

ZINC OXIDE ELECTRONIC STRUCTURE STUDY USING PES

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As the global energy landscape currently dominated by the fossil fuels is causing environmental and energy issues, there is an urgent need to shift to renewable energy sources. Production of Hydrogen gas a source of energy from water is by far the cleanest renewable energy source. Transition metal oxides are effective catalysts for the hydrogen evolution reaction. Small metal oxide clusters are used as a model to understand the catalytically active sites in bulk. In this study we use anion photoelectron spectroscopy as a means of understanding the electronic structure of the anionic and neutral species of the Zinc oxide clusters.