

Session Program

13-17 Sept 2021

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

C9_Advanced ceramic materials processing

Virtual

Tuesday 14 September

11:50

C9_Advanced ceramic materials processing: C9_1_Advanced Ceramic Materials Processing Technologies

Session | Location: Room 9

11:50–12:30

3D Printing of Self-Assembling Inks into Hierarchical Porous Ceramics (Keynote)

Speaker

André R. Studart

12:30–12:50

Possibilities of colloidal processing in the design of superhard B4C ceramics

Speaker

Rodrigo Moreno

12:50–13:10

Processes to fabricate ceramics with hierarchical microstructure and texture

Speaker

Hortense Le Ferrand

13:10–13:30

Transparent Nano-Y2O3 Shaped by Colloidal Processing

Speaker

Dr Aliasghar Najafzadehkhoe

13:30

15:20

C9_Advanced ceramic materials processing: C9_2_Innovative Sintering of Ceramics

Session | Location: Room 9

15:20–15:40

Flash Sintering behaviour of Binderless Tungsten Carbide

Speaker

Mr Isacco Mazo

15:40–16:00

Non-conventional sintering process in LSM (La_{0.8}Sr_{0.2}MnO₃) materials with enhanced microstructure and performance through ALD and DCSBD technology

Speaker

Rene Miguel Guillen Pineda

16:00–16:20

Cold sintering of biogenic calcium phosphates derived from mussel shells

Speaker

Ms Anna Galotta

16:20

17:20

C9_Advanced ceramic materials processing: C9_3_Ceramic Coatings and Surface Technology

Session | Location: Room 9

17:20–17:40

Plasma spraying coatings from zircon suspension feedstocks

Speaker

Mr Eugeni Cañas

17:40–18:00

Ceramic based biocatalytic reactors: processing and functionalization with biocatalysts

Speaker

Mrs Seika Ishii

18:00

Wednesday 15 September

09:50

C9_Advanced ceramic materials processing: C9_4_Preparation and Application of Ceramic Composites

Session | Location: Room 9

09:50–10:10 Injection Molding of 3-3 Hydroxyapatite Composites (Highlight)

Speaker

Tobias Fey

10:10–10:30

Reinforced Ceramic Matrix Composites Based on Alumina and Graphene Oxide Flakes obtained by Sol-Gel and Reactive Spark Plasma Sintering

Speaker

Mr Pedro Rivero-Antúnez

10:30–10:50

Nacre-like ceramic composites shaped by heteroaggregation of particles

Speaker

Manuella Cerbelaud

10:50–11:10

Spinel and pyrochlore secondary phases in zinc oxide ceramics: Control of crystal chemistry and properties by doping with trivalent metal ions

Speaker

Dr Ulf Betke

11:10

11:50

C9_Advanced ceramic materials processing: C9_5_Additive Manufacturing of Ceramic Materials

Session | Location: Room 9

11:50–12:10

Influence of the shaping parameters in the properties of zirconia components produced by fused filament fabrication (Highlight)

Speaker

Dr Tanja Lube

12:10–12:30

Additive Manufacturing for Printing Complex and Precise Components from Non-Oxide Ceramics

Speaker

Martin Schwentenwein

12:30–12:50

Stereolithography-based additive manufacturing of SiC-filled polymer-derived ceramics

Speaker

Johannes Eßmeister

12:50–13:10

Lithography-based Ceramic Manufacturing of Aluminum Nitride: Materials system development**Speaker**

Dr Thomas Konegger

13:10–13:30

Additive Manufacturing of Dense Mullite Structures Using Filament Printers (FDM Technology)**Speaker**

Fateme Sarraf

13:30

15:30

C9_Advanced ceramic materials processing: C9_6_Innovative Ceramic Shaping Approaches**Session** | **Location:** Room 9

15:30–15:50

Dispersion of kaolins in aqueous media, influence of the ratio between basal and lateral surface of grains (Highlight)**Speaker**

Ms Rana Al-Tahan

15:50–16:10

In-depth analysis of the Freeze Foaming process of biocompatible ceramics**Speaker**

David Werner

16:10–16:30

A Novel Synthesis Approach for the Preparation of Porous α -Al₂O₃ Monoliths and Membranes Using Elevated Pressure**Speaker**

Mr Igor Atanasov

16:30–16:50

Near-net shaping of zircon compacts through agar gelation.**Speaker**

Eduardo Rosado Rodríguez

16:50–17:10

Field induced surface defects: a novel power-to-X technology for the design of functional materials.**Speaker**

Benedikt Ehrhardt

17:10