

1 Article

2 **Characterization of (SO₄²⁻) SnO₂-ZrO₂ Catalysts and**
 3 **their Catalytic Performance on the tert-Butylation of**
 4 **Phenol**

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11 **Supplementary Materials**

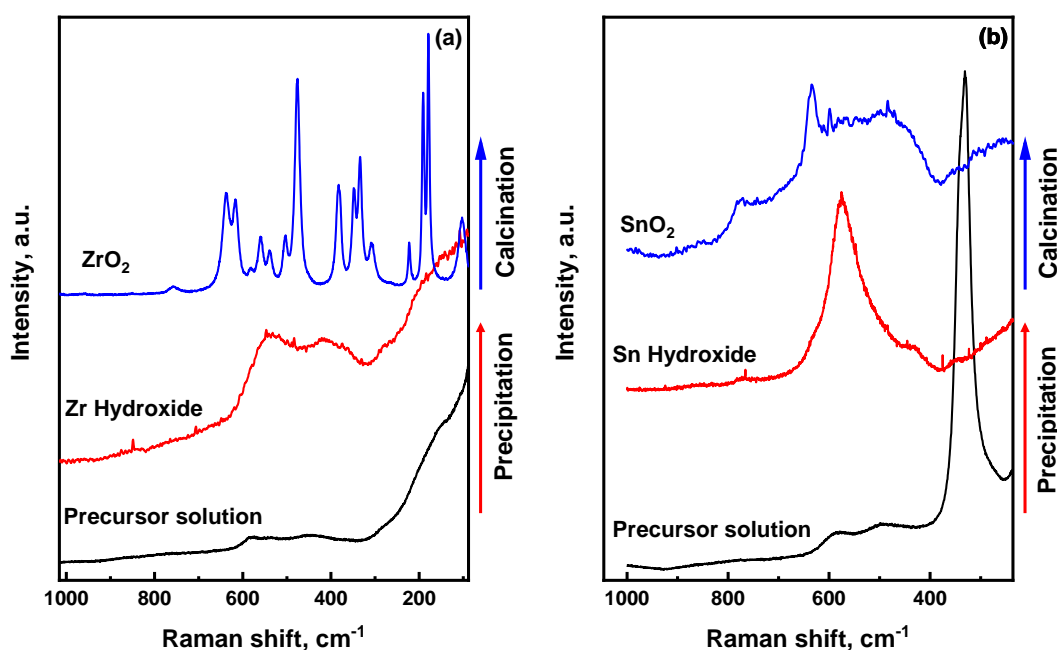


Figure S1. Raman spectra of (a) precursor solution, hydrous zirconia and calcined ZrO₂ and (b) precursor solution, tin hydroxide and calcined SnO₂

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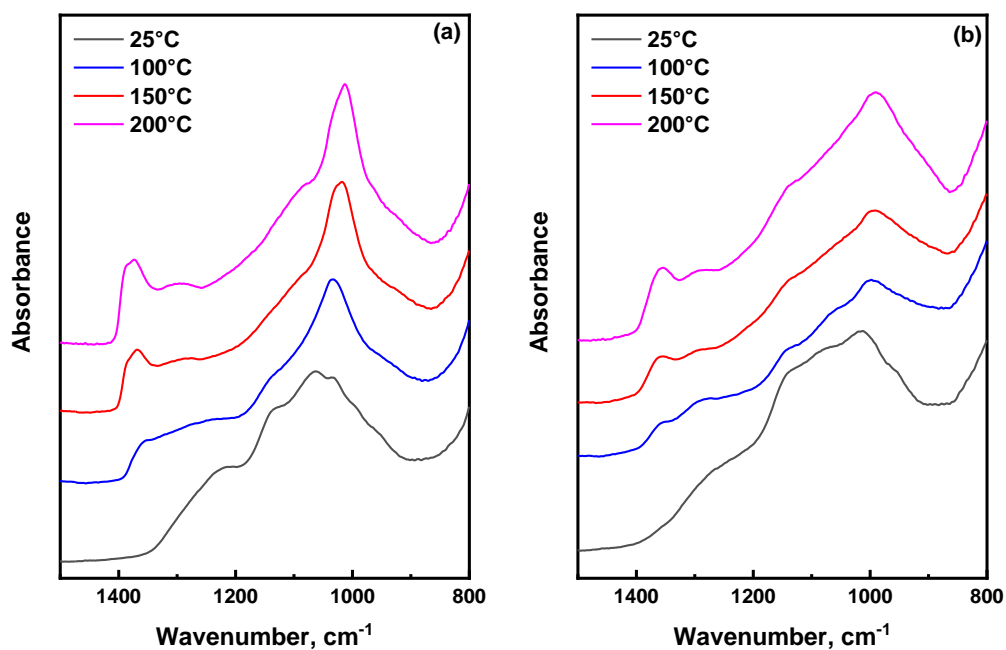


Figure S2. Temperature dependent ATR-IR spectra of the (a) 1:10 (SO₄²⁻)SnO₂/ZrO₂, and (b) 10:1 (SO₄²⁻)SnO₂/ZrO₂, up to 200°C. Spectral resolution was set to 4cm⁻¹ while 32 accumulations have been used to increase signal/noise ratio.

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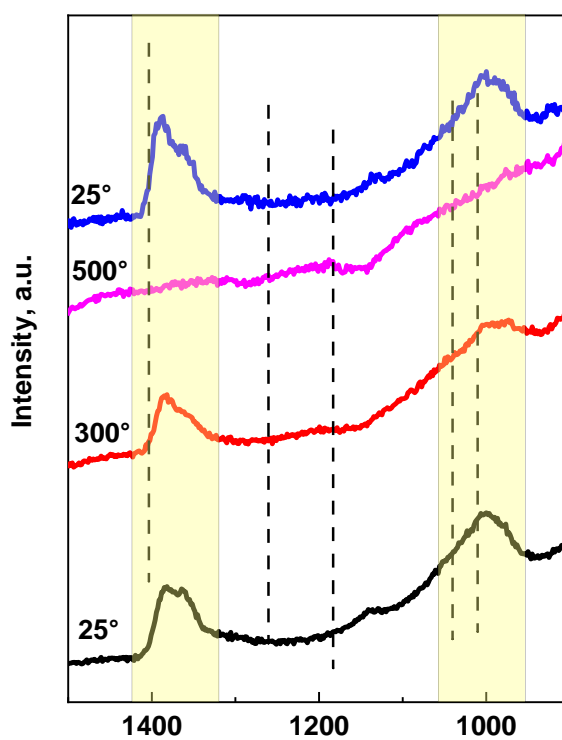


Figure S3. Temperature dependent Raman spectra of the (SO₄²⁻)SnO₂ up to 500°C. The blue spectrum pertains to room temperature Raman after heat treatment.