

# **Synthesis and electrochemical behaviour of nitroxide polymer brush thin-film electrodes for organic radical batteries†**

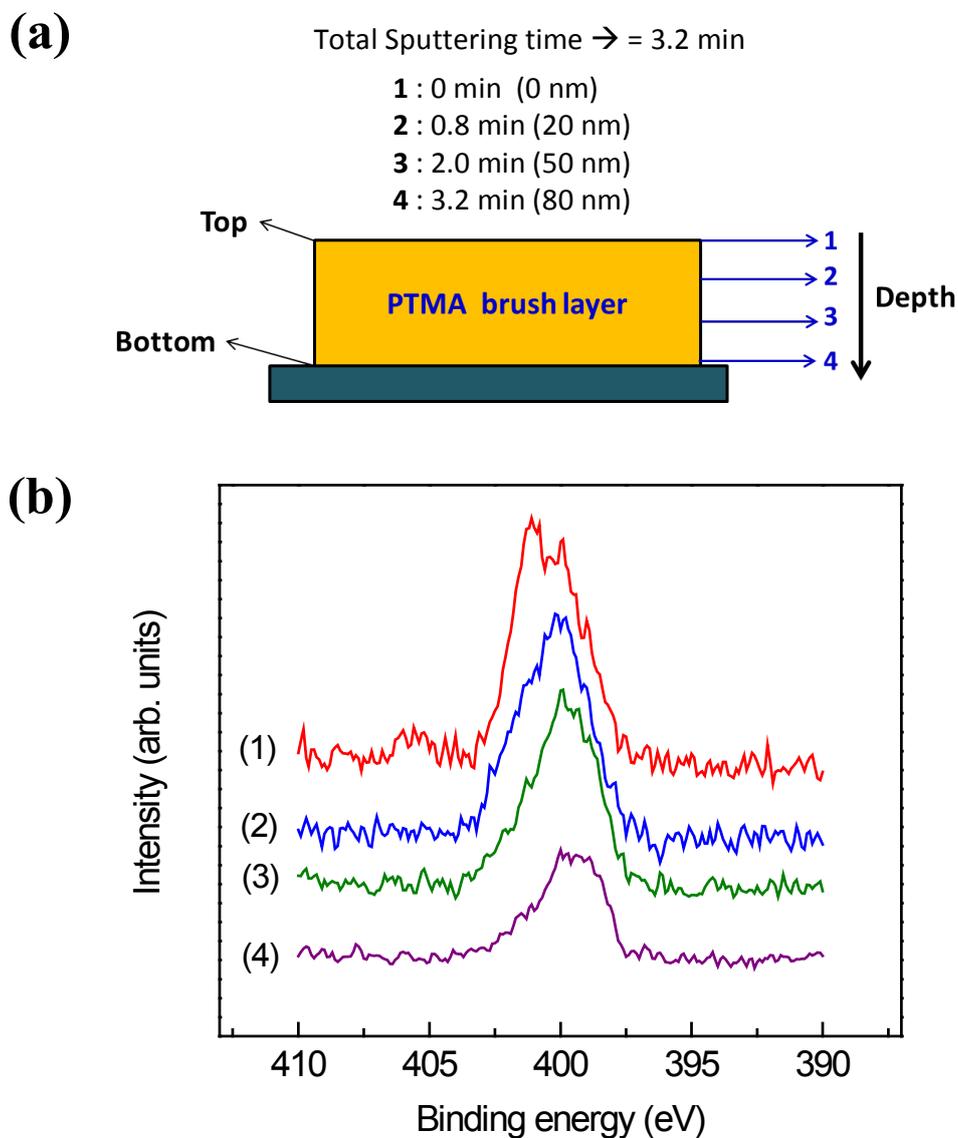
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## XPS spectra



**Fig. S1** (a) Schematic representation of a cross-section of PTMA brush with a thickness of 80 nm oxidized by 10 mM of *m*CPBA dichloromethane solution with an oxidation time of 10 min. The numbers 1-4 denote the probing positions for the XPS spectra (1)-(4) in (b), respectively. (b) High resolution XPS spectra of N 1s at depths of (1) 0, (2) 20, (3) 50 and, (4) 80 nm for the PTMA brush on ITO. The polymer brush was etched by  $C_{60}$  sputtering. The  $C_{60}$  sputter source was operated at 10 kV, 10 nA .