

Ultralong PtNi Alloy Nanowires Enabled by the Coordination Effect with Superior ORR Durability

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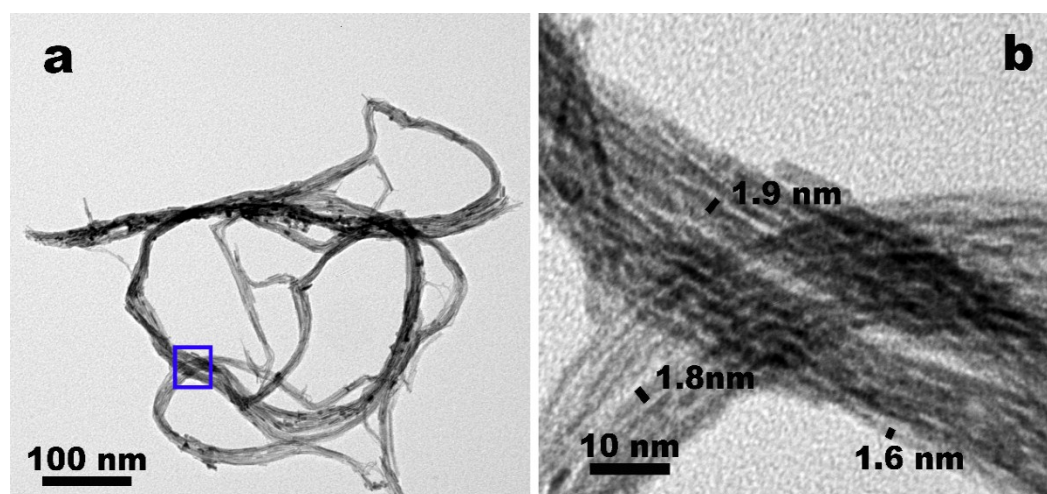


Figure S1. (a) Low-, and (b) high-magnified TEM image of pure Pt nanowires obtained under similar condition but without the introduction of NiCl_2 .

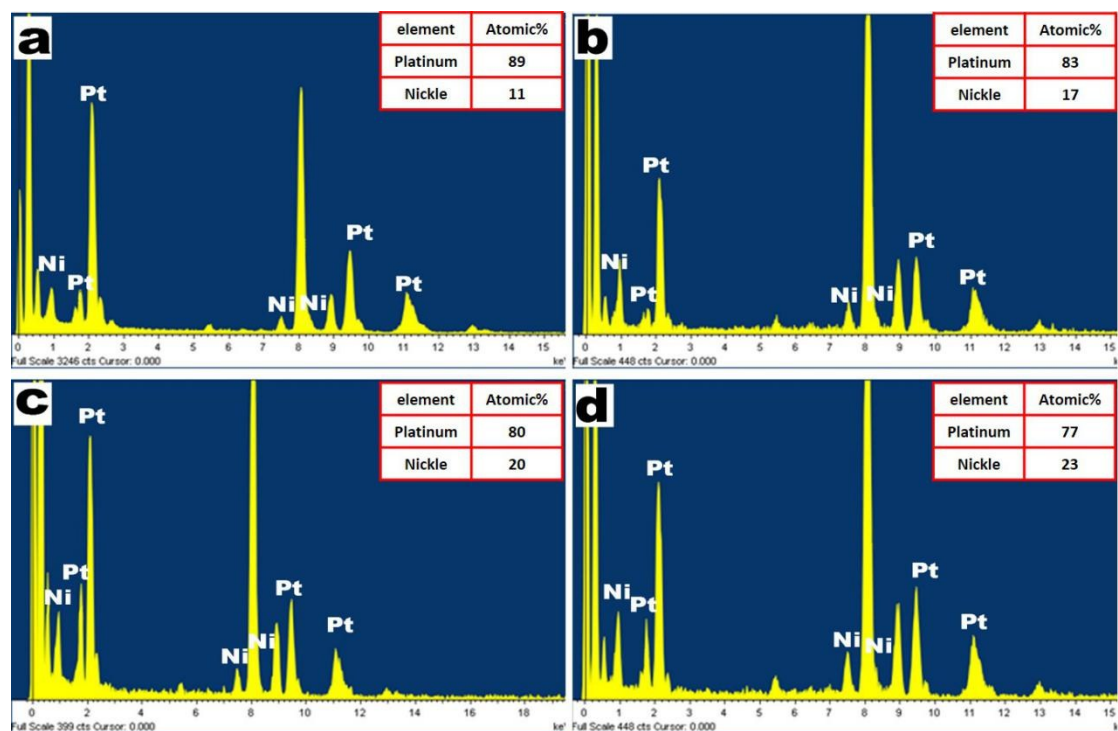


Figure S2. The EDS data of the products collected at different reaction stage: (a) 40 min, (b) 50 min, (c) 80 min, (d) 120 min.

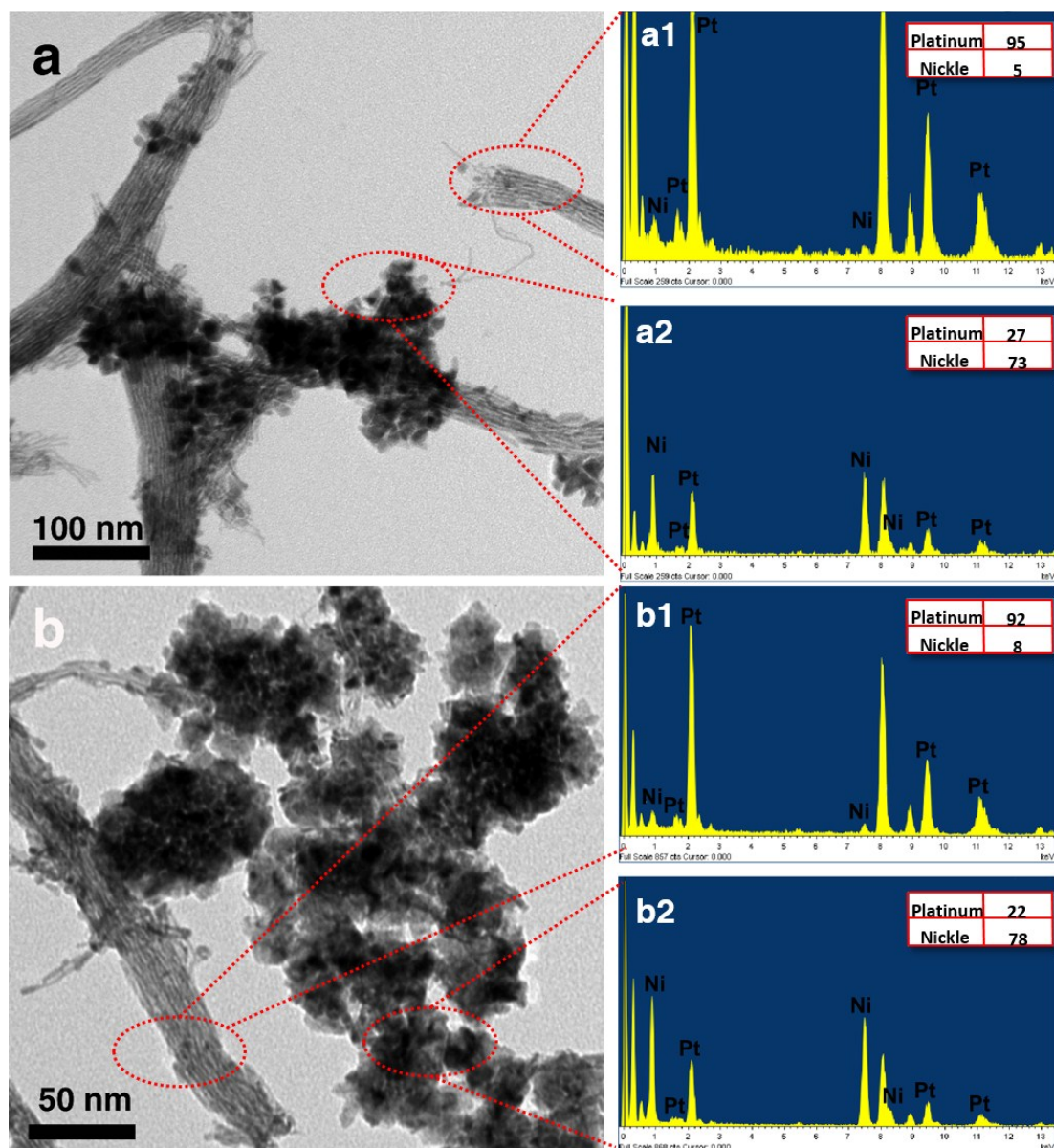


Figure S3. The TEM images and the corresponding EDS data recorded at different areas of the as-obtained products by using (a) NiSO_4 and (b) $\text{Ni(NO}_3)_2$ as the source of Ni(II), respectively.

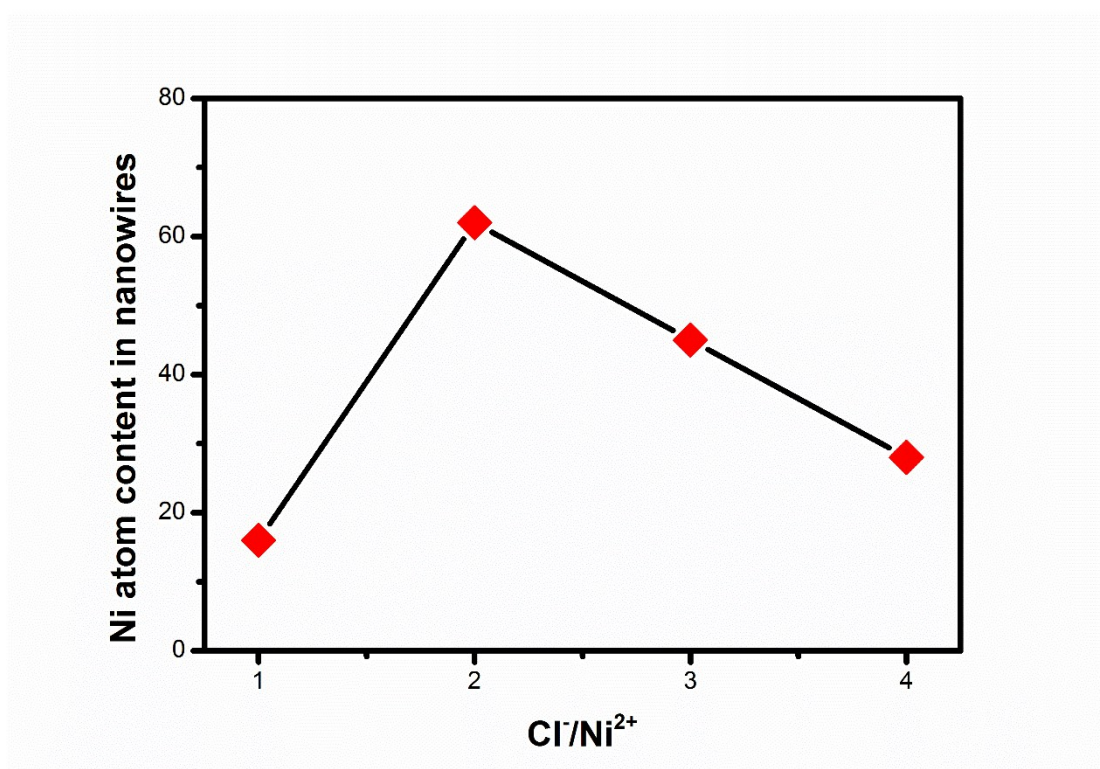


Figure S4. Ni-content in the nanowire depends on different Cl⁻/Ni²⁺ molar ratio.

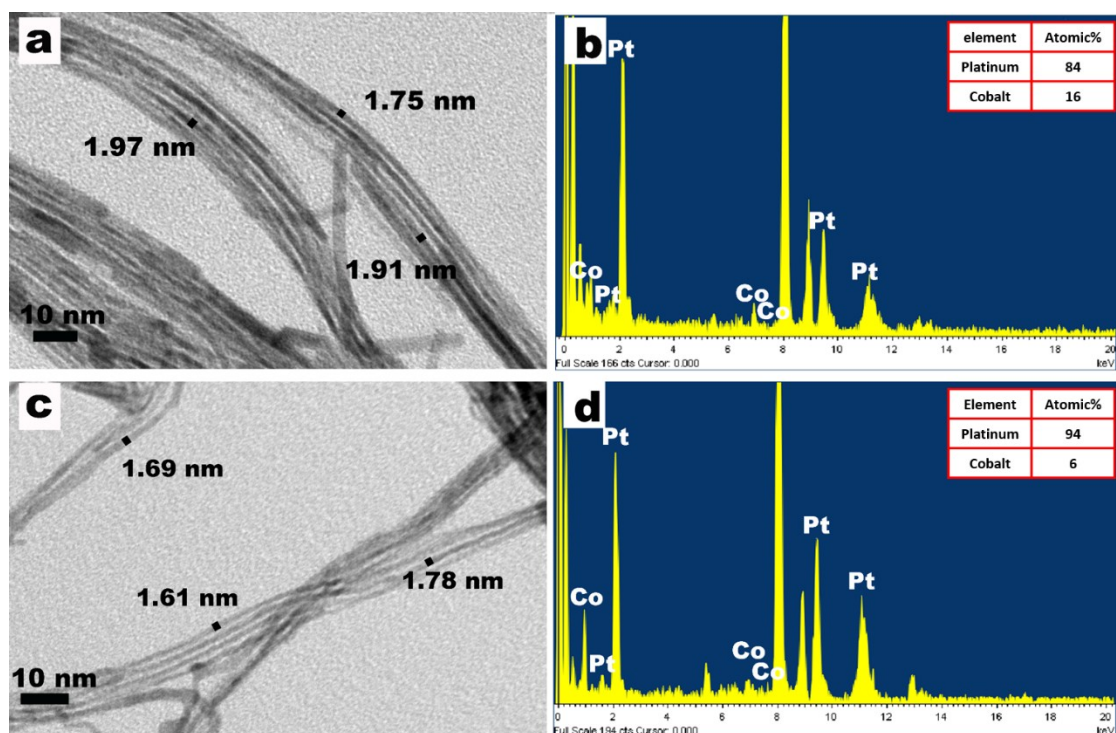


Figure S5. (a, c)TEM images and (b, d) the corresponding EDS data of the as-obtained PtCo nanowires by using CoCl_2 and $\text{Co}(\text{NO}_3)_2$ as the source of Co(II), respectively.

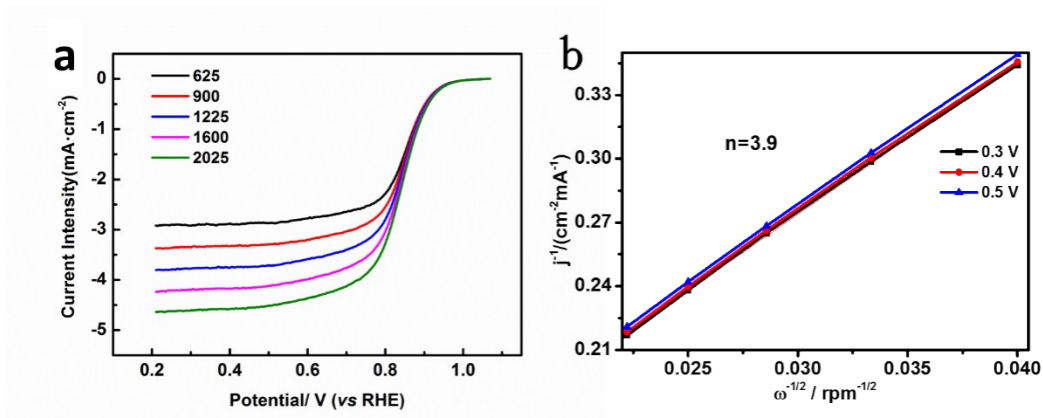


Figure S6. Linear sweep voltammetry curves under different rotation rate (a), and Koutecky-Levich plot at different volts for Pt₇₅Ni₂₅ catalysts in 0.1 M KOH aqueous solution with sweeping rate of 0.05 V·s⁻¹.

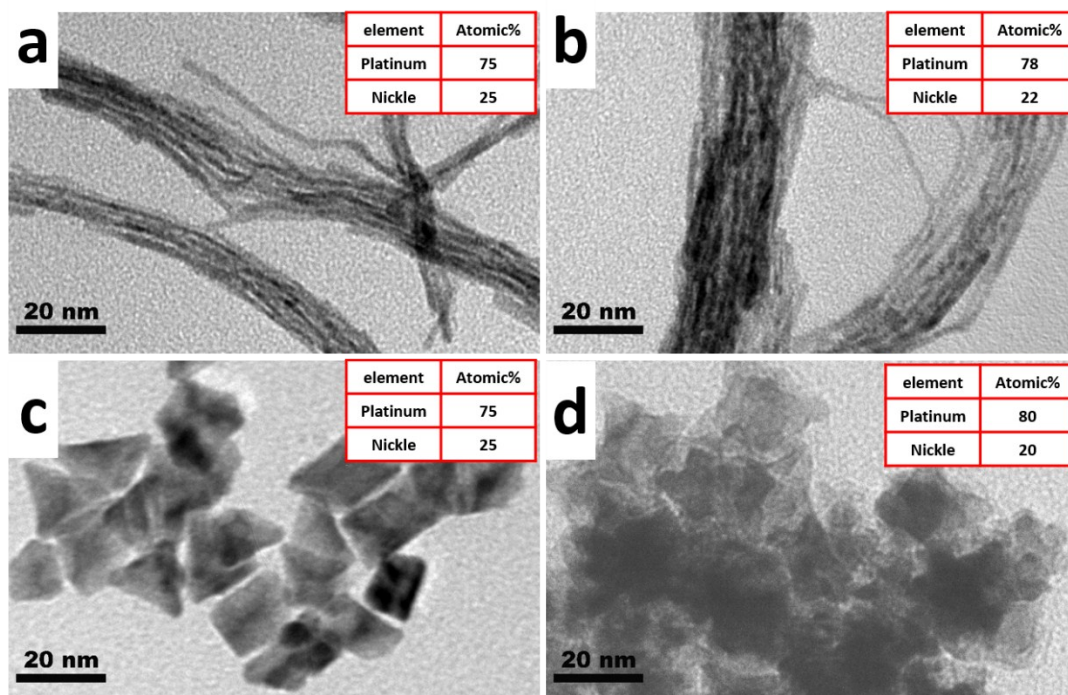


Figure S7. The TEM images of PtNi nanowires and PtNi nanoparticles before (a, c) and after (b, d) durability tests towards ORR, respectively.