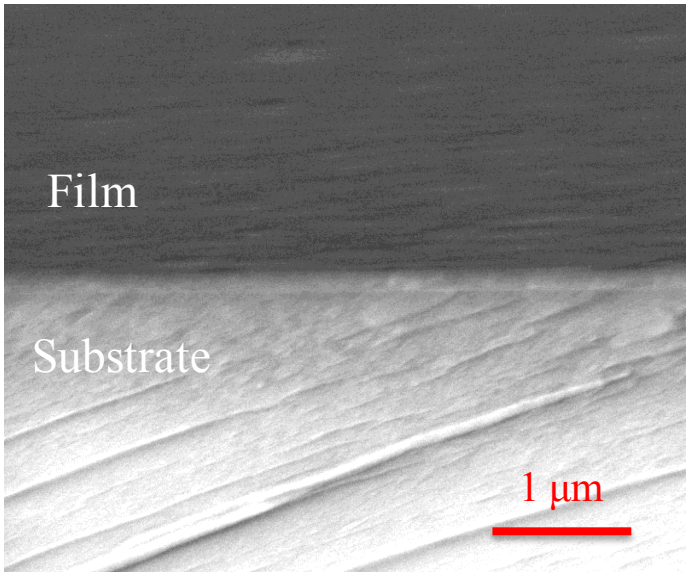

Figure 1 of Supporting Information: Cross-sectional SEM analysis of a plasma polymer coating made from 30 passes of the upper electrode over the silicon substrate.

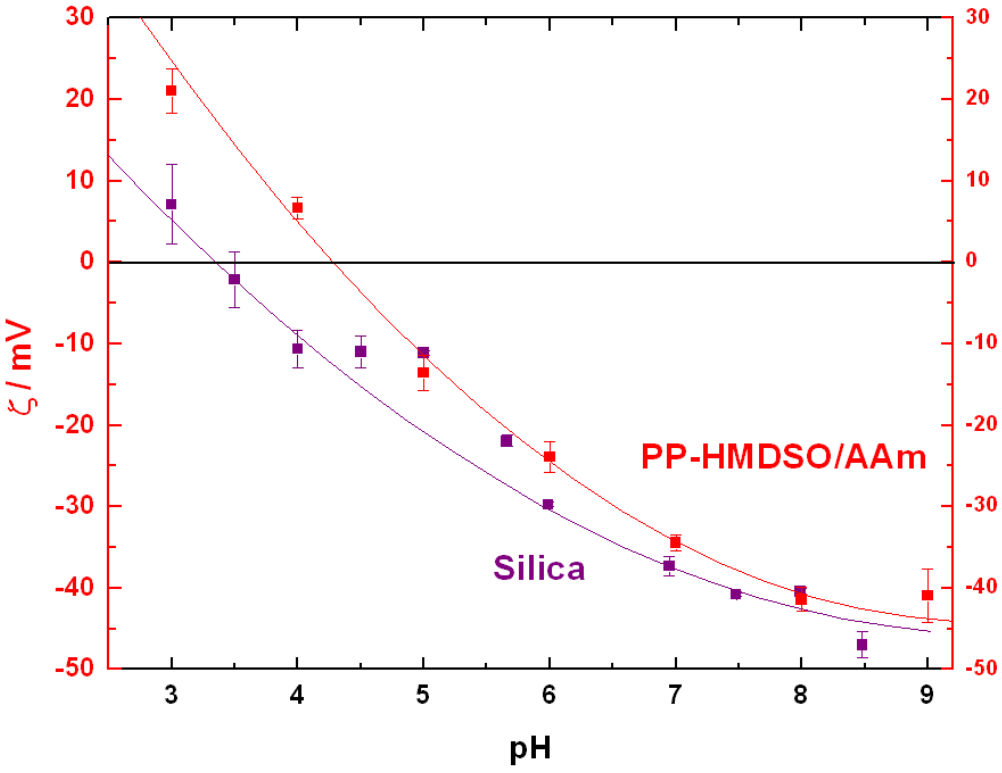

Figure 2 of Supporting Information: Zeta potential titration of the glass wafer and of the glass wafer coated with a plasma polymer film made from an HMDSO-Aam blend.

Quantification (at. %)					
	Si	**C**	**O**	**N**	**Ti**
HMDSO/Aam As deposited	11,7	53,7	20,7	13,9	
HMDSO/Aam After dipping in H_2O/Tibislac	11,7	36,4	37,4	6,3	8,2

Table 1 of Supporting Information: Change in the composition of the surface of the plasma polymer films after 1h of reaction with a solution containing 5 mM of $[Ti(IV)Lac_2OH_2]^{2-}$ anions.

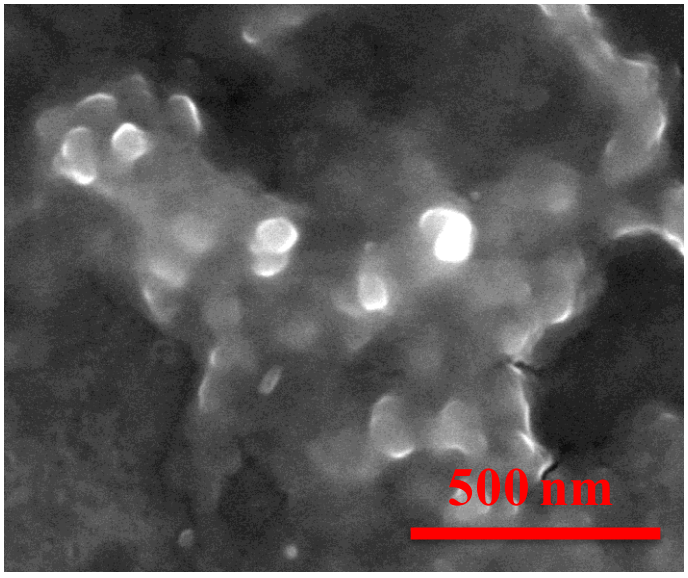

Figure 3 of Supporting Information: SEM image of an inorganic cluster grown on the surface of a plasma polymer film deposited from a mixture of HMDMSO and Aam after exposure to a solution containing 5 mM of 5 mM of $[Ti(IV)Lac_2OH_2]^{2-}$ anions.

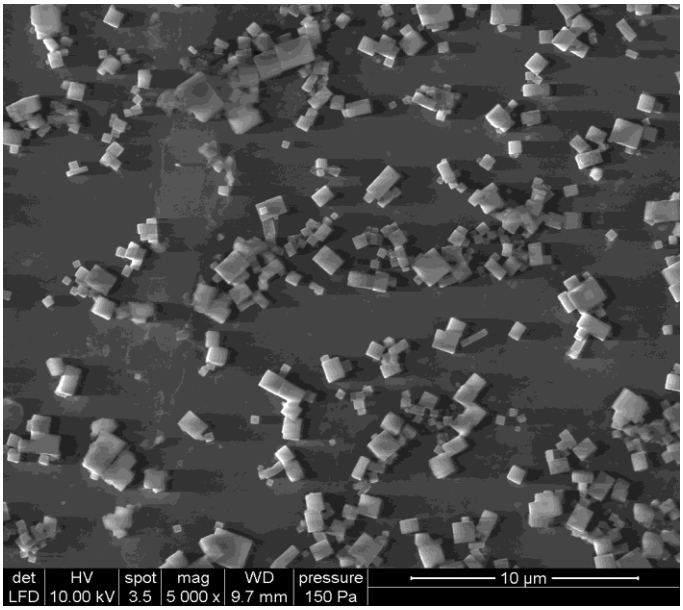

Figure 4 of Supporting Information: SEM micrograph of a plasma polymer film made from a blend of HMDMSO and Aam and subsequently put in contact with a 1mM $Fe(CN)_6^{4-}$ and a 10 mM Fe^{3+} containing solution.

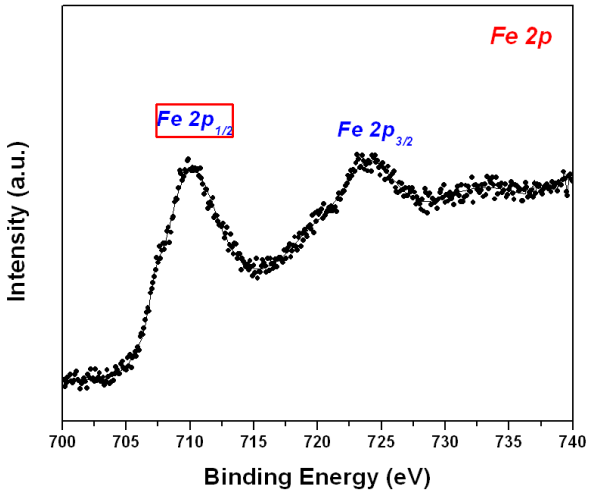

Figure 5 of Supporting Information: Fe2p region of the XPS spectrum of a HMDMSO-Aam plasma coating put in the successive presence of 1 mM potassium hexacyanoferrate and 10 iron(III) chloride.

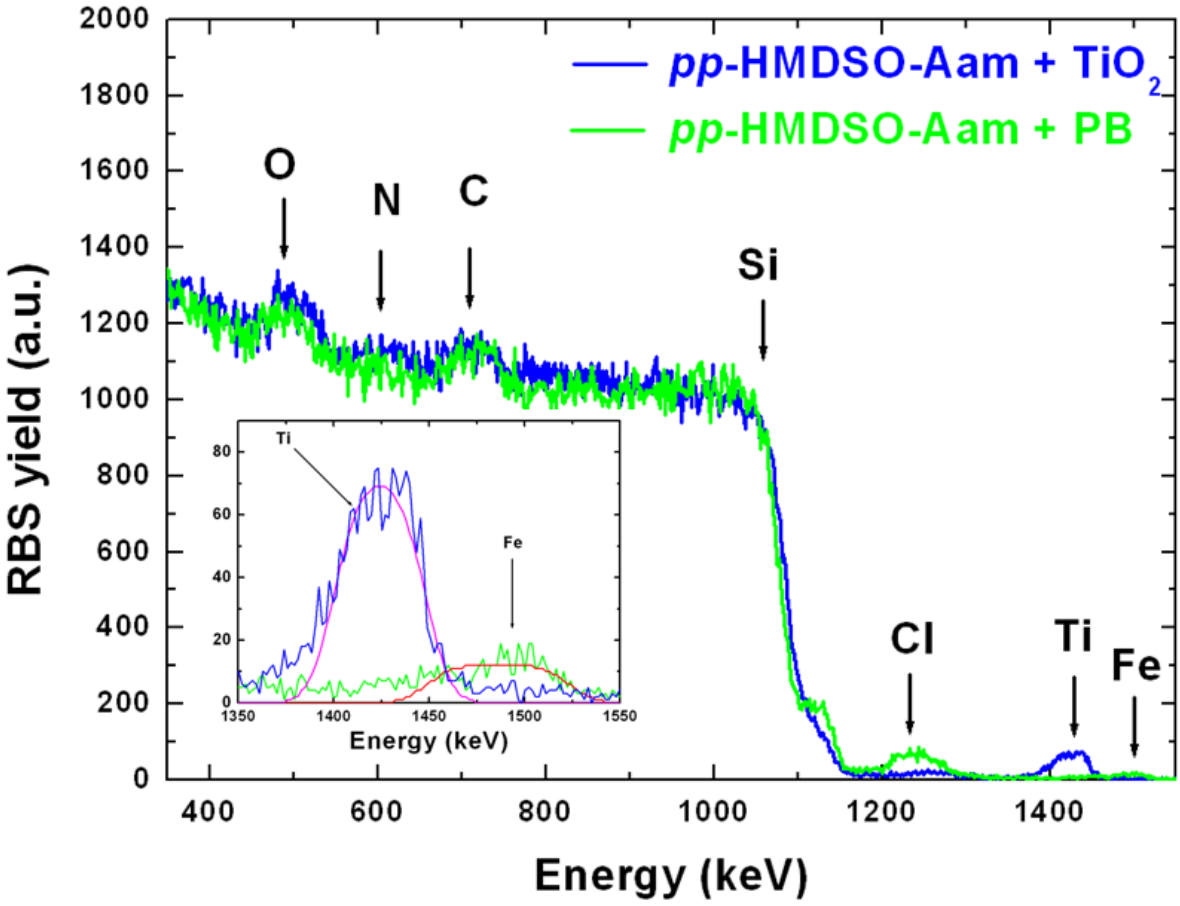

Figure 6 of Supporting Information: RBS spectra of a HMDMSO-Aam plasma coating after in situ formation of TiO_2 (blue) and BP (green). The inset displays a magnification of the spectral region corresponding to Ti and Fe. The full line correspond to the simulated energy profile of these elements for an homogeneous distribution across the film thickness.