[\text{ETA}_3\text{Pt(II)}\text{]}(\text{CO}_3)\text{ reduced}

20 \text{ nm}

\text{ETA}_2[\text{Pt(IV)(OH)}_3]\text{ reduced}

20 \text{ nm}
Supplementary Figure 1. Pt and Ir seeds prepared by polyol reduction method. Some particles are strongly aggregated.
Supplementary Figure 2. The size chart of the Pt and Ir seeds prepared by polyol reduction method.
Supplementary Figure 2. Top – Ni core particles prepared via ‘seeding’ method with the (EA)2[Pt(II)(OH)6] precursor; and bottom – their Gaussian fitted size distribution.
Supplementary Figure 3. TEM, high-resolution TEM and selected area electron diffraction of the Ni core particles coated with the 2–4 nm continuous copper shell, micrographs indicate Cu shell and oxidized copper patches were formed.
Supplementary Figure 4. XRD pattern of Ni/Cu core-shell particles prepared via 'seeding' method.