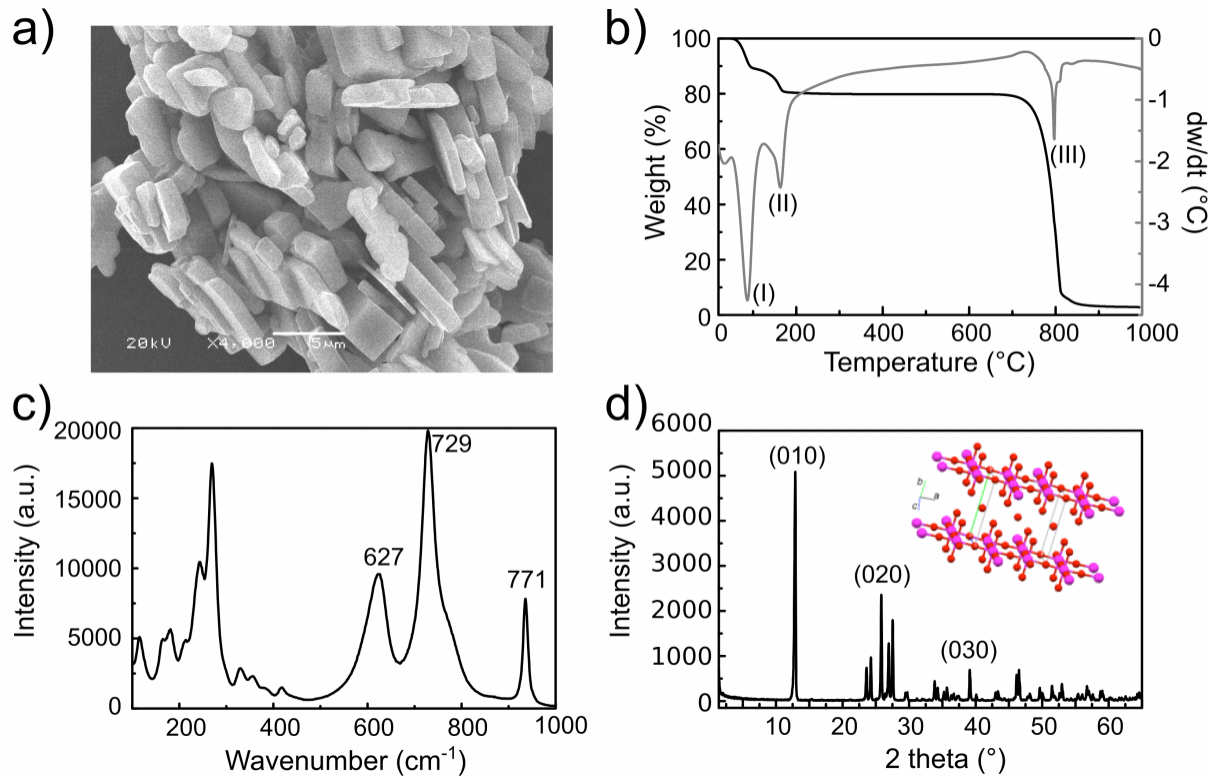
Electronic Supplementary Material (ESI) for RSC Advances.

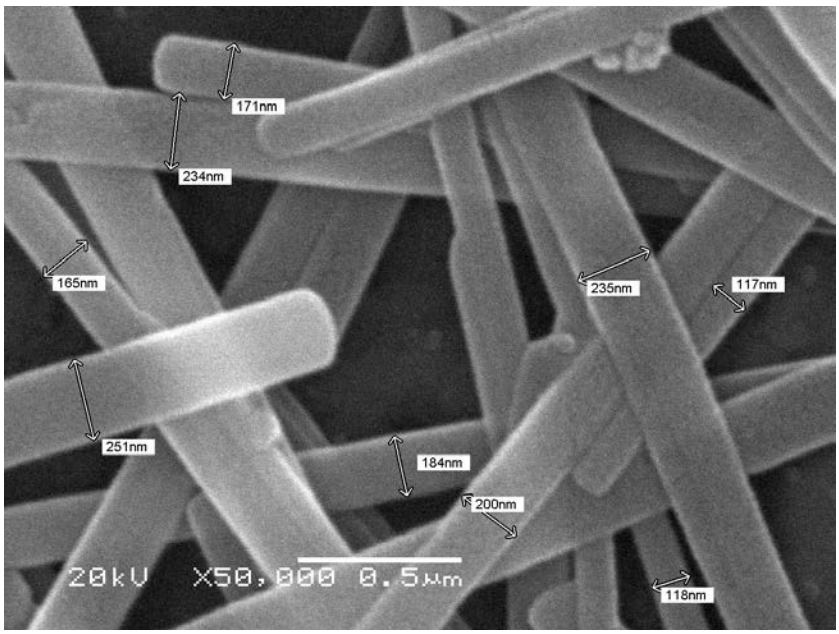
Template conversion of MoO_3 to MoS_2 nanoribbons: synthesis and electrochemical properties

L. Vieira[a], J. R. Martins Neto[b], O. P. Ferreira[c], R. M. Torresi[b], S. I. Cordoba de Torresi[b] and O. L. Alves[a]

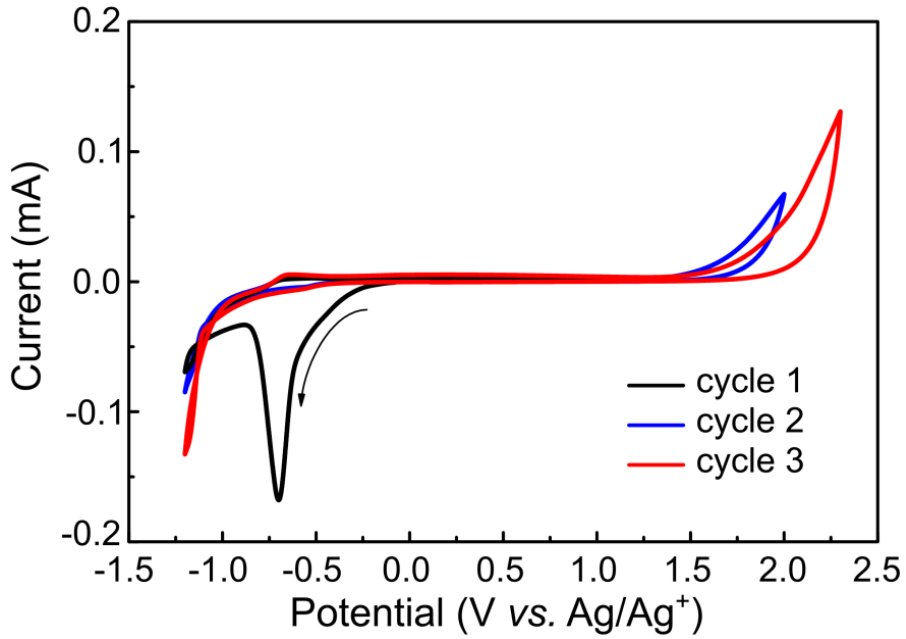
Support Information



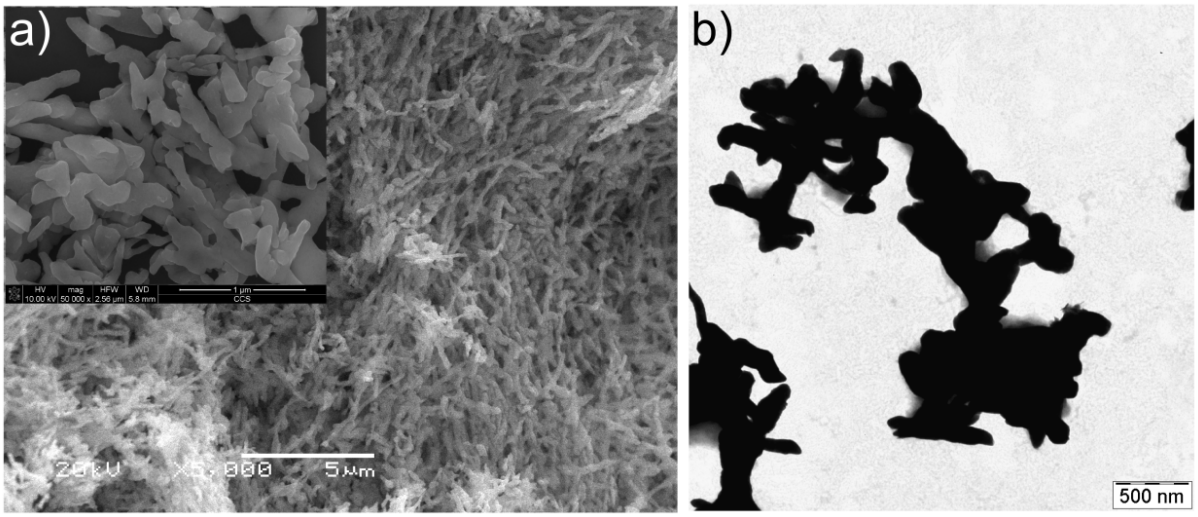
SI 1: Characterization of the precursor MoO_3•2 H_2O: a) SEM image, b) TG-DTA curves, c) Raman spectrum and d) XRD pattern.



SI 2: Diameter measurement of SEM images of as-prepared MoO_3 nanoribbons.



SI 3: a) Cyclic voltammogram at 10 mV $s^{-1}$of a MoO_3 film on ITO in 1 mol $L^{-1}Mg(ClO_4)_2$ in PC. The cathodic peak shows the irreversible intercalation of Mg^{2+} in MoO_3.



SI 4: TEM images of MoS_2 obtained through heating from room temperature to 800 °C at 30°C/min under 5 %/95 % H_2/N_2 (96 mL min^{-1}). H_2S was streamed after the temperature reached 400 °C. The sample was treated at 800 °C for 30 min.