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SnO₂ NCs morphology control during microwave synthesis

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Abstract content
   (Max 300 words)

SnO₂ nanocrystals (NCs) are industrially important, n-type metal oxide materials with a range of potential applications including transparent conductive electrodes, photovoltaic devices, gas sensors, and detection of metal ions. Such applications require SnO₂ NCs with a specific morphology. Therefore, it is important to investigate parameters influencing these morphologies. In this work, the influence of water and 2-propanol on the morphology of SnO₂ NCs synthesized by the microwave method has been studied. Results show a varying SnO₂ NCs were obtained as the compositions of water and 2-propanol were varied during the microwave synthesis. The SnO₂ were characterized by TEM, SEM, XRD, Raman and PL.

Apply to be
 consider for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
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PhD

Main supervisor (name and email)
and his / her institution

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Would you like to <br> submit a short paper <br> for the Conference
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No

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