

Supporting Information

Optimizing the Performance of Au_y/Ni_x/TiO₂NTs Photoanodes for Photoelectrochemical Water Splitting

Shaimaa K. Mohamed^{1,*}, Amany M. A. Bashat¹, Hassan M.A. Hassan^{1,*}, Nahla Ismail²,

Waleed M. A. El Rouby^{3,*}

¹ *Department of Chemistry, Faculty of Science, Suez University, 43518, Suez, Egypt*

² *Physical Chemistry Department, Centre of Excellence for Advanced Sciences, Renewable Energy Group, National Research Centre, 12311, Dokki, Giza, Egypt.*

³ *Materials Science and Nanotechnology Department, Faculty of Postgraduate Studies for Advanced Science (PSAS), Beni-Suef University, 62511 Beni-Suef, Egypt*

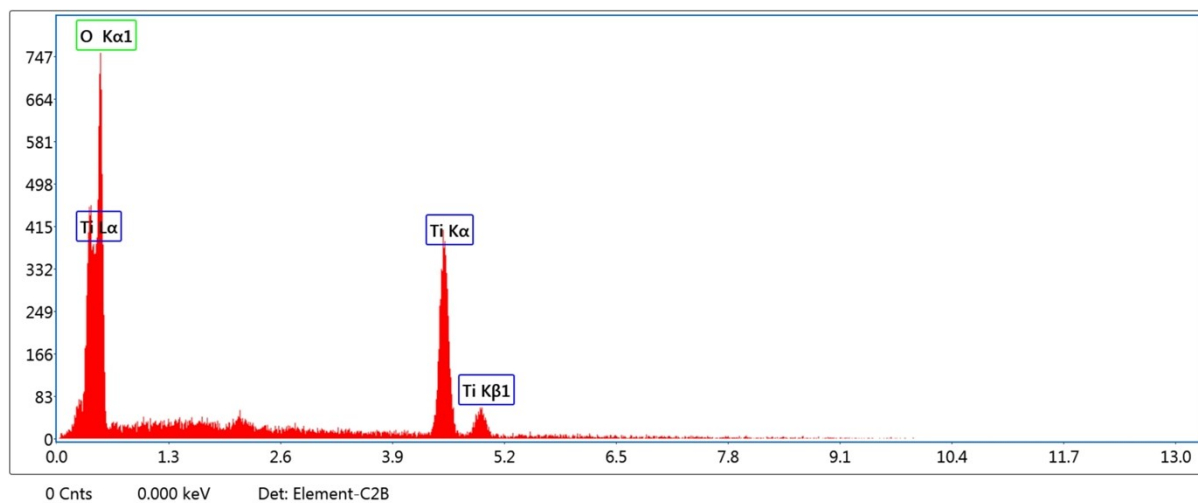


Fig. S1: The EDS elemental analysis of TiO₂NTs.

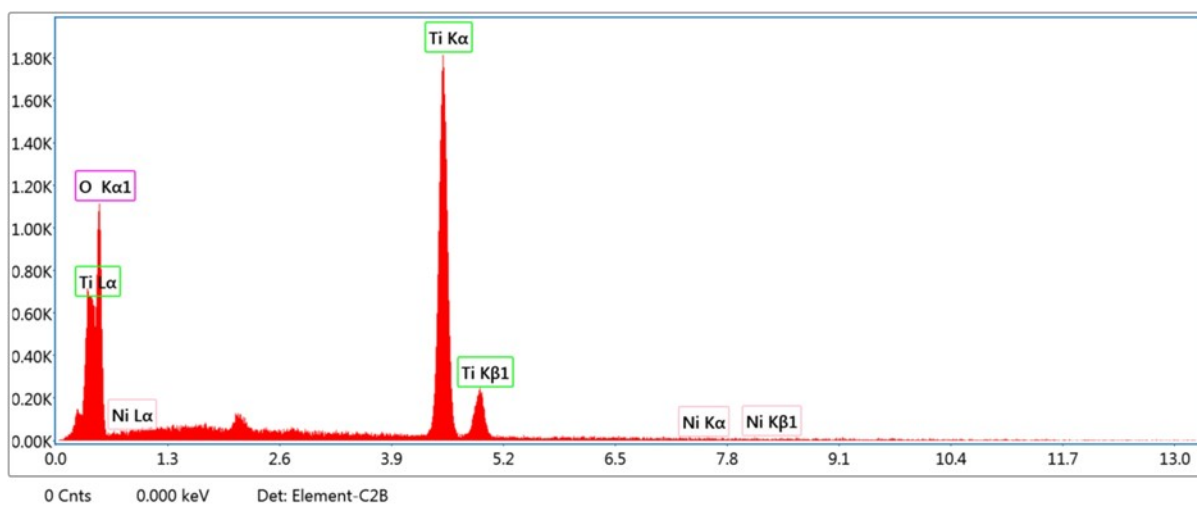


Fig. S2: The EDS elemental analysis of Ni₃/TiO₂NTs.

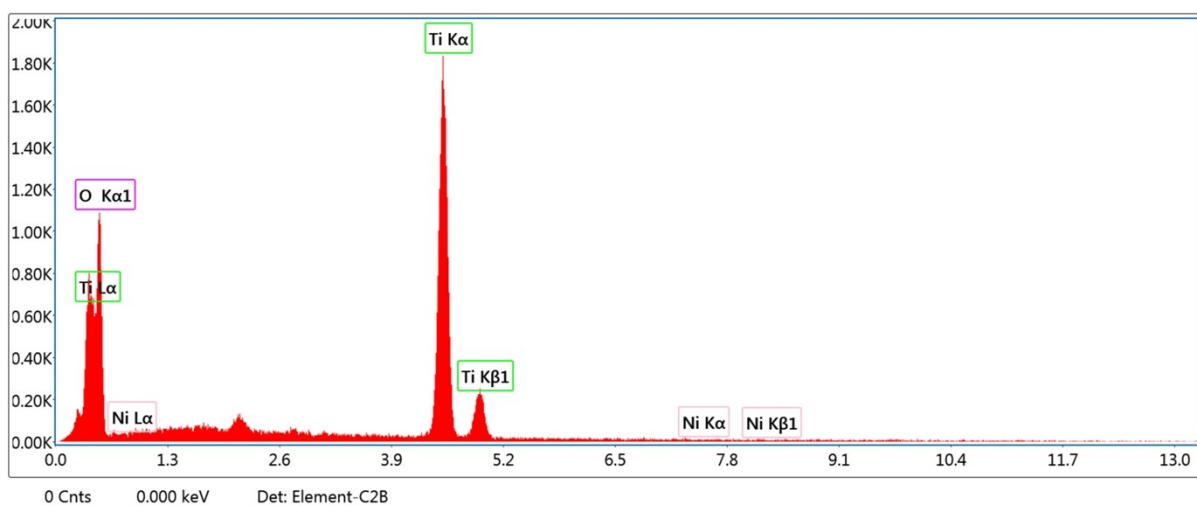


Fig. S3: The EDS elemental analysis of Ni₅/TiO₂NTs.

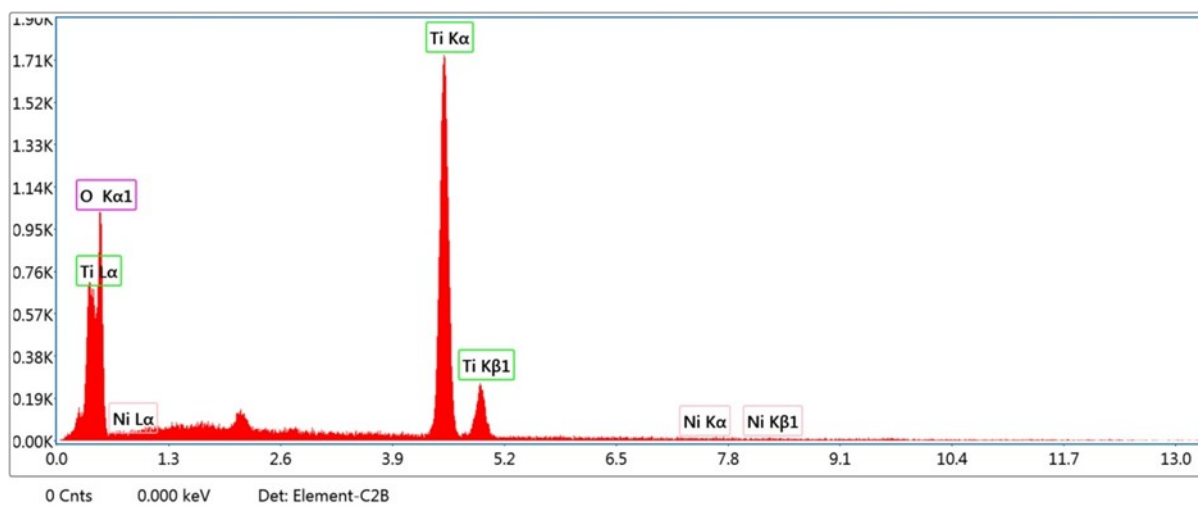


Fig. S4: The EDS elemental analysis of $\text{Ni}_{10}/\text{TiO}_2\text{NTs}$.

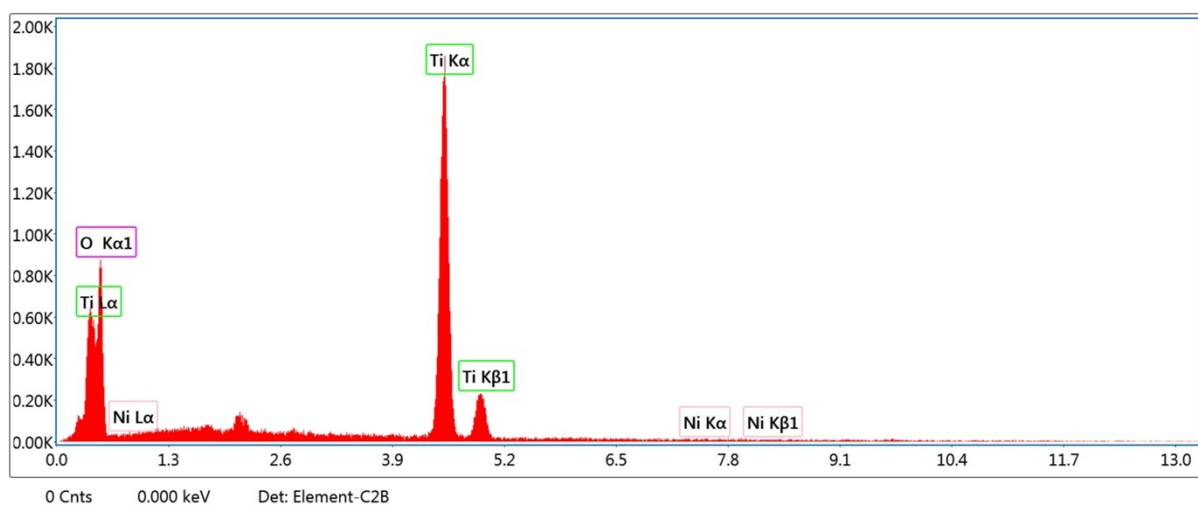


Fig. S5: The EDS elemental analysis of $\text{Ni}_{20}/\text{TiO}_2\text{NTs}$.

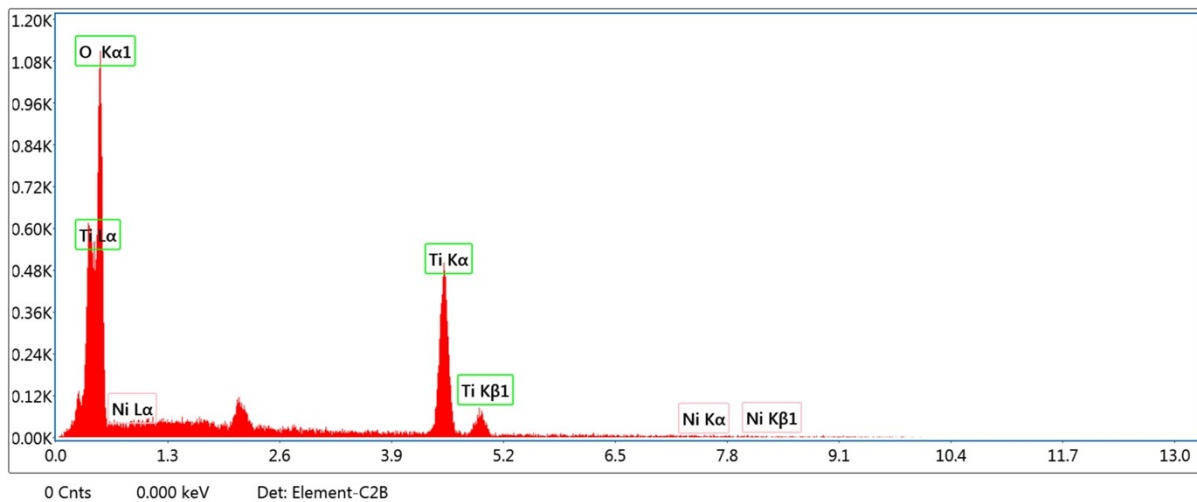


Fig. S6: The EDS elemental analysis of $\text{Ni}_{30}/\text{TiO}_2\text{NTs}$.

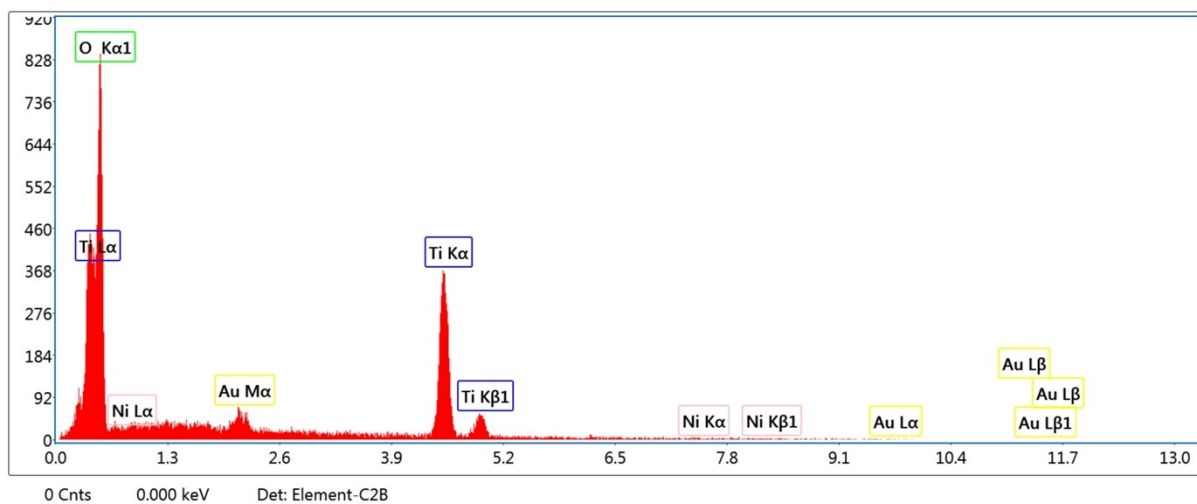


Fig. S7: The EDS elemental analysis of $\text{Au}_{15}/\text{Ni}_{20}/\text{TiO}_2\text{NTs}$.

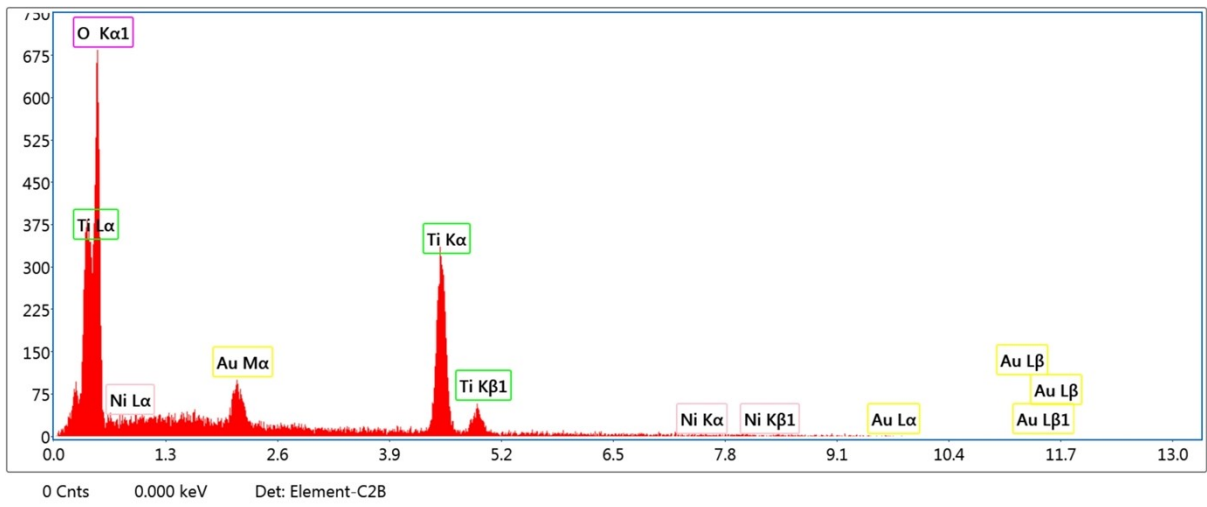


Fig. S8: The EDS elemental analysis of Au₃₀/Ni₂₀/TiO₂NTs.

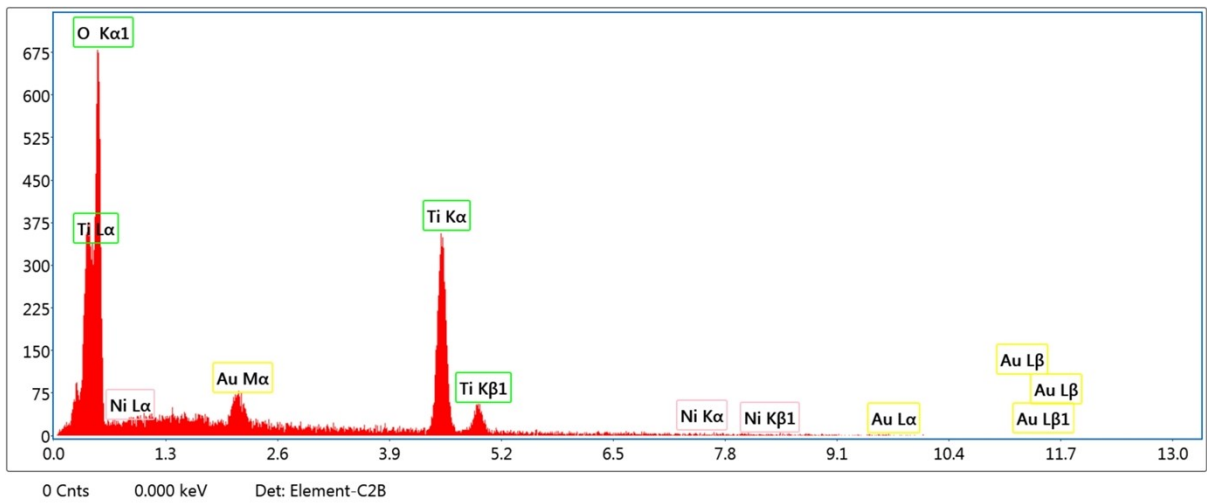


Fig. S9: The EDS elemental analysis of Au₆₀/Ni₂₀/TiO₂NTs.

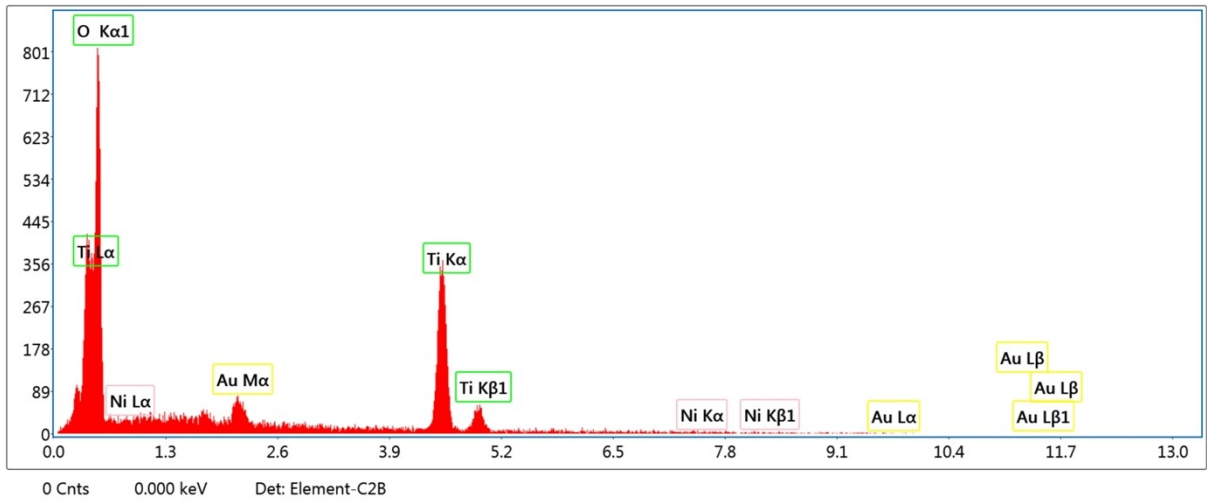


Fig. S10: The EDS elemental analysis of Au₃₀/Ni₂₀/TiO₂NTs.