Zaver M Bhujwalla

List of Publications by Year
in descending order

114 papers	4,359 citations	117625 34 h-index	123424 61 g-index
119 all docs	119 docs citations	119 times ranked	6798 citing authors

#	Article	IF	Citations
1	Deep learningâ€based classification of preclinical breast cancer tumor models using chemical exchange saturation transfer magnetic resonance imaging. NMR in Biomedicine, 2022, 35, e4626.	2.8	12
2	Two diverse carriers are better than one: A case study in Î±â€particle therapy for prostate specific membrane antigenâ€expressing prostate cancers. Bioengineering and Translational Medicine, 2022, 7, e10266.	7.1	5
3	Combination of Carriers with Complementary Intratumoral Microdistributions of Delivered Î±-Particles May Realize the Promise for ²²⁵Ac in Large, Solid Tumors. Journal of Nuclear Medicine, 2022, 63, 1223-1230.	5.0	5
4	PD-L1 near Infrared Photoimmunotherapy of Ovarian Cancer Model. Cancers, 2022, 14, 619.	3.7	4
5	Cancer insights from magnetic resonance spectroscopy of cells and excised tumors. NMR in Biomedicine, 2022, , e4724.	2.8	0
6	Abstract 6353: Metabolic changes in the spleen and pancreas induced by PDAC xenografts with or without glutamine transporter downregulation. Cancer Research, 2022, 82, 6353-6353.	0.9	0
7	VEGF Overexpression Significantly Increases Nanoparticle-Mediated siRNA Delivery and Target-Gene Downregulation. Pharmaceutics, 2022, 14, 1260.	4.5	3
8	Prostate-specific membrane antigen (PSMA)-targeted photodynamic therapy enhances the delivery of PSMA-targeted magnetic nanoparticles to PSMA-expressing prostate tumors. Nanotheranostics, 2021, 5, 182-196.	5.2	12
9	Non-invasive delivery of levodopa-loaded nanoparticles to the brain via lymphatic vasculature to enhance treatment of Parkinsonâ€™s disease. Nano Research, 2021, 14, 2749-2761.	10.4	10
10	The PD-L1 metabolic interactome intersects with choline metabolism and inflammation. Cancer & Metabolism, 2021, 9, 10.	5.0	12
11	Challenges and Initiatives in Diversity, Equity and Inclusion in Cancer Molecular Imaging. Frontiers in Oncology, 2021, 11, 638692.	2.8	2
12	Transport-driven engineering of liposomes for delivery of Î±-particle radiotherapy to solid tumors: effect on inhibition of tumor progression and onset delay of spontaneous metastases. European Journal of Nuclear Medicine and Molecular Imaging, 2021, 48, 4246-4258.	6.4	11
13	Targeting a cell surface vitamin D receptor on tumor-associated macrophages in triple-negative breast cancer. ELife, 2021, 10, .	6.0	18
14	Abstract 2896: Effects of hypoxia on normal prostate fibroblast and prostate cancer associated fibroblast metabolism and matrix degradation. , 2021, , .		1
15	Abstract 2353: Metabolic reprogramming by SLC1A5 downregulation in pancreatic cancer cells. , 2021, , .		0
16	Abstract 696: Phototheranostics of epithelioid sarcoma by targeting CD44 or EGFR. , 2021, , .		0
17	Biguanide drugs enhance cytotoxic effects of cisplatin by depleting aspartate and NAD+ in sensitive cancer cells. Cancer Biology and Therapy, 2021, 22, 579-586.	3.4	4
18	Theranostic small interfering RNA nanoparticles in cancer precision nanomedicine. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2020, 12, e1595.	6.1	19

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19	Brain metabolites in cholinergic and glutamatergic pathways are altered by pancreatic cancer cachexia. Journal of Cachexia, Sarcopenia and Muscle, 2020, 11, 1487-1500.	7.3	10
20	Hypoxia theranostics of a human prostate cancer xenograft and the resulting effects on the tumor microenvironment. Neoplasia, 2020, 22, 679-688.	5.3	16
21	The Impact of the COVID-19 Pandemic on the Radiology Research Enterprise: Radiology Scientific Expert Panel. Radiology, 2020, 296, E134-E140.	7.3	29
22	Water and Collagen Content Are High in Pancreatic Cancer: Implications for Quantitative Metabolic Imaging. Frontiers in Oncology, 2020, 10, 599204.	2.8	5
23	PD-L1 siRNA Theranostics With a Dextran Nanoparticle Highlights the Importance of Nanoparticle Delivery for Effective Tumor PD-L1 Downregulation. Frontiers in Oncology, 2020, 10, 614365.	2.8	12
24	Molecular and functional imaging insights into the role of hypoxia in cancer aggression. Cancer and Metastasis Reviews, 2019, 38, 51-64.	5.9	21
25	Translating preclinical MRI methods to clinical oncology. Journal of Magnetic Resonance Imaging, 2019, 50, 1377-1392.	3.4	24
26	MRI and MRS of intact perfused cancer cell metabolism, invasion, and stromal cell interactions. NMR in Biomedicine, 2019, 32, e4053.	2.8	2
27	Hypoxia Patterns in Primary and Metastatic Prostate Cancer Environments. Neoplasia, 2019, 21, 239-246.	5.3	21
28	Hypoxia Inducible Factors Modify Collagen I Fibers in MDA-MB-231 Triple Negative Breast Cancer Xenografts. Neoplasia, 2018, 20, 131-139.	5.3	25
29	Theranostics and metabolotheranostics for precision medicine in oncology. Journal of Magnetic Resonance, 2018, 291, 141-151.	2.1	22
30	Ascites Volumes and the Ovarian Cancer Microenvironment. Frontiers in Oncology, 2018, 8, 595.	2.8	33
31	Optimized acriflavine-loaded lipid nanocapsules as a safe and effective delivery system to treat breast cancer. International Journal of Pharmaceutics, 2018, 551, 322-328.	5.2	30
32	Choline Kinase Alpha Inhibition by EB-3D Triggers Cellular Senescence, Reduces Tumor Growth and Metastatic Dissemination in Breast Cancer. Cancers, 2018, 10, 391.	3.7	23
33	Molecular causes of elevated phosphoethanolamine in breast and pancreatic cancer cells. NMR in Biomedicine, 2018, 31, e3936.	2.8	21
34	Acid-degradable Dextran as an Image Guided siRNA Carrier for COX-2 Downregulation. Theranostics, 2018, 8, 1-12.	10.0	27
35	Hypoxia-Induced Reporter Genes with Different Half-Lives. Methods in Molecular Biology, 2018, 1790, 113-125.	0.9	1
36	Metabolic consequences of HIF silencing in a triple negative human breast cancer xenograft. Oncotarget, 2018, 9, 15326-15339.	1.8	21

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37	A PSMA-targeted theranostic agent for photodynamic therapy. Journal of Photochemistry and Photobiology B: Biology, 2017, 167, 111-116.	3.8	39
38	Metabolomic characterization of experimental ovarian cancer ascitic fluid. Metabolomics, 2017, 13, 1.	3.0	16
39	Molecular Effects of Doxorubicin on Choline Metabolism in Breast Cancer. Neoplasia, 2017, 19, 617-627.	5.3	40
40	Structure and Function of a Prostate Cancer Disseminationâ€“Permissive Extracellular Matrix. Clinical Cancer Research, 2017, 23, 2245-2254.	7.0	53
41	Editorial: Exploring Cancer Metabolic Reprogramming through Molecular Imaging. Frontiers in Oncology, 2017, 7, 79.	2.8	0
42	Breast cancer cell cyclooxygenase-2 expression alters extracellular matrix structure and function and numbers of cancer associated fibroblasts. Oncotarget, 2017, 8, 17981-17994.	1.8	42
43	Delayed Progression of Lung Metastases Following Delivery of a Prodrug-activating Enzyme. Anticancer Research, 2017, 37, 2195-2200.	1.1	1
44	Degradable Dextran Nanopolymer as a Carrier for Choline Kinase (ChoK) siRNA Cancer Therapy. Nanomaterials, 2016, 6, 34.	4.1	19
45	A fully human CXCR4 antibody demonstrates diagnostic utility and therapeutic efficacy in solid tumor xenografts. Oncotarget, 2016, 7, 12344-12358.	1.8	32
46	Choline Metabolism Alteration: A Focus on Ovarian Cancer. Frontiers in Oncology, 2016, 6, 153.	2.8	40
47	Effect of Pantethine on Ovarian Tumor Progression and Choline Metabolism. Frontiers in Oncology, 2016, 6, 244.	2.8	15
48	The Tumor Microenvironment Modulates Choline and Lipid Metabolism. Frontiers in Oncology, 2016, 6, 262.	2.8	42
49	Targeting Phospholipid Metabolism in Cancer. Frontiers in Oncology, 2016, 6, 266.	2.8	146
50	Lymphatic endothelial cells actively regulate prostate cancer cell invasion. NMR in Biomedicine, 2016, 29, 904-911.	2.8	7
51	Developing imidazoles as CEST MRI pH sensors. Contrast Media and Molecular Imaging, 2016, 11, 304-312.	0.8	47
52	The Angiogenic Secretome in VEGF overexpressing Breast Cancer Xenografts. Scientific Reports, 2016, 6, 39460.	3.3	22
53	Microglia activation in a pediatric rabbit model of tuberculous meningitis. DMM Disease Models and Mechanisms, 2016, 9, 1497-1506.	2.4	51
54	Collagen fibers mediate MRI-detected water diffusion and anisotropy in breast cancers. Neoplasia, 2016, 18, 585-593.	5.3	25

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55	Targeting choline phospholipid metabolism: GDPD5 and GDPD6 silencing decrease breast cancer cell proliferation, migration, and invasion. NMR in Biomedicine, 2016, 29, 1098-1107.	2.8	36
56	Phototheranostics of CD44-positive cell populations in triple negative breast cancer. Scientific Reports, 2016, 6, 27871.	3.3	64
57	PSMA-specific theranostic nanoplex for combination of TRAIL gene and 5-FC prodrug therapy of prostate cancer. Biomaterials, 2016, 80, 57-67.	11.4	36
58	Effect of alginate microencapsulation on the catalytic efficiency andin vitroenzyme-prodrug therapeutic efficacy of cytosine deaminase and of recombinantE. coliexpressing cytosine deaminase. Journal of Microencapsulation, 2016, 33, 64-70.	2.8	7
59	Detection of Pancreatic Cancerâ€"Induced Cachexia Using a Fluorescent Myoblast Reporter System and Analysis of Metabolite Abundance. Cancer Research, 2016, 76, 1441-1450.	0.9	10
60	Magnetic Resonance Spectroscopy of siRNA-Based Cancer Therapy. Methods in Molecular Biology, 2016, 1372, 37-47.	0.9	3
61	Synthesis and Evaluation of Gd^{III}â€Based Magnetic Resonance Contrast Agents for Molecular Imaging of Prostateâ€Specific Membrane Antigen. Angewandte Chemie - International Edition, 2015, 54, 10778-10782.	13.8	57
62	Metastatic breast cancer cells in lymph nodes increase nodal collagen density. Scientific Reports, 2015, 5, 10002.	3.3	54
63	Breast cancer cell adhesome and degradome interact to drive metastasis. Npj Breast Cancer, 2015, 1, 15017.	5.2	35
64	Choline kinase-Î± protein and phosphatidylcholine but not phosphocholine are required for breast cancer cell survival. NMR in Biomedicine, 2015, 28, 1697-1706.	2.8	29
65	MALDI-Mass Spectrometric Imaging Revealing Hypoxia-Driven Lipids and Proteins in a Breast Tumor Model. Analytical Chemistry, 2015, 87, 5947-5956.	6.5	61
66	Structural and functional roles of collagen 1 fibers in breast cancer metastasis: collagen 1 fiber density increases in lymph node-positive breast cancers. Breast Cancer Management, 2015, 4, 177-182.	0.2	0
67	Combining Optical Reporter Proteins with Different Half-lives to Detect Temporal Evolution of Hypoxia and Reoxygenation in Tumors. Neoplasia, 2015, 17, 871-881.	5.3	29
68	Choline metabolism-based molecular diagnosis of cancer: an update. Expert Review of Molecular Diagnostics, 2015, 15, 735-747.	3.1	99
69	Targeting Glutamine Metabolism in Breast Cancer with Aminooxyacetate. Clinical Cancer Research, 2015, 21, 3263-3273.	7.0	129
70	Metabolic Imaging of Pancreatic Ductal Adenocarcinoma Detects Altered Choline Metabolism. Clinical Cancer Research, 2015, 21, 386-395.	7.0	42
71	Global metabolic profile identifies choline kinase alpha as a key regulator of glutathione-dependent antioxidant cell defense in ovarian carcinoma. Oncotarget, 2015, 6, 11216-11230.	1.8	20
72	HIF isoforms have divergent effects on invasion, metastasis, metabolism and formation of lipid droplets. Oncotarget, 2015, 6, 28104-28119.	1.8	29

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73	A Biomimetic Collagen Derived Peptide Exhibits Anti-Angiogenic Activity in Triple Negative Breast Cancer. PLoS ONE, 2014, 9, e111901.	2.5	12
74	Molecular Imaging of the Tumor Microenvironment for Precision Medicine and Theranostics. Advances in Cancer Research, 2014, 124, 235-256.	5.0	54
75	Phospholipase D1 and choline kinase-Î± are interactive targets in breast cancer. Cancer Biology and Therapy, 2014, 15, 593-601.	3.4	33
76	Direct facile screening of recombinant DNA vector constructs. Analytical Biochemistry, 2014, 450, 1-3.	2.4	0
77	Unsupervised Deconvolution of Dynamic Imaging Reveals Intratumor Vascular Heterogeneity and Repopulation Dynamics. PLoS ONE, 2014, 9, e112143.	2.5	15
78	COX-2 in cancer: Gordian knot or Achilles heel?. Frontiers in Pharmacology, 2013, 4, 34.	3.5	47
79	Hypoxic Tumor Environments Exhibit Disrupted Collagen I Fibers and Low Macromolecular Transport. PLoS ONE, 2013, 8, e81869.	2.5	16
80	Collagen I fiber density increases in lymph node positive breast cancers: pilot study. Journal of Biomedical Optics, 2012, 17, 116017.	2.6	95
81	PSMA-Targeted Theranostic Nanoplex for Prostate Cancer Therapy. ACS Nano, 2012, 6, 7752-7762.	14.6	95
82	Choline metabolism in malignant transformation. Nature Reviews Cancer, 2011, 11, 835-848.	28.4	651
83	Nanoplex Delivery of siRNA and Prodrug Enzyme for Multimodality Image-Guided Molecular Pathway Targeted Cancer Therapy. ACS Nano, 2010, 4, 6707-6716.	14.6	54
84	Hypoxic Tumor Microenvironments Reduce Collagen I Fiber Density. Neoplasia, 2010, 12, 608-617.	5.3	73
85	Molecular and functional imaging of cancer. , 2009, 2009, 47-9.		4
86	Novel antiangiogenic peptides inhibit tumor growth in breast cancer xenografts. FASEB Journal, 2009, 23, 761.1.	0.5	0
87	â€˜The Metabolism of Tumoursâ€™: 70 Years Later. Novartis Foundation Symposium, 2008, , 251-264.	1.1	152
88	Image-Guided Enzyme/Prodrug Cancer Therapy. Clinical Cancer Research, 2008, 14, 515-522.	7.0	41
89	The Physiological Environment in Cancer Vascularization, Invasion and Metastasis. Novartis Foundation Symposium, 2008, 240, 23-45.	1.1	36
90	Choline Kinase Down-regulation Increases the Effect of 5-Fluorouracil in Breast Cancer Cells. Cancer Research, 2007, 67, 11284-11290.	0.9	71

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91	Dual Probe with Fluorescent and Magnetic Properties for Imaging Solid Tumor Xenografts. Molecular Imaging, 2007, 6, 7290.2007.00006.	1.4	17
92	Silencing of Cyclooxygenase-2 Inhibits Metastasis and Delays Tumor Onset of Poorly Differentiated Metastatic Breast Cancer Cells. Molecular Cancer Research, 2007, 5, 435-442.	3.4	52
93	Characterizing Vascular Parameters in Hypoxic Regions: A Combined Magnetic Resonance and Optical Imaging Study of a Human Prostate Cancer Model. Cancer Research, 2006, 66, 9929-9936.	0.9	65
94	Novel Imaging Agents for Molecular MR Imaging of Cancer. , 2005, , 1309-1341.		0
95	RNA Interferenceâ€"Mediated Choline Kinase Suppression in Breast Cancer Cells Induces Differentiation and Reduces Proliferation. Cancer Research, 2005, 65, 11034-11043.	0.9	165
96	Loss of P53 Function in Colon Cancer Cells Results in Increased Phosphocholine and Total Choline. Molecular Imaging, 2004, 3, 153535002004041.	1.4	8
97	A Novel Method of Imaging Lysosomes in Living Human Mammary Epithelial Cells. Molecular Imaging, 2003, 2, 153535002003021.	1.4	3
98	Reduction of vascular and permeable regions in solid tumors detected by macromolecular contrast magnetic resonance imaging after treatment with antiangiogenic agent TNP-470. Clinical Cancer Research, 2003, 9, 355-62.	7.0	86
99	Real-time measurements of cellular oxygen consumption, pH, and energy metabolism using nuclear magnetic resonance spectroscopy. Magnetic Resonance in Medicine, 2001, 45, 749-755.	3.0	29
100	Switchable multicoil array for MR micro-imaging of breast lesions. Magnetic Resonance in Medicine, 1999, 41, 569-574.	3.0	3
101	In vivo imaging of extracellular pH using1H MRSI. Magnetic Resonance in Medicine, 1999, 41, 743-750.	3.0	303
102	Nm23-transfected MDA-mB-435 human breast carcinoma cells form tumors with altered phospholipid metabolism and pH: A31P nuclear magnetic resonance study in vivo and in vitro. Magnetic Resonance in Medicine, 1999, 41, 897-903.	3.0	91
103	Dynamics of prostate cancer cell invasion studied in vitro by NMR microscopy. Magnetic Resonance in Medicine, 1999, 42, 277-282.	3.0	13
104	In vivo imaging of extracellular pH using 1H MRSI. Magnetic Resonance in Medicine, 1999, 41, 743-750.	3.0	5
105	Nm23â€transfected MDAâ€mBâ€435 human breast carcinoma cells form tumors with altered phospholipid metabolism and pH: A 31P nuclear magnetic resonance study in vivo and in vitro. Magnetic Resonance in Medicine, 1999, 41, 897-903.	3.0	1
106	Two-compartment model for determination of glycolytic rates of solid tumors byin vivo13C NMR spectroscopy. , 1998, 11, 395-404.		30
107	Hypoxic cell cytotoxin tirapazamine induces acute changes in tumor energy metabolism and pH:A31p magnetic resonance spectroscopy study. Radiation Oncology Investigations, 1998, 6, 249-254.	0.9	8
108	Effects of blood flow modifiers on tumor metabolism observedin vivo by proton magnetic resonance spectroscopic imaging. Magnetic Resonance in Medicine, 1996, 36, 204-211.	3.0	23

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109	In Vivo Selective Measurement of {1â^'13C}-Glucose Metabolism in Tumors by Heteronuclear Cross Polarization. Magnetic Resonance in Medicine, 1995, 33, 151-155.	3.0	35
110	Proton NMR Observation of the Antineoplastic Agent IproplatinIn Vivo by Selective Multiple Quantum Coherence Transfer (Sel-MQC). Magnetic Resonance in Medicine, 1995, 33, 414-416.	3.0	27
111	Pharmacokinetics of the13C labeled anticancer agent temozolomide detectedin vivo by selective cross-polarization transfer. Magnetic Resonance in Medicine, 1995, 34, 338-342.	3.0	28
112	Glucose metabolism in RIF-1 tumors after reduction in blood flow: Anin Vivo13C and31P NMR study. Magnetic Resonance in Medicine, 1994, 32, 303-309.	3.0	14
113	¹H NMR spectroscopy of subcutaneous tumors in mice: Preliminary studies of effects of growth, chemotherapy and blood flow reduction. NMR in Biomedicine, 1992, 5, 296-302.	2.8	27
114	Determination of Absolute Phosphate Metabolite Concentrations in RIF-1 Tumors in Vivo by31P-1H-2H NMR Spectroscopy Using Water as an Internal Intensity Reference. Magnetic Resonance in Medicine, 1992, 28, 105-121.	3.0	31