

SUPPORTING INFORMATION

C-doped KNbO₃ Single Crystals for Enhanced Piezocatalytic Intermediate Water Splitting

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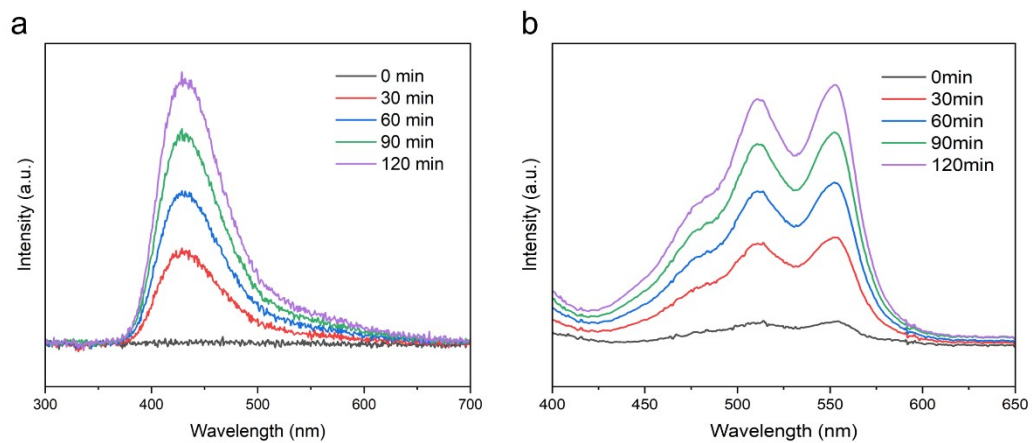


Figure S1. (a) PL spectra and (b) UV-vis spectra of solution obtained from the piezocatalytic system using 0.5:1 C-KNbO₃ as the catalysts.

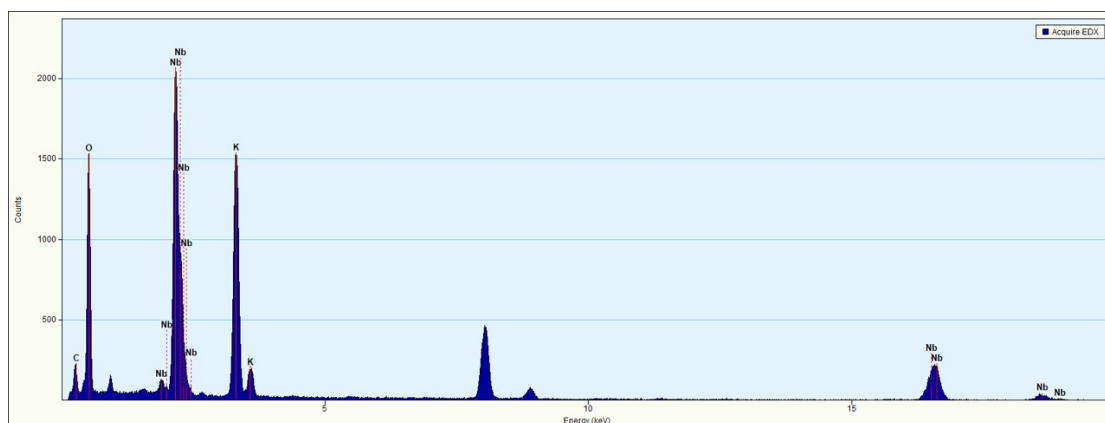


Figure S2. EDS spectrum of 0.5:1 C-KNbO₃.

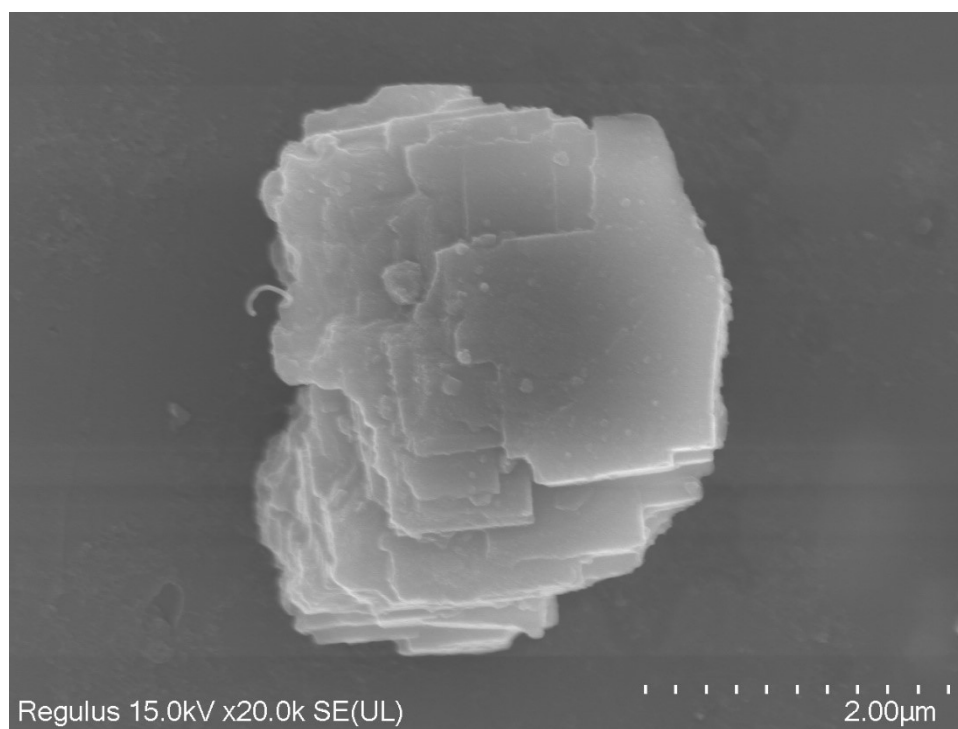


Figure S3. SEM images of 0.5:1 C-KNbO₃ after the piezocatalytic reduction of AgNO₃.

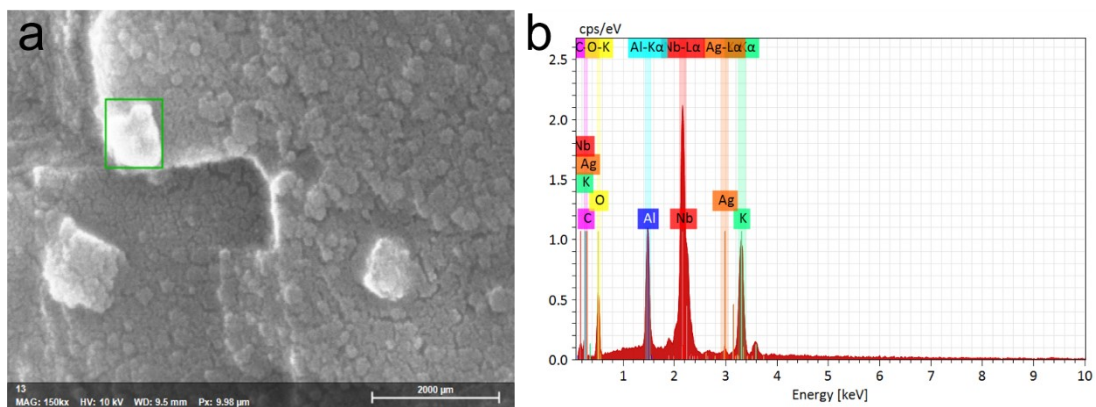


Figure S4. EDS measurement of nanoparticles from (110) plane. The elements C, K, Nb, and O come from 0.5:1 C-KNbO₃. Al might be attributed to the tin foil used to bearing the dispersed samples. It is confirmed that nanoparticles are Ag.

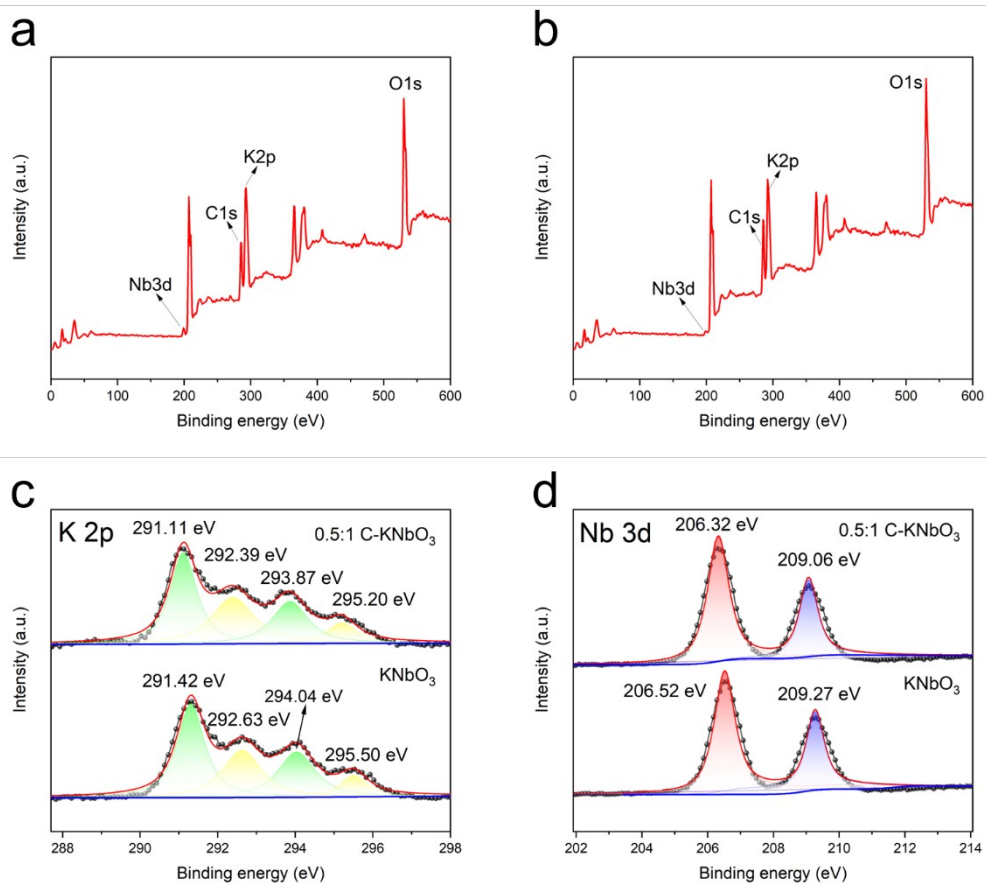


Figure S5. XPS survey spectra of (a) KNbO_3 and (b) $0.5:1 \text{ C-KNbO}_3$. High-resolution XPS spectra of (c) K 2p and (d) Nb 3d of KNbO_3 and $0.5:1 \text{ C-KNbO}_3$.

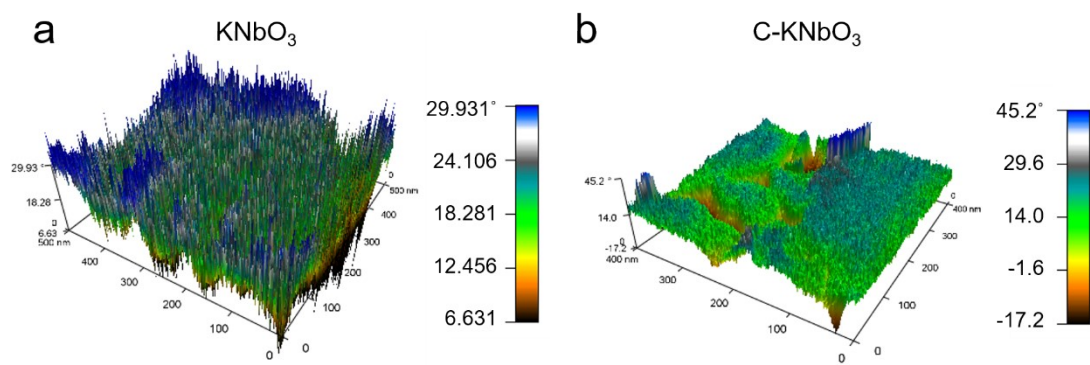


Figure S6. PFM phase of (a) KNbO_3 and (b) 0.5:1 C-KNbO_3 .