

Supplementary Materials: MOF Embedded and Cu Doped CeO₂ Nanostructures as Efficient Catalyst for Adipic Acid Production: Green Catalysis

Shabhat Bibi ¹, Erum Pervaiz ^{1,*}, Minghui Yang ² and Osama Rabi ¹

¹ Heterogeneous Catalysis Lab, Department of Chemical Engineering, School of Chemical & Materials Engineering (SCME), National University of Sciences & Technology (NUST), Sector H-12, Islamabad 44000, Pakistan; sbibi_che4@scme.nust.edu.pk (S.B.); orabi_che6@scme.nust.edu.pk (O.R.)

² Solid State functional Materials Research Lab, Ningbo Institute of Materials Technology and Engineering (NIMTE), Chinese Academy of Sciences (CAS), Ningbo 315201, China; myang@nimte.ac.cn

* Correspondence: erum.pervaiz@scme.nust.edu.pk; Tel.: +92-51-90855113

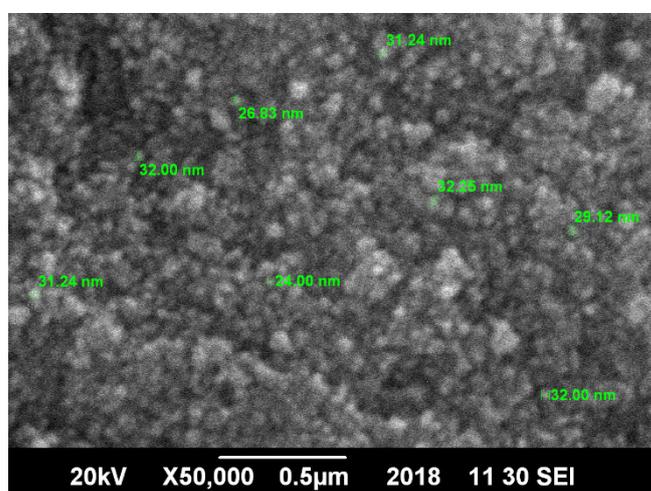


Figure S1. SEM image of CeO₂ nanoparticles with diameters.

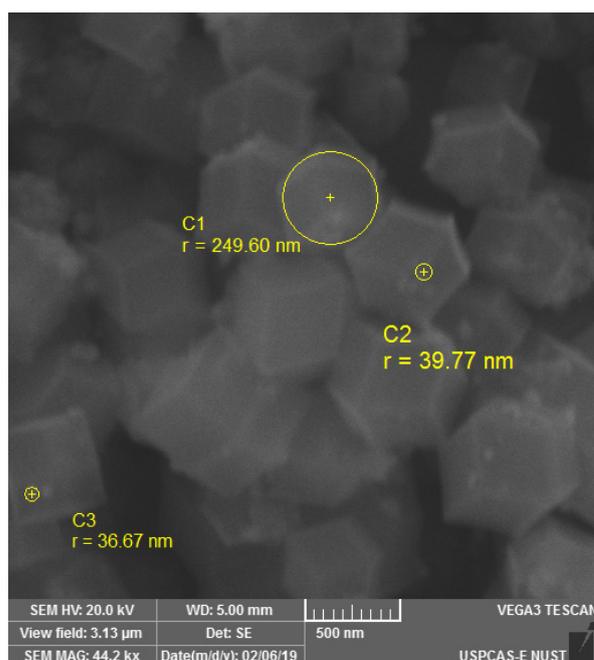


Figure S2. SEM image of ZIF-67/CeO₂ with particle size.

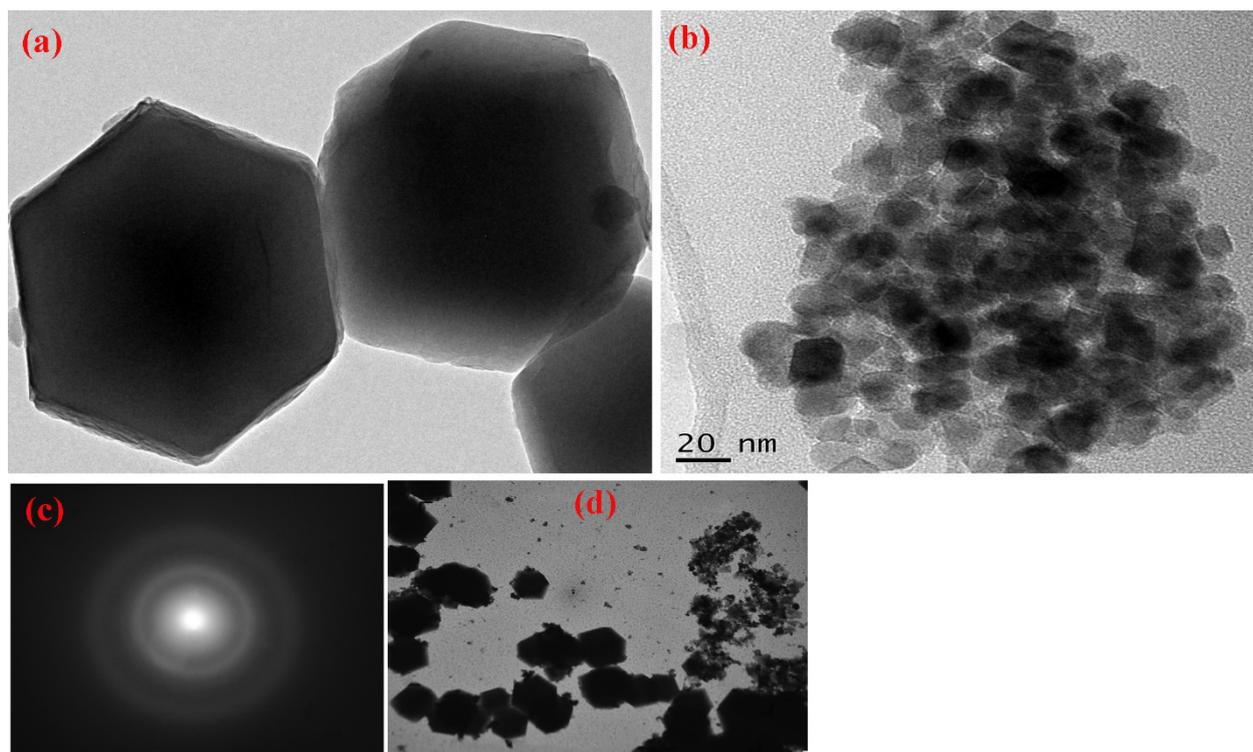


Figure S3. TEM images of (a) Pure ZIF-67 (b) Pure CeO₂ Nanoparticles (c) HRTEM (SAED) Pattern of ZIF-67/CeO₂ Nano-hybrids (d) Low Resolution TEM of ZIF-67/CeO₂ Nano-hybrids.

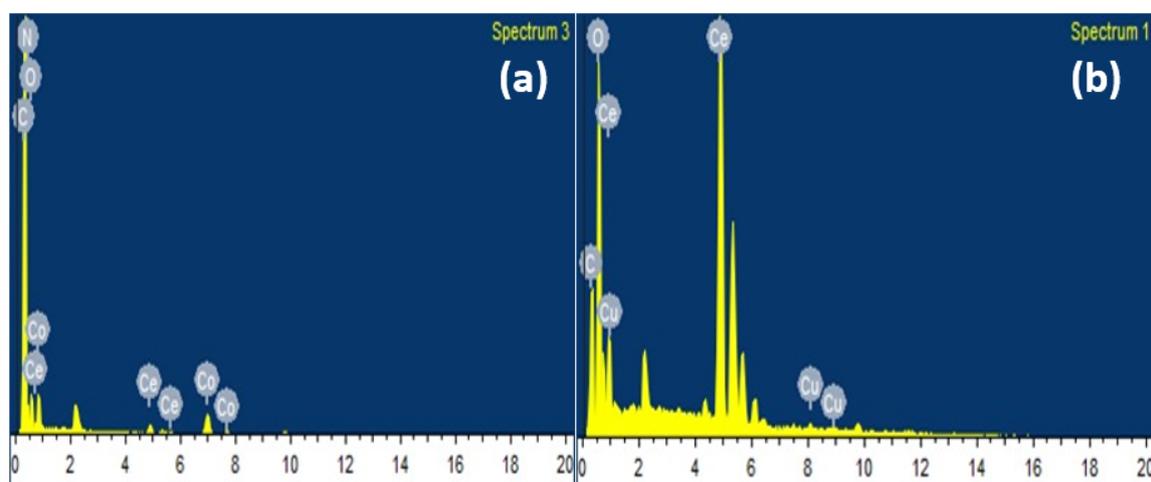


Figure S4. EDS spectrums (a) ZIF-67/CeO₂ (b) Cu doped CeO₂.

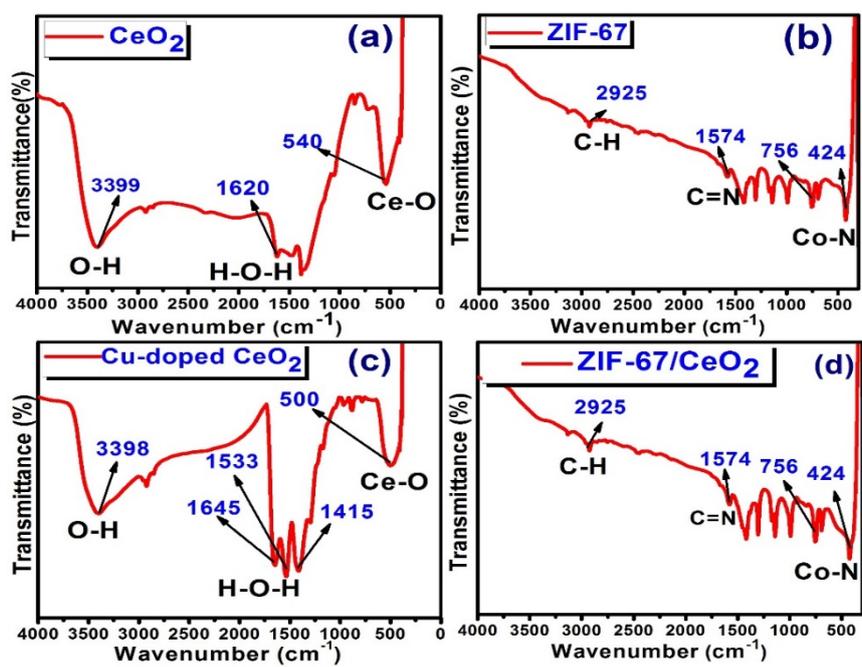


Figure S5. FTIR spectrum of (a) Pure CeO_2 (b) Pure ZIF-67 (c) 10% Cu doped CeO_2 (d) ZIF-67/ CeO_2 Nanohybrids.