

**ICM
2022**

The 4th International Conference on Materials

19–21 OCTOBER 2022 | BARCELONA, SPAIN

ICM 2022 List of Posters

Poster Session A – Wednesday, 19 October 2022; 15:55 – 17:25h

Poster Session	Poster Number	Author Name	Title
A	1	Ateeque Siddique	3D Printed Scaffolds for Stabilization and Local Therapeutic Delivery in Bone Metastases
A	2	Flavia Stochioiu	Femoral stems with lattice structures integration: from concept to part
A	3	Ana-Maria Lupu	Stabilization effects of natural antioxidants in PLA/SIS blends
A	4	Begoña Asenjo	TiO ₂ films synthesized by sol–gel method at low temperature for photovoltaic applications
A	5	Magdalena Zdanowicz	Organophilized montmorillonites as fillers for silicone pressure-sensitive adhesives
A	6	Marcin Chmielewski	Microstructural evolution occurring during sintering of Ni-SiC composite material
A	7	Damian Mrówczyński	The role of imperfections in numerical homogenization of multi-layered panels with a corrugated core
A	8	Agata Strojny-Nędza	Thermal stability of copper based layers reinforced by carbon nanoforms
A	9	Edyta Rekiel	Characterization of solids wetting by aqueous solutions of ethanol and surfactin mixture
A	10	Traian Zaharescu	The stability consequence promoted by oxide traces on the degradation of poly(ϵ -caprolactone)
A	11	Justyna Szerement	Characterization of X-type zeolite composites derived from fly ash
A	12	Woonggeol Lee	CO ₂ adsorption reactions of synthetic calcium aluminoferrite compounds
A	13	Kwangkyun Mun	Salt resistance of cement mortar using modified sulfur with slaked lime
A	14	Myongshin Song	Synthesis of 12CaO $\times$ 7Al ₂ O ₃ by multiple calcination and hydration properties of synthetic 12CaO $\times$ 7Al ₂ O ₃
A	15	Lilia Sabantina	Morphological studies of needle-free electrospun PAN/Daemonorops draco nanofiber mats for possible medical applications
A	16	Hassan Bakare	Surface Morphological and Thermal Aging Analysis of Polymer Modified Agbabu Natural Bitumen

A	17	Sorina Suarasan	Colorimetric and thermoplasmonic dual-mode detection of C-reactive protein based on aptamer conjugated gold nanoparticles
A	18	Nuria Gordillo	Effects on the H ₂ gas sensor-based MoTe ₂ (1-x)Se _{2x} alloy driven by Ga and In nanoparticles
A	19	Jiri Rathousky	Composite TiO ₂ -based photocatalysis
A	20	Monika Remzová	Highly Efficient C-containing TiO ₂ Layers for the Photocatalytic Degradation of Chlorinated Pollutants
A	21	Vyom Desai	Synthesis and characterisation of MAX phase Ti ₃ AlC ₂ by pressureless sintering
A	22	Antanas Ciuplys	Investigation of the relationship between the change in microstructure and mechanical characteristics of dissimilar welds
A	23	Sung-Hoon Kim	Enhancement of electromagnetic wave shielding effectiveness by carbon microcoils incorporation into carbon paste for commercial heating film
A	24	Arunsinh Zala	Microstructure and mechanical property assessment of plasma tempered aluminized Indian RAFM steels
A	25	Regita Bendikiene	Aluminium TIG welding: AC versus DC
A	26	Josep Picas	Rheological study of AlSi9Cu3 aluminium alloy in a semi-solid state
A	27	Baimakhan Satbayev	High-Temperature Composite Materials for Ferrous and Non-Ferrous Metallurgy
A	28	Adriana S Franca	Preparation and characterization of biocomposites using waste cooking oil and spent coffee grounds
A	29	Szymon Malinowski	Biopolymers in road material engineering
A	30	Kamila Lewicka	Synthesis and properties of chitosan derivatives containing Schiff bases, grafted with polycaprolactone
A	31	Karolína Kocourková	3D printing of silk / polycaprolactone composite scaffolds
A	32	Piotr Dobrzynski	The course of synthesis and properties of bioresorbable antibacterial copolymers intended for cosmetological application
A	33	Magdalena Krupska-Klimczak	Indirect measurements of the electrocaloric effect in Pb ₅ Ge ₃ O ₁₁ :Ba single crystals
A	34	Raman Raman	Cs ₂ (NaxAg _{1-x})BiCl ₆ Nanocrystals: A New Class of Alloyed Double Perovskite with Tunable Band Gap

Poster Session B – Thursday, 20 October 2022; 16:20 – 17:50h

Poster Session	Poster Number	Author Name	Title
B	1	Klaudia Szafran	Characterization of biocompatible coatings for polymer-made implants
B	2	Zuzana Murčinková	Non-standard structural materials to reduce vibration amplitudes
B	3	Bousalham SRHIR	Kinetics and isotherms of adsorption of Phenol and Chlorophenol by four types of activated carbon.
B	4	Traian Zaharescu	Modified POSS nanoparticles for the stabilization of styrene-isoprene-styrene triblock copolymer
B	5	Lukmanul Hakim Zaini	Microfibrils from oil palm trunk: Effect of delignification and fibrillation technique
B	6	Nazeeha Alkayal	Fabrication of Cross-Linked PMMA/SnO ₂ Nanocomposites for Highly Efficient Removal of Chromium (III) from Wastewater
B	7	Tinatin Ciciszili	Characterization of Ni-B/MoS ₂ composite coatings produced by chemical reduction method using sediment deposition technique.
B	8	Kamil Stelmaszczyk	Effective Electromagnetic Shielding with Graphene Epoxy Composites in the Extended THF Band: Fabrication, Measurement Procedures, and Data Analysis
B	9	Derek Rosenzweig	Evaluating Adipose Stromal Cell Seeded Polyurethane Polymers as Tissue Engineered Implantable Ligament Substitutes
B	10	Jakub Mokrzycki	Assessment of ammonium ions removal from aqueous solutions using zeolite-composite materials derived from fly ash
B	11	Kacper Przykaza	Characteristics of hybrid chitosan-bioglass coatings deposited on plasma activated PEEK polymer
B	12	Maha Alotaibi	Synthesis and Characterisation of Bipyridine-Based Polyaminal Network for Carbon Dioxide Capture
B	13	Maria Isabel Rodriguez	Influence of substrate temperature and gas environment on the structure of Cu ₃ N thin films as solar absorber deposited by reactive magnetron sputtering
B	14	Ritika Wadhwa	Surface engineering with metal to design heterojunctions for efficient photoelectrochemical ethanol oxidation
B	15	Daria Stoia	NIR fluorescent hybrid microcapsules as efficient delivery agents for controlled in vitro Avastin drug release
B	16	Noor Abu Jarad	Omniphobic Spray Coating with Repel and Kill Mechanism Prevents Contamination by Drug-Resistant Bacteria and Viruses on High-Touch Surfaces
B	17	Adrian Dabrowski	Composite copper/carbon phase coatings for potential applications in electronics
B	18	Eliska Mikyskova	Photocatalytic NO _x abatement: The effect of high air flow velocity

B	19	Radek Zouzelka	Photocatalytic degradation of halogenated phenols: Experimental, DFT and Antibacterial study
B	20	Vibhav Katoch	Microfluidic platform for inline photocatalytic reduction of Cr(VI) using nanosized titanium dioxide
B	21	Nishant Verma	Comparative study on the mechanical behavior of microwave-assisted compression molded and conventionally compression-molded nano-hydroxyapatite reinforced UHMWPE composite
B	22	Filip Votava	Study of Transition Areas in Press-hardened Steels in Combined Tool for Hot and Cold Forming
B	23	Jun Ha Lee	Annealing Phenomena in Electroformed Invar
B	24	Veluri Sivanjineyulu	Structure and Properties of γ -form Polypropylene Nanocomposites Crystallized under High-Pressure
B	25	Mohammad Ibrahim Mohammad Abualsayed	Development of newly polyester composites reinforced with waste marble and CdO particles for radiation shielding applications
B	26	Radek Leták	Effect of forming and heat treatment parameters on the mechanical properties of medium manganese steel with 5% Mn
B	27	Sitko Dorota	Low-temperature structural, dielectric and ferroelectric properties of $\text{Ba}_{1-x}\text{Sr}_x\text{TiO}_3$ ($x=0-0.45$)
B	28	Priyesh Priyesh	Exciton to Dopant Energy Transfer in Mn Doped (BA) ₄ AgBiBr ₈ Layered Double Perovskite
B	29	Swati Khurana	Charge Transfer Dynamics in CsPbBr ₃ -CdSe/CdS/ZnS Nanohybrids coupled by Bifunctional Ligands
B	30	Magdalena Zdanowicz	Thermoplastic starch modified with deep eutectic solvents as multifunctional biodegradable materials intended for plants cultivation
B	31	Antonín Minařík	Structuring of silk-fibroin surfaces by phase separation
B	32	Monika Owczarek	Biopolymer hydrogel compositions as a carrier of active plant extracts used in oncological treatment
B	33	Leandro S. Oliveira	Films of polysaccharides from spent coffee grounds with ions Ca^{2+} as crosslinking agents
B	34	Gurpreet Singh	Lung Tissue Surrogates: Fabrication and Mechanical Testing