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Supporting Information – 3 pages and 4 figures

Ferroelectric Surface Photovoltage Enhancement in Chromium-doped SrTiO₃ Nanocrystal Photocatalysts for Hydrogen Evolution

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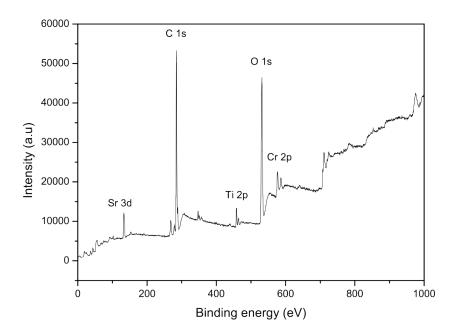


Figure S1. X-ray photoelectron survey spectrum.

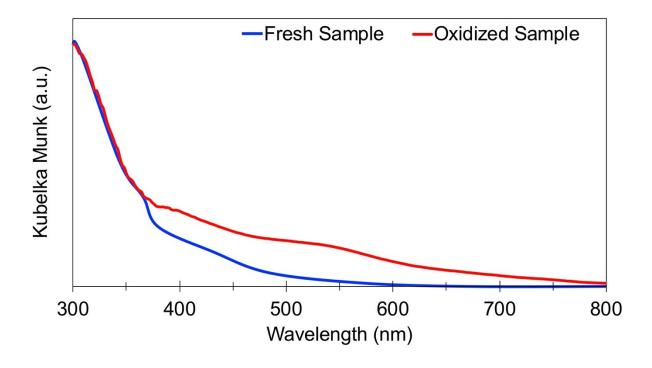


Figure S2. KM plot for a fresh and an oxidized SrTiO₃:Cr film (after storing in air for 3 months).

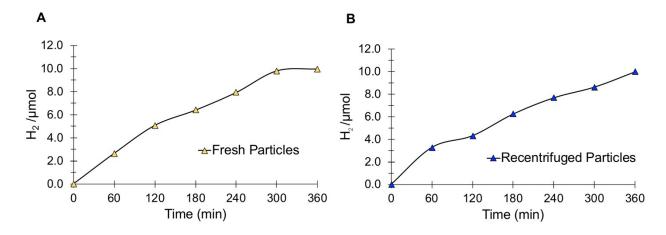


Figure S3. AQE Measurement on 0.5%wt Pt - SrTiO₃:Cr under 435 nm illumination in 20% aqueous methanol solution (irradiation area of 2.01 cm^2). A) Lamp intensity = 19.3 mW/cm^2 on freshly made sample with AQE = 0.66%. B) 20.91 mW/cm^2 lamp intensity on recentrifuged sample after 6 hours irradiation with AQE = 0.61% (7.6% decrease from original value).

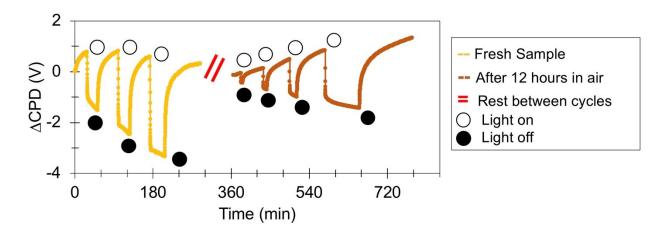


Figure S4. Transient photovoltage of Au/SrTiO₃:Cr under 2.5 eV illumination before and after sample exposure to air (dark) for 12 h.