Poster Session

Poster (Thursday September 15)

Session Chair: **Wayne Hess**

ThPO1 **Diagnostics of Liquid-Phase Laser Ablation Plasmas by Spectroscopic Methods**
H. Ushida, N. Takada, and K. Sasaki, *Department of Electrical Engineering and Computer Science, Japan*

ThPO2 **Nanoscale Patterning by Pulsed Laser Irradiation in Near Field**
M. Hong[1], Xie Q[1], B. Lukyanchuk[1], L.P. Shi[1], T. C. Chong[1], Lin Yin[2], G.X. Chen[2] and L.S. Tan[2], *[1]Data Storage Institute, DSI Building, and Department of Electrical and Computer Engineering, National University of Singapore, Singapore, [2]Department of Electrical and Computer Engineering, National University of Singapore, Singapore*

ThPO3 **Thermal and Gasdynamic Analysis of Ablation of Polymethyl Methacrylate by Pulsed IR Laser Under Conditions of Nanoparticle Formation**
N.M. Bulgakova[1], L.A. Zakharov[2], A.A. Onischuk[3], A.M Baklanov[3], *[1]Institute of Thermophysics SB RAS, Russia, [2]Novosibirsk State University, Russia, [3]Institute of Chemical Kinetics and Combustion, Russia*

ThPO4 **The Model of Cluster Formation in a Laser-Induced Plume**
N.M. Bulgakova, A.V. Bulgakov, *Institute of Thermophysics SB RAS, Russia*

ThPO5 **Near-Spinode Explosive Bubble Nucleation and Hydrodynamic Instabilities on Laser-Irradiated Free Graphite Surfaces**
Sergey I. Kudryashov, and Susan D. Allen, *Arkansas State University, State University, USA*

ThPO6 **Fs Laser Ablation Of Metals and Crater Formation by Phase Explosion in High-Fluence Regime**
Bukuk Oh[1], Dongsik Kim[1], Jaegu Kim[2], Jae-Hoon Lee[2], *[1]Department of Mechanical Engineering, POSTECH, Pohang 790-784, Korea, [2]Nanoprocess Group, Korea Institute of Machinery and Materials, Daejeon 305-343, Korea*

ThPO7 **Laser Processing of Crystalline Fe and Al Based Glass-Forming Alloys for Enhanced Corrosion Resistance**
J.G. Hoekstra, M.A. Jakab, [a]S.B. Qadri, G. J. Shiflet, [b]S. J. Poon, J.R. Scully, [*]J.M. Fitz-Gerald, *University of Virginia,Departments of Materials Science and Engineering and [*]Physics, USA, [**]Naval Research Laboratory, USA*

ThPO8 **IR, VIS and UV Laser Interaction with Gelatine**
E. Rebollar[1], M. Oujja[1], M. Castillejo[1], C. Abrusci[2], F. Catalina[2], D. Gómez-Varga[2], *[1]Institute of Physical Chemistry Rocasolano, Spain,[2]Institute of Polymer Science and Technology, CSIC, Spain*

ThPO9 **Plume Analysis During Pulsed Laser Ablation of Silicon in Hydrogen Gas**
Masatoshi Takata, Ikurou Umezu and Akira Sugimura, *Konan University, Department of Physics, Japan*

ThPO10 **Magnetic Properties of Co and CoO_x Nanoparticles Produced by Pulsed Laser Deposition**
J. Margueritat[1], J. Gonzalo[1], and C. N. Afonso[1], A.N. Dobrynin[2], D.N. Ievlev[2], K. Temst[2], P. Lievens[2], E. Piscopiello[3], G. Van Tendeloo[3, 1] *[1]Laser Processing Group, Instituto de Optica, CSIC, Spain, [2]Laboratorium voor Vaste-Stoffysica en Magnetisme, Belgium, [3]Universiteit Antwerpen, EMAT RUCA, Belgium*

ThPO11 **Enhanced Absorptance of Metals Following Multi-Pulse Femtosecond Laser Ablation**
Anatoliy Y. Vorobyev and Chunlei Guo, *The Institute of Optics, University of Rochester, USA*

ThPO12 **Fs/ns-Dual-Pulse Orthogonal Geometry Plasma Plume Reheating for Compositional Analysis of Ancient Copper-Based-Alloy Artworks**
Antonio Santagata[1], Gianni Pompeo Parisi[1], Stefano Orlando[1], Olga De Pascale[2], Marcella Dell'Aglio[2], Alessandro De Giacomo[3], Roberto Teghil[4] and Angela De Bonis[4], *[1]CNR-IMIP-PZ, Zona Ind. Tito Scalo, Italy, [2]CNR-IMIP-BA, Italy, [3]Dip. Chimica, Università degli studi di Bari, Italy, [4]Dip. Chimica, Università degli Studi della Basilicata, Italy*

ThPO13 **Blank**

ThPO14 **Nanomilling Surfaces Using Near-Threshold Femtosecond Laser Pulses**
Sean E. Kirkwood, Michael T. Taschuk, Ying Y. Tsui, and Robert Fedosejevs, *Laser Plasma Applications Laboratory Department of Electrical and Computer Engineering University of Alberta, Canada*

ThPO15 **Selective Laser Processing Of Flexible $Cuinse_2$-Solar Cells-Layer Using Ultra Short Pulse Durations And Different Wavelengths – The Results As Well As A Machine Concept**
Jens Hänel, Lars Pichler, Sven Albert, Tino Petsch, *3D-Micromac AG, Germany*

ThPO16 **Simulation of the Thermionic Emission During Ultrashort Pulse Laser Ablation of Metals**
T. Balasubramani and S. H. Jeong, *Gwangju Institute of Science and Technology, Republic of Korea*

ThPO17 **Blank**

ThPO18 **Blank**

ThPO19 **Microstructural Characterization of Chromium Oxide Thin Films Grown by Remote Plasma Assisted Pulsed Laser Deposition**
M. Tabbal[1], C. Madi[1], T. Christidis[1], S. Isber[1], B. Nsouli[2] and K. Zahraman[2], *[1]Department of Physics, American University of Beirut, Lebanon, [2]Lebanese Atomic Energy Commission-CNRS, Lebanon*

ThPO20 **UV Laser Controlled Quantum Well Intermixing in InGaAlAs/GaAs Heterostructures**

Jonathan Genest[1], Jan J. Dubowski[1], Vincent Aimez[1], Nicolas Pauc[1], Dominique Drouin[1] and Mike Post[2], *[1]Regroupement québécois sur les matériaux de pointe (RQMP), Département de génie électrique et génie informatique, Université de Sherbrooke, Canada, [2]Institute for Chemical Process and Environmental Technology National Research Council of Canada, Canada*

ThPO21 **Study of the Plasmas Produced in a Hybrid Magnetron-Laser Deposition System Used for TiC and SiC Thin Film Preparation**

M. Novotny[1], J. Bulir[1], J. Lancok[1], M. Jelinek[1], Z. Zelinger[2], *[1]Institute of Physics, Academy of Sciences of the Czech Rep., Czech Republic, [2]J. Heyrovsky Institute of Physical Chemistry, Academy of Sciences of the Czech Rep., Czech Republic*

ThPO22 **UV-Femtosecond Laser Ablation of $SrTiO_3$ Single Crystals**

S. Zoppel[1;3], D. Gray[2], M. Farsari[2], R. Merz, G. A. Reider[1], C. Fotakis[2], *[1]Vienna University of Technology, Photonics Institute, Austria, [2]Foundation for Research and Technology – Hellas, Institute of Electronic Structure and Laser, Greece, [3]Research Centre for Microtechnologies, Vorarlberg University of Applied Sciences, Austria*

ThPO23 **Nano-Graphene Particle Formation and Texturing in Carbon Films by Nd:YAG Pulsed Laser Ablation of Graphite**

E. Cappelli[1] , S. Orlando[2] , M. Servidori[3], V. Morandi[3], C. Scilletta[1] and P. Ascarelli[1], *[1]CNR-ISC sez. Montelibretti, Italy, [2]CNR-IMIP sez. Potenza, Italy, [3]CNR-IMM sez. Bologna, Italy*

ThPO24 **F2 Excimer Laser (157 nm) Ablation of Polymers: Relation of Fragment Detection, Plasma Onset and Absorption**

Markus Kuhnke[1], Thomas Lippert[1], Alexander Wokaun[1], Loren Cramer[2], J. Thomas Dickinson[2], Hiroyuki Niino[3], Maria Pervolaraki[4], Peter E. Dyer[4], *[1]General Energy Research Department, Paul Scherrer Institut, Switzerland, [2]Washington State University, USA, [3]National Institute of Advanced Industrial Science and Technology, Japan, [4]Department of Physics, University of Hull, UK*

ThPO25 **Modification of Some Organic Compounds by Synchrotron Radiation**

Takehiro Yamada and Satoru Nishio, *Department of Applied Chemistry, Faculty of Science and Engineering, Ritsumeikan University, Japan*

ThPO26 **Ablation of Metal-Containing Perylene Tetracarboxylic Dianhydride with 3rd Harmonic of Nd:YAG Laser**

Chihiro Kanezawa[1], Koji Hatanaka[1], Jonathan Hobley[1], Hiroshi Fukumura[1] and Satoru Nishio[2], *[1]Department of Chemistry, Graduate School of Science, Tohoku University, Japan, [2]Department of Applied Chemistry, Faculty of Science and Engineering, Ritsumeikan University, Japan*

ThPO27 **Amorphous Carbon Structure Dependence on the Laser Ablation Plasma Parameters**

E. Camps[1], L. Escobar-Alarcón[1], S. Muhl[2], M.A. Camacho-Lopez[3], E. Vigueras[3,] *[1]Departamento de Física, Instituto Nacional de Investigaciones Nucleares, México, [2]Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México,México, [3]Laboratorio de Investigación y Desarrollo de Materiales Avanzados, Facultad de Química, Universidad Autónoma del Estado de México, México*

ThPO28 **Blank**

ThPO29 **Pulsed Laser Deposition of Undoped and Neodymium-Doped Gallium Lanthanum Sulphide Glasses for Photonic Applications**
Trevor W. Allen[1], Prabhat K. Dwivedi[1], Ray G. DeCorby[1], and Jim N. McMullin[1], Chris J. Haugen[2], Ying Y. Tsui[3], *[1]Dept. of Electrical and Computer Engineering, University of Alberta, Canada, TRLabs, Canada, [2]TRLabs, Canada, [3]Dept. of Electrical and Computer Engineering, University of Alberta, Canada*

ThPO30 **Blank**

ThPO31 **Ferroelectric Mesoscopic Structures By Room-Temperature PLD**
C. Harnagea, C. Cojocaru, F. Rosei and A. Pignolet, *INRS - Energie, Matériaux et Télécommunications,Canada*

ThPO32 **Influence of Chromatic Aberrations on Parameters of a Broadband Argon Laser Beam**
O. Mendoza-Yero[1], M. Arronte[2], [1]*Lab. Tec. Láser, IMRE-Universidad de la Habana,Cuba, [2]Lab. Tec. Láser, CICATA-IPN, México*

ThPO33 **Langmuir Probes in a Silver Ablation Plume: A Study of the Probe Geometry**
Jørgen Schou, Thomas Nørskov and Bo Toftmann**,** *Department of Optics and Plasma Research, Risø National Laboratory, Denmark*

ThPO34 **Electrodes for Microfluidic Devices Produced by Laser Induced Forward Transfer**
Chris Germain[1] Ying Y Tsui[1], Luc Charron[2], and Lothar Lilge[2], *[1]Electrical and Computer Engineering University of Alberta, Canada, [2]Department of Medical Biophysics, University of Toronto, Canada*

ThPO35 **Hydrodynamic Multi-Phase Model for Simulation of Laser-Induced Non-Equilibrium Phase Transformations**
Alexey Volkov and Leonid V. Zhigilei, *Department of Materials Science and Engineering, University of Virginia, USA*

ThPO36 **Si Microcones Growth by IR Nanosecond Pulses**
J. Jiménez-Jarquín, E. Haro-Poniatowski, M. Fernández-Guasti, J.L. Hernández-Pozos, *Laboratorio de Óptica Cuántica. Universidad Autónoma Metropolitana-Iztapalapa, Mexico*

ThPO37 **Modeling of Short Laser Pulse Energy Deposition in Transparent Media**
François Vidal[1], Pierre-Luc Lavertu[1], Francis Moore[1], Dominic Giguère[1], Guillaume Girard[1], Jean-Claude Kieffer[1], Gilles Olivié[1], Stéphanie Toetsch[1] and Isabelle Brunette[2], *[1]INRS-Énergie, Matériaux et Télécommunications, Canada, [2]Département d'Ophtalmologie, Université de Montréal, Canada*

ThPO38 **Simulation of Femtosecond Laser Ablation of Silicon**
S.E. Kirkwood, R. Holenstein, N. Young, R. Fedosejevs, Y.Y. Tsui, *Department of Electrical and Computer Engineering, University of Alberta, Edmonton, Canada*

ThPO39 **Optimalization of Single Walled Carbon Nanotubes Preparation Yield and Purity by Use of Near-Infrared Spectroscopy**
J. Cech[1,2], B. Hornbostel[1], and S. Roth[1], *[1]Max Planck Institute for Solid State Research, Germany, [2]International Max Planck Research School for Advanced Materials, Germany*

ThPO40 **Resonant Infrared Pulsed Laser Deposition of Polyimide**
Kenneth E. Schriver, Nicole L. Dygert, and Richard F. Haglund, *[1]Department of Physics and Astronomy, Vanderbilt University, USA*

ThPO41 **Holographic Laser Fabrication of 3D Woodpile Photonic Structures with Phase Masks**
Ladan E Abolghasemi and Peter R. Herman, *Department of Electrical and Computer Engineering, University of Toronto, Canada*

ThPO42 **Direct Laser Ablation and Ionization of Solids for Chemical Analysis by Mass Spectrometry**
Jason Holt and Greg Klunder, *Forensic Science Center, Lawrence Livermore National Laboratory, USA*

ThPO43 **Laser Surface Modification of Ti Implants to Improve Osseointegration**
Matías Marticorena, Gastón Corti, Paula Martín and Stella Duhalde, *Facultad de Ingeniería, Universidad de Buenos Aires, Argentina*

ThPO44 **Embedding Semiconductor Devices Using Laser Direct-Write**
Alberto Piqué[1], Ray C. Auyeung[1], Bhanu Pratap[1], Heungsoo Kim[1], Mike Ollinger[1], Moshe Kasser[1], Sam Lakeou[2] and Scott A. Mathews[3], *[1]Materials Science and Technology Division, Naval Research Laboratory, USA, [2]Department of Electrical Engineering, University of the District of Columbia, USA, [3]Department of Electrical Engineering, Catholic University of America, USA*

ThPO45 **β-$FeSi_2$ Thin Film Preparation without Fragments from Various Kinds of Iron Silicide Targets by Arf Excimer Laser Deposition**
Yasuo Takigawa[1], Mayumi Tode[1], Masaaki Muroya[1], Masato Ohmukai[2], Kou Kurosawa[3], *[1]Osaka Electro-Communication University, Japan, [2]AKASHI National College of Technology, Japan, [3]University of Miyazaki, Japan*

ThPO46 **Microstructures Formation on Titanium Plate by Femtosecond Laser Ablation**
Masahiro Tsukamoto[1], Nobuyuki Abe[1], Takashi Kayahara[2], Keita Asuka[2], Masaki Hashida[3], Hitoshi Nakano[4], Masayuki Fujita[5] and Masahito Katto[6], *[1]Joining and Welding Research Institute, Osaka University, Japan,[2]Graduate school of engineering, Osaka University, Japan, [3]Institute for Chemical Research, Kyoto University, Japan, [4]School of Science and Engineering, KinKI University, Japan, [5]Institute for Laser Technology, Japan, [6]Cooperative Research Center, Miyazaki University, Japan*

ThPO47 **Structural and Optical Properties of ZnMgO Thin Films Grown by Pulsed Laser Deposition Using ZnO-MgO Multiple Targets**
Toshihiko Maemoto, Nobuyasu Ichiba, Hiroaki Ishii, Shigehiko Sasa, Masataka Inoue, *New Materials Research Center, Japan*

ThPO48 **A Study on Electro-Magnetic Energy Distribution of Modified Probe for NSOM-Lithography**
J. –B. Kim[1] and S. –J. Na[1], W. –S. Chang[2], *[1]Dept. of Mechanical Eng, KAIST, Korea, [2]Nanoprocess Group, KIMM, Korea*

ThPO49 **Laser-Induced Photoemission as a Probe of Slip Band Formation in Single Crystal and Polycrystalline Aluminum During Uniaxial Deformation**
M. Cai[1], Stephen C. Langford[1], J. Thomas Dickinson[1], D. Pitchure[2] and Lyle. E. Levine[2], *[1]Physics Department, Washington State University, USA, [2]National Institute of Standards and Technology, USA*

ThPO50 **Deep Ultraviolet Laser Micromachining of Novel Fiber Optic Devices**
Jianzhao Li, James Dou, Peter R. Herman, *The Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Canada*

ThPO51 **Color Marking of Transparent Materials by Laser-Induced Plasma-Assisted Ablation (LIPAA)**
Yasutaka Hanada[1,2], Koji Sugioka[1,2], Masatoshi Mera[1,3], Hiroshi Takai[3], Iwao Miyamoto[2], and Katsumi Midorikawa[1], *[1]RIKEN - The Institute of Physical and Chemical Research, Japan, [2]Department of Applied Electronics, Faculty of Industrial Science & Technology, Science University of Tokyo, Japan, [3]Department of Electrical Engineering, Tokyo Denki University, Japan*

ThPO52 **Heat Accumulation During High Repetition Rate Ultrafast Laser Interaction: Waveguide Writing in Borosilicate Glass**
Haibin Zhang, Shane Eaton, Jianzhao Li, and Peter R. Herman, *The Edward S. Rogers Sr. Department of Electrical and Computer Engineering, University of Toronto, Canada*

ThPO53 **F2-Laser Microfabrication of Multilevel Diffractive Optical Elements**
Mi Li Ng, Peter R. Herman, Amir H. Nejadmalayeri, and Jianzhao Li
Department of Electrical and Computer Engineering, University of Toronto, Canada

ThPO54 **3-D Micro Fabrication Inside the Transparent Material by Crossed-Beam Irradiation System Using Femtosecond Laser**
F. Takase, K. Sugioka, Y. Cheng, H. Takai, and K. Midorikawa, *RIKEN-The Institute of Physical and Chemical Research, Japan, Tokyo Denki University, Japan*

ThPO55 **Comparative Analysis of Microactuators Fabricated by the Femtosecond and Nanosecond Laser Micromachining**
Evgueni V. Bordatchev, Yongjun Lai, Suwas K. Nikumb, *Integrated Manufacturing Technologies Institute, National Research Council of Canada, Canada*

ThPO56 **Blank**

ThPO57 **Laser Irradiation Pretreatment Effects on Catalyst Roughening/Alloying and CVD Nanotube Growth**
C. M. Rouleau[1], A. A. Puretzky[2], Z. Liu[3], K. Belay[4], J. Jackson[4], G. Eres[1], and D. B. Geohegan[1], *[1]Condensed Matter Sciences Division, Oak Ridge National Laboratory, USA, [2]Department of Materials Science and Engineering, University of Tennessee,USA, [3]Center for Nanophase Materials Science, Oak Ridge National Laboratory, USA, [4]Department of Physics, Florida A&M University, USA*

ThPO58 ***In situ* Laser-Irradiation Effects on Chemical Vapor Deposition Growth of Carbon Nanotubes**

D. B. Geohegan[1], A. A. Puretzky[2], Z. Liu[3], H. Cui[4], I. N. Ivanov[2], C. M. Rouleau[1], D. Styers-Barnett[3], *[1]Condensed Matter Sciences Division, Oak Ridge National Laboratory, USA, [2]Department of Materials Science and Engineering, University of Tennessee,USA, [3]Center for Nanophase Materials Sciences, Oak Ridge National Laboratory, USA, [4]Oak Ridge Institute for Science and Education, USA*

ThPO59 **Laser Vaporization Deposition (LVD) Synthesis of Oxide Nanowires for Functional Applications**

Z. Liu[1], A. A. Puretzky[2], I. N. Ivanov[2], K. Xiao[1], M. Garrett[4], D. B. Geohegan[3], *[1]Center for Nanophase Materials Sciences, Oak Ridge National Laboratory, USA, [2]Department of Materials Science and Engineering, University of Tennessee, USA, [3]Condensed Matter Sciences Division, Oak Ridge National Laboratory, USA, [4]Physics Department, University of Tennessee, USA*

ThPO60 **Femtosecond Laser Modification of Refractive Index in Silicon**

Amir H. Nejadmalayeri[1], Peter R. Herman[1], Jonas Burghoff[2], Matthias Will[2], Stefan Nolte[2], and Andreas Tünnermann[2], *[1]Photonics Group, Department of Electrical and Computer Engineering, University of Toronto, Canada, [2]Institute of Applied Physics, Friedrich-Schiller-University, Germany*

ThPO61 **Synthesis of Lead-Free Ferroelectric Thin Films by Pulsed Laser Deposition**

Maria Dinescu[1], Nicu Doinel Scarisoreanu[1], Antoniu Moldovan[1], Andreea Purice[1], Floriana Craciun[2], Patrizio Verardi[3], Carmen Galassi[4], *[1]NILPRP, Romania, [2]CNR-Istituto dei Sistemi Complessi, Italy,[3]CNR-Istituto di Acustica, Italy, [4]CNR-ISTEC, Italy*

ThPO62 **Geometrical Profile of Material Surface Ablated with High-Power, Short-Pulse Lasers in Ambient Gas Media**

S. R. Vatsya and S.K. Nikumb, Norman Tolk presenting, *Integrated Manufacturing Technologies Institute, National Research Council of Canada, Canada*

ThPO63 **Photochemical Writing of Silica Optical Waveguides in Silicone Rubber by F2 Laser**

Masayuki Okoshi[1], Jianzhao Li[2], Peter R. Herman[2] and Narumi Inoue[1] *[1]Department of Electrical and Electronic Engineering, National Defense Academy Japan, [2]Department of Electrical and Computer Engineering, University of Toronto, Canada*

ThPO64 **F2-Laser Photochemical Welding of Silica Microspheres to Silicone: Towards Flexible Micro-Optical Circuits**

Masayuki Okoshi[1], Jianzhao Li[2], Peter R. Herman[2] and Narumi Inoue[1] *[1]Department of Electrical and Electronic Engineering, National Defense Academy, Japan [2]Department of Electrical and Computer Engineering, University of Toronto, Canada*

ThPO65 **Plasma Investigation During Femtosecond Pulsed Laser Deposition of Nano-Structured Metal-Doped Diamond-Like Carbon Films**

F. Garrelie, N. Benchikh, C. Donnet, E. Audouard, R. Stoian presenting, *Laboratoire TSI, Université Jean Monnet, France*

ThPO66 **Structure and Optical Properties 8of Size-Selected ZnTe Nanoparticles Produced by Pulsed Laser Ablation**

Takaaki Orii,[1, 2] Makoto Hirasawa,[1, 2] and Takafumi Seto,[1, 2], [1]*Reserch Consortium for Synthetic Nano-Function Materials Project (SYNAF),National Institute of Advanced Industrial Science and Technology (AIST), Japan,* [2]*Also at: Advanced Manufacturing Research Institute (AMRI),National Institute of Advanced Industrial Science and Technology (AIST), AIST East, Japan*

ThPO67 **The Estimation of Content A Sp^3 Hybridization Bonds by Raman Spectroscopy Method in Amorphous Carbon Films Deposited by Excimer Krf Laser**

W. Mróz[1], S. Burdyńska[1], M. Jelinek [2], B. Major[3], A. Prokopiuk[1], Y. Sakai [4], Y. Suda[4], T. Wierzchoń[5], [1]*Military University of Technology, Institute of Optoelectronics Poland.* [2]*Institute of Physics, Academy of Sciences of Czech Republic, Czech Republic,* [3]*Polish Academy of Sciences, Institute of Metallurgy and Materials Science, Poland,* [4]*Hohhaido University, Division of Electronic and Information Engineering, Japan.* [5]*Warsaw University of Technology, Materials and Science Engineering, Poland*

ThPO68 **Mode Shifting of Quantum Cascade Lasers through Pulsed Nd:YVO4 Processing of Chalcogenide Glass Claddings**

Shanshan Song, Daniel L. Recht, Scott Howard, Claire F. Gmachl, Craig B. Arnold, *Princeton Institute for Science and Technology of Materials, Princeton University, USA*

ThPO69 **Effect of Reactive Atmosphere on Pulsed Laser Deposition of Hydroxyapatite Thin Films**

W. Mróz[1], A.Prokopiuk[1], M. Jedyński[2], J.Hoffman[2], Z. Szymański[2], B. Major[3] and M.Jelinek[4], [1]*Institute of Optoelectronics of Military University of Technology, Poland,* [2]*Institute of Fundamental Technological Research, Polish Academy of Sciences, Poland,* [3]*Institute of Metallurgy and Materials Sciences, Polish Academy of Sciences, Poland,* [4]*Institute of Physics, Academy of Sciences of Czech Republic, Czech Republic*

ThPO70 **Structural and Optical Properties of Phenylalanine and Tyrosine Thin Films Elaborated by Pulsed Laser Deposition**

M. A. Hernandez-Perez[1], C. Garapon[1], C. Champeaux[2], J. C. Orlianges[2] [1]*Laboratoire de Physico-Chimie des Matériaux Luminescents, CNRS-Université Lyon I, France,* [2]*Science des Procédés Céramiques et Traitement de Surface, CNRS-Université de Limoges, France*

ThPO71 **Pulse Duration and Pulse Shaping Effects on Laser Microstructuring of Si**

V. Zorba[1,2] , E. Spanakis[1], E. Stratakis[1], E. Skantzakis[1,3] , D.G. Papazoglou[1], I. Zergioti[3], P.Tzanetakis[1,2], A. Manousaki[1], D. Gray[1], C. Fotakis[1,2], [1] *Foundation for Research & Technology – Hellas, Institute of Electronic Structure and Laser, Greece,* [2] *Department of Physics, University of Crete, Greece,* [3] *Physics Department, National Technical University of Athens, Greece*

ThPO72 **Blank**

ThPO73 **Surface Diffraction Studies of PLD-Grown Perovskite Thin Films**

Phil Willmott, Roger Herger, Christian Schlepütz, Domenico Martoccia, and Bruce Patterson, *Paul Scherrer Institute, Swiss Light Source, Switzerland*

ThPO74 **Ion Kinetic Energy Control in Dual-Pulsed Laser Ablation on Graphite Targets**
C. Sánchez Aké[1], H. Sobral[1], P. Ramos-Alvarez[1], M. Villagrán-Muniz[1] and C. Le Men[2], [1]*Centro de Ciencias Aplicadas y Desarrollo Tecnológico, Universidad Nacional Autónoma de México, México,*
[2]*Institut Fresnel, France*

ThPO75 **Explosive Femtosecond Laser Ablation: A Thermal Model**
B. Chimier, L. Hallo, V. Tikhonchuk, *Centre Lasers Intenses et Applications, UMR 5107 CNRS - Université Bordeaux 1 - France*

ThPO76 **Spectroscopic Study of Reaction Mechanism of Laser-Ablated Silicon Ions With Neon Atoms and Benzene Molecules**
Morihisa Saeki, Hironori Ohba and Atsushi Yokoyama, *Japan Atomic Energy Research Institute, Japan*

ThPO77 **157 nm Interactions with Technologically Important Materials**
Sharon Rose, John Leraas, Steve Langford, and Tom Dickinson, *Department of Physics, Washington State University, USA*

ThPO78 **Diffractive Shaping of Excimer-Laser Beams for Pulsed Laser Deposition**
Antti Hakola[1], Timo Kajava[1], Henna Elfström[2], Janne Simonen[2], Pertti Pääkkönen[2], and Jari Turunen[2], [1]*Helsinki University of Technology, Department of Engineering Physics and Mathematics, Finland,* [2]*University of Joensuu, Department of Physics, Finland*