



UNIVERSITÀ
degli STUDI
di CATANIA



DIPARTIMENTO DI **FISICA E ASTRONOMIA**
“**ETTORE MAJORANA**”

DOTTORATO DI **RICERCA** IN
SCIENZA DEI MATERIALI E NANOTECNOLOGIE
XXXIX CICLO

Physics of Matter (2 CFU: Theory + Lab.)

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lecture period: 1st semester 2024/2025

PROGRAMME OF THE COURSE

- Structural and electrical properties of materials
- Point defects and extended defects
- Nucleation, solidification, amorphous-crystal transition.
- Silicon technology
- Thin film deposition and epitaxy
- Molecular Beam Epitaxy
- Materials and technology for renewable energy production: photovoltaics, green hydrogen, fuel cells

BIBLIOGRAPHY

Slides produced by the teacher