

Supporting information for

Enhanced thermal decomposition and kinetics of Poly (Lactic Acid) sacrificial polymer catalyzed by metal oxide nanoparticles

Lu Liu^a, Michael R. Zachariah^{*ab}, Stanislav I. Stoliarov^c, Jing Li^{*d}

- a. Department of Chemistry and Biochemistry, University of Maryland, College Park, MD 20742, USA
- b. Department of Chemical and Biomolecule Engineering, University of Maryland, College Park, MD 20742, USA
- c. Department of Fire Protection Engineering, University of Maryland, College Park, MD 20742, USA
- d. Department of Fire Science & Professional Studies, University of New Haven, West Haven, CT, 06516, USA

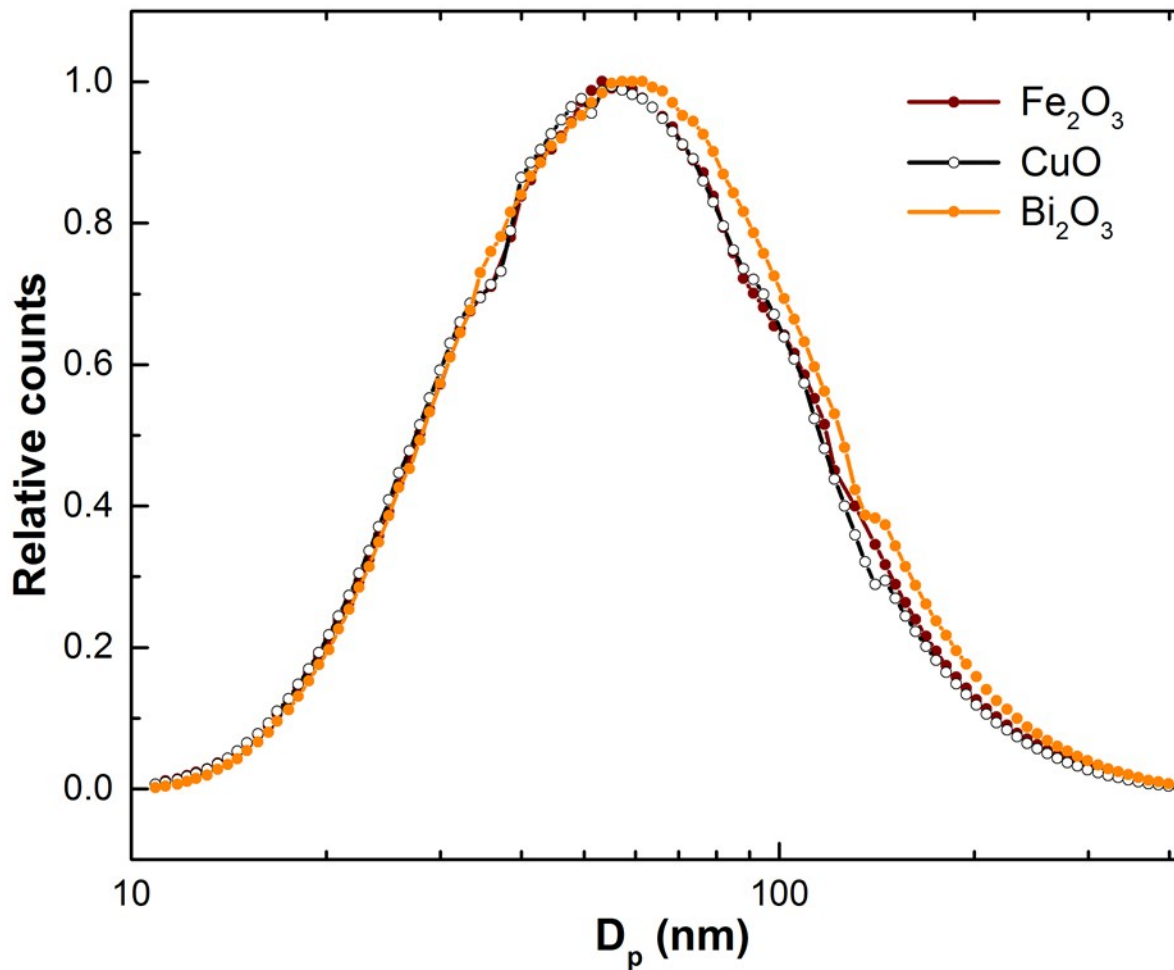


Figure S1. Particle-size distributions of Fe_2O_3 , CuO, Bi_2O_3 as-synthesized by spray pyrolysis measured using a differential mobility analyzer (DMA) coupled with a condensation particle counter (CPC).

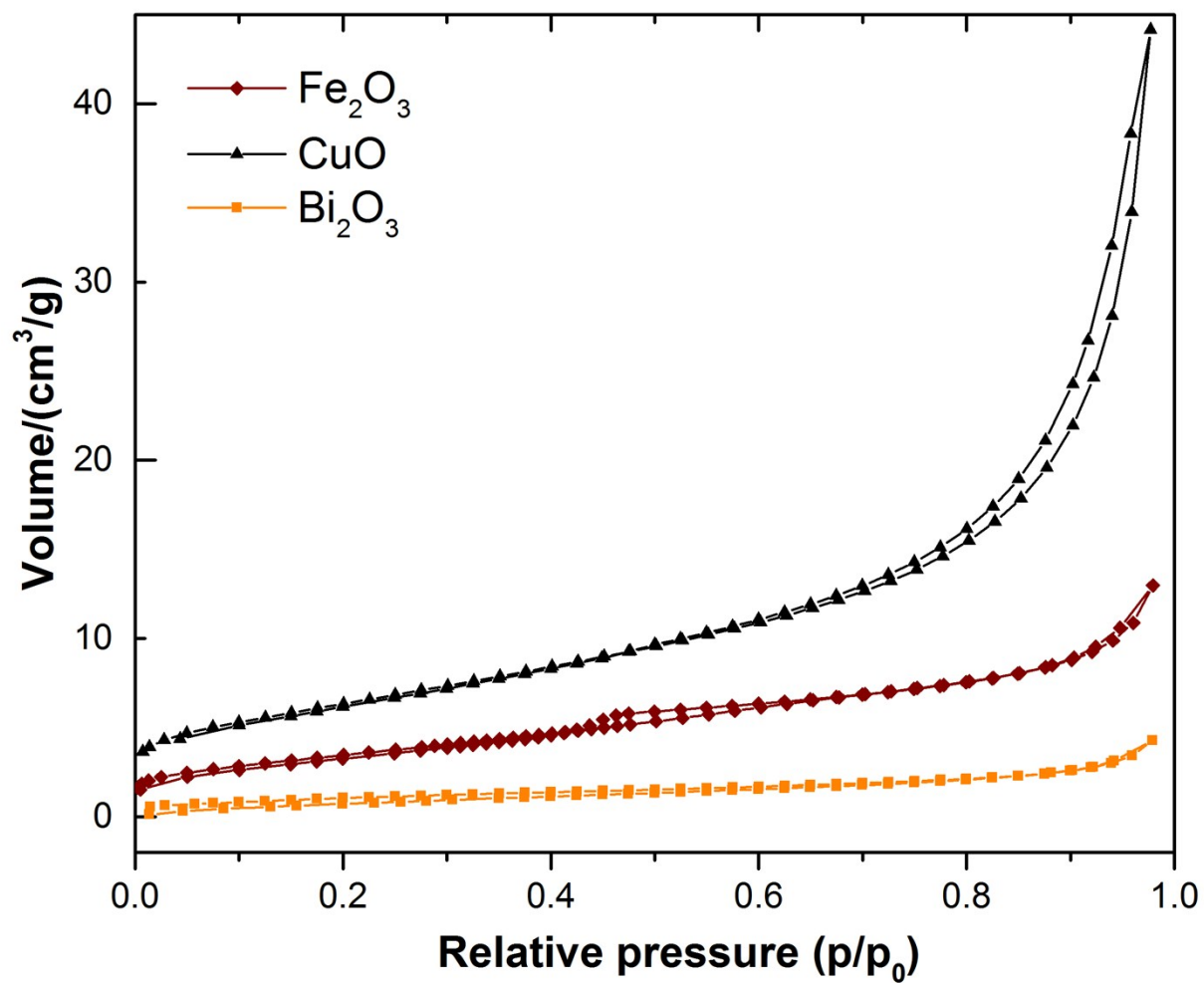


Figure S2. N₂ adsorption/desorption isotherms of Fe₂O₃, CuO, Bi₂O₃.

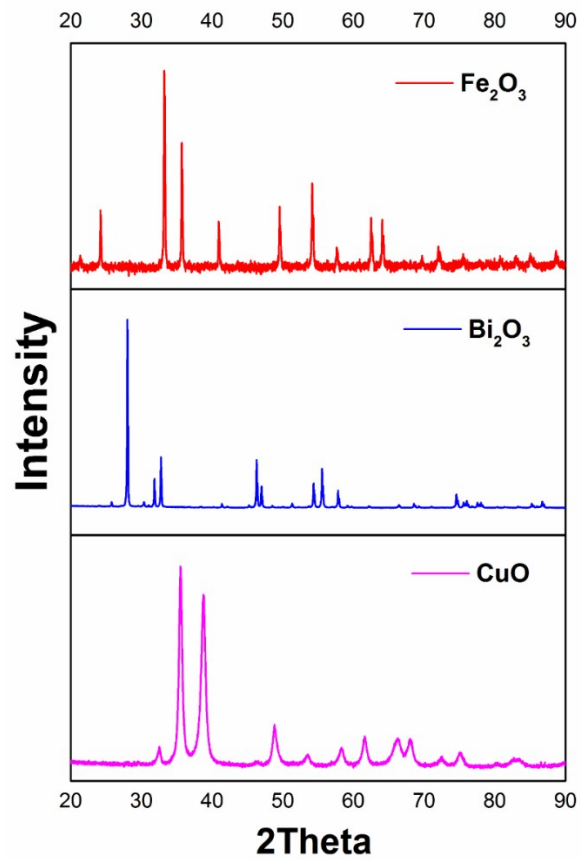


Figure S3. XRD of nanoparticles- Bi_2O_3 , Fe_2O_3 , CuO from spray pyrolysis.