1-1 Mutant Saccharomyces cerevisae in Response to Stresses. Biotechnology Progress, 1999, 15, 65-73.	2.6	27
125	Peripheral Sensory Deprivation Restores Critical-Period-like Plasticity to Adult Somatosensory Thalamocortical Inputs. Cell Reports, 2017, 19, 2707-2717.	6.4	26
126	Determination of renal molar concentrations of phosphorus-containing metabolitesin vivo using31P NMR. Magnetic Resonance in Medicine, 1987, 4, 244-251.	3.0	25

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127	Cultivator for NMR studies of suspended cell cultures. Biotechnology and Bioengineering, 1992, 40, 1359-1366.	3.3	25
128	Is there a path beyond BOLD? Molecular imaging of brain function. NeuroImage, 2012, 62, 1208-1215.	4.2	25
129	Nuclear magnetic resonance determination of flow, lactate, and phosphate metabolites during amphetamine stimulation of the rat brain. NMR in Biomedicine, 1990, 3, 272-278.	2.8	24
130	A model of blood-brain barrier permeability to water: Accounting for blood inflow and longitudinal relaxation effects. Magnetic Resonance in Medicine, 2002, 47, 1100-1109.	3.0	23
131	Laminar specific detection of APP induced neurodegeneration and recovery using MEMRI in an olfactory based Alzheimer's disease mouse model. NeuroImage, 2015, 118, 183-192.	4.2	23
132	The B isozyme of creatine kinase is active as a fusion protein inEscherichia coli: In vivo detection by31P NMR. FEBS Letters, 1989, 243, 8-12.	2.8	22
133	Calcium Measurements in Perfused Mouse Heart: Quantitating Fluorescence and Absorbance of Rhod-2 by Application of Photon Migration Theory. Biophysical Journal, 2001, 80, 549-561.	0.5	22
134	Troponin I protein kinase C phosphorylation sites and ventricular function. Cardiovascular Research, 2004, 63, 245-255.	3.8	22
135	Development of a MR-Visible Compound for Tracing Neuroanatomical Connections InÂVivo. Neuron, 2011, 70, 229-243.	8.1	22
136	The unfolded protein response is activated in the olfactory system in Alzheimerâ€™s disease. Acta Neuropathologica Communications, 2020, 8, 109.	5.2	22
137	Application of Localized in VIVO NMR to Whole Organ Physiology in the Animal. Annual Review of Physiology, 1992, 54, 799-826.	13.1	21
138	Catheter confocal fluorescence imaging and functional magnetic resonance imaging of local and systems level recovery in the regenerating rodent sciatic nerve. NeuroImage, 2006, 30, 847-856.	4.2	21
139	Manganese-Enhanced MRI of the Brain in Healthy Volunteers. American Journal of Neuroradiology, 2019, 40, 1309-1316.	2.4	21
140	Manganese Enhanced MRI for Use in Studying Neurodegenerative Diseases. Frontiers in Neural Circuits, 2019, 12, 114.	2.8	21
141	Mapping the Brain-Wide Network Effects by Optogenetic Activation of the Corpus Callosum. Cerebral Cortex, 2020, 30, 5885-5898.	2.9	21
142	Sensitivity enhancement of remotely coupled NMR detectors using wirelessly powered parametric amplification. Magnetic Resonance in Medicine, 2012, 68, 989-996.	3.0	20
143	Absence of myofibrillar creatine kinase and diaphragm isometric function during repetitive activation. Journal of Applied Physiology, 1998, 84, 1166-1173.	2.5	19
144	New developments in magnetic resonance imaging of the brain. NeuroRx, 2004, 1, 155-164.	6.0	19

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145	Mapping cortical representations of the rodent forepaw and hindpaw with BOLD fMRI reveals two spatial boundaries. NeuroImage, 2011, 57, 526-538.	4.2	19
146	Contractile and metabolic effects of increased creatine kinase activity in mouse skeletal muscle. American Journal of Physiology - Cell Physiology, 1996, 270, C1236-C1245.	4.6	18
147	Delivery of fluorescent probes using iron oxide particles as carriers enables in-vivo labeling of migrating neural precursors for magnetic resonance imaging and optical imaging. Journal of Biomedical Optics, 2007, 12, 051504.	2.6	18
148	Transverse relaxation of cerebrospinal fluid depends on glucose concentration. Magnetic Resonance Imaging, 2017, 44, 72-81.	1.8	18
149	Myofibrillar or mitochondrial creatine kinase deficiency alone does not impair mouse diaphragm isotonic function. Journal of Applied Physiology, 2000, 88, 973-980.	2.5	17
150	Identification of Mucosal Injury in the Murine Nasal Airways by Magnetic Resonance Imaging: Site-Specific Lesions Induced by 3-Methylindole. Toxicology and Applied Pharmacology, 2001, 175, 68-75.	2.8	17
151	Live nephron imaging by MRI. American Journal of Physiology - Renal Physiology, 2014, 307, F1162-F1168.	2.7	17
152	Interhemispheric plasticity is mediated by maximal potentiation of callosal inputs. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6391-6396.	7.1	17
153	Radial Echo-Planar Imaging. Journal of Magnetic Resonance, 1998, 135, 242-247.	2.1	16
154	Transmit B1-field correction at 7T using actively tuned coupled inner elements. Magnetic Resonance in Medicine, 2011, 66, 901-910.	3.0	16
155	Magnetic resonance imaging of odorant activity-dependent migration of neural precursor cells and olfactory bulb growth. NeuroImage, 2017, 158, 232-241.	4.2	16
156	Interactions between stimuli-evoked cortical activity and spontaneous low frequency oscillations measured with neuronal calcium. NeuroImage, 2020, 210, 116554.	4.2	16
157	Lamina-specific immunohistochemical signatures in the olfactory bulb of healthy, Alzheimerâ€™s and Parkinsonâ€™s disease patients. Communications Biology, 2022, 5, 88.	4.4	16
158	Simultaneous Glutamate and Perfusion fMRI Responses to Regional Brain Stimulation. Journal of Cerebral Blood Flow and Metabolism, 1998, 18, 1064-1070.	4.3	15
159	Manganese cell labeling of murine hepatocytes using manganese(III)â€transferrin. Contrast Media and Molecular Imaging, 2008, 3, 95-105.	0.8	15
160	Novel frontiers in ultra-structural and molecular MRI of the brain. Current Opinion in Neurology, 2011, 24, 386-393.	3.6	15
161	Interhemispheric Plasticity Protects the Deafferented Somatosensory Cortex from Functional Takeover After Nerve Injury. Brain Connectivity, 2014, 4, 709-717.	1.7	15
162	Comparison of 31P NMR spectra of in Vivo rat brain using convolution difference and saturation with a surface coil. Source of the broad component in the brain spectrum. Journal of Magnetic Resonance, 1984, 57, 526-533.	0.5	14

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163	Differential effects of creatine kinase isoenzymes and substrates on regeneration in livers of transgenic mice. American Journal of Physiology - Cell Physiology, 1997, 273, C741-C746.	4.6	14
164	Design and fabrication of a micromachined multispectral magnetic resonance imaging agent. Journal of Micromechanics and Microengineering, 2009, 19, 025020.	2.6	14
165	Microfabricated highâ€moment micrometerâ€sized MRI contrast agents. Magnetic Resonance in Medicine, 2011, 65, 645-655.	3.0	14
166	Performance Trade-offs in In Situ Chemostat NMR. Biotechnology Progress, 1999, 15, 185-195.	2.6	12
167	Relationship between blood and myocardium manganese levels during manganeseâ€enhanced MRI (MEMRI) with T₁ mapping in rats. NMR in Biomedicine, 2011, 24, 46-53.	2.8	12
168	Manganese graft ionomer complexes (MaGICs) for dual imaging and chemotherapy. Journal of Materials Chemistry B, 2014, 2, 1087.	5.8	12
169	Circuit-Specific Plasticity of Callosal Inputs Underlies Cortical Takeover. Journal of Neuroscience, 2020, 40, 7714-7723.	3.6	12
170	Inotropic and energetic effects of altering the force-calcium relationship: Mechanisms, experimental results, and potential molecular targets. Journal of Cardiac Failure, 2000, 6, 144-156.	1.7	11
171	Engineering novel detectors and sensors for MRI. Journal of Magnetic Resonance, 2013, 229, 67-74.	2.1	11
172	Functional Assessment of Tissues with Magnetic Resonance Imaging. Annals of the New York Academy of Sciences, 2002, 961, 203-205.	3.8	10
173	Magnetic resonance imaging of neural circuits. Nature Clinical Practice Cardiovascular Medicine, 2008, 5, S71-S78.	3.3	10
174	Lambda exonuclease digestion of CGG trinucleotide repeats. European Biophysics Journal, 2010, 39, 337-343.	2.2	10
175	Measuring collective cell movement and extracellular matrix interactions using magnetic resonance imaging. Scientific Reports, 2013, 3, 1879.	3.3	10
176	Ellipsoidal Microcavities: Electromagnetic Properties, Fabrication, and Use as Multispectral MRI Agents. Small, 2014, 10, 1902-1907.	10.0	10
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