SS-001

1-D and 2-D Metal Oxide Nanostructures

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Metal oxide nanostructures have been applied to various fields such as energy, catalysts and electronics. We have freely designed one and two-dimensional (1 and 2-D) metal (transition metals and lanthanides) oxide nanostructures, characterized them using various techniques including scanning electron microscopy, transmission electron microscopy, X-ray diffraction crystallography, thermogravimetric analysis, FT-IR, UV-visible-NIR absorption, Raman, photoluminescence, X-ray photoelectron spectroscopy, and temperature-programmed thermal desorption (reaction) mass spectrometry. In addition, Ag- and Au-doped metal oxides will be discussed in this talk

Keywords: 1-D and 2-D metal oxide nanostructures

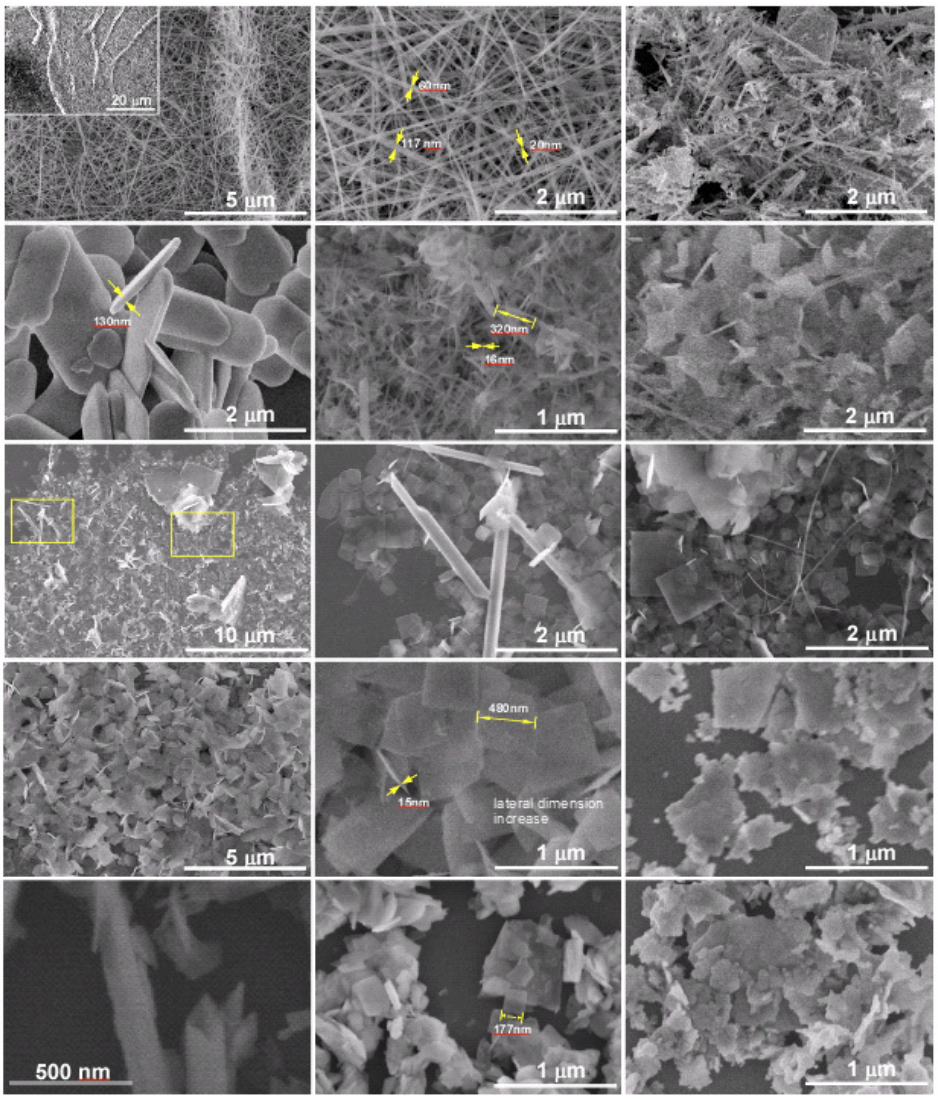

Fig. 1. 1- and 2-D Holmium oxide nanostructures.