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Spin-Coated vs. Electrodeposited Mn Oxide Films as Water Oxidation Catalysts

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## Supplementary Materials: Spin-Coated vs. Electrodeposited Mn Oxide Films as Water Oxidation Catalysts

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Figure S1. Cross-section FE-SEM image of a spin-coated film made with a non-ball-milled  $\text{Mn}_2\text{O}_3$  powder.

Figure S2. FE-SEM cross-section images of the films prepared by spin-coating of  $\text{MnO}$  (a);  $\text{Mn}_2\text{O}_3$  (b) and  $\text{Mn}_3\text{O}_4$  (c) powders; as-made electrodeposited 5-min film (d).



Figure S5. Nyquist plots of the EIS measurements acquired using the  $\alpha$ - $\text{Mn}_2\text{O}_3$ -based electrodes at 1.6, 1.8 and 2.0 V/RHE.