Alan P Koretsky

List of Publications by Year in Descending Order

220 papers	16,855 citations	64 h-index	126 g-index
233 ext. papers	18,386 ext. citations	7 avg, IF	6.41 L-index

#	Paper	IF	Citations
220	Lamina-specific immunohistochemical signatures in the olfactory bulb of healthy, Alzheimer's and Parkinson's disease patients.. *Communications Biology*, **2022**, 5, 88	6.7	2
219	Optimization of pseudo-continuous arterial spin labeling using off-resonance compensation strategies at 7T. *Magnetic Resonance in Medicine*, **2021**, 87, 1720	4.4	1
218	Optical imaging of stimulation-evoked cortical activity using GCaMP6f and jRGECO1a. *Quantitative Imaging in Medicine and Surgery*, **2021**, 11, 998-1009	3.6	4
217	The misunderstood meander: Redesigning MRI meander-line surface coils to reduce noise, increase uniformity, and eliminate image artifacts. *Journal of Magnetic Resonance*, **2021**, 333, 107100	3	
216	Multifield and inverse-contrast switching of magnetocaloric high contrast ratio MRI labels. *Magnetic Resonance in Medicine*, **2021**, 85, 506-517	4.4	1
215	A hierarchy of manganese competition and entry in organotypic hippocampal slice cultures. *NMR in Biomedicine*, **2021**, 34, e4476	4.4	1
214	Microvascular Injury in the Brains of Patients with Covid-19. *New England Journal of Medicine*, **2021**, 384, 481-483	59.2	207
213	Outlier detection in multimodal MRI identifies rare individual phenotypes among more than 15,000 brains.. *Human Brain Mapping*, **2021**,	5.9	2
212	Mapping the Brain-Wide Network Effects by Optogenetic Activation of the Corpus Callosum. *Cerebral Cortex*, **2020**, 30, 5885-5898	5.1	6
211	Interactions between stimuli-evoked cortical activity and spontaneous low frequency oscillations measured with neuronal calcium. *NeuroImage*, **2020**, 210, 116554	7.9	7
210	High-resolution MEMRI characterizes laminar specific ascending and descending spinal cord pathways in rats. *Journal of Neuroscience Methods*, **2020**, 340, 108748	3	
209	Ex vivo MR microscopy of a human brain with multiple sclerosis: Visualizing individual cells in tissue using intrinsic iron. *NeuroImage*, **2020**, 223, 117285	7.9	2
208	The unfolded protein response is activated in the olfactory system in Alzheimer's disease. *Acta Neuropathologica Communications*, **2020**, 8, 109	7.3	10
207	Manganese-Enhanced MRI in Patients with Multiple Sclerosis. *American Journal of Neuroradiology*, **2020**, 41, 1569-1576	4.4	2
206	Circuit-Specific Plasticity of Callosal Inputs Underlies Cortical Takeover. *Journal of Neuroscience*, **2020**, 40, 7714-7723	6.6	4
205	Opportunities in Interventional and Diagnostic Imaging by Using High-Performance Low-Field-Strength MRI. *Radiology*, **2019**, 293, 384-393	20.5	72
204	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	11.5	7

203	Manganese-Enhanced MRI of the Brain in Healthy Volunteers. *American Journal of Neuroradiology*, **2019**, 40, 1309-1316	4.4	13
202	Magnetocaloric materials as switchable high contrast ratio MRI labels. *Magnetic Resonance in Medicine*, **2019**, 81, 2238-2246	4.4	4
201	Manganese Enhanced MRI for Use in Studying Neurodegenerative Diseases. *Frontiers in Neural Circuits*, **2018**, 12, 114	3.5	12
200	Anatomy, Functionality, and Neuronal Connectivity with Manganese Radiotracers for Positron Emission Tomography. *Molecular Imaging and Biology*, **2018**, 20, 562-574	3.8	21
199	Wireless implantable coil with parametric amplification for in vivo electron paramagnetic resonance oximetric applications. *Magnetic Resonance in Medicine*, **2018**, 80, 2288-2298	4.4	2
198	Long-term optical imaging of neurovascular coupling in mouse cortex using GCaMP6f and intrinsic hemodynamic signals. *NeuroImage*, **2018**, 165, 251-264	7.9	17
197	Neural precursor cells form integrated brain-like tissue when implanted into rat cerebrospinal fluid. *Communications Biology*, **2018**, 1, 114	6.7	2
196	Synchronized Astrocytic Ca Responses in Neurovascular Coupling during Somatosensory Stimulation and for the Resting State. *Cell Reports*, **2018**, 23, 3878-3890	10.6	33
195	Transcranial manganese delivery for neuronal tract tracing using MEMRI. *NeuroImage*, **2017**, 156, 146-154	7.9	7
194	Transverse relaxation of cerebrospinal fluid depends on glucose concentration. *Magnetic Resonance Imaging*, **2017**, 44, 72-81	3.3	11
193	Magnetic resonance imaging of odorant activity-dependent migration of neural precursor cells and olfactory bulb growth. *NeuroImage*, **2017**, 158, 232-241	7.9	6
192	Peripheral Sensory Deprivation Restores Critical-Period-like Plasticity to Adult Somatosensory Thalamocortical Inputs. *Cell Reports*, **2017**, 19, 2707-2717	10.6	17
191	Sensitivity Enhancement of an Inductively Coupled Local Detector Using a HEMT-Based Current Amplifier. *Magnetic Resonance in Medicine*, **2016**, 75, 2573-8	4.4	5
190	Endosphenoidal coil for intraoperative magnetic resonance imaging of the pituitary gland during transsphenoidal surgery. *Journal of Neurosurgery*, **2016**, 125, 1451-1459	3.2	6
189	Sensory and optogenetically driven single-vessel fMRI. *Nature Methods*, **2016**, 13, 337-40	21.6	62
188	Shape-changing magnetic assemblies as high-sensitivity NMR-readable nanoprobes. *Nature*, **2015**, 520, 73-7	50.4	42
187	Laminar specific detection of APP induced neurodegeneration and recovery using MEMRI in an olfactory based Alzheimer's disease mouse model. *NeuroImage*, **2015**, 118, 183-92	7.9	18
186	Ellipsoidal microcavities: electromagnetic properties, fabrication, and use as multispectral MRI agents. *Small*, **2014**, 10, 1902-7	11	7

185	Transcranial amelioration of inflammation and cell death after brain injury. *Nature*, **2014**, 505, 223-8	50.4	334
184	MRI Agents: Ellipsoidal Microcavities: Electromagnetic Properties, Fabrication, and Use as Multispectral MRI Agents (Small 10/2014). *Small*, **2014**, 10, 1878-1878	11	
183	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	11.5	37
182	Manganese graft ionomer complexes (MaGICs) for dual imaging and chemotherapy. *Journal of Materials Chemistry B*, **2014**, 2, 1087-1099	7.3	11
181	Self-organized Mn-Block Copolymer Complexes and Their Use for MR Imaging of Biological Processes. *Journal of Materials Chemistry B*, **2014**, 2, 7055-7064	7.3	4
180	Sub-millimeter imaging of brain-free water for rapid volume assessment in atrophic brains. *NeuroImage*, **2014**, 100, 370-8	7.9	10
179	Deciphering laminar-specific neural inputs with line-scanning fMRI. *Nature Methods*, **2014**, 11, 55-8	21.6	95
178	Live nephron imaging by MRI. *American Journal of Physiology - Renal Physiology*, **2014**, 307, F1162-8	4.3	15
177	Interhemispheric plasticity protects the deafferented somatosensory cortex from functional takeover after nerve injury. *Brain Connectivity*, **2014**, 4, 709-17	2.7	12
176	EPR oxygen imaging and hyperpolarized 13C MRI of pyruvate metabolism as noninvasive biomarkers of tumor treatment response to a glycolysis inhibitor 3-bromopyruvate. *Magnetic Resonance in Medicine*, **2013**, 69, 1443-50	4.4	37
175	Magnetic Nanoclusters with Hydrophilic Spacing for Dual Drug Delivery and Sensitive Magnetic Resonance Imaging. *Journal of Materials Chemistry B*, **2013**, 1, 1142-1149	7.3	42
174	Engineering novel detectors and sensors for MRI. *Journal of Magnetic Resonance*, **2013**, 229, 67-74	3	9
173	Wireless amplified nuclear MR detector (WAND) for high-spatial-resolution MR imaging of internal organs: preclinical demonstration in a rodent model. *Radiology*, **2013**, 268, 228-36	20.5	28
172	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	11.5	62
171	Measuring collective cell movement and extracellular matrix interactions using magnetic resonance imaging. *Scientific Reports*, **2013**, 3, 1879	4.9	8
170	The use of silica coated MnO nanoparticles to control MRI relaxivity in response to specific physiological changes. *Biomaterials*, **2012**, 33, 3560-7	15.6	47
169	Thalamocortical inputs show post-critical-period plasticity. *Neuron*, **2012**, 74, 731-42	13.9	59
168	Direct imaging of macrovascular and microvascular contributions to BOLD fMRI in layers IV-V of the rat whisker-barrel cortex. *NeuroImage*, **2012**, 59, 1451-60	7.9	73

167	Early development of arterial spin labeling to measure regional brain blood flow by MRI. *NeuroImage*, **2012**, 62, 602-7	7.9	26
166	Is there a path beyond BOLD? Molecular imaging of brain function. *NeuroImage*, **2012**, 62, 1208-15	7.9	24
165	Sensitivity enhancement of remotely coupled NMR detectors using wirelessly powered parametric amplification. *Magnetic Resonance in Medicine*, **2012**, 68, 989-96	4.4	20
164	Mapping cortical representations of the rodent forepaw and hindpaw with BOLD fMRI reveals two spatial boundaries. *NeuroImage*, **2011**, 57, 526-38	7.9	11
163	Development of a MR-visible compound for tracing neuroanatomical connections in vivo. *Neuron*, **2011**, 70, 229-43	13.9	20
162	Relationship between blood and myocardium manganese levels during manganese-enhanced MRI (MEMRI) with T1 mapping in rats. *NMR in Biomedicine*, **2011**, 24, 46-53	4.4	12
161	Novel frontiers in ultra-structural and molecular MRI of the brain. *Current Opinion in Neurology*, **2011**, 24, 386-93	7.1	13
160	Microfabricated high-moment micrometer-sized MRI contrast agents. *Magnetic Resonance in Medicine*, **2011**, 65, 645-55	4.4	12
159	Detecting response of rat C6 glioma tumors to radiotherapy using hyperpolarized [1- 13C]pyruvate and 13C magnetic resonance spectroscopic imaging. *Magnetic Resonance in Medicine*, **2011**, 65, 557-63	4.4	130
158	Transmit B1-field correction at 7 T using actively tuned coupled inner elements. *Magnetic Resonance in Medicine*, **2011**, 66, 901-10	4.4	13
157	Microfabricated Multispectral MRI Contrast Agents **2011**, 375-397		
156	Magnetic manipulation of actin orientation, polymerization, and gliding on myosin using superparamagnetic iron oxide particles. *Nanotechnology*, **2011**, 22, 065101	3.4	4
155	Interpretation of □P NMR saturation transfer experiments: what you can□t see might confuse you. Focus on "Standard magnetic resonance-based measurements of the Pi-□ATP rate do not index the rate of oxidative phosphorylation in cardiac and skeletal muscles". *American Journal of Physiology - Cell Physiology*, **2011**, 301, C12-5	5.4	35
154	Arterial spin labeling demonstrates that focal amygdalar glutamatergic agonist infusion leads to rapid diffuse cerebral activation. *Acta Neurologica Scandinavica*, **2010**, 121, 209-16	3.8	3
153	3D mapping of somatotopic reorganization with small animal functional MRI. *NeuroImage*, **2010**, 49, 1667-76	7.9	32
152	In vivo detection of individual glomeruli in the rodent olfactory bulb using manganese enhanced MRI. *NeuroImage*, **2010**, 49, 1350-6	7.9	27
151	Lambda exonuclease digestion of CGG trinucleotide repeats. *European Biophysics Journal*, **2010**, 39, 337-43	1.9	9
150	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, 13570-5	11.5	85

149	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, 14114-9	11.5	57
148	The fabrication of uniform cylindrical nanoshells and their use as spectrally tunable MRI contrast agents. *Nanotechnology*, **2009**, 20, 385301	3.4	34
147	Design and fabrication of a micromachined multispectral magnetic resonance imaging agent. *Journal of Micromechanics and Microengineering*, **2009**, 19, 025020	2	13
146	B1 homogenization in MRI by multilayer coupled coils. *IEEE Transactions on Medical Imaging*, **2009**, 28, 551-4	11.7	22
145	Temporal changes in the T1 and T2 relaxation rates (DeltaR1 and DeltaR2) in the rat brain are consistent with the tissue-clearance rates of elemental manganese. *Magnetic Resonance in Medicine* , **2009**, 61, 1528-32	4.4	55
144	Characterization of T(2)* heterogeneity in human brain white matter. *Magnetic Resonance in Medicine*, **2009**, 62, 1652-7	4.4	67
143	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, 403-14	4.7	42
142	Differential effects of anesthetics on cocaine's pharmacokinetic and pharmacodynamic effects in brain. *European Journal of Neuroscience*, **2009**, 30, 1565-75	3.5	28
141	Accounting for nonspecific enhancement in neuronal tract tracing using manganese enhanced magnetic resonance imaging. *Magnetic Resonance Imaging*, **2009**, 27, 594-600	3.3	37
140	Layer specific tracing of corticocortical and thalamocortical connectivity in the rodent using manganese enhanced MRI. *NeuroImage*, **2009**, 44, 923-31	7.9	42
139	In vivo labeling of adult neural progenitors for MRI with micron sized particles of iron oxide: quantification of labeled cell phenotype. *NeuroImage*, **2009**, 44, 671-8	7.9	65
138	Manganese enhanced MRI reveals functional circuitry in response to odorant stimuli. *NeuroImage*, **2009**, 44, 363-72	7.9	51
137	Brain redox imaging using blood-brain barrier-permeable nitroxide MRI contrast agent. *Journal of Cerebral Blood Flow and Metabolism*, **2008**, 28, 1165-74	7.3	76
136	Micro-engineered local field control for high-sensitivity multispectral MRI. *Nature*, **2008**, 453, 1058-63	50.4	104
135	Functional reactivity of cerebral capillaries. *Journal of Cerebral Blood Flow and Metabolism*, **2008**, 28, 961-72	7.3	168
134	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	3.7	25
133	Controlled aggregation of ferritin to modulate MRI relaxivity. *Biophysical Journal*, **2008**, 95, 342-51	2.9	43
132	Mapping resting-state functional connectivity using perfusion MRI. *NeuroImage*, **2008**, 40, 1595-605	7.9	95

131	Mapping prefrontal circuits in vivo with manganese-enhanced magnetic resonance imaging in monkeys. *Journal of Neuroscience*, **2008**, 28, 7637-47	6.6	25
130	Magnetic resonance imaging of neural circuits. *Nature Clinical Practice Cardiovascular Medicine*, **2008**, 5 Suppl 2, S71-8		10
129	Controlled transport of magnetic particles using soft magnetic patterns. *Applied Physics Letters*, **2008**, 93, 203901	3.4	39
128	Convertible manganese contrast for molecular and cellular MRI. *Magnetic Resonance in Medicine*, **2008**, 60, 265-9	4.4	50
127	Tracking the effects of crusher gradients on gradient-echo BOLD signal in space and time during rat sensory stimulation. *Magnetic Resonance in Medicine*, **2008**, 60, 548-54	4.4	3
126	MRI of the basement membrane using charged nanoparticles as contrast agents. *Magnetic Resonance in Medicine*, **2008**, 60, 564-74	4.4	78
125	Manganese cell labeling of murine hepatocytes using manganese(III)-transferrin. *Contrast Media and Molecular Imaging*, **2008**, 3, 95-105	3.2	15
124	Detection of cortical laminar architecture using manganese-enhanced MRI. *Journal of Neuroscience Methods*, **2008**, 167, 246-57	3	64
123	Micron-Sized Iron Oxide Particles (MPIOs) for Cellular Imaging: More Bang for the Buck **2008**, 141-161		5
122	Improved cardiac manganese-enhanced MRI (MEMRI) with T1 mapping in rodent **2007**,		1
121	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, 147-53	3.2	57
120	Functional MRI impulse response for BOLD and CBV contrast in rat somatosensory cortex. *Magnetic Resonance in Medicine*, **2007**, 57, 1110-8	4.4	96
119	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, 11796-801	11.5	541
118	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	3.5	15
117	Observation of two distinct spatial-temporal BOLD clusters during sensory stimulation in rats. *NeuroImage*, **2007**, 34, 1220-6	7.9	2
116	Functional MRI detection of bilateral cortical reorganization in the rodent brain following peripheral nerve deafferentation. *NeuroImage*, **2007**, 37, 262-73	7.9	63
115	Cell labeling for magnetic resonance imaging with the T1 agent manganese chloride. *NMR in Biomedicine*, **2006**, 19, 50-9	4.4	73
114	Noninvasive evaluation of liver repopulation by transplanted hepatocytes using 31P MRS imaging in mice. *Hepatology*, **2006**, 44, 1250-8	11.2	29

113	In vivo detection of single cells by MRI. *Magnetic Resonance in Medicine*, **2006**, 55, 242-9	4.4	732
112	BOLD and CBV-weighted functional magnetic resonance imaging of the rat somatosensory system. *Magnetic Resonance in Medicine*, **2006**, 55, 316-24	4.4	66
111	Improved neuronal tract tracing using manganese enhanced magnetic resonance imaging with fast T(1) mapping. *Magnetic Resonance in Medicine*, **2006**, 55, 604-11	4.4	74
110	High-resolution mapping of tumor redox status by magnetic resonance imaging using nitroxides as redox-sensitive contrast agents. *Clinical Cancer Research*, **2006**, 12, 2455-62	12.9	124
109	Cocaine increases the intracellular calcium concentration in brain independently of its cerebrovascular effects. *Journal of Neuroscience*, **2006**, 26, 11522-31	6.6	47
108	Contrast-enhanced in vivo imaging of breast and prostate cancer cells by MRI. *Cell Cycle*, **2006**, 5, 113-9	4.7	42
107	Catheter confocal fluorescence imaging and functional magnetic resonance imaging of local and systems level recovery in the regenerating rodent sciatic nerve. *NeuroImage*, **2006**, 30, 847-56	7.9	18
106	Spatial flow-volume dissociation of the cerebral microcirculatory response to mild hypercapnia. *NeuroImage*, **2006**, 32, 520-30	7.9	108
105	Magnetic resonance imaging of the migration of neuronal precursors generated in the adult rodent brain. *NeuroImage*, **2006**, 32, 1150-7	7.9	129
104	Extensive heterogeneity in white matter intensity in high-resolution T2*-weighted MRI of the human brain at 7.0 T. *NeuroImage*, **2006**, 32, 1032-40	7.9	120
103	Temporal dynamics of the BOLD fMRI impulse response. *NeuroImage*, **2005**, 24, 667-77	7.9	87
102	Octameric mitochondrial creatine kinase induces and stabilizes contact sites between the inner and outer membrane. *Biochemical Journal*, **2005**, 385, 445-50	3.8	68
101	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, 1078-92	7.3	25
100	Technological advances in MRI measurement of brain perfusion. *Journal of Magnetic Resonance Imaging*, **2005**, 22, 751-3	5.6	24
99	Sizing it up: cellular MRI using micron-sized iron oxide particles. *Magnetic Resonance in Medicine*, **2005**, 53, 329-38	4.4	257
98	Manganese-enhanced magnetic resonance imaging of mouse brain after systemic administration of MnCl2: dose-dependent and temporal evolution of T1 contrast. *Magnetic Resonance in Medicine*, **2005**, 53, 640-8	4.4	148
97	Manganese enhanced magnetic resonance imaging of normal and ischemic canine heart. *Magnetic Resonance in Medicine*, **2005**, 54, 196-200	4.4	28
96	MRI detection of regional blood flow using arterial spin labeling **2004**, 119-140		

95	MRI detection of single particles for cellular imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 10901-6	11.5	422
94	Troponin I protein kinase C phosphorylation sites and ventricular function. *Cardiovascular Research*, **2004**, 63, 245-55	9.9	20
93	Decreasing motion artifacts in calcium-dependent fluorescence transients from the perfused mouse heart using frequency filtering. *Cell Calcium*, **2004**, 35, 141-53	4	2
92	Functional MRI of the rodent somatosensory pathway using multislice echo planar imaging. *Magnetic Resonance in Medicine*, **2004**, 52, 89-99	4.4	84
91	Manganese-enhanced magnetic resonance imaging (MEMRI): methodological and practical considerations. *NMR in Biomedicine*, **2004**, 17, 532-43	4.4	414
90	New developments in magnetic resonance imaging of the brain. *NeuroRx*, **2004**, 1, 155-64		16
89	In vivo detection of neuroarchitecture in the rodent brain using manganese-enhanced MRI. *NeuroImage*, **2004**, 22, 1046-1046	7.9	1
88	In vivo detection of neuroarchitecture in the rodent brain using manganese-enhanced MRI. *NeuroImage*, **2004**, 22, 1046-59	7.9	230
87	New developments in magnetic resonance imaging of the brain. *Neurotherapeutics*, **2004**, 1, 155-164	6.4	
86	Manganese enhanced magnetic resonance imaging. *Current Pharmaceutical Biotechnology*, **2004**, 5, 529-37	2.6	43
85	Highly efficient endosomal labeling of progenitor and stem cells with large magnetic particles allows magnetic resonance imaging of single cells. *Blood*, **2003**, 102, 867-72	2.2	382
84	MRI detection of ferritin iron overload and associated neuronal pathology in iron regulatory protein-2 knockout mice. *Brain Research*, **2003**, 971, 95-106	3.7	54
83	Detection of inflammation following renal ischemia by magnetic resonance imaging. *Kidney International*, **2003**, 64, 43-51	9.9	47
82	Expression of myoglobin in the transgenic mouse brain. *Advances in Experimental Medicine and Biology*, **2003**, 530, 331-45	3.6	6
81	Transgenic livers expressing mitochondrial and cytosolic CK: mitochondrial CK modulates free ADP levels. *American Journal of Physiology - Cell Physiology*, **2002**, 282, C338-46	5.4	31
80	A model of blood-brain barrier permeability to water: accounting for blood inflow and longitudinal relaxation effects. *Magnetic Resonance in Medicine*, **2002**, 47, 1100-9	4.4	22
79	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, 735-8	4.4	131
78	Dynamic activity-induced manganese-dependent contrast magnetic resonance imaging (DAIM MRI). *Magnetic Resonance in Medicine*, **2002**, 48, 927-33	4.4	120

77	Functional assessment of tissues with magnetic resonance imaging. *Annals of the New York Academy of Sciences*, **2002**, 961, 203-5	6.5	9
76	An open transverse z-gradient coil design for magnetic resonance imaging. *Review of Scientific Instruments*, **2002**, 73, 2208-2210	1.7	2
75	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, 15182-7	11.5	207
74	alpha-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, H2397-405	5.2	49
73	Tracing odor-induced activation in the olfactory bulbs of mice using manganese-enhanced magnetic resonance imaging. *NeuroImage*, **2002**, 16, 441-8	7.9	203
72	High calcium and dobutamine positive inotropy in the perfused mouse heart: myofilament calcium responsiveness, energetic economy, and effects of protein kinase C inhibition. *BMC Physiology*, **2001**, 1, 12	0	4
71	Perfusion imaging using dynamic arterial spin labeling (DASL). *Magnetic Resonance in Medicine*, **2001**, 45, 1021-9	4.4	64
70	Manganese-enhanced MRI of mouse heart during changes in inotropy. *Magnetic Resonance in Medicine*, **2001**, 46, 884-90	4.4	113
69	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	4.6	16
68	Calibration of the calcium dissociation constant of Rhod(2)in the perfused mouse heart using manganese quenching. *Cell Calcium*, **2001**, 29, 217-27	4	37
67	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, 23-30	3.5	24
66	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, 3249-62	12.6	476
65	Calcium measurements in perfused mouse heart: quantitating fluorescence and absorbance of Rhod-2 by application of photon migration theory. *Biophysical Journal*, **2001**, 80, 549-61	2.9	20
64	Changes in the mitochondrial proteome from mouse hearts deficient in creatine kinase. *Physiological Genomics*, **2001**, 6, 117-28	3.6	45
63	Ischemic dysfunction in transgenic mice expressing troponin I lacking protein kinase C phosphorylation sites. *American Journal of Physiology - Heart and Circulatory Physiology*, **2001**, 280, H835-43	5.2	39
62	Compensatory changes in Ca(2+) and myocardial O(2) consumption in beta-tropomyosin transgenic hearts. *American Journal of Physiology - Heart and Circulatory Physiology*, **2001**, 281, H2539-48	5.2	7
61	Myofibrillar or mitochondrial creatine kinase deficiency alone does not impair mouse diaphragm isotonic function. *Journal of Applied Physiology*, **2000**, 88, 973-80	3.7	16
60	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	3.3	10

59	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	2.8	26
58	Performance trade-offs in in situ chemostat NMR. *Biotechnology Progress*, **1999**, 15, 185-95	2.8	10
57	Creatine and cyclocreatine treatment of human colon adenocarcinoma xenografts: 31P and 1H magnetic resonance spectroscopic studies. *British Journal of Cancer*, **1999**, 79, 278-85	8.7	40
56	Perfusion analysis using dynamic arterial spin labeling (DASL). *Magnetic Resonance in Medicine*, **1999**, 41, 299-308	4.4	38
55	Imaging transgenic animals. *Annual Review of Biomedical Engineering*, **1999**, 1, 611-48	12	78
54	Detection of single mammalian cells by high-resolution magnetic resonance imaging. *Biophysical Journal*, **1999**, 76, 103-9	2.9	242
53	Perfusion analysis using dynamic arterial spin labeling (DASL) **1999**, 41, 299		1
52	Simultaneous glutamate and perfusion fMRI responses to regional brain stimulation. *Journal of Cerebral Blood Flow and Metabolism*, **1998**, 18, 1064-70	7.3	14
51	Radial echo-planar imaging. *Journal of Magnetic Resonance*, **1998**, 135, 242-7	3	14
50	Cardiac MRI of the normal and hypertrophied mouse heart. *Magnetic Resonance in Medicine*, **1998**, 39, 980-7	4.4	95
49	In vivo neuronal tract tracing using manganese-enhanced magnetic resonance imaging. *Magnetic Resonance in Medicine*, **1998**, 40, 740-8	4.4	388
48	Comparison of the effects of ORG 30029, dobutamine and high perfusate calcium on function and metabolism in rat heart. *Journal of Molecular and Cellular Cardiology*, **1998**, 30, 2605-12	5.8	9
47	Fluorescence measurement of calcium transients in perfused rabbit heart using rhod 2. *American Journal of Physiology - Heart and Circulatory Physiology*, **1998**, 274, H728-41	5.2	49
46	Absence of myofibrillar creatine kinase and diaphragm isometric function during repetitive activation. *Journal of Applied Physiology*, **1998**, 84, 1166-73	3.7	19
45	Near-simultaneous hemoglobin saturation and oxygen tension maps in the mouse cortex during amphetamine stimulation. *Advances in Experimental Medicine and Biology*, **1998**, 454, 149-58	3.6	5
44	Functional equivalence of creatine kinase isoforms in mouse skeletal muscle. *Journal of Biological Chemistry*, **1997**, 272, 17790-4	5.4	25
43	Near-simultaneous hemoglobin saturation and oxygen tension maps in mouse brain using an AOTF microscope. *Biophysical Journal*, **1997**, 73, 1223-31	2.9	96
42	The role of creatine kinase in inhibition of mitochondrial permeability transition. *FEBS Letters*, **1997**, 414, 253-7	3.8	192

41	Combined myofibrillar and mitochondrial creatine kinase deficiency impairs mouse diaphragm isotonic function. *Journal of Applied Physiology*, **1997**, 82, 1416-23	3.7	33
40	Differential effects of creatine kinase isoenzymes and substrates on regeneration in livers of transgenic mice. *American Journal of Physiology - Cell Physiology*, **1997**, 273, C741-6	5.4	12
39	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	4.4	93
38	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, 232-7	4.4	83
37	Manganese ion enhances T1-weighted MRI during brain activation: an approach to direct imaging of brain function. *Magnetic Resonance in Medicine*, **1997**, 38, 378-88	4.4	411
36	Dilated cardiomyopathy in transgenic mice with cardiac-specific overexpression of tumor necrosis factor-alpha. *Circulation Research*, **1997**, 81, 627-35	15.7	586
35	Koretsky, A.P.: Contributions to Functional, Cellular, and Molecular Imaging with MRI **1996**, 1-4		
34	Contractile and metabolic effects of increased creatine kinase activity in mouse skeletal muscle. *American Journal of Physiology - Cell Physiology*, **1996**, 270, C1236-45	5.4	18
33	Radiofrequency magnetic field gradient echoes have reduced sensitivity to susceptibility gradients. *Magnetic Resonance Imaging*, **1995**, 13, 791-7	3.3	1
32	Hepatic High Energy Phosphate Metabolism in Transgenic Livers Expressing Creatine Kinase as Revealed by 31P NMR. *Advances in Molecular and Cell Biology*, **1995**, 233-255		1
31	Multi-slice MRI of rat brain perfusion during amphetamine stimulation using arterial spin labeling. *Magnetic Resonance in Medicine*, **1995**, 33, 209-14	4.4	137
30	NMR measurement of perfusion using arterial spin labeling without saturation of macromolecular spins. *Magnetic Resonance in Medicine*, **1995**, 33, 370-6	4.4	138
29	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, 4448-53	4.8	38
28	Magnetic Resonance Imaging of Cerebral Blood Flow**The Pittsburgh NMR Center for Biomedical Research was established by grants from the Richard King Mellon Foundation, the Lucille P. Markey Charitable Trust, the Ben Franklin Partnership Program of the Commonwealth of Pennsylvania, and the Ralph M. Parsons Foundation. The work described was supported by a National Institutes of		
27	Functional information from magnetic resonance imaging. *Proceedings Annual Meeting Electron Microscopy Society of America*, **1995**, 53, 84-85 ve **1995**, 463-473		
26	Perfusion imaging of the rat kidney with MR. *Radiology*, **1994**, 190, 813-8	20.5	41
25	Tissue specific perfusion imaging using arterial spin labeling. *NMR in Biomedicine*, **1994**, 7, 75-82	4.4	278
24	Response of normal and reperfused livers to glucagon stimulation: NMR detection of blood flow and high-energy phosphates. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **1993**, 1181, 7-14	6.9	4

23	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, 2646-50	11.5	45
22	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, 416-21	4.4	127
21	Magnetic resonance imaging of perfusion in the isolated rat heart using spin inversion of arterial water. *Magnetic Resonance in Medicine*, **1993**, 30, 361-5	4.4	81
20	Application of localized in vivo NMR to whole organ physiology in the animal. *Annual Review of Physiology*, **1992**, 54, 799-826	23.1	17
19	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, 212-6	11.5	1242
18	Cultivator for NMR studies of suspended cell cultures. *Biotechnology and Bioengineering*, **1992**, 40, 1359-66	4.6	21
17	Perfusion imaging. *Magnetic Resonance in Medicine*, **1992**, 23, 37-45	4.4	1391
16	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, 362-71	4.4	117
15	Manipulating creatine kinase activity in transgenic mice to study control of energy metabolism. *Biochemical Society Transactions*, **1991**, 19, 1010-4	5.1	7
14	Nuclear magnetic resonance determination of flow, lactate, and phosphate metabolites during amphetamine stimulation of the rat brain. *NMR in Biomedicine*, **1990**, 3, 272-8	4.4	24
13	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, 3112-6	11.5	127
12	The B isozyme of creatine kinase is active as a fusion protein in Escherichia coli: in vivo detection by 31P NMR. *FEBS Letters*, **1989**, 243, 8-12	3.8	20
11	NMR investigations of cellular energy metabolism. *Annals of the New York Academy of Sciences*, **1987**, 508, 48-53	6.5	7
10	Respiratory control in the glucose perfused heart. A 31P NMR and NADH fluorescence study. *FEBS Letters*, **1987**, 221, 270-6	3.8	119
9	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	4.6	82
8	Determination of renal molar concentrations of phosphorus-containing metabolites in vivo using 31P NMR. *Magnetic Resonance in Medicine*, **1987**, 4, 244-51	4.4	23
7	Effects of fatiguing exercise on high-energy phosphates, force, and EMG: evidence for three phases of recovery. *Muscle and Nerve*, **1987**, 10, 810-21	3.4	137
6	31P NMR saturation transfer measurements of phosphorus exchange reactions in rat heart and kidney in situ. *Biochemistry*, **1986**, 25, 77-84	3.2	56

5	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, 586-94	4.4	43
4	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		7
3	An in Vivo NMR probe circuit for improved sensitivity. *Journal of Magnetic Resonance*, **1983**, 54, 526-532		9
2	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, 7491-5	11.5	110
1	Detection of regional blood flow using arterial spin labeling94-112		