

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



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NOÉ ZAMORA: Synthesis of Molybdenum Oxide Nanoparticles by Laser Ablation of Solids in Liquids.

Thursday, 20 February 2020 17:00 (30 minutes)

The synthesis of molybdenum oxide (MoO_x) nanoparticles (NPs) by using the laser ablation of solids in liquids (LASL) technique and their oxidation process was investigated. S/TEM-EDX microscopy images were used to study the oxidation process of these type of NPs. We hypothesized that the NPs oxidation depends on size, particularly it was observed that the smaller the NP not only the more oxidizes but the faster. The formation of spherical core-shell type NPs was seen in most cases. Besides, micro-Raman spectroscopy shows the shell is composed of molybdenum trioxides hydrated (MoO₃ · xH₂O), x= 1/3, ½ and 1.

Session Classification: SHORT TALKS

Track Classification: SYMPOSIUM ON LASER ABLATION