# Ralph P Mason

List of Publications by Year
in descending order



| | | | |
|---|---|---|---|
| 231 papers | 9,160 citations | 41344 49 h-index | 53230 85 g-index |
| 234 all docs | 234 docs citations | 234 times ranked | 8725 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Hypoxia: Importance in tumor biology, noninvasive measurement by imaging, and value of its measurement in the management of cancer therapy. International Journal of Radiation Biology, 2006, 82, 699-757. | 1.8 | 561 |
| 2 | Early inactivation of p53 tumor suppressor gene cooperating with NF1 loss induces malignant astrocytoma. Cancer Cell, 2005, 8, 119-130. | 16.8 | 481 |
| 3 | Molecular Imaging of Hypoxia. Journal of Nuclear Medicine, 2008, 49, 129S-148S. | 5.0 | 455 |
| 4 | Biodistribution of phosphodiester and phosphorothioate siRNA. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 1139-1143. | 2.2 | 249 |
| 5 | Pten Haploinsufficiency Accelerates Formation of High-Grade Astrocytomas. Cancer Research, 2008, 68, 3286-3294. | 0.9 | 243 |
| 6 | 19F: A Versatile Reporter for Non-Invasive Physiology and Pharmacology Using Magnetic Resonance. Current Medicinal Chemistry, 2005, 12, 819-848. | 2.4 | 232 |
| 7 | Role of DAB2IP in modulating epithelial-to-mesenchymal transition and prostate cancer metastasis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2485-2490. | 7.1 | 215 |
| 8 | Development of aliphatic biodegradable photoluminescent polymers. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10086-10091. | 7.1 | 210 |
| 9 | New frontiers and developing applications in 19F NMR. Progress in Nuclear Magnetic Resonance Spectroscopy, 2013, 70, 25-49. | 7.5 | 160 |
| 10 | Chemiluminescent probes for imaging H<sub>2</sub>S in living animals. Chemical Science, 2015, 6, 1979-1985. | 7.4 | 139 |
| 11 | Validating Bioluminescence Imaging as a High-Throughput, Quantitative Modality for Assessing Tumor Burden. Molecular Imaging, 2004, 3, 117-124. | 1.4 | 121 |
| 12 | Noninvasive investigation of blood oxygenation dynamics of tumors by near-infrared spectroscopy. Applied Optics, 2000, 39, 5231. | 2.1 | 114 |
| 13 | Correlations of noninvasive BOLD and TOLD MRI with pO<sub>2</sub> and relevance to tumor radiation response. Magnetic Resonance in Medicine, 2014, 71, 1863-1873. | 3.0 | 114 |
| 14 | Tumor oximetry: demonstration of an enhanced dynamic mapping procedure using fluorine-19 echo planar magnetic resonance imaging in the Dunning prostate R3327-AT1 rat tumor. International Journal of Radiation Oncology Biology Physics, 2001, 49, 1097-1108. | 0.8 | 111 |
| 15 | In Vivo Chemiluminescent Imaging Agents for Nitroreductase and Tissue Oxygenation. Analytical Chemistry, 2016, 88, 4995-5002. | 6.5 | 109 |
| 16 | Hexafluorobenzene: a Sensitive19F NMR Indicator of Tumor Oxygenation. , 1996, 9, 125-134. | | 105 |
| 17 | In vivo oxygen tension and temperature: Simultaneous determination using19F NMR spectroscopy of perfluorocarbon. Magnetic Resonance in Medicine, 1993, 29, 296-302. | 3.0 | 102 |
| 18 | Non-invasive determination of tumor oxygen tension and local variation with growth. International Journal of Radiation Oncology Biology Physics, 1994, 29, 95-103. | 0.8 | 101 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Measuring Changes in Tumor Oxygenation. Methods in Enzymology, 2004, 386, 378-418. | 1.0 | 99 |
| 20 | Vascular Imaging of Solid Tumors in Rats with a Radioactive Arsenic-Labeled Antibody that Binds Exposed Phosphatidylserine. Clinical Cancer Research, 2008, 14, 1377-1385. | 7.0 | 98 |
| 21 | A Chemiluminescent Probe for HNO Quantification and Realâ€Time Monitoring in Living Cells. Angewandte Chemie - International Edition, 2019, 58, 1361-1365. | 13.8 | 90 |
| 22 | A perspective on vascular disrupting agents that interact with tubulin: preclinical tumor imaging and biological assessment. Integrative Biology (United Kingdom), 2011, 3, 375. | 1.3 | 87 |
| 23 | Perfluorocarbon imaging in vivo: A 19F MRI study in tumor-bearing mice. Magnetic Resonance Imaging, 1989, 7, 475-485. | 1.8 | 86 |
| 24 | Bone phenotype of the aromatase deficient mouse. Journal of Steroid Biochemistry and Molecular Biology, 2001, 79, 49-59. | 2.5 | 85 |
| 25 | Comparison of <sup>1</sup>H blood oxygen levelâ€"dependent (BOLD) and <sup>19</sup>F MRI to investigate tumor oxygenation. Magnetic Resonance in Medicine, 2009, 62, 357-364. | 3.0 | 85 |
| 26 | Imaging Î²-galactosidase activity using 19F chemical shift imaging of LacZ gene-reporter molecule 2-fluoro-4-nitrophenol-Î²-d-galactopyranoside. Magnetic Resonance Imaging, 2006, 24, 959-962. | 1.8 | 79 |
| 27 | Tumor Oxygen Dynamics: Correlation of In Vivo MRI with Histological Findings. Neoplasia, 2003, 5, 308-318. | 5.3 | 73 |
| 28 | Interplay of tumor vascular oxygenation and tumor pO[sub 2] observed using near-infrared spectroscopy, an oxygen needle electrode, and [sup 19]F MR pO[sub 2] mapping. Journal of Biomedical Optics, 2003, 8, 53. | 2.6 | 70 |
| 29 | Tumour oxygen dynamics measured simultaneously by near-infrared spectroscopy and19F magnetic resonance imaging in rats. Physics in Medicine and Biology, 2006, 51, 45-60. | 3.0 | 68 |
| 30 | Imaging Î²-Galactosidase Activity in Human Tumor Xenografts and Transgenic Mice Using a Chemiluminescent Substrate. PLoS ONE, 2010, 5, e12024. | 2.5 | 68 |
| 31 | Tumor physiologic response to combretastatin A4 phosphate assessed by MRI. International Journal of Radiation Oncology Biology Physics, 2005, 62, 872-880. | 0.8 | 67 |
| 32 | On the potential for molecular imaging with Cerenkov luminescence. Optics Letters, 2010, 35, 3889. | 3.3 | 67 |
| 33 | Blood oxygenation levelâ€dependent (BOLD) contrast magnetic resonance imaging (MRI) for prediction of breast cancer chemotherapy response: A pilot study. Journal of Magnetic Resonance Imaging, 2013, 37, 1083-1092. | 3.4 | 66 |
| 34 | Novel1H NMR approach to quantitative tissue oximetry using hexamethyldisiloxane. Magnetic Resonance in Medicine, 2006, 55, 743-748. | 3.0 | 64 |
| 35 | Novel NMR approach to assessing gene transfection: 4-fluoro-2-nitrophenyl-Î²-D -galactopyranoside as a prototype reporter molecule for Î²-galactosidase. Magnetic Resonance in Medicine, 2004, 51, 616-620. | 3.0 | 62 |
| 36 | Dynamic Near-Infrared Optical Imaging of 2-Deoxyglucose Uptake by Intracranial Glioma of Athymic Mice. PLoS ONE, 2009, 4, e8051. | 2.5 | 61 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Tissue oxygenation: A novel determination using19F surface coil NMR spectroscopy of sequestered perfluorocarbon emulsion. Magnetic Resonance in Medicine, 1991, 18, 71-79. | 3.0 | 59 |
| 38 | Antivascular effects of combretastatin A4 phosphate in breast cancer xenograft assessed using dynamic bioluminescence imaging and confirmed by MRI. FASEB Journal, 2008, 22, 2445-2451. | 0.5 | 58 |
| 39 | Oxygenation in cervical cancer and normal uterine cervix assessed using blood oxygenation levelâ€dependent (BOLD) MRI at 3T. NMR in Biomedicine, 2012, 25, 1321-1330. | 2.8 | 58 |
| 40 | Correlation of Tumor Oxygen Dynamics with Radiation Response of the Dunning Prostate R3327-HI Tumor1. Radiation Research, 2003, 159, 621-631. | 1.5 | 57 |
| 41 | Quantitative tissue oxygen measurement in multiple organs using <sup>19</sup>F MRI in a rat model. Magnetic Resonance in Medicine, 2011, 66, 1722-1730. | 3.0 | 57 |
| 42 | Proton imaging of siloxanes to map tissue oxygenation levels (PISTOL): a tool for quantitative tissue oximetry. NMR in Biomedicine, 2008, 21, 899-907. | 2.8 | 56 |
| 43 | Regional Tumor Oximetry: 19F NMR Spectroscopy of Hexafluorobenzene. International Journal of Radiation Oncology Biology Physics, 1998, 41, 161-171. | 0.8 | 55 |
| 44 | Tumor Oxygen Dynamics with Respect to Growth and Respiratory Challenge: Investigation of the Dunning Prostate R3327-HI Tumor1. Radiation Research, 2001, 156, 510-520. | 1.5 | 55 |
| 45 | Development of Intrinsically Photoluminescent and Photostable Polylactones. Advanced Materials, 2014, 26, 4491-4496. | 21.0 | 55 |
| 46 | Developing oxygen-enhanced magnetic resonance imaging as a prognostic biomarker of radiation response. Cancer Letters, 2016, 380, 69-77. | 7.2 | 55 |
| 47 | A Comparison of Three Commercial Perfluorocarbon Emulsions as High-Field 19F NMR Probes of Oxygen Tension and Temperature. Journal of Magnetic Resonance Series B, 1995, 106, 131-141. | 1.6 | 53 |
| 48 | 19 Fâ€NMR detection of lacZ gene expression via the enzymic hydrolysis of 2â€fluoroâ€4â€nitrophenyl Î²â€Dâ€galactopyranoside in vivo in PC3 prostate tumor xenografts in the mouse 1. FASEB Journal, 2007, 21, 2014-2019. | 0.5 | 52 |
| 49 | Regional tumor oxygen dynamics: 19F PBSR EPI of hexafluorobenzene. Magnetic Resonance Imaging, 1997, 15, 971-981. | 1.8 | 50 |
| 50 | Synthesis of a 2-Aryl-3-aroyl Indole Salt (OXi8007) Resembling Combretastatin A-4 with Application as a Vascular Disrupting Agent. Journal of Natural Products, 2013, 76, 1668-1678. | 3.0 | 50 |
| 51 | Formaldehyde metabolism by Escherichia coli. Detection by in vivo carbon-13 NMR spectroscopy of S-(hydroxymethyl)glutathione as a transient intracellular intermediate. Biochemistry, 1986, 25, 4504-4507. | 2.5 | 49 |
| 52 | Differential oxygen dynamics in two diverse Dunning prostate R3327 rat tumor sublines (MAT-Lu and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf<br>Biology Physics, 2002, 53, 744-756. | 0.8 | 48 |
| 53 | A noninvasive assessment of myocardial oxygen tension:19f nmr spectroscopy of sequestered perfluorocarbon emulsion. Magnetic Resonance in Medicine, 1992, 27, 310-317. | 3.0 | 47 |
| 54 | Comparison of BOLD contrast and Gd-DTPA dynamic contrast-enhanced imaging in rat prostate tumor. Magnetic Resonance in Medicine, 2004, 51, 953-960. | 3.0 | 47 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Correlation of radiation response with tumor oxygenation in the Dunning prostate R3327-AT1 tumor. International Journal of Radiation Oncology Biology Physics, 2007, 67, 1179-1186. | 0.8 | 47 |
| 56 | Dual <sup>19</sup>F/<sup>1</sup>H MR Gene Reporter Molecules for in Vivo Detection of Î²-Galactosidase. Bioconjugate Chemistry, 2012, 23, 596-603. | 3.6 | 47 |
| 57 | Regional Tumor Oxygenation and Measurement of Dynamic Changes. Radiation Research, 1999, 152, 239. | 1.5 | 46 |
| 58 | A new method for radiochemical separation of arsenic from irradiated germanium oxide. Applied Radiation and Isotopes, 2005, 63, 343-351. | 1.5 | 46 |
| 59 | Isolated tumor growth in a surgically formed skin pedicle in the rat: A new tumor model for NMR studies. Magnetic Resonance Imaging, 1993, 11, 1007-1017. | 1.8 | 45 |
| 60 | The use of histone deacetylase inhibitor FK228 and DNA hypomethylation agent 5-azacytidine in human bladder cancer therapy. International Journal of Cancer, 2007, 120, 1795-1802. | 5.1 | 45 |
| 61 | Dynamic oxygen challenge evaluated by NMR T<sub>1</sub> and T<sub>2</sub>* â€“ insights into tumor oxygenation. NMR in Biomedicine, 2015, 28, 937-947. | 2.8 | 45 |
| 62 | Chemiluminescent 1,2â€Dioxetane Iridium Complexes for Nearâ€Infrared Oxygen Sensing. Angewandte Chemie - International Edition, 2022, 61, . | 13.8 | 45 |
| 63 | Dynamic response of breast tumor oxygenation to hyperoxic respiratory challenge monitored with three oxygen-sensitive parameters. Applied Optics, 2003, 42, 2960. | 2.1 | 44 |
| 64 | Synthesis and evaluation of novel enhanced gene reporter molecules: Detection of Î²-galactosidase activity using 19F NMR of trifluoromethylated aryl Î²-d-galactopyranosides. Bioorganic and Medicinal Chemistry, 2006, 14, 326-333. | 3.0 | 44 |
| 65 | Transmembrane pH Gradients In vivo: Measurements Using Fluorinated Vitamin 86 Derivatives*. Current Medicinal Chemistry, 1999, 6, 481-499. | 2.4 | 44 |
| 66 | Regional tumor oxygen tension: fluorine echo planar imaging of hexafluorobenzene reveals heterogeneity of dynamics. International Journal of Radiation Oncology Biology Physics, 1998, 42, 747-750. | 0.8 | 43 |
| 67 | Sâ€GalÂ®, A novel <sup>1</sup>H MRI reporter for Î²â€galactosidase. Magnetic Resonance in Medicine, 2010, 64, 65-71. | 3.0 | 43 |
| 68 | Uncoupling hypoxia signaling from oxygen sensing in the liver results in hypoketotic hypoglycemic death. Oncogene, 2011, 30, 2147-2160. | 5.9 | 42 |
| 69 | Carbon ion radiotherapy decreases the impact of tumor heterogeneity on radiation response in experimental prostate tumors. Cancer Letters, 2016, 378, 97-103. | 7.2 | 41 |
| 70 | Prognostic Radiology: Quantitative Assessment of Tumor Oxygen Dynamics by MRI. American Journal of Clinical Oncology: Cancer Clinical Trials, 2001, 24, 462-466. | 1.3 | 40 |
| 71 | Non-Invasive Physiology:19F NMR of Perfluorocarbons. Artificial Cells, Blood Substitutes, and Biotechnology, 1994, 22, 1141-1153. | 0.9 | 39 |
| 72 | A no-carrier-added 72Se/72As radionuclide generator based on solid phase extraction. Radiochimica Acta, 2005, 93, . | 1.2 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Kinetics-Based Measurement of Hypoxia in Living Cells and Animals Using an Acetoxymethyl Ester Chemiluminescent Probe. ACS Sensors, 2019, 4, 1391-1398. | 7.8 | 38 |
| 74 | Ratiometric pH Imaging Using a 1,2-Dioxetane Chemiluminescence Resonance Energy Transfer Sensor in Live Animals. ACS Sensors, 2020, 5, 2925-2932. | 7.8 | 38 |
| 75 | Physical principles of quantitative nuclear magnetic resonance oximetry. Frontiers in Bioscience - Landmark, 2008, 13, 1371. | 3.0 | 38 |
| 76 | Development of novel 19 F NMR pH indicators: synthesis and evaluation of a series of fluorinated vitamin B 6 analogues. Bioorganic and Medicinal Chemistry, 1998, 6, 1631-1639. | 3.0 | 37 |
| 77 | Convertible MRI contrast: Sensing the delivery and release of anti-glioma nano-drugs. Scientific Reports, 2015, 5, 9874. | 3.3 | 37 |
| 78 | Design, synthesis, and biological evaluation of water-soluble amino acid prodrug conjugates derived from combretastatin, dihydronaphthalene, and benzosuberene-based parent vascular disrupting agents. Bioorganic and Medicinal Chemistry, 2016, 24, 938-956. | 3.0 | 37 |
| 79 | Oxygen tension mapping with F-19 echo-planar MR imaging of sequestered perfluorocarbon. Journal of Magnetic Resonance Imaging, 1994, 4, 595-602. | 3.4 | 36 |
| 80 | Fluorinated Proteins as Potential 19F Magnetic Resonance Imaging and Spectroscopy Agents. Bioconjugate Chemistry, 1994, 5, 257-261. | 3.6 | 35 |
| 81 | Comparison of Optical and Power Doppler Ultrasound Imaging for Non-Invasive Evaluation of Arsenic Trioxide as a Vascular Disrupting Agent in Tumors. PLoS ONE, 2012, 7, e46106. | 2.5 | 35 |
| 82 | Synthesis and biological evaluation of benzocyclooctene-based and indene-based anticancer agents that function as inhibitors of tubulin polymerization. MedChemComm, 2016, 7, 2418-2427. | 3.4 | 35 |
| 83 | Simultaneous intracellular and extracelular pH measurement in the heart by19F NMR of 6-fluoropyridoxol. Magnetic Resonance in Medicine, 1998, 39, 551-556. | 3.0 | 34 |
| 84 | A <sup>19</sup>Fâ€NMR approach using reporter molecule pairs to assess Î²â€galactosidase in human xenograft tumors in vivo. NMR in Biomedicine, 2008, 21, 704-712. | 2.8 | 34 |
| 85 | <I>In Vitro</I> and <I>In Vivo</I> Assessment of CdTe and CdHgTe Toxicity and Clearance. Journal of Biomedical Nanotechnology, 2008, 4, 524-528. | 1.1 | 34 |
| 86 | Trans alkenes by stereoselective reduction of Î±-Ph2PO ketones: -isosaffrole, -anethole, and peniculin. Tetrahedron Letters, 1983, 24, 5293-5296. | 1.4 | 33 |
| 87 | Regional myocardial oxygen tension:19F MRI of sequestered perfluorocarbon. Magnetic Resonance in Medicine, 1996, 35, 827-833. | 3.0 | 33 |
| 88 | Novel NMR Platform for Detecting Gene Transfection:â€‰ Synthesis and Evaluation of Fluorinated Phenyl Î²-d-Galactosides with Potential Application for Assessing LacZ Gene Expression. Bioconjugate Chemistry, 2004, 15, 1334-1341. | 3.6 | 33 |
| 89 | Dermatan carriers for neovascular transport targeting, deep tumor penetration and improved therapy. Journal of Controlled Release, 2005, 109, 222-235. | 9.9 | 33 |
| 90 | Applications of the stereochemically-controlled Horner-Wittig reaction: synthesis of feniculin, (E)-non-6-en-1-ol, a pheromone of the mediterranean fruit fly, (E)- and (Z)-dec-5-en-1-ol, tri-substituted alkenes, and (Z)-Î±-bisabolene. Journal of the Chemical Society Perkin Transactions 1, 1987, , 2569-2577. | 0.9 | 31 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Preclinical Applications of Multi-Platform Imaging in Animal Models of Cancer. Cancer Research, 2021, 81, 1189-1200. | 0.9 | 31 |
| 92 | Tumor physiological changes during hypofractionated stereotactic body radiation therapy assessed using multi-parametric magnetic resonance imaging. Oncotarget, 2017, 8, 37464-37477. | 1.8 | 31 |
| 93 | Molecular imaging in prostate cancer. Journal of Cellular Biochemistry, 2003, 90, 473-483. | 2.6 | 30 |
| 94 | Simultaneous measurement of tissue oxygen levelâ€dependent (TOLD) and blood oxygenation levelâ€dependent (BOLD) effects in abdominal tissue oxygenation level studies. Journal of Magnetic Resonance Imaging, 2013, 38, 1230-1236. | 3.4 | 30 |
| 95 | A new method for the labelling of proteins with radioactive arsenic isotopes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 569, 512-517. | 1.6 | 29 |
| 96 | Tubulin-Destabilizing Agent BPR0L075 Induces Vascular-Disruption in Human Breast Cancer Mammary Fat Pad Xenografts. PLoS ONE, 2012, 7, e43314. | 2.5 | 29 |
| 97 | GdDO3NI, a nitroimidazole-based T 1 MRI contrast agent for imaging tumor hypoxia in vivo. Journal of Biological Inorganic Chemistry, 2014, 19, 271-279. | 2.6 | 29 |
| 98 | A noninvasive tumor oxygenation imaging strategy using magnetic resonance imaging of endogenous blood and tissue water. Magnetic Resonance in Medicine, 2014, 71, 561-569. | 3.0 | 29 |
| 99 | Exploring Feasibility of Multicolored CdTe Quantum Dots for In Vitro and In Vivo Fluorescent Imaging. Journal of Nanoscience and Nanotechnology, 2008, 8, 1174-1177. | 0.9 | 29 |
| 100 | Continuous Low-Dose (Metronomic) Chemotherapy on Rat Prostate Tumors Evaluated Using MRI In Vivo and Comparison with Histology. Neoplasia, 2005, 7, 678-687. | 5.3 | 27 |
| 101 | Non-invasive assessment of kidney oxygenation: a role for BOLD MRI. Kidney International, 2006, 70, 10-11. | 5.2 | 27 |
| 102 | Quantitative assessment of tumor oxygen dynamics: Molecular imaging for prognostic radiology. Journal of Cellular Biochemistry, 2002, 87, 45-53. | 2.6 | 26 |
| 103 | The vascular disrupting activity of OXi8006 in endothelial cells and its phosphate prodrug OXi8007 in breast tumor xenografts. Cancer Letters, 2015, 369, 229-241. | 7.2 | 26 |
| 104 | The vascular disrupting agent combretastatin A-4 phosphate causes prolonged elevation of proteins involved in heme flux and function in resistant tumor cells. Oncotarget, 2018, 9, 4090-4101. | 1.8 | 26 |
| 105 | In Vivo Near-Infrared Spectroscopy and Magnetic Resonance Imaging Monitoring of Tumor Response to Combretastatin A-4-Phosphate Correlated With Therapeutic Outcome. International Journal of Radiation Oncology Biology Physics, 2011, 80, 574-581. | 0.8 | 25 |
| 106 | Phosphatidylserine-Targeted Molecular Imaging of Tumor Vasculature by Magnetic Resonance Imaging. Journal of Biomedical Nanotechnology, 2014, 10, 846-855. | 1.1 | 25 |
| 107 | A Chemiluminescent Probe for HNO Quantification and Realâ€Time Monitoring in Living Cells. Angewandte Chemie, 2019, 131, 1375-1379. | 2.0 | 25 |
| 108 | In vivo enzymology: a deuterium NMR study of formaldehyde dismutase in Pseudomonas putida F61a and Staphylococcus aureus. Biochemistry, 1989, 28, 2160-2168. | 2.5 | 24 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Near-Infrared Spectroscopy and Imaging of Tumor Vascular Oxygenation. Methods in Enzymology, 2004, 386, 349-378. | 1.0 | 24 |
| 110 | Dynamic bioluminescence and fluorescence imaging of the effects of the antivascular agent Combretastatin-A4P (CA4P) on brain tumor xenografts. Cancer Letters, 2015, 356, 462-469. | 7.2 | 24 |
| 111 | Energy transfer chemiluminescence for ratiometric pH imaging. Organic and Biomolecular Chemistry, 2018, 16, 4176-4182. | 2.8 | 24 |
| 112 | Noninvasive Anatomical and Functional Imaging of Orthotopic Glioblastoma Development and Therapy using Multispectral Optoacoustic Tomography. Translational Oncology, 2018, 11, 1251-1258. | 3.7 | 24 |
| 113 | Translating preclinical MRI methods to clinical oncology. Journal of Magnetic Resonance Imaging, 2019, 50, 1377-1392. | 3.4 | 24 |
| 114 | Dynamic Breast Tumor Oximetry: The Development of Prognostic Radiology. Technology in Cancer Research and Treatment, 2002, 1, 471-478. | 1.9 | 23 |
| 115 | Use of Fc-Engineered Antibodies as Clearing Agents to Increase Contrast During PET. Journal of Nuclear Medicine, 2014, 55, 1204-1207. | 5.0 | 23 |
| 116 | Incorporating Oxygen-Enhanced MRI into Multi-Parametric Assessment of Human Prostate Cancer. Diagnostics, 2017, 7, 48. | 2.6 | 23 |
| 117 | Synthesis and Characterization of Novel lacZ Gene Reporter Molecules:â€‰ Detection of Î²-Galactosidase Activity by 19F Nuclear Magnetic Resonance of Polyglycosylated Fluorinated Vitamin B6. Journal of Medicinal Chemistry, 2006, 49, 1991-1999. | 6.4 | 22 |
| 118 | Exploring Feasibility of Multicolored CdTe Quantum Dots for In Vitro and In Vivo Fluorescent Imaging. Journal of Nanoscience and Nanotechnology, 2008, 8, 1174-1177. | 0.9 | 22 |
| 119 | Oxygen-Enhanced Optoacoustic Tomography Reveals the Effectiveness of Targeting Heme and Oxidative Phosphorylation at Normalizing Tumor Vascular Oxygenation. Cancer Research, 2020, 80, 3542-3555. | 0.9 | 22 |
| 120 | Synthesis and Evaluation of a Novel Gene Reporter Molecule: Detection of b-galactosidase Activity Using 19F NMR of a Fluorinated Vitamin B6 Conjugate+. Medicinal Chemistry, 2005, 1, 255-262. | 1.5 | 22 |
| 121 | 6-Trifluoromethylpyridoxine: Novel19F NMR pH Indicator for in Vivo Detection. Journal of Medicinal Chemistry, 2012, 55, 6814-6821. | 6.4 | 21 |
| 122 | Tumor Oximetry: Comparison of 19F MR EPI and Electrodes. Advances in Experimental Medicine and Biology, 2003, 530, 19-27. | 1.6 | 21 |
| 123 | 6-Fluoropyridoxol: A novel probe of cellular pH using19F NMR spectroscopy. FEBS Letters, 1994, 349, 234-238. | 2.8 | 20 |
| 124 | Structural interrogation of benzosuberene-based inhibitors of tubulin polymerization. Bioorganic and Medicinal Chemistry, 2015, 23, 7497-7520. | 3.0 | 19 |
| 125 | Oxygenâ€sensitive MRI assessment of tumor response to hypoxic gas breathing challenge. NMR in Biomedicine, 2019, 32, e4101. | 2.8 | 19 |
| 126 | Structure Guided Design, Synthesis, and Biological Evaluation of Novel Benzosuberene Analogues as Inhibitors of Tubulin Polymerization. Journal of Medicinal Chemistry, 2019, 62, 5594-5615. | 6.4 | 19 |

| # | Article | IF | Citations |
|---|---|---|---|
| 127 | Tumor Oxygen Tension: Measurement Using Oxygentâ„¢ as A19F NMR Probe AT 4.7 T. Artificial Cells, Blood Substitutes, and Biotechnology, 1994, 22, 1361-1367. | 0.9 | 18 |
| 128 | Prevention of Thiazide-Induced Hypokalemia Without Magnesium Depletion by Potassium-Magnesium-Citrate. American Journal of Therapeutics, 2006, 13, 101-108. | 0.9 | 18 |
| 129 | Cell encapsulation and oxygenation in nanoporous microcontainers. Biomedical Microdevices, 2009, 11, 1205-1212. | 2.8 | 18 |
| 130 | Upregulation of TRAG3 gene in urothelial carcinoma of the bladder. International Journal of Cancer, 2011, 128, 2823-2832. | 5.1 | 18 |
| 131 | A Multi-Camera System for Bioluminescence Tomography in Preclinical Oncology Research. Diagnostics, 2013, 3, 325-343. | 2.6 | 18 |
| 132 | Validating Bioluminescence Imaging as a High-Throughput, Quantitative Modality for Assessing Tumor Burden. Molecular Imaging, 2004, 3, 153535002004031. | 1.4 | 16 |
| 133 | A novel editing technique for 19F MRI: Molecule-specific imaging. Magnetic Resonance Imaging, 1990, 8, 729-736. | 1.8 | 15 |
| 134 | Hexamethyldisiloxaneâ€based nanoprobes for <sup>1</sup>H MRI oximetry. NMR in Biomedicine, 2011, 24, 1226-1234. | 2.8 | 15 |
| 135 | Redâ€shifted emission from 1,2â€dioxetaneâ€based chemiluminescent reactions. Luminescence, 2014, 29, 553-558. | 2.9 | 15 |
| 136 | Inorganic phosphate-triggered release of anti-cancer arsenic trioxide from a self-delivery system: an in vitro and in vivo study. Nanoscale, 2016, 8, 6094-6100. | 5.6 | 15 |
| 137 | Synthesis of dihydronaphthalene analogues inspired by combretastatin A-4 and their biological evaluation as anticancer agents. MedChemComm, 2018, 9, 1649-1662. | 3.4 | 15 |
| 138 | Bioreductively Activatable Prodrug Conjugates of Combretastatin A-1 and Combretastatin A-4 as Anticancer Agents Targeted toward Tumor-Associated Hypoxia. Journal of Natural Products, 2020, 83, 937-954. | 3.0 | 15 |
| 139 | Oxygen-Sensitive MRI: A Predictive Imaging Biomarker for Tumor Radiation Response?. International Journal of Radiation Oncology Biology Physics, 2021, 110, 1519-1529. | 0.8 | 15 |
| 140 | Nonâ€Invasive Physiology and Pharmacology Using 19F Magnetic Resonance. , 2008, , 197-276. | | 14 |
| 141 | Novel S-GalÂ® analogs as 1H MRI reporters for in vivo detection of Î²-galactosidase. Magnetic Resonance Imaging, 2013, 31, 1006-1011. | 1.8 | 14 |
| 142 | Targeting Phosphatidylserine with Calcium-Dependent Proteinâ€“Drug Conjugates for the Treatment of Cancer. Molecular Cancer Therapeutics, 2018, 17, 169-182. | 4.1 | 14 |
| 143 | NMR visualization of free asparagine in potato tissue using adduct formation with [13C]formaldehyde. Phytochemistry, 1986, 25, 1567-1571. | 2.9 | 13 |
| 144 | Effect of homonuclearJ modulation on19F spin-echo images. Magnetic Resonance in Medicine, 1991, 17, 179-188. | 3.0 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 145 | Echo planar imaging of perfluorocarbons. Magnetic Resonance Imaging, 1993, 11, 1165-1173. | 1.8 | 13 |
| 146 | Connectivity in human cancellous bone by three-dimensional magnetic resonance microscopy. Medical Physics, 1997, 24, 1409-1420. | 3.0 | 13 |
| 147 | Estimated fraction of tumor vascular blood contents sampled by near infrared spectroscopy and ^19F magnetic resonance spectroscopy. Optics Express, 2005, 13, 1724. | 3.4 | 13 |
| 148 | Wavelength shifting of chemiluminescence using quantum dots to enhance tissue light penetration. Optical Materials Express, 2016, 6, 1384. | 3.0 | 13 |
| 149 | Exploring feasibility of multicolored CdTe quantum dots for in vitro and in vivo fluorescent imaging. Journal of Nanoscience and Nanotechnology, 2008, 8, 1174-7. | 0.9 | 13 |
| 150 | Novel molecular probes for 19F magnetic resonance imaging: synthesis & characterization of fluorinated polymers. Bioorganic and Medicinal Chemistry Letters, 1992, 2, 527-532. | 2.2 | 12 |
| 151 | Glutathione in whole blood: a novel determination using double quantum coherence transfer proton NMR spectroscopy. FEBS Letters, 1993, 318, 30-34. | 2.8 | 12 |
| 152 | Novel Fe<sup>3+</sup>â€Based <sup>1</sup>H MRI Î²â€Galactosidase Reporter Molecules. ChemPlusChem, 2012, 77, 370-378. | 2.8 | 12 |
| 153 | High-Throughput Quantitative Bioluminescence Imaging for Assessing Tumor Burden. Methods in Molecular Biology, 2009, 574, 37-45. | 0.9 | 12 |
| 154 | In vivo Bioluminescence Imaging of Tumor Hypoxia Dynamics of Breast Cancer Brain Metastasis in a Mouse Model. Journal of Visualized Experiments, 2011, , . | 0.3 | 12 |
| 155 | Evaluation of tumor ischemia in response to an indole-based vascular disrupting agent using BLI and (19)F MRI. American Journal of Nuclear Medicine and Molecular Imaging, 2015, 5, 143-53. | 1.0 | 12 |
| 156 | Investigation of rat breast tumour oxygen consumption by near-infrared spectroscopy. Journal Physics D: Applied Physics, 2005, 38, 2682-2690. | 2.8 | 11 |
| 157 | Assessment of tumor response to oxygen challenge using quantitative diffusion MRI in an animal model. Journal of Magnetic Resonance Imaging, 2015, 42, 1450-1457. | 3.4 | 11 |
| 158 | A role for dynamic contrast-enhanced magnetic resonance imaging in predicting tumour radiation response. British Journal of Cancer, 2016, 114, 1206-1211. | 6.4 | 11 |
| 159 | The effect of flow on blood oxygen level dependent (R<sup>*</sup><sub>2</sub>) MRI of orthotopic lung tumors. Magnetic Resonance in Medicine, 2019, 81, 3787-3797. | 3.0 | 11 |
| 160 | Non-Invasive Evaluation of Acute Effects of Tubulin Binding Agents: A Review of Imaging Vascular Disruption in Tumors. Molecules, 2021, 26, 2551. | 3.8 | 11 |
| 161 | Serial Non-Invasive Monitoring of Renal Disease Following Immune-Mediated Injury Using Near-Infrared Optical Imaging. PLoS ONE, 2012, 7, e43941. | 2.5 | 10 |
| 162 | Oxygentâ„¢; A Novel Probe of Tissue Oxygen Tension. Biomaterials, Artificial Cells, and Immobilization Biotechnology: Official Journal of the International Society for Artificial Cells and Immobilization Biotechnology, 1992, 20, 929-932. | 0.2 | 9 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Evaluation of Red CdTe and Near Infrared CdHgTe Quantum Dots by Fluorescent Imaging. Journal of Nanoscience and Nanotechnology, 2008, 8, 1155-1159. | 0.9 | 9 |
| 164 | Dynamic Contrast Enhanced Fluorescent Molecular Imaging of Vascular Disruption Induced by Combretastatin-A4P in Tumor Xenografts. Journal of Biomedical Nanotechnology, 2014, 10, 1545-1551. | 1.1 | 9 |
| 165 | In vivo hypoxia characterization using blood oxygen level dependent magnetic resonance imaging in a preclinical glioblastoma mouse model. Magnetic Resonance Imaging, 2021, 76, 52-60. | 1.8 | 9 |
| 166 | In vivo enzymology: 13 C NMR measurement of a kinetic isotope effect for methanol oxidation in Methylosinus trichosporium OB3b. FEBS Letters, 1987, 216, 4-6. | 2.8 | 8 |
| 167 | UTSW Small Animal Positron Emission Imager. IEEE Transactions on Nuclear Science, 2006, 53, 2591-2600. | 2.0 | 8 |
| 168 | Oxygen breathing challenge- the simplest theranostic. Theranostics, 2017, 7, 3873-3875. | 10.0 | 8 |
| 169 | Effective Rat Lung Tumor Model for Stereotactic Body Radiation Therapy. Radiation Research, 2016, 185, 616-622. | 1.5 | 7 |
| 170 | Tumor radioâ€sensitivity assessment by means of volume data and magnetic resonance indices measured on prostate tumor bearing rats. Medical Physics, 2016, 43, 1275-1284. | 3.0 | 7 |
| 171 | MR-CBCT image-guided system for radiotherapy of orthotopic rat prostate tumors. PLoS ONE, 2018, 13, e0198065. | 2.5 | 7 |
| 172 | Tumor Oxygen Dynamics: Comparison of 19F MR EPI and Frequency Domain NIR Spectroscopy. Advances in Experimental Medicine and Biology, 2003, 530, 225-236. | 1.6 | 7 |
| 173 | Evaluation of Red CdTe and Near Infrared CdHgTe Quantum Dots by Fluorescent Imaging. Journal of Nanoscience and Nanotechnology, 2008, 8, 1155-1159. | 0.9 | 7 |
| 174 | Examining correlations of oxygen sensitive MRI (BOLD/TOLD) with [F]FMISO PET in rat prostate tumors. American Journal of Nuclear Medicine and Molecular Imaging, 2019, 9, 156-167. | 1.0 | 7 |
| 175 | Chemiluminescent 1,2â€Dioxetane Iridium Complexes for Nearâ€Infrared Oxygen Sensing. Angewandte Chemie, 2022, 134, . | 2.0 | 7 |
| 176 | Fluorinated macromolecular probes for non-invasive assessment of pH by Magnetic resonance spectroscopy. Bioorganic and Medicinal Chemistry Letters, 1993, 3, 187-192. | 2.2 | 6 |
| 177 | Evaluating online filtering algorithms to enhance dynamic multispectral optoacoustic tomography. Photoacoustics, 2020, 19, 100184. | 7.8 | 6 |
| 178 | Imaging-Guided Evaluation of the Novel Small-Molecule Benzosuberene Tubulin-Binding Agent KGP265 as a Potential Therapeutic Agent for Cancer Treatment. Cancers, 2021, 13, 4769. | 3.7 | 6 |
| 179 | A scalable open-source MATLAB toolbox for reconstruction and analysis of multispectral optoacoustic tomography data. Scientific Reports, 2021, 11, 19872. | 3.3 | 6 |
| 180 | Approaching enzymic kinetic isotope effects in vivo by nuclear-magnetic-resonance spectroscopy. Biochemical Society Transactions, 1987, 15, 148-149. | 3.4 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Mathematical modeling of tumor response to radiation: radio-sensitivity correlation with BOLD, TOLD, Î”R<sub>1</sub> and Î”R<sub>2</sub>* investigated in large Dunning R3327-AT1 rat prostate tumors. , 2015, 2015, 3266-9. | | 5 |
| 182 | Commentary on Photoacoustic Tomography. Journal of Nuclear Medicine, 2015, 56, 1815-1816. | 5.0 | 5 |
| 183 | Hexafluorobenzene: a Sensitive 19F NMR Indicator of Tumor Oxygenation. NMR in Biomedicine, 1996, 9, 125-134. | 2.8 | 5 |
| 184 | Tomographic breathing detection: a method to noninvasively assess in situ respiratory dynamics. Journal of Biomedical Optics, 2018, 23, 1. | 2.6 | 5 |
| 185 | A phase Ib/II clinical trial of a novel oxygen therapeutic in chemoradiation of glioblastoma.. Journal of Clinical Oncology, 2017, 35, 2561-2561. | 1.6 | 5 |
| 186 | Evaluation of red CdTe and near infrared CdHgTe quantum dots by fluorescent imaging. Journal of Nanoscience and Nanotechnology, 2008, 8, 1155-9. | 0.9 | 5 |
| 187 | Oxygenation Imaging by Nuclear Magnetic Resonance Methods. Methods in Molecular Biology, 2018, 1718, 297-313. | 0.9 | 4 |
| 188 | 19F MR Characterization of Fluorinated Proteins and Relaxation Rate Enhancement with Gd-DTPA for Faster Imaging. , 1995, , 305-313. | | 4 |
| 189 | Tying glutathione in knots. Biochemical Society Transactions, 1987, 15, 230-231. | 3.4 | 3 |
| 190 | 6-Fluoropyridoxal Polymer Conjugates:â€‰ Novel 19F pH Indicators for Magnetic Resonance Spectroscopy. Bioconjugate Chemistry, 1996, 7, 536-540. | 3.6 | 3 |
| 191 | Nonuniform tumor vascular oxygen dynamics monitored by three-channel near-infrared spectroscopy. , 2003, , . | | 3 |
| 192 | Reconstruction Algorithm with Resolution Deconvolution in a Small-Animal PET Imager. , 2005, , 163-175. | | 3 |
| 193 | MRI Hypoxia Measurements. , 2014, , 269-289. | | 3 |
| 194 | <title>Tumor oximetry: a comparison between near-infrared frequency-domain spectroscopy of hemoglobin saturation and <formula><sup><roman>19</roman></sup></formula>F MRI of hexafluorobenzene</title>. , 1999, , . | | 2 |
| 195 | <title>Interplay of tumor vascular oxygenation and pO<formula><inf><roman>2</roman></inf></formula> in tumors using NIRS and needle electrode</title>. , 2001, 4250, 429. | | 2 |
| 196 | Response to â€˜Don't be so BOLD: Potential limitations in the use of BOLD MRI for studies of renal oxygenationâ€™. Kidney International, 2007, 71, 1328. | 5.2 | 2 |
| 197 | BOLD MRI: a tool for predicting tumor therapy outcome based on tumor blood oxygenation and vascular function. Imaging in Medicine, 2009, 1, 11-13. | 0.0 | 2 |
| 198 | Oxygenation in a Human Tumor Xenograft: Manipulation Through Respiratory Challenge and Antibody-Directed Infarction. Advances in Experimental Medicine and Biology, 2003, 530, 197-204. | 1.6 | 2 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | Abstract 4247: TOLD MRI validation of reversal of tumor hypoxia in glioblastoma with a novel oxygen therapeutic. , 2016, , . | | 2 |
| 200 | Correlation of NIR spectroscopy with BOLD MR imaging of assessing breast tumor vascular oxygen status. , 2004, , . | | 2 |
| 201 | S-Hydroxymethylglutathione observed in vivo at last. Biochemical Society Transactions, 1987, 15, 147-148. | 3.4 | 1 |
| 202 | Imaging Lung Clearance of Radiolabeled Tumor Cells to Study Mice with Normal, Activated or Depleted Natural Killer (NK) Cells. AIP Conference Proceedings, 2003, , . | 0.4 | 1 |
| 203 | Comparison of CsI(Ti) and Scintillating Plastic in a Multi-Pinhole/CCD-Based Gamma Camera for Small-Animal Low-Energy SPECT. , 2005, , 189-194. | | 1 |
| 204 | Abstract 4194: Assessment of novel benzosuberene-based vascular disrupting agents (VDA) on diverse tumor lines. , 2016, , . | | 1 |
| 205 | Acute Effects of Combreatastatin A4 Phosphate on Breast Tumor Hemodynamics Monitored by Near Infrared Spectroscopy. , 2006, , . | | 1 |
| 206 | Estimation of intracellular metabolites by specific adduct formation with infused labelled marker molecules. Biochemical Society Transactions, 1987, 15, 146-147. | 3.4 | 0 |
| 207 | Breast tumor oxygenation in response to carbogen intervention assessed simultaneously by three oxygen-sensitive parameters. , 2003, , . | | 0 |
| 208 | Breast tumor vascular oxygenation and blood volume assessed by near-infrared spectroscopy and magnetic resonance. , 2005, , . | | 0 |
| 209 | Chemotherapeutic (cyclophosphamide) effects on rat breast tumor hemodynamics monitored by multi-channel NIRS. , 2005, , . | | 0 |
| 210 | Projection and Pinhole-Based Data Acquisition for Small-Animal SPECT Using Storage Phosphor Technology. , 2005, , 279-286. | | 0 |
| 211 | A model of hemodynamic responses of rat tumors to hyperoxic gas challenge. , 2005, , . | | 0 |
| 212 | Editorial [Hot Topic: Reporter Molecules for Molecular Imaging (Guest Editor: Ralph P. Mason)]. Current Medicinal Chemistry, 2005, 12, 749-750. | 2.4 | 0 |
| 213 | In-Vivo Optical Assessment of Vascular Oxygen Dynamics in the AT1-R3327 Dunning Prostate Tumor. , 2006, , ThE73. | | 0 |
| 214 | Survey of Endourology. Journal of Endourology, 2007, 21, 124-136. | 2.1 | 0 |
| 215 | Correction for Yang et al., Development of aliphatic biodegradable photoluminescent polymers. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11818-11818. | 7.1 | 0 |
| 216 | Oxygenation in cervical cancer and normal uterine cervix assessed using BOLD MRI: Initial experiences. Gynecologic Oncology, 2011, 120, S112. | 1.4 | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 217 | 19F NMR: Clinical and Molecular Imaging Applications. Modecular Medicine and Medicinal, 2012, , 461-524. | 0.4 | 0 |
| 218 | Interview: Imaging in prognostic radiology in cancer. Imaging in Medicine, 2013, 5, 15-18. | 0.0 | 0 |
| 219 | Assessment of tumor response to oxygen challenge using quantitative diffusion MRI in an animal model. Journal of Magnetic Resonance Imaging, 2015, 42, spcone-spcone. | 3.4 | 0 |
| 220 | In vivo evaluation of combertestatin A-4 phosphate for lung cancer by bioluminescence imaging and multispectral optoacoustic tomography. Annals of Oncology, 2017, 28, ii3. | 1.2 | 0 |
| 221 | Noninvasive measurement of tumor hemoglobin dynamics using near-infrared spectroscopy. , 2000, , . | | 0 |
| 222 | Correlation between total hemoglobin concentration and blood volume of breast tumors measured by NIR spectroscopy and 19F MRS of PFOB. , 2002, , . | | 0 |
| 223 | Investigation of tumor oxygen consumption and tumor vascular oxygen dynamics in response to pharmacological interventions by NIRS. , 2002, , . | | 0 |
| 224 | Tumor oxygen dynamics measured simultaneously by nearinfrared spectroscopy and 19F MR EPI imaging. , 2004, , . | | 0 |
| 225 | Simultaneous monitoring tumor vascular and tissue oxygen tension under hyperbaric oxygen exposure. , 2006, , . | | 0 |
| 226 | Abstract 5309: Antivascular activities of novel tubulin binding agent BPR0L075. , 2011, , . | | 0 |
| 227 | TU-E-214-04: NMR Assessment of Tumor Hypoxia and Oxygen Dynamics. Medical Physics, 2011, 38, 3772-3773. | 3.0 | 0 |
| 228 | Utility of blood oxygen level dependent magnetic resonance imaging in the evaluation of tissue oxygenation patterns of prostate cancer.. Journal of Clinical Oncology, 2013, 31, 198-198. | 1.6 | 0 |
| 229 | TH-CD-204-05: Developing a Non-Invasive MRI Prognostic Biomarker to Predict Response to Hypofractionated Radiotherapy. Medical Physics, 2015, 42, 3732-3733. | 3.0 | 0 |
| 230 | Abstract 5115: An orthotopic lung tumor model for image-guided microirradiation in rats. , 2015, , . | | 0 |
| 231 | Abstract 3203: Targeting tumor hypoxia with prodrug conjugates of potent small-molecule inhibitors of tubulin polymerization. , 2017, , . | | 0 |