

ISTITUTO NAZIONALE DI RICERCA METROLOGICA
Repository Istituzionale

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

This is the author's accepted version of the contribution published as:

Original

Spin-Coated vs. Electrodeposited Mn Oxide Films as Water Oxidation Catalysts / HERNANDEZ RIBULLEN, SIMELYS PRIS; OTTONE MELIS, CARMINNA SOPHIA; Varetti, Sara; Fontana, Marco; Pugliese, Diego; Saracco, Guido; Bonelli, Barbara; Armandi, Marco. - In: MATERIALS. - ISSN 1996-1944. - 9:4(2016), p. 296. [10.3390/ma9040296]

Availability:

This version is available at: 11696/77299 since:

Publisher:

MDPI

Published

DOI:10.3390/ma9040296

Terms of use:

This article is made available under terms and conditions as specified in the corresponding bibliographic description in the repository

Publisher copyright

(Article begins on next page)

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

Simelys Hernández, Carminna Ottone, Sara Varetto, Marco Fontana, Diego Pugliese, Guido Saracco, Barbara Bonelli and Marco Armandi

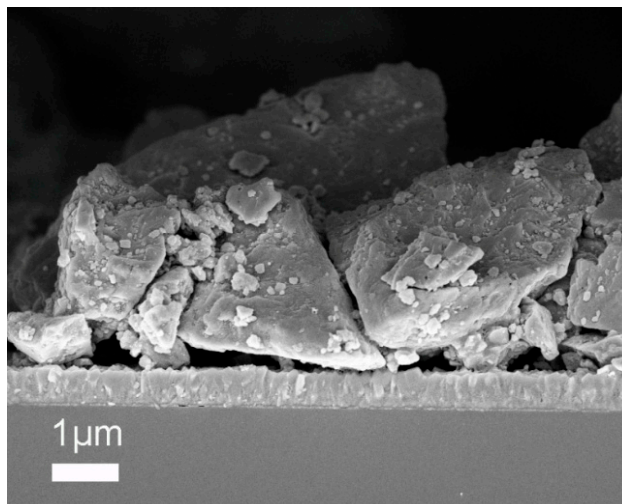


Figure S1. Cross-section FE-SEM image of a spin-coated film made with a non-ball-milled Mn_2O_3 powder.

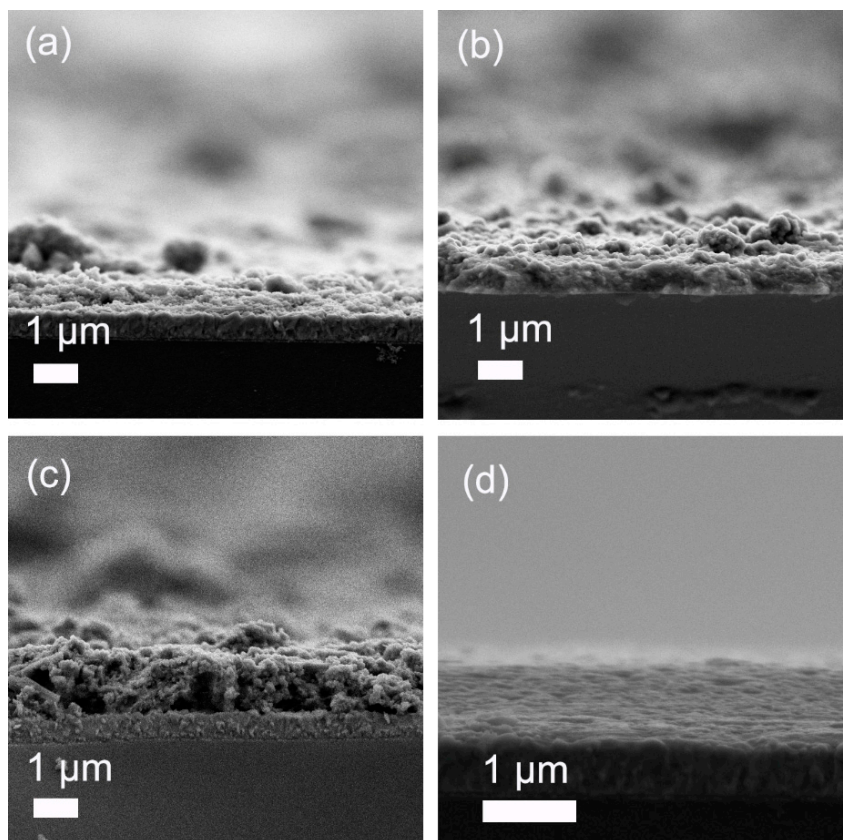


Figure S2. FE-SEM cross-section images of the films prepared by spin-coating of MnO_2 (a); Mn_2O_3 (b) and Mn_3O_4 (c) powders; as-made electrodeposited 5-min film (d).

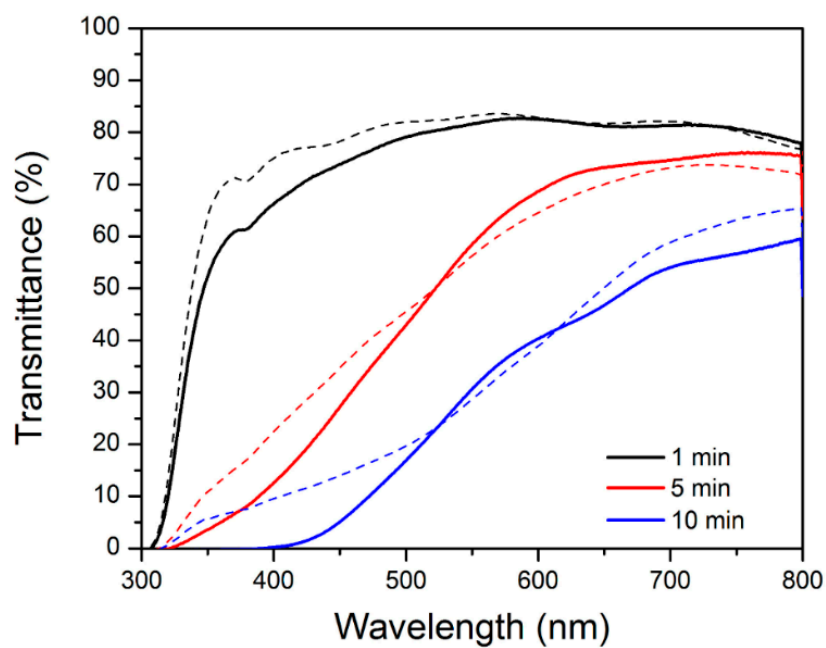


Figure S3. UV-Vis transmittance spectra of the electrodeposited films: as-made (continuous line) and calcined at 500 °C (dotted line).

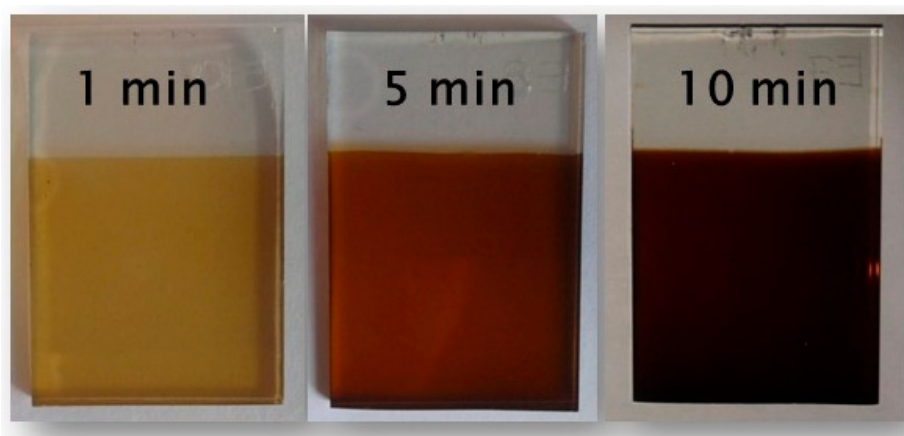


Figure S4. Photographs of the as-made films prepared by electrodeposition at different deposition times.

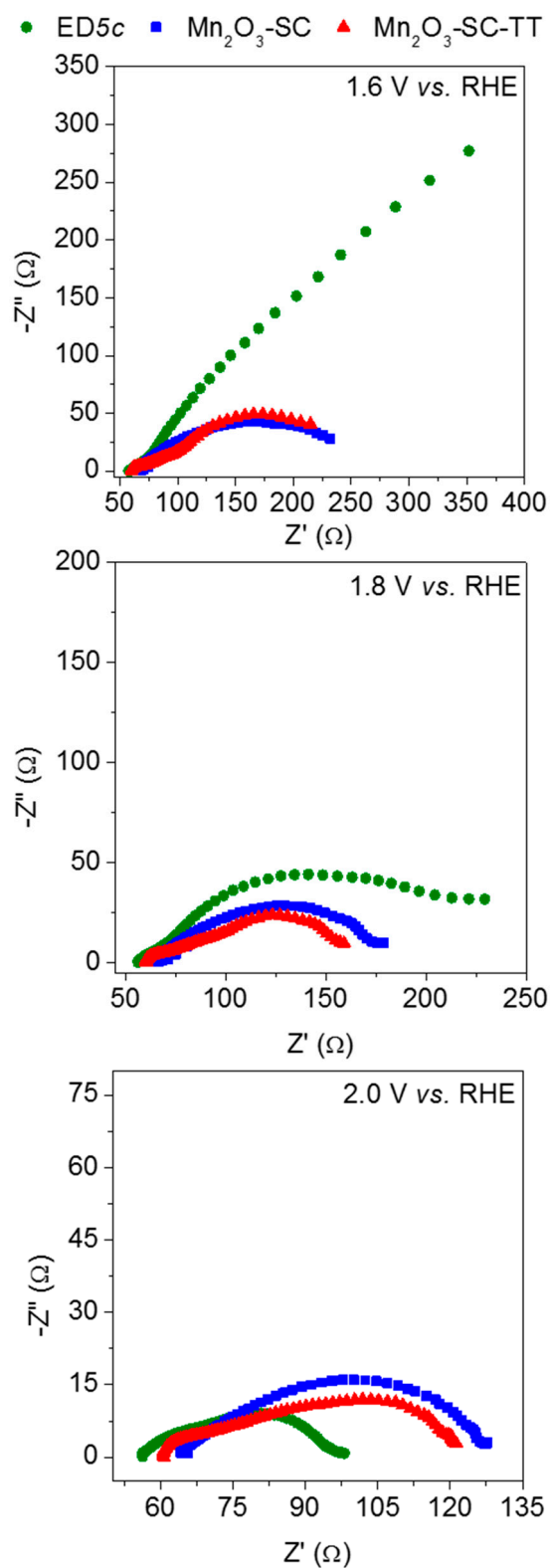


Figure S5. Nyquist plots of the EIS measurements acquired using the α -Mn₂O₃-based electrodes at 1.6, 1.8 and 2.0 V vs. RHE.