Supplementaly material

Hydrodechlorination of 4-Chlorophenol on Pd-Fe Catalysts on Mesoporous ZrO_2SiO_2 Support

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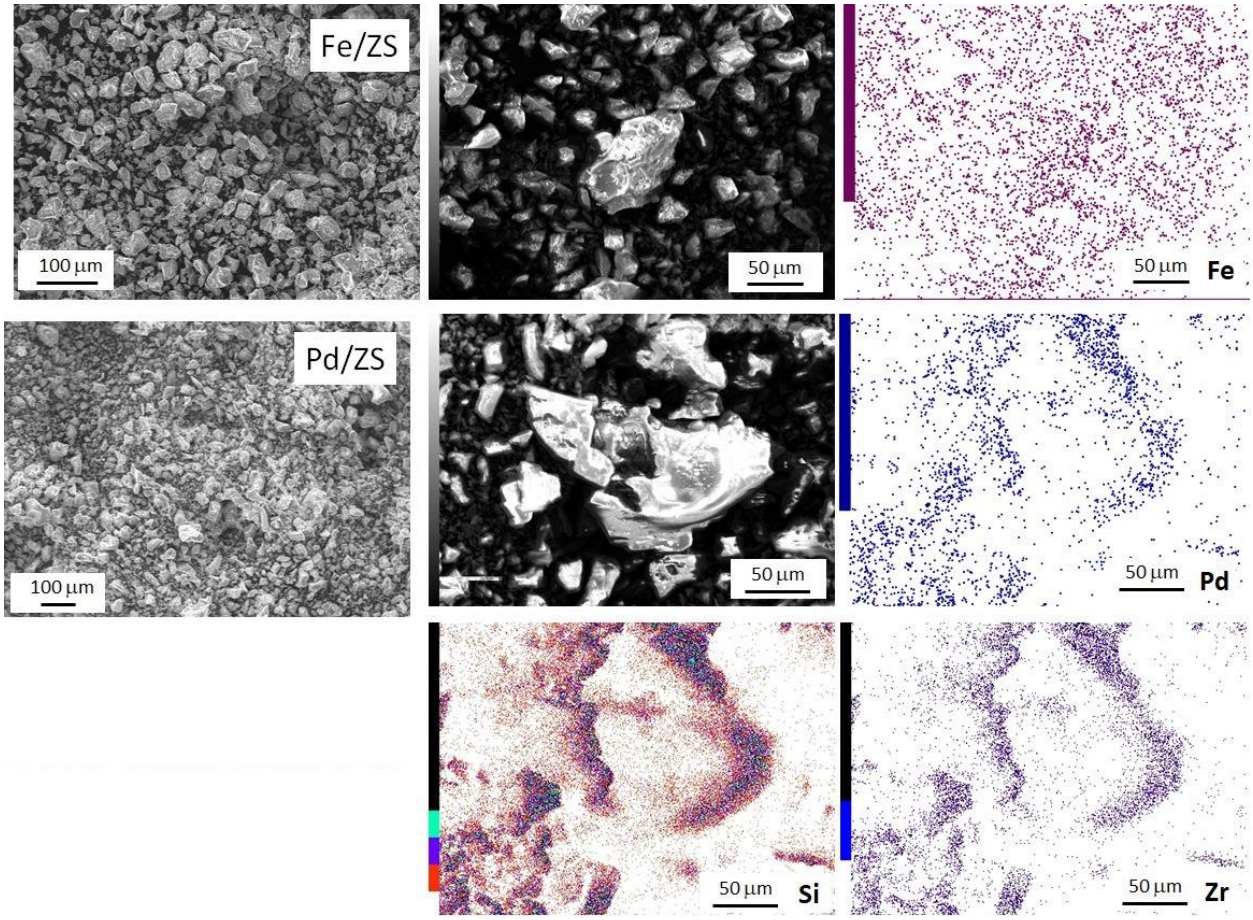

Figure S1: SEM images of Pd/ZS and Fe/ZS (after reduction with H_2 at 320 and 500 °C, respectively); the maps of elements distribution on the surface produced by EDS.

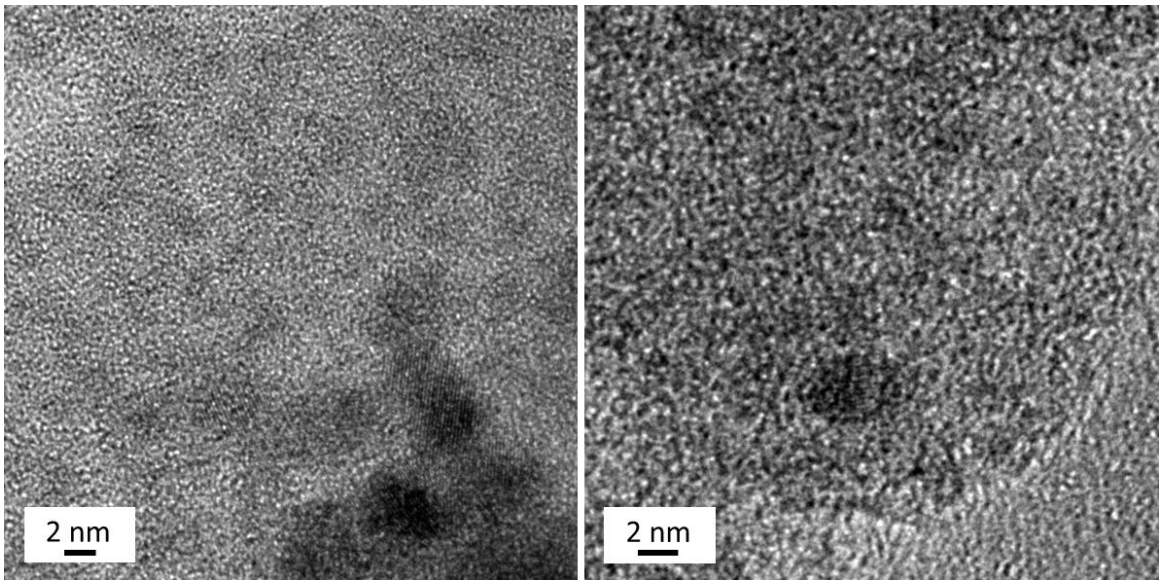

Figure S2. HR TEM images for Pd/ZS after the simultaneous treatment with water solution of phenol (75 mg/L) and H_2 (10 mL/min) at 30°C (1 h)

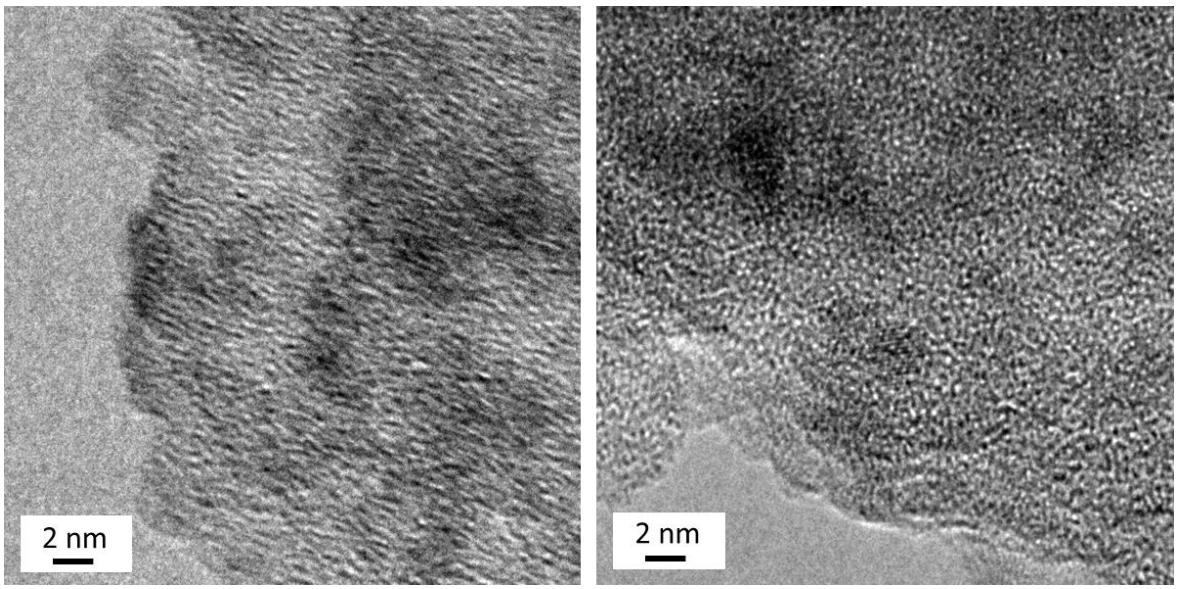

Figure S3. HR TEM images for FePd/ZS after the treatment with H_2 (10 mL/min) in water at 30^{o}C (1 h)

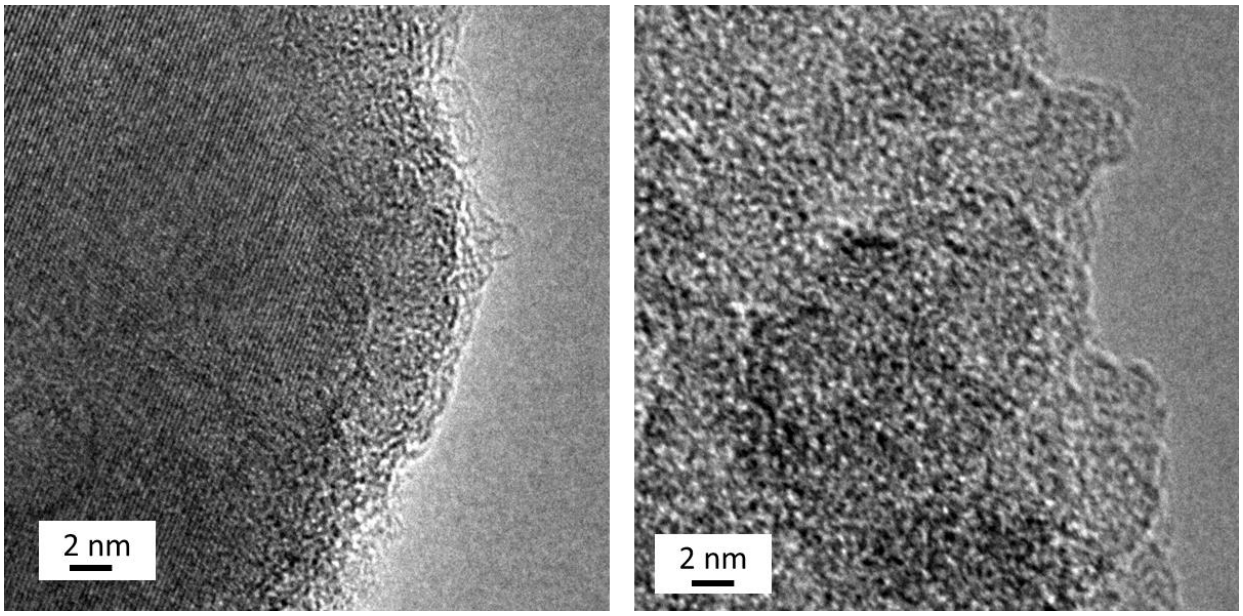

Figure S4. HR TEM images for Fe/ZS after the simultaneous treatment with water solution of phenol (75 mg/L) and H_2 (10 mL/min) at 30^{o}C (1 h)

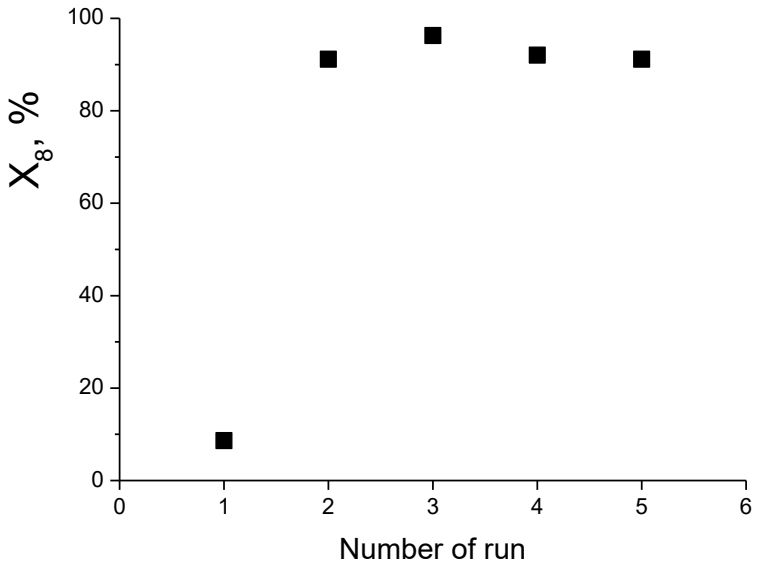

Figure S5. The conversion of 4-PhCl after 8 min of reaction on Pd/ZS in five consecutive runs. The preliminary reduction before the first run was performed using aqueous solution of $NaBH_4$ and H_2

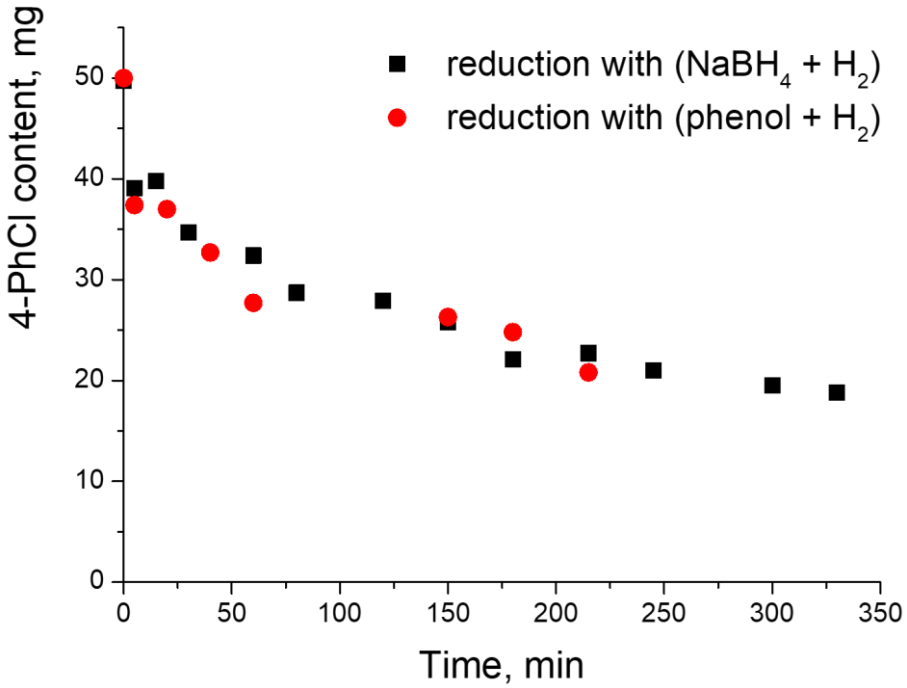

Figure S6. A comparison of Fe/ZS catalytic performance after reduction with aqueous solution of $NaBH_4$ and H_2 + phenol in aqueous solution, both treatments were performed at RT, 1 h