

Thin Film Materials (PHYS:7905)

Thin films play an important role in many technological applications, including micro- and optoelectronics, and optical and surface coatings. This course will provide an introduction to growth and properties of thin film materials. We will examine modes and techniques of growth and deposition of films; lithography, pattern generation, and microstructures; film stress in anisotropic and patterned films; film buckling and delamination; misfit dislocation formation, interaction, and strain relaxation; and equilibrium and stability of films.