

# Supplementary Information

## Direct Functionalization of Mn<sub>12</sub>-(methacrylate) Clusters on Si(100): Surface Characterization and Electrochemical Properties

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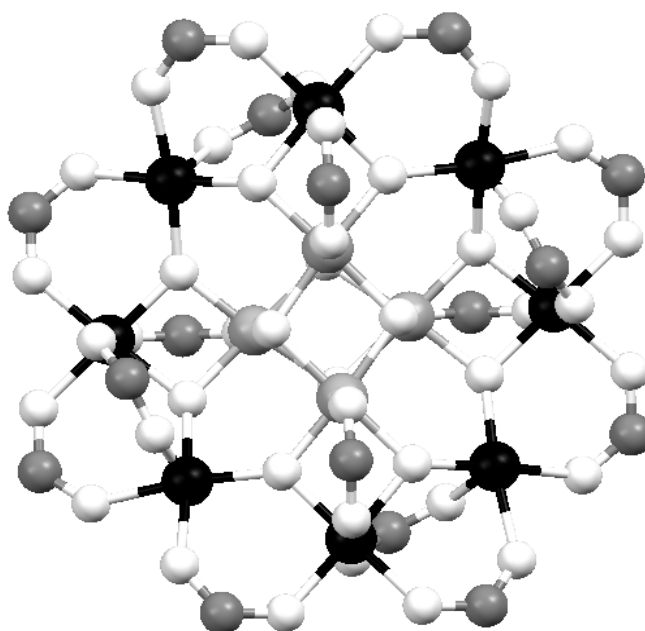
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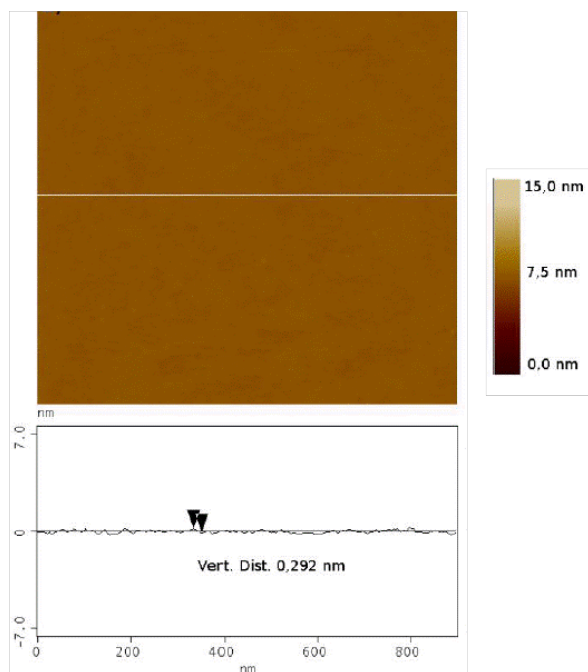
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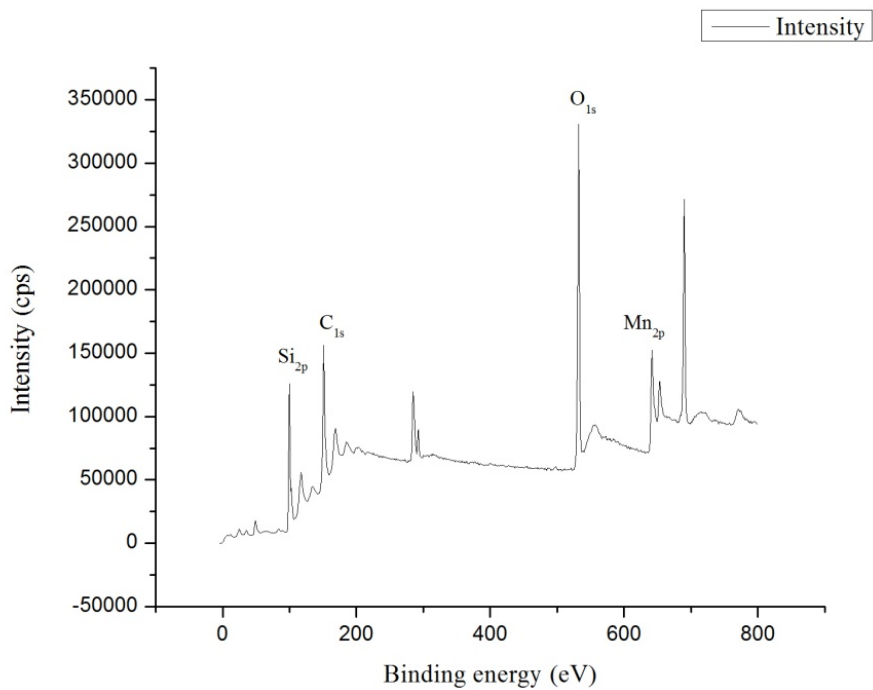
**Figure S1.** Structure of  $\text{Mn}_{12}\text{-OAc}$  viewed along  $c$ -axis. Color scheme: Mn(IV) grey, Mn(III) black, O white, C dark grey.



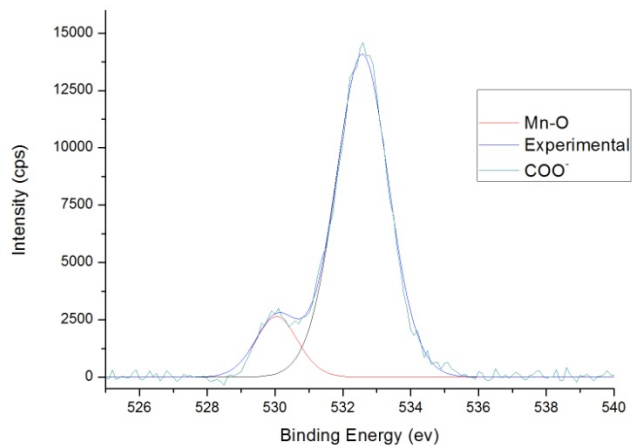
**Figure S2.** Electrochemical cell setup used for measuring  $\text{Mn}_{12}\text{-(methacrylate)-Si(100)}$ .



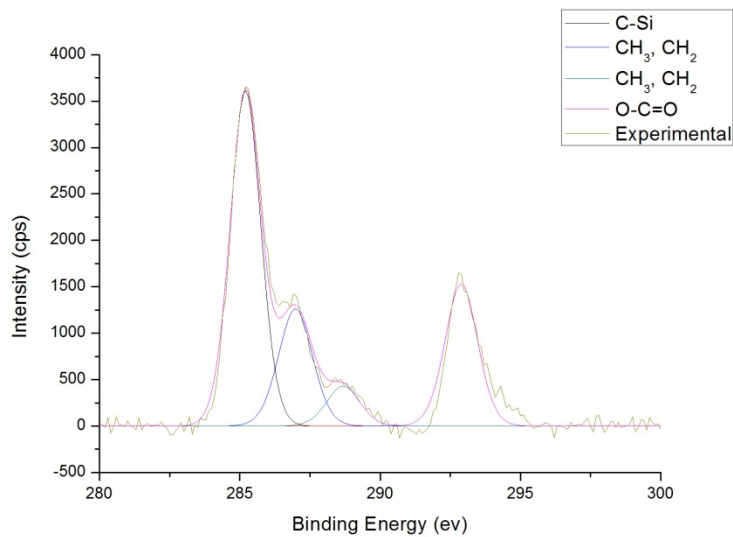
**Figure S3.** Tapping-mode AFM image of hydrogen-terminated silicon.



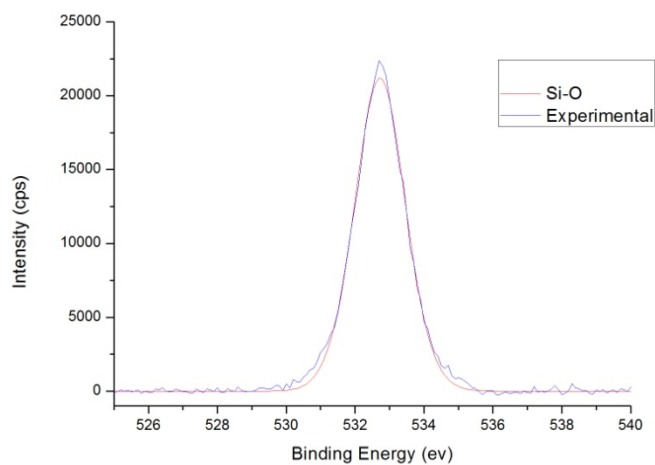
**Figure S4.** XPS spectrum survey of Mn<sub>12</sub>-(methacrylate)-Si(100).



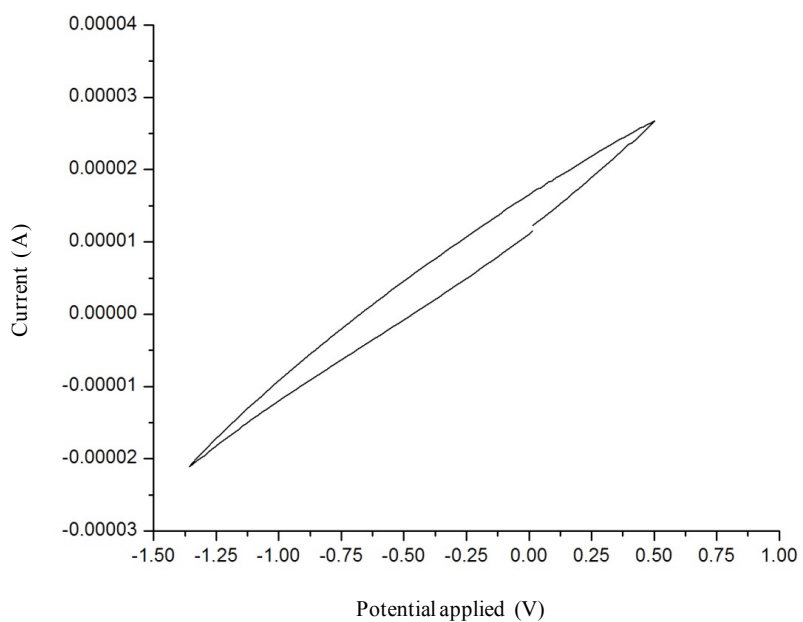
**Figure S5.** High resolution XPS spectra of O<sub>1s</sub> region in Mn<sub>12</sub>-(methacrylate)-Si(100).



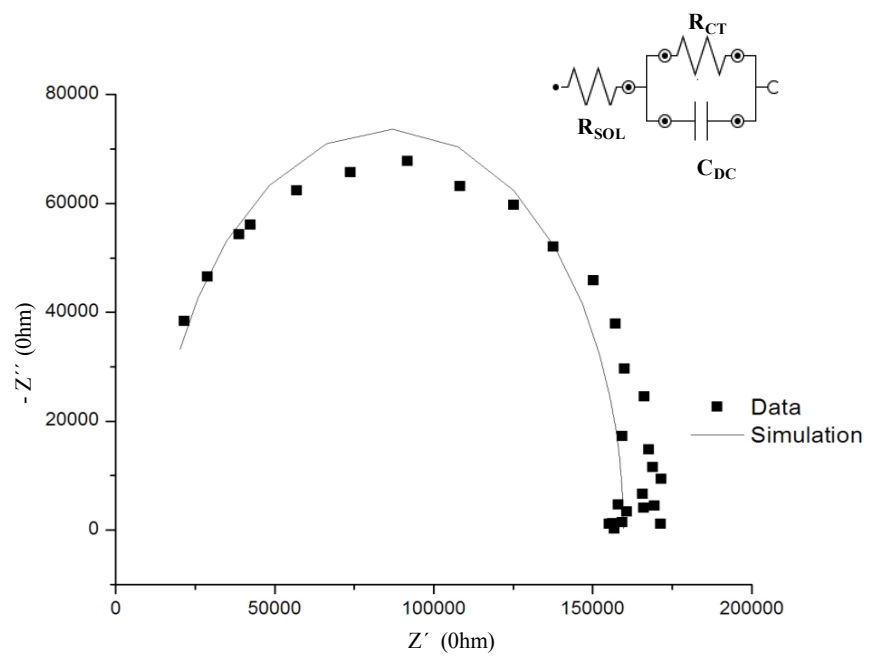
**Figure S6.** High resolution XPS spectra of C<sub>1s</sub> region in Mn<sub>12</sub>-(methacrylate)-Si(100).



**Figure S7.** High resolution XPS spectra of O<sub>1s</sub> region obtained using THF solvent in Mn<sub>12</sub>–(methacrylate)–Si(100).



**Figure S8.** Cyclic voltammogram of non-hydrogen terminated n-type Si(100) electrode in 3 mol L<sup>-1</sup> KCl, scan rate (0.100 V s<sup>-1</sup>).



**Figure S9.** Nyquist plots of passivated H-Si(100) electrode in 3 mol L<sup>-1</sup> KCl.