# PROCEEDINGS OF SPIE

# Twelfth International Conference on Correlation Optics

**Oleg V. Angelsky** *Editor* 

14–18 September 2015 Chernivsti, Ukraine

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# **Contents**

vii	Authors
ix	Conference Committee
xiii	Introduction
	STATISTICAL OPTICAL FIELDS, INCLUDING SINGULAR OPTICS, OPTICAL CHAOS, POLARIZATION OPTICS AND COHERENCE
9809 02	Edge diffraction of optical-vortex beams formed by means of the fork hologram (Best Oral Presentation) [9809-7]
9809 03	Young's diagnostics of the space correlation and polarization phase singularities inherent in combined Hermite-Gaussian beams (Best Oral Presentation) [9809-10]
9809 04	Validity of running criterion (Best Oral Presentation) [9809-43]
9809 05	Formation of determinate fields of intensity and polarization in the vicinity of specified point basing on three-wave interference [9809-34]
9809 06	Focusing the partly polarized light [9809-37]
9809 07	Additional algorithms of phase retrieval of complex optical fields [9809-16]
9809 08	Computer simulation of phase skeleton of random speckle fields (Best Poster Presentation) [9809-17]
9809 09	Investigations of self-reproduction of field diffracted by two-dimensional fractals [9809-40]
	OPTICAL CORRELATION DEVICES BASED ON DIFFRACTIVE OPTICAL ELEMENTS, INCLUDING OPTICAL AND DIGITAL HOLOGRAPHY, FRACTAL OPTICS, OPTICAL SENSORS
9809 0A	Adaptive wavefront sensor based on the Talbot effect (Best Poster Presentation) [9809-4]
9809 OB	Method of synthesized phase objects for pattern recognition with rotation invariance (Best Poster Presentation) [9809-5]
9809 OC	Refinement of thermal imager minimum resolvable temperature difference calculating method [9809-18]
9809 0D	Vortex microscope: analytical model and experiment (Invited Paper) [9809-9]
9809 OE	Anion-dye-induced spectral sensitization of holographic microsystems core-silver halide shell [9809-13]

9809 OF	The diffraction limit of an optical spectrum analyzer [9809-19]
9809 OG	Modeling of random laser at designable wavelengths [9809-24]
9809 OH	Temporal modulation of polarization states and its using for measurement the Mueller matrix [9809-32]
9809 01	Formation of edge dislocation by the computer generated hologram (Best Poster Presentation) [9809-33]
9809 OJ	Synthesis of dynamic phase profile by the correlation technique for spatial control of optical beams in multiplexing and switching [9809-38]
9809 OK	Principles of measurement of monochromatic responsivity of photodetectors for modulated and non-modulated radiation [9809-42]
9809 OL	Influence of the higher-order nonlinearities in embodying the second-order holographic associative memories [9809-45]
	OPTICAL CORRELATION DIAGNOSTICS, INTERFEROMETRY AND MICROSCOPY OF ROUGH SURFACES AND RANDOM MEDIA
9809 OM	Modeling of surface metrology of state-of-the-art x-ray mirrors as a result of stochastic polishing process (Invited Paper) [9809-2]
9809 ON	Bi/Si interface and Bi nanolines characterization by surface differential reflectivity (Best Poster Presentation) [9809-1]
9809 00	Quality assessment of layer-structured semiconductor single crystals by nuclear quadruple resonance method (Best Poster Presentation) [9809-6]
9809 OP	To the mechanism coarsening of Ostwald ripening of Pt, Pd catalysts and their compounds [9809-12]
9809 0Q	Formation of auxetic surfaces in rhombic syngony single crystals [9809-14]
9809 OR	Light-induced transition in spin-crossover compounds with correlated stochastic processes [9809-15]
9809 OS	Interference coloring by polymer dispersed liquid crystals [9809-20]
9809 OT	Correlation measurements of light transmittance in polymer dispersed liquid crystals [9809-21]
9809 OU	Software for optical recognition of micro- and nano-objects in solids and colloidal solutions [9809-22]
9809 OV	Temporal chaos in optical fields scattered by nematic liquid crystal [9809-23]
9809 OW	Integral relations of optical characteristics involving pairs of condensed medium [9809-35]

	Two-dimensional materials as inorganic analogues of graphene: methods of preparation, optical properties, and applications [9809-36]
9809 OY	Generation of diluted magnetic semiconductor nanostructures by pulsed laser ablation in liquid [9809-39]
9809 OZ	Luminescence of undoped $\alpha$ -ZnSe heterolayers [9809-41]
9809 10	Structural parameters and polarization properties of TiN thin films prepared by reactive magnetron sputtering $[9809\text{-}47]$
9809 11	Optical sensor for non-selective measurements based on the cadmium antimonide $\left[9809\text{-}49\right]$
9809 12	Optical correlation technique for cement particle size measurements [9809-53]
9809 13	Diagnostics of dispersed media using generating shock waves [9809-54]
9809 14	The use of correlation interferometry for analysis of phase inhomogeneous environments and surfaces [9809-55]
	NEW APPLICATIONS OF CORRELATION OPTICS IN BIOLOGY AND MEDICINE
9809 15	Fourier polarimetry of the birefringence distribution of myocardium tissue
	(Best Oral Presentation) [9809-46]
9809 16	(Best Oral Presentation) [9809-46]  The dynamics of visual perception pictures of stroboscope [9809-25]
9809 16 9809 17	
	The dynamics of visual perception pictures of stroboscope [9809-25]
9809 17	The dynamics of visual perception pictures of stroboscope [9809-25]  Spectropolarimetry biopsies of the cervix at an early cancer and dysplasia [9809-26]
9809 17 9809 18	The dynamics of visual perception pictures of stroboscope [9809-25]  Spectropolarimetry biopsies of the cervix at an early cancer and dysplasia [9809-26]  Screening spectroscopy of prostate cancer [9809-27]  Laser diagnostics of native cervix dabs with human papilloma virus in high carcinogenic
9809 17 9809 18 9809 19	The dynamics of visual perception pictures of stroboscope [9809-25]  Spectropolarimetry biopsies of the cervix at an early cancer and dysplasia [9809-26]  Screening spectroscopy of prostate cancer [9809-27]  Laser diagnostics of native cervix dabs with human papilloma virus in high carcinogenic risk [9809-28]  Azimuthally invariant Mueller-matrix mapping of optically anisotropic networks of urine
9809 17 9809 18 9809 19 9809 1A	The dynamics of visual perception pictures of stroboscope [9809-25]  Spectropolarimetry biopsies of the cervix at an early cancer and dysplasia [9809-26]  Screening spectroscopy of prostate cancer [9809-27]  Laser diagnostics of native cervix dabs with human papilloma virus in high carcinogenic risk [9809-28]  Azimuthally invariant Mueller-matrix mapping of optically anisotropic networks of urine polycrystalline layers [9809-48]  Polarization correlometry of polycrystalline films of human liquids in problems of forensic

Proc. of SPIE Vol. 9809 980901-6

## **Authors**

Numbers in the index correspond to the last two digits of the six-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first four 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.

Akhmerov, Aleksandr, 02 Angelsky, Oleg V., 13 Angelsky, P. O., 07 Babechko, N. Ju., 17 Balazyuk, Vitaliy N., 0Q Bekshaev, Aleksandr Y., 02, 0E

Besaga, Vira R., 13 Besaha, R. M., 1A

Borovytsky, Volodymyr, 06

Brus, V. V., 10

Bios, Y. Y., 10
Buchenko, Viktor V., 0N
Bugaychuk, Svitlana A., 0J
Burkovets, D. N., 19
Butok, Alexander M., 0B
Chernykh, Aleksey, 02
Churashov, V. P., 0E
Dan'ko, Volodymyr P., 0A
Derzhypolska, L., 14
Diachenko, L., 0U
Dobrovolsky, Yu. G., 10, 11
Doktorovych, I. V., 0K

Dominikov, Mickolay M., 05, 0H, 0W Dubolazov, O. V., 15, 1A, 1C, 1D

Fedoruk, O. S., 18 Felde, Christina V., 03, 0L

Fesiv, I. V., OP Fochuk, P., OU Galushko, Yu., OI Garasym, V. I., OX, OY Gavaleshko, O. S., OZ

Gavrylyak, Mykhailo S., 0G, 0V

Gevik, Vasyl B., 0Q Glebov, A., 0l Glebov, L., 0l Gnatovskiy, O., 14

Gnatovskyy, Vladimir O., 0J Goloborodko, Andrey A., 0N Goloborodko, Nataliya S., 0A Gorsky, M. P., 07, 08, 12, 15, 1B, 1C

Gruia, Ion, 19 Gruia, M. Ju., 19 Gudyma, Iurii V., 0R Gunko, Mikhailo M., 0Q Hodovaniouk, V. M., 0K Ivanskii, B. V., 0P

Ivanskyi, D. I., 08 Ivashko, P. V., 19 Karpenko, Ju. G., 19 Khalavka, Yu., 0U Khandozhko, Alexander, 00 Khandozhko, Victor, 00 Kharitonova, Ye, 01 Khoroshun, Anna, 02 Kim, Jin-Tae, 0B Kolobrodov, M. S., 0F Kolobrodov, V. G., 0C, 0F Konovchuk, Alexey V., 0L Kopach, O., 0U

Kotov, Myhailo M., 0A Kovalenko, Andrey V., 0A Kryvetskyi, V. I., 0P Kurashov, Vitaliy N., 0A Kuzmenko, Alexander V., 0B

Lastivka, Galina, 00

Maksimyak, Alexander P., 09, 0V Maksimyak, Andrew P., 13 Maksimyak, Peter P., 0S, 0T, 12, 13

Maksymov, Artur, 0R Maryanchuk, P. D., 10 Masajada, Jan, 0D Mikhaylovskaya, Lidiya, 02

Minov, E., 0U

Mokhun, I., 04, 01

Mohammed, Kadhim Ameen, 02

Mokhun, O., 0I Mykytenko, V. I., 0C Negriyko, Anatoliy M., 0J, 14 Nehrych, A. L., 0S, 0T Nikorych, A. V., 19

Olar, O. V., 15, 1B, 1D Oleksyuk, Maxim V., 03, 0L

Ostapov, S., OU

Ostroukh, Alexander P., 0B Panko, I. I., 0P Peresunko, O. P., 17, 19 Pidkamin, L. J., 10, 11 Plociniczak, Łukasz, 0D Podanchuk, Dmytro V., 0A Politansky, Leonid, 0O

Polyanskii, Peter V., 03, 0L Popiołek-Masajada, Agnieszka, 0D

Pryadko, Igor I., 0J Raransky, Mykola D., 0Q

Rogalska, I., OX

Rudeichuk, Volodymyr M., 05, 0H, 0W

Ryabyi, P. A., 07, 08

Sakhnovskyj, Mykhajlo Yu., 05, 0H, 0W

Samila, Andriy, 00

Savchuk, A. I., 0X, 0Y

Savchuk, Ol. A., 0Y

Savchuk, T. A., 0X

Shabashkevich, B. G., 11

Sheregii, E. M., 0X

Shi, Fan, 0G

Shlamp, Katerina I., 09

Shvets, Rostislav A., OB

Sidorenko, Andrey V., 0J

Slyotov, M. M., OZ

Slyotov, O. M., 0Z

Smirnov, V., Ol

Solovan, M. M., 10

Soltys, I. V., 15, 1B

Stasyk, M. O., OP

Stefaniuk, I., 0X

Stolyarchuk, I. D., 0X, 0Y

Struk, Andriy Y., 0Q

Szatkowski, Mateusz, 0D

Tkachuk, P. M., 0Y

Tymchik, G. S., 0F

Tymochko, Bogdan M., 05, 0H, 0W

Tyurin, A. V., 0E

Tyurin, Yury N., 0M

Tyurina, Anastasia Y., 0M

Ushenko, O. G., 15, 1C

Ushenko, V. O., 15, 1A, 1B

Ushenko, Yu. O., 1A, 1B, 1C, 1D

Val', O., 0U

Vengrenovich, R. D., OP

Viktorovskaya, Yu., Ol

Voloshynskyy, D. I., 18

Wang, Pidong, 0G

Xiang, Yinxiao, 0G

Yashchuk, Valeriy V., 0M

Yermolenko, S. B., 17, 18, 19

Yezhov, Pavel V., OB

Yuryev, V. H., 0K

Zelinskii, E., 03

Zhang, Xinzheng, 0G

Zhukov, S. A., 0E

Zhytaryuk, V. G., 0K, 16

viii

## **Conference Committee**

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- 1 Singular optics
  - K. Bliokh, Australian National University (Australia)
  - **I. Mokhun**, Yuriv Fedkovych Chernivtsi National University (Ukraine)
  - **S. Hanson**, Technical University of Denmark (Denmark)
  - C. Zenkova, Yuriy Fedkovych Chernivtsi National University (Ukraine)
- 2 Informative content of statistical optical fields, including optical chaos, polarization optics and coherence
  - **I. Meglinski**, University of Oulu (Finland)
  - A. Bekshaev, Odessa I.I. Mechnikov National University (Ukraine)
- 3 Optical correlation devices based on diffractive optical elements, including optical and digital holography, fractal optics, optical sensors
  - **G. Swartzlander**, Rochester Institute of Technology (United States)
  - V. Podolskiy, University of Massachusetts Lowell (United States)
- 4 Optical correlation diagnostics, interferometry and microscopy of rough surfaces and random media

**Marat Soskin**, Institute of Physics (Ukraine)

- **G. Pedrini**, University of Stuttgart (Germany)
- 5 New applications of correlation optics in biology and medicine
  - **A. Dieterlen**, University of Haute Alsace (France)
  - A. Petris, University of Bucharest (Romania)

Proc. of SPIE Vol. 9809 980901-12

## Introduction

The Twelfth International Conference on Correlation Optics continues the series of conferences with the same title held biannually at Chernivtsi National University (Ukraine) since 1993. More than 120 participants from 21 countries attended the conference, and more than 150 talks were presented.

This volume includes the invited talks as well as the best oral and poster contributions on the following topics:

- 1. Informative content of statistical optical fields, including singular optics, optical chaos, polarization optics and coherence;
- 2. Optical correlation devices on diffractive optical elements, including optical and digital holography, fractal optics and optical sensors;
- 3. Optical correlation diagnostics, interferometry and microscopy of rough surfaces and random media;
- 4. New applications of correlation optics in biology and medicine.

I am grateful to all participants of the conference, as well as to the members of the International Program Committee and the Conference Organizing Committee whose work provided high scientific and organizing level of the conference.

Oleg V. Angelsky

Proc. of SPIE Vol. 9809 980901-14