

VII Leopoldo García-Colín Mexican Meeting on Mathematical and
Experimental Physics



Contribution ID: 102

Type: not specified

**PATRICIA MALDONADO-ALTAMIRANO: Optical
and morphological characterization of CdSe
nanoparticles processed by laser ablation in liquid.**

Thursday, 20 February 2020 19:15 (15 minutes)

In this work we present some results and analysis concerning the processing of semiconducting CdSe nanoparticles obtained by laser ablation of diluted CdSe powder in acetone. A Nd-YAG pulsed laser was used for ablation, tuned at the first and second harmonic, $\lambda=1064$ and 532 nm, 50 Hz frequency repetition during 30 minutes. The experiment was performed at different power intensities. An important difference in the size of the samples synthesized at 1064 nm and 532 nm is observed, being 12 nm for the samples processed with the infrared line and less than 5 nm for those processed with the green line. The emission and absorption of the samples runs from 1.8 to almost 2.4eV for the smallest particles. A deep analysis of the results is presented and discussed.

Session Classification: SHORT TALKS

Track Classification: SYMPOSIUM ON LASER ABLATION