Electronic Supplementary Material (ESI) for RSC Advances.

SUPPLEMENTARY INFORMATION

Electrodeposition: A Versatile, Efficient, Binder-free and Room Temperature One-Step Process to Produce MnO_2 Electrochemical Capacitor Electrodes

R. Della Noce[a*], S. Eugénio[a], T.M. Silva[ab], M.J. Carmezim[ac], M.F. Montemor[a]

[a.] *Centro de Química Estrutural-CQE, Departament of Chemical Engineering, Instituto Superior Técnico, Universidade de Lisboa, 1049-001 Lisboa, Portugal. E-mail: rodrigo.noce@tecnico.ulisboa.pt*
[b.] *Department of Mechanical Engineering, GI-MOSM, Instituto Superior de Engenharia de Lisboa, 1950-062 Lisboa, Portugal.*
[c.] *ESTSetúbal, Instituto Politécnico de Setúbal, 1959-007 Setúbal, Portugal.*
[d.] **Corresponding author. rodrigo.noce@tecnico.ulisboa.pt (R. Della Noce)*

SEM images

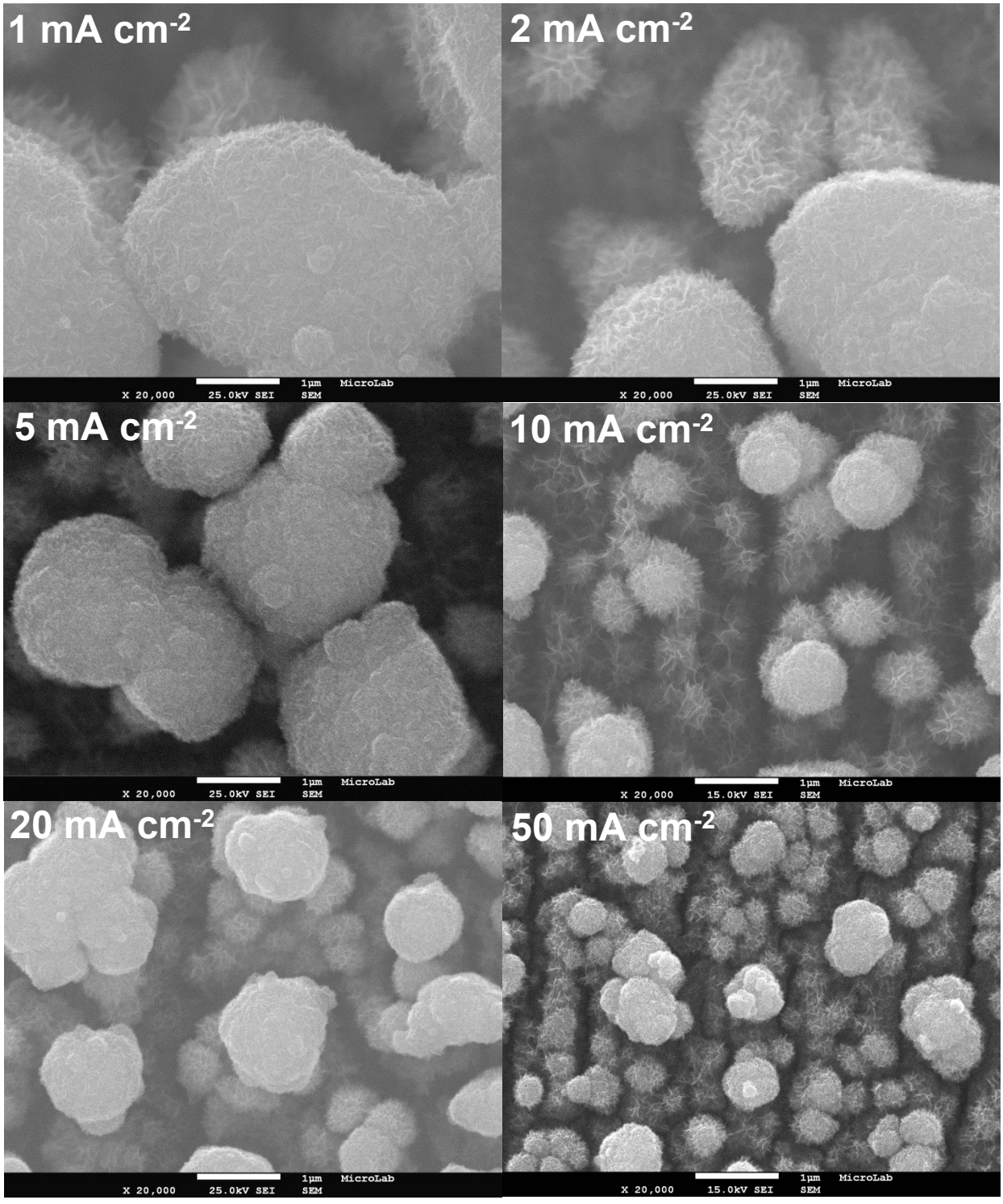

Fig. 1S SEM images of MnO_2/SS electrodes obtained at various i_c under high magnification (20000 times).

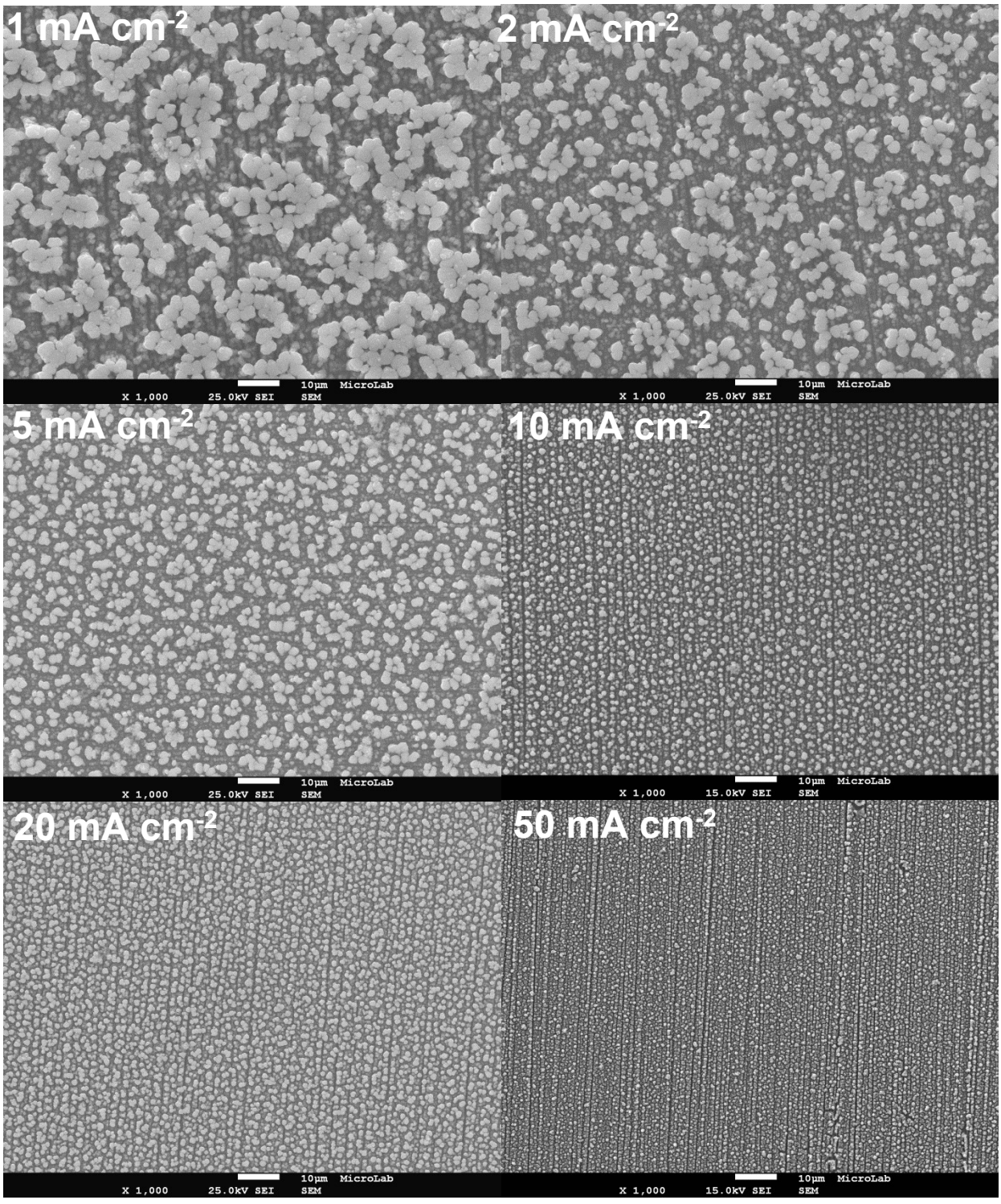

Fig. 2S SEM images of MnO_2/SS electrodes obtained at various i_c under low magnification (1000 times).

X-ray diffractometry

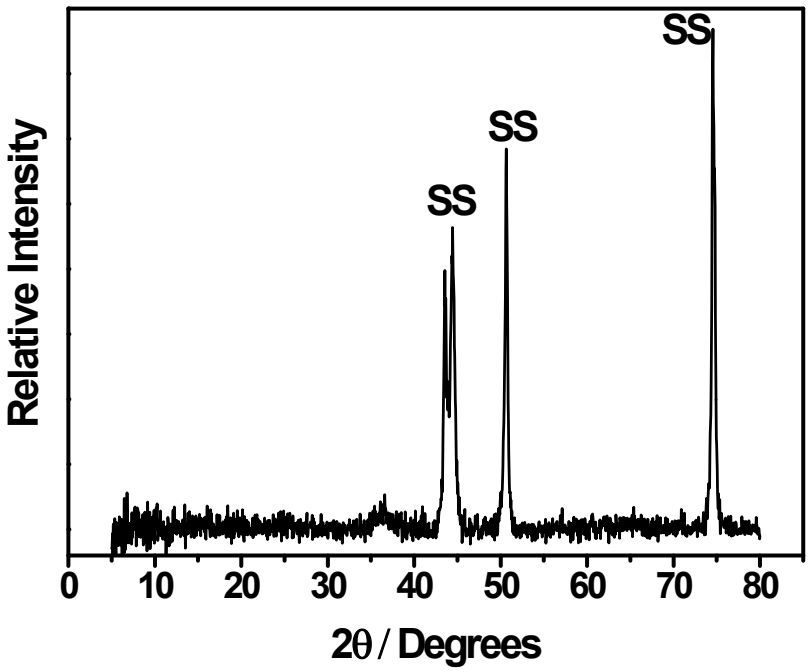

Fig. 3S XRD pattern of MnO_2/SS electrode obtained at 10 mA cm^{-2} and 2 C cm^{-2} from the bath with no Na_2SO_4 addition, evidencing the amorphous nature of the deposit.