

SUSTAINABLE MATERIALS, PROCESSES AND SYSTEMS FOR ENERGY TRANSITION

MUR DM 118 - Sustainable unconventional materials for energy harvesting and sensing applications by integration of organic and calcogen radical dopant

Funded By	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA [P.iva/CF:97429780584] UNIVERSITA' DEGLI STUDI DI NAPOLI FEDERICO II [P.iva/CF:00876220633]
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Context of the research activity	<p>Organic thermoelectric materials have potential for a wide range of applications from wearable heating, cooling, and to eventually satisfy the energy requirements of personalized healthcare devices. High-Seebeck-coefficient materials are needed and there is a growing interest in developing organic thermoelectric materials. A recent approach to improve thermoelectric properties of organic material relies on the use of molecules bearing stable radical groups to increase the Seebeck coefficient.</p> <p>Progetto finanziato nell'ambito del PNRR – DM 118/2023 - CUP E14D23001850006</p>
Objectives	Progetto finanziato nell'ambito del PNRR – DM 118/2023 - CUP E14D23001850006
Skills and competencies for the development of the activity	The main investigation techniques on which the activities will be based include: high and low pressure chromatography, mass spectrometry and NMR, spectroscopic techniques in liquid phase (UV-visible and fluorescence) and in solid phase (FTIR-ATR, EPR), impedance spectroscopy, I-V measurements in Van der Pauw 4 points configuration.