

Supplementary

Titanium carboxylate MLD hybrid films as protective coatings for lithium-ion batteries

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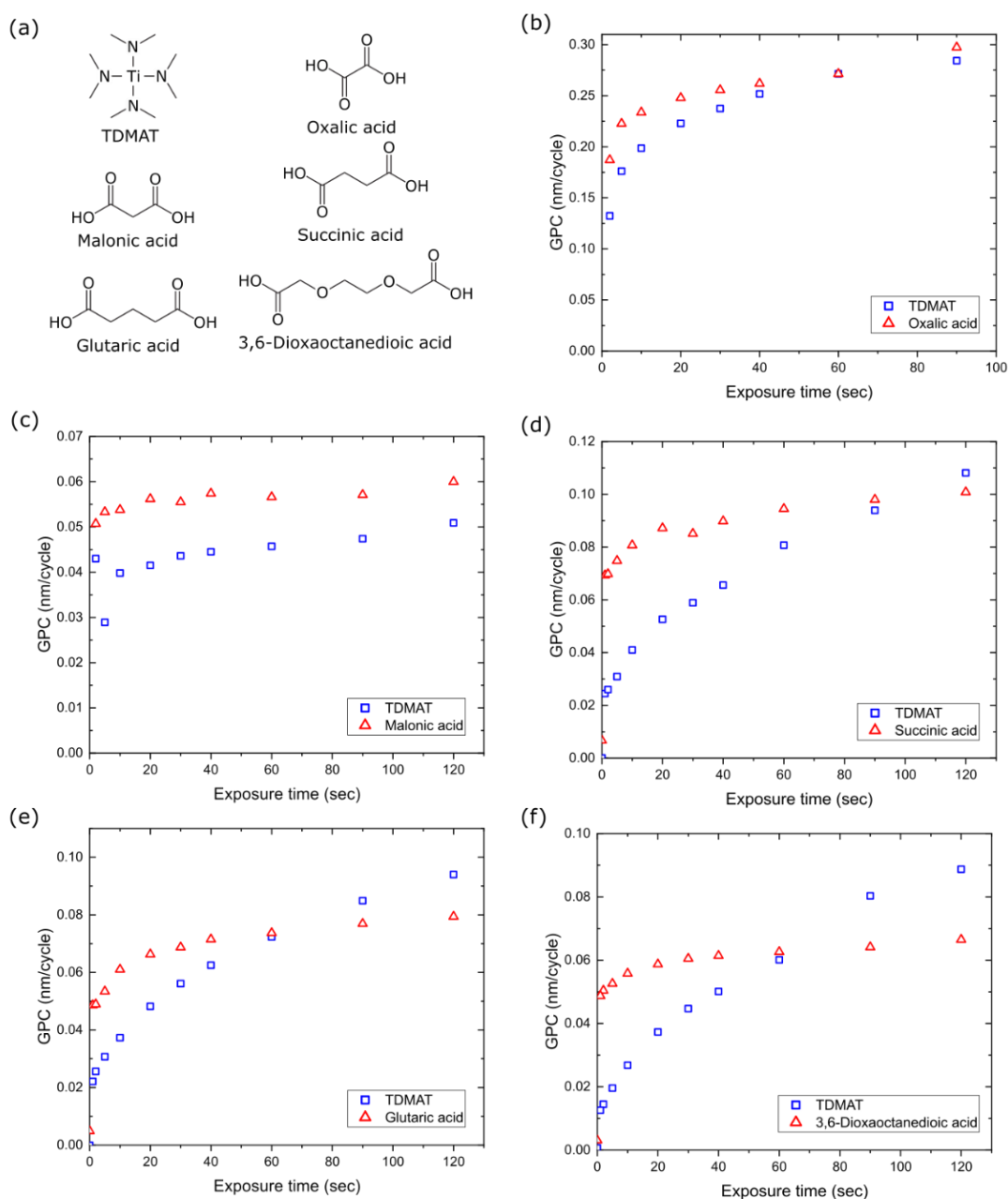


Figure 1 All precursors used in this work (a) and the growth per cycle (GPC) of the TDMAT/oxalic acid (b), TDMAT/malonic acid (c), TDMAT/succinic acid (d), TDMAT/glutaric acid (d) and TDMAT/3,6-dioxaoctanedioic acid (f) process at a sample temperature of 100 °C as a function of precursor exposure time. The GPC is monitored using in situ ellipsometry.

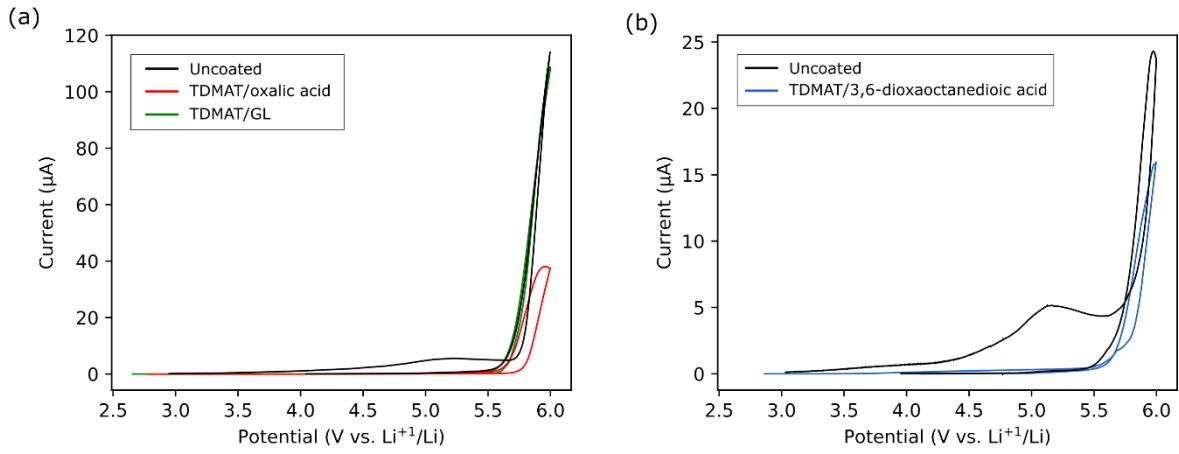


Figure 2 Cyclic voltammogram of the uncoated and 5 nm MLD coated TiN electrodes. The electrolyte decomposition on the TDMAT/oxalic acid and titanocene (a) and the TDMAT/3,6-dioxaoctanedioic acid coated electrode (b) is compared to an uncoated reference electrode which is measured simultaneously.