# Michael Jermyn

List of Publications by Year
in descending order



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|---|---|---|---|
| 33 papers | 1,727 citations | 430874 18 h-index | 454955 30 g-index |
| 33 all docs | 33 docs citations | 33 times ranked | 2300 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Intraoperative brain cancer detection with Raman spectroscopy in humans. Science Translational Medicine, 2015, 7, 274ra19. | 12.4 | 457 |
| 2 | Fast segmentation and high-quality three-dimensional volume mesh creation from medical images for diffuse optical tomography. Journal of Biomedical Optics, 2013, 18, 086007. | 2.6 | 151 |
| 3 | A new method using Raman spectroscopy for in vivo targeted brain cancer tissue biopsy. Scientific Reports, 2018, 8, 1792. | 3.3 | 149 |
| 4 | Characterization of a Raman spectroscopy probe system for intraoperative brain tissue classification. Biomedical Optics Express, 2015, 6, 2380. | 2.9 | 123 |
| 5 | A review of Raman spectroscopy advances with an emphasis on clinical translation challenges in oncology. Physics in Medicine and Biology, 2016, 61, R370-R400. | 3.0 | 103 |
| 6 | Cherenkov Video Imaging Allows for the First Visualization of Radiation Therapy in Real Time. International Journal of Radiation Oncology Biology Physics, 2014, 89, 615-622. | 0.8 | 95 |
| 7 | Highly Accurate Detection of Cancer In Situ with Intraoperative, Label-Free, Multimodal Optical Spectroscopy. Cancer Research, 2017, 77, 3942-3950. | 0.9 | 81 |
| 8 | Neural networks improve brain cancer detection with Raman spectroscopy in the presence of operating room light artifacts. Journal of Biomedical Optics, 2016, 21, 094002. | 2.6 | 65 |
| 9 | Raman spectroscopy detects distant invasive brain cancer cells centimeters beyond MRI capability in humans. Biomedical Optics Express, 2016, 7, 5129. | 2.9 | 64 |
| 10 | Predicting Breast Tumor Response to Neoadjuvant Chemotherapy with Diffuse Optical Spectroscopic Tomography prior to Treatment. Clinical Cancer Research, 2014, 20, 6006-6015. | 7.0 | 63 |
| 11 | Challenges and opportunities in clinical translation of biomedical optical spectroscopy and imaging. Journal of Biomedical Optics, 2018, 23, 1. | 2.6 | 56 |
| 12 | Mesoscopic characterization of prostate cancer using Raman spectroscopy: potential for diagnostics and therapeutics. BJU International, 2018, 122, 326-336. | 2.5 | 49 |
| 13 | Combining high wavenumber and fingerprint Raman spectroscopy for the detection of prostate cancer during radical prostatectomy. Biomedical Optics Express, 2018, 9, 4294. | 2.9 | 39 |
| 14 | Experimentally Observed Cherenkov Light Generation in the Eye During Radiation Therapy. International Journal of Radiation Oncology Biology Physics, 2020, 106, 422-429. | 0.8 | 31 |
| 15 | Initial Clinical Experience of Cherenkov Imaging in External Beam Radiation Therapy Identifies Opportunities to Improve Treatment Delivery. International Journal of Radiation Oncology Biology Physics, 2021, 109, 1627-1637. | 0.8 | 25 |
| 16 | Macroscopic optical imaging technique for wide-field estimation of fluorescence depth in optically turbid media for application in brain tumor surgical guidance. Journal of Biomedical Optics, 2015, 20, 026002. | 2.6 | 22 |
| 17 | Cherenkov imaging for linac beam shape analysis as a remote electronic quality assessment verification tool. Medical Physics, 2019, 46, 811-821. | 3.0 | 21 |
| 18 | CT contrast predicts pancreatic cancer treatment response to verteporfin-based photodynamic therapy. Physics in Medicine and Biology, 2014, 59, 1911-1921. | 3.0 | 20 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Improved sensitivity to fluorescence for cancer detection in wide-field image-guided neurosurgery. Biomedical Optics Express, 2015, 6, 5063. | 2.9 | 19 |
| 20 | Rapid Multisite Remote Surface Dosimetry for Total Skin Electron Therapy: Scintillator Target Imaging. International Journal of Radiation Oncology Biology Physics, 2019, 103, 767-774. | 0.8 | 17 |
| 21 | Macroscopic-imaging technique for subsurface quantification of near-infrared markers during surgery. Journal of Biomedical Optics, 2015, 20, 036014. | 2.6 | 14 |
| 22 | Sub-diffuse interstitial optical tomography to improve the safety of brain needle biopsies: a proof-of-concept study. Optics Letters, 2015, 40, 170. | 3.3 | 13 |
| 23 | Raman spectroscopy in microsurgery: impact of operating microscope illumination sources on data quality and tissue classification. Analyst, The, 2017, 142, 1185-1191. | 3.5 | 10 |
| 24 | Algorithm development for intrafraction radiotherapy beam edge verification from Cherenkov imaging. Journal of Medical Imaging, 2018, 5, 1. | 1.5 | 9 |
| 25 | Improvements to an optical scintillator imaging-based tissue dosimetry system. Journal of Biomedical Optics, 2019, 24, 1. | 2.6 | 8 |
| 26 | Remote dose imaging from Cherenkov light using spatially resolved CT calibration in breast radiotherapy. Medical Physics, 2022, 49, 4018-4025. | 3.0 | 5 |
| 27 | Neural networks improve brain cancer detection with Raman spectroscopy in the presence of light artifacts. , 2016, , . | | 4 |
| 28 | Technical Note: A novel dosimeter improves total skin electron therapy surface dosimetry workflow. Journal of Applied Clinical Medical Physics, 2020, 21, 158-162. | 1.9 | 4 |
| 29 | Verification of field match lines in whole breast radiation therapy using Cherenkov imaging. Radiotherapy and Oncology, 2021, 160, 90-96. | 0.6 | 4 |
| 30 | Computer animation body surface analysis of total skin electron radiation therapy dose homogeneity via Cherenkov imaging. Journal of Medical Imaging, 2020, 7, 1. | 1.5 | 4 |
| 31 | Technical Note: Quality assurance and relative dosimetry testing of a 60 Co total body irradiator using optical imaging. Medical Physics, 2019, 46, 3674-3678. | 3.0 | 2 |
| 32 | Towards the combined use of Raman spectroscopy and interstitial optical tomography to improve the safety and diagnostic accuracy of brain needle biopsies. , 2015, , . | | 0 |
| 33 | High wavenumber Raman spectroscopy to improve diagnostic yield of brain needle biopsies. , 2017, , . | | 0 |