

Session Program

13-17 Sept 2021

**EUROPEAN CONGRESS AND EXHIBITION ON
ADVANCED MATERIALS AND PROCESSES -
EUROMAT 2021**

***C11_Laser based processing an
manufacturing***

Virtual

Wednesday 15 September

09:50

C11_Laser based processing an manufacturing: C11_1_Laser-based periodic surface patterning

Session | Location: Room 10

09:50–10:10

Functionalization of surfaces by fabricating single and multi-scaled periodic structures using laser based fabrication methods

Speaker

Prof. Andrés Fabián Lasagni

10:10–10:30

Dynamics of molten nanometric fringes in semiconductors induced by interfering deep UV laser pulses

Speaker

Miguel Álvarez Sánchez

10:30–10:50

Surface functionalization of soda-lime glass by interference-based laser direct nano/microstructuring

Speaker

Dr Marcos Soldera

10:50–11:10

Lithography-Free Fabrication of Extraordinary Transmission Plasmonic Metasurfaces Over Large Areas Employing Ultrafast Lasers

Speaker

Dr Carlota Ruiz de Galarreta

11:10–11:30

Anisotropic resistivity surfaces produced in ITO films by fs-laser induced self-organization

Speaker

Prof. Javier Solis

11:30

11:50

C11_Laser based processing an manufacturing: C11_2_Laser induced phase transitions and microstructural changes

Session | Location: Room 10

11:50–12:10

Laser-induced phase switching in Pd-Si metallic thin films

Speaker

Dr Jerzy Antonowicz

12:10–12:30

Folding behavior of Al alloys related to the microstructural changes performed by laser processing

Speaker

Prof. Oana Gingu

12:30-12:50

Femtosecond laser-induced crystallization in sub-wavelength multilayer systems

Speaker

Ruben Ricca

12:50-13:10

Femtosecond laser machining of tellurite glass: evidence of laser-induced crystallization and self-organization beyond the focal volume

Speaker

Ms Gözden Torun

13:10-13:30

Evidence of laser shock-induced densification zones in pristine fused silica

Speaker

Arunkrishnan Radhakrishnan

13:30

15:30

C11_Laser based processing an manufacturing: C11_3_Laser Micromaching, Laser Induced Forward Transfer (LIFT) and Laser Induced TPP

Session | **Location:** Room 10

15:30-15:50

Optimization of Superconcentrated Copper Oxide Nanoparticle Suspensions Intended for Laser-Printable Inks for the Fabrication of Electronics

Speaker

Ms Evgenia Dimitriou

15:50-16:10

LIFT printing towards flexible electronics and displays

Speaker

Ioanna Zergioti

16:10-16:30

Large-Volume 2PP Structures as Ground Truth Phantoms for Diffusion-Weighted Magnetic Resonance Imaging

Speaker

Franziska Gantner

16:30-16:50

Employing Laser-Induced Forward Transfer for the fabrication of thin films aimed as a drug delivery tool

Speaker

Ioanna Zergioti

16:50-17:10

Freeform microcasting

Speaker

Luciano Borasi

17:10

17:30

C11_Laser based processing an manufacturing: C11_4_Laser-based functionalization and micro processing**Session** | **Location:** Room 10

17:30–17:50

New hardness model for fine fibrous eutectic ceramics prepared by laser-heated floating zone (LFZ)**Speaker**

Mrs Bibi Malma Moshtaghioun

18:10–18:30

Evaluation of the impact of thermal strain hardening on the precipitation of strengthening phases during the manufacture of nickel-based superalloys and aluminum alloys by L-PBF**Speaker**

Dr Louise Toualbi

18:50–19:10

Experimental investigation of the process combination of laser drilling and small diameter single-lip deep hole drilling on complex shaped surfaces**Speaker**

Mr Pascal Volke

19:10