

**Development of Novel Microsphere Structured - Calcium Tungstate as  
Efficacious Electrocatalyst for the Detection of Antibiotic Drug Nitrofurantoin**

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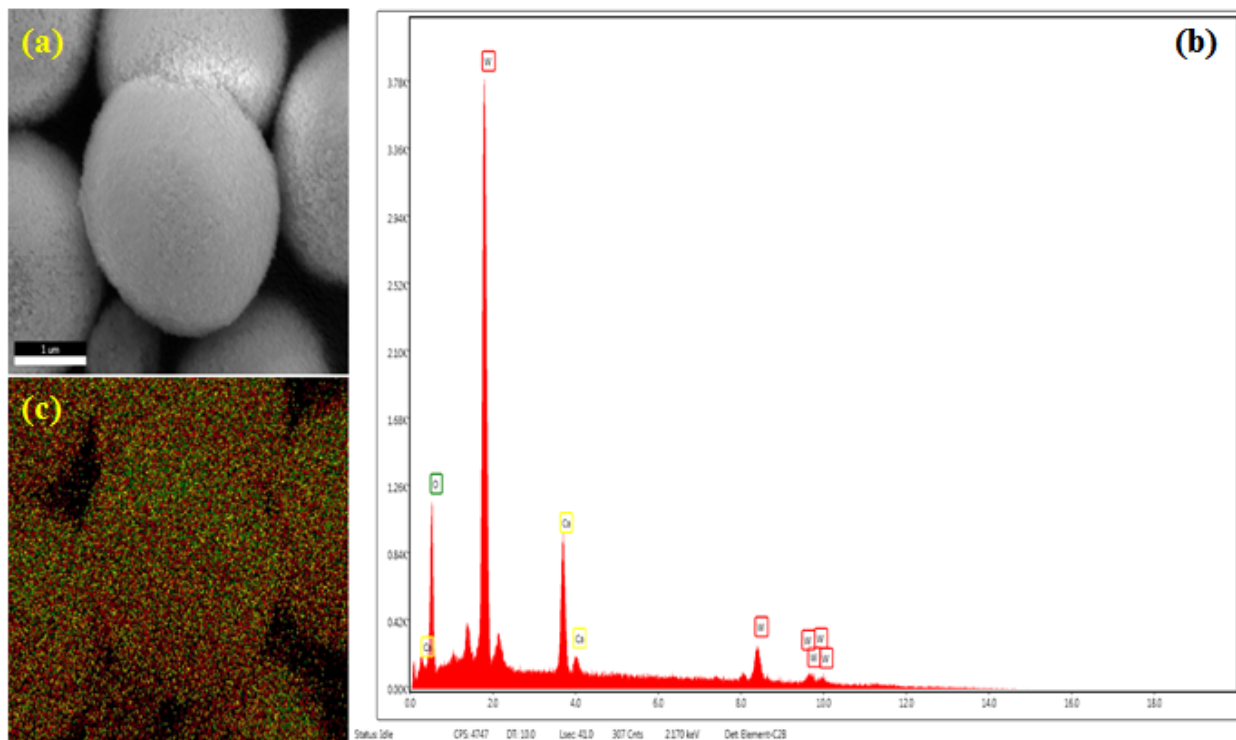
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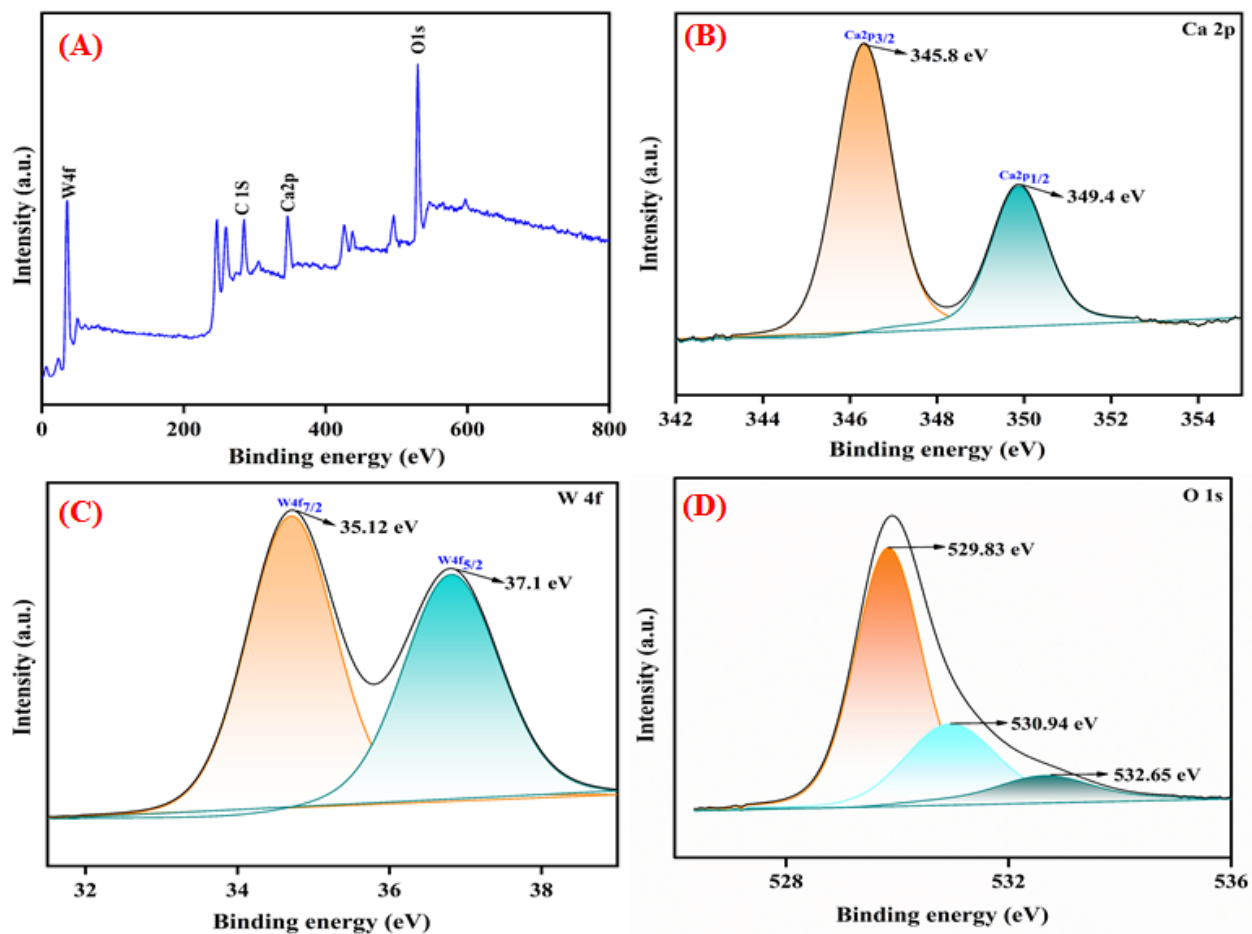
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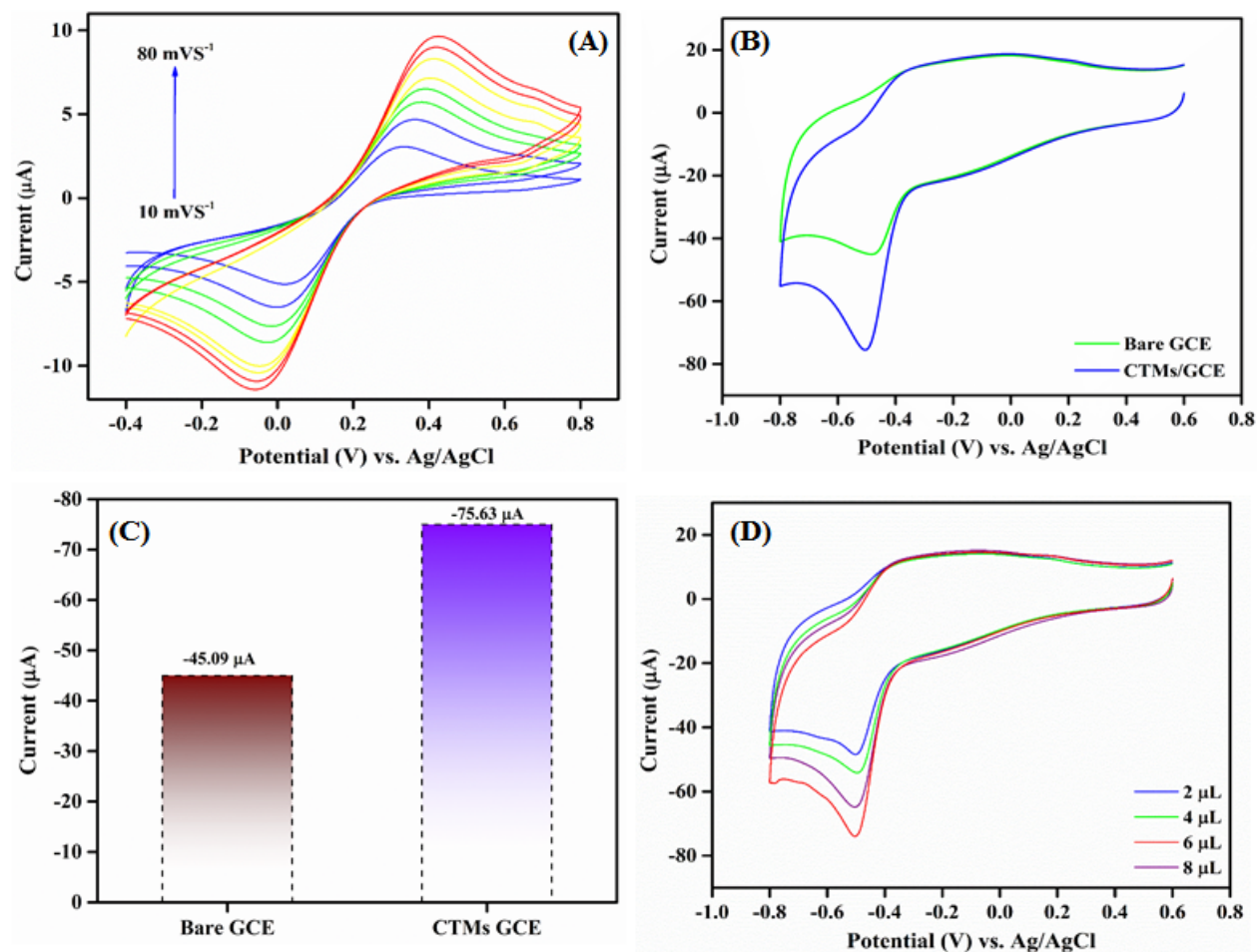
**Supplementary data**



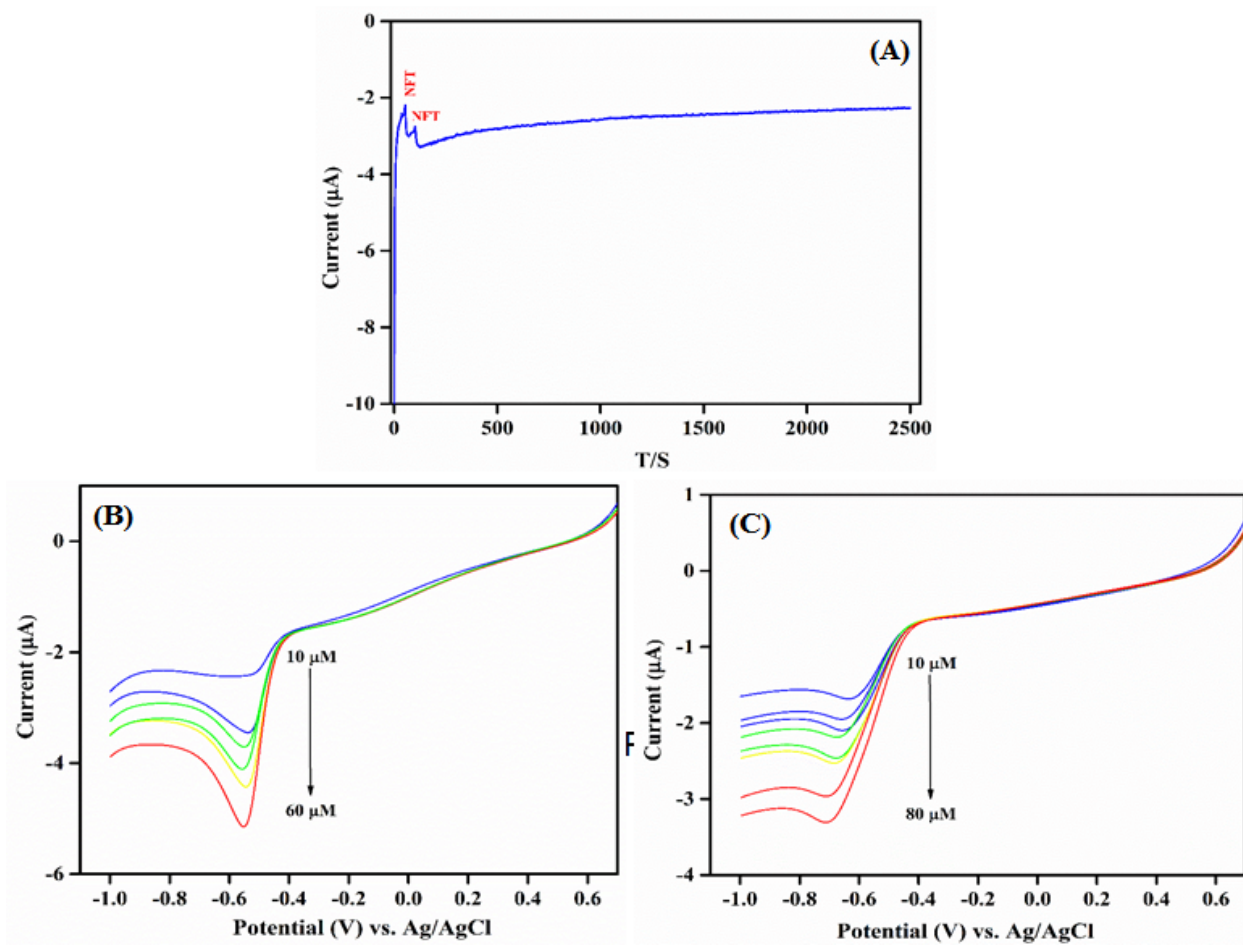
**Figure S1.** EDX spectrum of calcium tungstate microspheres.



**Figure S2.** (A) The XPS survey spectrum of the calcium tungstate microspheres. High resolution deconvulated spectra of (B) Ca, (C) W and (D) O.



**Figure S3.** (A) CV response of bare GCE in ferric system with increasing scan rate (10 – 80 mV S<sup>-1</sup>). (B) Comparison CV plot of bare and CTMs/GCE with 200 μM NFT in 0.05 M PBS. (C) Corresponding bar graph. (D) CV current response for different electrocatalyst loaded electrodes (2 -8 μL).



**Figure S4.** (A) Stability study response for 200  $\mu\text{L}$  of NFT in 0.1M PBS solution up to 2500S. (B) LSV response for the real sample NFT tablet concentration of 10-60  $\mu\text{M}$  and (C) NFT dissolved in tap water (10-80  $\mu\text{M}$ ).