



Contribution ID: 395

Type: Poster

Optical properties of metal nanoparticles formed by ion implantation in oxides

Abstract: Ion implantation was used to produce nanostructures in MgO, Al₂O₃ and SiO₂. Optical absorption spectra show surface plasmon resonance bands characteristic of the implanted metal ions. Upon annealing in reducing atmospheres the optical response of metal nanostructures changes what is related directly to their morphology, shape and size.

Primary author: KOZAKIEWICZ, Anna (Wits)

Co-author: DERRY, Trevor (Wits, School of Physics)

Presenter: KOZAKIEWICZ, Anna (Wits)

Track Classification: Track A - Condensed Matter Physics and Material Science