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Front Matter: Volume 9007

, "Front Matter: Volume 9007," Proc. SPIE 9007, Broadband Access
Communication Technologies VIII, 900701 (1 February 2014); doi:
10.1117/12.2057554

SPIE.

Event: SPIE OPTO, 2014, San Francisco, California, United States

PROCEEDINGS OF SPIE

Broadband Access Communication Technologies VIII

**Benjamin B. Dingel
Katsutoshi Tsukamoto**
Editors

**4–6 February 2014
San Francisco, California, United States**

Sponsored and Published by
SPIE

Volume 9007

Proceedings of SPIE 0277-786X, V. 9007

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

Broadband Access Communication Technologies VIII, edited by Benjamin B. Dingel, Katsutoshi Tsukamoto,
Proc. of SPIE Vol. 9007, 900701 · © 2014 SPIE · CCC code: 0277-786X/14/\$18 · doi: 10.1117/12.2057554

Proc. of SPIE Vol. 9007 900701-1

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *Broadband Access Communication Technologies VIII*, edited by Benjamin B. Dingel, Katsutoshi Tsukamoto, Proceedings of SPIE Vol. 9007 (SPIE, Bellingham, WA, 2014) Article CID Number.

ISSN: 0277-786X

ISBN: 9780819499202

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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Printed in the United States of America.

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Introduction

We are honored to welcome you again to the Photonics West 2014 conference on Broadband Access Communication Technologies VIII. This year (2014) in the Optical Communication: Devices to Systems track under the OPTO symposium, we have added a new conference called *Next-Generation Optical Networks for Data Centers and Short-Reach Links (Conference 9010)*, chaired by Atul K. Srivastava, of NEL, America (United States).

Every year since 2011, we have attempted to provide a holistic program with multiple joint sessions that cut across different optical-communication-related conferences. The new conference, Next-Generation Optical Networks for Data Centers and Short-Reach Links, is also participating in this multiple-joint-session initiative. Thus, we have these four conferences:

- (1) Broadband Access Communication Technologies,
- (2) Optical Metro Networks and Short-Haul Systems,
- (3) Next Generation Optical Communication: Components, Subsystems, and Systems, (formerly Coherent Optical Communication: Components, Subsystems, and Systems), and
- (4) Next-Generation Optical Networks for Data Centers and Short-Reach Links

These excellent joint sessions are made possible through the cooperation and leadership of all four conference chairs. Our continuing goal is to promote broad and in-depth discussions of interrelated designs, developments, and performances of various emerging communication technologies across access areas, optical metro areas, long-haul spaces, and now data centers.

With this arrangement, we are honored to assemble well-known, international, invited speakers, which is evident in our programs. For the Broadband Access Communication conference this year, we have a special focus on "hot platform technologies," such as silicon photonics-integrated circuits-based, radio-over-fiber-based, hybrid wire-and-wireless-based communication system for green broadband access and data centers applications.

Lastly, we would like to thank: the speakers and authors of all invited and contributed papers, the technical program committee members for their valuable efforts, and the SPIE staff for their great assistance in making this conference strong and successful.

Benjamin B. Dingel
Katsutoshi Tsukamoto