Supplementary Materials

for

Saccharide-derived Zinc Oxide Nanoparticles with High Photocatalytic Activity for Water Decontamination and Sanitation

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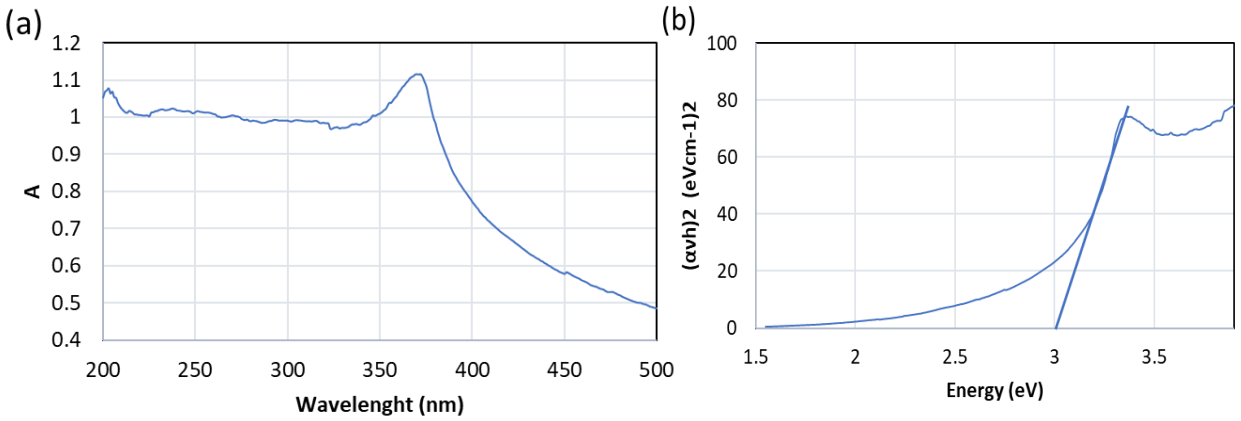

Figure S1: (a) The UV-visible absorption spectrum of Dextrin-ZnO NPs suspension in ethanol, (b) Tauc plot for the determination of bandgap of ZnO NPs.

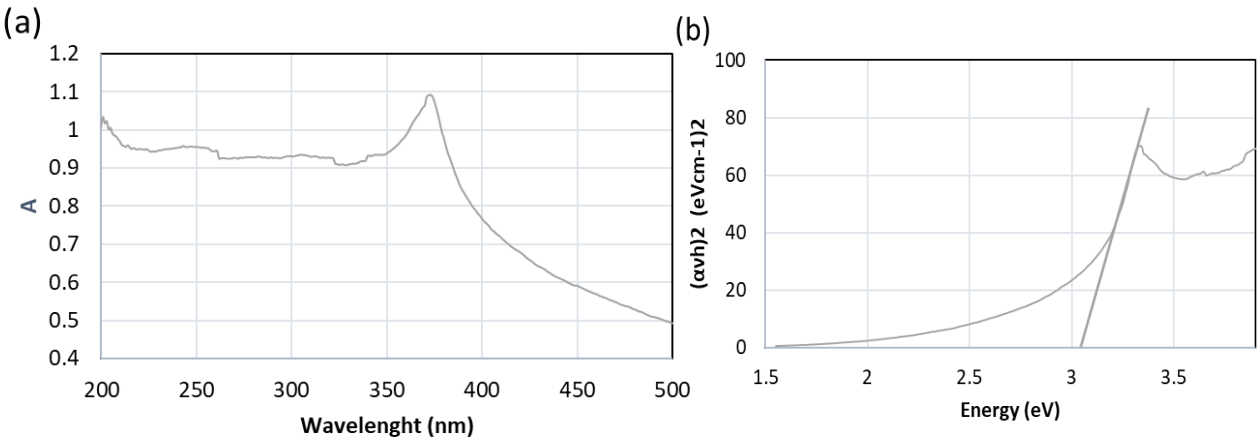

Figure S2: (a) The UV-visible absorption spectrum of Glucose-ZnO NPs suspension in ethanol, (b) Tauc plot for the determination of bandgap of ZnO NPs.

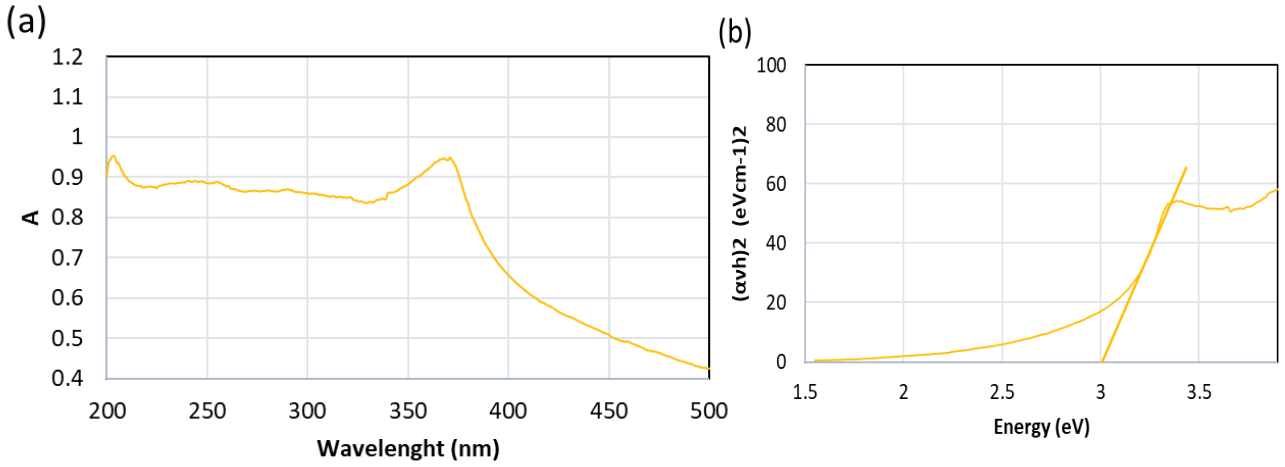

Figure S3: (a) The UV-visible absorption spectrum of Starch-ZnO NPs suspension in ethanol, (b) Tauc plot for the determination of bandgap of ZnO NPs.

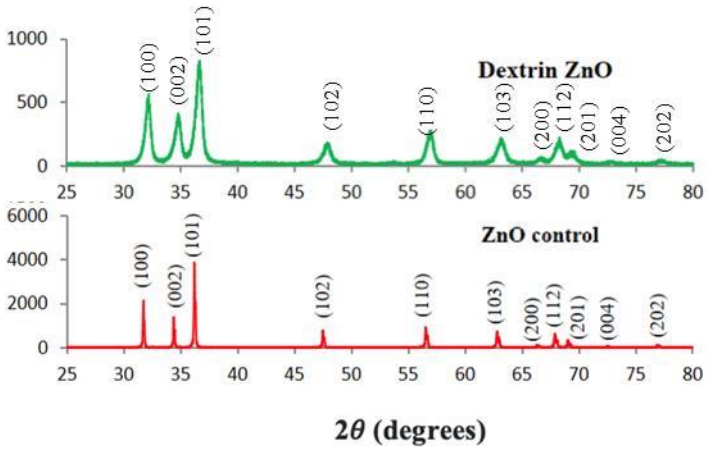

Figure S4: XRPD Patterns of the Dextrin ZnO NP and ZnO control.

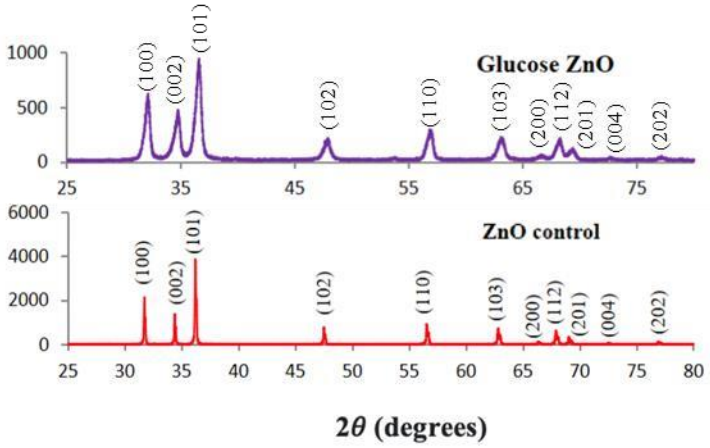

Figure S5: XRPD Patterns of the Glucose ZnO NP and ZnO control.

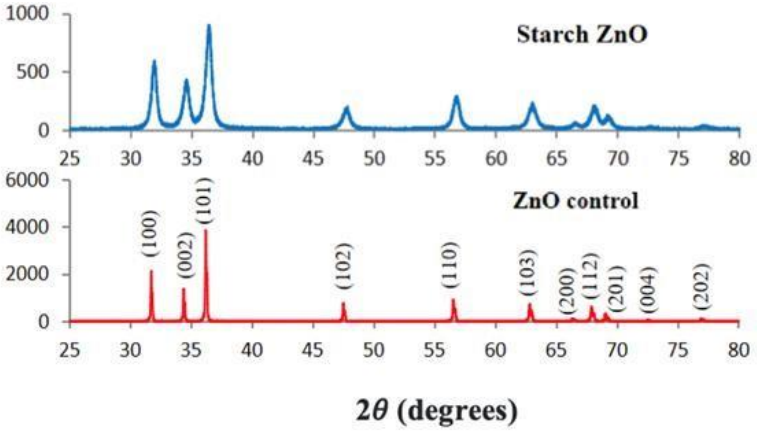

Figure S6: XRPD Patterns of the Starch ZnO NP and ZnO control.

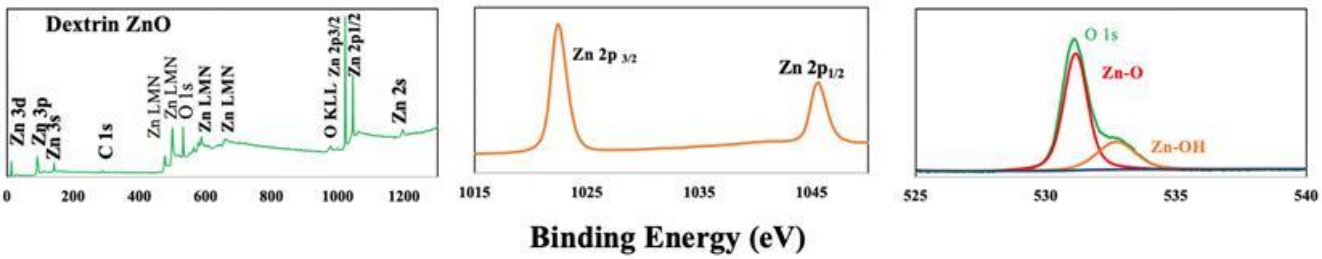

Figure S7: (a) XPS survey spectrum of Dextrin ZnO, (b) XPS spectrum of Zn 2p, (c) XPS spectrum of O 1s.

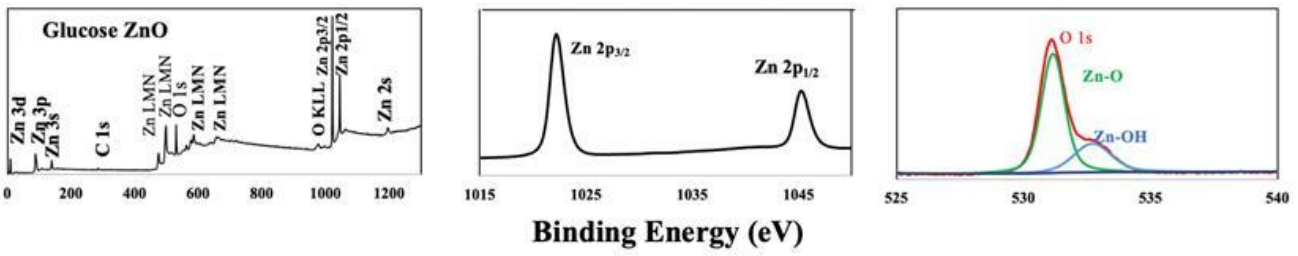

Figure S8: (a) XPS survey spectrum of Glucose ZnO, (b) XPS spectrum of Zn 2p, (c) XPS spectrum of O 1s.

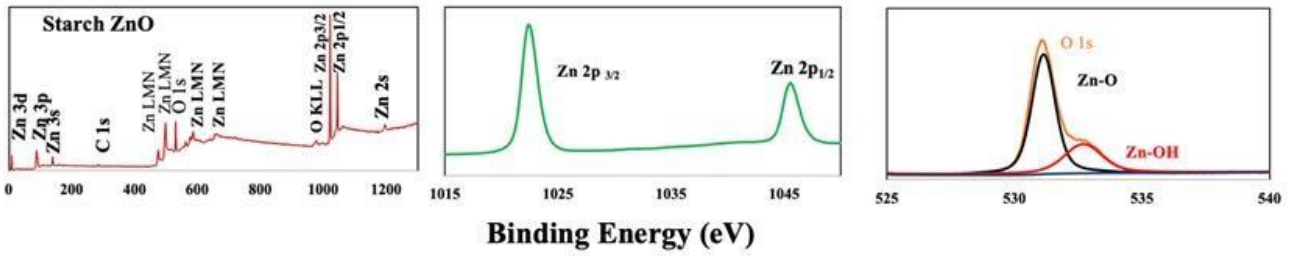

Figure S9: (a) XPS survey spectrum of Starch ZnO, (b) XPS spectrum of Zn 2p, (c) XPS spectrum of O 1s.