

Characterization of Strontium Titanate Powders Synthesized by the Oxalate Process.

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Abstract

Modified Precipitation Process of Zinc Oxide Nanosized Powders J. Sirita, P. Anuragudom and S. Phanichphant*

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Abstract

Zinc oxide nanosized powders have been synthesized by the modified precipitation process using zinc acetate and ammonium hydroxide as precursors. Different amount of carbon powder was added to the zinc hydroxide gel to study the effect of carbon addition. The mixture was dried at 70 °C in air and calcined at 600 °C for 2h, and zinc oxide fine powders were obtained. The formation mechanism of zinc oxide with and without carbon addition was investigated using thermogravimetric differential thermal analyses (TG-DTA) and X-ray diffraction (XRD). The morphology of zinc oxide powders was studied using electron scanning microscopy (SEM) and transmission electron microscopy.

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