Arvind P Pathak

List of Publications by Year
in descending order

54	2,650	236925 25	206112 48
papers	citations	h-index	g-index

54	54	54	4563
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	VascuViz: a multimodality and multiscale imaging and visualization pipeline for vascular systems biology. Nature Methods, 2022, 19, 242-254.	19.0	15
2	Characterizing the Correlation Between Angiogenesis and Osteogenesis In Vivo Using Multicontrast Functional Imaging in a Calvarial Defect Model. FASEB Journal, 2022, 36, .	0.5	2
3	In vivo phenotyping of the microvasculature in necrotizing enterocolitis with multicontrast optical imaging. Microcirculation, 2022, 29, e12768.	1.8	6
4	Advances in translational imaging of the microcirculation. Microcirculation, 2021, 28, e12683.	1.8	6
5	A Portable Multicontrast Microscope for Multiscale Imaging of the Microcirculation. FASEB Journal, 2021, 35, .	0.5	0
6	Imageâ€Based Modeling of the Invasive Vascular Front in Breast Cancer. FASEB Journal, 2021, 35, .	0.5	0
7	HemoSYS: A Toolkit for Image-based Systems Biology of Tumor Hemodynamics. Scientific Reports, 2020, 10, 2372.	3.3	5
8	A Novel Vascular Fiducialsâ€based Approach (VASFID) for Coâ€registering Multiscale Imaging Data for Microcirculation Systems Biology. FASEB Journal, 2020, 34, 1-1.	0.5	4
9	In vivo high-resolution diffusion tensor imaging of the developing neonatal rat cortex and its relationship to glial and dendritic maturation. Brain Structure and Function, 2019, 224, 1815-1829.	2.3	6
10	Tumor Ensemble-Based Modeling and Visualization of Emergent Angiogenic Heterogeneity in Breast Cancer. Scientific Reports, 2019, 9, 5276.	3.3	24
11	A miniature multi-contrast microscope for functional imaging in freely behaving animals. Nature Communications, 2019, 10, 99.	12.8	62
12	Design considerations for a miniature multicontrast neuroimager. , 2019, , .		0
13	Brain tumors disrupt the resting-state connectome. NeuroImage: Clinical, 2018, 18, 279-289.	2.7	31
14	Quantification and tracking of genetically engineered dendritic cells for studying immunotherapy. Magnetic Resonance in Medicine, 2018, 79, 1010-1019.	3.0	17
15	Phenotyping the Microvasculature in Critical-Sized Calvarial Defects via Multimodal Optical Imaging. Tissue Engineering - Part C: Methods, 2018, 24, 430-440.	2.1	8
16	Implications of neurovascular uncoupling in functional magnetic resonance imaging (fMRI) of brain tumors. Journal of Cerebral Blood Flow and Metabolism, 2017, 37, 3475-3487.	4.3	77
17	Structure and Function of a Prostate Cancer Disseminationâ€“Permissive Extracellular Matrix. Clinical Cancer Research, 2017, 23, 2245-2254.	7.0	53
18	Imaging biomarker roadmap for cancer studies. Nature Reviews Clinical Oncology, 2017, 14, 169-186.	27.6	792

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19	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
20	Intracellular Expression of PAI-1 Specific Aptamers Alters Breast Cancer Cell Migration, Invasion and Angiogenesis. PLoS ONE, 2016, 11, e0164288.	2.5	25
21	Effect of cranial window type on monitoring neurovasculature using laser speckle contrast imaging. , 2016, , .		1
22	Vasculature-specific MRI reveals differential anti-angiogenic effects of a biomimetic peptide in an orthotopic breast cancer model. Angiogenesis, 2015, 18, 125-136.	7.2	9
23	Miniaturized optical neuroimaging in unrestrained animals. NeuroImage, 2015, 113, 397-406.	4.2	27
24	A novel atherothrombotic model of ischemic stroke induced by injection of collagen into the cerebral vasculature. Journal of Neuroscience Methods, 2015, 239, 65-74.	2.5	11
25	Multiscale and multi-modality visualization of angiogenesis in a human breast cancer model. Angiogenesis, 2014, 17, 695-709.	7.2	28
26	A bioimage informatics based reconstruction of breast tumor microvasculature with computational blood flow predictions. Microvascular Research, 2014, 91, 8-21.	2.5	69
27	Microdialysis measurement of intratumoral temozolomide concentration after cediranib, a pan-VEGF receptor tyrosine kinase inhibitor, in a U87 glioma model. Cancer Chemotherapy and Pharmacology, 2013, 72, 93-100.	2.3	15
28	Assessing breast cancer angiogenesis in vivo: which susceptibility contrast MRI biomarkers are relevant?. Magnetic Resonance in Medicine, 2013, 70, 1106-1116.	3.0	25
29	In Vivo â€œMRI Phenotypingâ€•Reveals Changes in Extracellular Matrix Transport and Vascularization That Mediate VEGF-Driven Increase in Breast Cancer Metastasis. PLoS ONE, 2013, 8, e63146.	2.5	14
30	Hypoxic Tumor Environments Exhibit Disrupted Collagen I Fibers and Low Macromolecular Transport. PLoS ONE, 2013, 8, e81869.	2.5	16
31	Identification of morphological and hemodynamic biomarkers for tumor vascular perfusion through mathematical modeling and highâ€resolution imaging. FASEB Journal, 2013, 27, 685.12.	0.5	0
32	Multiscale Imaging and Computational Modeling of Blood Flow in the Tumor Vasculature. Annals of Biomedical Engineering, 2012, 40, 2425-2441.	2.5	52
33	In vivo laser speckle imaging reveals microvascular remodeling and hemodynamic changes during wound healing angiogenesis. Angiogenesis, 2012, 15, 87-98.	7.2	57
34	Optical Imaging of Microvascular Morphology and Perfusion. Current Angiogenesis, 2012, 1, 243-260.	0.1	5
35	Three-Dimensional Imaging of the Mouse Neurovasculature with Magnetic Resonance Microscopy. PLoS ONE, 2011, 6, e22643.	2.5	46
36	Vascular phenotyping of brain tumors using magnetic resonance microscopy (Î¼MRI). Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1623-1636.	4.3	28

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37	Multiexposure laser speckle contrast imaging of the angiogenic microenvironment. Journal of Biomedical Optics, 2011, 16, 056006.	2.6	29
38	MR Molecular Imaging of Tumor Vasculature and Vascular Targets. Advances in Genetics, 2010, 69, 1-30.	1.8	27
39	Model system takes us a step closer to efficacious imaging biomarkers of angiogenesis in head and neck cancer. Cancer Biology and Therapy, 2009, 8, 2282-2283.	3.4	2
40	Magnetic resonance susceptibility based perfusion imaging of tumors using iron oxide nanoparticles. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2009, 1, 84-97.	6.1	10
41	Circulating and imaging markers for angiogenesis. Angiogenesis, 2008, 11, 321-335.	7.2	40
42	A novel technique for modeling susceptibility-based contrast mechanisms for arbitrary microvascular geometries: The finite perturber method. NeuroImage, 2008, 40, 1130-1143.	4.2	81
43	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
44	Lymph Node Metastasis in Breast Cancer Xenografts Is Associated with Increased Regions of Extravascular Drain, Lymphatic Vessel Area, and Invasive Phenotype. Cancer Research, 2006, 66, 5151-5158.	0.9	47
45	Magnetic Resonance Imaging of Tumor Physiology. , 2006, 124, 279-297.		2
46	Characterizing Extravascular Fluid Transport of Macromolecules in the Tumor Interstitium by Magnetic Resonance Imaging. Cancer Research, 2005, 65, 1425-1432.	0.9	61
47	Molecular and Functional Imaging of Cancer: Advances in MRI and MRS. Methods in Enzymology, 2004, 386, 1-58.	1.0	74
48	Visualizing Function in the Tumor-Associated Lymphatic System. Lymphatic Research and Biology, 2004, 2, 165-172.	1.1	10
49	Novel system for determining contrast agent concentration in mouse blood in vivo. Magnetic Resonance in Medicine, 2004, 51, 612-615.	3.0	13
50	Characterization of a first-pass gradient-echo spin-echo method to predict brain tumor grade and angiogenesis. American Journal of Neuroradiology, 2004, 25, 1524-32.	2.4	156
51	The effect of brain tumor angiogenesis on the in vivo relationship between the gradient-echo relaxation rate change (?R2*) and contrast agent (MION) dose. Journal of Magnetic Resonance Imaging, 2003, 18, 397-403.	3.4	45
52	Antiangiogenic effects of dexamethasone in 9L gliosarcoma assessed by MRI cerebral blood volume maps. Neuro-Oncology, 2003, 5, 235-243.	1.2	61
53	MR-derived cerebral blood volume maps: Issues regarding histological validation and assessment of tumor angiogenesis. Magnetic Resonance in Medicine, 2001, 46, 735-747.	3.0	123
54	Utility of simultaneously acquired gradient-echo and spin-echo cerebral blood volume and morphology maps in brain tumor patients. Magnetic Resonance in Medicine, 2000, 43, 845-853.	3.0	226