

## **Effect of 120 MeV and 200 MeV Au ions on the Stress Profile of NiO thin Film**

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*Received : 10.11.2014 ; Accepted : 11.1.2015*

**Abstract.** NiO thin films grown on Si substrate were irradiated by 120 and 200 MeV Au ions. The effect of different ion energy on the stress profile of NiO films was studied. Ion irradiation led to the development of compressive stress in both the ion energies with nearly equal stressed region. The present study thus indicates that the ions having electronic energy loss much higher than threshold value does not have much impact on stress profile of NiO matrix.

**Keywords:** Ion irradiation; nanoparticles; stress; electronic excitation; NiO

**PACS:** 61.80.Jh; 61.82.Rx; 61.85.+p; 61.82.Ms; 68.55.Ac

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