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Investigation of tin oxide nanobelts/nanoribbons prepared by chemical deposition technology

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Abstract:

A facile aqueous solution process to fabricate tin oxide nanoarchitectures was successfully developed. The influence of precursors on the morphology of SnO2 is studied. Tin oxide nanobelts/nanoribbons were characterized by X-ray diffraction, micro-Raman spectroscopy, transmission electron microscopy (TEM) and scanning electron microscopy (SEM). Possible growth mechanism of tin oxide nanobedlts/nanoribbons is discussed. Their characteristics make it potential candidates for fabrication of new sensors and nanodevices.

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