CO₂-responsive polymer functionalized Au nanoparticles for CO₂ sensor

Ying $Ma^{\dagger*}$, Kittithat Promthaveepong † and Nan $Li^{\ddagger*}$

[†] Department of Chemical and Biomolecular Engineering, National University of Singapore, 10

Kent Ridge Crescent, Singapore 119260, Singapore

[‡] Division of Bioengineering, School of Chemical & Biomedical Engineering, Nanyang

Technological University, 70 Nanyang Drive, Singapore 637457, Singapore

Corresponding Author *

E-mail: chemay@nus.edu.sg

linan@ntu.edu.sg

Keywords: CO₂-responsive polymer, nanoparticles, colorimetric CO₂ sensor

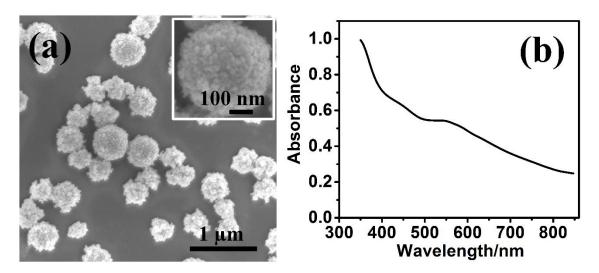


Figure S1. (a) SEM and (b) UV absorption spectra of Au NPs synthesized in the presence of 0.8 mg/ml PVP concentration using ANI as reducing agent.

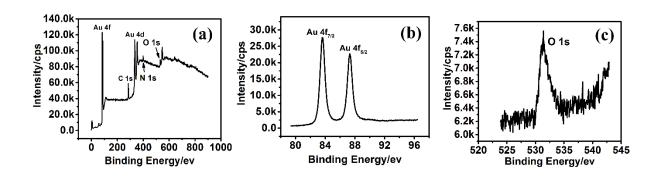


Figure S2. XPS spectra of Au NP1.6. (a) Survey spectrum, high-resolution spectra of (b) Au 4f and (c) O 1s.