

SUPPORTING INFORMATION

Mössbauerite as Iron-only Layered Oxyhydroxide Catalyst for WO₃ Photoanodes

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References

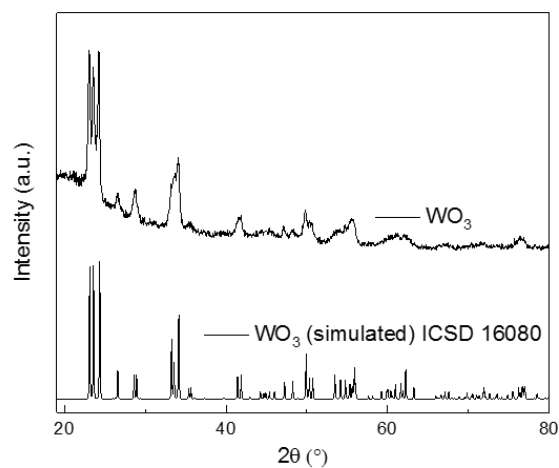


Figure S1. Powder X-ray diffraction data of WO_3 .

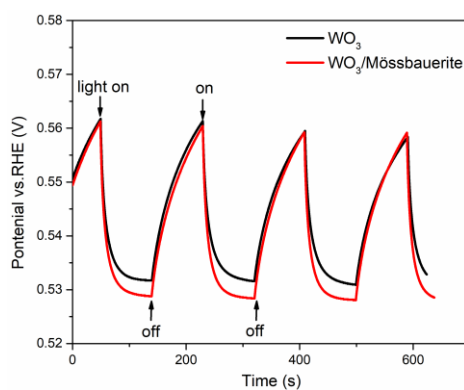


Figure S2. Open-circuit photovoltage of WO_3 and $\text{WO}_3/\text{Mössbauerite}$ photoanodes upon light on and light off.

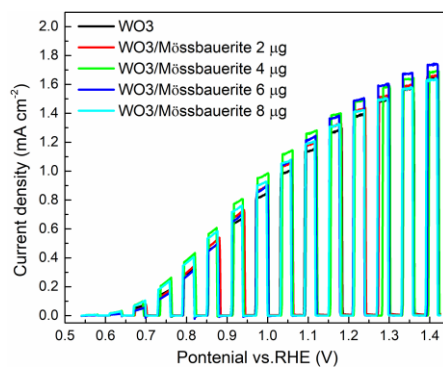


Figure S3. LSV at a scan rate of 10 mV s^{-1} under sequentially interrupted backlight AM 1.5G illumination at pH 7 with stepwise addition of mössbauerite.

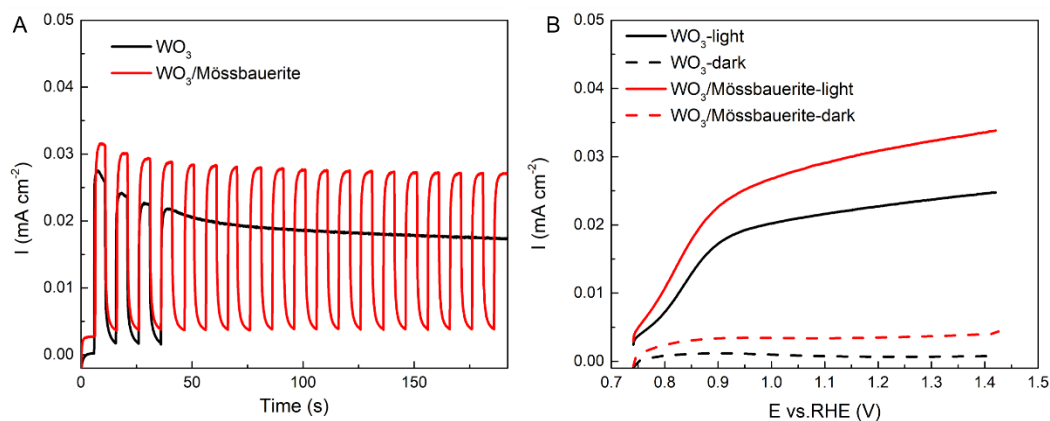


Figure S4. CA at 1.23 V vs. RHE and LSV at 10 mV s^{-1} of heterojunction photoanodes under AM 1.5G illumination in 0.1M Na_2SO_4 (pH 7) with WO_3 synthesized according to ref¹.

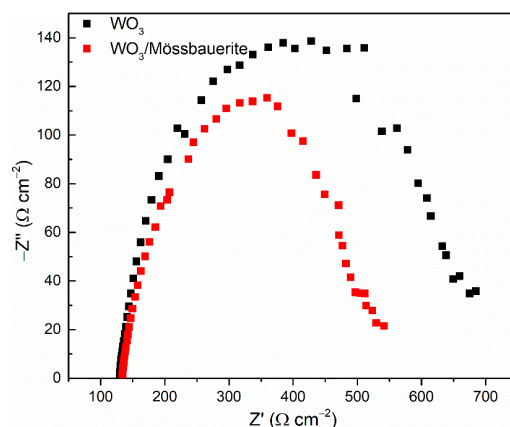


Figure S5. Photoelectrochemical impedance spectra of the WO_3 photoanode compared with the heterojunction $\text{WO}_3/\text{Mössbauerite}$ photoanode. The EIS was measured at 1.0 V vs RHE in the ac. potential frequency range of 20 KHZ–0.2 Hz under AM 1.5G illumination.

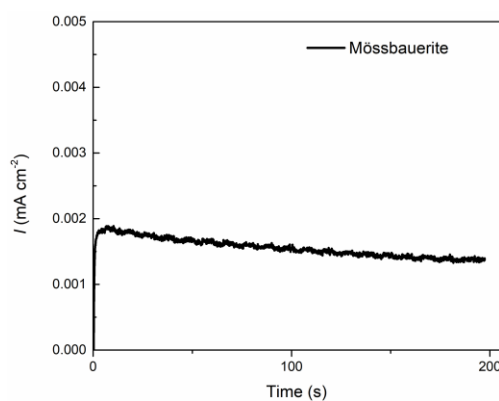


Figure S6. CA at 1.23 V vs. RHE of bare mössbauerite under sequentially interrupted AM 1.5G illumination in 0.1M Na_2SO_4 (pH 7).

References

- (1) Davi, M.; Ogutu, G.; Schrader, F.; Rokicinska, A.; Kustrowski, P.; Slabon, A. Enhancing Photoelectrochemical Water Oxidation Efficiency of $\text{WO}_3/\alpha\text{-Fe}_2\text{O}_3$ Heterojunction Photoanodes by Surface Functionalization with CoPd Nanocrystals. *Eur. J. Inorg. Chem.* **2017**, 2017, 4267–4274.