

# Supporting Information

## **TiO<sub>2</sub> nanoparticles vs TiO<sub>2</sub> nanowires as support in hydrogen peroxide direct synthesis: The influence of N and Au doping**

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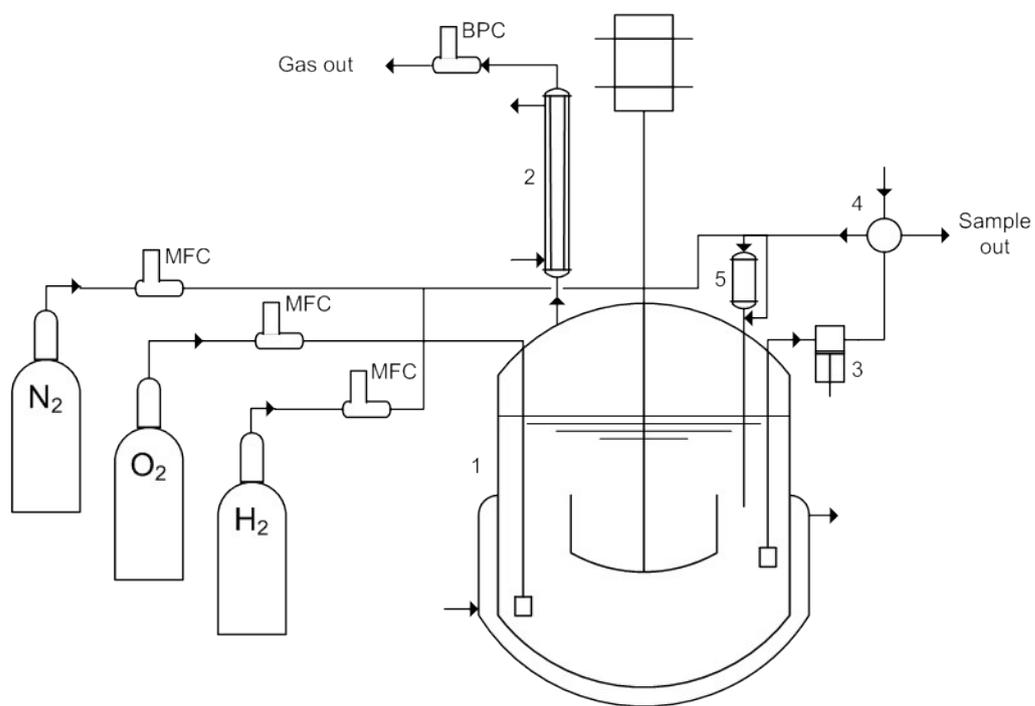
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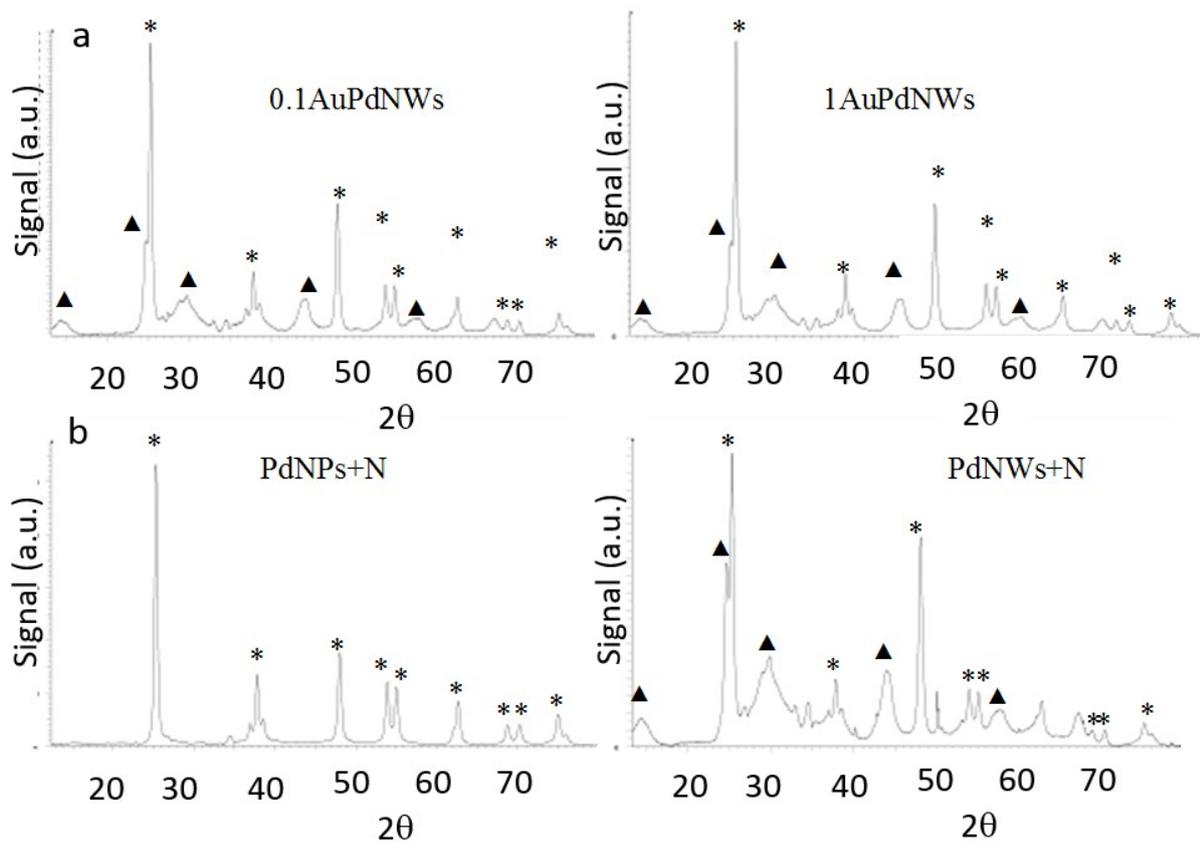
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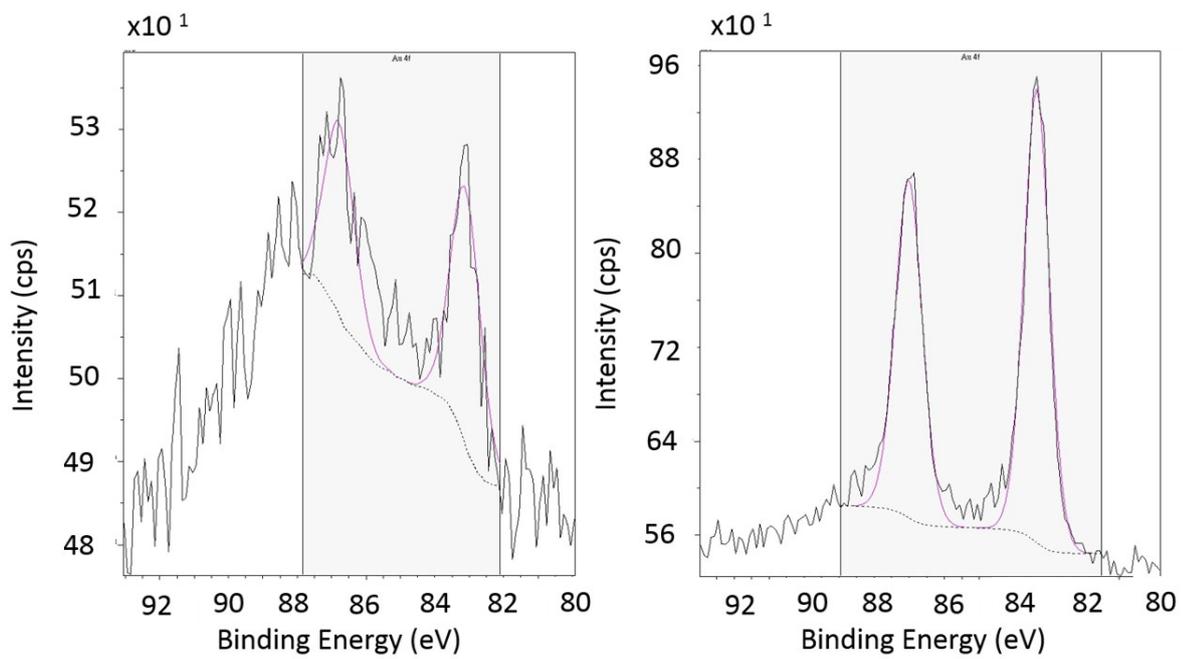
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**Figure S1.** Schematics of the experimental apparatus: 1- reactor; 2 - condenser; 3 - high pressure pump; 4 - sampling valve; 5 - catalyst chamber; MFC - mass flow controller; BPC - back pressure controller.



**Figure S2.** XRD patterns of bimetallic samples on TiO<sub>2</sub> nanowires (section a) and of N-doped samples (section b). (\* indicate anatase phase, while ▲ indicate beta-titania, space group C2/m).



**Figure S3.** XPS Au4f spectra of 0.1AuPdNWs (left) and 1AuPdNWs (right).