

PROGRESS IN BIOMEDICAL OPTICS AND IMAGING

Vol. 27 No. 37

Multiscale Imaging and Spectroscopy VII

Paul J. Campagnola
Darren M. Roblyer
Alex J. Walsh
Editors

18–19 January 2026
San Francisco, California, United States

Sponsored and Published by
SPIE

Volume 13859

Proceedings of SPIE, 1605-7422, V. 13859

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

The papers in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. Additional papers and presentation recordings may be available online in the SPIE Digital Library at SPIDigitalLibrary.org.

The papers reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from these proceedings:

Author(s), "Title of Paper," in *Multiscale Imaging and Spectroscopy VII*, edited by Paul J. Campagnola, Darren M. Roblyer, Alex J. Walsh, Proc. of SPIE 13859, Seven-digit Article CID Number (DD/MM/YYYY); (DOI URL).

ISSN: 0277-786X

ISSN: 1996-756X (electronic)

ISBN: 9781510696310

ISBN: 9781510696327 (electronic)

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA

Telephone +1 360 676 3290 (Pacific Time)

SPIE.org

Copyright © 2026 Society of Photo-Optical Instrumentation Engineers (SPIE).

Copying of material in this book for internal or personal use, or for the internal or personal use of specific clients, beyond the fair use provisions granted by the U.S. Copyright Law is authorized by SPIE subject to payment of fees. To obtain permission to use and share articles in this volume, visit Copyright Clearance Center at copyright.com. Other copying for republication, resale, advertising or promotion, or any form of systematic or multiple reproduction of any material in this book is prohibited except with permission in writing from the publisher.

Printed in the United States of America by Curran Associates, Inc., under license from SPIE.

Publication of record for individual papers is online in the SPIE Digital Library.

**SPIE. DIGITAL
LIBRARY**

SPIDigitalLibrary.org

Paper Numbering: A unique citation identifier (CID) number is assigned to each article in the Proceedings of SPIE at the time of publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online and print versions of the publication. SPIE uses a seven-digit CID article numbering system structured as follows:

- The first five digits correspond to the SPIE volume number.
- The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B ... 0Z, followed by 10-1Z, 20-2Z, etc. The CID Number appears on each page of the manuscript.

Contents

v *Conference Committee*

MICROSCOPY I

13859 0A **Five-dimensional coregistered multimodal, multiscale imaging platform: reflectance, fluorescence, FLIM, and Raman** [13859-9]

DEEP TISSUE OPTICS

13859 0C **Deep tissue pO₂ measurement by a diffuse optical lifetime detection technology** [13859-11]

13859 0F **Comparative analysis of optical absorption and fluorescence emission of ICG kinetics in dynamic diffuse fluorescence sensing** [13859-14]

POSTER SESSION

13859 0M **High-wavenumber analysis of Raman and FTIR spectra of amino acids for biomedical applications** [13859-23]