

**Tuning the Electrocatalytic Hydrogen Evolution
Reaction promoted by [Mo₂O₂S₂]-based molybdenum cycles
in aqueous medium.**

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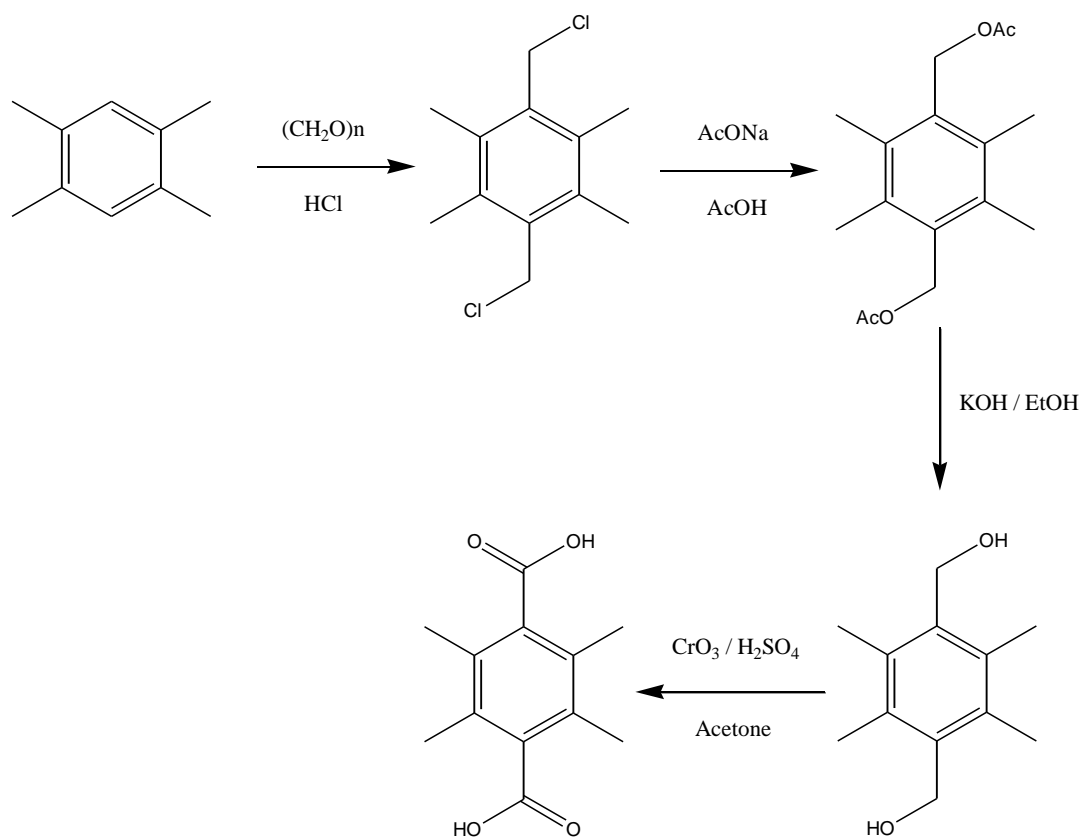
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Supporting Information



Scheme S1. Multi-Step synthesis procedure of the ligand H₂TMT.

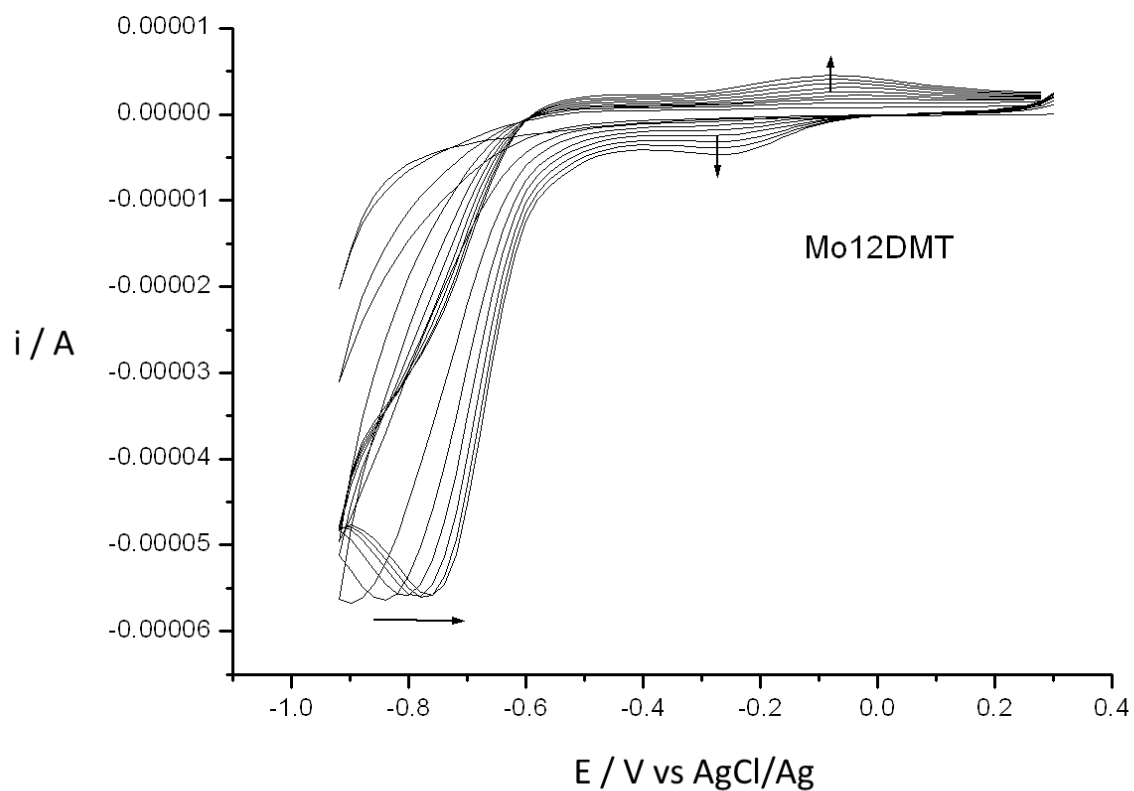


Figure S1. CV recorded in aqueous medium at pH = 3 for the compound 1. Scan rate was $100 \text{ mV}\cdot\text{s}^{-1}$. The figure evidences the non reproducibility of the CV and the likely formation of a deposit onto the surface of the glassy carbon electrode.

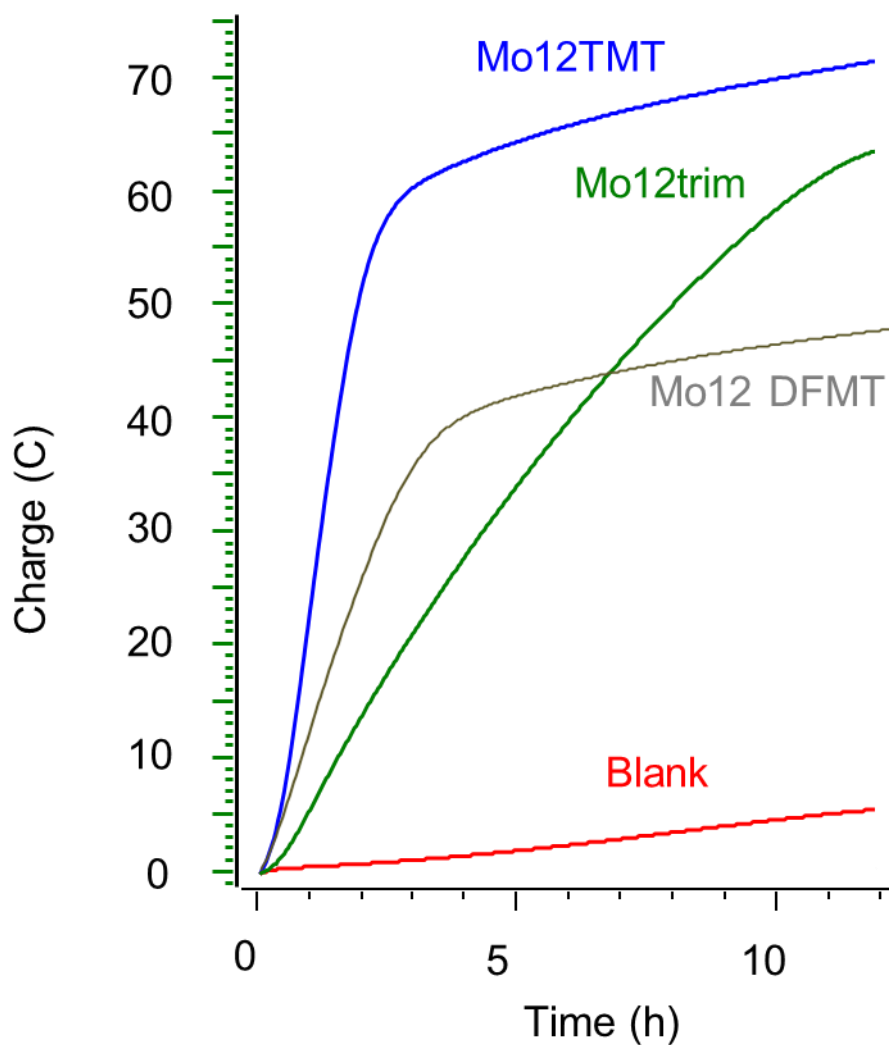


Figure S2. Variation of charge during the electrolysis at $E = -0.8$ V vs Ag/AgCl at pH = 2 of solution of **2** (grey), **4** (blue) and **5** (green) in comparison with the same experiment performed without compound.

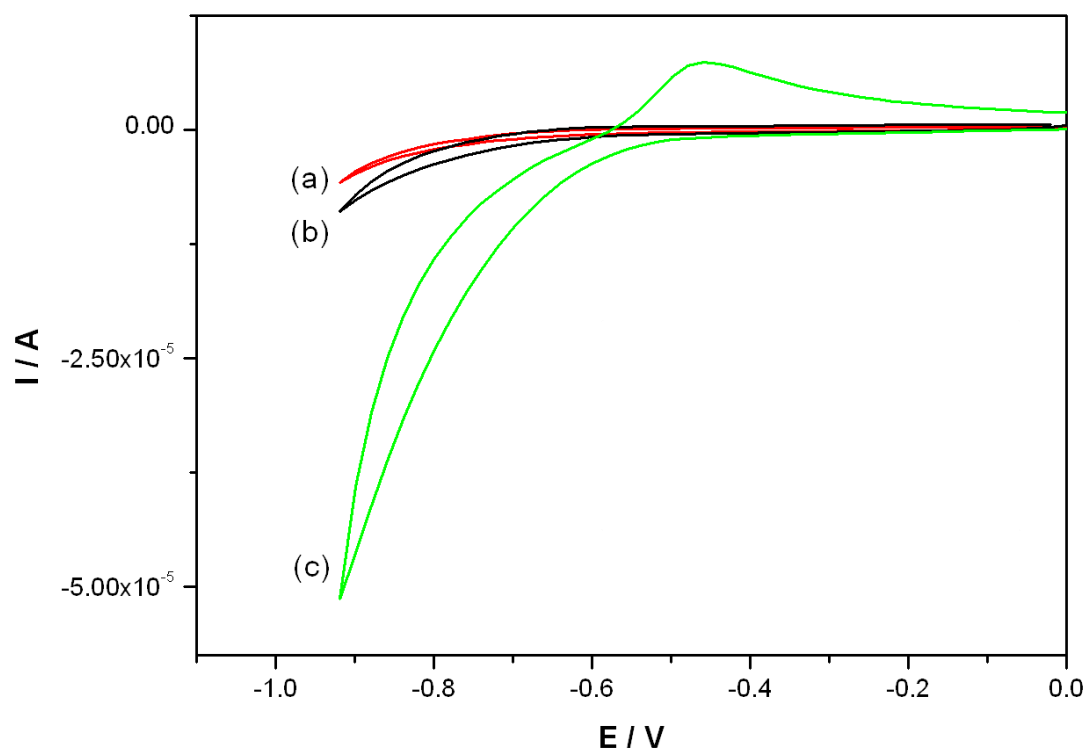


Figure S3. Comparison of the CV recorded in aqueous medium at pH = 3 for the compounds 2 (a), 4 (b) and 5 (c). Scan rate was 100 mV.s⁻¹.