



2025 GIORNATE SCIENTIFICHE

SESSIONE POSTER

CNR | DSCTM

21-23 ottobre 2025 - MAIN ENTRANCE HALL

Num.	Relatore	Titolo del contributo	Area tematica Dipartimento	Inst.
1	MARTIN ALBINO	Improving the properties of Sr-hexaferrites for the realization of Rare Earth-free permanent magnets	Advanced Materials	ICCOM
2	CATERINA BALDASSINI	Spintronic advantage of molecular spin-valves for neuromorphic computing	Advanced Materials	ISMN
3	BRUNO BRUNETTI	Sensor network, integration of satellite and terrestrial platforms managed by artificial intelligence, for surface waters health	Advanced Materials	ISMN
4	GABRIELE CALABRESE SIVIERI	Enhancing zT in Organic Thermoelectric Materials through Nanoscale Local Control Crystallization	Advanced Materials	ISMN
5	DANIELA CASCHERA	Critical raw materials and their recovery from geomaterials: state-of-the-art in Italy	Advanced Materials	ISMN
6	SONIA CONTE	The challenges of improving the circular economy in ceramic tiles production	Advanced Materials	ISSMC
7	ALESSANDRO COROZZI	Scaling Up Membrane Distillation For Industrial Wastewater Feeds: Biomimetic Coatings In Chemical Processing	Advanced Materials	ISSMC
8	RICCARDO DONNINI	Thin walled advanced ductile irons for lightweight design	Advanced Materials	ICMATE
9	SARA KHALIHA	Upcycling of Plastic Scraps from Biomedical Membrane Production and Their Reuse in Water Treatment Technologies	Advanced Materials	ISOF
10	ERIKA MANICONE	Multiscale Structural Characterization and Imaging of Nano/Bio-Materials by X-Ray Scattering Techniques with Advanced Laboratory Infrastructure	Advanced Materials	IC
11	ROBERTA MARZELLA	Technology Transfer of advanced composite polyurethane foams via pilot manufacturing in a Horizon Open Innovation Test Bed	Advanced Materials	IPCB
12	STEFANIA PALERMO	Role of membrane post-treatment on stabilisation of polymer electrolyte membranes	Advanced Materials	ITM
13	GIOVANNA G. BUONOCORE	Designing Lightweight, Piezoresistive Soft Components through Foam-Based Conductive TPU Printing	Advanced Materials	IPCB
14	FRANCESCA PETRONELLA	Optical Detection Of Biological Targets assisted by Plasmonic Nanomaterials	Advanced Materials	IC
15	FRANCESCO PICELLI	Ceramic Laser Waveguides: Beyond the Limits of Single Crystals	Advanced Materials	ISSMC

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16	ANGELA PINTUS	Direct Functionalization of Graphene Oxide in polymeric composites for tunable water contaminant adsorption	Advanced Materials	ISOF
17	MARIA ROSARIA PLUTINO	Tailored Functionalization of Textile Surfaces by Innovative Bio-based Hybrid Materials: from Concept to Sustainable Application	Advanced Materials	ISMN
18	VANESSA R. LANDAETA	Light-promoted arylation of carboxylates catalyzed by Nickel complexes bearing xanthine-derived ligands	Green Chemistry	ICCOM
19	ARASH GHALAYANI ESFAHANI	Design and Preliminary Evaluation of Triboelectric Sensors for Self-Powered E-Skin in Tactile Neuroprosthetics	Advanced Materials	IPCB
20	FEDERICA RUANI	Control on the photophysical responses of porphyrin-acridinium conjugates upon application of different orthogonal triggers	Advanced Materials	ISOF
21	LUCA PEZZATO	PVD films for hydrogen applications	Advanced Materials	ICMATE
22	PAOLA STAGNARO	Polymer composites for voltage-modulated Passive Daytime Radiative Coolers	Advanced Materials	SCITEC
23	ELENA VILLA	NiMnGa-based multicaloric alloys: functional thermo-mechanical investigation under magnetic field	Advanced Materials	ICMATE
24	FRANCESCA CICOGNA	Functional polymeric surfaces via immobilization of natural bioactive molecules	Advanced Materials	ICCOM
25	SABRINA GUALTIERI	Characterization and Conservation of Earthen Materials: a case study from an archaeological site in the UAE	Cultural Heritage	ISSMC
26	ELODIA SPINELLI	Tailored Release and Enhanced Antifouling Activity of Thyme Oil Encapsulated in Functionalized Mesoporous Silica Nanoparticles for Artworks Conservation	Cultural Heritage	IPCB
27	PAOLA BASSANI	New metallic PCM materials: a collaborative research from modeling to experimental development	Energy	ICMATE
28	GREGORIO BOTTARO	Eu3+ luminescent solar concentrators as high-area, visible-blind UV photodetectors	Energy	ICMATE
29	GIUSEPPE Di LUCA	Bio-sustainable membranes for water treatment applications	Energy	ITM
30	ANDREA ANTONINO SCAMPORRINO	Thermosetting self-healing resin for Perovskite Solar Cells encapsulation	Energy	IPCB
31	ELISA BANDINI	Carbon Dioxide Valorization by Chemical, Photo- And Electro-Chemical Processes (Cativape)	Energy	ISOF
32	ELISA CARIGNANI SILVIA BORSACCHI	Shedding Light onto Structure, Dynamics and Behaviour under in Situ Illumination of Halide Perovskites through Solid State NMR and Nuclear Quadrupole Resonance Spectroscopies	Energy	ICCOM

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33	MARIAGIULIA LONGO	Ion exchange membranes based on Polymers of intrinsic Microporosity (PIMs) for fuel cell and electrolyser applications	Energy	ITM
34	SIMONA BRONCO	Influence of ecofriendly polymeric materials in antropic contests: from health to energy	Green Chemistry	IPCF
35	FRANCESCA BUCO	Heterogeneous catalysis for polyester depolymerization: a sustainable route to monomer recovery	Green Chemistry	ICCOM
36	LUCIA CONZATTI	Influence of bio-based component miscibility on morphology and performances of rubber compounds for tire treads	Green Chemistry	SCITEC
37	MARCO RUSSO	Development of Sulfonated supported catalysts for one-pot biodiesel synthesis applications	Green Chemistry	ISMN
38	ZEINAB SAKI	Covalent Triazine Frameworks as Heterogeneous and Metal-Free Catalysts for Nitro-Aryl Reduction to Anilines	Green Chemistry	ICCOM
39	EMANUELE TROSSI	Metal replacement with two-dimensional materials for sustainable polymer composites	Green Chemistry	ISOF
40	ANDREA TRIFOGLIO	Synthesis of V-shaped oligothiophenes photocatalysts and their incorporation into alginate beads for the degradation of emerging organic contaminants in water	Green Chemistry	ISOF
41	MARIA CONCETTA CARNEVALE	Enhancing Membrane Distillation with Sustainable PVDF Membranes. The Role of Green Solvent and Functional Coating	Green Chemistry	ITM
42	VALENTINA ZIN	High Power Impulse Magnetron Sputtering plasma nitriding of biomedical grade CoCrMo alloy	Life Sciences	ICMATE
43	RAFFAELE MORRONE	Chemo-enzymatic synthesis of valuable precursor of (S)-amlodipine	Life Sciences	ICB
44	ASSUNTA BORZACCHIELLO	Targeted delivery systems for precision therapy of colorectal and hepatocellular cancer	Life Sciences	IPCB
45	CATERINA CRISTALLINI	Biomaterial design strategies for a fully biodegradable, electro-mechanical and drug release compliant cardiac patch technology	Life Sciences	IPCF
46	ROBERTO COMPARELLI	Silver-Engineered Nanocomposites: Innovative Strategies for Antimicrobial Defense	Life Sciences	IPCF
47	DANILO MILARDI	Non-covalent interactions with A β peptide inhibit SUMO-2 activity, potentially contributing to Alzheimer's disease pathogenesis	Life Sciences	IC
48	NOEMI RAVAGLIA	Bioelectric Stimulation Triggered by External Stimuli via Piezoelectric Egg-White Scaffolds for Tissue Regeneration	Life Sciences	ISSMC

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49	MARTINA ROTONDO	Targeting miRNA in Cancer: Peptide-PNA conjugates for Enhanced Intracellular Delivery	Life Sciences	ICB
50	MIKOLA TOPORASH	Unveiling the solvent effect: DMSO interaction with Human Nerve Growth Factor and its implications for drug discovery	Life Sciences	IC
51	ROBERTA FABBRI	Bioelectronic material interfaces and devices to stimulate and record glial dynamics	Life Sciences	ISOF
52	FAUSTA ULGHERI	MCR based sustainable synthesis of a second class of new inhibitors of the inflammasome-caspase 1 pathway. From design to in vitro and in vivo evaluation	Life Sciences	ICB
53	ILARIA ZANONI	Luminescent antibacterial silica-based nanomaterial: new sustainable alternatives	Life Sciences	ISSMC
54	EMILIA BENVENUTI	Engineering Nanoparticles for Medical Applications	Life Sciences	ISMN
55	ANTONELLA CATERINA BOCCIA	NMR tools for Chemistry in Life Sciences and for Advanced Materials Development	Life Sciences	SCITEC
56	DANIELA ESPOSITO	Decoding CB ₂ -driven metabolic rewiring in colorectal cancer: insights into immune evasion and microenvironment crosstalk	Life Sciences	ICB
57	MARIA GRAZIA MELILLI	Iron, zinc and selenium fortification of functionalized pasta: results of PNRR ONFOODS project	Life Sciences	ICB
58	DANIELA MONTI	Discovery, Functional Characterization, and Engineering of the Amine Transaminase Sbv333-TA from Streptomyces sp.	Green Chemistry	SCITEC
59	MARIACHIARA TRAPANI	Metal Nanoparticles, Cyclodextrins and Chromophores as Versatile Components of Supramolecular Functional Hybrid Nanomaterials for Sensing and Health	Life Sciences	ISMN
60	FRANZ SAIJA	Formation of SO ₂ in exoplanets' atmospheres investigated by quantum chemistry	Modelling	IPCF
61	MARIO ITALO TRIONI	H ₂ O and CO ₂ interaction with perovskitic (110) surface: the case of SrFeO ₃	Modelling	SCITEC
62	GIULIA MORRA	AI driven and rational design of modulators of cargo recruitment by the regulatory light chains of the ubiquitous kinesin-1 motor protein	Modelling	SCITEC
63	MICHELE SAVIANO	Research Infrastructures: a cornerstone for nanomedicine - The PNRR project ITACA.SB	Infrastrutture	IC
64	ALBERTO CASSETTA	Research Infrastructures: IC perspectives in Trieste in the PRP@CERIC and CNR@Elettra2,0 framework	Infrastrutture	IC

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65	ILARIA PERISSI	Preventing risks in Green Hydrogen production: a Safety by Design approach	Green Chemistry	ICCOM
66	PRACHI PANDEY	Computational study of vibronic coupling in 9-Mesityl-10-methylacridinium cation and its phenyl-derivative	Modelling	ICCOM
67	ALESSANDRO VELTRI	The Geometry Matrix: a simple, modular way to solve differential material equations for small nanoparticles	Advanced Materials	IPCF
68	DONATELLA SPADARO	Microbial Biomass Cultivation for Sustainable Natural Dyes: Chemistry and Practical Applications	Green Chemistry	IPCF
69	GIUSEPPE CALOGERO	Next-Gen Solar-to-Fuel: Bifunctional Tandem Bifacial DSSCs for Hydrogen and Liquid Fuel Carrier Production	Energy	IPCF
70	MATTEO MOR	High-Performance Ceramics for Extreme Environments: Unveiling the Potential of Ultra High Temperature Ceramic Matrix Composites Across Industries	Advanced Materials	ISSMC
71	FELICE CARLO SIMEONE	Statistical modeling of the toxicity of metal-oxide nanoparticles	Modelling	ISSMC
72	SERGIO RIVA	Studies on the enzymatic amination of the biomass derivatives cyrene and levoglucosenone	Green Chemistry	SCITEC
73	ABDULLAH FIRAT UYAR	Compaction Strategies for 3D Printing of Continuous Carbon Fiber Reinforced Thermoplastics	Advanced Materials	IPCB
74	FRANCESCO ATTANASIO	Changes in cellular Copper Homeostasis during bMSC aging	Life Sciences	IC
75	SIMONA FANTACCI	2D or not 2D, that is the question	Modelling	SCITEC
76	BARBARA VENTURA	Phthalocyanine-Based Host-Guest Supramolecular Frameworks: Assessing and Modulating Photoinduced Energy/Electron Transfer Processes for Artificial Photosynthesis Applications	Energy	ISOF
77	MARIA PIA CASALETTO	Bridging the gap between corrosion science and outdoor bronze conservation in marine environment: the MEDUSA project	Cultural Heritage	ISMN
78	CHIARA LAZZARINI	Inorganic and organic platforms for neural cell culture and functional 3d in vitro modelling	Life Sciences	ISOF
79	ANDREA BARBIERI	A Multicomponent Solar Energy Conversion System with Extended Spectral Collection and Improved Efficiency (MUSES)	Energy	ISOF

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