Front Matter: Volume 9558
Contents

vii Authors
ix Conference Committee
xi Nano-bio-optomechanics: nanoaperture tweezers probe single nanoparticles, proteins, and their interactions (Plenary Paper) [9544-501]

KEYNOTE SESSION

9558 02 Optical coatings and metamaterials [9558-1]

SESSION 1 APPLICATIONS AND DEVICES I

9558 03 Inorganic polarization devices with optical functional layers fabricated by glancing angle deposition technique (Invited Paper) [9558-2]
9558 04 Wideband antireflection coatings combining interference multilayers and subwavelength structures prepared by reactive ion etching [9558-3]

SESSION 2 CHARACTERIZATION I

9558 08 Structural and electrical properties of N doped SiC nanostructures obtained by TVA method [9558-7]

SESSION 3 CONTROL AND MODIFICATION I

9558 0B Optical and structural properties of noble metal nanoisLAND [9558-10]

SESSION 4 THEORETICAL STUDIES

9558 0C Axions, surface states, and the post constraint in electromagnetics [9558-12]
9558 0D A multiple scattering approach to solving scattering problems by complex objects [9558-13]
9558 0E Nanoengineered composite materials with giant dielectric anisotropy [9558-14]
9558 0F A new, fast and accurate spectrophotometric method for the determination of the optical constants of arbitrary absorptance thin films from a single transmittance curve: application to dielectric materials [9558-46]
### SESSION 5  APPLICATIONS AND DEVICES II

| 9558 0I | Graphene-metal interfaces for biosensors devices [9558-17] |
| 9558 0J | Microfluidic control on nano-plasmonic thin films using Marangoni effect [9558-18] |

### SESSION 6  CHARACTERIZATION II

| 9558 0M | Investigation on optoelectronic characteristics of porous silicon/TiO$_2$/CH$_3$NH$_3$PbI$_3$/graphene heterostructure light-emitting diodes prepared by spin-coating [9558-21] |
| 9558 0N | Surface morphology of ultrathin graphene oxide films obtained by the SAW atomization [9558-22] |

### SESSION 7  CONTROL AND MODIFICATION II

| 9558 0O | Periodic nanostructures for tunable thin optics (Invited Paper) [9558-23] |
| 9558 0P | Influence of silver-nanoparticle layer in a chiral sculptured thin film for surface-multiplasmonic sensing [9558-24] |
| 9558 0Q | Phoxonic structure with Photonic and Phononic Stop Bands at the same reduced frequency [9558-26] |

### SESSION 8  FABRICATION

| 9558 0R | Self-assembling of molecular nanowires for enhancing the conducting properties of discotic liquid crystals [9558-27] |
| 9558 0S | Room temperature deposition of highly dense TiO$_2$ thin films by filtered cathodic vacuum arc [9558-28] |

### POSTER SESSION

| 9558 0X | Growth of Bi$_2$O$_3$ nanocones over large areas by magnetron sputtering [9558-33] |
| 9558 11 | Microwave plasma chemical synthesis of nanocrystalline carbon film structures and study their properties [9558-37] |
| 9558 12 | Arrange an asymmetrical metal-dielectric multilayer as a low loss metamaterial [9558-38] |
| 9558 13 | Helical structured thin films deposited at a glancing angle [9558-39] |
| 9558 14 | Influence of low temperature on the morphology and optical property of a deposited silver nanorod array [9558-40] |
Nanoengineered hyperbolic materials for optical sensing applications [9558-41]

Realization of highly transparent conducting CdO thin films by R.F. Magnetron sputtering for optoelectronic applications [9558-42]

Statistical analysis of partial discharges evolved during aging of synthetic nanofilled polypropylene [9558-43]

Partial discharge characteristics and residual breakdown strength of natural nanofilled polypropylene films when aged with different voltage profiles [9558-44]

Effect of type of aging voltage on the residual breakdown strength of polypropylene films with natural and synthetic nanofillers [9558-45]
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.

Alcon-Camas, M., 05
Amiruddin, R., 06
Antohe, Stefan, 08
Bacco, Davide, 0B, 0I
Balachova, Olga V., 0N
Balashov, Sergey M., 0N
Basappa, Prathap, 17, 18, 19
Belc, Marius, 08
Bruynooghe, S., 04
Bushuev, N., 11
Caraiane, Aureliana, 08
Castro-Garay, P., 0Q
Challier, M., 04
Chan, San, 13
Chang, Yuan-Tai, 14
Cheermadan, Saheer, 16
Chen, Lung-Chien, 0M
Chiang, Chien-Ying, 12
Ciupina, Victor, 08
Corso, Alain J., 0B, 0I
Costa, Carlos A. R., 0N
Criante, L., 0O
Deschamps, Clément, 0F
Desforges, Jean, 0F
Dhara, Rohitha, 17, 19
Di Fonzo, F., 0O
Dinca, Virginia, 08
Escobar-Galindo, R., 0S
Ferracq, Didier, 0D
Fumagalli, F., 0O
Gatto, A., 04
Gauvin, Serge, 0F
Gerlin, Francesca, 0B, 0I
Gordon, Reuven, xiii
Guillén, E., 0S
Ham-Rodriguez, C. I., 0Q
Helger, M., 04
Heras, I., 0S
Huang, Jyong-Wei, 14
Ilminie, Sorina, 08
Jen, Yi-Jun, 12, 13, 14
Jepu, Ionut, 08
Jheng, Ci-Yao, 12, 13, 14
Kim, Kyung Ho, 0R
Kim, Youn Sang, 0R
Kimura, Kenji, 0J
Kley, E.-B., 04
Kling, Emmanuel, 0D
Koch, T., 04
Koike, Nobuyuki, 03
Kumar, M.C. Santhosh, 16
Lakhota, Akhlesh, 0C, 0P
Lanzani, G., 0O
Lin, Wun-Wei, 0M
Liu, Ying-Hong, 0X
Lu, Kun-Han, 12
Lungu, Cristian P., 08
Lungwitz, F., 0S
Mackay, Tom G., 0C, 0E, 15
Macleod, Angus, 02
Maggini, Michele, 0I
Mandes, Aurelia, 08
Manzanares-Martinez, B., 0Q
Manzanares-Martinez, J., 0Q
Moctezuma-Enriquez, D., 0Q
Nakajima, Kaoru, 0J
Nakanishi, Yoichiro, 0M
Namura, Kyoko, 0J
Nardiello, Marco, 0B, 0I
Nicolescu, Virginia, 08
Orlov, S., 11
Park, Ji Hyun, 0R
Park, Yung Woo, 0R
Passoni, L., 0O
Pavani Filho, A., 0N
Pelizzo, Maria G., 0B, 0I
Porosnicu, Corneliu, 0B
Prodan, Gabriel C., 0B
Rincón Llorente, G., 0S
Rodriguez-Viveros, Y. J., 0Q
Scalia, Giusy, 0R
Schulze, M., 04
Scotognella, F., 0O
Silvestrini, Simone, 0I
Simoni, F., 0O
Stanescu, Iuliana, 08
Starykh, D., 11
Sundermann, M., 04
Suzuki, Motofumi, 0J
Swientek, Stephen E., 0P
Takada, Akio, 03
Takahashi, Eiji, 03
Takanishi, Yoichi, 0R
Taylor, Charles M., 17, 18, 19
Tesarolo, Enrico, 0B, 0I
Tien, Li-Chia, 0X
Timoshenkov, V., 11
Tonova, D., 04

vii
Tseng, Chien-Hoa, 13
Vasile, Eugeniu, 08
Vladoiu, Rodica, 08
Watson, Antwarn E., 17, 18, 19
Wu, Jia-Ren, 0M
Yafarov, R., 11
Yamamoto, Jun, 0R
Zarovski, Valeriu, 08
Zuppella, Paola, 0B, 0I
Conference Committee

Symposium Chairs

Satoshi Kawata, Osaka University (Japan)
Manijeh Razeghi, Northwestern University (United States)

Symposium Co-chairs

David L. Andrews, University of East Anglia (United Kingdom)
James G. Grote, Air Force Research Laboratory (United States)

Conference Chairs

Akhlesh Lakhtakia, The Pennsylvania State University (United States)
Tom G. Mackay, The University of Edinburgh (United Kingdom)
Motofumi Suzuki, Kyoto University (Japan)

Conference Program Committee

Bharat Bhushan, The Ohio State University (United States)
Pankaj K. Choudhury, University Kebangsaan Malaysia (Malaysia)
Didier Felbacq, Université Montpellier 2 (France)
Flavio Horowitz, Universidade Federal do Rio Grande do Sul (Brazil)
Yi-Jun Jen, National Taipei University of Technology (Taiwan)
Raúl J. Martín-Palma, Universidad Autónoma de Madrid (Spain)
Anders Kristensen, Technical University of Denmark (Denmark)
Sidney J. Ribeiro, Universidade Estadual Paulista (Brazil)
Geoffrey B. Smith, University of Technology, Sydney (Australia)

Session Chairs

Keynote Session
Akhlesh Lakhtakia, The Pennsylvania State University (United States)

1 Applications and Devices I
Tom G. Mackay, The University of Edinburgh (United Kingdom)

2 Characterization I
H. Angus Macleod, Thin Film Center, Inc. (United States)

3 Control and Modification I
Didier Felbacq, Université Montpellier 2 (France)
4 Theoretical Studies
Frédéric Guittard, Universite de Nice Sophia Antipolis (France)

5 Applications and Devices II
Akhlesh Lakhtakia, The Pennsylvania State University (United States)

6 Characterization II
Stephane Bruynooghe, Carl Zeiss AG (Germany)

7 Control and Modification II
Akio Takada, Drexerals Corporation (Japan)

8 Fabrication
Luigino Criante, Istituto Italiano di Tecnologia (Italy)