

# Craig R Malloy

## List of Publications by Citations

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268  
papers

13,817  
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61  
h-index

110  
g-index

279  
ext. papers

15,501  
ext. citations

7  
avg, IF

6  
L-index

#	Paper	IF	Citations
268	Metabolic Heterogeneity in Human Lung Tumors. <i>Cell</i> , <b>2016</b> , 164, 681-94	56.2	593
267	2-hydroxyglutarate detection by magnetic resonance spectroscopy in IDH-mutated patients with gliomas. <i>Nature Medicine</i> , <b>2012</b> , 18, 624-9	50.5	584
266	Analysis of cancer metabolism by imaging hyperpolarized nuclei: prospects for translation to clinical research. <i>Neoplasia</i> , <b>2011</b> , 13, 81-97	6.4	570
265	Lactate Metabolism in Human Lung Tumors. <i>Cell</i> , <b>2017</b> , 171, 358-371.e9	56.2	568
264	Transcardiac serotonin concentration is increased in selected patients with limiting angina and complex coronary lesion morphology. <i>Circulation</i> , <b>1989</b> , 79, 116-24	16.7	418
263	Analysis of tumor metabolism reveals mitochondrial glucose oxidation in genetically diverse human glioblastomas in the mouse brain in vivo. <i>Cell Metabolism</i> , <b>2012</b> , 15, 827-37	24.6	389
262	A roadmap for interpreting (13)C metabolite labeling patterns from cells. <i>Current Opinion in Biotechnology</i> , <b>2015</b> , 34, 189-201	11.4	368
261	MRI detection of glycogen in vivo by using chemical exchange saturation transfer imaging (glycoCEST). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 4359-64	11.5	329
260	Composition of adipose tissue and marrow fat in humans by 1H NMR at 7 Tesla. <i>Journal of Lipid Research</i> , <b>2008</b> , 49, 2055-62	6.3	281
259	Effect of metoprolol on myocardial function and energetics in patients with nonischemic dilated cardiomyopathy: a randomized, double-blind, placebo-controlled study. <i>Journal of the American College of Cardiology</i> , <b>1994</b> , 24, 1310-20	15.1	252
258	Cardioprotective effects of 70-kDa heat shock protein in transgenic mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1996</b> , 93, 2339-42	11.5	239
257	Hyperpolarized 13C allows a direct measure of flux through a single enzyme-catalyzed step by NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2007</b> , 104, 19773-7	11.5	237
256	Mitochondrial metabolism mediates oxidative stress and inflammation in fatty liver. <i>Journal of Clinical Investigation</i> , <b>2015</b> , 125, 4447-62	15.9	234
255	Metabolism of [U-13 C]glucose in human brain tumors in vivo. <i>NMR in Biomedicine</i> , <b>2012</b> , 25, 1234-44	4.4	229
254	Responsive MRI agents for sensing metabolism in vivo. <i>Accounts of Chemical Research</i> , <b>2009</b> , 42, 948-57	24.3	229
253	Effect of beta-adrenergic blockade on myocardial function and energetics in congestive heart failure. Improvements in hemodynamic, contractile, and diastolic performance with bucindolol. <i>Circulation</i> , <b>1990</b> , 82, 473-83	16.7	219
252	Hyperpolarized C MRI: Path to Clinical Translation in Oncology. <i>Neoplasia</i> , <b>2019</b> , 21, 1-16	6.4	210

251	Cytosolic phosphoenolpyruvate carboxykinase does not solely control the rate of hepatic gluconeogenesis in the intact mouse liver. <i>Cell Metabolism</i> , <b>2007</b> , 5, 313-20	24.6	203
250	MRI thermometry based on PARACEST agents. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 17572-3	26.4	160
249	Left ventricular volumes measured by MR imaging. <i>Radiology</i> , <b>1985</b> , 156, 717-9	20.5	146
248	Assessing Cardiac Metabolism: A Scientific Statement From the American Heart Association. <i>Circulation Research</i> , <b>2016</b> , 118, 1659-701	15.7	142
247	Carbon flux through citric acid cycle pathways in perfused heart by <sup>13</sup> C NMR spectroscopy. <i>FEBS Letters</i> , <b>1987</b> , 212, 58-62	3.8	139
246	Contribution of exogenous substrates to acetyl coenzyme A: measurement by <sup>13</sup> C NMR under non-steady-state conditions. <i>Biochemistry</i> , <b>1990</b> , 29, 6756-61	3.2	137
245	Impaired tricarboxylic acid cycle activity in mouse livers lacking cytosolic phosphoenolpyruvate carboxykinase. <i>Journal of Biological Chemistry</i> , <b>2004</b> , 279, 48941-9	5.4	124
244	Prospective Longitudinal Analysis of 2-Hydroxyglutarate Magnetic Resonance Spectroscopy Identifies Broad Clinical Utility for the Management of Patients With IDH-Mutant Glioma. <i>Journal of Clinical Oncology</i> , <b>2016</b> , 34, 4030-4039	2.2	124
243	The metabolic state of the rat liver in vivo measured by <sup>31</sup> P-NMR spectroscopy. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>1986</b> , 885, 1-11	4.9	122
242	Isotope Tracing of Human Clear Cell Renal Cell Carcinomas Demonstrates Suppressed Glucose Oxidation In Vivo. <i>Cell Metabolism</i> , <b>2018</b> , 28, 793-800.e2	24.6	118
241	Tm(DOTP)5-: a <sup>23</sup> Na <sup>+</sup> shift agent for perfused rat hearts. <i>Magnetic Resonance in Medicine</i> , <b>1990</b> , 15, 25-32	3.4	115
240	In vivo measurement of myocardial mass using nuclear magnetic resonance imaging. <i>Journal of the American College of Cardiology</i> , <b>1986</b> , 8, 113-7	15.1	113
239	Flux through hepatic pyruvate carboxylase and phosphoenolpyruvate carboxykinase detected by hyperpolarized <sup>13</sup> C magnetic resonance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 19084-9	11.5	108
238	Influence of global ischemia on intracellular sodium in the perfused rat heart. <i>Magnetic Resonance in Medicine</i> , <b>1990</b> , 15, 33-44	4.4	104
237	Gadolinium-DTPA-enhanced nuclear magnetic resonance imaging of reperfused myocardium: identification of the myocardial bed at risk. <i>Journal of the American College of Cardiology</i> , <b>1988</b> , 12, 1064-72	15.1	104
236	<sup>13</sup> C-NMR: a simple yet comprehensive method for analysis of intermediary metabolism. <i>Trends in Biochemical Sciences</i> , <b>1991</b> , 16, 5-10	10.3	98
235	Substrate selection in the isolated working rat heart: effects of reperfusion, afterload, and concentration. <i>Basic Research in Cardiology</i> , <b>1995</b> , 90, 388-96	11.8	97
234	Diminished hepatic gluconeogenesis via defects in tricarboxylic acid cycle flux in peroxisome proliferator-activated receptor gamma coactivator-1alpha (PGC-1alpha)-deficient mice. <i>Journal of Biological Chemistry</i> , <b>2006</b> , 281, 19000-8	5.4	95

233	Glucose production, gluconeogenesis, and hepatic tricarboxylic acid cycle fluxes measured by nuclear magnetic resonance analysis of a single glucose derivative. <i>Analytical Biochemistry</i> , <b>2004</b> , 327, 149-55	3.1	92
232	An integrated (2)H and (13)C NMR study of gluconeogenesis and TCA cycle flux in humans. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2001</b> , 281, E848-56	6	92
231	Mechanisms by which liver-specific PEPCK knockout mice preserve euglycemia during starvation. <i>Diabetes</i> , <b>2003</b> , 52, 1649-54	0.9	90
230	Comparison of kinetic models for analysis of pyruvate-to-lactate exchange by hyperpolarized 13 C NMR. <i>NMR in Biomedicine</i> , <b>2012</b> , 25, 1286-94	4.4	89
229	The greater contribution of gluconeogenesis to glucose production in obesity is related to increased whole-body protein catabolism. <i>Diabetes</i> , <b>2006</b> , 55, 675-81	0.9	88
228	Inhibition of cardiac lipoprotein utilization by transgenic overexpression of Angptl4 in the heart. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 1767-72	11.5	86
227	Impact of Gd3+ on DNP of [1-13C]pyruvate doped with trityl OX063, BDPA, or 4-oxo-TEMPO. <i>Journal of Physical Chemistry A</i> , <b>2012</b> , 116, 5129-38	2.8	84
226	DNP by thermal mixing under optimized conditions yields >60,000-fold enhancement of 89Y NMR signal. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 8673-80	16.4	82
225	Measurement of gluconeogenesis and pyruvate recycling in the rat liver: a simple analysis of glucose and glutamate isotopomers during metabolism of [1,2,3-(13)C3]propionate. <i>FEBS Letters</i> , <b>1997</b> , 412, 131-7	3.8	81
224	Inhibition of carbohydrate oxidation during the first minute of reperfusion after brief ischemia: NMR detection of hyperpolarized 13CO2 and H13CO3-. <i>Magnetic Resonance in Medicine</i> , <b>2008</b> , 60, 1029-36	4.4	81
223	Ultra-short echo time (UTE) MR imaging of the lung: comparison between normal and emphysematous lungs in mutant mice. <i>Journal of Magnetic Resonance Imaging</i> , <b>2010</b> , 32, 326-33	5.6	79
222	Improved in vivo magnetic resonance imaging of acute myocardial infarction after intravenous paramagnetic contrast agent administration. <i>American Journal of Cardiology</i> , <b>1986</b> , 57, 864-8	3	79
221	Gated sodium-23 nuclear magnetic resonance images of an isolated perfused working rat heart. <i>Science</i> , <b>1981</b> , 212, 935-6	33.3	79
220	Effects of bucindolol on neurohormonal activation in congestive heart failure. <i>American Journal of Cardiology</i> , <b>1991</b> , 67, 67-73	3	75
219	Channeling of TCA cycle intermediates in cultured <i>Saccharomyces cerevisiae</i> . <i>Biochemistry</i> , <b>1990</b> , 29, 9106-10	3.2	74
218	Effect of fasting and acute ethanol administration on the energy state of in vivo liver as measured by 31P-NMR spectroscopy. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>1986</b> , 885, 12-22	4.9	73
217	Imaging the tissue distribution of glucose in livers using a PARACEST sensor. <i>Magnetic Resonance in Medicine</i> , <b>2008</b> , 60, 1047-55	4.4	71
216	Electron spin resonance studies of trityl OX063 at a concentration optimal for DNP. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 9800-7	3.6	70

215	MOXI Is a Mitochondrial Micropeptide That Enhances Fatty Acid Oxidation. <i>Cell Reports</i> , <b>2018</b> , 23, 3701-3709	37.09	70
214	Direct evidence that perhexiline modifies myocardial substrate utilization from fatty acids to lactate. <i>Journal of Cardiovascular Pharmacology</i> , <b>1995</b> , 25, 469-72	3.1	69
213	Magnetic resonance imaging of acute myocardial infarction: gadolinium diethylenetriamine pentaacetic acid as a marker of reperfusion. <i>Circulation</i> , <b>1986</b> , 74, 1434-40	16.7	69
212	BDPA: an efficient polarizing agent for fast dissolution dynamic nuclear polarization NMR spectroscopy. <i>Chemistry - A European Journal</i> , <b>2011</b> , 17, 10825-7	4.8	68
211	Contribution of various substrates to total citric acid cycle flux and anaplerosis as determined by <sup>13</sup> C isotopomer analysis and O <sub>2</sub> consumption in the heart. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , <b>1996</b> , 4, 35-46	2.8	68
210	Detection and localization of recent myocardial infarction by magnetic resonance imaging. <i>American Journal of Cardiology</i> , <b>1986</b> , 58, 214-9	3	67
209	A comparative study of short- and long-TE <sup>1</sup> H MRS at 3 T for in vivo detection of 2-hydroxyglutarate in brain tumors. <i>NMR in Biomedicine</i> , <b>2013</b> , 26, 1242-50	4.4	63
208	In vivo Na-23 MR imaging and spectroscopy of rat brain during TmDOTP5- infusion. <i>Journal of Magnetic Resonance Imaging</i> , <b>1992</b> , 2, 385-91	5.6	63
207	Heptanoate as a neural fuel: energetic and neurotransmitter precursors in normal and glucose transporter I-deficient (G1D) brain. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2013</b> , 33, 175-82	7.3	60
206	Hyperpolarized 89Y complexes as pH sensitive NMR probes. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 1784-5	16.4	60
205	( <sup>31</sup> P)-MRS of healthy human brain: ATP synthesis, metabolite concentrations, pH, and T1 relaxation times. <i>NMR in Biomedicine</i> , <b>2015</b> , 28, 1455-62	4.4	59
204	MED13-dependent signaling from the heart confers leanness by enhancing metabolism in adipose tissue and liver. <i>EMBO Molecular Medicine</i> , <b>2014</b> , 6, 1610-21	12	59
203	A new class of macrocyclic lanthanide complexes for cell labeling and magnetic resonance imaging applications. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 16178-88	16.4	58
202	Glucose metabolism via the pentose phosphate pathway, glycolysis and Krebs cycle in an orthotopic mouse model of human brain tumors. <i>NMR in Biomedicine</i> , <b>2012</b> , 25, 1177-86	4.4	57
201	<sup>13</sup> C isotopomer analysis of glutamate by tandem mass spectrometry. <i>Analytical Biochemistry</i> , <b>2002</b> , 300, 192-205	3.1	56
200	Competition of pyruvate with physiological substrates for oxidation by the heart: implications for studies with hyperpolarized [ <sup>1-13</sup> C]pyruvate. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , <b>2010</b> , 298, H1556-64	5.2	54
199	Analytical solutions for ( <sup>13</sup> C) isotopomer analysis of complex metabolic conditions: substrate oxidation, multiple pyruvate cycles, and gluconeogenesis. <i>Metabolic Engineering</i> , <b>2004</b> , 6, 12-24	9.7	54
198	Kinetic Modeling and Constrained Reconstruction of Hyperpolarized [ <sup>1-13</sup> C]-Pyruvate Offers Improved Metabolic Imaging of Tumors. <i>Cancer Research</i> , <b>2015</b> , 75, 4708-17	10.1	51

197	Noninvasive evaluation of liver metabolism by $^2\text{H}$ and $^{13}\text{C}$ NMR isotopomer analysis of human urine. <i>Analytical Biochemistry</i> , <b>2003</b> , 312, 228-34	3.1	51
196	Mitochondrial substrate utilization regulates cardiomyocyte cell-cycle progression. <i>Nature Metabolism</i> , <b>2020</b> , 2, 167-178	14.6	50
195	Effect of murine strain on metabolic pathways of glucose production after brief or prolonged fasting. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2005</b> , 289, E53-61	6	50
194	TmDOTP5- as a $^{23}\text{Na}$ shift reagent for the in vivo rat kidney. <i>Magnetic Resonance in Medicine</i> , <b>1995</b> , 34, 25-31	4.4	49
193	Effect of exercise on $(^{23}\text{Na})$ MRI and relaxation characteristics of the human calf muscle. <i>Journal of Magnetic Resonance Imaging</i> , <b>2000</b> , 11, 532-8	5.6	48
192	Effect of ischemia on NMR detection of phosphorylated metabolites in the intact rat heart. <i>Biochemistry</i> , <b>1989</b> , 28, 5323-6	3.2	48
191	In vivo determination of human breast fat composition by $^1\text{H}$ magnetic resonance spectroscopy at 7 T. <i>Magnetic Resonance in Medicine</i> , <b>2012</b> , 67, 20-6	4.4	47
190	Quantifying tracer levels of $(^2\text{H})(^2\text{O})$ enrichment from microliter amounts of plasma and urine by $(^2\text{H})$ NMR. <i>Magnetic Resonance in Medicine</i> , <b>2001</b> , 45, 156-8	4.4	47
189	Real-time detection of hepatic gluconeogenic and glycogenolytic states using hyperpolarized $[2-^{13}\text{C}]$ dihydroxyacetone. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 35859-67	5.4	45
188	Hyperpolarized $(^{89}\text{Y})$ offers the potential of direct imaging of metal ions in biological systems by magnetic resonance. <i>Journal of the American Chemical Society</i> , <b>2007</b> , 129, 12942-3	16.4	45
187	Alterations in substrate utilization in the reperfused myocardium: a direct analysis by $^{13}\text{C}$ NMR. <i>Biochemistry</i> , <b>1992</b> , 31, 4833-7	3.2	45
186	A noninvasive assessment of myocardial oxygen tension: $^{19}\text{F}$ NMR spectroscopy of sequestered perfluorocarbon emulsion. <i>Magnetic Resonance in Medicine</i> , <b>1992</b> , 27, 310-7	4.4	45
185	Simultaneous steady-state and dynamic $^{13}\text{C}$ NMR can differentiate alternative routes of pyruvate metabolism in living cancer cells. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 6212-24	5.4	44
184	Energetics and metabolism in the failing heart: important but poorly understood. <i>Current Opinion in Clinical Nutrition and Metabolic Care</i> , <b>2010</b> , 13, 458-65	3.8	40
183	Measurement of glycine in the human brain in vivo by $^1\text{H}$ -MRS at 3 T: application in brain tumors. <i>Magnetic Resonance in Medicine</i> , <b>2011</b> , 66, 609-18	4.4	39
182	Nuclear magnetic resonance imaging in Marfan $\text{\textcircled{Q}}$ syndrome. <i>Journal of the American College of Cardiology</i> , <b>1987</b> , 9, 70-4	15.1	39
181	Could $^{13}\text{C}$ MRI assist clinical decision-making for patients with heart disease?. <i>NMR in Biomedicine</i> , <b>2011</b> , 24, 973-9	4.4	38
180	Analysis of gluconeogenic pathways in vivo by distribution of $^2\text{H}$ in plasma glucose: comparison of nuclear magnetic resonance and mass spectrometry. <i>Analytical Biochemistry</i> , <b>2003</b> , 318, 321-4	3.1	37

179	Effects of insulin and cytosolic redox state on glucose production pathways in the isolated perfused mouse liver measured by integrated 2H and 13C NMR. <i>Biochemical Journal</i> , <b>2006</b> , 394, 465-73	3.8	35
178	Orientation-conserved transfer of symmetric Krebs cycle intermediates in mammalian tissue. <i>Biochemistry</i> , <b>1994</b> , 33, 6268-75	3.2	35
177	1H MRS of intramyocellular lipids in soleus muscle at 7 T: spectral simplification by using long echo times without water suppression. <i>Magnetic Resonance in Medicine</i> , <b>2010</b> , 64, 662-71	4.4	34
176	Differing mechanisms of hepatic glucose overproduction in triiodothyronine-treated rats vs. Zucker diabetic fatty rats by NMR analysis of plasma glucose. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2005</b> , 288, E654-62	6	34
175	The effect of 13C enrichment in the glassing matrix on dynamic nuclear polarization of [1-13C]pyruvate. <i>Physics in Medicine and Biology</i> , <b>2011</b> , 56, N85-92	3.8	33
174	Storage and oxidation of long-chain fatty acids in the C57/BL6 mouse heart as measured by NMR spectroscopy. <i>FEBS Letters</i> , <b>2006</b> , 580, 4282-7	3.8	33
173	Metabolism of hyperpolarized [1-(13)C]pyruvate through alternate pathways in rat liver. <i>NMR in Biomedicine</i> , <b>2016</b> , 29, 466-74	4.4	33
172	Measurement of hepatic glucose output, krebs cycle, and gluconeogenic fluxes by NMR analysis of a single plasma glucose sample. <i>Analytical Biochemistry</i> , <b>1998</b> , 263, 39-45	3.1	32
171	Quantitation of intracellular [Na+] in vivo by using TmDOTP5- as an NMR shift reagent and extracellular marker. <i>Journal of Applied Physiology</i> , <b>1998</b> , 85, 1806-12	3.7	30
170	Effects of visceral adiposity on glycerol pathways in gluconeogenesis. <i>Metabolism: Clinical and Experimental</i> , <b>2017</b> , 67, 80-89	12.7	29
169	Hyperpolarized 13C NMR detects rapid drug-induced changes in cardiac metabolism. <i>Magnetic Resonance in Medicine</i> , <b>2015</b> , 74, 312-9	4.4	29
168	Fast Dissolution Dynamic Nuclear Polarization NMR of 13C-Enriched 89Y-DOTA Complex: Experimental and Theoretical Considerations. <i>Applied Magnetic Resonance</i> , <b>2012</b> , 43, 69-79	0.8	29
167	Increased hepatic fructose 2,6-bisphosphate after an oral glucose load does not affect gluconeogenesis. <i>Journal of Biological Chemistry</i> , <b>2003</b> , 278, 28427-33	5.4	29
166	Effects of amino acids on substrate selection, anaplerosis, and left ventricular function in the ischemic reperfused rat heart. <i>Journal of Clinical Investigation</i> , <b>1993</b> , 92, 831-9	15.9	29
165	Mitochondrial Substrate Utilization Regulates Cardiomyocyte Cell Cycle Progression. <i>Nature Metabolism</i> , <b>2020</b> , 2, 167-178	14.6	29
164	Dissolution DNP-NMR spectroscopy using galvinoxyl as a polarizing agent. <i>Journal of Magnetic Resonance</i> , <b>2013</b> , 227, 14-9	3	28
163	Dynamic monitoring of carnitine and acetylcarnitine in the trimethylamine signal after exercise in human skeletal muscle by 7T 1H-MRS. <i>Magnetic Resonance in Medicine</i> , <b>2013</b> , 69, 7-17	4.4	27
162	Oxidation of lactate and acetate in rat skeletal muscle: analysis by 13C-nuclear magnetic resonance spectroscopy. <i>Journal of Applied Physiology</i> , <b>1997</b> , 83, 32-9	3.7	27

161	Compartmentation of glycolysis and glycogenolysis in the perfused rat heart. <i>NMR in Biomedicine</i> , <b>2004</b> , 17, 51-9	4.4	27
160	<sup>13</sup> C isotopomer analysis of glutamate by J-resolved heteronuclear single quantum coherence spectroscopy. <i>Analytical Biochemistry</i> , <b>2001</b> , 289, 187-95	3.1	27
159	<sup>13</sup> C NMR measurements of human gluconeogenic fluxes after ingestion of [U- <sup>13</sup> C]propionate, phenylacetate, and acetaminophen. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>1998</b> , 275, E843-52	6	27
158	Alterations in hepatic glucose and energy metabolism as a result of calorie and carbohydrate restriction. <i>Hepatology</i> , <b>2008</b> , 48, 1487-96	11.2	26
157	Measuring in-vivo metabolism using nuclear magnetic resonance. <i>Current Opinion in Clinical Nutrition and Metabolic Care</i> , <b>2003</b> , 6, 501-9	3.8	26
156	Dipolar cross-relaxation modulates signal amplitudes in the (1)H NMR spectrum of hyperpolarized [(13)C]formate. <i>Journal of Magnetic Resonance</i> , <b>2007</b> , 189, 280-5	3	25
155	Quantitation of gluconeogenesis by (2)H nuclear magnetic resonance analysis of plasma glucose following ingestion of (2)H(2)O. <i>Analytical Biochemistry</i> , <b>2000</b> , 277, 121-6	3.1	25
154	NMR indirect detection of glutamate to measure citric acid cycle flux in the isolated perfused mouse heart. <i>FEBS Letters</i> , <b>2001</b> , 505, 163-7	3.8	25
153	Determination of acetyl-CoA enrichment in rat heart and skeletal muscle by 1H nuclear magnetic resonance analysis of glutamate in tissue extracts. <i>Analytical Biochemistry</i> , <b>1997</b> , 249, 201-6	3.1	24
152	Influence of propranolol on acidosis and high energy phosphates in ischaemic myocardium of the rabbit. <i>Cardiovascular Research</i> , <b>1986</b> , 20, 710-20	9.9	24
151	Glucose production pathways by 2H and <sup>13</sup> C NMR in patients with HIV-associated lipodystrophy. <i>Magnetic Resonance in Medicine</i> , <b>2004</b> , 51, 649-54	4.4	23
150	Sources of acetyl-CoA entering the tricarboxylic acid cycle as determined by analysis of succinate <sup>13</sup> C isotopomers. <i>Biochemistry</i> , <b>1993</b> , 32, 12240-4	3.2	23
149	Active transport and inotropic state in guinea pig left atrium. <i>Circulation Research</i> , <b>1983</b> , 52, 411-22	15.7	22
148	Interaction between the pentose phosphate pathway and gluconeogenesis from glycerol in the liver. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 32593-603	5.4	21
147	Orientation of lipid strands in the extracellular compartment of muscle: effect on quantitation of intramyocellular lipids. <i>Magnetic Resonance in Medicine</i> , <b>2009</b> , 61, 16-21	4.4	21
146	Brain metabolism modulates neuronal excitability in a mouse model of pyruvate dehydrogenase deficiency. <i>Science Translational Medicine</i> , <b>2019</b> , 11,	17.5	21
145	Oxidation of [U- <sup>13</sup> C]glucose in the human brain at 7T under steady state conditions. <i>Magnetic Resonance in Medicine</i> , <b>2017</b> , 78, 2065-2071	4.4	20
144	Influence of liver triglycerides on suppression of glucose production by insulin in men. <i>Journal of Clinical Endocrinology and Metabolism</i> , <b>2015</b> , 100, 235-43	5.6	20



143	Quadrature transmit coil for breast imaging at 7 tesla using forced current excitation for improved homogeneity. <i>Journal of Magnetic Resonance Imaging</i> , <b>2014</b> , 40, 1165-73	5.6	20
142	C isotopomer analysis of glutamate by heteronuclear multiple quantum coherence-total correlation spectroscopy (HMQC-TOCSY). <i>FEBS Letters</i> , <b>1998</b> , 440, 382-6	3.8	20
141	Comparison of [3,4- <sup>13</sup> C]glucose to [6,6- <sup>2</sup> H <sub>2</sub> ]glucose as a tracer for glucose turnover by nuclear magnetic resonance. <i>Magnetic Resonance in Medicine</i> , <b>2005</b> , 53, 1479-83	4.4	20
140	A new technique for cannulation of the coronary sinus from the femoral vein. <i>Catheterization and Cardiovascular Diagnosis</i> , <b>1986</b> , 12, 426-9		20
139	Clinical and hemodynamic characteristics of patients with inducible pulsus alternans. <i>American Heart Journal</i> , <b>1988</b> , 115, 1251-7	4.9	20
138	Novel application of complementary imaging techniques to examine in vivo glucose metabolism in the kidney. <i>American Journal of Physiology - Renal Physiology</i> , <b>2016</b> , 310, F717-F725	4.3	19
137	Modeling of brain metabolism and pyruvate compartmentation using ( <sup>13</sup> C) NMR in vivo: caution required. <i>Journal of Cerebral Blood Flow and Metabolism</i> , <b>2013</b> , 33, 1160-7	7.3	19
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135	Effects of ischemia on intracellular sodium and phosphates in the in vivo rat liver. <i>Journal of Applied Physiology</i> , <b>1996</b> , 81, 1395-403	3.7	19
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