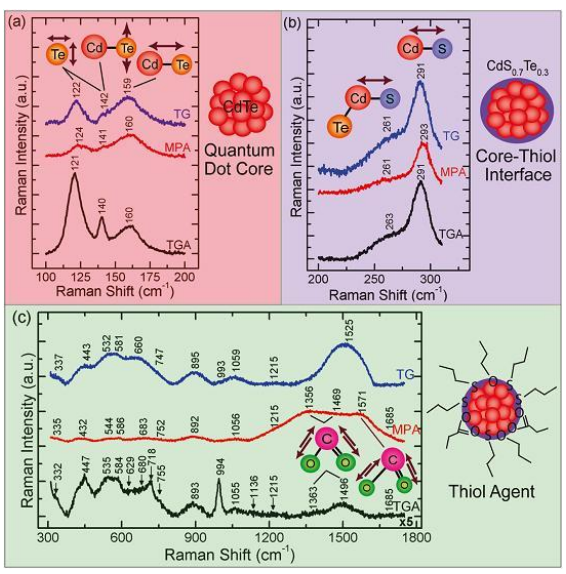
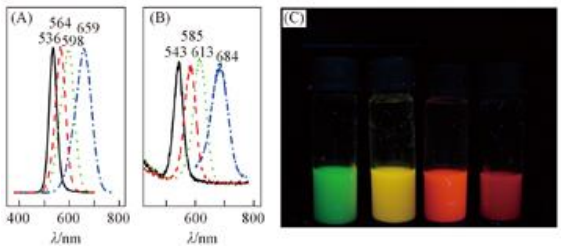
Sveučilište J. J. Strossmayera, Odjel za fiziku, i Technological Education Institute of Lamia, Department of Electronics, Vas u sklopu Erasmus+ programa pozivaju u utorak 01.07.2014. s početkom u 10.00h u prostoriji 60 na Odjelu za fiziku na predavanje

Semiconductors – optical and electrical characterisation

prof. dr. sc. Theodore Ganetsos





Sažetak predavanja:

Cadmium-telluride (CdTe) first became known as an infrared optical material as one of the hot pressed polycrystalline Kodak materials. It is a very difficult material to grow from a melt because both elements are volatile and it has a high melting point where appreciable vapour pressure can exist for both elements even if stoichiometry is near perfect. It has a congruent melting point of 1097°C, which means below that temperature both Cd-rich liquids and Te-rich liquids exist in equilibrium with pure CdTe.

High resistivity In-doped CdTe is one of the most important materials for the preparation of the room temperature x-ray and gamma-ray detectors. It is well known that the resistivity of CdTeIn strongly depends on the In doping concentration and growth and post-annealing conditions. In this research work we studied In-doped CdTe after annealing at various temperatures using Raman spectroscopy.