

Poster Session

Poster (Monday September 12)

Session Chair: *Alan Joly*

- MoPO1 **Industrially-Scaled Tribological Coating by PLD and Hybrid PLD**
Jürgen M. Lackner, W. Waldhauser, *Laser Center Leoben, JOANNEUM RESEARCH, Austria*
- MoPO2 **Modelling of a Water Plasma: Study of the Departures from Radiative Equilibrium**
Riadh Riahi and Zohra Ben Lakhdar, *University of Tunis El Manar, Faculty of Sciences of Tunis, Department of Physic, Laboratoire de Spectroscopie Atomique, Moléculaire et Applications, France*
- MoPO3 **Blank**
- MoPO4 **Thin Films Growth Parameters in MAPLE Technology**
M. Jelinek^{1,2}, R. Cristescu³, T. Kocourek¹, V. Vorliček¹, L. Stamatina³, A. Moldovan³, D. Mihaiescu³, C. Mirea³, I. Stamatina³, I.N. Mihailescu³, D.B. Chrisey⁴, ¹*Institute of Physics, Czech Republik.* ²*Institute for Biomedical Engineering CVUT, Czech Republik.* ³*National Institute for Laser, Plasma and Radiation Physics, Romania* ⁴*Naval Research Laboratory, USA*
- MoPO5 **Laser Induced Breakdown Spectroscopy in Aqueous Solution- Sample Presentation Considerations**
S. R. Ahmad and X. Fang, *DEOS, RMCS, Cranfield University, Shrivenham, UK*
- MoPO6 **Pulsed Laser Deposition for Coating Applications**
Ralph F. Delmdahl, Alexander Wiessner, Thorsten Geuking, *Lambda Physik AG, USA*
- MoPO7 **Blank**
- MoPO8 **A Laser Beam Model for High Performance Microdrilling**
Sylvain Lazare and Vladimir Tokarev, *Laboratoire de Physicochimie Moléculaire (LPCM), France*
- MoPO9 **Real Time Characterization of Pulsed Laser Deposition of Magnetic Oxide Thin Films by Ellipsometry**
B. Berini, T. Hamon, Y. Dumont, N. Keller, and P.R. Dahoo, *Laboratory of Magnetism and Optics of Versailles, Laboratory of Magnetism and Optics, France*
- MoPO10 **Laser Bulk Structuring and Filamentation in Optical Materials by Sub-Picosecond Ultraviolet Pulses**
I. Zergioti¹, S. Tzortzakis², D. G. Papazoglou³, ¹*National Technical University of Athens, Physics Department, Greece,* ²*Laboratoire d'Utilisation des Lasers Intenses, Ecole Polytechnique, France,* ³*Foundation for Research and Technology – Hellas, Institute of Electronic Structure and Laser, Greece*

- MoPO11 **Glass Wafer Singulation by Femtosecond and Nanosecond Lasers**
Q. Xie¹, M.H Hong^{1,2}, K.S. Tiaw^{1,2}, B.C. Lim¹, L.P. Shi¹, T.C. Chong^{1,2}, *Data Storage Institute Agency for Science, Technology and Research, Singapore, Department of Electrical and Computer Engineering, National University of Singapore², Singapore*
- MoPO12 **CO₂ Laser Cladding of VERSAlloy on SM20C with Powder Feeding**
Jae-Do Kim and Jin-Wook Kweon, *Inha University, Korea*
- MoPO13 **Blank**
- MoPO14 **Femtosecond Laser Processing of Silicon for High Aspect Ratio Holes and the Formation of Nano-Scale Silicon Particles**
Dennis R. Alexander, Brian W. Mihulka, Qi Peng, *Center for Electro-Optics, University of Nebraska-Lincoln, USA*
- MoPO15 **Comparison of Morphology Evolution of Ge(001) Homoepitaxial Films Grown by Pulsed Laser Deposition and Molecular Beam Epitaxy**
Byungha Shin, John P. Leonard, James W. McCamy, and Michael J. Aziz, *Division of Engineering and Applied Sciences, Harvard University, USA*
- MoPO16 **Nitridation of Titanium Surface by the Irradiation of YAG Laser Pulses in N₂/O₂ Gas Mixture and Liquid Nitrogen**
N. Takada, H. Ushida, and K. Sasaki, *Department of Electrical Engineering and Computer Science, Nagoya University, Japan*
- MoPO17 **Generation of Nanoparticles in Laser Ablation: Combined MD - DSMC Computational Study**
Tatiana E. Itina¹, Leonid V. Zhigilev², ¹*Laboratoire Lasers, Plasmas et Procédés Photoniques, Pôle Scientifique et Technologique de Luminy, France,* ²*Department of Materials Science & Engineering, University of Virginia, USA*
- MoPO18 **Surface Processing of Graphite-Like Hexagonal Boron Nitride Under Picosecond Uv Laser Irradiation**
A. Kanaev¹, L. Museur¹, J.-P. Petit¹, V. Marine², V. L. Solozhenko³, D. Anglos⁴
¹*Laboratoire d'Ingénierie des Matériaux et des Hautes Pressions - LIMHP CNRS, Institut Galilée, Université Paris Nord, France,* ²*Institut de Recherche sur les Phénomènes Hors Equilibre - IRPHE CNRS, Universités Aix-Marseille I et II, France,* ³*Laboratoire des Propriétés Mécaniques et Thermodynamiques des Matériaux - LPMTM CNRS, Institut Galilée, Université Paris Nord, France,* ⁴*Laser & Applications Division, Institute of Electronic Structure & Laser (I.E.S.L.), Foundation for Research and Technology - Hellas (F.O.R.T.H.), Greece*
- MoPO19 **Effects of Excimer Laser Annealing on Perovskite Thin Film Structure and Gas-Sensor Properties**
Xiaomei Du¹, Jan J. Dubowski², Jim Tunney¹ and Mike Post¹, ¹*National Research Council of Canada, Canada,* ²*Université de Sherbrooke, Canada*
- MoPO20 **Laser Ablation of Nanoscale Materials with 193 nm Light**
Jong Hyun Choi¹, Donald Lucas², Catherine P. Koshland³, and Robert F. Sawyer¹,
¹*Mechanical Engineering Department, University of California, USA,* ²*Environmental Energy Technologies Division, Lawrence Berkeley National Laboratory, USA,* ³*School of Public Health, University of California, USA*

- MoPO21 **Reaction Between Laser Ablation Plume and Ambient Studied by Laser-Induced Fluorescence Imaging Spectroscopy**
K. Sasaki and H. Watarai, *Department of Electrical Engineering and Computer Science, Japan*
- MoPO22 **Visualization of the Temporal Variation of C2 Temperature in Laser Ablation Plumes Produced From a Graphite Target**
K. Sasaki and S. Aoki, *Department of Electrical Engineering and Computer Science, Nagoya University Japan*
- MoPO23 **Nanoscale Patterning by Pulsed Laser Irradiation in Near Field**
M.H. Hong¹, Xie Q¹, B. Lukyanchuk¹, L.P. Shi¹ T. C. Chong¹, Lin Yin², G.X. Chen² and L.S. Tan², ¹*Data Storage Institute, Singapore and Department of Electrical and Computer Engineering, National University of Singapore, Singapore,* ²*Department of Electrical and Computer Engineering, National University of Singapore, Singapore*
- MoPO24 **Thermoelastic Modeling of Microbump and Nanojet Formation on Gold Nanosize Films Under Femtosecond Laser Irradiation**
Nadezhda M. Bulgakova¹ and Yuri P. Meshcheryakov², ¹*Institute of Thermophysics SB RAS, Russia,* ²*Design and Technology Branch of Lavrentyev Institute of Hydrodynamics SB RAS, Russia*
- MoPO25 **A Molecular Dynamics Study of Non-equilibrium Processes under Ultrafast Laser Irradiation**
Arun K.Upadhyay and Herbert M. Urbassek, *Fachbereich Physik, Universität Kaiserslautern, Erwin-Schrödinger-Straße, Germany*
- MoPO26 **Multi-photon Effects in Nanomachining of SiC by a Nanosecond Pulsed Laser**
 Arvind Battula, Senthil Theppakuttai, and Shaochen Chen, *Department of Mechanical Engineering, The University of Texas at Austin, USA*
- MoPO27 **Crystallized Hydroxyapatite Coatings Deposited by PLD With Targets of Different Densities**
Masahito Katto¹, Kenzo Ishibashi¹, Kou Kurosawa¹, Atushi Yokotani¹, Shoichi Kubodera¹, Akihiro Kameyama¹, Takeshi Higashiguchi¹, Takeyoshi Nakayama², Hirotaka Katayama², Masahiro Tsukamoto³ and Nobuyuki Abe³, ¹*Univ. of Miyazaki, Japan,* ²*Kinki Univ., Japan,* ³*Joining and Welding Research Institute, Osaka Univ., Japan*
- MoPO28 **Laser Ablation and Depth Control**
Michael Kuhl, *Dipl. Phys., LASERTEC GmbH Pfronten, Germany*
- MoPO29 **Laser Ablation-Inductively Coupled Plasma Mass Spectrometry – The Influence of Particle Formation on Quantitative Analysis**
D. Günther¹, H.-R. Kuhn¹, B. Hattendorf¹, Z. Wang¹, J. Koch², ¹*Swiss Federal Institute of Technology, Switzerland,* ²*ISAS - Institute for Analytical Sciences, Germany*
- MoPO30 **Explosive Crystallization From A Long Pulse Excimer Laser : Application To The Formation Of Highly Doped Junction Formation Of Cmos Devices**
J. Venturini, M. Hernandez, K. Huet, *SOPRA 26, France*

- MoPO31 **Organic Active Layers for Chemical Sensors Prepared by MAPLD**
Vladimír Myslík^a, Rudolf Fryček^a, Martin Vrnata^b, Filip Vysloužil^b, Přemysl Fitl^a,
Miroslav Jelínek^c, ^a*Institute of Chemical Technology*, ^a*Department of Solid-State
Engineering*, ^b*Department of Physics, Czech Republic*, ^c*Institute of Physics, Academy
of Sciences of the Czech Republic, Czech Republic*
- MoPO32 **Micromachining of Silicon Carbide Using Femtosecond Lasers**
M. Farsari¹, G. Filippidis¹, C. Fotakis¹, S. Zoppel, G. A. Reider², ¹*Institute of
Electronic Structure and Laser, Foundation for Research and Technology – Hellas,
Greece*, ²*Vienna University of Technology, Photonics Institute, Austria*
- MoPO33 **One-Dimensional Numerical Simulation of Laser-Driven Flyer Plates**
Zhuowei GU, Chengwei SUN, *Institute of Fluid Physics, Chinese Academy of
Engineering Physics, China*
- MoPO34 **Laser Ablative Micromachining of Monolithic, Metal, High-Current Cathodes**
R.M. Gilgenbach, N. Jordan, M.C. Jones, V.B. Neculaes, W. White, B.W. Hoff, Y.Y.
Lau, *Intense Energy Beam Interaction Laboratory, Nuclear Eng. & Radiological
Sciences Dept., University of Michigan, USA*
- MoPO35 **Laser Ablation of Metal and Plume Expansion into 1 atm Ambient Gas: A Two-
Dimensional Two-Temperature Model**
Zhaoyang Chen and Annemie Bogaerts, *Department of Chemistry, University of
Antwerp, Belgium*
- MoPO36 **Excimer Laser Ablation Method for Synthesis of Carbon Nanotubes**
Mitsuhiro Kusaba and Yoshiaki Tsunawaki, *Department of Electrical Engineering and
Electronics, Osaka Sangyo University, Japan*
- MoPO37 **Blank**
- MoPO38 **Evaluation and Control of the Uniformity of Drug Nanoparticles Directly
Deposited on the Particulate Surfaces of Excipient By PLD**
Sanshiro Nagare¹, Jo Sagawa², and Mamoru Senna², ¹*Nara Machinery Co., Ltd.,
Japan*, ²*Faculty of Science and Technology, Keio University, Japan*
- MoPO39 **Development and Evaluation of Hierarchical Units in the Deposited Protein Films
by IR Laser**
S. Nakayama^{1,2}, S. Nagare² and M. Senna³, ¹*Technofarm Axesz Co., Ltd., Japan*, ²*Nara
Machinery Co., Ltd., Japan*, ³*Faculty of Science and Technology, Keio University,
Japan*
- MoPO40 **Elimination of Large Particulate Units from Silk Fibroin PLD Films by Post-
Treatments**
S. Nakayama^{1,3}, T. Sato², S. Nagare³ and M. Senna², ¹*Technofarm Axesz Co., Ltd.,
Japan*, ²*Faculty of Science and Technology, Keio University, Japan*, ³*Nara Machinery
Co., Ltd., Japan*
- MoPO41 **Laser-Generated Microshells and Nanojets on Metal Surfaces**
Jürgen Koch¹, Elena Fadeeva¹, and Boris N. Chichkov¹, Dmitriy S. Ivanov², Alexey
Volkov², and Leonid V. Zhigilei², ¹*Laser Zentrum Hannover e.V., Germany*,
²*Department of Materials Science and Engineering, University of Virginia, USA*

- MoPO42 **Blank**
- MoPO43 **Blank**
- MoPO44 **Molecular Dynamics Simulation of Ultra-fast Laser Ablation of Fused Silica**
Changrui Cheng, Xianfan Xu, *School of Mechanical Engineering, Purdue University, USA*
- MoPO45 **Incubation Behaviour in Triazenepolymer Thin Films Upon Near-Infrared Femtosecond Laser Pulse Irradiation**
J. Bonse¹, S.M. Wiggins¹, J. Solis¹, H. Sturm², L. Urech³, A. Wokaun³, and T. Lippert³,
¹*Instituto de Optica, C.S.I.C., Spain*, ²*Bundesanstalt für Materialforschung und -prüfung (BAM), Germany*, ³*Paul-Scherrer-Institut (PSI), Switzerland*
- MoPO46 **High Repetition Rate and Low Energy Femtosecond Laser Ablation Coupled to ICPMS Detection: A New Analytical Approach for Trace Elements Determination in Solid Sample**
Christophe Pécheyran¹, Suzanne Cany¹, Olivier. F. X. Donard¹, Patrick Chabassier², Eric Mottay³, ¹*Laboratoire de Chimie Analytique Bio Inorganique et Environnement France*, ²*Novalase, Parc Technologique UNITEC 1, France*, ³*Amplitude Systèmes Domaine du Haut Carré, Parc Scientifique Unitec 2, France*
- MoPO47 **Laser Ablation as an Enabling Technology for the Structuring of Optical Multilayer Structures**
Nina Hendrickx, Geert Van Steenberge, Peter Geerinck, and Peter Van Daele, *TFCG Microsystems – Dept. of Information Technology, Belgium*
- MoPO48 **Pulsed Laser Deposition of Iron-Doped and Free-Standing Thin Films of Ferromagnetic Shape-Memory Ni-Mn-Ga Alloys**
Antti Hakola, Oleg Heczko, Ville Kekkonen, and Timo Kajava
Helsinki University of Technology, Department of Engineering Physics and Mathematics, Finland
- MoPO49 **Nano-Spallation from Silica Film Surfaces by Acoustic Wave Emitted by Laser-Heated Artificial Nano-Inclusions**
Susan D. Allen¹, Sergey I. Kudryashov¹, Semyon Papernov² and A.W. Schmid¹,
¹*Arkansas State University, State University, USA*, ²*Laboratory for Laser Energetics, University of Rochester, USA*
- MoPO50 **Photoacoustic Monitoring of Linear and Non-Linear Thermal Laser-Particle and Laser-Cell Interactions at Single Microparticle/Cell Level**
Vladimir P. Zharov¹, Ekaterina Galanzha¹, Elena Galitovskaya¹, Susan D. Allen², and Sergey I. Kudryashov², ¹*Philips Classic Laser Laboratories, University of Arkansas for Medical Sciences, USA*, ²*Arkansas State University, State University, USA*
- MoPO51 **Molecular Dynamics Simulations of Matrix-Assisted Laser Evaporation (MAPLE) for Deposition of Nanocomposites**
Elodie Leveugle, Leonid V. Zhigilei, Aaron Sellinger, and James M. Fitz-Gerald,
Department of Materials Science and Engineering, University of Virginia, USA

- MoPO52 **Preparation of Superhard Tetrahedral Amorphous Carbon Films with Low Internal Stress by means of Excimer Laser Ablation and Annealing**
Steffen Weissmantel, Guenter Reisse, Dirk Rost, *Hochschule Mittweida, University of Applied Sciences, Germany*
- MoPO53 **Microstructuring of Silicon, Glasses and Metals Using Femtosecond Laser Ablation**
Guenter Reisse, Steffen Weissmantel, Udo Loeschner, Florian Wange, Andy Engel, *Hochschule Mittweida, University of Applied Sciences, Germany*
- MoPO54 **Free Electron or Excimer Laser Direct Write of Polylactic Acid Containing Fluorescence Agent Onto a Pearl for Marking**
Kaoru SUZUKI, *Department of Electrical Engineering, College of Science and Technology, Nihon University, Japan*
- MoPO55 **(LaO)CuS and ZnO Films Deposition by Plasma-Assisted Laser Ablation Method**
Yohei Shimizu¹, Kouichi Takase², and Kaoru Suzuki³, ¹*Graduate School of Collage of Science and Technology, Nihon University*, ²*Department of Physics*, ³*Department of Electrical Engineering, Collage of Science and Technology, Nihon University Japan*
- MoPO56 **Blank**
- MoPO57 **Blank**
- MoPO58 **Blank**
- MoPO59 **Ultrafast Laser Assisted Field Evaporation and Atom Probe Tomography Applications**
Baptiste Gault¹, François Vurpillot¹, Alain Bostel¹, Bernard Deconihout¹, Antoine Courjaud² and Eric Mottay², ¹*Groupe de Physique des Matériaux, France*, ²*Amplitude Systemes, France*
- MoPO60 **A New Approach to Laser Material Processing: Synchronous, Digitally-Scripted Genotype Sequencing and Pockels Cell Modulation**
Frank E. Livingston and Henry Helvajian, *Micro/Nano Technology Department, Space Materials Laboratory, The Aerospace Corporation, USA*
- MoPO61 **Electrochromic WO₃ Fabricated by Laser Assisted Molecular Beam Deposition**
Robert L. DeLeon¹, Nehal S. Chokshi¹, and P. Ashrit², ¹*AMBP Tech Corporation, USA*, ²*Universite de Moncton, NB*
- MoPO62 **A High-Power Laser Ablation Ion Source for Penning Trap Studies of Nuclear Reaction Products**
D.A. Davies, G. Bollen, P.A. Lofy, J. Ottarson, and D.J. Morrissey, *NSCL, Michigan State University, USA*
- MoPO63 **Investigations of Particles Generated by 266-nm Laser Ablation During the Surface Decontamination**
Doh-Won Lee¹, Meng-Dawn Cheng², ¹*Oak Ridge Institute for Science and Education, USA*, ²*Oak Ridge National Laboratory, USA*

- MoPO64 **Aggregation Mechanism of Si Nanocrystals During Pulsed Laser Ablation in Background Gas**
Ikurou Umezu, Mitsuru Inada, Toshiharu Makino, Kimihisa Matsumoto and Akira Sugimura, *Konan University, Department of Physics, Japan, Konan University, High Technology Research Center, Japan*
- MoPO65 **Pulsed Laser Epitaxy of p-type ZnO Realizing Light Emitting Diode**
Masashi Kawasaki^{1,2}, ¹*Institute for Materials Research (IMR), Tohoku University,* ²*Combinatorial Materials Exploration and Technology (COMET), National Institute for Materials Science (NIMS), Japan*
- MoPO66 **Large- and Small-Area Metal Films Produced by Pulsed Laser Deposition**
Nini Pryds¹, Jørgen Schou² and Søren Linderoth¹, ¹*Department of Materials Research,* ²*Department of Optics and Plasma Research, Risø National Laboratory, Denmark*
- MoPO67 **Laser Processing of Polyethylene Glycol and Mussel Adhesive Protein Analogs by Matrix Assisted Pulsed Laser Evaporation Technique**
R. Cristescu¹, I.N. Mihailescu¹, A. Doraiswamy², T. Patz², N. Menegazzo², R. Narayan², B. Mizaikoff², P.P. Messersmith³, J.J. Wilker⁴, I. Stamatin⁵, T. Kocourek⁶ M. Jelinek⁶ and, D.B. Chrisey⁷, ¹*National Institute for Lasers, Plasma and Radiation Physics, Romania,* ²*Georgia Institute of Technology, USA,* ³*Northwestern University, USA,* ⁴*Purdue University, USA,* ⁵*University of Bucharest, Faculty of Physics, Romania,* ⁶*Institute of Physics, Academy of Sciences of the Czech Republic, Czech Republic,* ⁷*US Naval Research Laboratory, USA*
- MoPO68 **Excimer Laser Nanostructuring of Thin Metal Films**
Simon J Henley, J. D. Carey, S. R. P. Silva, *Nano-Electronics Centre, Advanced Technology Institute, University of Surrey, UK*
- MoPO69 **Doping of Silicon by Carbon during Laser Ablation Process**
Gediminas Račiukaitis¹, Marijus Brikas¹, Vida Kazlauskienė² and Juozas Miškinis², ¹*The Laboratory for Applied Research, Institute of Physics, Lithuania,* ²*The Institute for Material Science and Applied Research, Vilnius University, Lithuania*
- MoPO70 **Growth of GaAs “Nano Ice Cream Cones” by Dual Wavelength Pulsed Laser Ablation**
C T Schamp¹, W A Jesser¹ and B S Shivaram², ¹*University of Virginia, Department of Materials Science and Engineering, USA,* ²*University of Virginia, Department of Physics, USA*
- MoPO71 **Localized Synthesis of Single-Walled Carbon Nanotubes on Silicon Substrate by Laser Heating Catalytic CVD**
Masamichi Kohno¹, Shohei Chiashi², Yasuyuki Takata¹ and Shigeo Maruyama² ¹*Department of Mechanical Engineering Science, Kyushu University, Japan,* ²*Department of Mechanical Engineering, The University of Tokyo, Japan*
- MoPO72 **Laser Micro Fabrication and Drilling of Opaque Materials Using a Bessel Beam**
Shinji Kawauchi¹, Yasuyuki Takata¹, Takashi Inoue², Yoshihiko Matsuoka², Masamichi Kohno¹, ¹*Department of Mechanical Engineering Science, Kyushu University, Japan,* ²*Advanced Manufacturing Research Institute, National Institute of Advanced Industrial Science and Technology (AIST) Japan*

- MoPO73 **Si-Ka Radiation Generated by the Interaction of Femtosecond Laser Radiation with Silicon**
A. Horn¹, R. Ritschel¹, C. Kaiser², T. Mans¹, P. Russbüdt², E.W. Kreutz¹, H. D. Hoffmann², and R. Poprawe^{1,2}, ¹*Lehrstuhl für Lasertechnik, Germany*, ²*Fraunhofer Institut für Lasertechnik, Germany*
- MoPO74 **Debris Analyses in the Femtosecond Laser Ablation of Titanium**
Hitoshi Nakano¹, Yasuyuki Takahashi¹, Tsukamoto², Takashi Kayahara², and Nobuyuki Abe², and Masayuki Fujita^{3,1} *School of Science and Engineering, KinKI University, Masahiro* ²*Joining and Welding Research Institute, Osaka University, Japan*, ³*Institute for Laser Technology, Japan*
- MoPO75 **Numerical Modeling of Pulsed Laser Ablation of Carbon Particles in an Aerosol**
G.A. Lukyanov¹, S.V. Kozyrev¹, D.V. Leshchev¹, N.Yu. Bykov¹ O.I. Vakulova¹, A.N. Volkov², and Y. Khang³, ¹*Center for Advanced Studies, Saint-Petersburg State Polytechnical University, Russia*, ²*Department of Materials Science and Engineering, University of Virginia, USA*, ³*Samsung Advanced Institute of Technology, Korea*
- MoPO76 **On the Mechanism of Ultra Short Laser Ablation of Biological Tissue: Velocity-Distribution and Pulse Width Dependence of Neutrals**
Wolfgang Husinsky and Hatem Dachraoui, *Institut für Allgemeine Physik, Vienna University of Technology, Austria*
- MoPO77 **Study of the Ablation Mechanisms of ZnO at Laser Wavelengths of 266 and 308 nm**
María Jadraque¹, Margarita Martín¹, Santiago Sánchez-Cortés² and Concha Domingo², ¹*Instituto de Química Física "Rocasolano", Spain*, ²*Instituto de Estructura de la Materia, Spain*
- MoPO78 **Excimer Laser-Induced Material Modification to Create Nanometer High Smooth Patterns in Glass Using Mask Projection**
T. Rudolph, R. Böhme, D. Ruthe, and K. Zimmer, *Leibniz-Institute for Surface Modification, Germany*
- MoPO79 **Backside Etching of Fused Silica with Ultra-Short Laser Pulses at the Interface to Absorbing Liquid**
R. Böhme¹, M. Ehrhardt¹, T. Rudolph¹, D. Ruthe¹, K. Zimmer¹, and S. Pissadakis², ¹*Leibniz-Institute for Surface Modification, Germany*, ²*Institute of Electronic Structure and Laser, Foundation for Research and Technology – Hellas, Greece*
- MoPO80 **Study of Si/SiO₂ Nanoparticles Produced by Laser Ablation**
Constantin Grigoriu¹ Ionut Nicolae¹, Keichi Muray², Kouji Suwa², Makoo Hirai², Hisayuki Suematsu², Gabriel Prodan³, and Victor Ciupina³, ¹*National Institute for Laser, Plasma and Radiation Physics, Romania*, ²*Nagaoka University of Technology, Japan*, ³*"Ovidius" University, Romania*
- MoPO81 **Laser Induced Nanobump Array on Magnetic Glass Disk for Low Slider Flying Height Application**
W.J. Wang, G.H. Lim, W.D. Song, K.D. Ye, J. Zhou, M.H. Hong, W. Mroz, *presenting, Data Storage Institute, Singapore*

- MoPO82 **Analysis of Laser-Induced Hydrodynamic Phenomena in the Laser Shock Cleaning Process**
Bukuk Oh, Deoksuk Jang, Dongsik Kim, *Department of Mechanical Engineering, POSTECH, Korea*
- MoPO83 **Laser Ablation of Silver in Aqueous Ambient: Effect of Laser Pulse Wavelength and Energy on Efficiency of the Process**
Petr Šmejkal¹, Blanka Vlčková¹, and Jiří Pflieger², ¹*Department of Physical and Macromolecular Chemistry, Faculty of Science, Charles University in Prague, Czech Republic*, ²*Academy of Sciences of the Czech Republic, Institute of Macromolecular Chemistry, Czech Republic*
- MoPO84 **Blank**
- MoPO85 **Dynamics of Cluster Emission Under Femtosecond Laser Ablation of Silicon: Pump-Probe Measurements and Theoretical Analysis**
A.V. Bulgakov¹, N.M. Bulgakova¹, I. Ozerov², and W. Marine², ¹*Institute of Thermophysics SB RAS, Russia*, ²*Université de la Méditerranée, Faculté des Sciences de Luminy, France*
- MoPO86 **Novel Approach for Synthesis of Photoluminescent Silicon and Germanium Nanoparticles by Laser Ablation**
Daria Riabinina, Federico Rosei, Mohamed Chaker, *INRS Energie, Matériaux et Télécommunications, Université du Québec, Canada*
- MoPO87 **Laser Induced Modification and Ordering of Silver Nanoparticles**
E. Haro-Poniatowski¹, E. Fort², J. P. Lacharme², and C. Ricolleau², ¹*Departamento de Física, Universidad Autónoma Metropolitana, México*, ²*Matériaux et Phénomènes Quantiques and Laboratoire de Physique du Solide, France*
- MoPO88 **Effect of Molecular Weight on UV Laser Ablation of Doped Polymers: Physicochemical Modifications and Properties of Ejecta**
E. Rebollar¹, M. Oujja¹, M. Castillejo¹, G. Bounos², and S. Georgiou²
¹*Institute of Physical Chemistry Rocasolano, Spain* ²*Foundation for Research and Technology-Hellas, Institute of Electronic Structure and Laser, Greece*
- MoPO89 **High Power Picosecond Mid-IR Source for Polymer Ablation**
Barry Luther-Davies, Malte During, Vesselin Kolev, Andrei Rode, Khu Tri Vu, Peter Smythe, *Laser Physics Centre, Research School of Physical Sciences and Engineering, The Australian National University, Australia*
- MoPO90 **Laser Ablation of Ag in Water: Shift and Broadening of Emission Line Profile of Ablated Ag Atoms**
Satoru Masai, Koichi Hirata, Tetuo Sakka and Yukio H. Ogata, *Institute of Advanced Energy, Kyoto University, Japan*
- MoPO91 **Effect of Citrate Ions on Laser Ablation of Ag Foil in Aqueous Medium**
Karolina Siskova¹, Blanka Vlckova¹, Pierre-Yves Turpin², Claire Fayet³, ¹*Charles University Prague, CR*, ²*BioMoCeTi – Université P. et M. Currie Paris VI, France*, ³*Service de Microscopie Electronique de l'IFR M 83 de Biologie Intégrative – CNRS – France*

- MoPO92 **Micro Patterning of Fused Silica by ArF- and F₂-Laser Ablation**
Jürgen Ihlemann, Malte Schulz-Ruhtenberg, Thomas Fricke-Begemann, *Laser-Laboratorium Göttingen, Germany*
- MoPO93 **Apparent Excitation Temperature in Laser-Induced Plasmas**
José Antonio Aguilera, Carlos Aragón, *Departamento de Física, Universidad Pública de Navarra, Campus de Arrosadía, Spain*
- MoPO94 **Laser Assisted Fabrication of a Resonant Angular Rate Sensor**
Lidia Alaniz¹, Claudio Gillari¹, Domingo Valerio¹, Eduardo Gasulla¹, Jorge Gimenez¹, Héctor Lacomí¹, EladioRodríguez¹, Ramon Anzaldi¹ Cristian Arrieta¹ and Paula Martín², Gastón Corti² and Stella Duhalde², ¹CITEFA, Argentina, ²Facultad de Ingeniería, Universidad de Buenos Aires, Argentina
- MoPO95 **Low Temperature Growth of Epitaxial PZT/LSMO/LAO Film by Excimer Laser Metal Organic Deposition**
T. Tsuchiya, K. Daoudi, I. Yamaguchi, T. Manabe, T. Kumagai and S. Mizuta, *National Institute of Advanced Industrial Science and Technology, Japan*
- MoPO96 **Preparation and Characterization of Epitaxial SnO₂ Thin Films by Excimer Laser Metal Organic Deposition**
T. Tsuchiya, A. Watanabe, T. Kumagai and S. Mizuta, *National Institute of Advanced Industrial Science and Technology, Japan*
- MoPO97 **Photoacoustic Study of Laser-Induced Dethorning of Nopal Cladodes**
M. Arronte, E. Ortega, L. Ponce, T. Flores, *Lab. Tec. Láser, CICATA-IPN, Unidad Altamira, México*
- MoPO98 **Emission Spectroscopy Analysis During Nopal Cladodes Dethorning by Laser Ablation**
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