

# Robert A Bok

## List of Publications by Year in descending order

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58  
papers

4,153  
citations

201674

27  
h-index

144013

57  
g-index

58  
all docs

58  
docs citations

58  
times ranked

3115  
citing authors

#	ARTICLE	IF	CITATIONS
1	Clinical translation of hyperpolarized <sup>13</sup> C pyruvate and urea MRI for simultaneous metabolic and perfusion imaging. <i>Magnetic Resonance in Medicine</i> , 2022, 87, 138-149.	3.0	23
2	Hyperpolarized 1-[13C]-Pyruvate Magnetic Resonance Imaging Detects an Early Metabolic Response to Immune Checkpoint Inhibitor Therapy in Prostate Cancer. <i>European Urology</i> , 2022, 81, 219-221.	1.9	17
3	Initial Experience on Hyperpolarized [1-13C]Pyruvate MRI Multicenter Reproducibility—Are Multicenter Trials Feasible?. <i>Tomography</i> , 2022, 8, 585-595.	1.8	8
4	Whole-Abdomen Metabolic Imaging of Healthy Volunteers Using Hyperpolarized [ <sup>13</sup> C]pyruvate MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2022, 56, 1792-1806.	3.4	19
5	Development of specialized magnetic resonance acquisition techniques for human hyperpolarized [ <sup>13</sup> C], [ <sup>15</sup> N <sub>2</sub> ]urea + [ <sup>13</sup> C]pyruvate simultaneous perfusion and metabolic imaging. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 1039-1054.	3.0	11
6	Kinetic analysis of multi-resolution hyperpolarized <sup>13</sup> C human brain MRI to study cerebral metabolism. <i>Magnetic Resonance in Medicine</i> , 2022, 88, 2190-2197.	3.0	5
7	Resistance to Androgen Deprivation Leads to Altered Metabolism in Human and Murine Prostate Cancer Cell and Tumor Models. <i>Metabolites</i> , 2021, 11, 139.	2.9	13
8	Metabolic MRI with hyperpolarized [1- <sup>13</sup> C]pyruvate separates benign oligemia from infarcting penumbra in porcine stroke. <i>Journal of Cerebral Blood Flow and Metabolism</i> , 2021, 41, 2916-2927.	4.3	10
9	Specialized computational methods for denoising, B1 correction, and kinetic modeling in hyperpolarized <sup>13</sup> C MR EPSI studies of liver tumors. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 2402-2411.	3.0	6
10	Kinetic Modeling of Hyperpolarized Carbon-13 Pyruvate Metabolism in the Human Brain. <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 320-327.	8.9	32
11	Hyperpolarized <sup>13</sup> C-pyruvate MRI detects real-time metabolic flux in prostate cancer metastases to bone and liver: a clinical feasibility study. <i>Prostate Cancer and Prostatic Diseases</i> , 2020, 23, 269-276.	3.9	68
12	A variable resolution approach for improved acquisition of hyperpolarized <sup>13</sup> C metabolic MRI. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 2943-2952.	3.0	30
13	Simultaneous Metabolic and Perfusion Imaging Using Hyperpolarized <sup>13</sup> C MRI Can Evaluate Early and Dose-Dependent Response to Radiation Therapy in a Prostate Cancer Mouse Model. <i>International Journal of Radiation Oncology Biology Physics</i> , 2020, 107, 887-896.	0.8	18
14	A Metabolomics Study of Hypoxia Ischemia during Mouse Brain Development Using Hyperpolarized <sup>13</sup> C. <i>Developmental Neuroscience</i> , 2020, 42, 49-58.	2.0	8
15	Tensor image enhancement and optimal multichannel receiver combination analyses for human hyperpolarized <sup>13</sup> C MRSI. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 3351-3365.	3.0	27
16	Elevated Tumor Lactate and Efflux in High-grade Prostate Cancer demonstrated by Hyperpolarized <sup>13</sup> C Magnetic Resonance Spectroscopy of Prostate Tissue Slice Cultures. <i>Cancers</i> , 2020, 12, 537.	3.7	14
17	Characterization of serial hyperpolarized <sup>13</sup> C metabolic imaging in patients with glioma. <i>NeuroImage: Clinical</i> , 2020, 27, 102323.	2.7	42
18	A metabolite-specific 3D stack-of-spiral bSSFP sequence for improved lactate imaging in hyperpolarized [ <sup>13</sup> C]pyruvate studies on a 3T clinical scanner. <i>Magnetic Resonance in Medicine</i> , 2020, 84, 1113-1125.	3.0	13

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19	Assessing high-intensity focused ultrasound treatment of prostate cancer with hyperpolarized <sup>13</sup> C dual-agent imaging of metabolism and perfusion. <i>NMR in Biomedicine</i> , 2019, 32, e3962.	2.8	10
20	Amino Acid-Derived Sensors for Specific Zn <sup>2+</sup> Detection Using Hyperpolarized <sup>13</sup> C Magnetic Resonance Spectroscopy. <i>Chemistry - A European Journal</i> , 2019, 25, 11842-11846.	3.3	8
21	First hyperpolarized [2- <sup>13</sup> C]pyruvate MR studies of human brain metabolism. <i>Journal of Magnetic Resonance</i> , 2019, 309, 106617.	2.1	63
22	Using bidirectional chemical exchange for improved hyperpolarized [ <sup>13</sup> C]bicarbonate pH imaging. <i>Magnetic Resonance in Medicine</i> , 2019, 82, 959-972.	3.0	8
23	The Role of Lactate Metabolism in Prostate Cancer Progression and Metastases Revealed by Dual-Agent Hyperpolarized <sup>13</sup> C MRSI. <i>Cancers</i> , 2019, 11, 257.	3.7	41
24	Hyperpolarized <sup>13</sup> C MRI: State of the Art and Future Directions. <i>Radiology</i> , 2019, 291, 273-284.	7.3	210
25	Pulse sequence considerations for quantification of pyruvate-to-lactate conversion <i>in vivo</i> in hyperpolarized <sup>13</sup> C imaging. <i>NMR in Biomedicine</i> , 2019, 32, e4052.	2.8	13
26	A regional bolus tracking and real-time B <sub>1</sub> calibration method for hyperpolarized <sup>13</sup> C MRI. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 839-851.	3.0	30
27	Dynamic diffusion-weighted hyperpolarized <sup>13</sup> C imaging based on a slice-selective double spin echo sequence for measurements of cellular transport. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 2001-2010.	3.0	4
28	Translation of Carbon- <sup>13</sup> EPI for hyperpolarized MR molecular imaging of prostate and brain cancer patients. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 2702-2709.	3.0	65
29	Hyperpolarized <i>in vivo</i> pH imaging reveals grade-dependent acidification in prostate cancer. <i>Oncotarget</i> , 2019, 10, 6096-6110.	1.8	16
30	Technique development of 3D dynamic CS-EPI for hyperpolarized <sup>13</sup> C pyruvate MR molecular imaging of human prostate cancer. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 2062-2072.	3.0	47
31	Development of methods and feasibility of using hyperpolarized carbon- <sup>13</sup> imaging data for evaluating brain metabolism in patient studies. <i>Magnetic Resonance in Medicine</i> , 2018, 80, 864-873.	3.0	134
32	Diffusion-weighted imaging of hyperpolarized [ <sup>13</sup> C]urea in mouse liver. <i>Journal of Magnetic Resonance Imaging</i> , 2018, 47, 141-151.	3.4	4
33	Investigation of analysis methods for hyperpolarized <sup>13</sup> C-pyruvate metabolic MRI in prostate cancer patients. <i>NMR in Biomedicine</i> , 2018, 31, e3997.	2.8	77
34	Combining hyperpolarized <sup>13</sup> C MRI with a liver-specific gadolinium contrast agent for selective assessment of hepatocyte metabolism. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 2356-2363.	3.0	13
35	Detection of localized changes in the metabolism of hyperpolarized gluconeogenic precursors <sup>13</sup> C-lactate and <sup>13</sup> C-pyruvate in kidney and liver. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 1429-1437.	3.0	35
36	Development of high resolution 3D hyperpolarized carbon- <sup>13</sup> MR molecular imaging techniques. <i>Magnetic Resonance Imaging</i> , 2017, 38, 152-162.	1.8	20

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37	Hyperpolarized <sup>13</sup> C Spectroscopic Evaluation of Oxidative Stress in a Rodent Model of Steatohepatitis. <i>Scientific Reports</i> , 2017, 7, 46014.	3.3	15
38	Assessing Prostate Cancer Aggressiveness with Hyperpolarized Dual-Agent 3D Dynamic Imaging of Metabolism and Perfusion. <i>Cancer Research</i> , 2017, 77, 3207-3216.	0.9	60
39	Cancer recurrence monitoring using hyperpolarized [1- <sup>13</sup> C]pyruvate metabolic imaging in murine breast cancer model. <i>Magnetic Resonance Imaging</i> , 2017, 43, 105-109.	1.8	13
40	Spectrally selective three-dimensional dynamic balanced steady-state free precession for hyperpolarized <sup>13</sup> C metabolic imaging with spectrally selective radiofrequency pulses. <i>Magnetic Resonance in Medicine</i> , 2017, 78, 963-975.	3.0	26
41	Monitoring acute metabolic changes in the liver and kidneys induced by fructose and glucose using hyperpolarized [ <sup>13</sup> C]dihydroxyacetone. <i>Magnetic Resonance in Medicine</i> , 2017, 77, 65-73.	3.0	28
42	Hyperpolarized [ <sup>13</sup> C]ketobutyrate, a molecular analog of pyruvate with modified specificity for LDH isoforms. <i>Magnetic Resonance in Medicine</i> , 2016, 75, spcone-spcone.	3.0	0
43	Hyperpolarized [ <sup>13</sup> C]ketobutyrate, a molecular analog of pyruvate with modified specificity for LDH isoforms. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 1894-1900.	3.0	10
44	Imaging Renal Urea Handling in Rats at Millimeter Resolution Using Hyperpolarized Magnetic Resonance Relaxometry. <i>Tomography</i> , 2016, 2, 125-137.	1.8	31
45	A 2DRF pulse sequence for bolus tracking in hyperpolarized <sup>13</sup> C imaging. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 506-512.	3.0	8
46	Rapid in vivo apparent diffusion coefficient mapping of hyperpolarized <sup>13</sup> C metabolites. <i>Magnetic Resonance in Medicine</i> , 2015, 74, 622-633.	3.0	27
47	Noninvasive In Vivo Imaging of Diabetes-Induced Renal Oxidative Stress and Response to Therapy Using Hyperpolarized <sup>13</sup> C Dehydroascorbate Magnetic Resonance. <i>Diabetes</i> , 2015, 64, 344-352.	0.6	59
48	Dynamic hyperpolarized carbon-13 MR metabolic imaging of nonhuman primate brain. <i>Magnetic Resonance in Medicine</i> , 2014, 71, 19-25.	3.0	31
49	Metabolic Imaging of Patients with Prostate Cancer Using Hyperpolarized [1- <sup>13</sup> C]Pyruvate. <i>Science Translational Medicine</i> , 2013, 5, 198ra108.	12.4	1,061
50	<sup>13</sup> C-Pyruvate Imaging Reveals Alterations in Glycolysis that Precede c-Myc-Induced Tumor Formation and Regression. <i>Cell Metabolism</i> , 2011, 14, 131-142.	16.2	210
51	Imaging of blood flow using hyperpolarized [ <sup>13</sup> C]Urea in preclinical cancer models. <i>Journal of Magnetic Resonance Imaging</i> , 2011, 33, 692-697.	3.4	105
52	Detection of early response to temozolomide treatment in brain tumors using hyperpolarized <sup>13</sup> C MR metabolic imaging. <i>Journal of Magnetic Resonance Imaging</i> , 2011, 33, 1284-1290.	3.4	106
53	Hyperpolarized <sup>13</sup> C dehydroascorbate as an endogenous redox sensor for in vivo metabolic imaging. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 18606-18611.	7.1	143
54	3D compressed sensing for highly accelerated hyperpolarized <sup>13</sup> C MRSI with in vivo applications to transgenic mouse models of cancer. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 312-321.	3.0	126

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55	Investigation of tumor hyperpolarized [ <sup>13</sup> C]-pyruvate dynamics using time-resolved multiband RF excitation echo-planar MRSI. <i>Magnetic Resonance in Medicine</i> , 2010, 63, 582-591.	3.0	85
56	Multi-compound polarization by DNP allows simultaneous assessment of multiple enzymatic activities in vivo. <i>Journal of Magnetic Resonance</i> , 2010, 205, 141-147.	2.1	154
57	Hyperpolarized <sup>13</sup> C magnetic resonance metabolic imaging: application to brain tumors. <i>Neuro-Oncology</i> , 2010, 12, 133-144.	1.2	166
58	Hyperpolarized <sup>13</sup> C Lactate, Pyruvate, and Alanine: Noninvasive Biomarkers for Prostate Cancer Detection and Grading. <i>Cancer Research</i> , 2008, 68, 8607-8615.	0.9	527