

**7th World Congress on Nanotechnology and Materials Science
November 17-18, 2022 at Hotel ibis London Heathrow Airport, London, UK**

Day 1- November 17, 2022

09:40- 10:00	Introduction, Welcome note and Conference Inauguration
	Keynote Sessions
10:00-10:20	<p>Title: Time temperature superposition of the dissolution of cellulose fibres by the ionic liquid 1-ethyl-3-methylimidazolium acetate with cosolvent dimethyl sulfoxide</p> <p>James E Hawkins, University of Leeds, UK</p>
10:20- 10:40	<p>Title: Improving ultra-fast charging performance and durability of all solid state thin film Li-NMC battery-on-chip systems by in situ TEM lamella analysis</p> <p>León Romano Brandt, University of Oxford, United Kingdom</p>
10:40- 11:00	<p>Title: Tuning the emission color and temperature range of dual-mode luminescent thermometer by dopant valence states control</p> <p>Estelle Glais, Université de Nantes, France</p>
	Tea and Refreshments Break- 11:00-11:20
	Breakout Room 1- Speaker Sessions- Day 1
11:20- 11:35	<p>Title: Enhanced adsorption performance of chitosan/cellulose nanofiber isolated from durian peel waste/graphene oxide nanocomposite hydrogels</p> <p>Diana Alemin Barus, Universitas Sumatera Utara, Indonesia</p>
11:35- 11:50	<p>Title: Cr(VI) adsorption on binary and ternary composites of raw cocoa shell with magnetic nanoparticle and Prussian blue</p> <p>Jülide Hızal, Yalova University, Yalova, Turkey</p>
11:50- 12:05	<p>Title: Oxidative dissolution of uraninite nanoparticles in the presence of manganite</p> <p>Chunli Liu, Peking University, China</p>
12:05- 12:20	<p>Title: Amino-functionalization of hydroxylated SBA-15 for enhanced uranium adsorption from seawater</p> <p>Guiru Zhu, Ocean University of China, Qingdao, China</p>
12:20- 12:35	<p>Title: Environmental considerations and current status of grouping and regulation of engineered nanomaterials</p> <p>Harald R. Tschiche, German Federal Institute for Risk Assessment (BfR), Germany</p>

12:35-12:50	Title: Potential behavior, implication and risk of nanohybrids in the environment: A review Tianjiao Xia, Northwest A&F University, China.
	Session Wrap 12:50- 13:00
	Lunch Break 13:00- 13:45
13:45- 14:00	Title: A mini-review of nanocellulose-based nanofiber membranes incorporating carbon nanomaterials for dye wastewater treatment Edward N. Nxumalo, University of South Africa, South Africa
14:00- 14:15	Title: Adaptive Modulation of Interfacial Kinetics between Homogenous Bilayer Oxide Memristor for Emulating Learning Protocols Fei Zeng, School of Materials Science and Engineering, Tsinghua University, China
14:15- 14:30	Title: Conductive/magnetic metal–organic frameworks Francisco Torrens, Institut de Ciència Molecular, Universitat de València, Spain
14:30- 14:45	Title: Ca-SrCu₂O₂ nanomaterial for High-Performance Supercapacitors Hasi Rani Barai, School of Mechanical and IT Engineering, Yeungnam University, Korea
14:45- 15:00	Title: Food-waste enables carboxylated gold nanoparticles to completely abat hexavalent chromium in drinking water Irene Vassalini, National Interuniversity Consortium of Materials Science and Technology (INSTM), R.U. Brescia, Florence, Italy
	Tea and Refreshments Break 15:00-15:15
15:15- 15:30	Title: Gene resistance profile and multidrug-resistant bacteria isolated from a stream in midwestern Brazil Raylane Pereira Gomes, Federal University of Goiás, Brazil
15:30-15:45	Title: Mechanism adsorption analysis during the removal of Cd²⁺ and Cu²⁺ onto cedar sawdust via experiment coupled with theoretical calculation: Mono- and multicomponent systems Angélica Forgianny, Universidad de Medellín, Colombia
15:45-16:00	Title: Spirulina-based carbon bio-sorbent for the efficient removal of metoprolol, diclofenac and other micropollutants from wastewater Marta Pedrosa, University of Porto, Portugal
16:00-16:15	Title: Carbothermal reduction synthesis of eggshell-biochar modified with nanoscale zerovalent iron/activated carbon for remediation of soil polluted with lead and cadmium Lin Zhao, Tianjin University, China

16:15-16:30	Title: Octacalcium phosphate crystals including a higher density dislocation improve its materials osteogenicity
	Osamu Suzuki, Tohoku University, Japan
	Room 1 Session Wrap 16:30- 16:40
	Breakout Room 2- Speaker Sessions- Day 1
11:20- 11:35	Title: Zinc blende and wurtzite CoO polymorph nanoparticles: Rational synthesis and commensurate and incommensurate magnetic order
	A. López-Ortega, Universidad de Castilla-La Mancha, Spain
11:35- 11:50	Title: Fluorescent and magnetic stellate mesoporous silica for bimodal imaging and magnetic hyperthermia
	Mariana Tasso, Universidad Nacional de La Plata – CONICET, Argentina
11:50- 12:05	Title: Synthesis and characterization of photoactive porphyrin and poly(2-hydroxyethyl methacrylate) based materials with bactericidal properties
	Nuno M.M. Moura, University of Aveiro, Portugal
12:05- 12:20	Title: Nanoscale LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ cathode materials for lithium ion batteries via a polymer-assisted chemical solution method
	Hongmei Luo, New Mexico State University, United States
12:20- 12:35	Title: Polymeric nanoparticles encapsulating α-mangostin inhibit the growth and metastasis in colorectal cancer
	Bilan Wang, Sichuan University, PR China
12:35-12:50	Title: Lithium-calcium-silicate bioceramics stimulating cementogenic/osteogenic differentiation of periodontal ligament cells and periodontal regeneration
	Fuhua Yan, Medical School of Nanjing University, China
	Session Wrap 12:50- 13:00
	Lunch Break 13:00- 13:45
13:45- 14:00	Title: Radical-functionalized plasma polymers: Stable biomimetic interfaces for bone implant applications
	Behnam Akhavan, University of Sydney, Australia
14:00- 14:15	Title: The role of bacterial cellulose loaded with plant phenolics in prevention of UV-induced skin damage
	Charles Windson Isidoro Haminiuk, Universidade Tecnológica Federal do Paraná (UTFPR), Brazil

14:15- 14:30	Title: A review on the preparation and characterization of chitosan-clay nanocomposite films and coatings for food packaging applications
	Yangchao Luo, University of Connecticut, USA.
14:30- 14:45	Title: Algal-based polysaccharides as polymer electrolytes in modern electrochemical energy conversion and storage systems: A review
	Fernando G. Torres, Pontificia Universidad Catolica del Peru, Peru
14:45- 15:00	Title: Optimization and characterization of bacterial nanocellulose produced by Komagataeibacter rhaeticus K3
	Miguel Gama, University of Minho, Portugal
Tea and Refreshments Break 15:00-15:15	
15:15- 15:30	Speaker Slots Available
15:30-15:45	Speaker Slots Available
15:45-16:00	Speaker Slots Available
16:00-16:15	Speaker Slots Available
16:15-16:30	Speaker Slots Available
Room 2 Session Wrap 16:30- 16:40	
Breakout Room 3- Speaker Sessions- Day 1	
11:20- 11:35	Title: Conjugation of folic acid with TEMPO-oxidized cellulose hydrogel for doxorubicin administration
	Eliane Trovatti, University of Araraquara, Brazil
11:35- 11:50	Title: Design of self-cleaning and self-disinfecting paper-shaped photocatalysts based on wood and eucalyptus derived cellulose fibers modified with gCN/Ag nanoparticles
	Klaudia Maślana, West Pomeranian University of Technology Szczecin, Poland
11:50- 12:05	Title: Co-culture fermentation on the production of bacterial cellulose nanocomposite produced by Komagataeibacter hansenii

	Jeffrey M. Catchmark, Pennsylvania State University, United States
12:05- 12:20	Title: Fabrication of alginate/chitosan complex fibers via diffusion controlled in-situ polyelectrolyte complexation
	Liping Zhu, Donghua University, China
12:20- 12:35	Title: A novel dental re-mineralizing blend of hydroxyethyl-cellulose and cellulose nanofibers oral film loaded with nepheline apatite glass: Preparation, characterization and in vitro evaluation of re-mineralizing effect
	Mohammad L. Hassan, National Research Centre, Egypt
12:35-12:50	Title: Production and identification of galacto-oligosaccharides from lactose using β-D-galactosidases from <i>Lactobacillus leichmannii</i> 313
	Dominic Agyei, University of Otago, New Zealand
	Session Wrap 12:50- 13:00
	Lunch Break 13:00- 13:45
13:45- 14:00	Title: Electrochemical ammonia stripping from non-nitrified animal rendering wastewater
	Sudeep C. Popat, Clemson University, United States
14:00- 14:15	Title: Syngas to higher alcohols synthesis over 3D printed KMoCo/ZSM5 monolith
	Muxina Konarova, University of Queensland, Australia
14:15- 14:30	Title: Machine learning-based discrete element reaction model for predicting the dechlorination of poly (vinyl chloride) in NaOH/ethylene glycol solvent with ball milling
	Shogo Kumagai, Tohoku University, Japan
14:30- 14:45	Title: Efficient adsorption of organic matters and ions by porous biochar aerogel as pre-treatment of ultrafiltration for shale gas wastewater reuse
	Baicang Liu, Sichuan University, PR China
14:45- 15:00	Title: Large-scale synthesis of highly structural-connecting carbon nanospheres as an anodes material for lithium-ion batteries with high-rate capacity
	Jian Chen, Sichuan University of Science and Engineering, PR China
	Tea and Refreshments Break 15:00-15:15
15:15- 15:30	Speaker Slots Available
15:30-15:45	Speaker Slots Available

15:45-16:00	Speaker Slots Available
16:00-16:15	Speaker Slots Available
16:15-16:30	Speaker Slots Available
	Room 3 Session Wrap 16:30- 16:40
Day 2- November 18, 2022	
	Keynote Sessions
09:30- 09:50	Title: Zeolite templated carbon from Beta replica as metal-free electrocatalyst for CO2 reduction G. Papanikolaou, University of Messina, Italy
09:50- 10:10	Title: Electrophoretic mobility shift as a molecular beacon-based readout for miRNA detection Getulio P. Oliveira-Jr, Harvard Medical School, United States
	Breakout Room-1 Speaker Sessions- Day 2
10:10-10:25	Title: A novel Multi-Phase Flash Sintering (MPFS) technique for 3D complex-shaped ceramics Eva Gil-González, Universidad de Sevilla, Spain
10:25- 10:40	Title: Development of an alveolar chip model to mimic respiratory conditions due to fine particulate matter exposure Guan-Yu Chen, National Yang Ming Chiao Tung University, Taiwan
10:40-10:55	Title: Bioinspired, injectable, tissue-adhesive and antibacterial hydrogel for multiple tissue regeneration by minimally invasive therapy Yuxiao Lai, Chinese Academy of Sciences, China
	Tea and Refreshments Break 10:55-11:10
11:10- 11:25	Title: Flash sintering of complex shapes Charles Manière, Normandie Univ, ENSICAEN, UNICAEN, CNRS, CRISMAT, Caen, France
11:25- 11:40	Title: 2D MoS2/carbon/polylactic acid filament for 3D printing: Photo and electrochemical energy conversion and storage Martin Pumera, Brno University of Technology, Czech Republic
11:40- 11:55	Title: Scalable aqueous processing-based radiative cooling coatings for heat dissipation applications

	Jinshu Wang, Central South University, China
11:55- 12:10	Title: Ladder-structured boron nitride nanosheet skeleton in flexible polymer films for superior thermal conductivity
	Min Chen, Fudan University, China
12:10-12:25	Title: Self-aligned CH₃NH₃PbBr₃ perovskite nanowires via dielectrophoresis for gas sensing applications
	Jihoon Choi, Chungnam National University, Republic of Korea
12:25-12:40	Title: Autonomous self-propelled MnO₂ micromotors for hormones removal and degradation
	Osamah Alduhaish, King Saud University, Saudi Arabia
12:40-12:55	Title: The origin of opto-functional enhancement in ZnO/CuO nanoforest structure fabricated by submerged photosynthesis
	Melbert Jeem, Hokkaido University, Japan
	Session Wrap 12:55- 13:05
	Lunch Break 13:05- 13:50
13:50- 14:05	Title: The role of oxygen defects engineering via passivation of the Al₂O₃ interfacial layer for the direct growth of a graphene-silicon Schottky junction solar cell
	Seong Chan Jun, Yonsei University, South Korea
14:05- 14:20	Title: Selective laser melting of metal structures onto graphite substrates via a low melting point interlayer alloy
	Scott N. Schiffres, Binghamton University, USA
14:20- 14:35	Title: Preparation of high-quality few-layers bismuthene hexagons
	Félix Zamora, Universidad Autónoma de Madrid, Spain
14:35- 14:50	Title: Challenges on waste-to-energy for the valorization of industrial wastes: Electricity, heat and cold, bioliquids and biofuels
	A. Gil, Public University of Navarra, Spain
14:50-15:05	Title: Covalent organic frameworks based on electroactive naphthalenediimide as active electrocatalysts toward oxygen reduction reaction
	José L. Segura, Universidad Complutense de Madrid, Spain
	Tea and Refreshments Break 15:05-15:20
	Poster Presentation 15:20- 16:20
	Closing and Award Ceremony 16:20-16:40

Breakout Room-2 Speaker Sessions- Day 2	
10:10-10:25	<p>Title: Graphene oxide for efficient treatment of real contaminated water by mining tailings: Metal adsorption studies to Paraopeba river and risk assessment</p> <p>Marcelo Machado Viana, Universidade Federal de Minas Gerais, Brazil</p>
10:25- 10:40	<p>Title: Wearable patch delivery system for artificial pancreas health diagnostic-therapeutic application: A review</p> <p>Yew Hoong Wong, Universiti Malaya, Malaysia</p>
10:40-10:55	<p>Title: Cas14a1-mediated nucleic acid detection platform for pathogens</p> <p>Yi Wan, Hainan University, China</p>
Tea and Refreshments Break 10:55-11:10	
11:10- 11:25	<p>Title: Harnessing recombinase polymerase amplification for rapid multi-gene detection of SARS-CoV-2 in resource-limited settings</p> <p>Rachel A. McKendry, University College London, London, United Kingdom</p>
11:25- 11:40	<p>Title: Disposable electrochemical glucose sensor based on water-soluble quinone-based mediators with flavin adenine dinucleotide-dependent glucose dehydrogenase</p> <p>Seiya Tsujimura, University of Tsukuba, Japan</p>
11:40- 11:55	<p>Title: Polydopamine aggregation: A novel strategy for power-free readout of loop-mediated isothermal amplification integrated into a paper device for multiplex pathogens detection</p> <p>Nae Yoon Lee, Gachon University, South Korea</p>
11:55- 12:10	<p>Title: SERS-based sensor for the detection of sexually transmitted pathogens in the male swab specimens: A new approach for clinical diagnosis</p> <p>Agnieszka Kamińska, Polish Academy of Sciences, Poland</p>
12:10-12:25	<p>Title: Organophosphorus pesticides: Impacts, detection and removal strategies</p> <p>Timothy Oladiran Ajiboye, Florida International University, USA</p>
12:25-12:40	<p>Title: A MoS₂ platform and thionine-carbon nanodots for sensitive and selective detection of pathogens</p> <p>Encarnación Lorenzo, Ciudad Universitaria de Cantoblanco, Spain</p>
12:40-12:55	<p>Title: Replacement of antibodies with bacteriophages in lateral flow assay of Salmonella Enteritidis</p> <p>Ugur Tamer, Gazi University, Turkey</p>
Session Wrap 12:55- 13:05	

	Lunch Break 13:05- 13:50
13:50- 14:05	Title: Fluorescent paper-based DNA sensor using pyrrolidinyI peptide nucleic acids for hepatitis C virus detection Orawon Chailapakul, Chulalongkorn University, Thailand
14:05- 14:20	Speaker Slots Available
14:20- 14:35	Speaker Slots Available
14:35- 14:50	Speaker Slots Available
14:50-15:05	Speaker Slots Available
	Tea and Refreshments Break 15:05-15:20
	Poster Presentation 15:20- 16:20
	Closing and Award Ceremony 16:20-16:40
	Breakout Room-3 Speaker Sessions- Day 2
10:10-10:25	Title: Label-free photoelectrochemical immunosensor for aflatoxin B1 detection based on the Z-scheme heterojunction of g-C3N4/Au/WO3 Wu Lei, Nanjing University of Science and Technology, China
10:25- 10:40	Title: Integrated microneedle-smartphone nucleic acid amplification platform for in-field diagnosis of plant diseases Qingshan Wei, North Carolina State University, USA
10:40-10:55	Title: An integrated liquid crystal sensing device assisted by the surfactant-embedded smart hydrogel Jin-Ming Lin, Tsinghua University, China
	Tea and Refreshments Break 10:55-11:10
11:10- 11:25	Title: Monofunctional pyrenes at carbon nanotube electrodes for direct electron transfer H2O2 reduction with HRP and HRP-bacterial nanocellulose Serge Cosnier, Univ. Grenoble Alpes - CNRS, France
11:25- 11:40	Title: Development of 6E3 antibody-mediated SERS immunoassay for drug-resistant influenza virus Juyeon Jung, University of Science and Technology (UST), Republic of Korea

11:40- 11:55	Title: Microbial whole-cell biosensors: Current applications, challenges, and future perspectives Sylvia Daunert, University of Miami Miller School of Medicine, USA
11:55- 12:10	Title: Rational selection of hidden epitopes for a molecularly imprinted electrochemical sensor in the recognition of heat-denatured dengue NS1 protein Eduardo Costa Figueiredo, Federal University of Alfenas, Brazil
12:10-12:25	Title: Enzyme-free impedimetric biosensor-based molecularly imprinted polymer for selective determination of L-hydroxyproline Whitchuta Jesadabundit, Chulalongkorn University, Thailand
12:25-12:40	Title: A rapid quantitative on-site coronavirus disease 19 serological test Yong Beom Shin, BioNano Health Guard Research Center, Republic of Korea
12:40-12:55	Title: 3D fuzzy graphene microelectrode array for dopamine sensing at sub-cellular spatial resolution Tzahi Cohen-Karni, Carnegie Mellon University, USA
Session Wrap 12:55- 13:05	
Lunch Break 13:05- 13:50	
13:50- 14:05	Title: Interfacing the enzyme multiheme cytochrome c nitrite reductase with pencil lead electrodes: Towards a disposable biosensor for cyanide surveillance in the environment Deniz Aktaş Uygun, Adnan Menderes University, Turkey
14:05- 14:20	Title: High selectivity detection of FMDV- SAT-2 using a newly-developed electrochemical nanosensors Ibrahim M. El-Sherbiny, Zewail City of Science and Technology, Egypt
14:20- 14:35	Speaker Slots Available
14:35- 14:50	Speaker Slots Available
14:50-15:05	Speaker Slots Available
Tea and Refreshments Break 15:05-15:20	
Poster Presentation 15:20- 16:20	
Closing and Award Ceremony 16:20-16:40	

Poster 1	Title: Titanosilicates enhance carbon dioxide photocatalytic reduction
	Jiří Čejka, Charles University, Czech Republic
Poster 2	Title: Engineering of domain wall propagation in magnetic microwires with graded magnetic anisotropy
	A. Zhukov, University of Basque Country, Spain
Poster 3	Title: Recent progress in acoustic metamaterials and active piezoelectric acoustic metamaterials - A review
	John Huber, University of Oxford, UK
Poster 4	Title: NIR powered Janus nanocarrier for deep tumor penetration
	Yongqiang Wen, University of Science and Technology Beijing, China
Poster 5	Title: Surface charge density of triboelectric nanogenerators: Theoretical boundary and optimization methodology
	Zhong Lin Wang, Chinese Academy of Sciences, China
Poster 6	Title: Saikosaponin D loaded macrophage membrane-biomimetic nanoparticles target angiogenic signaling for breast cancer therapy
	Fei Yan, Jilin University, China
Poster 7	Title: Glioma-sensitive delivery of Angiopep-2 conjugated iron gold alloy nanoparticles ensuring simultaneous tumor imaging and hyperthermia mediated cancer theranostics
	Ren-Jei Chung, National Taipei University of Technology, Taiwan
Poster 8	Title: ECM-mimicking nanofibrous matrix coaxes macrophages toward an anti-inflammatory phenotype: Cellular behaviors and transcriptome analysis
	Fa-Ming Chen, Fourth Military Medical University, China
Poster 9	Title: Polymeric microellipsoids with programmed magnetic anisotropy for controlled rotation using low (≈ 10 mT) magnetic fields
	Sonia Contera, University of Oxford, UK
Poster 10	Title: High speed 4D printing of shape memory polymers with nanosilica
	Yu Ying Clarrisa Choong, Nanyang Technological University, Singapore

Poster 11	Title: Self-assembled, biocompatible and biodegradable TEMPO-conjugated nanoparticles enable folate-targeted tumor magnetic resonance imaging
	M. Zubair Iqbal, Chinese Academy of Sciences, PR China
Poster 12	Title: Optimization of ionic-liquid based electrolyte concentration for high-energy density graphene supercapacitors
	Jaka Sunarso, Swinburne University of Technology, Malaysia
Poster 13	Title: Enhanced bacteriostatic activity, osteogenesis and osseointegration of silicon nitride/polyetherketoneketone composites with femtosecond laser induced micro/nano structural surface
	Kai Zheng, University of Erlangen-Nuremberg, Germany
Poster 14	Title: Sticky bone-specific artificial extracellular matrix for stem cell-mediated rapid craniofacial bone therapy
	Sang Ho Jun, Korea University Medical Center, Republic of Korea
Poster 15	Title: Hydrophobic to superhydrophilic tuning of multifunctional sporopollenin for microcapsule and bio-composite applications
	Nam-Joon Cho, Nanyang Technological University, Singapore
Poster 16	Title: Specific phase modulation and infrared photon confinement in solar selective absorbers
	Hongtao Cao, Chinese Academy of Sciences, China
Poster 17	Title: Mutual contaminants relational realization and photocatalytic treatment using Cu₂MgSnS₄ decorated BaTiO₃
	Yaodong Yang, Xi'an Jiaotong University, PR China
Poster 18	Title: Bi-stable electronic states of cobalt phthalocyanine molecules on two-dimensional vanadium diselenide
	Ping Kwan Johnny Wong, National University of Singapore, Singapore
Poster 19	Title: Harnessing energy from micropollutants electrocatalysis in a high-performance supercapacitor based on PEDOT nanotubes
	Marcio Vidotti, Universidade Federal do Paraná, Brazil
Poster 20	Title: Probing the influence of tether density on tethered bilayer lipid membrane (tBLM)-peptide interactions
	Minsub Chung, Hongik University, Republic of Korea

Poster 21	Title: Surface-PASylation of ferritin to form stealth nanovehicles enhances in vivo therapeutic performance of encapsulated ellipticine
	Zbynek Heger, Mendel University in Brno, Czech Republic
Poster 22	Title: Genetically engineered elastin-like recombinamers with sequence-based molecular stabilization as advanced bioinks for 3D bioprinting
	Jose Carlos Rodríguez-Cabello, University of Valladolid, Spain
Poster 23	Title: Tuning the structural, optical and photoluminescence properties of hybrid perovskite quantum dots by A-site doping
	Juan Jesús Gallardo, Universidad de Cádiz, Spain
Poster 24	Title: Mesenchymal stem cells transplanted with self-assembling scaffolds differentiated to regenerate nucleus pulposus in an ex vivo model of degenerative disc disease
	G. Rasul Chaudhry, Oakland University, USA
Poster 25	Title: Asymmetric polyelectrolyte multilayer membranes with ultrathin separation layers for highly efficient micropollutant removal
	Wiebe M. de Vos, Institute for Nanotechnology, The Netherlands
Poster 26	Title: Additive manufacturing by template-assisted 3D electrodeposition: Nanocrystalline nickel microsprings and microspring arrays
	Patrik Schürch, Laboratory for Mechanics of Materials and Nanostructures, Switzerland
Poster 27	Title: CO₂ permeability control in 3D printed light responsive structures
	Annalisa Chiappone, Politecnico di Torino, Italy
Poster 28	Title: Anchoring of single-platinum-adatoms on cyanographene: Experiment and theory
	Piotr Błoński, Palacký University, Czech Republic
Poster 29	Title: New insights on Uranium recovery from seawater and aqueous media
	Tamara Elzein, National Council for Scientific Research, Lebanon
Poster 30	Title: Elements beyond graphene: Current state and perspectives of elemental monolayer deposition by bottom-up approach
	Rigoberto C. Advincula, University of Chemistry and Technology Prague, Czech Republic
Poster 31	Title: 3D printing for membrane separation, desalination and water treatment

	Leonard D. Tijging, University of Technology Sydney, Australia
Poster 32	Title: Review: Silicon oxycarbide based materials for biomedical applications Aldo R. Boccaccini, University of Erlangen-Nuremberg, Germany
Poster 33	Title: Hydrogel-based 3D bioprinting: A comprehensive review on cell-laden hydrogels, bioink formulations, and future perspectives Ambalangodage C. Jayasuriya, University of Toledo, USA
Poster 34	Title: The rise of conductive copper inks: challenges and perspectives Wanli Li, National Institute for Materials Science, Japan
Poster 35	Title: Recent trends on the development of systems for cancer diagnosis and treatment by microfluidic technology Carmen S.R. Freire, University of Aveiro, Portugal
Poster 36	Title: Ferrocene-integrated conjugated microporous polymer nanosheets: Active and regenerative catalysts for photomediated controlled radical polymerization Jiayin Yuan, Stockholm University, Sweden
Poster 37	Title: Unscrambling illusionary catalysis in three-dimensional particle-modified electrodes: Reversible reactions at conducting particles Enno Kästelhön, Oxford University, United Kingdom
Poster 38	Title: Disentangling bulk polymers from adsorbed polymers using the quartz crystal microbalance Jurriaan J.J. Gillissen, University College London, United Kingdom
Poster 39	Title: New inorganic coating-based triboelectric nanogenerators with anti-wear and self-healing properties for efficient wave energy harvesting Daoai Wang, Lanzhou Institute of Chemical Physics, China
Poster 40	Title: Unlocking the potential of carbon incorporated silver-silver molybdate nanowire with light Sharon Xiaodai Lim, National University of Singapore, Singapore
Poster 41	Title: In-situ Synchrotron imaging of keyhole mode multi-layer laser powder bed fusion additive manufacturing Yunhui Chen, University College London, United Kingdom
Poster 42	Title: The crucial impact of cerium reduction on photoluminescence

	Romain Gautier, Université de Nantes, France
Poster 43	Title: Exploring phononic properties of two-dimensional materials using machine learning interatomic potentials
	Bohayra Mortazavi, Leibniz Universität, Germany
Poster 44	Title: Polymer-derived Si₃N₄ nanofelts for flexible, high temperature, lightweight and easy-manufacturable super-thermal insulators
	Gian Domenico Sorarù, University of Trento, Italy
Poster 45	Title: Investigating the properties of humins foams, the porous carbonaceous materials derived from biorefinery by-products
	Alice Mija, Université Côte d'Azur, France
Poster 46	Title: Self-aligned concentrating immersion-lens arrays for patterning and efficiency recovery in scaffold-reinforced perovskite solar cells
	Adam D. Printz, Stanford University, USA
Poster 47	Title: Thin-walled Ni-Ti tubes under compression: ideal candidates for efficient and fatigue-resistant elastocaloric cooling
	Jaka Tušek, University of Ljubljana, Slovenia
Poster 48	Title: Effect of mold assemblies-induced interfaces in the mechanical actuation of electro-responsive ionic liquid-based polycationic hydrogels
	H.C. de Sousa, Univ Coimbra, Portugal
Poster 49	Title: Electrophoretic deposition of antimonene for photoelectrochemical applications
	Menny Shalom, University of the Negev, Israel
Poster 50	Title: Design of wave-optical structured substrates for ultra-thin perovskite solar cells
	Universidade NOVA de Lisboa and CEMOP/UNINOVA, Portugal.
Poster 51	Title: 3D printing enables the rapid prototyping of modular microfluidic devices for particle conjugation
	Majid Ebrahimi Warkiani, University of Technology Sydney, Australia
Poster 52	Title: UV-triggered polymerization of polycatecholamines enables the production of organ-on-chips inside a biosafety cabinet
	Amir Sanati-Nezhad, University of Calgary, Canada

Poster 53	Title: Emerging Dirac materials for THz plasmonics
	Alessandro Molle, CNR-IMM, Unit of Agrate Brianza, Italy
Poster 54	Title: Strain-polarization coupling mechanism of enhanced conductivity at the grain boundaries in BiFeO₃ thin films
	Andrei Kholkin, University of Aveiro, Portugal
Poster 55	Title: Resist-free nanoimprinting on optical fibers for plasmonic optrodes
	Daisuke Aoyo, The University of Adelaide, Australia.
Poster 56	Title: Control of plasmon dephasing time using stacked nanogap gold structures for strong near-field enhancement
	Hiroaki Misawa, Hokkaido University, Japan
Poster 57	Title: Surface-enhanced Raman scattering (SERS) imaging of bioactive metabolites in mixed bacterial populations
	Gustavo Bodelón, Universidade de Vigo, Spain
Poster 58	Title: Surface enhanced Raman scattering on molecule junction
	M. Kiguchi, Tokyo Institute of Technology, Japan
Poster 59	Title: Hyperporous carbon-coated 3D printed devices
	Alvaro J. Santos-Neto, University of the Balearic Islands, Spain
Poster 60	Title: Intrinsic Au-decoration on anodic TiO₂ nanotubes grown from metastable Ti–Au sputtered alloys—High density co-catalyst decoration enhances the photocatalytic H₂ evolution
	Patrik Schmuki, University of Erlangen-Nuremberg, Germany
Poster 61	Title: Metal–organic framework mixed-matrix coatings on 3D printed devices
	Gemma Turnes Palomino, University of the Balearic Islands, Spain
Poster 62	Title: Injection compression molding of transmission-type Fano resonance biochips for multiplex sensing applications
	Kuang-Li Lee, Research Center for Applied Sciences, Taiwan
Poster 63	Title: Self-assembled porous ferroelectric thin films with a greatly enhanced piezoelectric response
	Aleksander Matavž, Jožef Stefan Institute, Slovenia

Poster 64	Title: 3D printed microstructured Au/TiO₂ catalyst for hydrogen photoproduction
	Lluís Soler, Universitat Politècnica de Catalunya, Spain
Poster 65	Title: Fluorescent and magnetic stellate mesoporous silica for bimodal imaging and magnetic hyperthermia
	Mariana Tasso, Universidad Nacional de La Plata – CONICET, Argentina
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