

PROGRESS IN BIOMEDICAL OPTICS AND IMAGING

Vol. 17 No. 29

Adaptive Optics and Wavefront Control for Biological Systems II

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Editors

13–15 February 2016
San Francisco, California, United States

Sponsored and Published by
SPIE

Volume 9717

Proceedings of SPIE, 1605-7422, V. 9717

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Adaptive Optics and Wavefront Control for Biological Systems II, edited by Thomas G. Bifano, Joel Kubby, Sylvain Gigan,
Proc. of SPIE Vol. 9717, 971701 · © 2016 SPIE · CCC code: 1605-7422/16/\$18 · doi: 10.1117/12.2239763

Proc. of SPIE Vol. 9717 971701-1

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Author(s), "Title of Paper," in *Adaptive Optics and Wavefront Control for Biological Systems II*, edited by Thomas G. Bifano, Joel Kubby, Sylvain Gigan, Proceedings of SPIE Vol. 9717 (SPIE, Bellingham, WA, 2016) Six-digit Article CID Number.

ISSN: 1605-7422
ISSN: 2410-9045 (electronic)
ISBN: 9781628419511

Published by

SPIE

P.O. Box 10, Bellingham, Washington 98227-0010 USA
Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445
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Introduction

Adaptive optics and wavefront control have greatly expanded the capability of optical microscopy and measurements in biological systems. Recent breakthroughs in measuring and controlling high-order optical wavefront have led to many important applications, including deep tissue and super-resolution microscopy with improved imaging quality and depth, optical tweezers with sophisticated shape and momentum distribution, and three-dimensionally patterned optogenetic excitation. This conference proceedings includes contributions from leading experts in a variety of research fields that employ innovative adaptive optics and wavefront control technologies for biomedical applications.

**Thomas G. Bifano
Joel Kubby
Sylvain Gigan**

