

SUPPORTING INFORMATION

A Comparative Study of Electrochemical Biosensors Based on Highly Efficient Mesoporous ZrO₂-Ag-G-SiO₂ and In₂O₃- G-SiO₂ for Rapid Recognition of *E. coli O157: H7*

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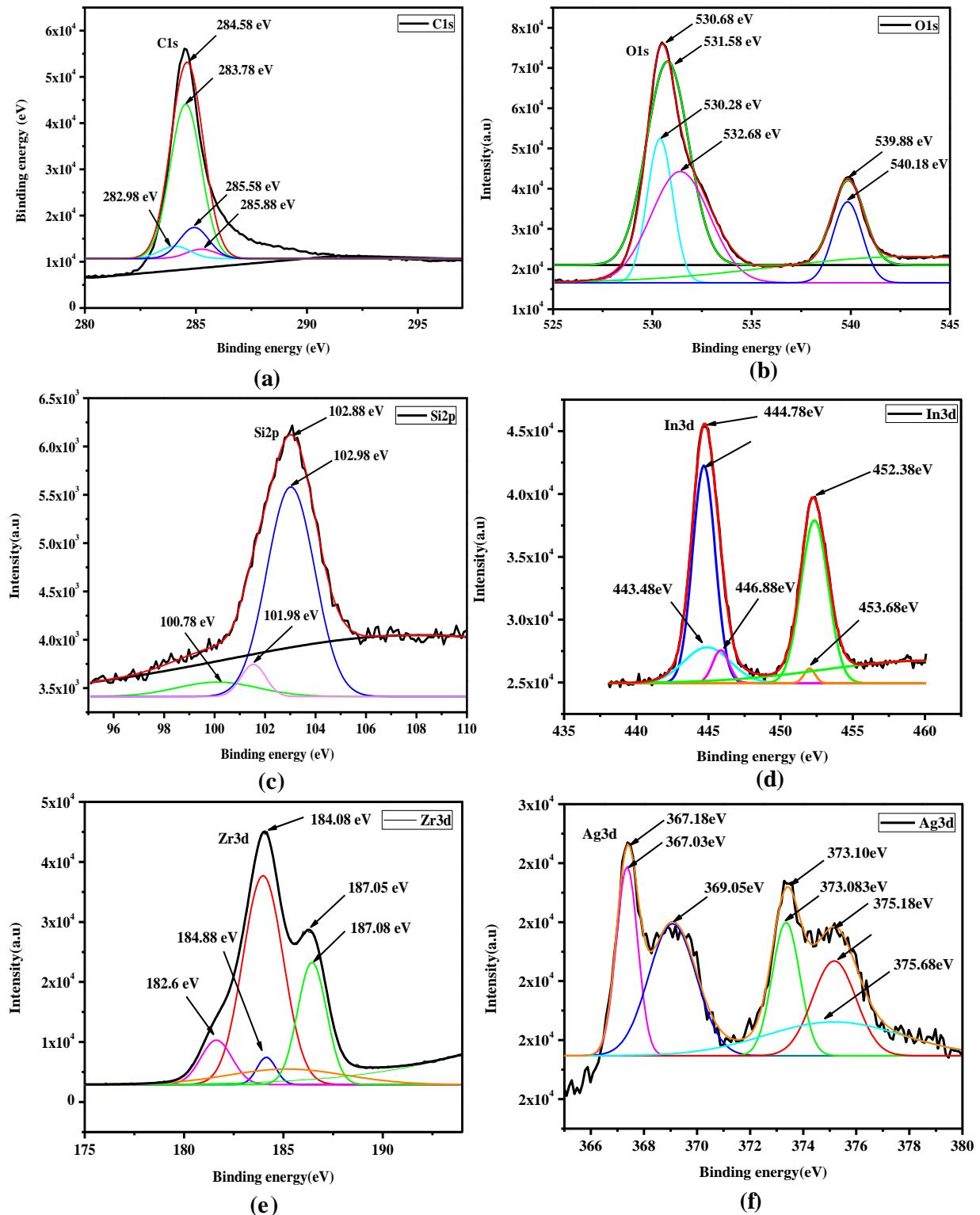


Figure S1. XPS spectra of C1s (a); O1s (b); Si2p (c); In3d (d); Zr3d (e); Ag3d (f).

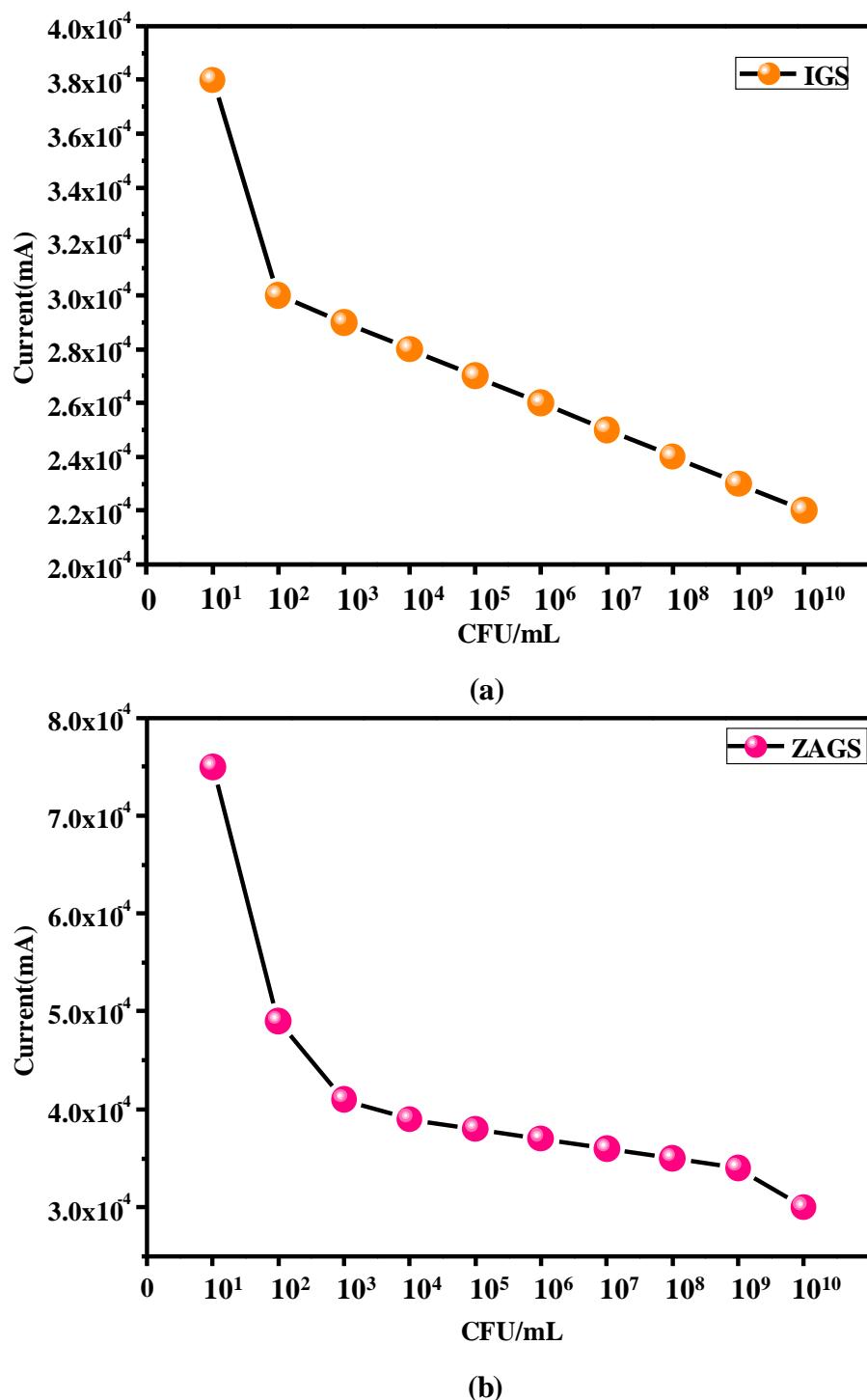


Figure S2. Calibration curve of $\text{In}_2\text{O}_3\text{-G-SiO}_2$ (IGS) sensor (a), $\text{ZrO}_2\text{-Ag-G-SiO}_2$ (ZAGS) sensor (b).

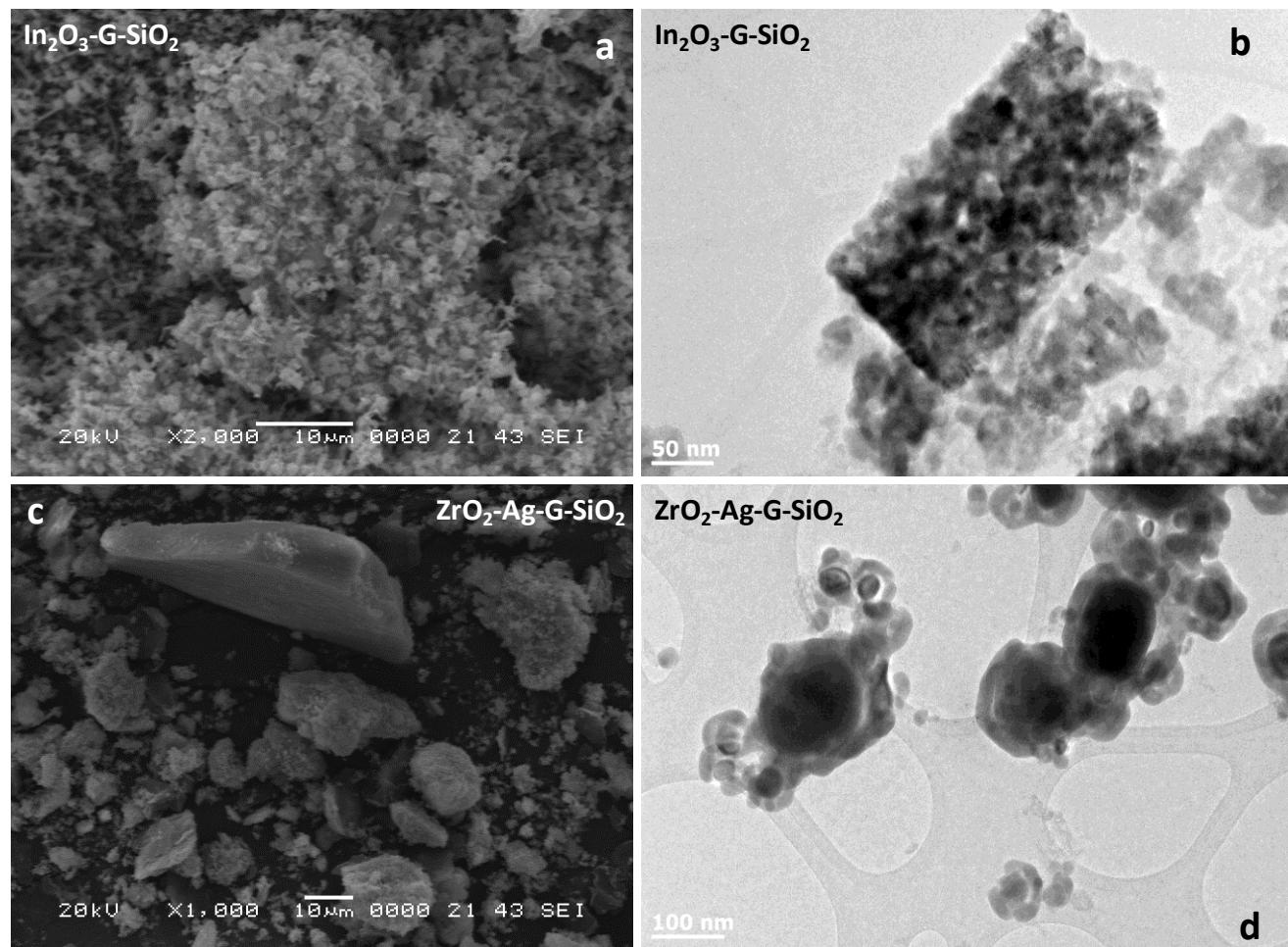


Figure S3. SEM and TEM images of In_2O_3 -G-SiO₂ (a), (b) and ZrO_2 -Ag -G -SiO₂ (c), (d) respectively after electrochemical performance.

Table S1. Nomenclature of prepared samples.

Samples	Nomenclature
ZC	Commercial Zirconium
ZS	Synthesized ZrO ₂
ZA	ZrO ₂ -Ag
ZAG	ZrO ₂ -Ag -G
ZAGS	ZrO ₂ -Ag -G -SiO ₂
IG	In ₂ O ₃ -G
IGS10	In ₂ O ₃ -G-SiO ₂ -10%
IGS20	In ₂ O ₃ -G-SiO ₂ -20%