

# Posters

## July 21<sup>st</sup>, 2022



### Area A6

ID	Author	Title	Affiliation
5	Florencia Diaz	Preliminary characterization of reinforced gelatin-chitosan scaffolds for tendon tissue engineering applications	University of Erlangen-Nuremberg, Germany
20	Mohammad El Khatib	Tendon biomimetic 3D scaffold enhance amniotic epithelial stem cells biological potential	University of Teramo, Italy
40	Luca Lorenzetti	Cu-based thin foils for antimicrobial applications: relationship between alloy composition and micromechanical properties	University of Bologna, Italy
46	Lisa Schöbel	Preparation of Alginate Films for Cell Seeding Studies: Challenges and Strategies for Improvement	University of Erlangen-Nuremberg, Germany
52	Seyma Sereflioglu	Electrospinning of polycaprolactone-based hybrid nanofibrous scaffolds and their in vitro evaluation for tendon regeneration	University of Erlangen-Nuremberg, Germany
66	Tamara Matic	Hydroxyapatite based bioceramic inserts in restorative dentistry: Fracture resistance of Class I restorations	Innovation Center of The Faculty of Technology and Metallurgy Ltd, Serbia
87	António Fróis	Biocompatibility of C-based Sputtered Coatings in Orthodontic	University of Coimbra, Portugal
109	Francesco Iorio	Fabrication and preliminary characterization of electrospun poly(glycerol sebacate)-based nanofibrous scaffolds for tendon tissue engineering	University of Erlangen-Nuremberg, Germany
110	Tomáš Škraban	Modelling of martensitic microstructure in beta-Ti alloys	Charles University, Czechia
116	Fei-Fan Cai	A Hybrid System Combining Patterned Ti-based Bulk Metallic Glass and Biopolymer Coating for Implant Applications	Montanuniversität Leoben, Austria

133	Aleksej Zarkov	Zinc Whitlockite (Ca <sub>18</sub> Zn <sub>2</sub> (HPO <sub>4</sub> ) <sub>2</sub> (PO <sub>4</sub> ) <sub>12</sub> ): Dissolution-Precipitation Synthesis, Structural and Morphological Features	Vilnius University, Lithuania
135	Maria Zemkova	Novel biodegradable Mg-Y and Mg-Y-Li alloys	Charles University, Czechia
140	Juan Londoño	Tuning Cu Ion Release from Pd Bulk Metallic Glass Composites	Montanuniversität Leoben, Austria
154	Filip Kuśmierczyk	Electrophoretic deposition, heat treatment and characterization of HA/ZnS/S-PEEK coatings on the Zr-2.5Nb alloy	AGH University of Science and Technology, Poland
201	Parthiban Ramasamy	Synthesis and characterization of magnesium based bulk metallic glass composite prepared by high pressure torsion	Erich Schmid Institute of Materials Science, Austria
208	Júlio Rocha	Advanced electromechanical devices for use in bone tissue engineering	University of Aveiro, Portugal
227	Patrícia dos Santos	Novel L-alanine and glycine based poly(ester amide)s: assessment on their thermal processability and physico-chemical properties	University of Coimbra, Portugal
230	Sara Inocêncio	Hyaluronic acid-based chemically crosslinked hydrogels via thiol-ene Michael addition reaction	University of Coimbra, Portugal
232	Diogo Salgueiro	Development of Polymeric Microparticles as Tailored Drug Delivery Systems for Co-Encapsulated Drugs	Bluepharma Indústria Farmacêutica S.A., Portugal

### Area C

ID	Author	Title	Affiliation
19	Anna Hirle	Influence of Mo on structure-mechanical properties of TiB <sub>2</sub> ±z coatings	TU Wien, Austria
21	Sophie Richter	Phase formation and oxidation resistance of physical vapor deposited MoSi <sub>2</sub> thin films	TU Wien, Austria
55	Miguel Costa	Combining thermomechanical processing techniques for rejuvenation of bulk metallic glasses	University of Cambridge, United Kingdom

12	Kostas Andritsos	LIFT of CuO NP inks: Process parameters and High Speed visualization	National Technical University of Athens, Greece
31	Nečas David	Advanced zinc-magnesium alloys prepared by mechanical alloying and spark plasma sintering	University of Chemistry and Technology Prague, Czechia
85	Natasha Fort	Effects of Precious Metal Doping on Stainless Steels Produced by Spark Plasma Sintering	University of Sheffield, England
67	Maximilian Rothammer	Additive Manufacturing of Bioinspired Architectures with Polysaccharide-Based Photoresists	Technical University of Munich, Germany
72	Cindy Morales	17-4 PH SS single tracks DED depositions over AISI316L: macro and microstructural investigations	University of Ferrara, Italy
114	Miwen Yuan	Evaluation of softening resistance of DED tool steels at elevated temperatures	Chalmers University of Technology, Sweden
24	Omar Mohamed	Evaluating Residual Strains in Tungsten-Copper (W/Cu) Dissimilar Joints for Fusion Reactors using Bragg-edge Neutron Imaging	University of Surrey, United Kingdom
56	Sylwia Terlicka	Wetting behavior of liquid pure magnesium on pure tungsten substrates	Institute of Metallurgy and Materials Science, Poland
165	Antonio Sánchez	Characterization of pure copper parts manufactured via Fused Filament Fabrication (FFF)	Universidad de Castilla-La Mancha, Spain
173	Kaid Mustapha	Friction stir welding FSW for AA 6061-t6 with tool without pin	Université Djillali Liabès de Sidi Bel Abbès, Algeria
189	Pamela Bomfim	Effect of inoculation on microstructure and corrosion behavior of AA 2017 alloy produced by laser-based powder bed fusion	Federal University of São Carlos, Brazil
181	Abqaat Naseer	Synthesis and characterization of Si and O doped diamond-like carbon coatings	University of Coimbra, Portugal
185	Jesús Molina	“Hydrogen embrittlement mitigation in austenitic stainless steels by means of surface modification and carbon-based coatings”	CIEMAT, Spain
177	Sylwia Terlicka	High-temperature interaction of liquid magnesium with cast iron substrates	AGH University of Science and Technology, Poland

194	Maciej Szlezzynger	Development of NiAl intermetallic coatings from mechanically deposited nickel and aluminum elemental powders	Institute of Metallurgy and Materials Science, Poland
196	Sharjeel Khan	Tribological Characterization by Pin-On-Disc test of DLC Coatings Deposited in Ar-Ne Plasma Against Ti6Al4V Counter-Body	University of Coimbra, Portugal
214	Mirko Pigato	Kinetic of hardening of 6061 aluminum alloy during electrically assisted artificial aging	University of Padua, Italy
216	Diana Sousa	Decorative and functional coatings on polymeric substrates for the automotive industry using an eco-friendly technology	University of Minho, Portugal
218	Panagiotis Karakaidos	Laser-Induced Forward Transfer for drug thin film printing	Bioacademy, Greece
220	Jong-Hyun Lee	High-Speed Sinter-Bonding by in situ Reduction of Oxalate Skins on Cu Particles in Reducing Formulation	Seoul National University of Science and Technology, Republic of Korea
223	Marta Ciemiorek	Incremental Equal Channel Angular Pressing as an Efficient Tool for Grain Refinement: Microstructure and Properties	Warsaw University of Technology, Poland
224	Adriel Oliveira	Application of the Box-Behnken design in optimization of additive manufacturing process parameters for H13 steel	Universidade Federal de São Carlos, Brazil
228	João Conceição	Printability of Reused IN625 Powders without and with Alumina Particles through Direct Energy Deposition	University of Porto, Portugal
233	Neus Bascompte	TiN/CrN, TiSiN/CrN and NbN/CrN multilayer coatings deposited in an industrial-scale HiPIMS system	Universitat Ramon Llull, Spain
235	Peifeng Li	Process-structure-process relationships of Al-WS <sub>2</sub> self-lubricating composites: Laser Powder-Bed Fusion vs. Spark Plasma Sintering	University of Nottingham, United Kingdom

## Area D

ID	Author	Title	Affiliation
50	Olivia Vaerst	Effect of thermal treatment on the atomic structure and dynamics of PdNiP metallic glass	Westfälische Wilhelms-Universität Münster, Germany

34	Thomas Isensee	Multiscale modeling of dendritic solidification with convective transport in the melt	IMDEA Materials Institute, Spain
175	Jorge Recio	DFT simulations of the behavior of aggregates of light impurity atoms in a tungsten interface	Universidad de Oviedo, Spain
36	José Mancias	A GPU-Parallelized Julia Implementation of a Phase Field Model	IMDEA Materials Institute, Spain
97	Carlos Mota	De Havilland Goblin: seeking materials, processes, and current state of an engineering breakthrough	Faculdade de Engenharia da Universidade do Porto, Portugal
118	Cholidah Fitriani	Effects on Liquid Metal Environment on Slip Band Morphology of T91 Ferritic-Martensitic Steel	Ghent University, Belgium
130	Laura Gonzalez	Modelling the effects of texture on the stress and strain localization during bending of aluminium	University of Manchester, United Kingdom
102	Kwan Kan	Through Process Modelling of Sustainable Aluminium	University of Manchester, United Kingdom
172	Gustavo Carmo	Characterisation of the thermoelastic properties of 3D printed ZTA technical ceramics by Asymptotic Expansion Homogenization	University of Aveiro, Portugal
187	Marko Rukavina	Experimental and theoretical study of aluminosilicate gel	University of Zagreb, Croatia
151	Rouhollah Tavakoli	Phase field study of columnar grains growth competition under multi-dimensional temperature fields	IMDEA Materials Institute, Spain
182	Sara Azcona	First principle study of Co-catalyzed MgH <sub>2</sub> for CO <sub>2</sub> capture and conversion	University of Burgos, Spain
225	Seyed Elahi	Multiscale modeling of powder bed fusion process for Inconel 718	IMDEA Materials Institute, Spain
234	Andreea-Georgia Predila	Airborne microplastics: surface chemistry and cloud-crystallization properties	University College London, United Kingdom

