

# Devkumar Mustafi

## List of Publications by Year in descending order

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92  
papers

2,264  
citations

270111

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docs citations

93  
times ranked

3439  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effectiveness of Dynamic Contrast Enhanced MRI with a Split Dose of Gadoterate Meglumine for Detection of Prostate Cancer. <i>Academic Radiology</i> , 2022, 29, 796-803.	1.3	2
2	Can Pre-treatment Quantitative Multi-parametric MRI Predict the Outcome of Radiotherapy in Patients with Prostate Cancer?. <i>Academic Radiology</i> , 2022, 29, 977-985.	1.3	7
3	Validation of Prostate Tissue Composition by Using Hybrid Multidimensional MRI: Correlation with Histologic Findings. <i>Radiology</i> , 2022, 302, 368-377.	3.6	14
4	Differences Between Ipsilateral and Contralateral Early Parenchymal Enhancement Kinetics Predict Response of Breast Cancer to Neoadjuvant Therapy. <i>Academic Radiology</i> , 2022, 29, 1469-1479.	1.3	3
5	Histological validation of prostate tissue composition measurement using hybrid multi-dimensional MRI: agreement with pathologists' measures. <i>Abdominal Radiology</i> , 2022, 47, 801-813.	1.0	6
6	Physically implausible signals as a quantitative quality assessment metric in prostate diffusion-weighted MR imaging. <i>Abdominal Radiology</i> , 2022, , .	1.0	0
7	T2*-weighted MRI as a non-contrast-enhanced method for assessment of focal laser ablation zone extent in prostate cancer thermotherapy. <i>European Radiology</i> , 2021, 31, 325-332.	2.3	3
8	Sensitivity to myelin using model-free analysis of the water resonance line shape in postmortem mouse brain. <i>Magnetic Resonance in Medicine</i> , 2021, 85, 667-677.	1.9	2
9	Signal intensity form of the Tofts model for quantitative analysis of prostate dynamic contrast enhanced MRI data. <i>Physics in Medicine and Biology</i> , 2021, 66, 025002.	1.6	3
10	Comparison of DCE-MRI of murine model cancers with a low dose and high dose of contrast agent. <i>Physica Medica</i> , 2021, 81, 31-39.	0.4	4
11	High spectral and spatial resolution MRI of prostate cancer: a pilot study. <i>Magnetic Resonance in Medicine</i> , 2021, 86, 1505-1513.	1.9	3
12	An in silico validation framework for quantitative DCE-MRI techniques based on a dynamic digital phantom. <i>Medical Image Analysis</i> , 2021, 73, 102186.	7.0	4
13	Enhancement-constrained acceleration: A robust reconstruction framework in breast DCE-MRI. <i>PLoS ONE</i> , 2021, 16, e0258621.	1.1	2
14	Magnetic resonance angiography reveals increased arterial blood supply and tumorigenesis following high fat feeding in a mouse model of triple-negative breast cancer. <i>NMR in Biomedicine</i> , 2020, 33, e4363.	1.6	4
15	Discrimination of benign from malignant breast lesions in dense breasts with model-based analysis of regions-of-interest using directional diffusion-weighted images. <i>BMC Medical Imaging</i> , 2020, 20, 61.	1.4	6
16	Effect of Echo Times on Prostate Cancer Detection on T2-Weighted Images. <i>Academic Radiology</i> , 2020, 27, 1555-1563.	1.3	2
17	Performance of T2 Maps in the Detection of Prostate Cancer. <i>Academic Radiology</i> , 2019, 26, 15-21.	1.3	29
18	The effects of variations in tissue microstructure from postmortem rat brain on the asymmetry of the water proton resonance. <i>Magnetic Resonance in Medicine</i> , 2019, 81, 79-89.	1.9	6

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19	Low-dose imaging technique (LITE) MRI: initial experience in breast imaging. British Journal of Radiology, 2019, 92, 20190302.	1.0	12
20	Use of Indicator Dilution Principle to Evaluate Accuracy of Arterial Input Function Measured With Low-Dose Ultrafast Prostate Dynamic Contrast-Enhanced MRI. Tomography, 2019, 5, 260-265.	0.8	1
21	Diagnosis of Prostate Cancer by Use of MRI-Derived Quantitative Risk Maps: A Feasibility Study. American Journal of Roentgenology, 2019, 213, W66-W75.	1.0	14
22	Magnetic Resonance Angiography Shows Increased Arterial Blood Supply Associated with Murine Mammary Cancer. International Journal of Biomedical Imaging, 2019, 2019, 1-6.	3.0	4
23	Revisiting quantitative multi-parametric MRI of benign prostatic hyperplasia and its differentiation from transition zone cancer. Abdominal Radiology, 2019, 44, 2233-2243.	1.0	30
24	Multiparametric MRI Features and Pathologic Outcome of Wedge-Shaped Lesions in the Peripheral Zone on T2-Weighted Images of the Prostate. American Journal of Roentgenology, 2019, 212, 124-129.	1.0	15
25	Ultrafast Dynamic Contrast-Enhanced Breast MRI: Kinetic Curve Assessment Using Empirical Mathematical Model Validated with Histological Microvessel Density. Academic Radiology, 2019, 26, e141-e149.	1.3	31
26	Quantitative analysis of vascular properties derived from ultrafast DCE-MRI to discriminate malignant and benign breast tumors. Magnetic Resonance in Medicine, 2019, 81, 2147-2160.	1.9	44
27	Comparison of T2-Weighted Imaging, DWI, and Dynamic Contrast-Enhanced MRI for Calculation of Prostate Cancer Index Lesion Volume: Correlation With Whole-Mount Pathology. American Journal of Roentgenology, 2019, 212, 351-356.	1.0	46
28	Diagnosis of Prostate Cancer with Noninvasive Estimation of Prostate Tissue Composition by Using Hybrid Multidimensional MR Imaging: A Feasibility Study. Radiology, 2018, 287, 864-873.	3.6	83
29	Dynamic field-of-view imaging to increase temporal resolution in the early phase of contrast media uptake in breast DCE-MRI: A feasibility study. Medical Physics, 2018, 45, 1050-1058.	1.6	7
30	Performance of Ultrafast DCE-MRI for Diagnosis of Prostate Cancer. Academic Radiology, 2018, 25, 349-358.	1.3	28
31	Fast Temporal Resolution Dynamic Contrast-Enhanced MRI: Histogram Analysis Versus Visual Analysis for Differentiating Benign and Malignant Breast Lesions. American Journal of Roentgenology, 2018, 211, 933-939.	1.0	15
32	Magnetic resonance spectroscopy detects differential lipid composition in mammary glands on low fat, high animal fat versus high fructose diets. PLoS ONE, 2018, 13, e0190929.	1.1	8
33	Using Numerical Simulations and Experiments to Compare Different Pure Mathematical Models for Analyzing Dynamic Contrast Enhanced MRI Data. Current Medical Imaging, 2018, 14, 468-476.	0.4	0
34	Spectral characterization of tissues in high spectral and spatial resolution MR images: Implications for a classification-based synthetic CT algorithm. Medical Physics, 2017, 44, 1865-1875.	1.6	2
35	Value of breast MRI for patients with a biopsy showing atypical ductal hyperplasia (ADH). Journal of Magnetic Resonance Imaging, 2017, 46, 1738-1747.	1.9	23
36	Fast bilateral breast coverage with high spectral and spatial resolution (HiSS) MRI at 3T. Journal of Magnetic Resonance Imaging, 2017, 46, 1341-1348.	1.9	8

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37	MRI ductography of contrast agent distribution and leakage in normal mouse mammary ducts and ducts with in situ cancer. <i>Magnetic Resonance Imaging</i> , 2017, 40, 48-52.	1.0	4
38	Magnetic Resonance Imaging and Molecular Characterization of a Hormone-Mediated Murine Model of Prostate Enlargement and Bladder Outlet Obstruction. <i>American Journal of Pathology</i> , 2017, 187, 2378-2387.	1.9	9
39	MRI reveals increased tumorigenesis following high fat feeding in a mouse model of triple-negative breast cancer. <i>NMR in Biomedicine</i> , 2017, 30, e3758.	1.6	13
40	ADAM17 is a Tumor Promoter and Therapeutic Target in Western Diet-associated Colon Cancer. <i>Clinical Cancer Research</i> , 2017, 23, 549-561.	3.2	40
41	Dynamic Contrast-Enhanced Magnetic Resonance Imaging as a Pharmacodynamic Biomarker for Pazopanib in Metastatic Renal Carcinoma. <i>Clinical Genitourinary Cancer</i> , 2017, 15, 207-212.	0.9	10
42	B <sub>1</sub> and T <sub>1</sub> mapping of the breast with a reference tissue method. <i>Magnetic Resonance in Medicine</i> , 2016, 75, 1565-1573.	1.9	23
43	Breast density estimation from high spectral and spatial resolution MRI. <i>Journal of Medical Imaging</i> , 2016, 3, 044507.	0.8	9
44	Kinetic Analysis of Benign and Malignant Breast Lesions With Ultrafast Dynamic Contrast-Enhanced MRI: Comparison With Standard Kinetic Assessment. <i>American Journal of Roentgenology</i> , 2016, 207, 1159-1166.	1.0	98
45	Ultrafast Bilateral DCE-MRI of the Breast with Conventional Fourier Sampling. <i>Academic Radiology</i> , 2016, 23, 1137-1144.	1.3	70
46	Arterial input functions (AIFs) measured directly from arteries with low and standard doses of contrast agent, and AIFs derived from reference tissues. <i>Magnetic Resonance Imaging</i> , 2016, 34, 197-203.	1.0	18
47	Benign Conditions That Mimic Prostate Carcinoma: MR Imaging Features with Histopathologic Correlation. <i>Radiographics</i> , 2016, 36, 162-175.	1.4	131
48	Mitophagy defects arising from BNip3 loss promote mammary tumor progression to metastasis. <i>EMBO Reports</i> , 2015, 16, 1145-1163.	2.0	232
49	MRI accurately identifies early murine mammary cancers and reliably differentiates between in situ and invasive cancer: correlation of MRI with histology. <i>NMR in Biomedicine</i> , 2015, 28, 1078-1086.	1.6	9
50	Using MRI to detect and differentiate calcium oxalate and calcium hydroxyapatite crystals in air-bubble-free phantom. <i>Physica Medica</i> , 2015, 31, 1075-1079.	0.4	4
51	Preliminary assessment of dispersion versus absorption analysis of high spectral and spatial resolution magnetic resonance images in the diagnosis of breast cancer. <i>Journal of Medical Imaging</i> , 2015, 2, 024502.	0.8	4
52	IV Administered Gadodiamide Enters the Lumen of the Prostatic Glands: X-Ray Fluorescence Microscopy Examination of a Mouse Model. <i>American Journal of Roentgenology</i> , 2015, 205, W313-W319.	1.0	6
53	3D high spectral and spatial resolution imaging of ex vivo mouse brain. <i>Medical Physics</i> , 2015, 42, 1463-1472.	1.6	13
54	High resolution 3D MRI of mouse mammary glands with intra-ductal injection of contrast media. <i>Magnetic Resonance Imaging</i> , 2015, 33, 161-165.	1.0	8

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55	Correlation of In Vivo and Ex Vivo ADC and T2 of In Situ and Invasive Murine Mammary Cancers. PLoS ONE, 2015, 10, e0129212.	1.1	4
56	Residual analysis of the water resonance signal in breast lesions imaged with high spectral and spatial resolution (HiSS) MRI: A pilot study. Medical Physics, 2014, 41, 012303.	1.6	14
57	MRI of neonatal necrotizing enterocolitis in a rodent model. NMR in Biomedicine, 2014, 27, 272-279.	1.6	5
58	Mammary cancer initiation and progression studied with magnetic resonance imaging. Breast Cancer Research, 2014, 16, 495.	2.2	9
59	Intranasal Delivery of Mesenchymal Stem Cells Significantly Extends Survival of Irradiated Mice with Experimental Brain Tumors. Molecular Therapy, 2014, 22, 140-148.	3.7	105
60	The Renin-Angiotensin System Mediates EGF Receptor-Vitamin D Receptor Cross-Talk in Colitis-Associated Colon Cancer. Clinical Cancer Research, 2014, 20, 5848-5859.	3.2	40
61	Quantitative evaluation of internal marks made using MRgFUS as seen on MRI, CT, US, and digital color images - A pilot study. Physica Medica, 2014, 30, 941-946.	0.4	0
62	Monitoring Anti-Angiogenic Therapy in Colorectal Cancer Murine Model using Dynamic Contrast-Enhanced MRI - Comparing Pixel-by-Pixel with Region of Interest Analysis. Technology in Cancer Research and Treatment, 2013, 12, 71-78.	0.8	9
63	Cross-linked Heterogeneous Nanoparticles as Bifunctional Probe. Chemistry of Materials, 2012, 24, 2423-2425.	3.2	17
64	T2* relaxation times of intraductal murine mammary cancer, invasive mammary cancer, and normal mammary gland. Medical Physics, 2012, 39, 1309-1313.	1.6	5
65	Use of a reference tissue and blood vessel to measure the arterial input function in DCEMRI. Magnetic Resonance in Medicine, 2010, 64, 1821-1826.	1.9	19
66	Can DCEMRI assess the effect of green tea on the angiogenic properties of rodent prostate tumors?. Physica Medica, 2010, 26, 111-116.	0.4	4
67	New vanadium-based magnetic resonance imaging probes: clinical potential for early detection of cancer. Journal of Biological Inorganic Chemistry, 2009, 14, 1187-1197.	1.1	24
68	Magnetic resonance imaging of the natural history of in situ mammary neoplasia in transgenic mice: a pilot study. Breast Cancer Research, 2009, 11, R65.	2.2	16
69	Quantitative Analysis of Dynamic Contrast Enhanced MRI for Assessment of Bowel Inflammation in Crohn's Disease. Academic Radiology, 2009, 16, 1223-1230.	1.3	58
70	Rational Design, Synthesis, and Biological Evaluation of Progesterone-Modified MRI Contrast Agents. Chemistry and Biology, 2007, 14, 824-834.	6.2	35
71	The vanadyl (VO <sub>2</sub> <sup>+</sup> ) chelate bis(acetylacetonato)oxovanadium(IV) potentiates tyrosine phosphorylation of the insulin receptor. Journal of Biological Inorganic Chemistry, 2005, 10, 874-886.	1.1	51
72	Structure and Conformation of Bis(acetylacetonato)oxovanadium(IV) and Bis(maltolato)oxovanadium(IV) in Solution Determined by Electron Nuclear Double Resonance Spectroscopy. Inorganic Chemistry, 2005, 44, 5580-5590.	1.9	22

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73	Characterization of calcium binding properties of lithostathine. <i>Journal of Biological Inorganic Chemistry</i> , 2003, 8, 341-347.	1.1	17
74	Catalytic and structural role of the metal ion in dUTP pyrophosphatase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 5670-5675.	3.3	46
75	Differentiation of nonmetastatic and metastatic rodent prostate tumors with high spectral and spatial resolution MRI. <i>Magnetic Resonance in Medicine</i> , 2001, 45, 1046-1055.	1.9	22
76	Uptake of a superparamagnetic contrast agent imaged by MR with high spectral and spatial resolution. <i>Magnetic Resonance in Medicine</i> , 2000, 43, 633-639.	1.9	22
77	Overexpression and Biosynthetic Deuterium Enrichment of TEM-1 $\beta$ -Lactamase for Structural Characterization by Magnetic Resonance Methods. <i>Protein Expression and Purification</i> , 2000, 19, 235-245.	0.6	30
78	High-Frequency Electron Paramagnetic Resonance Studies of VO <sub>2</sub> <sup>+</sup> in Low-Temperature Glasses. <i>Journal of Physical Chemistry A</i> , 1999, 103, 11279-11286.	1.1	36
79	A new method for imaging perfusion and contrast extraction fraction: Input functions derived from reference tissues. <i>Journal of Magnetic Resonance Imaging</i> , 1998, 8, 1126-1134.	1.9	140
80	Conformational Changes in Spin-Labeled Cephalosporin and Penicillin upon Hydrolysis Revealed by Electron Nuclear Double Resonance Spectroscopy. <i>Journal of the American Chemical Society</i> , 1997, 119, 12619-12628.	6.6	16
81	Spectroscopic imaging of the water resonance with short repetition time to study tumor response to hyperoxia. <i>Magnetic Resonance in Medicine</i> , 1997, 38, 27-32.	1.9	44
82	In vivo imaging of extraction fraction of low molecular weight mr contrast agents and perfusion rate in rodent tumors. <i>Magnetic Resonance in Medicine</i> , 1997, 38, 259-268.	1.9	27
83	Differentiating between T1 and T2* changes caused by gadopentetate dimeglumine in the kidney by using a double-echo dynamic MR imaging sequence. <i>Journal of Magnetic Resonance Imaging</i> , 1996, 6, 764-768.	1.9	30
84	Structure, Conformation, and Probable Mechanism of Hydrolysis of a Spin-Labeled Penicillin Revealed by Electron Nuclear Double Resonance Spectroscopy. <i>Journal of the American Chemical Society</i> , 1995, 117, 6739-6746.	6.6	20
85	Synthesis of conjugated polyene carbonyl derivatives of nitroxyl spin-labels and determination of their molecular structure and conformation by electron nuclear double resonance. <i>Journal of the American Chemical Society</i> , 1993, 115, 3674-3682.	6.6	14
86	Multiple rotamers of 3-(2,2,5,5-tetramethyl-1-oxypyrrolinyl)-2-propen-1-ol, a stereospecific substrate of liver alcohol dehydrogenase: determination of molecular structure and conformation by electron nuclear double resonance. <i>Journal of the American Chemical Society</i> , 1993, 115, 3683-3687.	6.6	5
87	Molecular geometry of vanadyl-adenine nucleotide complexes determined by EPR, ENDOR, and molecular modeling. <i>Journal of the American Chemical Society</i> , 1992, 114, 6219-6226.	6.6	49
88	Assignment of Proton Endor Resonances of Nitroxyl Spin-Labels in Frozen Solution. <i>Free Radical Research Communications</i> , 1990, 10, 95-101.	1.8	11
89	Structure and conformation of spin-labeled amino acids in frozen solutions determined by electron nuclear double resonance. 1. Methyl N-(2,2,5,5-tetramethyl-1-oxypyrrolinyl-3-carbonyl)-L-alanate, a molecule with a single preferred conformation. <i>Journal of the American Chemical Society</i> , 1990, 112, 2558-2566.	6.6	23
90	Structure and conformation of spin-labeled amino acids in frozen solutions determined by electron nuclear double resonance. 2. Methyl N-(2,2,5,5-tetramethyl-1-oxypyrrolinyl-3-carbonyl)-L-tryptophanate, a molecule with multiple conformations. <i>Journal of the American Chemical Society</i> , 1990, 112, 2566-2574.	6.6	20

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91	ENDOR-determined solvation structure of vanadyl(2+) in frozen solutions. Inorganic Chemistry, 1988, 27, 3360-3368.	1.9	60
92	E.p.r. and spin echo study of bituminous coal radicals. Fuel, 1986, 65, 684-693.	3.4	23