

Supporting Information

for

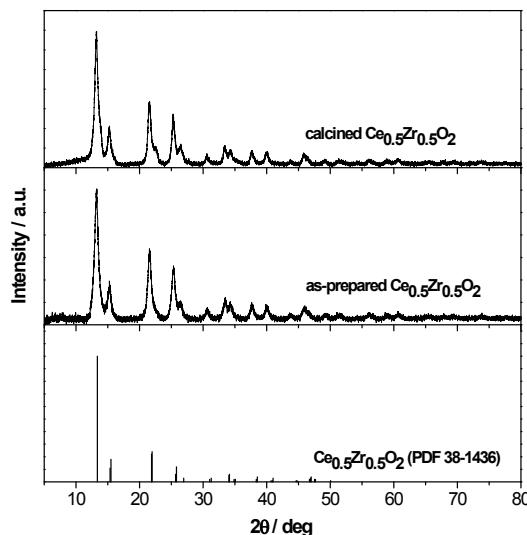
Energy efficient microwave synthesis of mesoporous $\text{Ce}_{0.5}\text{M}_{0.5}\text{O}_2$ (Ti, Zr, Hf) nanoparticles for low temperature CO Oxidation in an ionic liquid- a comparative study

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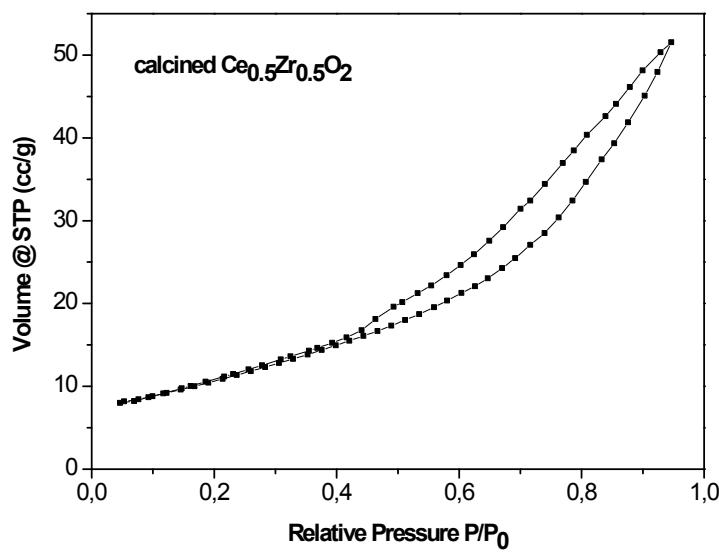
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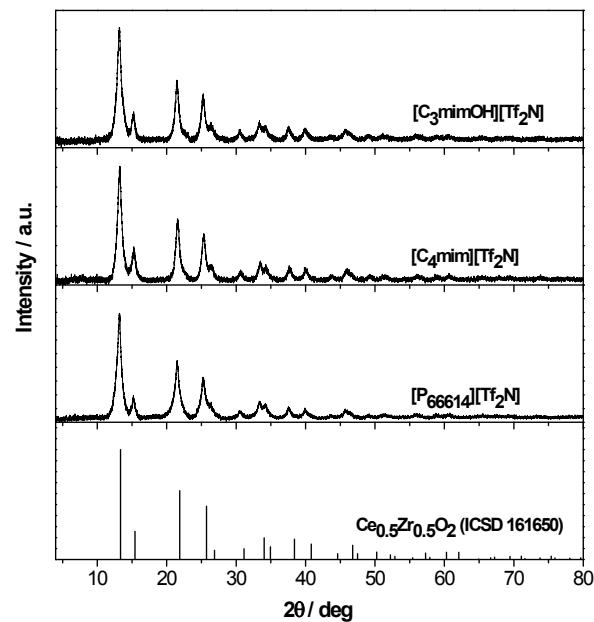
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SI. 1. X-ray diffraction patterns of as-synthesized and calcined $\text{Ce}_{0.5}\text{Zr}_{0.5}\text{O}_2$ powder at 600 °C for 3 h.



SI. 2. N_2 adsorption-desorption of calcined $\text{Ce}_{0.5}\text{Zr}_{0.5}\text{O}_2$.



SI-3. XRD patterns of as-prepared $\text{Ce}_{0.5}\text{Zr}_{0.5}\text{O}_2$ using different ionic liquids in comparison with the database pattern.