

Sylvain Gioux

List of Publications by Year in descending order

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77
papers

3,955
citations

159358

30
h-index

123241

61
g-index

77
all docs

77
docs citations

77
times ranked

3299
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Fundamentals and developments in fluorescence-guided cancer surgery. Nature Reviews Clinical Oncology, 2022, 19, 9-22. | 12.5 | 122 |
| 2 | Simultaneous multipurpose fluorescence imaging with IRDye [®] 800BK during laparoscopic surgery. Surgical Endoscopy and Other Interventional Techniques, 2021, 35, 4840-4848. | 1.3 | 6 |
| 3 | Quantitative dynamic near-infrared fluorescence imaging using indocyanine green for analysis of bowel perfusion after mesenteric resection. Journal of Biomedical Optics, 2021, 26, . | 1.4 | 3 |
| 4 | Contact, high-resolution spatial diffuse reflectance imaging system for skin condition diagnosis: a first-in-human clinical trial. Journal of Biomedical Optics, 2021, 26, . | 1.4 | 3 |
| 5 | Single Snapshot Imaging of Optical Properties (SSOP) for Perfusion Assessment during Gastric Conduit Creation for Esophagectomy: An Experimental Study on Pigs. Cancers, 2021, 13, 6079. | 1.7 | 4 |
| 6 | Multimodal imaging platform for surgery: application to tissue status assessment. , 2021, , . | | 0 |
| 7 | Noninvasive Near-Infrared Fluorescence Imaging of the Ureter During Robotic Surgery: A Demonstration in a Porcine Model. Journal of Laparoendoscopic and Advanced Surgical Techniques - Part A, 2020, 30, 962-966. | 0.5 | 7 |
| 8 | Fluorescence-guided surgery imaging systems: basics and advanced concepts. , 2020, , 141-160. | | 2 |
| 9 | OpenSFDI: an open-source guide for constructing a spatial frequency domain imaging system. Journal of Biomedical Optics, 2020, 25, 1. | 1.4 | 31 |
| 10 | Real-time, wide-field and high-quality single snapshot imaging of optical properties with profile correction using deep learning. Biomedical Optics Express, 2020, 11, 5701. | 1.5 | 34 |
| 11 | Macroscopic fluorescence lifetime topography enhanced via spatial frequency domain imaging. Optics Letters, 2020, 45, 4232. | 1.7 | 17 |
| 12 | Quantitative Wide-Field Imaging Techniques for Fluorescence Guided Neurosurgery. Frontiers in Surgery, 2019, 6, 31. | 0.6 | 21 |
| 13 | Real-time, wide-field, and quantitative oxygenation imaging using spatiotemporal modulation of light. Journal of Biomedical Optics, 2019, 24, 1. | 1.4 | 14 |
| 14 | Single snapshot of optical properties image quality improvement using anisotropic two-dimensional windows filtering. Journal of Biomedical Optics, 2019, 24, 1. | 1.4 | 16 |
| 15 | Single snapshot imaging of optical properties using a single-pixel camera: a simulation study. Journal of Biomedical Optics, 2019, 24, 1. | 1.4 | 14 |
| 16 | Spatial frequency domain imaging in 2019: principles, applications, and perspectives. Journal of Biomedical Optics, 2019, 24, 1. | 1.4 | 81 |
| 17 | Real-time optical properties and oxygenation imaging using custom parallel processing in the spatial frequency domain. Biomedical Optics Express, 2019, 10, 3916. | 1.5 | 9 |
| 18 | In vivo testing of a CMOS-based diffuse reflectance device for skin condition monitoring. , 2019, , . | | 0 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Special Section Guest Editorial: Special Section on Spatial Frequency Domain Imaging. Journal of Biomedical Optics, 2019, 24, 1. | 1.4 | 1 |
| 20 | Real-time multispectral optical imaging using GPGPU processing. , 2019, , . | | 0 |
| 21 | Fluorescence-guided surgery and intervention – An AAPM emerging technology blue paper. Medical Physics, 2018, 45, 2681-2688. | 1.6 | 29 |
| 22 | Quantitative real-time optical imaging of the tissue metabolic rate of oxygen consumption. Journal of Biomedical Optics, 2018, 23, 1. | 1.4 | 36 |
| 23 | Review of structured light in diffuse optical imaging. Journal of Biomedical Optics, 2018, 24, 1. | 1.4 | 72 |
| 24 | Machine learning approach for rapid and accurate estimation of optical properties using spatial frequency domain imaging. Journal of Biomedical Optics, 2018, 24, 1. | 1.4 | 38 |
| 25 | Contact, high-resolution spatial diffuse reflectance imaging system for skin condition diagnosis. Journal of Biomedical Optics, 2018, 23, 1. | 1.4 | 5 |
| 26 | qF-SSOP: real-time optical property corrected fluorescence imaging. Biomedical Optics Express, 2017, 8, 3597. | 1.5 | 39 |
| 27 | Real-time endoscopic optical properties imaging. Biomedical Optics Express, 2017, 8, 5113. | 1.5 | 40 |
| 28 | Towards real-time quantitative optical imaging for surgery. , 2017, , . | | 0 |
| 29 | Intraoperative Hemifacial Composite Flap Perfusion Assessment Using Spatial Frequency Domain Imaging. Annals of Plastic Surgery, 2016, 76, 249-255. | 0.5 | 12 |
| 30 | Ultrafast optical property map generation using lookup tables. Journal of Biomedical Optics, 2016, 21, 110501. | 1.4 | 41 |
| 31 | Real-time simultaneous single snapshot of optical properties and blood flow using coherent spatial frequency domain imaging (cSFDI). Biomedical Optics Express, 2016, 7, 870. | 1.5 | 27 |
| 32 | Endocrine-specific NIR fluorophores for adrenal gland targeting. Chemical Communications, 2016, 52, 10305-10308. | 2.2 | 24 |
| 33 | Real-time endoscopic oxygenation imaging using single snapshot of optical properties (SSOP) imaging (Conference Presentation). , 2016, , . | | 1 |
| 34 | Renal Clearable Organic Nanocarriers for Bioimaging and Drug Delivery. Advanced Materials, 2016, 28, 8162-8168. | 11.1 | 122 |
| 35 | Real-time, profile-corrected single snapshot imaging of optical properties. Biomedical Optics Express, 2015, 6, 4051. | 1.5 | 56 |
| 36 | Near-infrared imaging for the assessment of anastomotic patency, thrombosis, and reperfusion in microsurgery: A pilot study in a porcine model. Microsurgery, 2015, 35, 309-314. | 0.6 | 13 |

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|----|---|-----|-----------|
| 37 | Pancreas-Targeted NIR Fluorophores for Dual-Channel Image-Guided Abdominal Surgery. <i>Theranostics</i> , 2015, 5, 1-11. | 4.6 | 38 |
| 38 | Real-time imaging of tissue optical properties and surface profile using 3D-SSOP. , 2015, , . | | 3 |
| 39 | Molecular-guided surgery. <i>Proceedings of SPIE</i> , 2015, , . | 0.8 | 0 |
| 40 | Sentinel Lymph Node Mapping of Liver. <i>Annals of Surgical Oncology</i> , 2015, 22, 1147-1155. | 0.7 | 21 |
| 41 | Real-time imaging of tissue optical properties and surface profile using 3D-SSOP. , 2015, , . | | 0 |
| 42 | Laser line illumination scheme allowing the reduction of background signal and the correction of absorption heterogeneities effects for fluorescence reflectance imaging. <i>Journal of Biomedical Optics</i> , 2015, 20, 106003. | 1.4 | 4 |
| 43 | Real-time quantitative fluorescence imaging using a single snapshot optical properties technique for neurosurgical guidance. <i>Proceedings of SPIE</i> , 2015, , . | 0.8 | 0 |
| 44 | Depth-enhanced fluorescence imaging using masked detection of structured illumination. <i>Journal of Biomedical Optics</i> , 2014, 19, 116008. | 1.4 | 3 |
| 45 | Laser line scanning for fluorescence reflectance imaging: a phantom study and in vivo validation of the enhancement of contrast and resolution. <i>Journal of Biomedical Optics</i> , 2014, 19, 106003. | 1.4 | 4 |
| 46 | Near-infrared fluorescence sentinel lymph node mapping in breast cancer: a multicenter experience. <i>Breast Cancer Research and Treatment</i> , 2014, 143, 333-342. | 1.1 | 150 |
| 47 | Near-infrared imaging of face transplants: are both pedicles necessary?. <i>Journal of Surgical Research</i> , 2013, 184, 714-721. | 0.8 | 10 |
| 48 | Effective Low-dose Escalation of Indocyanine Green for Near-infrared Fluorescent Sentinel Lymph Node Mapping in Melanoma. <i>Annals of Surgical Oncology</i> , 2013, 20, 2357-2363. | 0.7 | 73 |
| 49 | The design and integration of a custom broadband 15x zoom lens for NIR fluorescence-guided surgery. , 2013, , . | | 1 |
| 50 | A dual oxygenation and fluorescence imaging platform for reconstructive surgery. <i>Proceedings of SPIE</i> , 2013, , . | 0.8 | 0 |
| 51 | Single snapshot imaging of optical properties. <i>Biomedical Optics Express</i> , 2013, 4, 2938. | 1.5 | 102 |
| 52 | Design and characterization of an optimized simultaneous color and near-infrared fluorescence rigid endoscopic imaging system. <i>Journal of Biomedical Optics</i> , 2013, 18, 1. | 1.4 | 38 |
| 53 | A Novel Pilot Study Using Spatial Frequency Domain Imaging to Assess Oxygenation of Perforator Flaps During Reconstructive Breast Surgery. <i>Annals of Plastic Surgery</i> , 2013, 71, 308-315. | 0.5 | 40 |
| 54 | Masked detection of structured illumination (MDSI): depth sensitive fluorescence measurement. , 2013, , . | | 2 |

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|----|---|-----|-----------|
| 55 | FluoSTIC: miniaturized fluorescence image-guided surgery system. Journal of Biomedical Optics, 2012, 17, 106014. | 1.4 | 23 |
| 56 | Face transplant perfusion assessment using near-infrared fluorescence imaging. Journal of Surgical Research, 2012, 177, e83-e88. | 0.8 | 16 |
| 57 | Bone flap perfusion assessment using near-infrared fluorescence imaging. Journal of Surgical Research, 2012, 178, e43-e50. | 0.8 | 27 |
| 58 | Optimization of Coded Aperture Radioscintigraphy for Sentinel Lymph Node Mapping. Molecular Imaging and Biology, 2012, 14, 173-182. | 1.3 | 21 |
| 59 | Preclinical and clinical validation of a novel oxygenation imaging system. , 2011, , . | | 2 |
| 60 | Toward Optimization of Imaging System and Lymphatic Tracer for Near-Infrared Fluorescent Sentinel Lymph Node Mapping in Breast Cancer. Annals of Surgical Oncology, 2011, 18, 2483-2491. | 0.7 | 225 |
| 61 | First-in-human pilot study of a spatial frequency domain oxygenation imaging system. Journal of Biomedical Optics, 2011, 16, 1. | 1.4 | 139 |
| 62 | Image-Guided Surgery Using Invisible Near-Infrared Light: Fundamentals of Clinical Translation. Molecular Imaging, 2010, 9, 7290.2010.00034. | 0.7 | 444 |
| 63 | Real-time, near-infrared, fluorescence-guided identification of the ureters using methylene blue. Surgery, 2010, 148, 78-86. | 1.0 | 116 |
| 64 | Real-time intra-operative near-infrared fluorescence identification of the extrahepatic bile ducts using clinically available contrast agents. Surgery, 2010, 148, 87-95. | 1.0 | 109 |
| 65 | Wavelength optimization for rapid chromophore mapping using spatial frequency domain imaging. Journal of Biomedical Optics, 2010, 15, 1. | 1.4 | 94 |
| 66 | The FLARE Intraoperative Near-Infrared Fluorescence Imaging System: A First-in-Human Clinical Trial in Perforator Flap Breast Reconstruction. Plastic and Reconstructive Surgery, 2010, 126, 1472-1481. | 0.7 | 106 |
| 67 | Low-frequency wide-field fluorescence lifetime imaging using a high-power near-infrared light-emitting diode light source. Journal of Biomedical Optics, 2010, 15, 026005. | 1.4 | 21 |
| 68 | Structured illumination enhances resolution and contrast in thick tissue fluorescence imaging. Journal of Biomedical Optics, 2010, 15, 1. | 1.4 | 68 |
| 69 | Image-guided surgery using invisible near-infrared light: fundamentals of clinical translation. Molecular Imaging, 2010, 9, 237-55. | 0.7 | 237 |
| 70 | High-Power, Computer-Controlled, Light-Emitting Diode-Based Light Sources for Fluorescence Imaging and Image-Guided Surgery. Molecular Imaging, 2009, 8, 7290.2009.00009. | 0.7 | 46 |
| 71 | Three-dimensional surface profile intensity correction for spatially modulated imaging. Journal of Biomedical Optics, 2009, 14, 034045. | 1.4 | 132 |
| 72 | Motion-gated acquisition for in vivo optical imaging. Journal of Biomedical Optics, 2009, 14, 1. | 1.4 | 18 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 73 | The FLARE [®] , [®] Intraoperative Near-Infrared Fluorescence Imaging System: A First-in-Human Clinical Trial in Breast Cancer Sentinel Lymph Node Mapping. <i>Annals of Surgical Oncology</i> , 2009, 16, 2943-2952. | 0.7 | 628 |
| 74 | High-power, computer-controlled, light-emitting diode-based light sources for fluorescence imaging and image-guided surgery. <i>Molecular Imaging</i> , 2009, 8, 156-65. | 0.7 | 43 |
| 75 | A low-cost linear DC - 35 MHz high-power LED driver for continuous wave (CW) and fluorescence lifetime imaging (FLIM). , 2008, 6848, 684807. | | 6 |
| 76 | A low-cost, universal, and cumulative gating circuit for small and large animal clinical imaging. <i>Proceedings of SPIE</i> , 2008, 6848, 64811. | 0.8 | 1 |
| 77 | Improved optical sub-systems for intraoperative near-infrared fluorescence imaging. , 2005, 6009, 39. | | 4 |