

## Electronic Support Information (ESI)

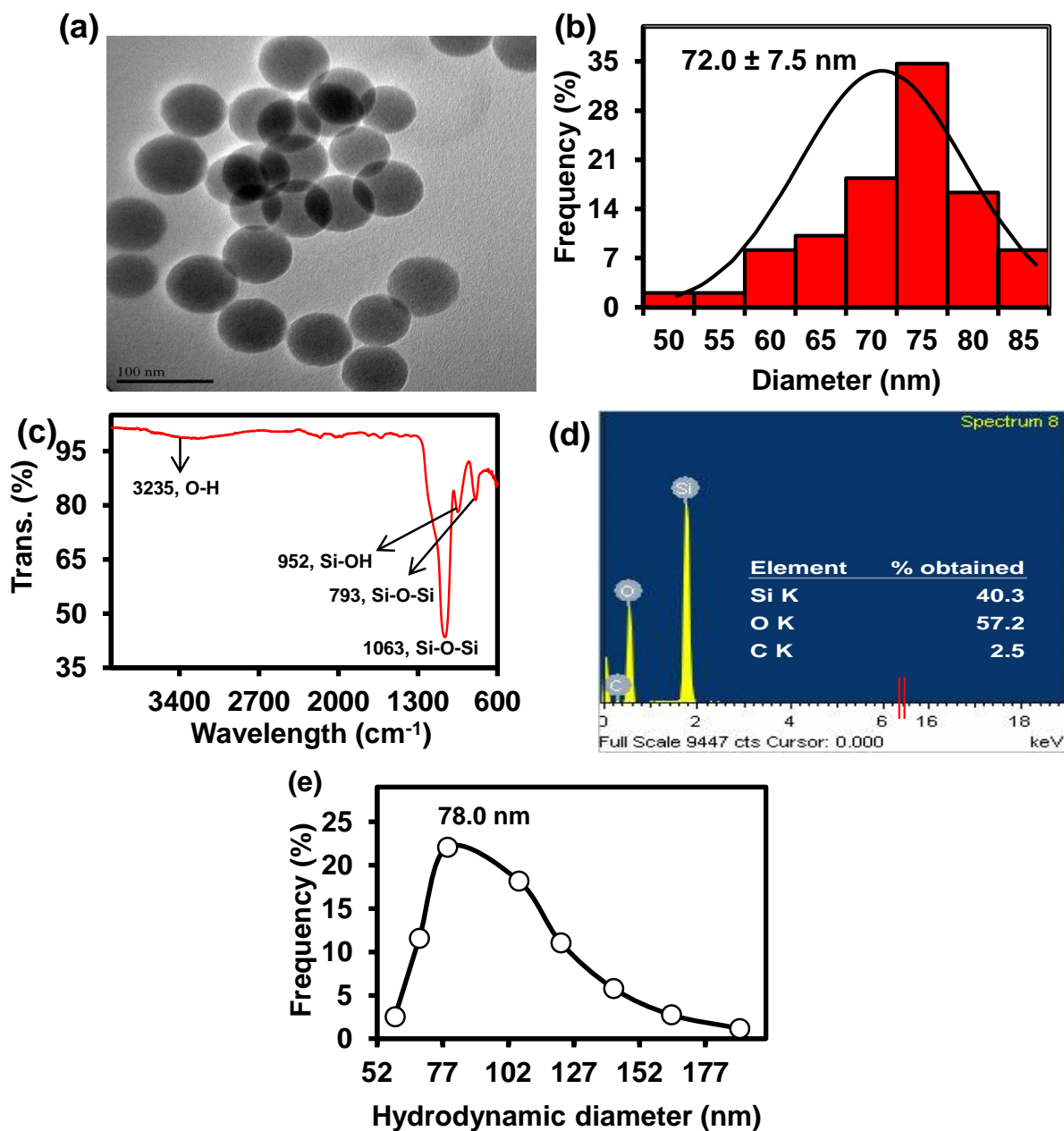
### **Pd Nanocatalysts Adsorbed onto Silica Nanoparticles Coated Indium Tin Oxide: A Reusable Nanozyme for Glucose**

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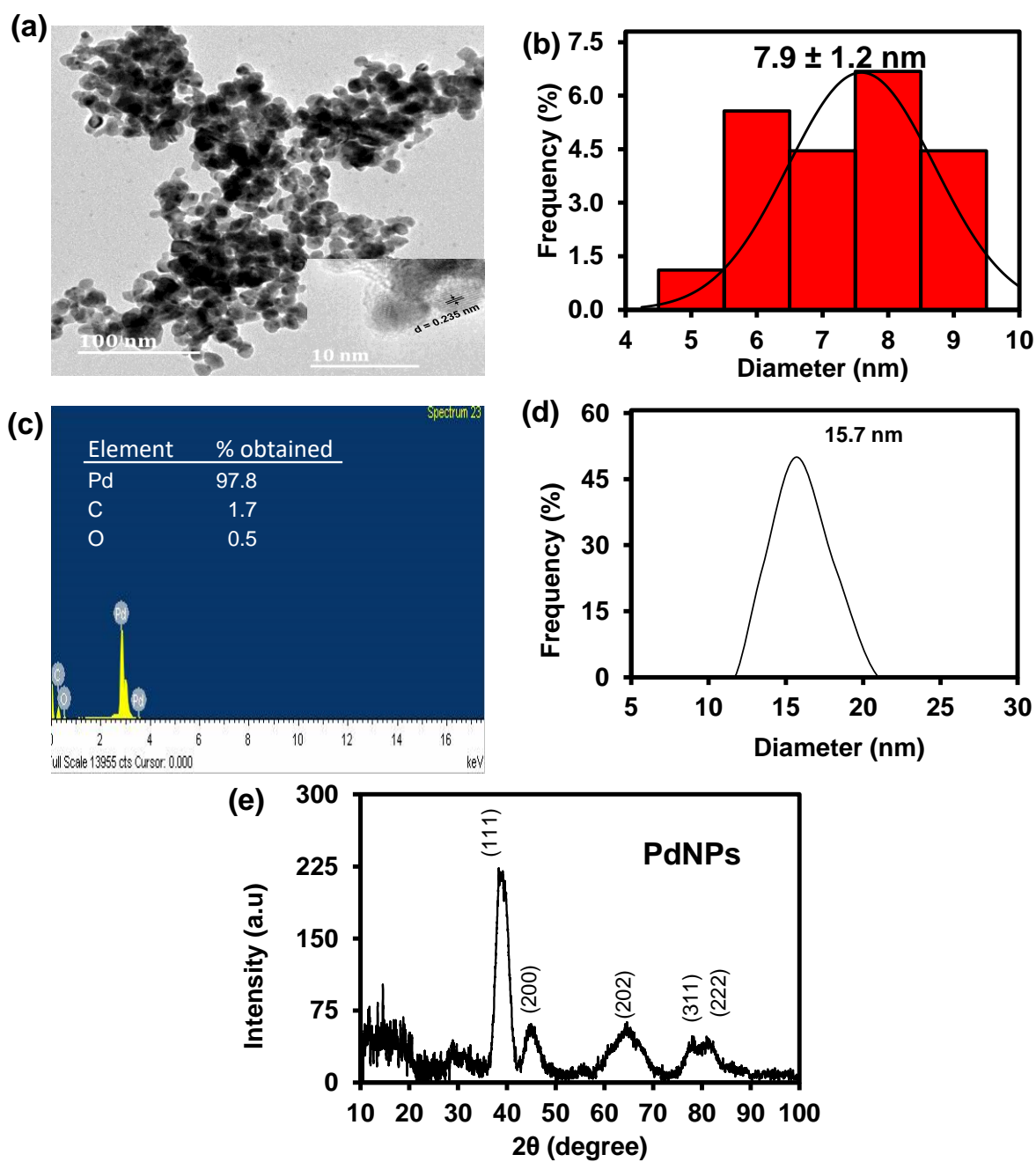
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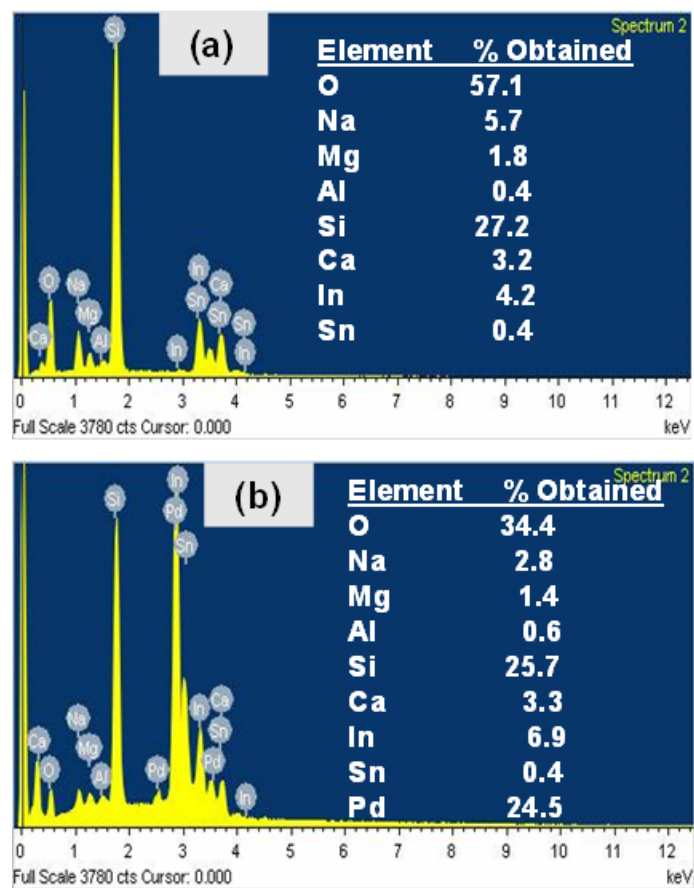
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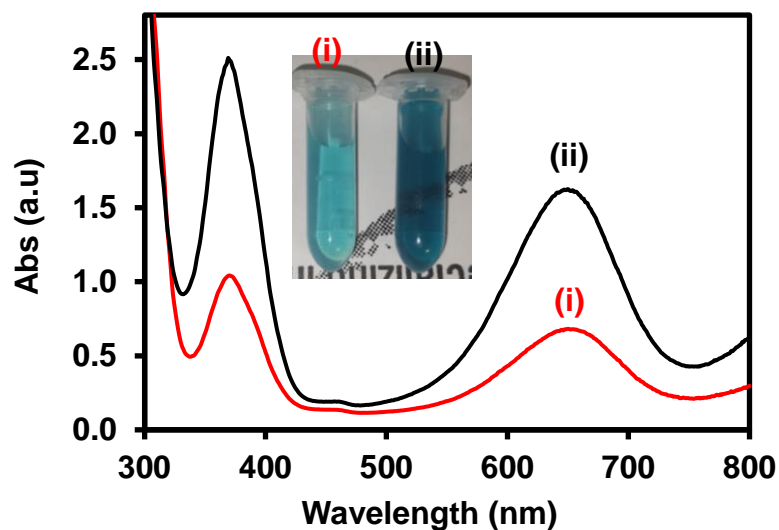
**Figure S1:** (a) TEM image, (b) size distribution histogram, (c) FT-IR spectrum, (d) EDX and (e) DLS of silica nanoparticles (SiO<sub>2</sub>NPs).



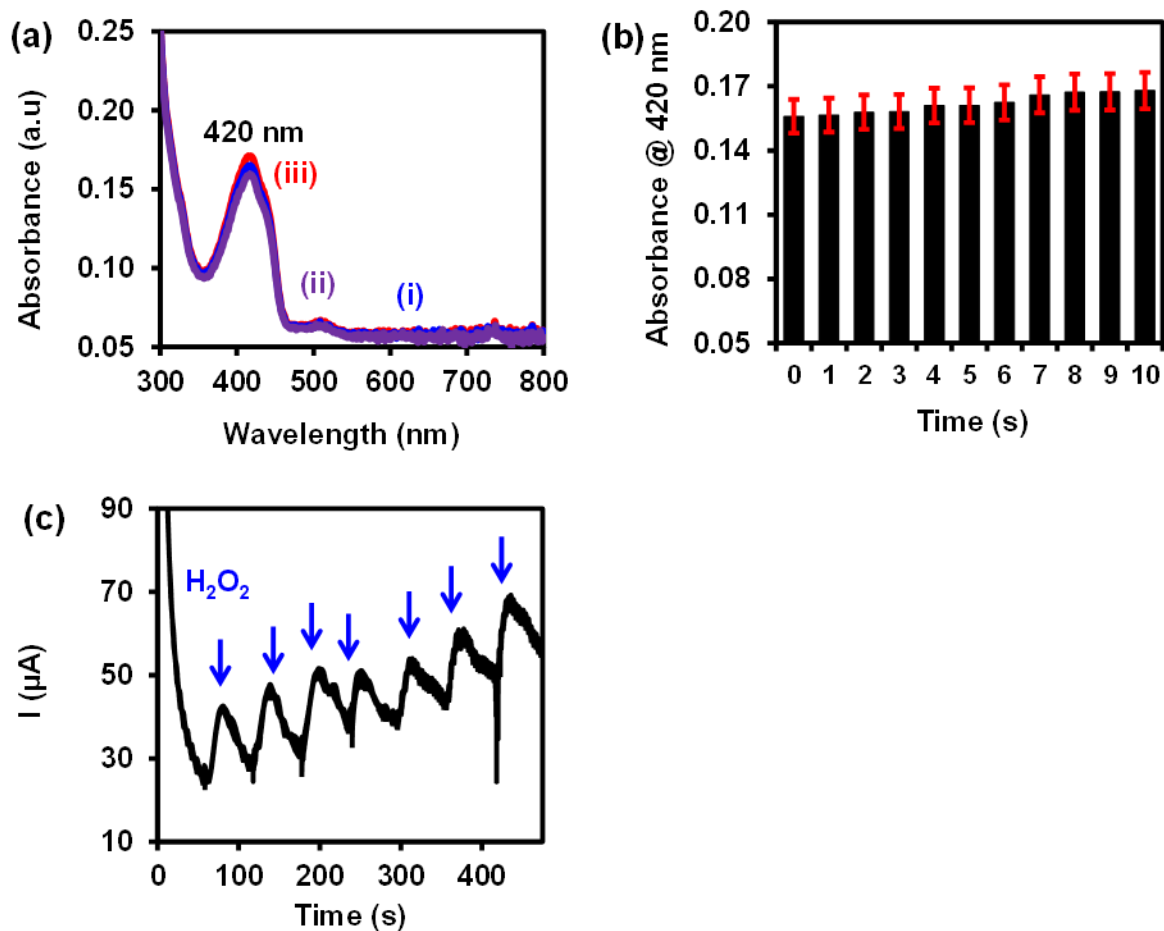
**Figure S2:** (a) TEM image, (b) size distribution histogram, (c) EDX, (d) DLS and (e) XRD of palladium nanoparticles (PdNPs).



**Figure S3:** EDX of the (a) bare ITO and (b) the ITO-SiO<sub>2</sub>-prS-PdNPs.



**Figure S4:** UV-Vis absorption spectra of (i) 0.20 M  $\text{H}_2\text{O}_2$  + 4.2 mM TMB + ITO-SiO<sub>2</sub>-prS-PdNPs and (ii) 0.20 M  $\text{H}_2\text{O}_2$  + 4.2 mM TMB + PdNPs. (Insert photograph for the corresponding colour change of different reaction systems). All were measured in 0.20 M acetate buffer (pH 4.0).



**Figure S5:** UV-vis absorption spectra of (a)(i) DPBF alone (blue), (ii) DPBF + H<sub>2</sub>O<sub>2</sub> (purple), (iii) DPBF + H<sub>2</sub>O<sub>2</sub> + ITO-SiO<sub>2</sub>-prS-PdNPs (red). (b) Absorption of DPBF at 420 nm in the presence of H<sub>2</sub>O<sub>2</sub> and ITO-SiO<sub>2</sub>-prS-PdNPs at the predetermined time interval of 1 minute up to 10 minutes. (c) Chronoamperogram of the modified ITO-SiO<sub>2</sub>-prS-PdNPs with addition of 10 μL H<sub>2</sub>O<sub>2</sub> (1.0 mM) into 10 mL pH 4.0 acetate buffer.