

Abstract Submitted
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Determination of Hydrogen absorption capacity of different nanomaterials using a Quartz Crystal Microbalance SUSANA ROJAS, DONOVAN DIAZ-DROGUETT¹, ALEJANDRO CABRERA², Instituto de Fisica, Pontificia Universidad Catolica, Santiago, Chile — Hydrogen has become an alternative energy source and a key gas for the fuel cell technology. For these reasons, there is a growing need of developing more efficient materials for hydrogen storage in a safer way and to develop hydrogen sensors for hydrogen detection. We studied hydrogen absorption properties of different nanomaterials-assembled systems using a Quartz Crystal Microbalance. The nanomaterials inspected include palladium-based thin films, metal oxides, polymer-metal composites as well as carbon nanoparticles.

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