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Front Matter: Volume 9959

, "Front Matter: Volume 9959," Proc. SPIE 9959, Optical Data Storage 2016, 995901 (23 December 2016); doi: 10.1117/12.2256404

SPIE.

Event: SPIE Optical Engineering + Applications, 2016, San Diego, California, United States

PROCEEDINGS OF SPIE

Optical Data Storage 2016

Ryuichi Katayama
Thomas D. Milster
Editors

28 August 2016
San Diego, California, United States

Sponsored and Published by
SPIE

Volume 9959

Proceedings of SPIE 0277-786X, V. 9959

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

Optical Data Storage 2016, edited by Ryuichi Katayama, Thomas D. Milster, Proc. of SPIE
Vol. 9959, 995901 · © 2016 SPIE · CCC code: 0277-786X/16/\$18 · doi: 10.1117/12.2256404

Proc. of SPIE Vol. 9959 995901-1

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

Author(s), "Title of Paper," in *Optical Data Storage 2016*, edited by Ryuichi Katayama, Thomas D. Milster, Proceedings of SPIE Vol. 9959 (SPIE, Bellingham, WA, 2016) Six-digit Article CID Number.

ISSN: 0277-786X

ISSN: 1996-756X (electronic)

ISBN: 9781510603097

ISBN: 9781510603103 (electronic)

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

This proceedings volume is a collection of papers based on the invited and contributed presentations at the Optical Data Storage (ODS) 2016 conference, which was held on 28 August 2016 at the San Diego Convention Center as part of the SPIE Optics + Photonics 2016.

The ODS had been held as a stand-alone conference from 1973 to 2012. However, because of the decrease in the number of researchers in the field of optical data storage, it has been held as part of larger conferences since 2013. This was the third time for ODS to be held in the SPIE Optics + Photonics.

ODS 2016 was basically a success. Although 2 papers were cancelled before the conference, a total of 14 papers (8 invited papers and 6 contributed papers) were presented orally. The average number of attendees for each session in this year was almost the same as those in the past two years. There were some high-quality presentations about holographic data storage as well as emerging and elemental technologies. It is highly expected that holographic data storage will be put into practical use in the professional archival storage market in the near future, and that emerging and elemental technologies will explore novel applications in which improved function and performance are realized utilizing the features of light, unlike other storage modalities.

We are very happy that a total of 5 papers are contained in this proceedings volume. They represent important and interesting achievements in the current field of optical data storage. We hope that the readers find this proceedings volume stimulating and exciting as well as helpful for their future research and development.

We are planning to have the ODS 2017 as part of SPIE Optics + Photonics 2017, which will be officially announced later. To further activate ODS, we would like to enhance the range of attendees and discussions by incorporating related technologies, inviting researchers in the big data industry, etc. Reconsidering the conference name might also be a good idea.

Finally, we would like to express our sincere gratitude to the committee members, session chairs, all of the presenters and attendees of the ODS 2016, and the SPIE staff for their great contributions.

Ryuichi Katayama
Thomas D. Milster