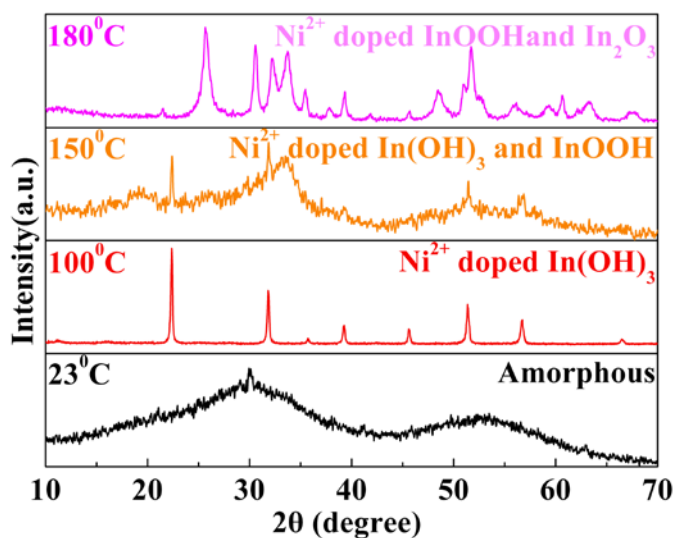
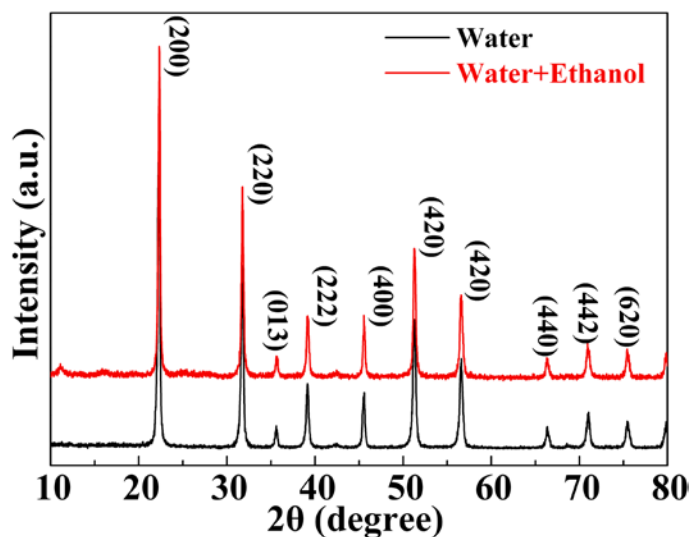


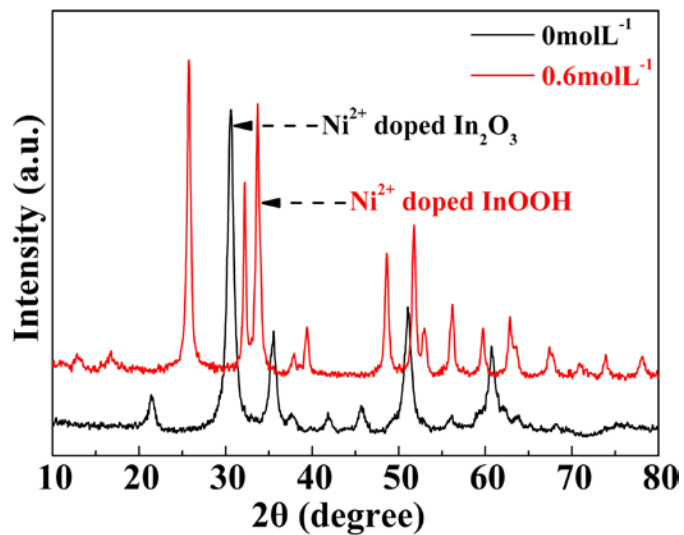
## Supporting information



Supporting information 1 (SP-1), XRD patterns of the samples obtained at different solvothermal temperatures, which shows the phases evolve with reaction temperatures.



Supporting information 2 (SP-2), XRD patterns of S2 and S3 obtained in distilled water or 50 V% distilled water plus 50 V% ethanol solvents. They are  $\text{Ni}^{2+}$  doped  $\text{In(OH)}_3$  in term of JCPDS 76-1464.



Supporting information 3 (SP-3), XRD patterns of S4 and S5 prepared with different alkaline concentrations in ethanol solvents. The samples prepared without alkali is Ni<sup>2+</sup> doped In<sub>2</sub>O<sub>3</sub> while the specimens obtained at 0.6 mol L<sup>-1</sup> alkaline concentrations are Ni<sup>2+</sup> doped InOOH.