# Gregory M Palmer

List of Publications by Year
in descending order



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|---|---|---|---|
| 98 papers | 4,804 citations | 126858 33 h-index | 95218 68 g-index |
| 100 all docs | 100 docs citations | 100 times ranked | 5872 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 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. | 1.3 | 3 |
| 2 | Imaging Hypoxia. , 2021, , 869-895. | | 0 |
| 3 | Plasmonic gold nanostars for synergistic photoimmunotherapy to treat cancer. Nanophotonics, 2021, 10, 3295-3302. | 2.9 | 8 |
| 4 | Cherenkov emissions for studying tumor changes during radiation therapy: An exploratory study in domesticated dogs with naturally-occurring cancer. PLoS ONE, 2020, 15, e0238106. | 1.1 | 2 |
| 5 | Dual-emissive, oxygen-sensing boron nanoparticles quantify oxygen consumption rate in breast cancer cells. Journal of Biomedical Optics, 2020, 25, . | 1.4 | 6 |
| 6 | Clinical and Pre-clinical Methods for Quantifying Tumor Hypoxia. Advances in Experimental Medicine and Biology, 2019, 1136, 19-41. | 0.8 | 26 |
| 7 | 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. | 1.1 | 8 |
| 8 | Targeting Fluorescent Nanodiamonds to Vascular Endothelial Growth Factor Receptors in Tumor. Bioconjugate Chemistry, 2019, 30, 604-613. | 1.8 | 30 |
| 9 | Surface-enhanced Raman scattering nanosensors for in vivo detection of nucleic acid targets in a large animal model. Nano Research, 2018, 11, 4005-4016. | 5.8 | 34 |
| 10 | XIAP Regulation by MNK Links MAPK and NFÎºB Signaling to Determine an Aggressive Breast Cancer Phenotype. Cancer Research, 2018, 78, 1726-1738. | 0.4 | 45 |
| 11 | Noninvasive optical spectroscopy for identification of nonâ€melanoma skin cancer: Pilot study. Lasers in Surgery and Medicine, 2018, 50, 246-252. | 1.1 | 9 |
| 12 | Red blood cell phenotype fidelity following glycerol cryopreservation optimized for research purposes. PLoS ONE, 2018, 13, e0209201. | 1.1 | 25 |
| 13 | 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. | 1.5 | 12 |
| 14 | Development and Preliminary Evaluation of a Murine Model of Chronic Radiation-Induced Proctitis. International Journal of Radiation Oncology Biology Physics, 2018, 101, 1194-1201. | 0.4 | 8 |
| 15 | Synergistic immuno photothermal nanotherapy (SYMPHONY) to treat unresectable and metastatic cancers and produce and cancer vaccine effect. , 2018, , . | | 0 |
| 16 | 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. | 1.4 | 3 |
| 17 | Abstract 4152: Synergistic gold nanostar-mediated photothermal and immunotherapy for cancer metastasis treatment. , 2018, , . | | 0 |
| 18 | Luminescent Difluoroboron Î²-Diketonate PLAâ€“PEG Nanoparticle. Biomacromolecules, 2017, 18, 551-561. | 2.6 | 30 |

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|---|---|---|---|
| 19 | Miniature spectral imaging device for wide-field quantitative functional imaging of the morphological landscape of breast tumor margins. Journal of Biomedical Optics, 2017, 22, 026007. | 1.4 | 10 |
| 20 | NIR-emissive PEG-b-TCL micelles for breast tumor imaging and minimally invasive pharmacokinetic analysis. Nanoscale, 2017, 9, 13465-13476. | 2.8 | 17 |
| 21 | Synergistic Immuno Photothermal Nanotherapy (SYMPHONY) for the Treatment of Unresectable and Metastatic Cancers. Scientific Reports, 2017, 7, 8606. | 1.6 | 113 |
| 22 | MP98-09 SYNERGISTIC IMMUNO-PHOTOTHERMAL NANOTHERAPY (SYMPHONY): A NOVEL TREATMENT FOR LOCALIZED AND METASTATIC BLADDER CANCER. Journal of Urology, 2017, 197, . | 0.2 | 2 |
| 23 | Noninvasive measurement of tissue blood oxygenation with Cerenkov imaging during therapeutic radiation delivery. Optics Letters, 2017, 42, 3101. | 1.7 | 9 |
| 24 | The Development of an In Vivo Mobile Dynamic Microscopy System that Images Cancerous Tumors via Fluorescent and Phosphorescent Nanoparticles. , 2017, , . | | 0 |
| 25 | Portable System for Wide-field, Sub-millimeter Functional Imaging of the Morphological Landscape of Breast Tumor Margins. , 2016, , . | | 0 |
| 26 | Tunable and amplified Raman gold nanoprobes for effective tracking (TARGET): in vivo sensing and imaging. Nanoscale, 2016, 8, 8486-8494. | 2.8 | 29 |
| 27 | MEK1/2 inhibitors reverse acute vascular occlusion in mouse models of sickle cell disease. FASEB Journal, 2016, 30, 1171-1186. | 0.2 | 14 |
| 28 | Renitrosylation of banked human red blood cells improves deformability and reduces adhesivity. Transfusion, 2015, 55, 2452-2463. | 0.8 | 19 |
| 29 | Effects of High-Dose Microbeam Irradiation on Tumor Microvascular Function and Angiogenesis. Radiation Research, 2015, 183, 147. | 0.7 | 19 |
| 30 | Modulation of Murine Breast Tumor Vascularity, Hypoxia, and Chemotherapeutic Response by Exercise. Journal of the National Cancer Institute, 2015, 107, . | 3.0 | 188 |
| 31 | Oxygen Sensing Difluoroboron Dinaphthoylmethane Polylactide. Macromolecules, 2015, 48, 2967-2977. | 2.2 | 117 |
| 32 | Luminescent Difluoroboron Î²â€Diketonate PEGâ€PLA Oxygen Nanosensors for Tumor Imaging. Macromolecular Rapid Communications, 2015, 36, 694-699. | 2.0 | 32 |
| 33 | Snap-shot multispectral imaging of vascular dynamics in a mouse window-chamber model. Optics Letters, 2015, 40, 3292. | 1.7 | 69 |
| 34 | Novel Manganese-Porphyrin Superoxide Dismutase-Mimetic Widens the Therapeutic Margin in a Preclinical Head and Neck Cancer Model. International Journal of Radiation Oncology Biology Physics, 2015, 93, 892-900. | 0.4 | 61 |
| 35 | Biomimetic engineered muscle with capacity for vascular integration and functional maturation in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 5508-5513. | 3.3 | 206 |
| 36 | Measuring tumor cycling hypoxia and angiogenesis using a sideâ€firing fiber optic probe. Journal of Biophotonics, 2014, 7, 552-564. | 1.1 | 16 |

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|---|---|---|---|
| 37 | Systemic anti-tumour effects of local thermally sensitive liposome therapy. International Journal of Hyperthermia, 2014, 30, 385-392. | 1.1 | 22 |
| 38 | Plasmonics-enhanced and optically modulated delivery of gold nanostars into brain tumor. Nanoscale, 2014, 6, 4078-4082. | 2.8 | 54 |
| 39 | Hypoxia in Melanoma: Using Optical Spectroscopy and EF5 to Assess Tumor Oxygenation Before and During Regional Chemotherapy for Melanoma. Annals of Surgical Oncology, 2014, 21, 1435-1440. | 0.7 | 8 |
| 40 | Cellular Migration and Invasion Uncoupled: Increased Migration Is Not an Inexorable Consequence of Epithelial-to-Mesenchymal Transition. Molecular and Cellular Biology, 2014, 34, 3486-3499. | 1.1 | 80 |
| 41 | Anti-Hypotensive Treatment and Endothelin Blockade Synergistically Antagonize Exercise Fatigue in Rats under Simulated High Altitude. PLoS ONE, 2014, 9, e99309. | 1.1 | 8 |
| 42 | Imaging the Hypoxic Tumor Microenvironment in Preclinical Models. Cancer Drug Discovery and Development, 2014, , 157-178. | 0.2 | 0 |
| 43 | Automated Measurement of Microcirculatory Blood Flow Velocity in Pulmonary Metastases of Rats. Journal of Visualized Experiments, 2014, , e51630. | 0.2 | 2 |
| 44 | 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 |
| 45 | Automated measurement of blood flow velocity and direction and hemoglobin oxygen saturation in the rat lung using intravital microscopy. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2013, 304, L86-L91. | 1.3 | 19 |
| 46 | <sup>18</sup>F-EF5 PET Imaging as an Early Response Biomarker for the Hypoxia-Activated Prodrug SN30000 Combined with Radiation Treatment in a Nonâ€“Small Cell Lung Cancer Xenograft Model. Journal of Nuclear Medicine, 2013, 54, 1339-1346. | 2.8 | 31 |
| 47 | Monitoring of cycling hypoxia and angiogenesis in FaDu head and neck tumors using a side-firing sensor. , 2013, , . | | 0 |
| 48 | Sickle Erythrocytes Target Cytotoxics to Hypoxic Tumor Microvessels and Potentiate a Tumoricidal Response. PLoS ONE, 2013, 8, e52543. | 1.1 | 18 |
| 49 | Wavelength Optimization for Quantitative Spectral Imaging of Breast Tumor Margins. PLoS ONE, 2013, 8, e61767. | 1.1 | 10 |
| 50 | Abstract B151: Monitoring tumor microenvironment (Hb saturation and oxygenation) in response to plasmonics-assisted photothermal cancer therapy.. , 2013, , . | | 0 |
| 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, 078003. | 1.4 | 2 |
| 52 | The combination of theophylline and endothelin receptor antagonism improves exercise performance of rats under simulated high altitude. Journal of Applied Physiology, 2012, 113, 1243-1252. | 1.2 | 10 |
| 53 | A diffuse reflectance spectral imaging system for tumor margin assessment using custom annular photodiode arrays. Biomedical Optics Express, 2012, 3, 3211. | 1.5 | 20 |
| 54 | 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 |

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| 55 | Publisherâ€™s Note: 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, 0798051. | 1.4 | 1 |
| 56 | Application of Optical Imaging and Spectroscopy to Radiation Biology. Radiation Research, 2012, 177, 365-375. | 0.7 | 8 |
| 57 | High-Resolution In Vivo Imaging of Fluorescent Proteins Using Window Chamber Models. Methods in Molecular Biology, 2012, 872, 31-50. | 0.4 | 13 |
| 58 | A novel angiopoietinâ€derived peptide displays antiâ€angiogenic activity and inhibits tumourâ€induced and retinal neovascularization. British Journal of Pharmacology, 2012, 165, 1891-1903. | 2.7 | 13 |
| 59 | TH-A-BRB-04: Vascular Response to Microbeam Radiation Therapy in Vivo Using a Murine Window Chamber Tumor Model. Medical Physics, 2012, 39, 3983-3983. | 1.6 | 2 |
| 60 | In vivo optical molecular imaging and analysis in mice using dorsal window chamber models applied to hypoxia, vasculature and fluorescent reporters. Nature Protocols, 2011, 6, 1355-1366. | 5.5 | 224 |
| 61 | Molecular Imaging of Hypoxia. Journal of Nuclear Medicine, 2011, 52, 165-168. | 2.8 | 100 |
| 62 | Non-invasive monitoring of intra-tumor drug concentration and therapeutic response using optical spectroscopy. Journal of Controlled Release, 2010, 142, 457-464. | 4.8 | 86 |
| 63 | Optical imaging of tumor hypoxia dynamics. Journal of Biomedical Optics, 2010, 15, 1. | 1.4 | 68 |
| 64 | Utility of functional imaging in prediction or assessment of treatment response and prognosis following thermotherapy. International Journal of Hyperthermia, 2010, 26, 283-293. | 1.1 | 10 |
| 65 | A low-cost, portable, and quantitative spectral imaging system for application to biological tissues. Optics Express, 2010, 18, 12630. | 1.7 | 22 |
| 66 | Stereocomplexed Poly(lactic acid)â^'Poly(ethylene glycol) Nanoparticles with Dual-Emissive Boron Dyes for Tumor Accumulation. ACS Nano, 2010, 4, 4989-4996. | 7.3 | 72 |
| 67 | In Vivo Fluorescence Imaging and Spectroscopy. , 2010, , 30-1-30-11. | | 1 |
| 68 | Quantitative Optical Spectroscopy: A Robust Tool for Direct Measurement of Breast Cancer Vascular Oxygenation and Total Hemoglobin Content In vivo. Cancer Research, 2009, 69, 2919-2926. | 0.4 | 154 |
| 69 | Quantitative diffuse reflectance and fluorescence spectroscopy: tool to monitor tumor physiology in vivo. Journal of Biomedical Optics, 2009, 14, 024010. | 1.4 | 42 |
| 70 | A Robust Monte Carlo Model for the Extraction of Biological Absorption and ScatteringIn Vivo. IEEE Transactions on Biomedical Engineering, 2009, 56, 960-968. | 2.5 | 65 |
| 71 | A dual-emissive-materials design concept enables tumour hypoxia imaging. Nature Materials, 2009, 8, 747-751. | 13.3 | 941 |
| 72 | Advances in quantitative UVâ€“visible spectroscopy for clinical and pre-clinical application in cancer. Current Opinion in Biotechnology, 2009, 20, 119-131. | 3.3 | 125 |

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| 73 | A strategy for quantitative spectral imaging of tissue absorption and scattering using light emitting diodes and photodiodes. Optics Express, 2009, 17, 1372. | 1.7 | 33 |
| 74 | Quantitative Physiology of the Precancerous Cervix In Vivo through Optical Spectroscopy. Neoplasia, 2009, 11, 325-332. | 2.3 | 80 |
| 75 | Electromagnetic Spectroscopy of Normal Breast Tissue Specimens Obtained From Reduction Surgeries: Comparison of Optical and Microwave Properties. IEEE Transactions on Biomedical Engineering, 2008, 55, 2444-2451. | 2.5 | 21 |
| 76 | Diagnosis of breast cancer using fluorescence and diffuse reflectance spectroscopy: a Monte-Carlo-model-based approach. Journal of Biomedical Optics, 2008, 13, 034015. | 1.4 | 72 |
| 77 | Monte-Carlo-based model for the extraction of intrinsic fluorescence from turbid media. Journal of Biomedical Optics, 2008, 13, 024017. | 1.4 | 52 |
| 78 | Cost-effective diffuse reflectance spectroscopy device for quantifying tissue absorption and scattering in vivo. Journal of Biomedical Optics, 2008, 13, 060505. | 1.4 | 38 |
| 79 | A Miniature Optical Device for Noninvasive, Fast Characterization of Tumor Pathology. , 2008, , . | | 0 |
| 80 | 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. | 1.7 | 45 |
| 81 | Monte Carlo-based inverse model for calculating tissue optical properties Part I: Theory and validation on synthetic phantoms: erratum. Applied Optics, 2007, 46, 6847. | 2.1 | 11 |
| 82 | Use of Genetic Algorithms to Optimize Fiber Optic Probe Design for the Extraction of Tissue Optical Properties. IEEE Transactions on Biomedical Engineering, 2007, 54, 1533-1535. | 2.5 | 7 |
| 83 | Autofluorescence Spectroscopy of Normal and Malignant Human Breast Cell LinesÂ¶. Photochemistry and Photobiology, 2007, 78, 462-469. | 1.3 | 4 |
| 84 | Monte Carlo-based inverse model for calculating tissue optical properties Part I: Theory and validation on synthetic phantoms. Applied Optics, 2006, 45, 1062. | 2.1 | 276 |
| 85 | Monte Carlo-based inverse model for calculating tissue optical properties Part II: Application to breast cancer diagnosis. Applied Optics, 2006, 45, 1072. | 2.1 | 116 |
| 86 | 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, 714-724. | 1.1 | 97 |
| 87 | Effect of optical clearing agents on the in vivo optical properties of squamous epithelial tissue. Lasers in Surgery and Medicine, 2006, 38, 920-927. | 1.1 | 21 |
| 88 | Use of a multiseparation fiber optic probe for the optical diagnosis of breast cancer. Journal of Biomedical Optics, 2005, 10, 024032. | 1.4 | 52 |
| 89 | Autofluorescence and diffuse reflectance properties of malignant and benign breast tissues. Annals of Surgical Oncology, 2004, 11, 65-70. | 0.7 | 85 |
| 90 | Investigation of fiber-optic probe designs for optical spectroscopic diagnosis of epithelial pre-cancers. Lasers in Surgery and Medicine, 2004, 34, 25-38. | 1.1 | 65 |

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| 91 | Monte Carlo based inverse model of diffuse reflectance for determination of UV-VIS optical properties and its application to breast cancer diagnosis. , 2004, , . | | 0 |
| 92 | The use of a multi-separation probe for optical diagnosis of breast cancer. , 2004, , . | | 0 |
| 93 | Diagnosis of Breast Cancer Using Optical Spectroscopy. Medical Laser Application: International Journal for Laser Treatment and Research, 2003, 18, 233-248. | 0.4 | 14 |
| 94 | Comparison of multiexcitation fluorescence and diffuse reflectance spectroscopy for the diagnosis of breast cancer (march 2003). IEEE Transactions on Biomedical Engineering, 2003, 50, 1233-1242. | 2.5 | 121 |
| 95 | Autofluorescence Spectroscopy of Normal and Malignant Human Breast Cell LinesÂ¶. Photochemistry and Photobiology, 2003, 78, 462. | 1.3 | 75 |
| 96 | [21] Steady-state fluorescence imaging of neoplasia. Methods in Enzymology, 2003, 361, 452-481. | 0.4 | 14 |
| 97 | Optimal methods for fluorescence and diffuse reflectance measurements of tissue biopsy samples. Lasers in Surgery and Medicine, 2002, 30, 191-200. | 1.1 | 69 |
| 98 | Quantifying the effects of anesthesia on intracellular oxygen via low-cost portable microscopy using dual-emissive nanoparticles. Biomedical Optics Express, 0, , . | 1.5 | 1 |