Nirmala Ramanujam

List of Publications by Citations

170 papers	6,821 citations	44 h-index	79 g-index
203 ext. papers	7,926 ext. citations	4 avg, IF	5.62 L-index

#	Paper	IF	Citations
170	In vivo multiphoton microscopy of NADH and FAD redox states, fluorescence lifetimes, and cellular morphology in precancerous epithelia. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 19494-9	11.5	691
169	Fluorescence spectroscopy of neoplastic and non-neoplastic tissues. *Neoplasia*, **2000**, 2, 89-117	6.4	438
168	Metabolic mapping of MCF10A human breast cells via multiphoton fluorescence lifetime imaging of the coenzyme NADH. *Cancer Research*, **2005**, 65, 8766-73	10.1	285
167	In vivo multiphoton fluorescence lifetime imaging of protein-bound and free nicotinamide adenine dinucleotide in normal and precancerous epithelia. *Journal of Biomedical Optics*, **2007**, 12, 024014	3.5	247
166	In vivo diagnosis of cervical intraepithelial neoplasia using 337-nm-excited laser-induced fluorescence. *Proceedings of the National Academy of Sciences of the United States of America*, **1994**, 91, 10193-7	11.5	223
165	Monte Carlo-based inverse model for calculating tissue optical properties. Part I: Theory and validation on synthetic phantoms. *Applied Optics*, **2006**, 45, 1062-71	1.7	208
164	Cervical precancer detection using a multivariate statistical algorithm based on laser-induced fluorescence spectra at multiple excitation wavelengths. *Photochemistry and Photobiology*, **1996**, 64, 720-35	3.6	198
163	Phase measurement of light absorption and scatter in human tissue. *Review of Scientific Instruments*, **1998**, 69, 3457-3481	1.7	189
162	Multiphoton microscopy of endogenous fluorescence differentiates normal, precancerous, and cancerous squamous epithelial tissues. *Cancer Research*, **2005**, 65, 1180-6	10.1	184
161	Development of a Fiber Optic Probe to Measure NIR Raman Spectra of Cervical Tissue In Vivo. *Photochemistry and Photobiology*, **1998**, 68, 427-431	3.6	139
160	Fluorescence spectroscopy: a diagnostic tool for cervical intraepithelial neoplasia (CIN). *Gynecologic Oncology*, **1994**, 52, 31-8	4.9	136
159	Optical redox ratio differentiates breast cancer cell lines based on estrogen receptor status. *Cancer Research*, **2010**, 70, 4759-66	10.1	123
158	Quantitative optical spectroscopy: a robust tool for direct measurement of breast cancer vascular oxygenation and total hemoglobin content in vivo. *Cancer Research*, **2009**, 69, 2919-26	10.1	113
157	Development of a multivariate statistical algorithm to analyze human cervical tissue fluorescence spectra acquired in vivo. *Lasers in Surgery and Medicine*, **1996**, 19, 46-62	3.6	100
156	Advances in quantitative UV-visible spectroscopy for clinical and pre-clinical application in cancer. *Current Opinion in Biotechnology*, **2009**, 20, 119-31	11.4	97
155	Monte Carlo-based inverse model for calculating tissue optical properties. Part II: Application to breast cancer diagnosis. *Applied Optics*, **2006**, 45, 1072-8	1.7	94
154	Spectroscopic diagnosis of cervical intraepithelial neoplasia (CIN) in vivo using laser-induced fluorescence spectra at multiple excitation wavelengths. *Lasers in Surgery and Medicine*, **1996**, 19, 63-74	3.6	94

153	Comparison of multiexcitation fluorescence and diffuse reflectance spectroscopy for the diagnosis of breast cancer (March 2003). *IEEE Transactions on Biomedical Engineering*, **2003**, 50, 1233-42	5	93
152	Diagnosis of breast cancer using diffuse reflectance spectroscopy: Comparison of a Monte Carlo versus partial least squares analysis based feature extraction technique. *Lasers in Surgery and Medicine*, **2006**, 38, 714-24	3.6	80
151	Trans-abdominal monitoring of fetal arterial blood oxygenation using pulse oximetry. *Journal of Biomedical Optics*, **2000**, 5, 391-405	3.5	71
150	Ensembles of radial basis function networks for spectroscopic detection of cervical precancer. *IEEE Transactions on Biomedical Engineering*, **1998**, 45, 953-61	5	70
149	Effect of fiber optic probe geometry on depth-resolved fluorescence measurements from epithelial tissues: a Monte Carlo simulation. *Journal of Biomedical Optics*, **2003**, 8, 237-47	3.5	68
148	Quantitative physiology of the precancerous cervix in vivo through optical spectroscopy. *Neoplasia*, **2009**, 11, 325-32	6.4	67
147	Autofluorescence spectroscopy of normal and malignant human breast cell lines. *Photochemistry and Photobiology*, **2003**, 78, 462-9	3.6	67
146	Relation between fluorescence spectra of dilute and turbid samples. *Applied Optics*, **1994**, 33, 414-23	1.7	67
145	Low Temperature Fluorescence Imaging of Freeze-trapped Human Cervical Tissues. *Optics Express*, **2001**, 8, 335-43	3.3	66
144	Autofluorescence and diffuse reflectance properties of malignant and benign breast tissues. *Annals of Surgical Oncology*, **2004**, 11, 65-70	3.1	63
143	Rapid noninvasive optical imaging of tissue composition in breast tumor margins. *American Journal of Surgery*, **2009**, 198, 566-74	2.7	62
142	Experimental validation of Monte Carlo modeling of fluorescence in tissues in the UV-visible spectrum. *Journal of Biomedical Optics*, **2003**, 8, 223-36	3.5	62
141	Multiphoton redox ratio imaging for metabolic monitoring in vivo. *Methods in Molecular Biology*, **2010**, 594, 155-62	1.4	59
140	Optimal methods for fluorescence and diffuse reflectance measurements of tissue biopsy samples. *Lasers in Surgery and Medicine*, **2002**, 30, 191-200	3.6	58
139	Relationship between depth of a target in a turbid medium and fluorescence measured by a variable-aperture method. *Optics Letters*, **2002**, 27, 104-6	3	57
138	Diagnosis of breast cancer using fluorescence and diffuse reflectance spectroscopy: a Monte-Carlo-model-based approach. *Journal of Biomedical Optics*, **2008**, 13, 034015	3.5	56
137	Chromophore based analyses of steady-state diffuse reflectance spectroscopy: current status and perspectives for clinical adoption. *Journal of Biophotonics*, **2015**, 8, 9-24	3.1	55
136	Sequential estimation of optical properties of a two-layered epithelial tissue model from depth-resolved ultraviolet-visible diffuse reflectance spectra. *Applied Optics*, **2006**, 45, 4776-90	1.7	53

135	Investigation of fiber-optic probe designs for optical spectroscopic diagnosis of epithelial pre-cancers. *Lasers in Surgery and Medicine*, **2004**, 34, 25-38	3.6	53
134	Fluorescence spectroscopy for diagnosis of squamous intraepithelial lesions of the cervix. *Obstetrics and Gynecology*, **1999**, 93, 462-70	4.9	53
133	Uptake of 2-NBDG as a method to monitor therapy response in breast cancer cell lines. *Breast Cancer Research and Treatment*, **2011**, 126, 55-62	4.4	52
132	Performance metrics of an optical spectral imaging system for intra-operative assessment of breast tumor margins. *Optics Express*, **2010**, 18, 8058-76	3.3	51
131	Optical breast cancer margin assessment: an observational study of the effects of tissue heterogeneity on optical contrast. *Breast Cancer Research*, **2010**, 12, R91	8.3	50
130	A robust Monte Carlo model for the extraction of biological absorption and scattering in vivo. *IEEE Transactions on Biomedical Engineering*, **2009**, 56, 960-8	5	49
129	Scaling method for fast Monte Carlo simulation of diffuse reflectance spectra from multilayered turbid media. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2007**, 24, 1011-25	1.8	46
128	Use of a multiseparation fiber optic probe for the optical diagnosis of breast cancer. *Journal of Biomedical Optics*, **2005**, 10, 024032	3.5	45
127	Optical assessment of tumor resection margins in the breast. *IEEE Journal of Selected Topics in Quantum Electronics*, **2010**, 16, 530-544	3.8	44
126	Resonance Raman Spectroscopy at 257 nm Excitation of Normal and Malignant Cultured Breast and Cervical Cells. *Applied Spectroscopy*, **1999**, 53, 82-85	3.1	43
125	Quantitative optical spectroscopy can identify long-term local tumor control in irradiated murine head and neck xenografts. *Journal of Biomedical Optics*, **2009**, 14, 054051	3.5	42
124	Portable, Fiber-Based, Diffuse Reflection Spectroscopy (DRS) Systems for Estimating Tissue Optical Properties. *Applied Spectroscopy*, **2011**, 62, 206-215	3.1	39
123	Using optical spectroscopy to longitudinally monitor physiological changes within solid tumors. *Neoplasia*, **2009**, 11, 889-900	6.4	39
122	FLUORESCENCE SPECTROSCOPY FOR DIAGNOSIS OF SQUAMOUS INTRAEPITHELIAL LESIONS OF THE CERVIX. *Obstetrics and Gynecology*, **1999**, 93, 462-470	4.9	39
121	Radiation induces aerobic glycolysis through reactive oxygen species. *Radiotherapy and Oncology*, **2013**, 106, 390-6	5.3	38
120	Design of a Novel Low Cost Point of Care Tampon (POCkeT) Colposcope for Use in Resource Limited Settings. *PLoS ONE*, **2015**, 10, e0135869	3.7	38
119	Experimental proof of the feasibility of using an angled fiber-optic probe for depth-sensitive fluorescence spectroscopy of turbid media. *Optics Letters*, **2004**, 29, 2034-6	3	36
118	Monte-Carlo-based model for the extraction of intrinsic fluorescence from turbid media. *Journal of Biomedical Optics*, **2008**, 13, 024017	3.5	35

117	Comparison of a physical model and principal component analysis for the diagnosis of epithelial neoplasias in vivo using diffuse reflectance spectroscopy. *Optics Express*, **2007**, 15, 7863-75	3.3	35
116	Optical and radioiodinated tethered Hsp90 inhibitors reveal selective internalization of ectopic Hsp90 in malignant breast tumor cells. *Chemistry and Biology*, **2013**, 20, 1187-97		33
115	Quantitative diffuse reflectance and fluorescence spectroscopy: tool to monitor tumor physiology in vivo. *Journal of Biomedical Optics*, **2009**, 14, 024010	3.5	33
114	High-resolution three-dimensional scanning optical image system for intrinsic and extrinsic contrast agents in tissue. *Review of Scientific Instruments*, **2002**, 73, 172-178	1.7	32
113	Preferential accumulation of 5-aminolevulinic acid-induced protoporphyrin IX in breast cancer: a comprehensive study on six breast cell lines with varying phenotypes. *Journal of Biomedical Optics*, **2010**, 15, 018002	3.5	31
112	Cost-effective diffuse reflectance spectroscopy device for quantifying tissue absorption and scattering in vivo. *Journal of Biomedical Optics*, **2008**, 13, 060505	3.5	29
111	Fast and noninvasive fluorescence imaging of biological tissues in vivo using a flying-spot scanner. *IEEE Transactions on Biomedical Engineering*, **2001**, 48, 1034-41	5	29
110	Optical spectral surveillance of breast tissue landscapes for detection of residual disease in breast tumor margins. *PLoS ONE*, **2013**, 8, e69906	3.7	29
109	Noninvasive monitoring of tissue hemoglobin using UV-VIS diffuse reflectance spectroscopy: a pilot study. *Optics Express*, **2009**, 17, 23396-409	3.3	28
108	Transabdominal near infrared oximetry of hypoxic stress in fetal sheep brain in utero. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 12950-4	11.5	26
107	Photon migration through fetal head in utero using continuous wave, near infrared spectroscopy: clinical and experimental model studies. *Journal of Biomedical Optics*, **2000**, 5, 173-84	3.5	25
106	Optimization of a widefield structured illumination microscope for non-destructive assessment and quantification of nuclear features in tumor margins of a primary mouse model of sarcoma. *PLoS ONE*, **2013**, 8, e68868	3.7	25
105	Development of Algorithms for Automated Detection of Cervical Pre-Cancers With a Low-Cost, Point-of-Care, Pocket Colposcope. *IEEE Transactions on Biomedical Engineering*, **2019**, 66, 2306-2318	5	25
104	Advancing optical imaging for breast margin assessment: an analysis of excisional time, cautery, and patent blue dye on underlying sources of contrast. *PLoS ONE*, **2012**, 7, e51418	3.7	24
103	Instrument independent diffuse reflectance spectroscopy. *Journal of Biomedical Optics*, **2011**, 16, 011010	3.5	24
102	A strategy for quantitative spectral imaging of tissue absorption and scattering using light emitting diodes and photodiodes. *Optics Express*, **2009**, 17, 1372-84	3.3	23
101	Model based and empirical spectral analysis for the diagnosis of breast cancer. *Optics Express*, **2008**, 16, 14961-78	3.3	23
100	A Quantitative Diffuse Reflectance Imaging (QDRI) System for Comprehensive Surveillance of the Morphological Landscape in Breast Tumor Margins. *PLoS ONE*, **2015**, 10, e0127525	3.7	23

99	Method to Determine Tissue Fluorescence Efficiency in vivo and Predict Signal-to-Noise Ratio for Spectrometers. *Applied Spectroscopy*, **1998**, 52, 943-951	3.1	22
98	Delivery rate affects uptake of a fluorescent glucose analog in murine metastatic breast cancer. *PLoS ONE*, **2013**, 8, e76524	3.7	21
97	Sources of phase noise in homodyne and heterodyne phase modulation devices used for tissue oximetry studies. *Review of Scientific Instruments*, **1998**, 69, 3042-3054	1.7	21
96	Development of enhanced ethanol ablation as an alternative to surgery in treatment of superficial solid tumors. *Scientific Reports*, **2017**, 7, 8750	4.9	20
95	Delivery-corrected imaging of fluorescently-labeled glucose reveals distinct metabolic phenotypes in murine breast cancer. *PLoS ONE*, **2014**, 9, e115529	3.7	20
94	Visible light optical spectroscopy is sensitive to neovascularization in the dysplastic cervix. *Journal of Biomedical Optics*, **2010**, 15, 057006	3.5	20
93	Diffuse reflectance spectroscopy with a self-calibrating fiber optic probe. *Optics Letters*, **2008**, 33, 1783-5	3	20
92	Rapid staining and imaging of subnuclear features to differentiate between malignant and benign breast tissues at a point-of-care setting. *Journal of Cancer Research and Clinical Oncology*, **2016**, 142, 1475-86	4.9	19
91	Oxygen and Perfusion Kinetics in Response to Fractionated Radiation Therapy in FaDu Head and Neck Cancer Xenografts Are Related to Treatment Outcome. *International Journal of Radiation Oncology Biology Physics*, **2016**, 96, 462-469	4	19
90	Fluorescence spectroscopy: an adjunct diagnostic tool to image-guided core needle biopsy of the breast. *IEEE Transactions on Biomedical Engineering*, **2009**, 56, 2518-28	5	19
89	Photon migration through fetal head in utero using continuous wave, near-infrared spectroscopy: development and evaluation of experimental and numerical models. *Journal of Biomedical Optics*, **2000**, 5, 163-72	3.5	19
88	Electromagnetic spectroscopy of normal breast tissue specimens obtained from reduction surgeries: comparison of optical and microwave properties. *IEEE Transactions on Biomedical Engineering*, **2008**, 55, 2444-51	5	18
87	Effect of optical clearing agents on the in vivo optical properties of squamous epithelial tissue. *Lasers in Surgery and Medicine*, **2006**, 38, 920-7	3.6	18
86	Relationship between collagen autofluorescence of the human cervix and menopausal status. *Photochemistry and Photobiology*, **2003**, 77, 653-8	3.6	18
85	Non-invasive, simultaneous quantification of vascular oxygenation and glucose uptake in tissue. *PLoS ONE*, **2015**, 10, e0117132	3.7	18
84	Design and preliminary analysis of a vaginal inserter for speculum-free cervical cancer screening. *PLoS ONE*, **2017**, 12, e0177782	3.7	18
83	A Fluorescence-Guided Laser Ablation System for Removal of Residual Cancer in a Mouse Model of Soft Tissue Sarcoma. *Theranostics*, **2016**, 6, 155-66	12.1	18
82	Near-simultaneous intravital microscopy of glucose uptake and mitochondrial membrane potential, key endpoints that reflect major metabolic axes in cancer. *Scientific Reports*, **2017**, 7, 13772	4.9	17

81	Statistical techniques for diagnosing CIN using fluorescence spectroscopy: SVD and CART. *Journal of Cellular Biochemistry*, **1995**, 23, 125-30	4.7	17
80	Rapid ratiometric determination of hemoglobin concentration using UV-VIS diffuse reflectance at isosbestic wavelengths. *Optics Express*, **2010**, 18, 18779-92	3.3	16
79	An integrated strategy for improving contrast, durability, and portability of a Pocket Colposcope for cervical cancer screening and diagnosis. *PLoS ONE*, **2018**, 13, e0192530	3.7	16
78	International Image Concordance Study to Compare a Point-of-Care Tampon Colposcope With a Standard-of-Care Colposcope. *Journal of Lower Genital Tract Disease*, **2017**, 21, 112-119	3.6	15
77	Towards a field-compatible optical spectroscopic device for cervical cancer screening in resource-limited settings: effects of calibration and pressure. *Optics Express*, **2011**, 19, 17908-24	3.3	15
76	A diffuse reflectance spectral imaging system for tumor margin assessment using custom annular photodiode arrays. *Biomedical Optics Express*, **2012**, 3, 3211-22	3.5	15
75	Antepartum, transabdominal near infrared spectroscopy: feasibility of measuring photon migration through the fetal head in utero. *The Journal of Maternal-fetal Medicine*, **1999**, 8, 275-88		15
74	Measuring tumor cycling hypoxia and angiogenesis using a side-firing fiber optic probe. *Journal of Biophotonics*, **2014**, 7, 552-64	3.1	14
73	A low-cost, portable, and quantitative spectral imaging system for application to biological tissues. *Optics Express*, **2010**, 18, 12630-45	3.3	14
72	Leveraging ectopic Hsp90 expression to assay the presence of tumor cells and aggressive tumor phenotypes in breast specimens. *Scientific Reports*, **2017**, 7, 17487	4.9	13
71	Steady-state fluorescence imaging of neoplasia. *Methods in Enzymology*, **2003**, 361, 452-81	1.7	13
70	Optical Imaging of Glucose Uptake and Mitochondrial Membrane Potential to Characterize Her2 Breast Tumor Metabolic Phenotypes. *Molecular Cancer Research*, **2019**, 17, 1545-1555	6.6	12
69	Metaboloptics: Visualization of the tumor functional landscape via metabolic and vascular imaging. *Scientific Reports*, **2018**, 8, 4171	4.9	12
68	Quantitative Segmentation of Fluorescence Microscopy Images of Heterogeneous Tissue: Application to the Detection of Residual Disease in Tumor Margins. *PLoS ONE*, **2013**, 8, e66198	3.7	12
67	Feasibility of near-infrared diffuse optical spectroscopy on patients undergoing imageguided core-needle biopsy. *Optics Express*, **2007**, 15, 7335-50	3.3	11
66	Diagnosis of Breast Cancer Using Optical Spectroscopy. *Medical Laser Application: International Journal for Laser Treatment and Research*, **2003**, 18, 233-248		11
65	Modeling photon transport in transabdominal fetal oximetry. *Journal of Biomedical Optics*, **2000**, 5, 277-82	3.5	11
64	Rapid determination of oxygen saturation and vascularity for cancer detection. *PLoS ONE*, **2013**, 8, e82937	3.7	11

63	Development of a multivariate statistical algorithm to analyze human cervical tissue fluorescence spectra acquired in vivo **1996**, 19, 46		11
62	Miniature spectral imaging device for wide-field quantitative functional imaging of the morphological landscape of breast tumor margins. *Journal of Biomedical Optics*, **2017**, 22, 26007	3.5	10
61	Assessment of the sensitivity and specificity of tissue-specific-based and anatomical-based optical biomarkers for rapid detection of human head and neck squamous cell carcinoma. *Oral Oncology*, **2014**, 50, 848-856	4.4	9
60	Monte Carlo-based inverse model for calculating tissue optical properties Part I: Theory and validation on synthetic phantoms: erratum **2007**, 46, 6847		9
59	Wavelength optimization for quantitative spectral imaging of breast tumor margins. *PLoS ONE*, **2013**, 8, e61767	3.7	9
58	Micro-anatomical quantitative optical imaging: toward automated assessment of breast tissues. *Breast Cancer Research*, **2015**, 17, 105	8.3	8
57	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, 077012	3.5	8
56	Endoscopically compatible near-infrared photon migration probe. *Optics Letters*, **2004**, 29, 2022-4	3	7
55	Exploiting heat shock protein expression to develop a non-invasive diagnostic tool for breast cancer. *Scientific Reports*, **2019**, 9, 3461	4.9	6
54	Near-simultaneous quantification of glucose uptake, mitochondrial membrane potential, and vascular parameters in murine flank tumors using quantitative diffuse reflectance and fluorescence spectroscopy. *Biomedical Optics Express*, **2018**, 9, 3399-3412	3.5	6
53	A quantitative microscopic approach to predict local recurrence based on in vivo intraoperative imaging of sarcoma tumor margins. *International Journal of Cancer*, **2015**, 137, 2403-12	7.5	6
52	Detection of squamous cell carcinoma and corresponding biomarkers using optical spectroscopy. *Otolaryngology - Head and Neck Surgery*, **2011**, 144, 390-4	5.5	6
51	Correlation of breast tissue histology and optical signatures to improve margin assessment techniques. *Journal of Biomedical Optics*, **2016**, 21, 66014	3.5	6
50	In Vivo Optical Metabolic Imaging of Long-Chain Fatty Acid Uptake in Orthotopic Models of Triple-Negative Breast Cancer. *Cancers*, **2021**, 13,	6.6	6
49	Distinct Angiogenic Changes during Carcinogenesis Defined by Novel Label-Free Dark-Field Imaging in a Hamster Cheek Pouch Model. *Cancer Research*, **2017**, 77, 7109-7119	10.1	5
48	Use of genetic algorithms to optimize fiber optic probe design for the extraction of tissue optical properties. *IEEE Transactions on Biomedical Engineering*, **2007**, 54, 1533-5	5	5
47	Fluorescence Spectroscopy In Vivo **2006**,		5
46	Structured Illumination Microscopy and a Quantitative Image Analysis for the Detection of Positive Margins in a Pre-Clinical Genetically Engineered Mouse Model of Sarcoma. *PLoS ONE*, **2016**, 11, e0147008	3.7	5

45	Quantitative spectral reflectance imaging device for intraoperative breast tumor margin assessment. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2009**, 2009, 6554-6	0.9	4
44	Autofluorescence Spectroscopy of Normal and Malignant Human Breast Cell Lines. *Photochemistry and Photobiology*, **2007**, 78, 462-469	3.6	4
43	Development of a Fiber Optic Probe to Measure NIR Raman Spectra of Cervical Tissue In Vivo **1998**, 68, 427		4
42	A novel speculum-free imaging strategy for visualization of the internal female lower reproductive system. *Scientific Reports*, **2020**, 10, 16570	4.9	4
41	Simultaneous in vivo optical quantification of key metabolic and vascular endpoints reveals tumor metabolic diversity in murine breast tumor models. *Journal of Biophotonics*, **2019**, 12, e201800372	3.1	4
40	Spectroscopic diagnosis of cervical intraepithelial neoplasia (CIN) in vivo using laser-induced fluorescence spectra at multiple excitation wavlengths **1996**, 19, 63		4
39	Tissue quantification in photon-limited microendoscopy **2011**,		3
38	A compact, cost-effective diffuse reflectance spectroscopic imaging system for quantitative tissue absorption and scattering **2011**,		3
37	Imaging of 2-NBDG and TMRE reveals glucose uptake and mitochondrial membrane potential in dorsal window chamber models **2017**,		3
36	Understanding Factors Governing Distribution Volume of Ethyl Cellulose-Ethanol to Optimize Ablative Therapy in the Liver. *IEEE Transactions on Biomedical Engineering*, **2020**, 67, 2337-2348	5	3
35	Digital Health Strategies for Cervical Cancer Control in Low- and Middle-Income Countries: Systematic Review of Current Implementations and Gaps in Research. *Journal of Medical Internet Research*, **2021**, 23, e23350	7.6	3
34	Dark field optical imaging reveals vascular changes in an inducible hamster cheek pouch model during carcinogenesis. *Biomedical Optics Express*, **2016**, 7, 3247-3261	3.5	3
33	Algorithms for differentiating between images of heterogeneous tissue across fluorescence microscopes. *Biomedical Optics Express*, **2016**, 7, 3412-3424	3.5	3
32	Polymer-assisted intratumoral delivery of ethanol: Preclinical investigation of safety and efficacy in a murine breast cancer model. *PLoS ONE*, **2021**, 16, e0234535	3.7	3
31	Fluorescence Spectroscopy In Vivo **2011**,		2
30	Calibration schemes of a field-compatible optical spectroscopic system to quantify neovascular changes in the dysplastic cervix **2011**,		2
29	Custom annular photodetector arrays for breast cancer margin assessment using diffuse reflectance spectroscopy **2011**,		2
28	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	3.5	2

27	Diffuse reflectance spectral imaging for breast tumor margin assessment **2012**,		2
26	Visualization of morphological and molecular features associated with chronic ischemia in bioengineered human skin. *Microscopy and Microanalysis*, **2010**, 16, 117-31	0.5	2
25	Optical spectroscopy vs. the surgical suite [cancer detection]. *IEEE Circuits and Devices: the Magazine of Electronic and Photonic Systems*, **1996**, 12, 34-40		2
24	Longitudinal Monitoring of 4T1-Tumor Physiology in vivo with Doxorubicin Treatment via Diffuse Optical Spectroscopy **2008**,		2
23	Combining multiple contrasts for improving machine learning-based classification of cervical cancers with a low-cost point-of-care Pocket colposcope. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference*, **2020**, 2020, 1148-1151	0.9	2
22	Minimally invasive ethyl cellulose ethanol ablation in domesticated cats with naturally occurring head and neck cancers: Six cats. *Veterinary and Comparative Oncology*, **2021**, 19, 492-500	2.5	2
21	Using wide-field quantitative diffuse reflectance spectroscopy in combination with high-resolution imaging for margin assessment **2011**,		1
20	A self-calibrating fiber optic probe for tissue optical spectroscopy **2008**,		1
19	Relationship Between Collagen Autofluorescence of the Human Cervix and Menopausal Status. *Photochemistry and Photobiology*, **2007**, 77, 653-658	3.6	1
18	A scaling Monte Carlo method for diffuse reflectance computation from multi-layered media **2007**,		1
17	Optimizing fluorescently-tethered Hsp90 inhibitor dose for maximal specific uptake by breast tumors **2018**,		1
16	In vivo Multiphoton Fluorescence Lifetime Imaging of Free and Protein-bound NADH in Normal and Pre-cancerous Epithelia **2006**,		1
15	Optical Spectral Imaging For Breast Margin Assessment: A Comprehensive Assessment of Sources of Contrast **2012**,		1
14	Hyperspectral Imaging of Glucose Uptake, Mitochondrial Membrane Potential, and Vascular Oxygenation Differentiates Breast Cancers with Distinct Metastatic Potential In Vivo **2016**,		1
13	[F]Fluoro-DCP, a first generation PET radiotracer for monitoring protein sulfenylation in vivo.. *Redox Biology*, **2021**, 49, 102218	11.3	1
12	Assessing effects of pressure on tumor and normal tissue physiology using an automated self-calibrated, pressure-sensing probe for diffuse reflectance spectroscopy. *Journal of Biomedical Optics*, **2018**, 23, 1-8	3.5	1
11	Resetting the tumor microenvironment to favor anti-tumor immunity after local ablation.. *Journal of Clinical Oncology*, **2021**, 39, 2561-2561	2.2	1
10	An Accessible Laparoscope for Surgery in Low- and Middle- Income Countries. *Annals of Biomedical Engineering*, **2021**, 49, 1657-1669	4.7	1

List of Publications

9	Understanding the sources of errors in Hsp90 molecular imaging for rapid-on-site breast cancer diagnosis. *Biomedical Optics Express*, **2021**, 12, 2299-2311	3.5	1
8	Optimizing ethyl cellulose-ethanol delivery towards enabling ablation of cervical dysplasia. *Scientific Reports*, **2021**, 11, 16869	4.9	1
7	Policy Considerations to Promote Equitable Cervical Cancer Screening and Treatment in Peru.. *Annals of Global Health*, **2021**, 87, 116	3.3	0
6	Radiologic-pathologic analysis of increased ethanol localization and ablative extent achieved by ethyl cellulose. *Scientific Reports*, **2021**, 11, 20700	4.9	0
5	Quantitative assessment of distant recurrence risk in early stage breast cancer using a nonlinear combination of pathological, clinical and imaging variables. *Journal of Biophotonics*, **2020**, 13, e201960235	3.1	
4	One-Photon Autofluorescence Microscopy. *Series in Cellular and Clinical Imaging*, **2014**, 67-76		
3	A novel treatment for recurrent localized cervical cancer using point-of-care ethyl cellulose ethanol ablation with concurrent cytotoxic therapy.. *Journal of Clinical Oncology*, **2021**, 39, e17507-e17507	2.2	
2	Editorial overview: Biomedical Engineering and Women's Health - Breaking new ground in gender and sex-specific research. *Current Opinion in Biomedical Engineering*, **2022**, 100392	4.4	
1	A Spectroscopic Technique to Simultaneously Characterize Fatty Acid Uptake, Mitochondrial Activity, Vascularity, and Oxygen Saturation for Longitudinal Studies In Vivo. *Metabolites*, **2022**, 12, 369	5.6	