

Supplementary Information.

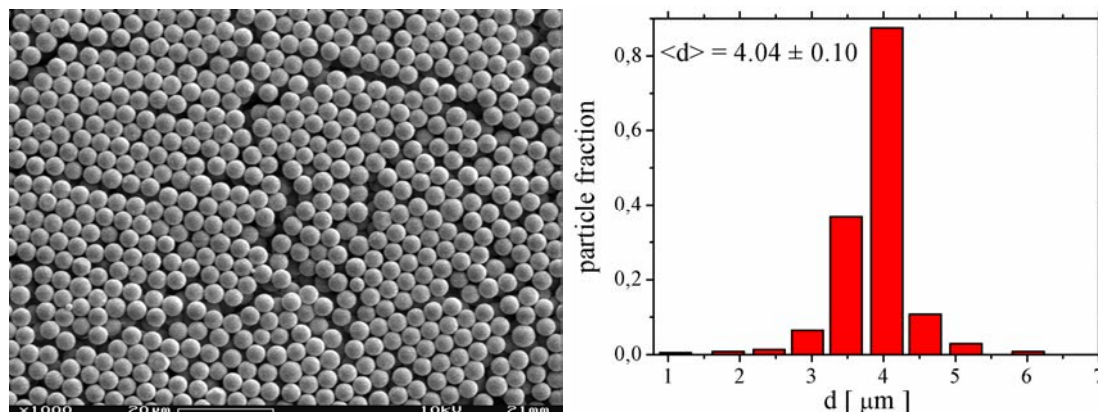


Fig. A: SEM image of the PMMA particles used as core. The diagram on the right side of the image show the size distributions of the particles.

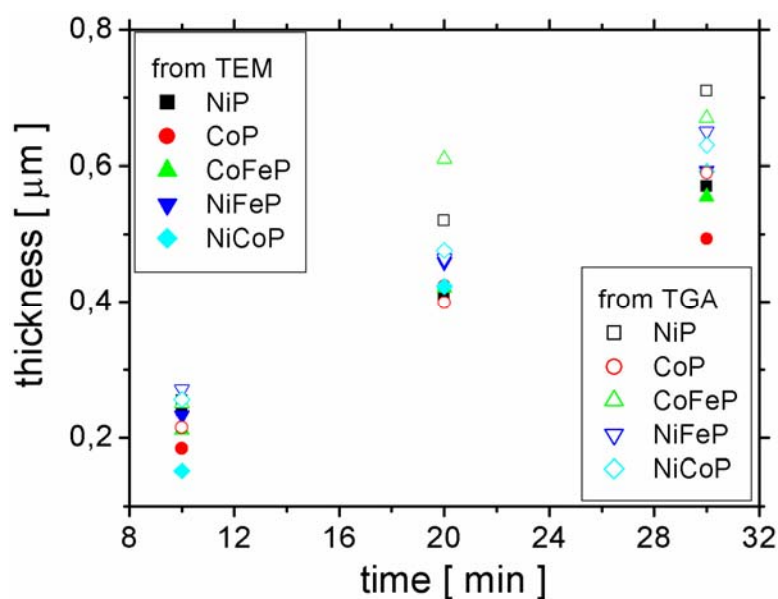


Fig.B: Diagram of the metallic thickness in function of the plating time for all the coated microspheres. There are in the diagram two kind of points: the filled one (legend on the left) refer to the calculated thickness from the TEM images, while the hollow (legend on the right) were obtained from TGA measurements.

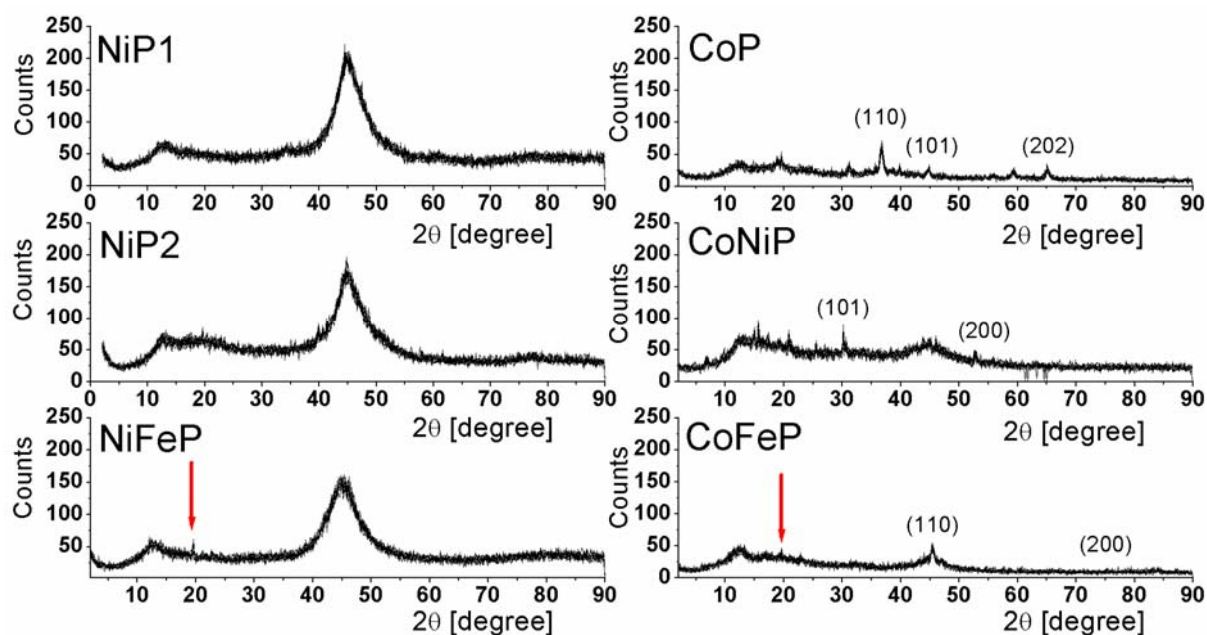


Fig.C: XRD pattern for all the coated microspheres. The diagram were obtain from a dry powder of particles at T=300 K. The arrow in red indicate the expected position of the major peak corresponding to the $\alpha\text{Fe}_3\text{O}_4$ phase.

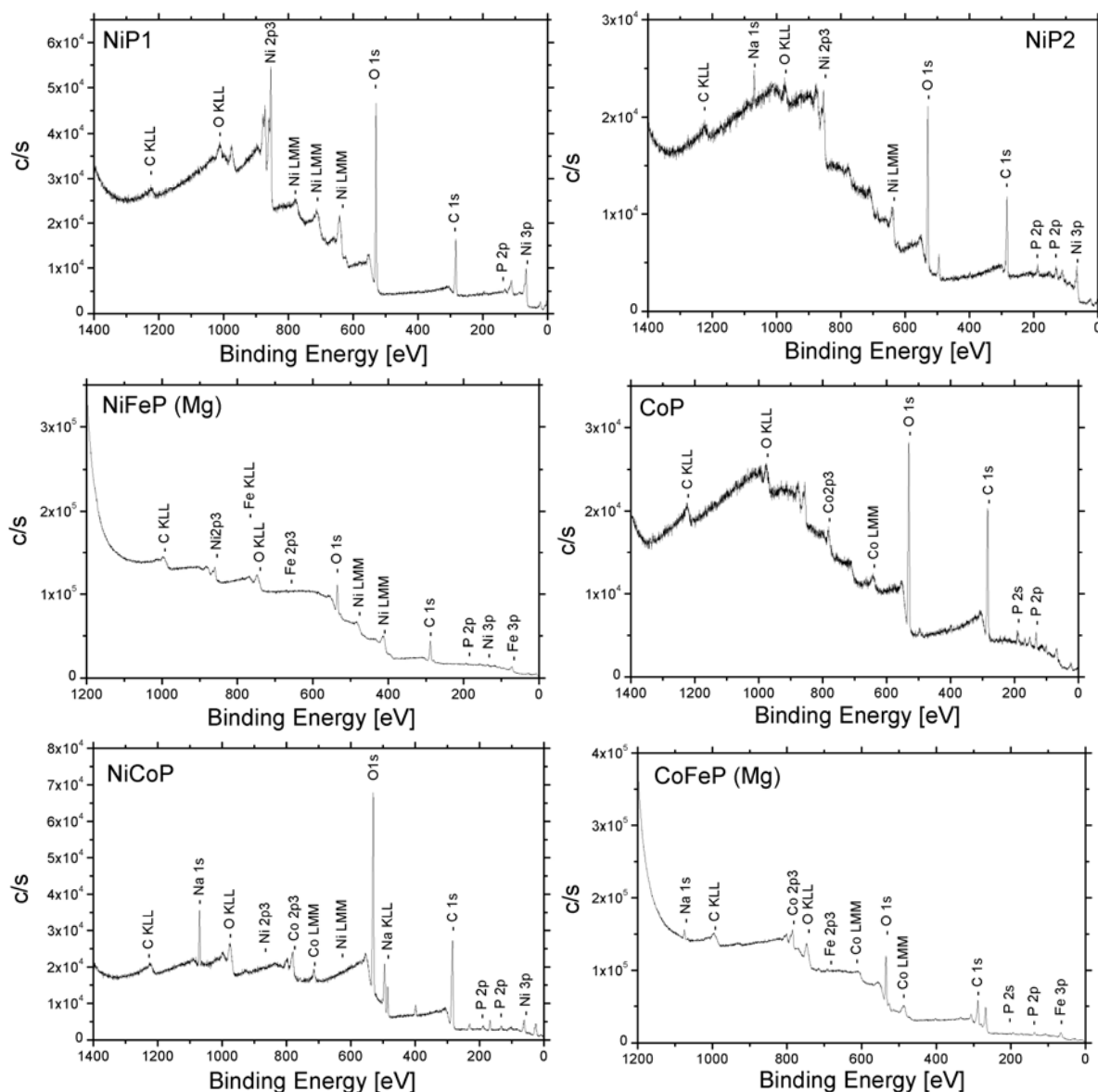


Fig.D: XPS spectra obtained from a dry powder of the the coated microspheres. For all the samples AlK α monochromatic radiation was used (250.0 W, 187.85 eV), while for the NiFeP and CoFeP samples was used also a MgK α radiation (250.0 W, 187.85 eV) in order to better identify the Fe peaks.