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Practical Holography XXXII: Displays, Materials, and Applications

**Hans I. Bjelkhagen
V. Michael Bove Jr.**
Editors

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Contents

vii	<i>Authors</i>
ix	<i>Conference Committee</i>
xi	<i>Introduction</i>

SESSION 1 APPLICATIONS I

10558 03	Monocolor and color holography of pre-Hispanic Colombian goldwork: a way of Colombian heritage appropriation [10558-2]
10558 04	Holographic diffraction gratings based on photopolymers: achieved results and new opportunities in astronomical spectroscopy [10558-3]
10558 05	Compact spectral multiplexing VPHGs using stacked photopolymeric layers [10558-4]

SESSION 2 APPLICATIONS II

10558 08	Digital holography for the investigation of buried structures with a common-path reflection microscope [10558-8]
10558 09	An updated diorama with a full-color H2 analog hologram [10558-9]
10558 0A	Dynamic measurement of propagating waves in a piezoelectric linear motor by using shadow moiré method [10558-10]

SESSION 3 MATERIALS AND PROCESSES

10558 0B	On the impact of incoherent pre-exposure on vHOE recording in Bayfol HX film for see-through applications (Invited Paper) [10558-11]
10558 0C	Formate as a sensitivity enhancer of holographic emulsions [10558-12]
10558 0D	High dynamic range two-stage photopolymer materials through enhanced solubility high refractive index writing monomers [10558-13]
10558 0E	New diffractive effects for security holograms produced with Geolas Originators [10558-39]

SESSION 4 DIGITAL HOLOGRAPHY I

- 10558 OF **Validation of objective image quality evaluation for computer-generated hologram (Invited Paper)** [10558-15]
- 10558 OH **Design, development, and implementation of a low-cost full-parallax holoprinter** [10558-17]
- 10558 OJ **Resolution-enhanced digital in-line holographic microscope with segmentation and pixel super-resolution technique** [10558-19]
- 10558 OK **View synthesis from sparse camera array for pop-out rendering on hologram displays** [10558-20]

SESSION 5 DIGITAL HOLOGRAPHY II

- 10558 OL **Progress in transparent flat-panel holographic displays enabled by guided-wave acousto-optics** [10558-21]
- 10558 OM **Full-color holographic 3D display on a single SLM based on spatial sampling and selective frequency-filtering of color holograms** [10558-22]
- 10558 ON **Regional gamma curve calibration of liquid crystal SLM for holographic display** [10558-23]

POSTER SESSION

- 10558 OQ **Holographic gratings recording in synthetic dye of system PVA and cupric chloride** [10558-26]
- 10558 OR **Viewing window position control on holographic projection system by electrically focused tunable lens** [10558-27]
- 10558 OS **Diffraction pattern study of gratings with radial symmetry and local modified periods** [10558-28]
- 10558 OU **Binary patterns tool for computer generated holograms** [10558-30]
- 10558 OV **Effect of CCD and CMOS fixed pattern noise on digital hologram reconstruction** [10558-31]
- 10558 OW **Application to optical secret key sharing cryptography using phase-shifting digital holography** [10558-32]
- 10558 OX **Kinoform synthesis using phase Fourier hologram as basis for iterative algorithm** [10558-33]
- 10558 OY **Measurement of additional phase modulation of an amplitude liquid crystal spatial light modulator HoloEye LC 2002 by dual-beam interferometric method** [10558-34]

- 10558 10 **Color dispersion free holographic screen based on volume holographic optical element for augmented space projection display [10558-36]**
- 10558 11 **Effect of degree of hydrolysis of polyvinyl alcohol on the diffraction efficiency from the gratings recorded in polyvinyl alcohol with ferric chloride films [10558-37]**
- 10558 12 **Evaluation of polymerization and diffusion times in holographic recording for acrylamide-based photopolymer film [10558-38]**

Authors

Numbers in the index correspond to the last two digits of the seven-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first five digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Alim, Marvin D., 0D	Liu, Juan, 0N
Alschuler, William R., 0C	Madrid Sánchez, Alejandro, 03, 0H
Bakanas, Ramūnas, 0E	Manecke, Christel, 0B
Bekaert, Philippe, 0K	Marroquín-Ramírez, J. I., 11
Bianco, Andrea, 04, 05	Mavila, Sudheendran, 0D
Boaz Jessie, Jackin, 0K	McLeod, Robert R., 0D
Bove, V. Michael, Jr., 0L	Mejias-Brisuela, Nildia Yamilet, 0S
Bowman, Christopher N., 0D	Nystrom, Philip D., 0D
Bruder, Friedrich-Karl, 0B	Oh, Kwan-Jung, 0R
Bulanovs, Andrejs, 0E	Ohkawa, Masashi, 12
Cheremkhin, Pavel A., 0V, 0X	Olivares-Pérez, Arturo, 0Q, 0S, 0U, 11
Choo, Hyon-Gon, 0R	Ordoñez-Padilla, Manuel Jorge, 0S
Conde-Cuatzo, María G., 0Q	Orselli, Enrico, 0B
Datta, Bianca, 0L	Ortiz-Gutiérrez, Mauricio, 0S
Duan, Junyi, 0N	Osabe, Keiichi, 12
Evtikhiev, Nikolay N., 0V, 0X	Park, Minsik, 0R
Fäcke, Thomas, 0B	Ponomarev, Nikolay M., 0Y
Feng, Shaodong, 0J	Rewitz, Christian, 0B
Finkeldey, Markus, 08	Righi, Chiara, 04
Fuentes-Tapia, Israel, 0Q, 0S, 11	Riva, M., 05
Galli, Paola, 04	Rodin, Vladislav G., 0V, 0X
Gao, Qiankun, 0N	Rölle, Thomas, 0B
Gentet, Philippe, 09	Sato, Takashi, 12
Gentet, Yves, 09	Savidis, Nickolaos, 0L
Gerhardt, Nils C., 08	Smalley, Daniel, 0L
Gil, Sang Keun, 0W	Starikov, Rostislav S., 0V, 0Y
Giraldo, Leidy Marcela, 03	Sullivan, Amy C., 0D
Glugla, David J., 0D	Tai, Shih-Lun, 0A
Goncharov, Dmitriy S., 0Y	Toxqui-López, Santa, 0Q, 0S, 11
Göring, Lena, 08	Uetake, Hiroki, 0F
Hansen, Sven, 0B	Vallejo-Mendoza, Rosaura, 0S
Herrán-Cuspinera, Roxana M., 0S	Velásquez Prieto, Daniel, 03, 0H
Hofmann, Martin R., 08	Villa-Hernández, Joan M., 0S, 0U
Hong, Keehoon, 0R	Wakunami, Koki, 0K
Hsu, Yu-Hsiang, 0A	Wang, Chen, 0D
Hwang, Yong-Seok, 0M, 10	Wang, Chun-Hsiung, 0A
Jeon, Seok Hee, 0W	Wang, Mingjun, 0J
Jolly, Sundeeep, 0L	Wewer, Brita, 0B
Jorissen, Lode, 0K	Wu, Jigang, 0J
Jung, Jong Rae, 0W	Wu, Sheng-Hsun, 0A
Kim, Eun-Soo, 0M, 10	Wu, Wen-Jong, 0A
Kim, Hyoung-Sik, 10	Yamaguchi, Takeshi, 0F
Krasnov, Vitaly V., 0V, 0X, 0Y	Yamamoto, Kenji, 0K
Lafruit, Gauthier, 0K	Yoshikawa, Hiroshi, 0F
Landoni, Marco, 04, 05	Zacharovas, Stanislovas, 0E
Lee, Chih-Kung, 0A	Zanutta, Alessio, 04, 05
Lee, Seung Hyun, 09	Zhao, Tao, 0N
Lim, Yongjun, 0R	
Lin, Shu-Feng, 0M	

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- 1 Applications I
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Hansholo Consulting Ltd. (United Kingdom)
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Hans I. Bjelkhagen, Glyndwr University (United Kingdom) and
Hansholo Consulting Ltd. (United Kingdom)
- 3 Materials and Processes
Hans I. Bjelkhagen, Glyndwr University (United Kingdom) and
Hansholo Consulting Ltd. (United Kingdom)
- 4 Digital Holography I
V. Michael Bove Jr., MIT Media Laboratory (United States)
- 5 Digital Holography II
V. Michael Bove Jr., MIT Media Laboratory (United States)

Introduction

The SPIE Conference 10558, Practical Holography XXXII: Displays, Materials, and Applications, took place at the Moscone Center in San Francisco, California, 29–31 January 2018, as part of the larger SPIE Photonics West event. It was an important international event in the field of holographic applications and recording materials. The conference provided a venue for all aspects of holography: art, display, metrology, scientific, security, storage, materials and processes, CGHs and HOEs. It also brought together participants from all over the world.

The holography conference was chaired by Hans I. Bjelkhagen, Glyndŵr University (United Kingdom) and Hansholo Consulting Ltd. (United Kingdom), and V. Michael Bove, Jr., MIT Media Laboratory (United States) and attracted about 50 participants. This year's conference (as always) featured long-time participants and new members of the Practical Holography community, sharing many novel and interesting contributions in various holographic fields during two days of oral presentations and a poster session. The oral presentations were divided into five main sessions: Applications I and II, Materials and Processes, and Digital Holography I and II.

The conference produced many quality papers. Ian Lancaster (United Kingdom) gave an invited talk, "Can we overcome display holography's brick wall?" [10558-1]; and Alejandro Madrid Sánchez, from Universidad EAFIT (Colombia) presented a paper on Denisyuk holograms recorded of pre-Hispanic gold artefacts [10558-2]. He also described a low-cost full-parallax holoprinter [10558-17]. Two papers from Italy described astronomic HOEs and VPHGs recorded on photopolymer materials [10558-3] and [10588-4]. Lena Göring, Ruhr-Universität Bochum (Germany) described digital holography applied in a reflection microscope [10558-8]. Phillipe Gentet, Kwangwoon University (Korea, Republic of) described a diorama with colour H2 analogue holograms [10558-9]. Christel Manecke, Covestro (Germany), described incoherent pre-exposure of vHOEs in Bayfol® HX photopolymer [10558-11]. William Alschuler, California Institute of the Arts (United States) described how formate can increase the sensitivity of silver halide holographic emulsions [10558-15]. An invited paper [10558-24] on the image quality of computer-generated holograms was presented by Hiroshi Yoshikawa, Nihon University, (Japan). From Massachusetts Institute of Technology (United States), Sundeep Jolly described a flat-panel holographic display based on waveguide acousto-optics [10558-21].

The SPIE Holography Technical Evening Event took place on Tuesday, 30 January at the InterContinental Hotel. It focused on new developments, applications, holography events, and demonstrations. During the Tuesday evening event, short presentations took place. For example, Ian Lancaster (United Kingdom) informed attendees about the SURYS Hologram Foundation and Art Grant. Gunnar Elgcrona, COBOLT (Sweden) informed on the latest COBOLT lasers. Andy Well, UNIK LASERS (Scotland) introduced brand new

United Kingdom lasers suitable for holography. Information about the 11th International Symposium on Display Holography (ISDH 2018) was provided. It will take place at the Universidade de Aveiro (Portugal) 25–29 June 2018.

The conference chairs would like to thank the authors and the program committee members for their contributions to the conference. We look forward to seeing you at next year's conference in San Francisco.

Hans I. Bjelkhagen
V. Michael Bove, Jr.