

Mixed-Metal Semiconductor Anodes for Electrochemical Water Splitting and Reactive Chlorine Species Generation: Implications for Electrochemical Wastewater Treatment

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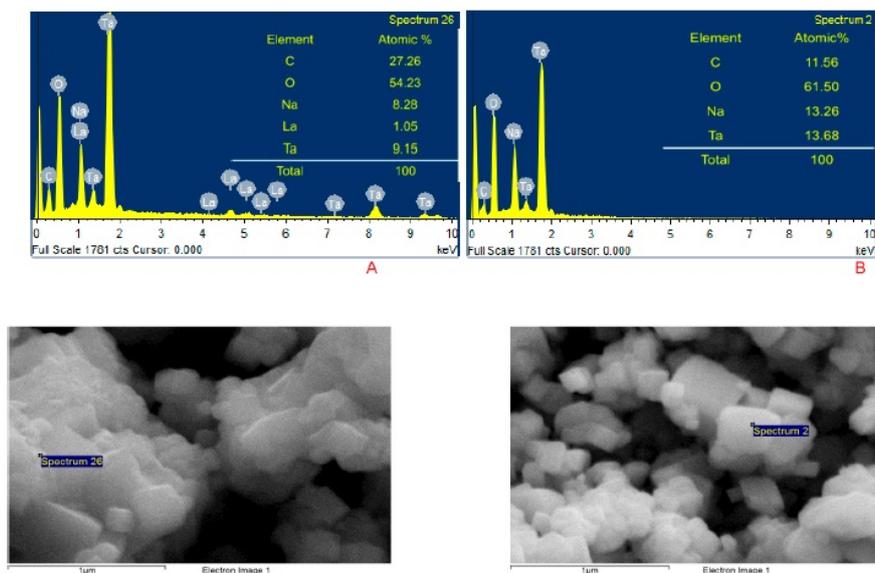


Figure S1. SEM and EDS of NaTaO₃:La shows a nanostep surface morphology (A), while the surface of nondoped NaTaO₃ was flat (B), caused by a change of the structure of NaTaO₃ with the dope of lanthanum.

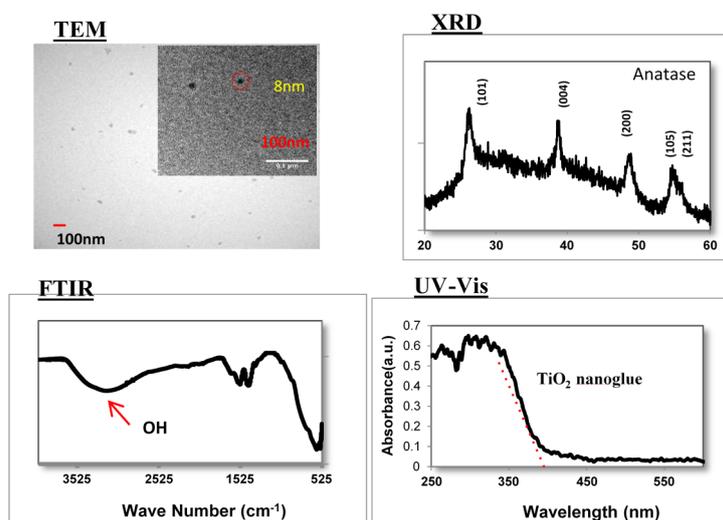


Figure S2. Shows the TEM image that determined particle size as around 8 nm, and XRD patterns that revealed the anatase structural phase of TiO₂ and confirmed abundant surface hydroxyl group in FTIR spectrum. The bandgap was determined as 3.13 eV at its UV-vis reflectance spectrum.

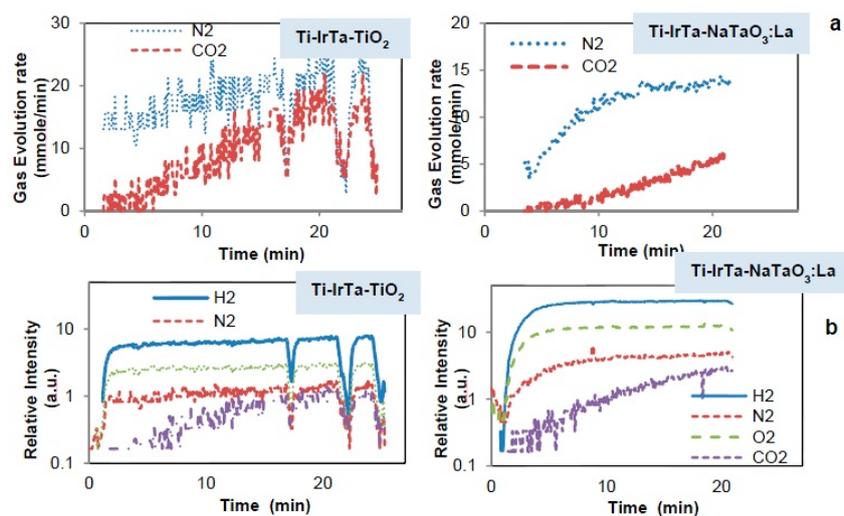


Figure S3. Shows the time profile for the generated N_2 and CO_2 gas during electrolysis of urea degradation: (a) a time profile of an estimated N_2 and CO_2 gas generation rate; (b) a time profile of head-space gas composition for the major gases, H_2 , O_2 , N_2 , and CO_2