

**Tipo di tesi:** Laurea Triennale

**Corso di Laurea:** Area dell'Ingegneria Industriale

**Tipologia:** Sperimentale

**Titolo della tesi:** Laser treatment design and testing to reduce the optical reflectivity of copper alloys, molybdenum, and tungsten

**Proponente:** M. Dalla Palma

**Relatore Accademico:** L. Giudicotti

**Capogruppo:** M. Dalla Palma (Gruppo Ingegneria del Plasma)

**Argomento della tesi:** The student will contribute to the design and testing of a laser surface treatment conceived to roughen the surfaces and, as a consequence, to reduce the optical reflectivity of materials. The laser will be used to treat samples of calorimeter dumping surfaces made of copper alloys, molybdenum, or tungsten that should provide reduced reflectivity to be observed with thermal imaging cameras. Surface morphology and material continuity will be examined (SEM) together with chemical composition and crystalline configuration (TEM) in particular for the effects on the mechanical strength.

**Data della proposta:** 13/11/2019

**Stato:** non assegnata

**Laureando/a:** ---