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Front Matter: Volume 8802

, "Front Matter: Volume 8802," Proc. SPIE 8802, Optical Coherence
Tomography and Coherence Techniques VI, 880201 (20 June 2013); doi:
10.1117/12.2034120

SPIE.

Event: European Conferences on Biomedical Optics, 2013, Munich, Germany

PROGRESS IN BIOMEDICAL OPTICS AND IMAGING

Vol. 14, No. 52

Optical Coherence Tomography and Coherence Techniques VI

Brett E. Bouma
Rainer A. Leitgeb
Editors

13–15 May 2013
Munich, Germany

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SPIE

Volume 8802

Proceedings of OSA Biomedical Optics-SPIE, 1605-7422, V. 8802

Optical Coherence Tomography and Coherence Techniques VI, edited by Brett E. Bouma, Rainer A. Leitgeb,
Proc. of OSA Biomedical Optics-SPIE Vol. 8802, 880201 · © OSA-2013 SPIE
CCC code: 1605-7422/13/\$18 · doi: 10.1117/12.2034120

Proc. of OSA-SPIE Vol. 8802 880201-1

The papers included 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. The papers published in these proceedings 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 this book:

Author(s), "Title of Paper," in *Optical Coherence Tomography and Coherence Techniques VI*, edited by Brett E. Bouma, Rainer A. Leitgeb, Proceedings of OSA Biomedical Optics-SPIE Vol. 8802 (SPIE, Bellingham, WA, 2013) Article CID Number.

ISSN: 1605-7422

ISBN: 9780819496515

Copublished by

SPIE

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

Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445

SPIE.org

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The Optical Society

2010 Massachusetts Ave., N.W., Washington, D.C., 20036 USA

Telephone 1 202/223-8130 (Eastern Time) · Fax 1 202/223-1096

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Printed in the United States of America.

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Introduction

This volume is a collection of papers presented at the Optical Coherence Tomography and Coherence Techniques VI conference held May 13–15, 2013 at the European Conference on Biomedical Optics in Munich, Germany.

The present proceedings provide an excellent overview about current state-of-the-art OCT technology as well as advance in holography and Laser Speckle Imaging and gives new perspectives for applications in medicine, biology, and material sciences.

The conference was organized into the following 9 sessions: Advancements in Technology and Applications, Optical Coherence Microscopy and Digital Holography, Adaptive Optics and Resolution Enhancement, Endoscopic and Intravascular OCT, Ophthalmic OCT I&II, Blood Flow Imaging and Speckle, Spectroscopic OCT and Contrasting Techniques. Moreover, this year, a full session was dedicated to an emerging field in OCT, Elastography. As usual, OCT focused papers were predominant throughout the sessions. However, we were happy to see interesting contributions of the field of holography and from Laser Speckle Imaging.

All submissions were peer-reviewed and scored by the conference committee members, who were instrumental for keeping the high quality of presented papers. Authors were requested to submit a 3-page summary. The conference included six excellent invited presentations that were selected as the top six scored submissions:

Branislav Grajciar, Quantitative phase contrast optical coherence microscopy for imaging live cell dynamics, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria

Danuta M. Bukowska, Angio-OCT as a noninvasive tool for three-dimensional vascular network visualization in retinal diseases, Nicolaus Copernicus University, Torun, Poland.

David G. Blauvelt, Three-dimensional in vivo blood flow mapping in tumors using optical frequency domain imaging, Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA, USA,

Martin Villiger, Characterization of coronary plaques with polarization sensitive optical frequency domain imaging, Wellman Center for Photomedicine, Harvard Medical School and Massachusetts General Hospital, Boston, MA, USA,

Amir Nahas, 3D static elastography and shear wave imaging using Full Field OCT, Langevin Institute, Paris, France,

Bernhard Baumann, Polarization sensitive optical coherence tomography for quantitative assessment of tissue properties in the rat eye in vivo, Center for Medical Physics and Biomedical Engineering, Medical University of Vienna, Vienna, Austria;

The conference chairs would like to thank the members of the Technical Program Committee for their considerable effort in reviewing and scoring all submissions and for their help in organizing the conference. We appreciate the support from OSA, SPIE, and the conference staff. Finally we would like to thank all the conference attendees and manuscript authors for their contributions and participation that helped to make this conference a success.

Brett E. Bouma
Rainer A. Leitgeb