

## Supplementary Materials

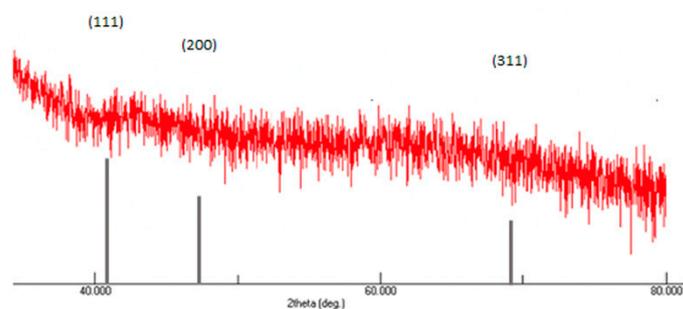


Figure S1. XRD spectrum of Ir-NP2.

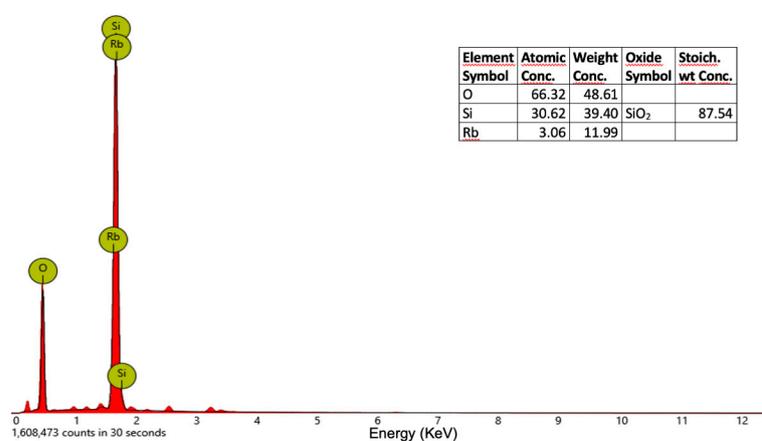


Figure S2. EDX spectrum and elements concentration of wafer substrate.

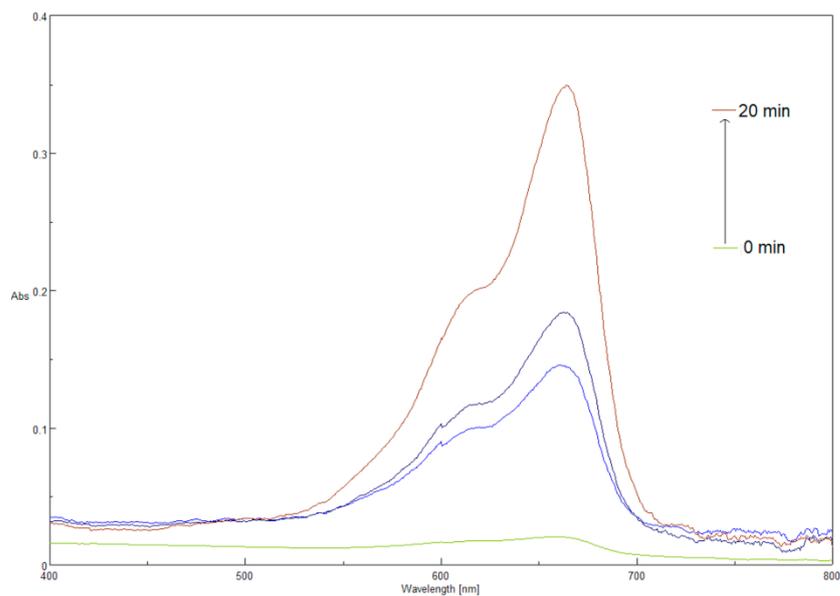


Figure S3. UV-visible spectra registered at different intervals of time of the reaction mixture after catalytic reduction of MB by NaBH<sub>4</sub> in the presence of Ir-NP<sub>2</sub> (0 min) and left at the air for 20 min.