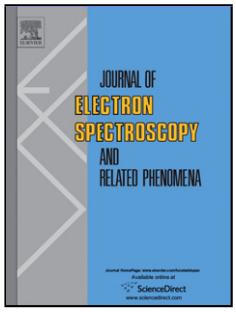

Title: Inverse photoemission and photoemission spectroscopic studieson sputter-annealed Ni-Mn-Sn and Ni-Mn-In surfaces

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Highlight

Comparison of inverse photoemission spectra and Korringa–Kohn–Rostoker method calculation show dominant feature is related to Mn 3d-like states.

The changes in the composition dependent ultraviolet photoemission spectra reveal the change in degree of Ni 3d and Mn 3d band hybridization.

Rigid band shift between Ni2MnIn and Ni2MnSn is observed because of band filling, due to increase in the number of 5p electrons from In to Sn.

Mn 2p and 3s core-level reveal unambiguous existence of exchange splitting in both the materials.