

Supporting Information

In situ generated nickel on cerium oxide nanoparticle for efficient catalytic reduction of 4-nitrophenol

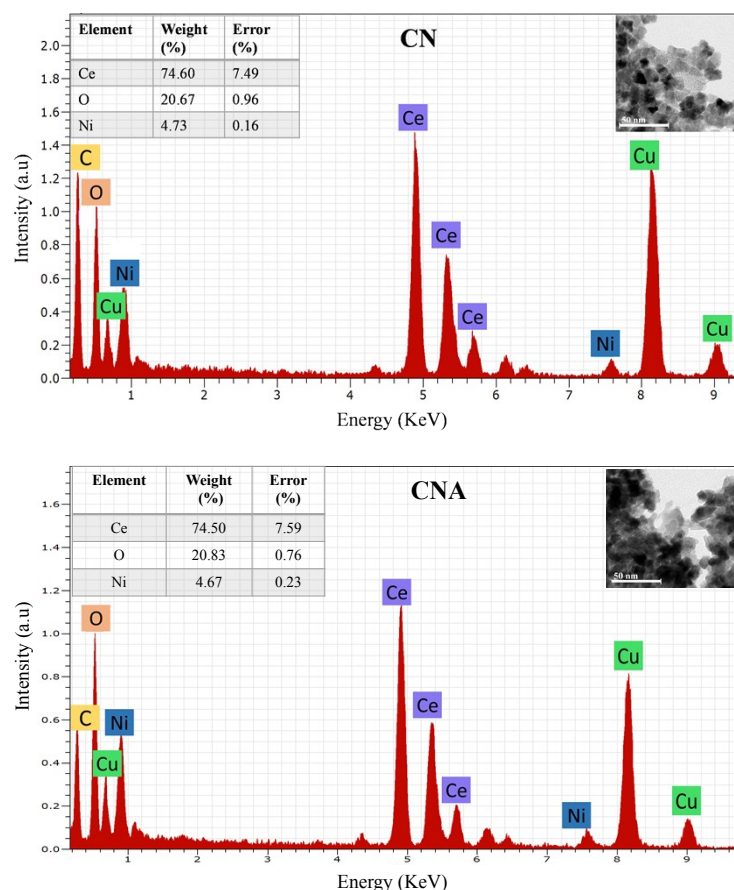
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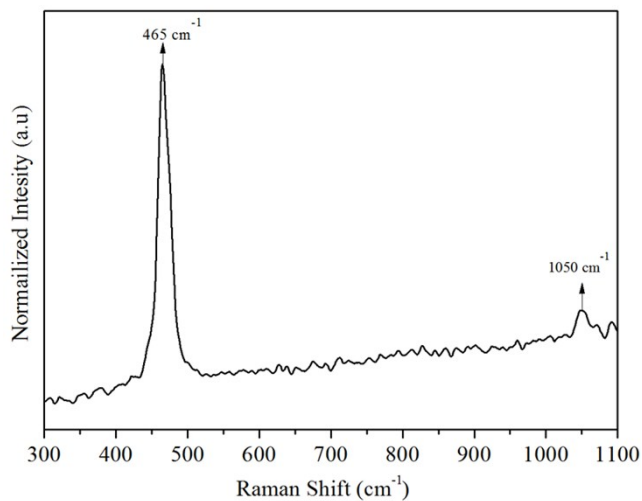
[§]Equally contributed to the work



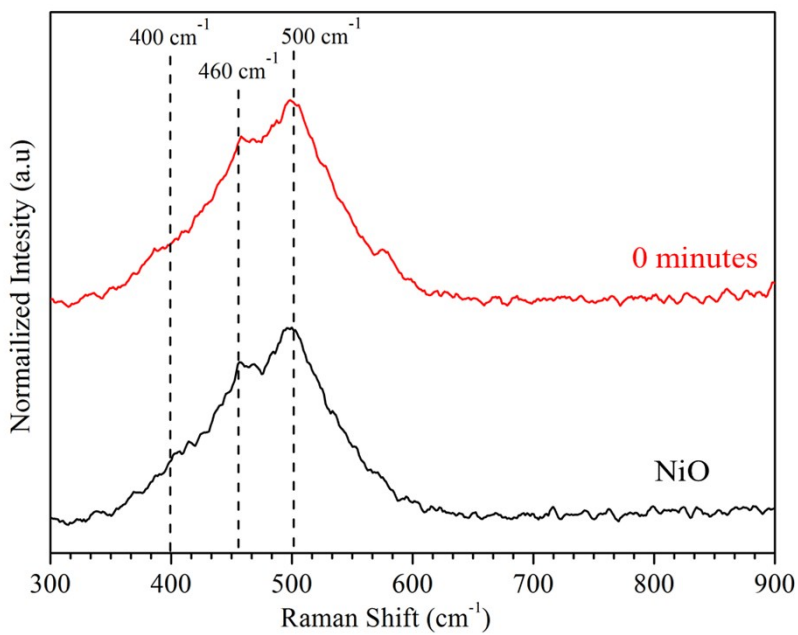
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mentary Figure 1.EDX spectra for CN and CNA showing the presence of Ni, Ce and O (taken

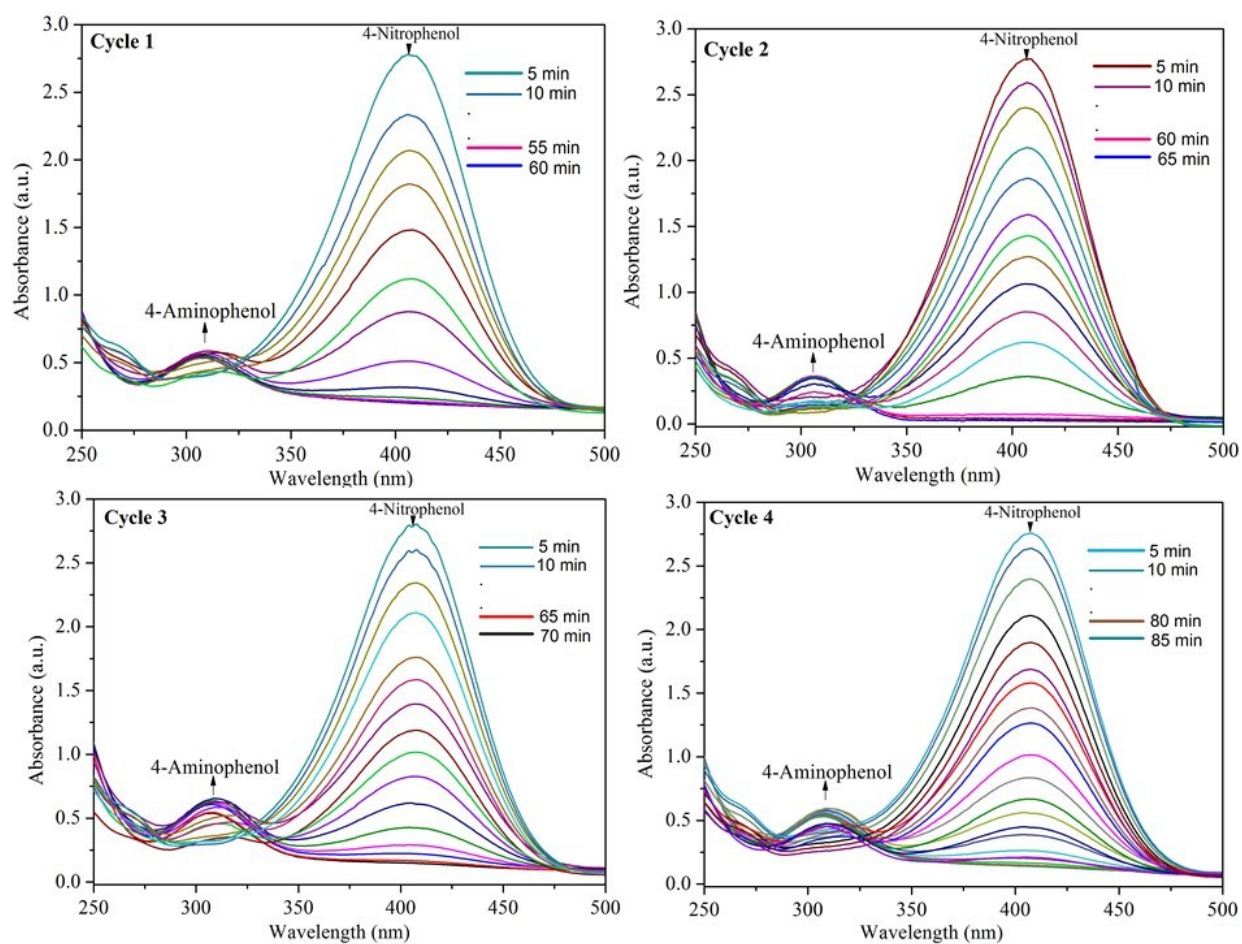
from FEI-Tecnai G² 20 S-TWIN operated at 200 keV attached with Bruker XFlash 6T130 EDX Detector).



Supplementary Figure 2. Raman spectroscopy of CN catalyst dispersed in water.



Supplementary Figure 3. The Raman Spectra of pure NiO dispersed in water and 0 minutes indicates the spectra taken subsequently after the addition of NaBH₄.



Supplementary Figure 4. UV-Visible Spectroscopy of four consecutive recyclability cycles using CN as catalyst for the reduction of 4-nitrophenol to 4-Aminophenol.