

Computational and Experimental Methods for the Assessment of Tomographic Optical Microscopy in the II Near Infrared Window and in Low Scattering Media

by

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A mis padres,
porque gran parte de lo que soy se lo debo a ellos.

PUBLISHED AND SUBMITTED CONTENT

Journal Articles:

[1] **Marcos-Vidal A** and Ripoll J (2019) "Recent advances in Optical Tomography in Low Scattering Media" *Optics and Lasers in Engineering*. (submitted)

(Author Contributions: Asier Marcos was responsible for writing the paper. All authors were responsible for conceptualizing the framework, writing, editing & reviewing the paper)

(Contribution completely included in chapter 2)

[2] Albert-Smet I, **Marcos-Vidal A**, Vaquero JJ, Desco M, Muñoz-Barrutia A and Ripoll J (2019) "Applications of Light-Sheet Microscopy in Microdevices." *Front. Neuroanat.* 13:1. <https://doi.org/10.3389/fnana.2019.00001>

(Author Contributions: Albert-Smet was responsible for writing the paper. All authors were responsible for conceptualizing the framework, writing, editing & reviewing the paper.)

Book Chapters:

[3] **Marcos-Vidal, A.**, Vaquero, J. J. and Ripoll, J. (2019) 'Optical properties of tissues in the near infrared: Their relevance for optical bioimaging', in Benayas, A. et al. (eds) *Near-Infrared-Emitting Nanoparticles for Biomedical Applications*. 1st edn. Springer International Publishing. <https://doi.org/10.1117/12.2293708>

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(Contribution completely included in chapter 1)

Conference Proceedings:

[4] **Marcos-Vidal A**, Ancora D, Zacharakis G, Vaquero JJ, and Ripoll J (2018) "Projection tomography in the NIR-IIa window: challenges, advantages, and comparison with classical optical approach", *Proc. SPIE 10573, Medical Imaging 2018: Physics of Medical Imaging*, 105732F <https://doi.org/10.1117/12.2293708>

(Author Contributions: Asier Marcos-Vidal was responsible for designing and testing the case studies; All authors were responsible for conceptualizing the framework & reviewing the paper.)

(Contribution partially included in chapter 6)

Patents:

[5] **Marcos-Vidal A**, Fernández R and Ripoll. Método y sistema para revertir el efecto de la dispersión de la luz en medidas de haz láser plano, Issued 2019.(Approved for submission by the UC3M committee. In preparation)

(Author Contributions: Asier Marcos Vidal was responsible for designing and testing the case studies; All authors were responsible for conceptualizing the framework, writing, editing & reviewing the patent.)

[6] Fernández R, **Marcos-Vidal A** and Ripoll. Método y sistema para determinar el perfil rugoso de muestras de tejido mediante medidas de autocorrelación de luz dispersada en reflexión, Issued 2019. (Approved for submission by the UC3M committee. In preparation)

(Author Contributions: Roberto Fernández was responsible for designing and testing the case studies; All authors were responsible for conceptualizing the framework, writing, editing & reviewing the patent.)