

Selected topics in Physics:
From basic research to applications in solid state physics.

Talk given by: Federica Poiana

Organic field effect transistors.
Exploring possibilities.

After the discovery of conducting organic polymers and their outstanding properties, the interest in organic electronics has grown exponentially in the last forty years.

In this presentation we will at first recall the main features of organic semiconductors, from the molecular structure to the fabrication methods. Then we will focus on the applications, in particular on organic field effect transistors, compared to a traditional Si-based MOSFET. Devices based on different organic semiconductors will be analyzed, in order to show the wide range of possibilities offered by these materials, keeping in mind that there's still a long way to go...