

TARGET PREPARATION AND CHARACTERIZATION FOR NUCLEAR PHYSICS EXPERIMENTS

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Target preparation techniques continuously under development. In the particular case of nuclear physics experiments, target composition and quality are crucial for obtaining reliable data. Target characteristics are considered individually for matching specific parameters of each experiment.

The target laboratory in IFIN-HH is endowed with high quality equipment for evaporation-condensation, cold rolling and electron gun methods¹. In order to fulfill characterization requirements, methods as XRD, AFM, SEM/EDX, RBS are applied. Manufacturing processes combined with the characterization techniques lead to a strong perspective for improving target preparation²⁻⁴.

Detailed and specific information about the aforementioned methods is given and our recent results regarding target manufacturing and characterization are presented for various cases in target types.

References

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