



Funded by the
European Union
NextGenerationEU



PRIN 2022 PNRR – NanoStore

Engineered NANOstructures for sustainable and accessible photo-enhanced energy STORagE devices



Università
di Catania



DIPARTIMENTO di
FISICA e ASTRONOMIA
"Ettore Majorana"



Istituto per la
Microelettronica e
Microsistemi
Consiglio Nazionale delle Ricerche

Workshop on advanced materials for energy storage applications: state-of- the-art and future perspectives

June 9th-10th 2025

Physics and Astronomy department, Catania University

Seminar room, building 6

Chairs: Prof.ssa M. Chiara Spadaro and Dott.ssa Vincenzina Strano

Agenda

June 9th 2025

10:00-10:10	Welcome and NanoStore presentation (DFA,CNR)
10:10-10:30	Daniela Russo (CNR-IMM)
10:30-11:15	Massimo Cuscunà (CNR-NANOTECH) – invited <i>2D Layered Thin Films for Solid-State Hydrogen Storage</i>
11:15-11:30	Coffee break
11:30-12:15	Emre Erdem (Sabbanci Uni) – invited <i>From Atomic Defects to Device Efficiency: Probing Oxide Nanomaterials for Supercapacitor Applications</i>
12:15-12:35	Alessia Fischetti (DFA-UniCt)
12:35-14:00	Lunch break
14:00-16:30	Round table and lab tour

June 10th 2025

10:00-10:10	NanoStore perspectives (DFA, CNR)
10:10-10:55	Richard Palmer (Swansea Uni) – invited <i>Manipulating Metal Atoms and Manufacturing Atomic Clusters</i>
10:55-11:15	Claudio Lentini Campalleggio (DFA-UniCt)
11:15-11:30	Coffee break
11:30-12:15	Claudia Triolo (UniRC) - invited <i>High-Entropy Oxides for Energy Storage Systems: Role of Crystalline Structure and Defects in Alkali Metal-Ion Battery Storage Mechanisms</i>
12:15-13:00	Vincenzo Grillo (CNR-NANO) – invited <i>Prospects of AI-automated electron microscopy for material science and energy applications</i>
13:00-13:05	greetings



Funded by the
European Union
NextGenerationEU



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA