



European Materials Research Society

# Spring Meeting 2022

May 30 | June 3  
Virtual Conference

## SYMPOSIUM Q

Fundamental and applicative research  
in laser-material interactions

Symposium Organizers :

Alexandra PALLA-PAPAVLU, National Institute for Lasers, Plasma, and Radiation  
Physics

Anne-Patricia ALLONCLE, Centre National de la Recherche Scientifique LP3 -  
CNRS

Evgeny GUREVICH, University of Applied Science Munster

Maria KANDYLA, National Hellenic Research Foundation

Selected papers will be published in Applied Phys. A (Springer).



Monday may 30

08:45	<b>Welcome and Introduction to the Symposium</b>		11:30	<b>MAPLE deposited organic thin films based on P3HT and PC70BM on nanopatterned substrate</b>	Q II.3
	<b>Pulsed laser deposition and ablation-based growth of materials : Palla-Papavlu Alexandra</b>			M. Socol1, N. Preda1, C. Breazu1, G. Petre1, A. Stanculescu1, A. Stochioiu2, G. Socol2, S. Iftimie3 C. Thanner4, O. Rasoga1 1National Institute of Material Physics, 405A Atomistilor Street, 077125, Magurele, Romania 2National Institute for Lasers, Plasma and Radiation Physics, 409 Atomistilor Street, 077125, Magurele, Romania 3University of Bucharest, Faculty of Physics, 405 Atomistilor Street, P.O. Box MG-11, Magurele, 077125 Romania 4EVGroup., DI Erich Thallner Strasse 1, 4782 St. Florian am Inn, Austria	
09:00	<b>Thin Films prepared by PLD: model systems for studies using large facilities techniques</b>	Q I.1	11:45	<b>Flexible bulk heterojunction with non-fullerene acceptor deposited by MAPLE</b>	Q II.5
	Thomas Lippert 1- Division for Research with Neutrons and Muons, Paul Scherrer Institute, 5232 Villigen, Switzerland 2- International Institute for Carbon-Neutral Energy Research (WPI-I2CNER), Kyushu University, Fukuoka 819-0395, Japan 3- Laboratory of Inorganic Chemistry, Department of Chemistry and Applied Biosciences, ETH Zurich, 8093 Zurich, Switzerland			A. Stanculescu(1), M. Socol(1), C. Breazu(1), O. Rasoga(1), G. Petre(1,5), G. Socol(2), G. Popescvu-Pelin(2), N. Preda(1), L. Vacareanu(3), M. Girtan(4), F. Stanculescu(5) (1) National Institute of Materials Physics, 105 bis Atomistilor Street, P.O. Box MG-7, Bucharest-Magurele, 077125 Romania, sanca@infim.ro, (2)National Institute for Laser, Plasma and Radiation Physics, Str. Atomistilor, Nr. 409, PO Box MG-36, Magurele, Bucharest, 077125, Romania, (3) P. Poni Institute of Macromolecular Chemistry, 41 A Gr. Ghica Voda Alley, 700487-Iasi, Romania, (4)University of Angers, Photonics Laboratory, University 2, Bd. Lavoisier 49045, Angers, France, (5) University of Bucharest, Faculty of Physics, 405 Atomistilor Street, P.O. Box MG-11, Bucharest-Magurele, 077125 Romania	
09:30	<b>PLD of ferroelectric HfO2 thin films</b>	Q I.2	12:00	<b>Laser synthesis of MoS2/SWCNT composites</b>	Q II.6
	I.A. Bercea1, M. L. Ciurea2, A.M. Lepadatu2, M. Dragoman3, M. Filipescu1, V. Ion1, A. Moldovan1, V.A. Maraloiu2, V.S. Teodorescu2, Maria Dinescu1* 1 National Institute for Laser, Plasma and Radiation Physics, Atomistilor 409, 77125 Magurele, Romania 2National Institute of Material Physics, Atomistilor 405 A, 77125 Magurele, Romania 3National Institute for Research and Development in Microtechnologies - IMT, Str. Erou Iancu Nicolae, Nr. 126 A, Voluntari, Ilfov, Romania			Averchenko A.V. * (1), Salimon I.A (1), Zharkova E. V. (1), Abbas O.A. (1), Lagoudakis P. G. (1), Gladush Y. (1), Mkrtchyan A. A. (1), Nasibulin A. G. (1), and Mailis S. (1). (1) Skolkovo Institute of Science and Technology, Moscow, 121205, Russian Federation	
09:45	<b>Langmuir Probe as Deposition Sensor for Pulsed Laser Deposition: Implementation for copper halide systems</b>	Q I.3	12:15	<b>Generation of nanoparticles using a laser treatment of thin films</b>	Q II.7
	Stefan Andrei Irimiciuc(1,2), Sergii Chertopalov(2), Michal Novotný(2), Maricel Agop(3), Valentin Craciun(1,4), Jan Lancok(2) 1National Institute for Laser, Plasma and Radiation Physics – NILPRP, 409 Atomistilor Street, Bucharest, Romania 2Institute of Physics of the Czech Academy of Sciences, Na Slovance 1999/2, Prague, Czech Republic 3Department of Physics, “Gh. Asachi” Technical University of Iasi, 700050 Iasi, Romania 4Extreme Light Infrastructure for Nuclear Physics, IFIN-HH, Magurele, Romania			Stankevicius, E* (1), Petrikaitė, V. (1), Trusovas R. (1), Adomavičiūtė-Grabusovė, S (2), Šablinskas, V. (2), Zdaniauskiene, A. (1), Talaikis, M. (1), Mikoliūnaitė, L. (1), Selskis, A. (1), Niaura, G. (1,2) (1) Center for Physical Sciences and Technology (FTMC), Lithuania, (2) Institute of Chemical Physics, Faculty of Physics, Vilnius University, Lithuania, * lead presenter	
10:00	<b>Study of the bioactivity of glass/polymer biphasic scaffolds obtained by conjugating electrospinning and PLD techniques</b>	Q I.4	12:30	<b>Q&amp;A</b>	
	Curcio, M. *(1), De Bonis, A.(1), Pepe, A.(1), Bochicchio, B.(1), Laezza, A.(1), Teghil, R.(1), Santagata, A. (2), Rau, J.V.(3). (1) Dipartimento di Scienze, Università della Basilicata, V.le dell'Ateneo Lucano 10, 85100 Potenza, Italy (2) ISM-CNR, UOS Tito Scalo, Zona Industriale, 85050 Tito Scalo (PZ), Italy (3) ISM-CNR, Via del Fosso del Cavaliere, 100-00133 Rome, Italy * lead presenter		12:45	<b>Lunch</b>	
10:15	<b>Effect of surface characteristics of activated PbS-NPs/TiO2-NTs on the adsorption of Butane-2, 3-dione from indoor air</b>	Q I.5		<b>Nanoparticle Generation and Applications : Patricia Alloncle</b>	
	Anouar Hajjaji1*, Safa Jemai1, Mabrouk Laabidi1, Khaled Trabelsi1, Mounir Gaidi4, Aymen Amine Assadi3, Brahim Bessais1, and My Ali ElKhakani2 1 Laboratoire de Photovoltaïque, Centre de Recherches et des Technologies de l'Energie, Technopôle de Borj-Cédria, BP 95 Hammam-Lif, 2050 Tunis, Tunisie 2Centre Énergie Matériaux et Télécommunications (INRS-EMT), Institut National de la Recherche Scientifique (INRS), 1650 Boulevard Lionel Boulet, Varennes, QC J3X 1S2, Canada 3 Univ Rennes, ENSCR, ISCR (Institut des Sciences Chimiques de Rennes), UMR 6226, F-35000, Rennes, France 4Center of Advanced Research Materials, Research Institute of Sciences and Engineering, University of Sharjah, Sharjah P.O. Box 27272, United Arab Emirates		14:00	<b>Ferroelectric polymer/metal nanocomposites by laser ablation in liquids</b>	Q III.1
10:30	<b>Q&amp;A</b>			Daniel E. Martínez-Tong1, Adriano J. Garcia-Martin2, Tiberio A. Ezquerro3, Aurora Nogales3, Esther Rebollar2 Materials Physics Center (MPC), P. Manuel de Lardizábal 5, 20018 Donostia, Spain, Instituto de Química Física Rocasolano (IQFR-CSIC), Serrano 119, 28006 Madrid, Spain, Instituto de Estructura de la Materia (IEM-CSIC), Serrano 121, 28006 Madrid, Spain	
10:45	<b>Coffee</b>		14:30	<b>Application of matrix-assisted pulsed laser evaporation for the realization of superhydrophobic polymer surfaces</b>	Q III.2
	<b>MAPLE, Nanoparticle Generation and Applications : Evgeny Gurevich</b>			S. Brajnicov, A. Palla-Papavlu, M. Filipescu, V. Satulu, T. Tozar, M. Dinescu National Institute for Lasers, Plasma, and Radiation Physics, Atomistilor St. 409, Magurele, ZIP 077125, Romania	
11:00	<b>Sensors processed by MAPLE technique for contaminants detection</b>	Q II.1	14:45	<b>Palladium-based theranostic nanoplatfoms for antitumor applications</b>	Q III.3
	C. Craciun1,2, F. Andrei1,3, A. Bonciu1,2, S. Brajnicov1, M. Filipescu1, A. Palla Papavlu1, M. Dinescu1 1 - National Institute for Lasers, Plasma and Radiation Physics, Magurele, Romania 2 - University of Bucharest, Faculty of Physics, RO 077125 Magurele, Romania 3 - Faculty of Chemistry, University of Bucharest, Romania			Scivoletto, G.(1), Bellissima, A.(1), Cucci, L.M.(1), Foti, A.(1), Fraix, A.(2), Petralia, S.(2), Giorgini, E.(3), Notarstefano, V.(3), Marzo, T.(4), La Mendola, D.(4), De Bonis, A.(5), Puglisi, A.(6), Reimhult, E.(6), Satriano, C.*(1). (1) Department of Chemical Sciences, University of Catania, Italy (2) Department of Drug and Health Sciences, University of Catania, Italy (3) Department of Life and Environmental Sciences, Polytechnic University of Marche, Italy (4) Department of Pharmacy, University of Pisa, Italy (5) Department of Sciences, University of Basilicata, Italy (6) Department of NanoBiotechnology BOKU - University of Natural Resources and Life Sciences, Austria	
11:15	<b>Catheters coating through Matrix-Assisted Pulsed Laser Evaporation with new-concept biocompatible graphenic materials</b>	Q II.2	15:00	<b>Hyaluronic acid coated gold nanorods for antitumoral plasmonic photothermal therapy</b>	Q III.4
	M. Alfè, G. Minopoli, V. Gargiulo, U. Caruso, G. Ausanio Istituto di Scienze e Tecnologie per l'Energia e la Mobilità Sostenibili (CNR-STEMS), 80125 Naples, Italy, Department of Molecular Medicine and Medical Biotechnology, University of Naples Federico II, Naples, Via Pansini, 5, Naples, 80131, Italy, Department of Chemical Sciences, University of Naples Federico II, via Cinthia 4, 80126, Naples, Italy, Department of Physics “E. Pancini” University of Naples Federico II, via Cinthia 4, 80126, 80126 Naples, Italy.			Foti, A.*(1), Domingo, J.(2), Serrano Olmedo, J.J.(2), Ramos, M.(2), Sanfilippo, S.(1), Satriano, C.(1). (1) Department of Chemical Sciences, University of Catania, Italy (2) Centre for Biomedical Technology, Polytechnic University of Madrid (UPM), Spain	

15:15	<b>A FRAP and FRET study of SLB platforms to probe the cell membrane interaction with neurotrophic peptides/nanomaterial hybrids</b> Redigolo, L.(1), Priolo, I.(1), Sanfilippo, V.(1), Forte, G.(2), La Mendola, D.(3), Satriano, C.*(1). (1) Department of Chemical Sciences, University of Catania, Italy (2) Department of Drug and Health Sciences, University of Catania, Italy (3) Department of Pharmacy, University of Pisa, Italy	Q III.5	16:00	<b>Kinetic theory of magnetic absorption of ultra-short laser pulses by metal nanoparticles of spheroidal form in conditions in con</b> O.Yu.Semchuk, O.O.Havryliuk, A.A.Biliuk O. O. Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine, O. O. Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine, O. O. Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine	Q XII.6
15:30	<b>Plasmonic tuning of GO-based nanosheets by Ag nanorods for self-cleaning photothermal surfaces to fight surface contamination</b> Tomaseella, P.(1), Sanfilippo, V.(1), Foti, A.(1), Fraix, A.(2), Petralia, S.*(2), Forte, G.(2), Fortuna, C.(1), Giuffrida, A.(1), Subbiahdioss, G.(3), Reimhult E.(3), Satriano C.(1). (1) Department of Chemical Sciences, University of Catania, Italy (2) Department of Drug and Health Sciences, University of Catania, Italy (3) Department of NanoBiotechnology BOKU - University of Natural Resources and Life Sciences, Austria	Q III.6	16:00	<b>Synthesis of Germanium nanoparticles by Pulsed Laser Deposition</b> F. Stock 1, F. Antoni 1, D. Bouaziz 1, R. Meyer 1, S. Roques 1 1 ICube, D-ESSP, 23 rue du Loess, 67037 Strasbourg - France	Q XII.29
15:45	<b>Q&amp;A</b>  : Patricia Alloncle, Palla-Papavlu Alexandra, Evgeny Gurevich, Maria Kandyla		16:00	<b>LIFT and laser sintering of CuO NP inks: a digital process for low-cost and highly conductive micro-patterns</b> K. Andritsos a, E. Dimitriou b, M. Makrygianni a, I. Theodorakos a, A. Kaldeli-Kerou c, F. Zacharatos a*, N. Michailidis b and I. Zergioti a. a. School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Iroon Polytechniou 9, 15780, Athens, Greece b. Physical Metallurgy Laboratory, Department of Mechanical Engineering, School of Engineering, Aristotle University of Thessaloniki, GR 54124 Thessaloniki, Greece c. PLiN Nanotechnology S.A., Spectra Business Center, 57001 Thessaloniki, Greece	Q XII.7
16:00	<b>Influence of laser radiation on the polymer nanofibers generated by electrospinning process</b> A.Groza1, M.Serbanescu1, B.Bita1, O.Stoican1, I.G.Lupu2, R. M. Zvonaru2, O.Cramariuc3, M.Ganciu3 1National Institute for Laser, Plasma and Radiation Physics, 409 Atomistilor Street, P.O. Box MG 36, Magurele, 077125 Bucharest, Romania 2Department of Textile Products Engineering and Design, Gh. Asachi Technical University Iasi, Iasi, Romania 3IT Center for Science and Technology, Bucharest, Romania	Q XII.1	16:00	<b>Chemical and structural changes at the surface of titanium materials upon irradiation with near-infrared ultrashort laser pulses</b> F. Mirabella, M. Mezera, M. Weise, M. Sahre, K. Wasmuth, A. Hertwig, J. Krüger, V.-D. Hodoroaba, J. Bonse Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany	Q XII.8
16:00	<b>Morpho-structural changes on iron oxide nanoparticles synthesized by laser pyrolysis and annealed in different environments F. Dumitrache 1, C. Fleaca 1, I. P. Morjan 1, A. Criveanu 1, I. Lungu 1, L. Gavrilă-Florescu 1, A. Tiliacos 1,2, A. Marinou 2, G. Prodan 3</b> 1. National Institute for Laser, Plasma and Radiation Physics, 409 Atomistilor Street, Măgurele, , Romania. 2. National R&D Institute for Cryogenic and Isotopic Technologies (ICSI), 4 Uzinei Street, Râmnicu Vâlcea, 240050, Romania 3. "Ovidius" University of Constanta, Constanta, Mamaia Avenue 124, Romania	Q XII.2	16:00	<b>Substitutional 10% Sn incorporation in Ge by sputter deposition and pulsed laser melting</b> Enrico Di Russo(1,2,3), Francesco Sgarbossa(1,2), Pierpaolo Ranieri(1), Samba Ndiaye(4), Sébastien Duguay(4), François Vurpillot(4), Lorenzo Rigutti(4), Jean-Luc Rouvière(5), Vittorio Morandi(3), Davide De Salvador(1,2), Enrico Napolitano(1,2,6). (1) Dipartimento di Fisica e Astronomia, Università degli Studi di Padova, Via Marzolo 8, 35131 Padova, Italy. (2)INFN-LNL, viale dell'Università 2, 35020, Legnaro, Padova, Italy. (3) CNR-IMM, Via Gobetti 101, Bologna, 40129, Italy. (4) Normandie Univ., UNIROUEN, INSA Rouen, CNRS, Groupe de Physique des Matériaux, 76000 Rouen, France. (5) Univ. Grenoble Alpes, CEA, IRIG-MEM, 38000 Grenoble, France. (6) CNR-IMM, Via S. Sofia 64, 95123 Catania, Italy.	Q XII.9
16:00	<b>Synthesis of beryllium nanoparticles via laser ablation</b> S.A.Yehia1,2, L.Carpentier1,2, F. Stokker-Cheregi1, C. Porosnicu1, V.Satulu1, C.Staicu1,2, B.Butoi1, A. Bercea1, A. Palla-Papavlu1, G.Dinescu1,2 1National Institute for Lasers, Plasma and Radiation Physics, 77125, Magurele &#8211, Bucharest, Romania 2Faculty of Physics, University of Bucharest, 77125, Magurele &#8211, Bucharest, Romania	Q XII.28	16:00	<b>Solvents influence on P(N-Isopropylacrylamide-co-butylacrylate) Coatings obtained by MAPLE</b> N. Dumitrescu1, A. Bonciu1, A. Moldovan1, V. Dinca1,2 and L. Rusen1 * 1Lasers Department, NILPRP, Magurele, Romania 2FOTOPLASMAT, NILPRP, Magurele, Romania, * laurentiu.rusen@infpr.ro	Q XII.11
16:00	<b>Tungsten oxide based nanocomposites obtained by MAPLE for sensor applications</b> M. Filipescu*, A. Palla-Papavlu, V. Ion, A. I. Radu, C. Craciun, A. Bonciu, M. Dinescu National Institute for Lasers, Plasma and Radiation Physics, 077125 Magurele, Romania	Q XII.27	16:00	<b>Spatially controlled Airy beams for glass processing</b> Paulius Slevas, Karolis Mundrys, Sergej Orlov, Orestas Ulcinas Center for Physical Sciences and Technology, Sauletekio Ave. 3, Vilnius, Lithuania, Workshop of Photonics, Mokslininku st. 6A, Vilnius, Lithuania	Q XII.12
16:00	<b>Influence of the chirp in the direct-field Electron Acceleration in a Radially Polarized Pulsed beam</b> Klemensas Laurinavičius, Sergej Orlov State research institute Center for Physical Sciences and Technology	Q XII.3	16:00	<b>In vitro evaluation of the effect of textured silicone microtopography characteristics on cells</b> V. Dinca1,2, S. Nistorescu2, M. Icriverzi3, A. Bonciu1, P. Florian3, N. Dumitrescu2, L. Rusen1, A. Roseanu3 1Lasers department, NILPRP, Magurele, Romania 2FOTOPLASMAT, NILPRP, Magurele, Romania 3 IBAR, Bucharest, Romania	Q XII.13
16:00	<b>The formation of Zn and ZnO nanoparticles under the influence of pulsed laser irradiation of the zinc oxide bulk semiconductor</b> O.V. Kuzyk 1, I.D. Stolyarchuk 1, O.O. Dan'kiv 1, R.M. Peleshchak 1 2, A. Medvids 3 1 - Drohobych Ivan Franko State Pedagogical University, Ukraine, 2 - Lviv Polytechnic National University, Ukraine, 3 - Riga Technical University, Latvia	Q XII.4	16:00	<b>Bioinstructive multifunctional interfaces for implant research</b> Valentina Dinca FOTOPLASMAT center, National Institute for Laser Plasma and Radiation Physics, Magurele, Romania e-mail: valentina.dinca@infpr.ro	Q XII.14
16:00	<b>Evaluating the time constant of p+-n and p+-i-n GaAs junctions with estimating the quantum efficiency of the junctions by photo-</b> Behnam ZeinalvandFarzin(1), DongKun Lee(2), Geun Hyeng Kim(3), Jaedu Ha(1), Jong Su Kim(1*), Yeongho Kim(4), Sang Jun Lee(4) (1) Department of Physics, Yeungnam University, Gyeongsan 38541, Republic of Korea,(2) Institute of Photonic & Nano Technology, Department of Physics, Yeungnam University, Gyeongsan 38541, Republic of Korea,(3) Department of Aero Mechanical Engineering, Kyungwoon University, Gumi 13557, Republic of Korea,(4) Division of Interdisciplinary Materials Measurement Institute, Korea Research Institute of Standards and Science, Daejeon 34113, Republic of Korea,* Corresponding author	Q XII.5	16:00	<b>Ultrahigh precision machining of polymer surface using laser-induced reactive micro-plasmas</b> Streisel, Leon(1), Ehrhardt, Martin(1,*), Lorenz, Pierre(1), Heinke, Robert(1,2), Hossain, Afaq(1), Zimmer, Klaus(1) (1) Department of ultra-precision surfaces, Leibniz Institute of Surface Engineering (IOM), Permoserstraße 15, 04318 Leipzig, Germany (2) Institute of Manufacturing Science and Engineering, Technische Universität Dresden, 01062 Dresden, Germany * corresponding author, Martin.Ehrhardt@iom-leipzig.de Lead presenter: Leon Streisel	Q XII.15

16:00	<b>Direct laser writing of photonic arrays for vapor-responsive sensing</b> Jing Qian*(1)§, Colm Delaney(2)§, Xia Zhang(1), Larisa Florea(2), A. Louise Bradley(1). (1)School of Physics and AMBER, Trinity College Dublin, College Green, Dublin 2, Ireland, (2)School of Chemistry and AMBER, the SFI Research Centre for Advanced Materials and BioEngineering Research, Trinity College Dublin, the University of Dublin, College Green, Dublin 2, Ireland.	Q XII.16	16:00	<b>High repetition rate laser-induced printing of biopolymers: time-resolved study of multiple jet dynamics</b> Lucas Duvert 1, Adrien Casanova 1, Jérôme D Robin 2, Frédérique Magdinier 2, Anne-Patricia Alloncle 1 1) Aix-Marseille University, CNRS, LP3 UMR 7341, Campus de Luminy, Case 917, 13288, Marseille cedex 9, France 2) Aix-Marseille University, INSERM, MMG, Marseille Medical Genetics, 13385 Marseille, France	Q XII.25
16:00	<b>Modulation of biofilm development in biomimetic hydroxyapatite and natural enamel by cold plasma treatment</b> Holban, A.M.*(1,2), Joia, A. (1), Zarif, M. (3), Vizireanu, S. (3), Grumezescu, A.M.(2,4), Birca, A.(4), Farcasiu, A.T. (5), Marinescu, F. (1,2), Chifiriuc, M.C. (1,2) (1)Department of Microbiology and Immunology, Faculty of Biology, University of Bucharest (2)Research Institute of the University of Bucharest, Romania (3) National Institute for Laser, Plasma and Radiation Physics, Magurele, Romania (4)Department of Science and Engineering of Oxide Materials and Nanomaterials, Faculty of Applied Chemistry and Materials Science, University Politehnica of Bucharest (5) Faculty of Dental Medicine, U.M.F. Carol Davila, Bucharest	Q XII.17	16:00	<b>Hybrid composite films based on P3HT:ITIC and ZnO deposited by MAPLE</b> M. Socol1*, N. Preda1**, A. Costas1, C. Breazu1, G. Petre1,2, A. Stanculescu1, G. Popescu-Pelin3, A. Stochioiu2,3, G. Socol3 1National Institute of Material Physics, 405A Atomistilor Street, 077125, Magurele, Romania 2University of Bucharest, Faculty of Physics, 405 Atomistilor Street, PO Box MG-11, 077125, Magurele, Romania 3National Institute for Lasers, Plasma and Radiation Physics, 409 Atomistilor Street, 077125, Magurele, Romania	Q XII.26
16:00	<b>Viscoelastic properties of stored red blood cells using single beam optical tweezers</b> T. Giannakis, M. Kandyla National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute,	Q XII.18			
16:00	<b>Effect of composition on the MAPLE prepared polymer based organic heterostructures for photovoltaic applications</b> F. Stanculescu(1), M. Socol(2), C. Breazu(2), G. Socol(3), G. Popescu-Pelin(2), O. Rasoga(2), G. Petre(2,1), N. Preda(2), A. M. Solonaru(4), M. Girtan(5), A. Stanculescu(2) (1) University of Bucharest, Faculty of Physics, 405 Atomistilor Street, P.O. Box MG-11, Bucharest-Magurele, 077125 Romania (2) National Institute of Materials Physics, 405A Atomistilor Street, P.O. Box MG-7, Bucharest-Magurele, 077125 Romania, sanca@infim.ro (3)National Institute for Laser, Plasma and Radiation Physics, Str. Atomistilor, Nr. 409, PO Box MG-36, Magurele, Bucharest, 077125, Romania (4) P. Poni Institute of Macromolecular Chemistry, 41 A Gr. Ghica Voda Alley, 700487-Iasi, Romania (5)University of Angers, Photonics Laboratory, University 2, Bd. Lavoisier 49045, Angers, France	Q XII.19			
16:00	<b>Investigation of laser-ablated Si phase elements for generation of THz Bessel beams</b> Paulius Kizevicius, Ernestas Nacius, Rusne Ivaskeviciute-Povilauskiene, Domas Jakubauskis, Linas Minkevicius, Sergej Orlov, Gintaras Valusis, Paulius Slevas State research institute Center for Physical Sciences and Technology Sauletekio ave 3, LT-10257 Vilnius, Lithuania	Q XII.20			
16:00	<b>Fabrication of ultrathin sensors via laser-forward transfer</b> A. Bercea, M. Filipescu, S. Brajnicov, A. Palla-Papavlu National Institute for Lasers, Plasma and Radiation Physics, Lasers Department, Atomistilor Street 409, Magurele, ZIP 077125, Romania	Q XII.21			
16:00	<b>ULTRASHORT LASER ABLATION OF ALUMINIUM NITRIDE AND SILICON NITRIDE CERAMICS</b> N. Nedyalkov1, Al. Daskalova1, L. Kovachev1, 1Institute of Electronics, Bulgarian Academy of Sciences, 72, Tsarigradsko Shaussee blvd, 1784, Sofia, Bulgaria	Q XII.22			
16:00	<b>Surface structuring of Si3N4 ceramic by nanosecond laser pulses</b> N. Nedyalkov1*, A. Dikovska1, Ru. Nikov1, Ro. Nikov1, G. Atanasova2, M. Koleva1, L. Aleksandrov2, M. Terakawa3 1Institute of Electronics, Bulgarian Academy of Sciences, 72, Tsarigradsko Chaussee blvd, 1784, Sofia, Bulgaria 2Institute of General and Inorganic Chemistry, Bulgarian Academy of Sciences, bld. 11, Acad. Georgi Bonchev str, 1113, Sofia, Bulgaria. 3Department of Electronics and Electrical Engineering, Keio University, 3-14-1 Hiyoshi, Kohoku-ku, Yokohama 223-8522, Japan	Q XII.23			
16:00	<b>Nanosecond laser processing of AlN and Si3N4 ceramics in water at different wavelengths</b> Ro Nikov1, N Nedyalkov1, D Karashanova2 1E. Djakov Institute of Electronics, Bulgarian Academy of Sciences, 72, Tzsarigradsko Chaussee, 1784 Sofia, Bulgaria 2Institute of Optical Materials and Technologies, Bulgarian Academy of Sciences, G. Bonchev Street, bl. 109, Sofia 1113, Bulgaria	Q XII.24			

Tuesday may 31

LIPSS I : Evgeny Gurevich

09:00	<b>INV Bio-inspired Laser Micro- and Nanopatterning of Materials</b> Johannes Heitz, Gerda Buchberger, Cristina Plamadeala, Martina Muck, Werner Baumgartner, Achim Walter Hassel, Dominik Knapic Institutes of Applied Physics, of Biomedical Mechatronics, and for Chemical Technology of Inorganic Materials, Johannes Kepler University Linz, Austria	Q IV.1
09:30	<b>LIPSS formation by picosecond laser irradiation of magnetron sputtered gadolinium-doped ceria thin films</b> W. Karim1, A. Petit1, M. Tabbal2, A.L. Thomann1 and N. Semmar1 1 GREMI-UMR 7344-CNRS-University of Orleans, 14 rue d'Issoudun, 45071 Orleans Cedex2, France 2 Department of Physics, American University of Beirut, Beirut, Lebanon 1107 2020.	Q IV.2
09:45	<b>Reducing Escherichia coli adhesion to PET by modulating spatial periods of laser-induced surface nanoripples</b> A.M. Richter (1), G. Buchberger (2), D. Stifter (3), J. Duchoslav (3), A. Hertwig (1), J. Bonse (1), J. Heitz (2), K. Schwibbert* (1) (1) Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany (2) Institute of Applied Physics, Johannes Kepler University Linz, Austria (3) Center for Surface and Nanoanalytics, Johannes Kepler University Linz, Austria * lead presenter	Q IV.4
10:00	<b>Laser Induced Periodic Surface Structures on conductive polymer films generated with nanosecond laser vector beams</b> Javier Prada-Rodrigo (1,2), Jijil JJ Nivas (3), Meilin Hu (3), Marcella Salvatore (3), Stefano Oscurato (3), Salvatore Amoroso (3), Tiberio A. Ezquerro (4), Pablo Moreno (1), Esther Rebolgar (2) 1 Grupo de Aplicaciones del Láser y Fotónica (ALF-USAL), Universidad de Salamanca, Pl. de la Merced s/n, 37008 Salamanca, Spain, 2 Instituto de Química Física Rocasolano (IQFR-CSIC), C/Serrano 119, 28006 Madrid, Spain, 3 Dipartimento di Fisica «Ettore Pancini», Università degli Studi di Napoli "Federico II" Complesso Universitario di Monte S. Angelo Via Cintia I-80126 Napoli (Italy), 4 Instituto de Estructura de la Materia, Consejo Superior de Investigaciones Científicas (IEM-CSIC), Serrano 121, 28006 Madrid, Spain	Q IV.5
10:15	<b>Laser surface structuring of intrinsic Si, in vacuum and air, with fs pulse sequences at repetition rates from 10 Hz to 200 kHz</b> M. Hu (1), J. JJ Nivas (1,2), M. Valadan (1), R. Fittipaldi (3), A. Vecchione (3), R. Bruzzese (1,2), C. Altucci (4), and S. Amoroso (1,2) (1) Dipartimento di Fisica "Ettore Pancini", Università di Napoli Federico II, Complesso Universitario di Monte S. Angelo, Via Cintia, I-80126 Napoli, Italy, (2) CNR-SPIN, UOS Napoli, Complesso Universitario di Monte S. Angelo, Via Cintia, I-80126 Napoli, Italy, (3) CNR-SPIN, UOS Salerno, Via Giovanni Paolo II 132, I-84084 Fisciano, Italy, (4) Dipartimento di Scienze mediche avanzate, Università di Napoli Federico II, Via Pansini 5, 80131 Napoli, Italy	Q IV.6
10:30	<b>Q&amp;A</b>	
10:45	<b>Coffee</b>	
11:15	<b>INV A brief survey on open questions about laser-induced periodic surface structures</b> J. Bonse (1), C. Florian (1,2), M. Mezera (1), K. Wasmuth (1), A.M. Richter (1), K. Schwibbert (1), J. Krüger (1), F.A. Müller (3), S. Gräf (3) (1) Bundesanstalt für Materialforschung und -prüfung (BAM), Berlin, Germany, (2) Princeton University, USA, (3) Friedrich-Schiller-Universität Jena, Germany	Q V.1
11:45	<b>INV Ultrafast laser fabrication of biomimetic surfaces</b> E. Stratakis Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology (FORTH), Greece	Q V.2
12:15	<b>Laser surface irradiation of a topological insulator crystal with femtosecond laser pulses</b> Jijil JJ Nivas (1,2), Meilin Hu (1), Rosalba Fittipaldi (3), Antonio Vecchione (3), Riccardo Bruzzese (1,2), and Salvatore Amoroso (1,2) (1) Dipartimento di Fisica "Ettore Pancini", Università di Napoli Federico II, Complesso Universitario di Monte S. Angelo, Via Cintia, I-80126 Napoli, Italy, (2) CNR-SPIN, UOS Napoli, Complesso Universitario di Monte S. Angelo, Via Cintia, I-80126 Napoli, Italy, (3) CNR-SPIN, UOS Salerno, Via Giovanni Paolo II 132, I-84084 Fisciano, Italy.	Q V.3
12:30	<b>Q&amp;A</b>	
12:45	<b>Lunch</b>	

13:45 **Plenary I**

14:45 **Coffee**

LIFT : Palla-Papavlu Alexandra

15:00	<b>INV Laser-induced Forward Transfer (LIFT) of silver-nanoparticle inks</b> Gert-willem Römer, Justinas Mikšys, Matthias Feinaeugle, Gari Arutinov Gert-willem Römer: Chair of Laser Processing, Department of Mechanics of Solids, Surfaces & Systems, Faculty of Engineering Technology, University of Twente, Drienerlolaan 5, 7522NB Enschede, The Netherlands, Justinas Mikšys: Chair of Laser Processing, Department of Mechanics of Solids, Surfaces & Systems, Faculty of Engineering Technology, University of Twente, Drienerlolaan 5, 7522NB Enschede, The Netherlands AND Holst Centre/TNO, High Tech Campus 31, 5656AE Eindhoven, The Netherlands Gari Arutinov: Holst Centre/TNO, High Tech Campus 31, 5656AE Eindhoven, The Netherlands	Q VI.1
15:30	<b>OPTIMIZATION OF THE LASER-INDUCED FORWARD TRANSFER PROCESS FOR THE PRINTING OF LIVING CELLS</b> A. Casanova 1, L. Duvert 1, J. D. Robin 2, F. Magdinier 2, P. Delaporte 1, A. P. Alloncle 1 1 Aix-Marseille University, CNRS, LP3 UMR 7341, Campus de Luminy, Case 917, 13288, Marseille cedex 9, France 2 Aix-Marseille University, INSERM, MMG, Marseille Medical Genetics, 13385 Marseille, France	Q VI.2
15:45	<b>Laser-induced forward transfer to deposit metallic particles on textiles</b> Matthias Domke, Sandra Stroj, Justus Landsiedel, Noemi Aguiló-Aguayo Research Center for Microtechnology, Vorarlberg University of Applied Sciences, Hochschulstr. 1, 6850 Dornbirn, Austria, Research Center for Microtechnology, Vorarlberg University of Applied Sciences, Hochschulstr. 1, 6850 Dornbirn, Austria, Research Institute of Textile Chemistry and Textile Physics, University of Innsbruck, Hoehstersstrasse 73, 6850 Dornbirn, Austria, Research Institute of Textile Chemistry and Textile Physics, University of Innsbruck, Hoehstersstrasse 73, 6850 Dornbirn, Austria,	Q VI.3
16:00	<b>Conformal laser printing and sintering of Ag nanoparticle inks for the fabrication of micro-conductive patterns K. Andritsos a, I. Theodorakos a, F. Zacharatos a, A. Kabla b, S. Melamed b, F. de la Vega b, Y. Porte c, P. Too c and I. Zergioti a a. School of Applied Mathematical and Physical Sciences, National Technical University of Athens, Iroon Polytechniou 9, 15780, Athens, Greece b. PV Nano Cell Ltd., 8 Hamasger st., P.O. Box 236 Migdal Ha'Emek, Migdal Haemek 2310102, Israel, c. FlexEnable Ltd, 34 Cambridge Science Park, Cambridge, CB4 0FX, United Kingdom</b>	Q VI.4
16:15	<b>Laser printing of alfa-fetoprotein monoclonal antibody functionalized graphene for surface acoustic wave biosensors</b> Voicu, S.I.*(1, 2), Pandelescu, A.M.(1, 2), Oprea, M.(1, 2) & Tuncel, C.(2). (1)Advanced Polymers Materials Group, Gheorghe Polizu 1-7. 011061 Bucharest, Romania (2)Faculty of Chemical Engineering and Biotechnologies, University Politehnica of Bucharest, Gheorghe Polizu 1-7. 011061 Bucharest, Romania	Q VI.5
16:30	<b>Q&amp;A</b>	

Wednesday June 1

Ultrashort laser processing : Evgeny Gurevich

09:00	<b>INV Challenges and opportunities of multi-PW laser experiments</b> Petru Ghenuche Extreme Light Infrastructure - Nuclear Physics (ELI-NP), Horia Hulubei» National Institute for Physics and Nuclear Engineering (IFIN-HH)	Q VII.1
09:30	<b>High power polymer micro-lens tolerance for surface submicron marking</b> <b>Tony Hajj 1,4 Djamilia Bouaziz1,2,4 Assia Guessoum2 Gregoire Chabrol 1,3 Nacer-E. Demagh 2 Sylvain Lecler 1,4</b> 1ICube, UMR 7357, Université de Strasbourg-CNRS, 67 412 Illkirch, France 2Laboratoire d'Optique Appliquée, IOPM, Ferhat Abbas University, 19 000 Setif, Algeria 3ECAM Strasbourg-Europe, 67 300 Schiltigheim, France 4INSA de Strasbourg, 67 000 Strasbourg, France	Q VII.2
09:45	<b>Space-selective creation of luminescence in a new organic material: femtosecond laser irradiation of Zeonex polymer</b> Ruyue. Que1, Ludvine Houel-Renault2, Mebarek Temagout3, Matthieu Lancry1, Bertrand Poumellec1 1. Institut de Chimie Moléculaire et des Matériaux d'Orsay - ICMMO, Université Paris-Saclay 2. Institut des Sciences Moléculaires d'Orsay - ISMO, Université Paris-Saclay 3. Institute of Integrative Biology of the Cell - I2BC, Université Paris-Saclay	Q VII.3
10:00	<b>Time-resolved photoluminescence electro-optic recorder</b> Ščajev, P. *(1), Miasojedovas, A. (1), Mekys, A. (1) (1) Institute of Photonics and Nanotechnology, Vilnius University, Saulėtekio Ave. 3, LT 10257 Vilnius, Lithuania	Q VII.4
10:15	<b>Continuous-Wave mid-Infrared to Visible Frequency Upconversion with a Molecular Optomechanical Nanocavity</b> W. Chen1, P. Roelli1, H. Hu2, S. Verlekar1, S. P. Amirtharaj1, A. I. Barreda3, T. J. Kippenberg1, M. Kovylna4, E. Verhagen5, A. Martínez4, C. Galland1 1. Institute of Physics, Ecole Polytechnique Fédérale de Lausanne (EPFL), 1015 Lausanne, Switzerland 2. Hubei Key Laboratory of Optical Information and Pattern Recognition, Wuhan Institute of Technology, Wuhan 430205, China 3. Institute of Applied Physics, Abbe Center of Photonics, Friedrich Schiller University Jena, Albert-Einstein-Str. 15, 07745 Jena, Germany 4. Nanophotonics Technology Center, Universitat Politècnica de València, Camino de Vera s/n, 46022 Valencia, Spain 5. Center for Nanophotonics, AMOLF, Science Park 104, 1098 XG Amsterdam, Netherlands	Q VII.5
10:30	<b>Optimization of Poly(vinyl chloride) coupling with UV laser radiation for laser ablation propulsion applications</b> Pietro Battocchio, Jacopo Terragni, Vito Cristino, Nicola Bazzanella, Riccardo Checchetto, Michele Orlandi, Stefano Caramori, Antonio Miotello University of Trento, Department of Physics, via Sommarive 14, 38123, Trento, Italy, University of Trento, Department of Physics, via Sommarive 14, 38123, Trento, Italy, University of Ferrara, Department of Chemistry, via Luigi Borsari 46, 44121, Ferrara, Italy University of Trento, Department of Physics, via Sommarive 14, 38123, Trento, Italy, University of Trento, Department of Physics, via Sommarive 14, 38123, Trento, Italy, University of Ferrara, Department of Chemistry, via Luigi Borsari 46, 44121, Ferrara, Italy University of Trento, Department of Physics, via Sommarive 14, 38123, Trento, Italy,	Q VII.6
10:45	Q&A	
11:00	Coffee	
	<b>Ultrashort laser processing: Theory and applications : Evgeny Gurevich</b>	
11:15	<b>INV Ultrafast laser interaction with silicon: Critical assessment of excited processes via comparison of modeling with experiment</b> Nadezhda M. Bulgakova, Thibault J.-Y. Derrien, Alexander V. Bulgakov HiLASE Centre, Institute of Physics of the Czech Academy of Sciences, Dolní Břežany, Czech Republic	Q VIII.1

11:45	<b>Multiscale atomistic modelling of ultrafast melting in laser annealing processes</b> G. Calogero [1], D. Raciti [1], P. Acosta-Alba [2], F. Cristiano [3], I. Deretzis [1], G. Fiscaro [1], K. Huet [4], S. Kerdilès [2], A. Sciuto [1,5], A. La Magna [1] [1] CNR-IMM, Zona Industriale VIII Strada 5, 95121 Catania, Italy [2] Université Grenoble Alpes, CEA-LETI, 38000 Grenoble, France [3] LAAS, CNRS and Université de Toulouse, 7av. Du Col. Roche, 31400 Toulouse, France [4] Laser Systems & Solutions of Europe (LASSE), 145 rue des Caboeufs, 92230 Gennevilliers, France [5] Dipartimento di Fisica e Astronomia, Università di Catania, Via Santa Sofia 64, 95125 Catania, Italy	Q VIII.2
12:00	<b>Femtosecond laser-induced transformations on thin-films of 2D Transition-Metal Dichalcogenides A. Fernandez Garcia (1)*, F. Agulló-Rueda (2), P. Sopeña (3), D. Grojo (3), M. Manso Silvan (1,4), M. Garcia-Lechuga (1,4)</b> (1)Departamento de Física Aplicada, Universidad Autónoma de Madrid, 28049, Madrid, Spain, (2)Instituto de Ciencia de Materiales de Madrid, Consejo Superior de Investigaciones Científicas (ICMM-CSIC), 28049, Madrid, Spain, (3) Aix-Marseille Université, CNRS, LP3, UMR7341, 13009 Marseille, France, (4)Centro de Microanálisis de Materiales, Universidad Autónoma de Madrid, 28049, Madrid, Spain	Q VIII.3
12:15	<b>Diamond Thin Film Waveguide and Quantum Cascade Lasers for Sensing Caffeine</b> Andrea Teuber1, Giada Caniglia1, Michael Wild2, Matthias Godejohann3, Christine Kranz1, Boris Mizaikoff1,4* 1 Institute of Analytical and Bioanalytical Chemistry, University of Ulm, Ulm, Germany, 2 Diamond Materials, Freiburg, Germany, 3 MG Optical Solutions GmbH, Utting/Ammersee, Germany, 4 Hahn-Schickard, Ulm, Germany	Q VIII.4
12:30	Q&A	
12:45	Lunch	
13:45	Plenary II	
14:45	Coffee	
	<b>Laser surface structuring and direct writing : Patricia Alloncle</b>	
15:00	<b>INV Light-Matter Interaction in GaN-based Micro- and Nano-LEDs: using femtosecond lasers for device processing and analyzing the charge-carrier dynamics</b> Tobias Voss Institute of Semiconductor Technology and Laboratory for Emerging Nanometrology LENA, Technische Universität Braunschweig, Braunschweig, Germany	Q IX.1
15:30	<b>UV-Laser crystallization of TiO2 deposited by Low Temperature ALD on polymeric substrate : applications in photocatalysis</b> <b>Massimo Zimbone #, Enrico Napolitani \$, Maria Cantarella #, Vittorio Privitera \$, Giuliana Impellizzeri</b>	Q IX.2
15:45	<b>Flexible and Reusable Smart Textile based Dry Electrodes for Biopotential Sensing</b> Yogita Maithani, B. R. Mehta, J. P. Singh Department of Physics, Indian Institute of Technology-Delhi, Hauz Khas, New Delhi 110016, India	Q IX.3
16:00	<b>Low surface damage laser processing silicon by laser-induced plasma etching (LIPE)</b> Heinke, Robert (1,2,*), Ehrhardt, Martin(2), Bauer, Jens(2), Lotnyk, Andriy(2), Lorenz, Pierre(2), Morgenstern, Roy(3), Lampke, Thomas(3), Arnold, Thomas(1,2), Zimmer, Klaus(2) (1) Institute of Manufacturing Science and Engineering, Technische Universität Dresden, 01062 Dresden, Germany (2) Department of ultra-precision surfaces, Leibniz Institute of Surface Engineering (IOM), Permoserstraße 15, 04318 Leipzig, Germany (3) Materials and Surface Engineering Group, Technische Universität Chemnitz, 09107 Chemnitz, Germany * lead presenter and corresponding author, Robert.Heinke@iom-leipzig.de	Q IX.4
16:15	Q&A	

Thursday June 2

Laser-material synthesis : Maria Kandyla

- 09:00 **Study of microstructure, optical behaviors of Rare earth doped Ba<sub>0.85</sub>Ca<sub>0.12</sub>RE<sub>0.03</sub>Ti<sub>0.90</sub>Zr<sub>0.04</sub>Nb<sub>0.042</sub>O<sub>3</sub>ceramics(RE=Ce<sup>3+</sup> andPr<sup>3+</sup>) 1/ Zeineb Raddaoui 2/ Marwa Bourguiba 3/ Pascal Marchet 4/ Jemai Dhahri 5/ Moez Chafra** Q X.1  
1/ - Laboratory of Condensed Matter and Nanosciences, Faculty of Sciences of Monastir, University of Monastir, Avenue of the environment , 5019 Monastir, Tunisia. - Institute for Research on Ceramics, University of Limoges, UMR 7315, 87068 Limoges, France. 2/ - Laboratory of Applied Mechanics and systems, School Polytechnic of Tunisia, University of Carthage, La Marsa, Tunisia. - Faculty of Sciences Tunis, University of Tunis el Manar, Tunis 2092. 3/ Institute for Research on Ceramics, University of Limoges, UMR 7315, 87068 Limoges, France. 4/ Laboratory of Condensed Matter and Nanosciences, Faculty of Sciences of Monastir, University of Monastir, Avenue of the environment , 5019 Monastir, Tunisia. 5/ Laboratory of Applied Mechanics and systems, School Polytechnic of Tunisia, University of Carthage, La Marsa, Tunisia.
- 09:15 **Laser-assisted molecular beam epitaxy of hexagonal boron nitride** Q X.2  
L.Stagi, J. Zhang, C. Hilbrunner, J. Malindretos, A. Rizzi  
Department of Chemistry, Laboratory of Materials Science and Nanotechnology, CR-INSTM, University of Sassari, Via Vienna 2, 07100, Sassari, Italy, IV. Physikalisches Institut, Georg-August Universität Göttingen, D-37077 Göttingen, Germany, IV. Physikalisches Institut, Georg-August Universität Göttingen, D-37077 Göttingen, Germany, IV. Physikalisches Institut, Georg-August Universität Göttingen, D-37077 Göttingen, Germany, IV. Physikalisches Institut, Georg-August Universität Göttingen, D-37077 Göttingen, Germany
- 09:30 **Compositionally tuneable laser synthesised WxMo(1-x)S<sub>2</sub> alloys** Q X.3  
Zharkova E. V. <sup>\*(1)</sup>, Averchenko A.V. (1), Salimon I.A (1), Abbas O.A. (1), Sazio P. J. A. (2), Lagoudakis P. G. (1), and Mailis S. (1).  
(1) Skolkovo Institute of Science and Technology, Moscow, 121205, Russian Federation, (2) Optoelectronics Research Centre, University of Southampton, Southampton, SO17 1BJ, United Kingdom
- 09:45 **Oxygen-deficient niobium oxide layers with improved conductivity formed by powder bed selective ultrafast laser processing** Q X.4  
B. Sotillo, R. Ariza, P. Fernández, J. Solis  
B.S., R.A., P.F.: Department of Materials Physics, Faculty of Physics, University Complutense of Madrid, Madrid, 28040, Spain, R.A., J.S.: Laser Processing Group, Institute of Optics (IO-CSIC), Serrano 121, Madrid, 28006, Spain
- 10:00 **Tuning Semiconductor Dopant Concentration: n++ Gas Immersion Laser Doping of p++ Emitters in Phosphorus Oxychloride Atmosphere.** Q X.5  
F. C. Serra, G. Gaspar, A. S. Viana, I. Costa, D. M. Pêra, J. A. Silva, G. Hahn, L. Vines, J. M. Serra, K. Lobato  
Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749-016, Lisboa, Portugal, Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749-016, Lisboa, Portugal, Centro de Química Estrutural, Faculdade de Ciências (CQE), Universidade de Lisboa, 1749-016, Lisboa, Portugal, Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749-016, Lisboa, Portugal, Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749-016, Lisboa, Portugal, Department of Physics, University of Konstanz, 78464 Konstanz, Germany, Department of Physics, Center for Materials Science and Nanotechnology, University of Oslo, N-0371 Oslo, Norway, Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749-016, Lisboa, Portugal, Instituto Dom Luiz (IDL), Faculdade de Ciências, Universidade de Lisboa, 1749-016, Lisboa, Portugal
- 10:15 **Advanced manufacturing of dense ceramic materials using industrially scalable Laser Furnace technology** Q X.6  
C. Ozçelik1, H. Amaveda1, M. Mora1, E. Martínez1, B. Ozçelik2, G.F. de la Fuente1, L. A. Angurel1  
1Instituto de Nanociencia y Materiales de Aragón (CSIC-University of Zaragoza), Zaragoza, Spain 2 Department of Physics, Faculty of Sciences and Letters, Çukurova University, Adana, Turkey
- 10:30 **Selective Laser Melting of various lunar soil simulants** Q X.7  
Danijela Ignjatovic Stupar, Grégoire Robert Chabrol, Thierry Cutard, Sylvain Lecler, Jocelyne Brendle  
International Space University, ECAM Strasbourg-Europe, IMT Mines Albi-Carmaux, INSA of Strasbourg, IS2M
- 10:45 **Q&A**

11:00 Coffee

Laser processing and applications : Patricia Alloncle

- 11:30 **Laser-based experiments to investigate nuclear fuels behaviour under thermal stresses** Q XI.1  
Thomas Doualle, Matthieu Reymond, Vincent Klosek, Jerome Sercombe, Laurent Gallais and Yves Pontillon  
CEA, DES, IRESNE, DEC, Cadarache F-13108 Saint-Paul-Lez-Durance, France, Aix Marseille Université, CNRS, Centrale Marseille, Institut Fresnel, Marseille, France
- 11:45 **Ultrafast laser ablation for surface preparation of CFRP composites used in shipbuilding** Q XI.2  
Ana J. López, Alicia Moreno, Pablo Pardiñas, Javier Lamas, Alberto Ramil  
Universidade da Coruña, Campus Industrial de Ferrol, Ferrol, 15403, A Coruña, Spain
- 12:00 **The lazer radiation propagation mechanism in optical waveguides-fibers** Q XI.3  
Egorov E.V.(1,2,3), Egorov V.K.(1)  
(1) Institute of Microelectronics Technology Russian Academy of Science (IMT RAS) (2) Institute of Radio Engineering and Electronics Russian Academy of Science (IRE RAS) (3) Financial University under the Government of the Russian Federation
- 12:15 **Wavelength-selective isotype heterojunction n+-ZnO/n-Si photodetector** Q XI.4  
G. Chatzigiannakis, A. Jaros, R. Leturcq, J. Jungclaus, T. Voss, S. Gardelis, M. Kandyla  
Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, 11635 Athens, Greece, Institute of Semiconductor Technology, Braunschweig University of Technology, Hans-Sommer Strasse 66, 38106 Braunschweig, Germany, Materials Research and Technology Department, Luxembourg Institute of Science and Technology, 41 Rue du Brill, L-4422 Belvaux, Luxembourg, Institute of Semiconductor Technology, Braunschweig University of Technology, Hans-Sommer Strasse 66, 38106 Braunschweig, Germany, Institute of Semiconductor Technology, Braunschweig University of Technology, Hans-Sommer Strasse 66, 38106 Braunschweig, Germany, Department of Physics, National and Kapodistrian University of Athens, Panepistimiopolis Zografos, 15784 Athens, Greece, Theoretical and Physical Chemistry Institute, National Hellenic Research Foundation, 48 Vassileos Constantinou Avenue, 11635 Athens, Greece
- 12:30 **Regulating breast cancer cell adhesion on laser-patterned surfaces** Q XI.5  
M. Kanidi, A. Papadimitropoulou, C. Charalampous, Z. Chakim, G. Tsekenis, A. Sinani, C. Riziotis, M. Kandyla  
National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, 48 Vasileos Constantinou Ave., Athens 11635, Greece, Biomedical Research Foundation of the Academy of Athens, 4 Soranou Ephessiou St., 115 27 Athens, Greece, Biomedical Research Foundation of the Academy of Athens, 4 Soranou Ephessiou St., 115 27 Athens, Greece, Biomedical Research Foundation of the Academy of Athens, 4 Soranou Ephessiou St., 115 27 Athens, Greece, Biomedical Research Foundation of the Academy of Athens, 4 Soranou Ephessiou St., 115 27 Athens, Greece, National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, 48 Vasileos Constantinou Ave., Athens 11635, Greece, National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, 48 Vasileos Constantinou Ave., Athens 11635, Greece, National Hellenic Research Foundation, Theoretical and Physical Chemistry Institute, 48 Vasileos Constantinou Ave., Athens 11635, Greece
- 12:45 **Q&A**
- 13:00 **Concluding remarks**
- 13:45 **Plenary III**