

## Amorphous mesostructured zirconia with high (hydro)thermal stability

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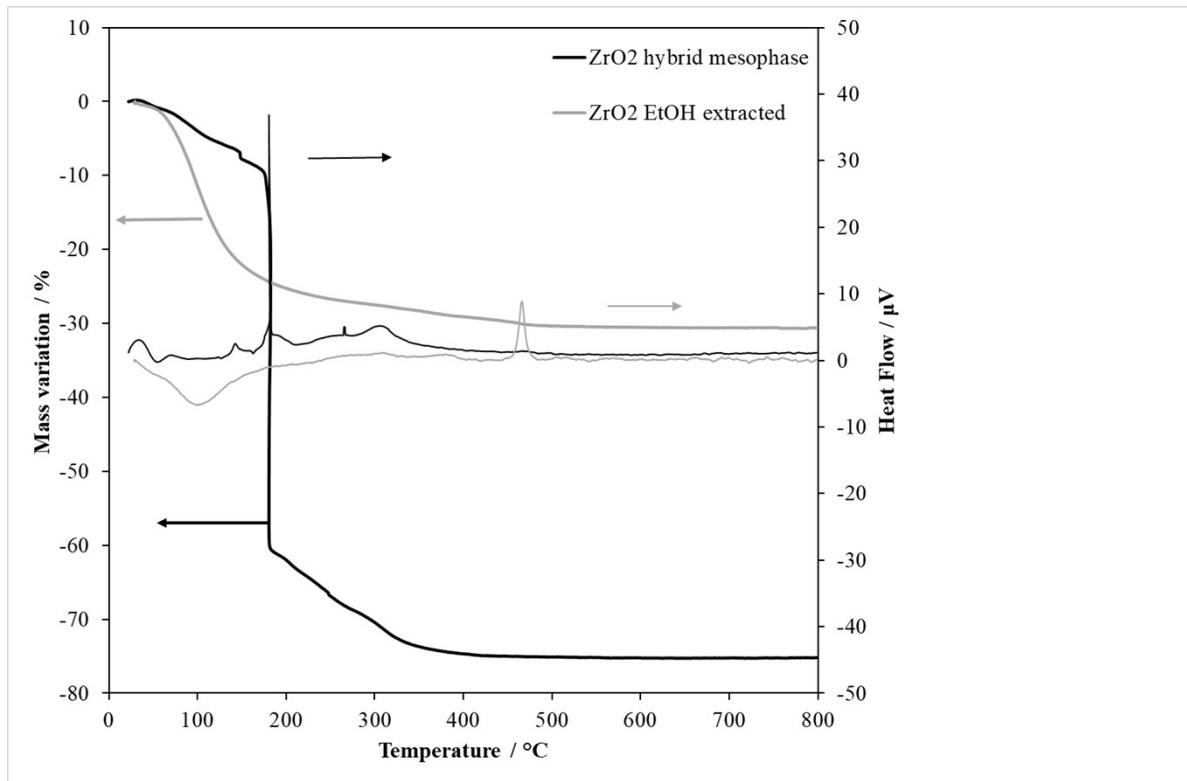
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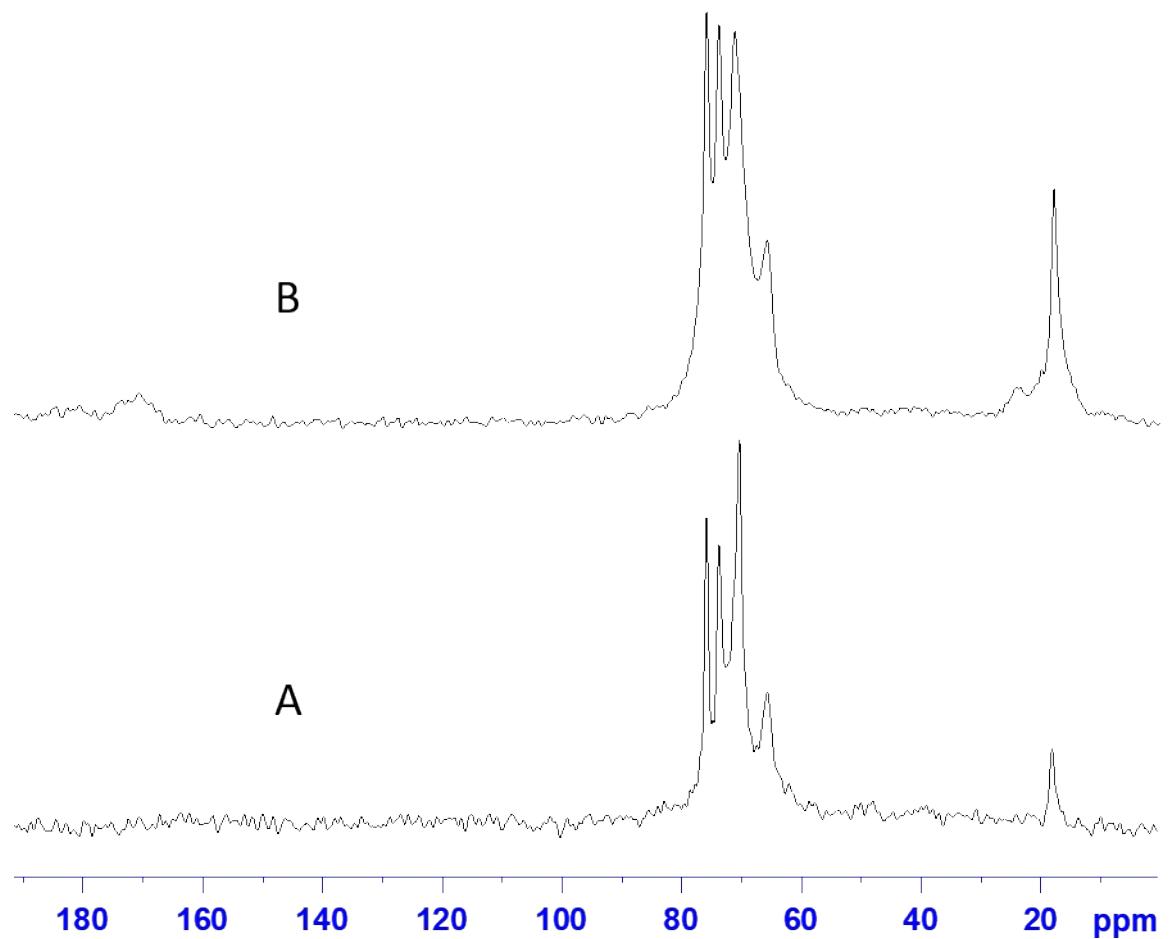
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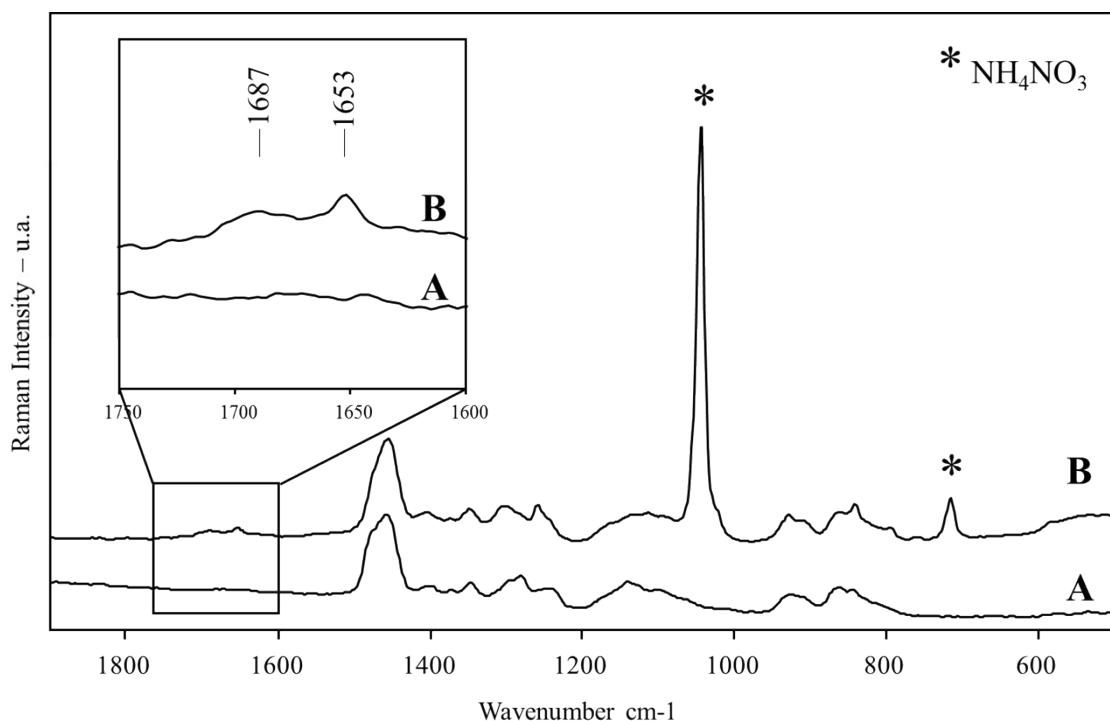
**Supporting information S1:** TG and heat-flow curves of the hybrid mesophase and EtOH-extracted mesostructured  $\text{ZrO}_2$



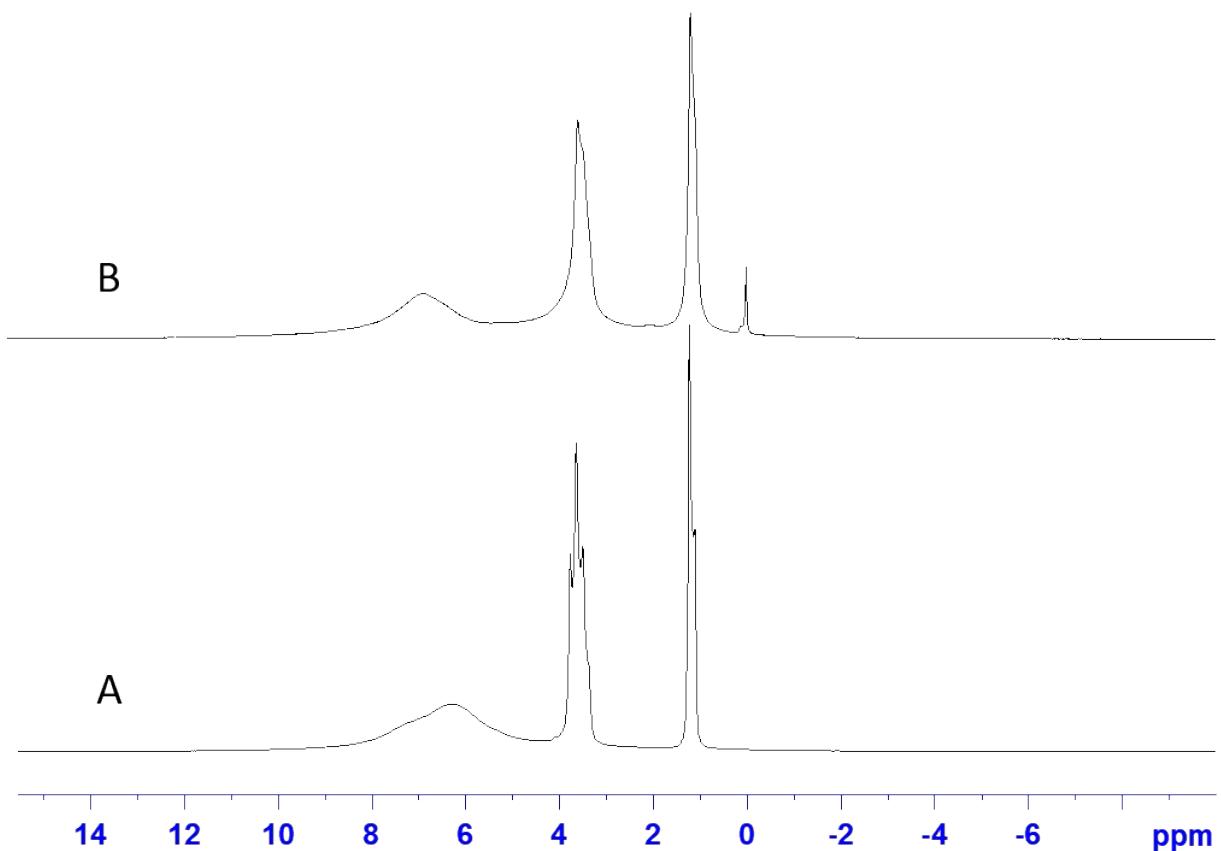
**Supporting information S2:**  $^1\text{H}$ - $^{13}\text{C}$  CPMAS NMR spectra of as-synthesized (A) and dehydrated at 70 °C (B)  $\text{ZrO}_2$  hybrid mesophase



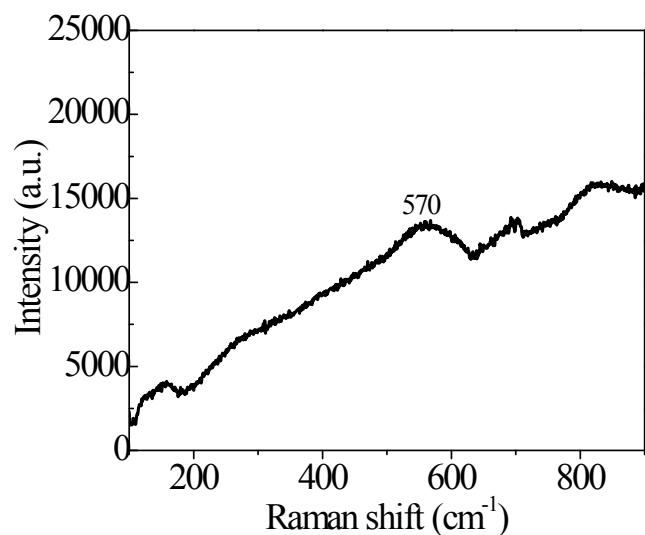
**Supporting information S3:** Raman spectra of Pluronic P123 (A) and ZrO<sub>2</sub> hybrid mesophase (B)



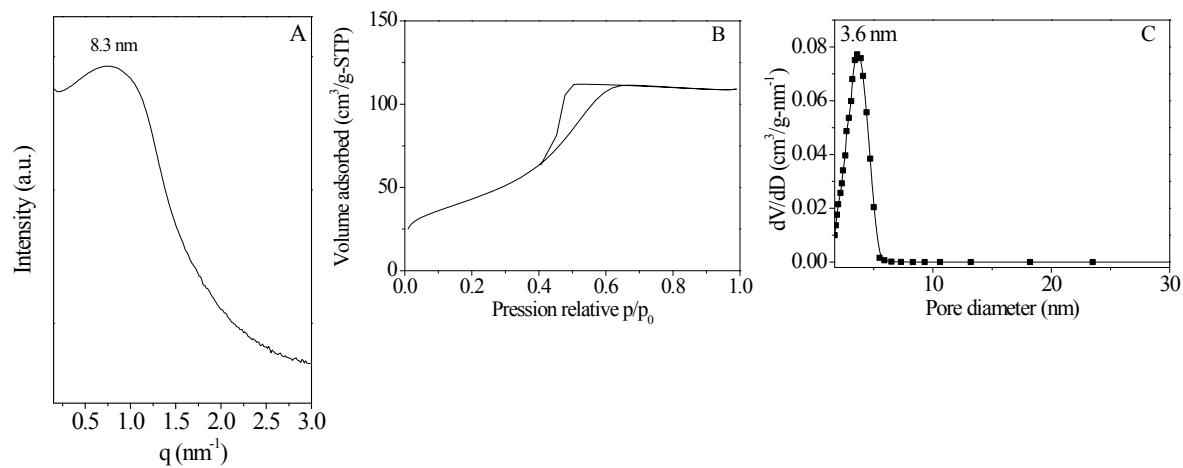
**Supporting information S4:**  $^1\text{H}$  MAS NMR spectra of as-synthesized (A) and dehydrated at 70 °C (B)  $\text{ZrO}_2$  hybrid mesophase



**Supporting information S5:** Raman spectrum of amorphous mesostructured ZrO<sub>2</sub> recovered after surfactant extraction.



**Supporting information S6:** SAXS pattern (A), nitrogen adsorption-desorption isotherm (B) and mesopores size distribution (C) of  $\text{ZrO}_2$  after calcination at  $480\text{ }^\circ\text{C}$  under air atmosphere in a furnace.



**Supporting information S7:** Evolution as a function of the immersion time of the specific surface area (■) and pore volume (○) of amorphous ZrO<sub>2</sub> after calcination at 440 °C under air atmosphere in a furnace. Lines are just a guide for the eyes.

