

## Supporting Information

### Effect of lithium and sodium ions on size and morphology of ZnO nanoparticles synthesized by glycerol-urea route

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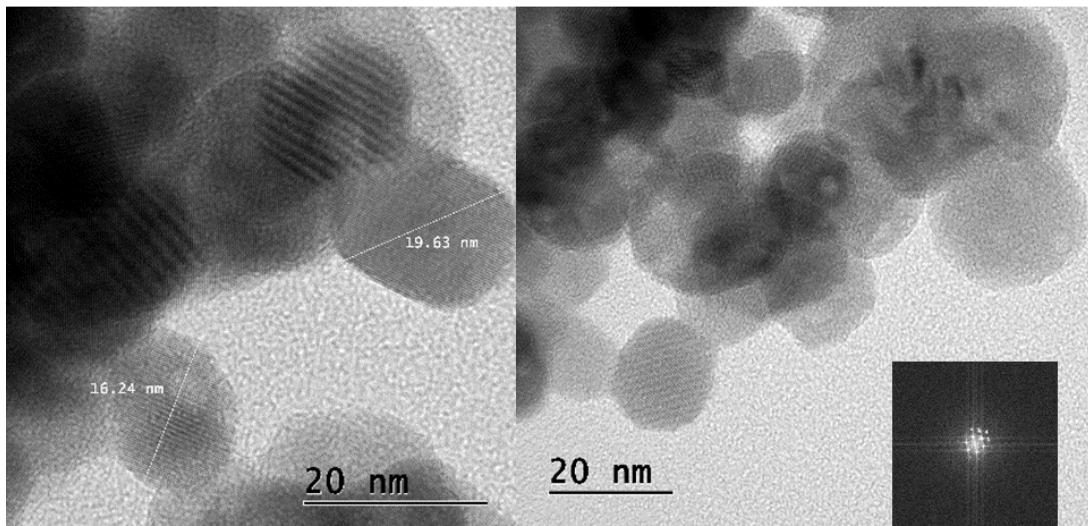
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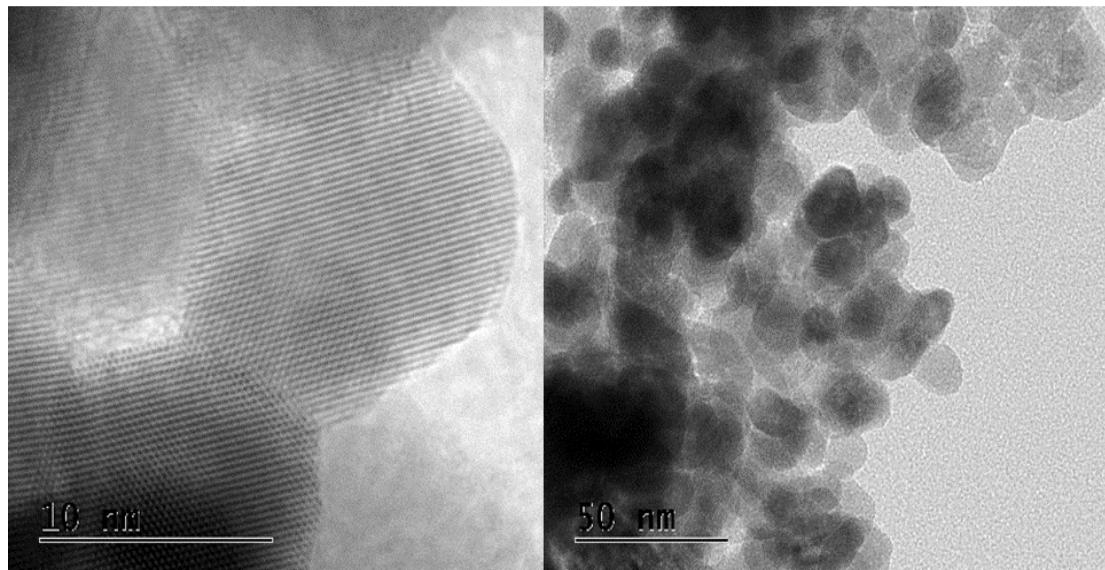
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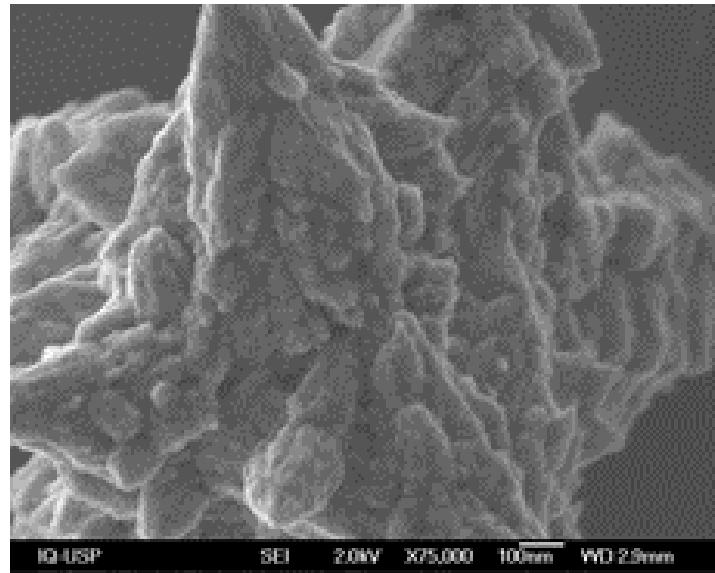
**ZnO NPs obtained at 10 °C**



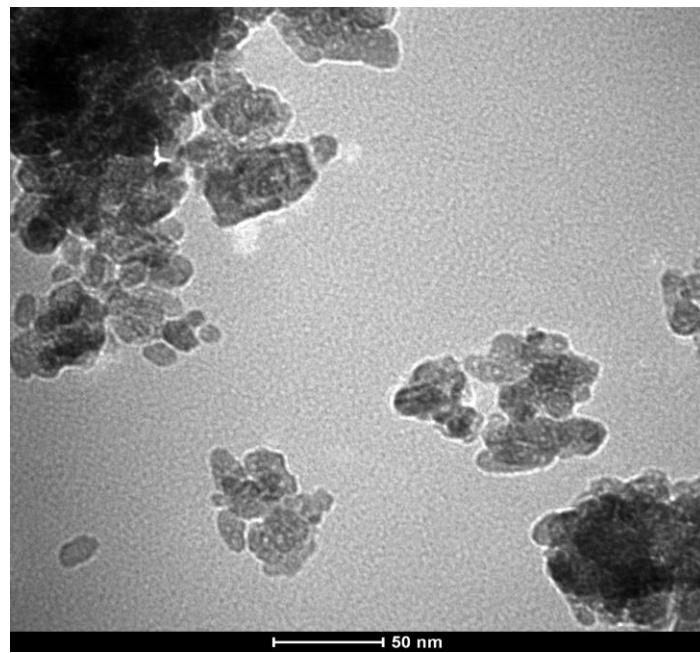
**ZnO NPs obtained at 40 °C**



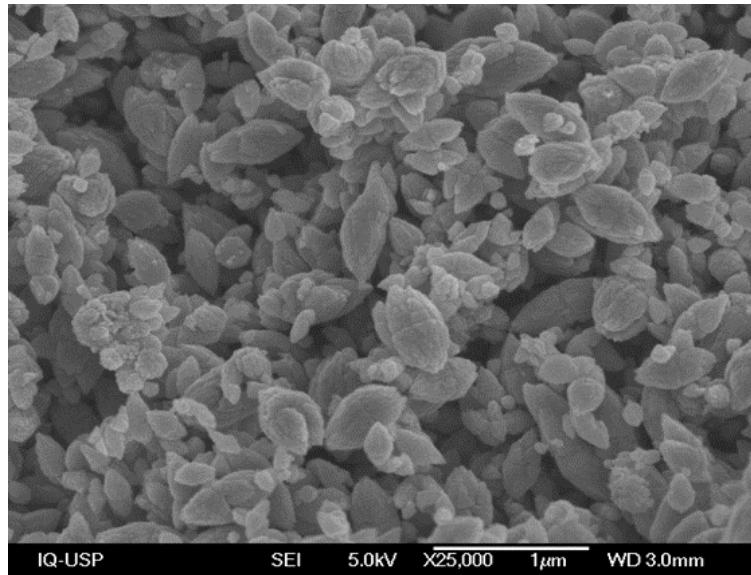
**Figure SI-1.** Preparation of the ZnO at 40 °C and 10 °C.



**Figure SI-2.** ZnO nanoparticles obtained in a higher concentration of NaOH: the ratio of  $Zn^{2+}/OH$  precursor is greater than 1:4 mol.



**Figure SI-3.** ZnO nanoparticles obtained when the ratio of glycerol/urea is 10:1; ZnO particles start to get irregular and to grow in larger sizes.



**Figure SI-4.** ZnO nanoparticles obtained only in glycerol-water at the temperature of 70 °C. It can see the spindle shape of the particles in the micrometric domain.