Narasimhan Rajaram

List of Publications by Year
in descending order

68	1,444	377584 21	371746 37
papers	citations	h-index	g-index

71	71	71	1779
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Macrophage-targeted anti-CCL2 immunotherapy enhances tumor sensitivity to 5-fluorouracil in a Balb/c-CT26 murine colon carcinoma model measured using diffuse reflectance spectroscopy. BMC Immunology, 2022, 23, 20.	0.9	2
2	Spectroscopic investigation of radiation-induced reoxygenation in radiation-resistant tumors. Neoplasia, 2021, 23, 49-57.	2.3	7
3	Cancerâ€induced cardiac atrophy adversely affects myocardial redox state and mitochondrial oxidative characteristics. JCSM Rapid Communications, 2021, 4, 3-15.	0.6	17
4	Diffuse reflectance spectroscopy reveals heat stress-induced changes in hemoglobin concentration in chicken breast. Scientific Reports, 2021, 11, 3649.	1.6	2
5	Mammary tumors in Sprague Dawley rats induced by N-ethyl-N-nitrosourea for evaluating terahertz imaging of breast cancer. Journal of Medical Imaging, 2021, 8, 023504.	0.8	8
6	Longitudinal monitoring of tumor response to immune checkpoint inhibitors using noninvasive diffuse reflectance spectroscopy. Biomedical Optics Express, 2021, 12, 3982.	1.5	3
7	Raman Spectroscopy and Machine Learning Reveals Early Tumor Microenvironmental Changes Induced by Immunotherapy. Cancer Research, 2021, 81, 5745-5755.	0.4	13
8	Diffuse reflectance spectroscopy to monitor murine colorectal tumor progression and therapeutic response. Journal of Biomedical Optics, 2020, 25, 1.	1.4	7
9	Supervised Statistical Learning for Cancer Detection in Dehydrated Excised Tissue with Terahertz Imaging. , 2020, , .		1
10	Multimodal Optical Spectroscopy of Functional and Molecular Changes in Tumors after Radiation Therapy. , 2020, , .		0
11	Quantum Blue Reduces the Severity of Woody Breast Myopathy via Modulation of Oxygen Homeostasis-Related Genes in Broiler Chickens. Frontiers in Physiology, 2019, 10, 1251.	1.3	32
12	Label-Free Raman Spectroscopy Reveals Signatures of Radiation Resistance in the Tumor Microenvironment. Cancer Research, 2019, 79, 2054-2064.	0.4	53
13	Mitochondrial mRNA translation initiation contributes to oxidative metabolism in the myocardia of aged, obese mice. Experimental Gerontology, 2019, 121, 62-70.	1.2	3
14	Optical Imaging Approaches to Investigating Radiation Resistance. Frontiers in Oncology, 2019, 9, 1152.	1.3	4
15	Characterization of radiation-induced reoxygenation in head and neck tumor xenografts using diffuse reflectance spectroscopy. , 2019, , .		0
16	Metaboloptics: Visualization of the tumor functional landscape via metabolic and vascular imaging. Scientific Reports, 2018, 8, 4171.	1.6	21
17	Rapid quantification of mitochondrial fractal dimension in individual cells. Biomedical Optics Express, 2018, 9, 5269.	1.5	9
18	Pulsed terahertz reflection imaging of tumors in a spontaneous model of breast cancer. Biomedical Physics and Engineering Express, 2018, 4, 065025.	0.6	21

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19	Tumor-derived granulocyte colony-stimulating factor diminishes efficacy of breast tumor cell vaccines. Breast Cancer Research, 2018, 20, 126.	2.2	25
20	A Radiosensitizing Inhibitor of HIF-1 alters the Optical Redox State of Human Lung Cancer Cells In Vitro. Scientific Reports, 2018, 8, 8815.	1.6	18
21	Pulsed terahertz imaging of breast cancer in freshly excised murine tumors. Journal of Biomedical Optics, 2018, 23, 1.	1.4	51
22	Optical spectroscopic sensing of tumor hypoxia. Journal of Biomedical Optics, 2018, 23, 1.	1.4	18
23	Sampling depth of a diffuse reflectance spectroscopy probe for in-vivo physiological quantification of murine subcutaneous tumor allografts. Journal of Biomedical Optics, 2018, 23, 1.	1.4	19
24	Quantitative diffuse reflectance spectroscopy of short-term changes in tumor oxygenation after radiation in a matched model of radiation resistance. Biomedical Optics Express, 2018, 9, 3794.	1.5	15
25	Intravital imaging of tumor bioenergetics in metastatic and non-metastatic breast cancer. , 2018, , .		0
26	Diffuse Reflectance Spectroscopy (DRS) of radiation-induced re-oxygenation in sensitive and resistant head and neck tumor xenografts. , 2018, , .		0
27	Terahertz imaging of freshly excised breast cancer using mouse model. , 2017, , .		3
28	Optical imaging and spectroscopy of microenvironmental changes associated with radiation resistance in tumors. Proceedings of SPIE, 2017, , .	0.8	0
29	Optical imaging of radiation-induced metabolic changes in radiation-sensitive and resistant cancer cells. Journal of Biomedical Optics, 2017, 22, 060502.	1.4	19
30	Quantitative Diffuse Optical Spectroscopy of Short-term Reoxygenation Kinetics in Radiation-Resistant and Sensitive Tumors. , 2017, , .		0
31	Determining the Sensitivity of Diffuse Reflectance Spectroscopy to Dose- and Depth-Dependent Changes in Tumor Oxygenation after Radiation Therapy. , 2017, , .		1
32	Optical Metabolic Imaging of TWIST Inhibition in 4T1 Breast Cancer Cells. , 2017, , .		0
33	Optical redox ratio identifies metastatic potential-dependent changes in breast cancer cell metabolism. Biomedical Optics Express, 2016, 7, 4364.	1.5	76
34	Valve interstitial cell contractile strength and metabolic state are dependent on its shape. Integrative Biology (United Kingdom), 2016, 8, 1079-1089.	0.6	32
35	Towards monitoring dysplastic progression in the oral cavity using a hybrid fiber-bundle imaging and spectroscopy probe. Scientific Reports, 2016, 6, 26734.	1.6	11
36	Multimodal Imaging and Spectroscopy Fiber-bundle Microendoscopy Platform for Non-invasive, In Vivo Tissue Analysis. Journal of Visualized Experiments, 2016, , .	0.2	0

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37	Optical Molecular Imaging and Spectroscopy of Oxygenation and Metabolism in Tumors. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 78-87.	1.9	18
38	In vivo measurement of non-keratinized squamous epithelium using a spectroscopic microendoscope with multiple source-detector separations. Proceedings of SPIE, 2016, 9715, .	0.8	1
39	Hyperspectral Imaging of Glucose Uptake, Mitochondrial Membrane Potential, and Vascular Oxygenation Differentiates Breast Cancers with Distinct Metastatic Potential In Vivo. , 2016, , .		1
40	Fiber-bundle microendoscopy with sub-diffuse reflectance spectroscopy and intensity mapping for multimodal optical biopsy of stratified epithelium. Biomedical Optics Express, 2015, 6, 4934.	1.5	12
41	Non-Invasive, Simultaneous Quantification of Vascular Oxygenation and Glucose Uptake in Tissue. PLoS ONE, 2015, 10, e0117132.	1.1	24
42	Delivery-Corrected Imaging of Fluorescently-Labeled Glucose Reveals Distinct Metabolic Phenotypes in Murine Breast Cancer. PLoS ONE, 2014, 9, e115529.	1.1	23
43	Measuring tumor cycling hypoxia and angiogenesis using a sideâ€firing fiber optic probe. Journal of Biophotonics, 2014, 7, 552-564.	1.1	16
44	Optical monitoring of glucose demand and vascular delivery in a preclinical murine model. Proceedings of SPIE, 2014, , .	0.8	0
45	Clinical study of noninvasivein vivomelanoma and nonmelanoma skin cancers using multimodal spectral diagnosis. Journal of Biomedical Optics, 2014, 19, 117003.	1.4	92
46	Quantitative Mapping of Hemodynamics in the Lung, Brain, and Dorsal Window Chamberâ€Grown Tumors Using a Novel, Automated Algorithm. Microcirculation, 2013, 20, 724-735.	1.0	21
47	Radiation induces aerobic glycolysis through reactive oxygen species. Radiotherapy and Oncology, 2013, 106, 390-396.	0.3	48
48	Optical and Radioiodinated Tethered Hsp90 Inhibitors Reveal Selective Internalization of Ectopic Hsp90 in Malignant Breast Tumor Cells. Chemistry and Biology, 2013, 20, 1187-1197.	6.2	43
49	Delivery Rate Affects Uptake of a Fluorescent Glucose Analog in Murine Metastatic Breast Cancer. PLoS ONE, 2013, 8, e76524.	1.1	27
50	Experimental validation of an inverse fluorescence Monte Carlo model to extract concentrations of metabolically relevant fluorophores from turbid phantoms and a murine tumor model. Journal of Biomedical Optics, 2012, 17, 078003.	1.4	2
51	Experimental validation of an inverse fluorescence Monte Carlo model to extract concentrations of metabolically relevant fluorophores from turbid phantoms and a murine tumor model. Journal of Biomedical Optics, 2012, 17, 0780031.	1.4	13
52	Performance of a lookup table-based approach for measuring tissue optical properties with diffuse optical spectroscopy. Journal of Biomedical Optics, 2012, 17, 057001.	1.4	55
53	Rapid and accurate determination of tissue optical properties using least-squares support vector machines. Biomedical Optics Express, 2011, 2, 592.	1.5	33
54	Variation of fluorescence in tissue with temperature. Lasers in Surgery and Medicine, 2011, 43, 36-42.	1.1	9

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55	Changes in morphology and optical properties of sclera and choroidal layers due to hyperosmotic agent. Journal of Biomedical Optics, 2011, 16, 077008.	1.4	9
56	Development of a noncontact diffuse optical spectroscopy probe for measuring tissue optical properties. Journal of Biomedical Optics, 2011, 16, 120505.	1.4	27
57	Probe pressure effects on human skin diffuse reflectance and fluorescence spectroscopy measurements. Journal of Biomedical Optics, 2011, 16, 011012.	1.4	80
58	Experimental validation of the effects of microvasculature pigment packaging on in vivo diffuse reflectance spectroscopy. Lasers in Surgery and Medicine, 2010, 42, 680-688.	1.1	50
59	Pilot clinical study for quantitative spectral diagnosis of nonâ€melanoma skin cancer. Lasers in Surgery and Medicine, 2010, 42, 876-887.	1.1	69
60	Parametric and empirical spectral analysis for non-invasive diagnosis of basal cell carcinoma. , 2010, , .		0
61	Design and validation of a clinical instrument for spectral diagnosis of cutaneous malignancy. Applied Optics, 2010, 49, 142.	2.1	62
62	Pilot Clinical Study for Quantitative Spectral Diagnosis of Non-Melanoma Skin Cancer. , 2010, , .		0
63	Changes in morphology and optical properties of sclera due to hyperosmotic agent. Proceedings of SPIE, 2009, , .	0.8	0
64	In vivo determination of optical properties and fluorophore characteristics of non-melanoma skin cancer. Proceedings of SPIE, 2009, , .	0.8	2
65	Erratum to â€œIn Vivo Detection of Gold Nanoshells in Tumors Using Diffuse Optical Spectroscopyâ€• IEEE Journal of Selected Topics in Quantum Electronics, 2008, 14, 251-251.	1.9	2
66	Lookup tableâ€“based inverse model for determining optical properties of turbid media. Journal of Biomedical Optics, 2008, 13, 050501.	1.4	147
67	Clinical instrument for spectral diagnosis of cutaneous malignancy. Proceedings of SPIE, 2008, , .	0.8	4
68	In Vivo Detection of Gold Nanoshells in Tumors Using Diffuse Optical Spectroscopy. IEEE Journal of Selected Topics in Quantum Electronics, 2007, 13, 1715-1720.	1.9	60