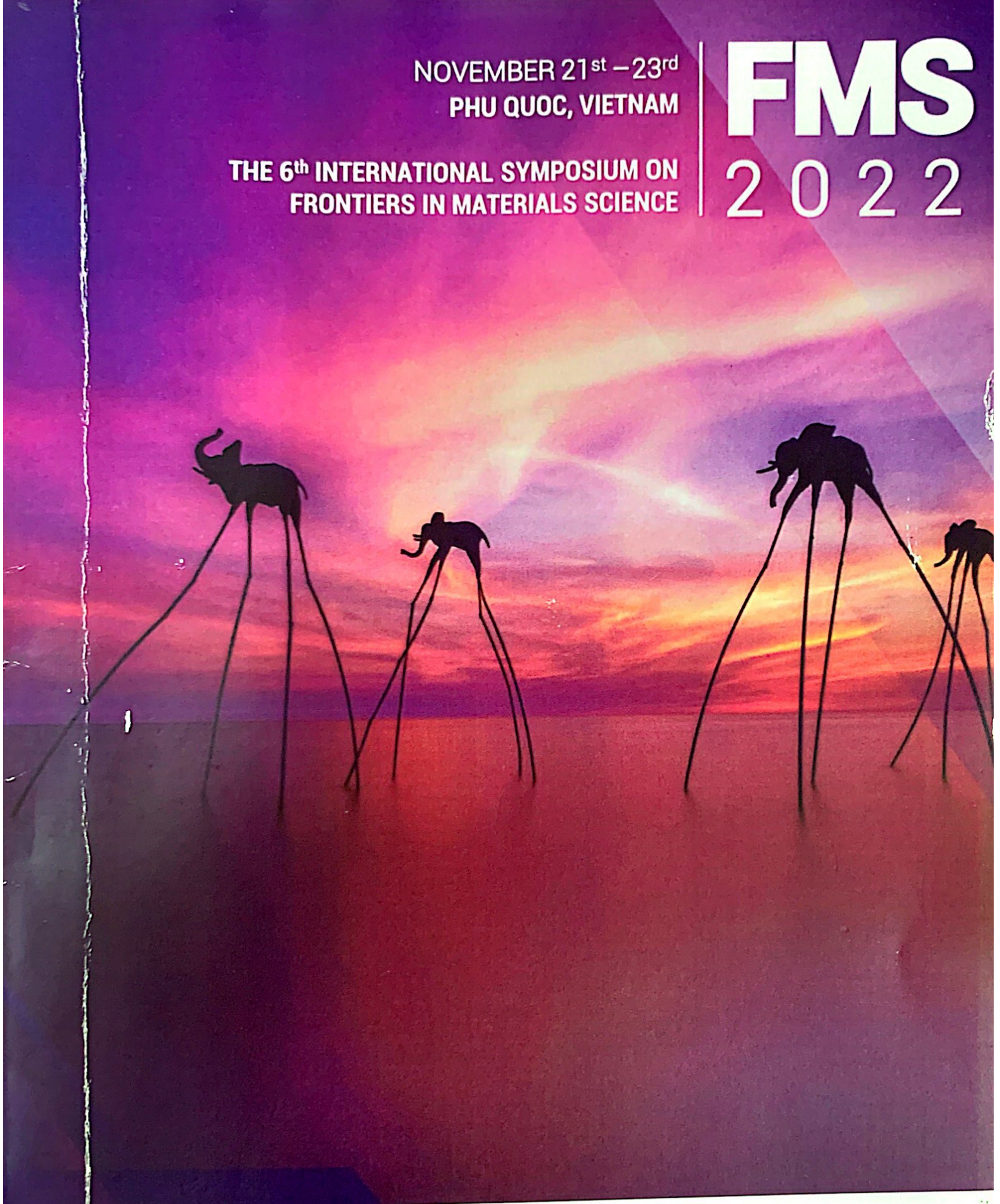


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## Preparation and characteristics of SnO<sub>2</sub> nanomaterials by Joule heating effect

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SnO<sub>2</sub> nanostructures have been prepared using the thermal oxidation reaction with the Sn metal by a self resistive heating effect. The morphology and microstructure of the prepared SnO<sub>2</sub> nanoproducts are characterized by means of scanning electron microscopy (SEM), Xray diffraction and Raman spectrum. In addition, the possible growth mechanism of the SnO<sub>2</sub> nanoproducts is also discussed.

**Keywords:** SnO<sub>2</sub> nanowires; Joule heating; current; thermal oxidation.