

Supporting Information

NiO/NiWO₄ Composite Yolk–Shell Spheres with Nanoscale NiO Outer Layer for Ultrasensitive and Selective Detection of Subppm-level *p*-Xylene

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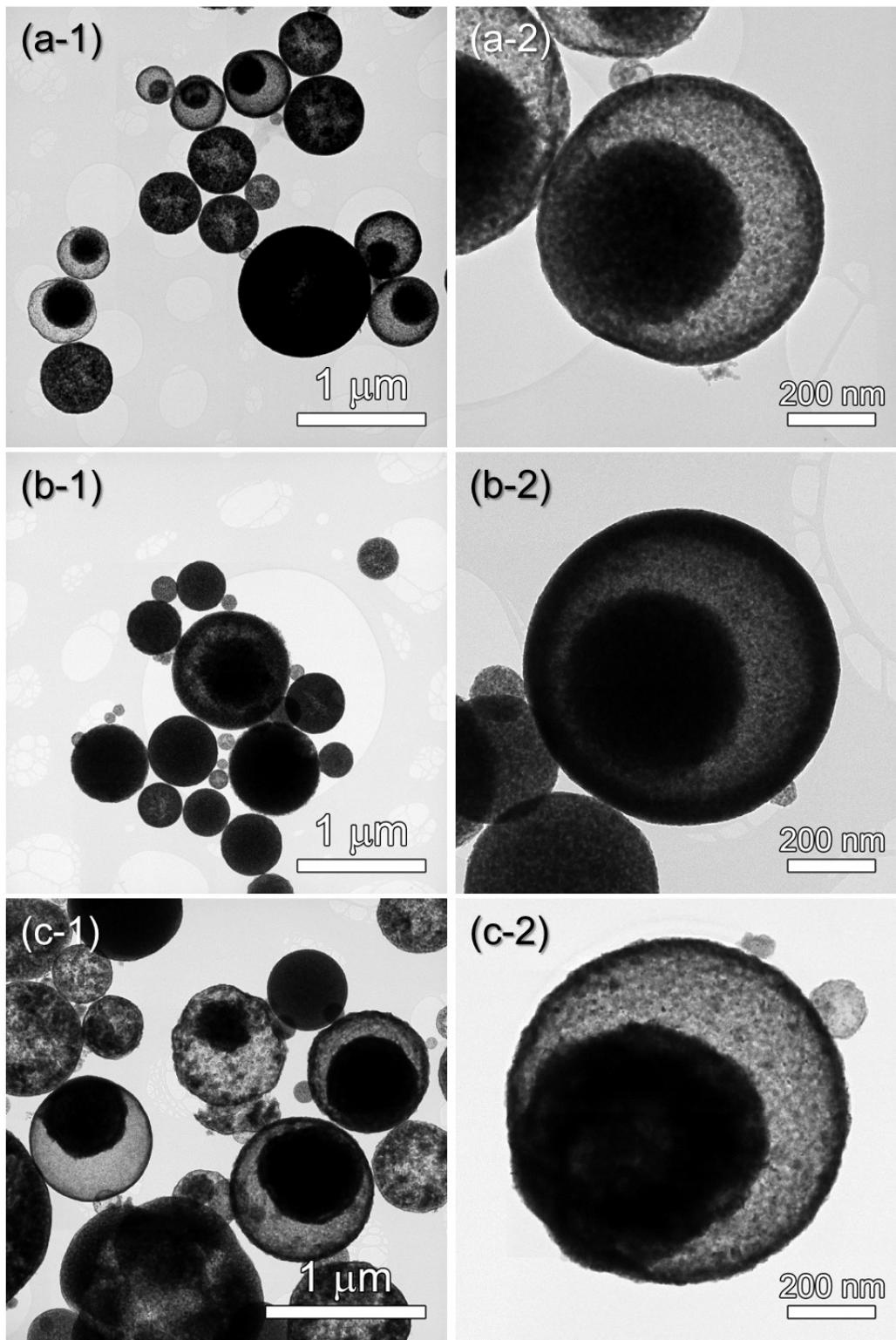


Figure S1. TEM images of (a) pure NiO, (b) 0.01W-Ni and (c) 0.05W-Ni specimens.

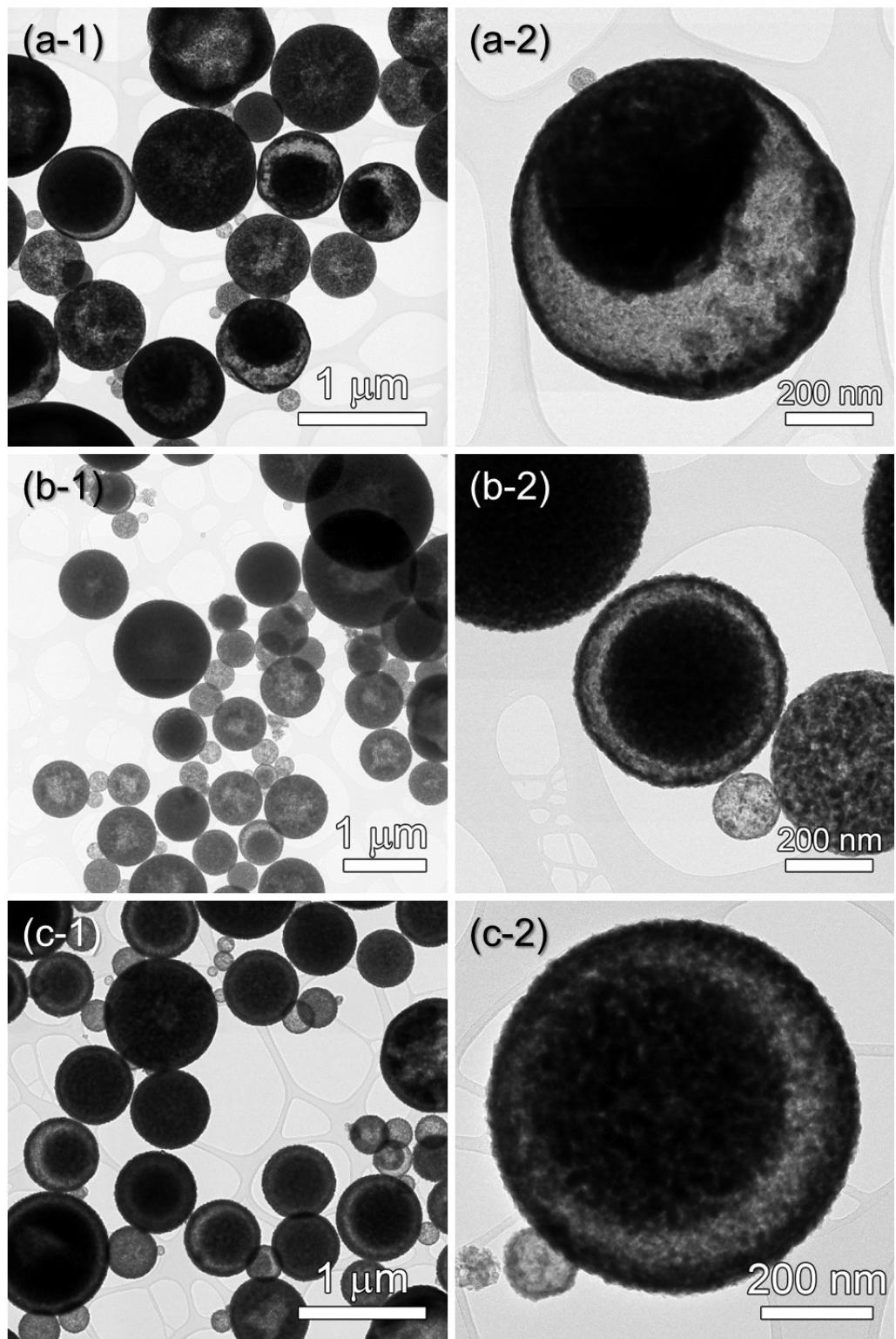


Figure S2. TEM images of (a) 0.1W-Ni, (b) 0.2W-Ni and (c) 0.5W-Ni specimens.

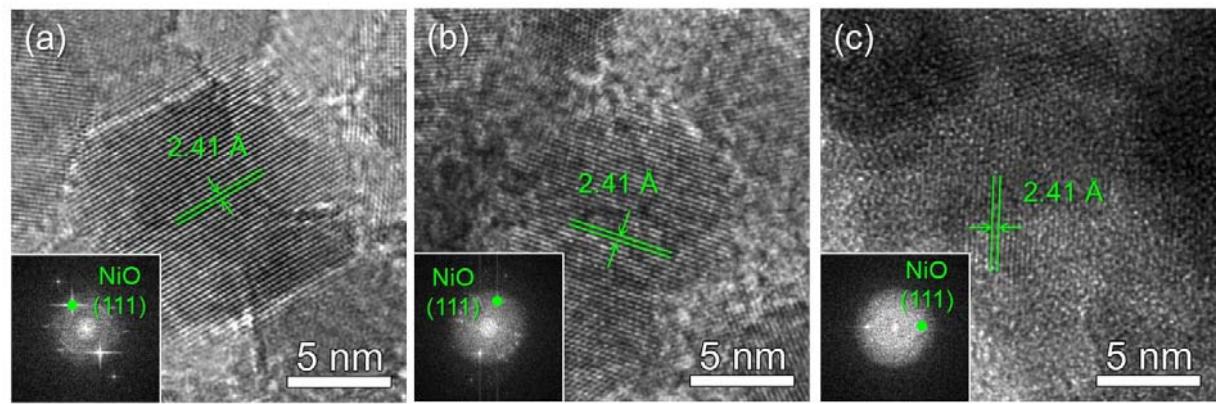


Figure S3. High-resolution lattice images of (a) pure NiO, (b) 0.01W-Ni and (c) 0.05W-Ni specimens.

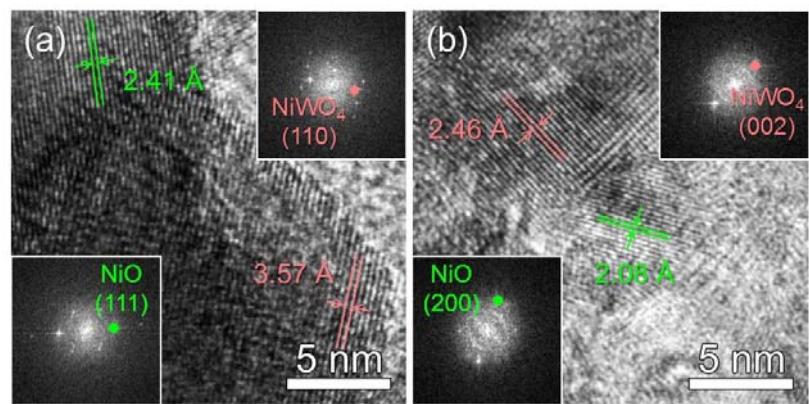


Figure S4. High-resolution lattice images of (a) 0.1W-Ni and (b) 0.5W-Ni specimens.

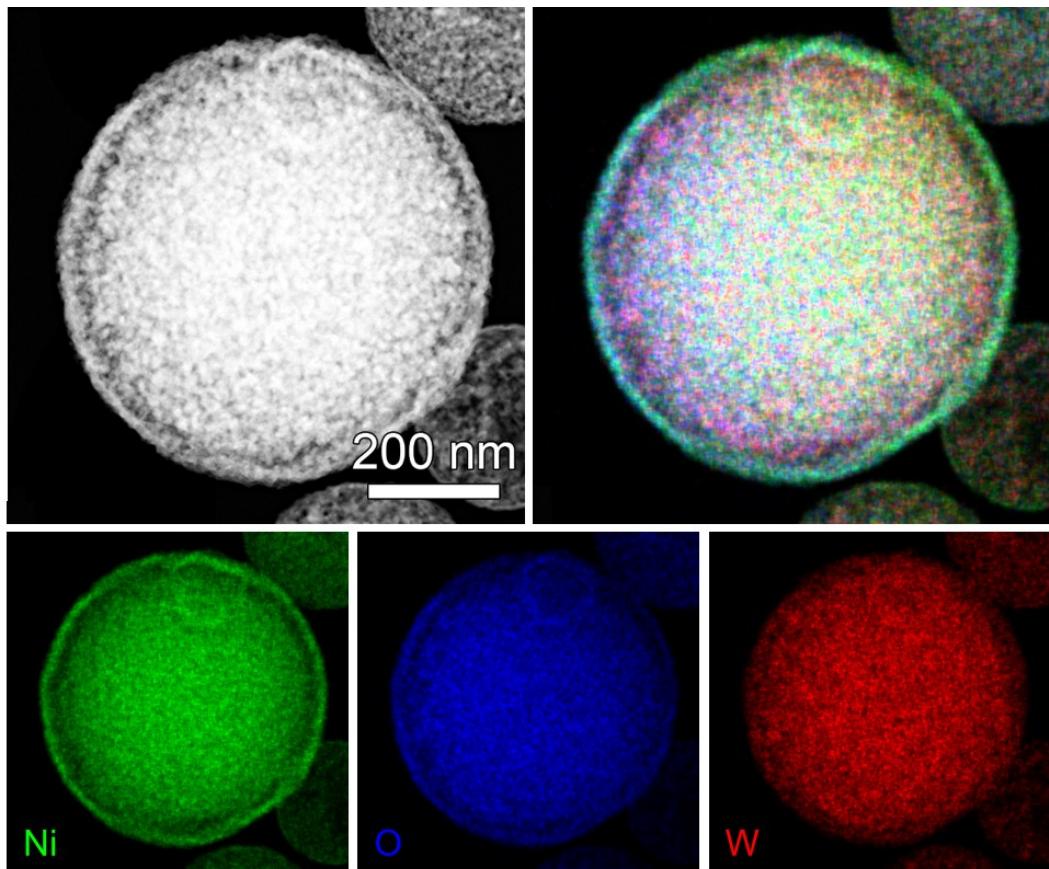


Figure S5. EDS elemental mapping images of 0.2W-Ni specimens.

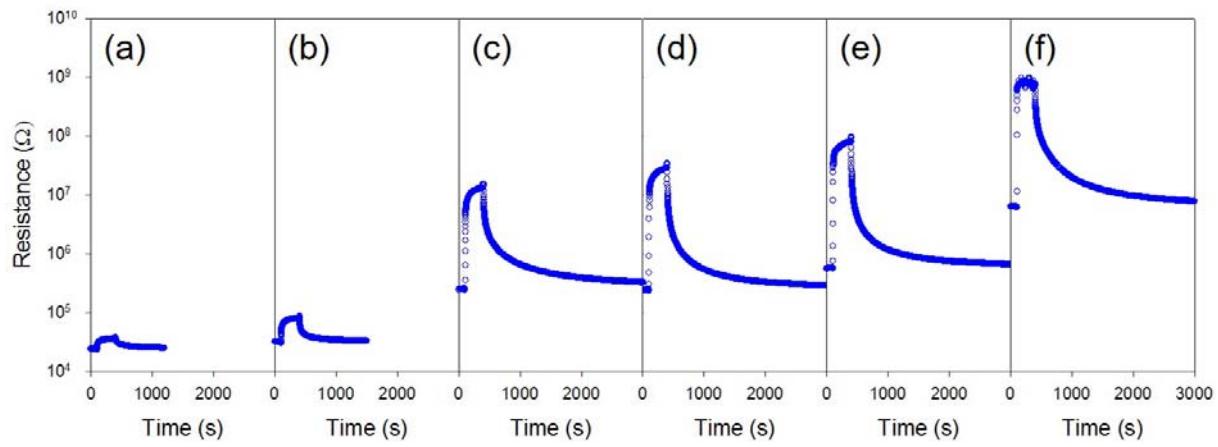


Figure S6. Dynamic sensing transients of (a) pure NiO, (b) 0.01W-Ni, (c) 0.05W-Ni, (d) 0.1W-Ni, (e) 0.2W-Ni and (f) 0.5W-Ni sensors to 5 ppm *p*-xylene at 375 °C

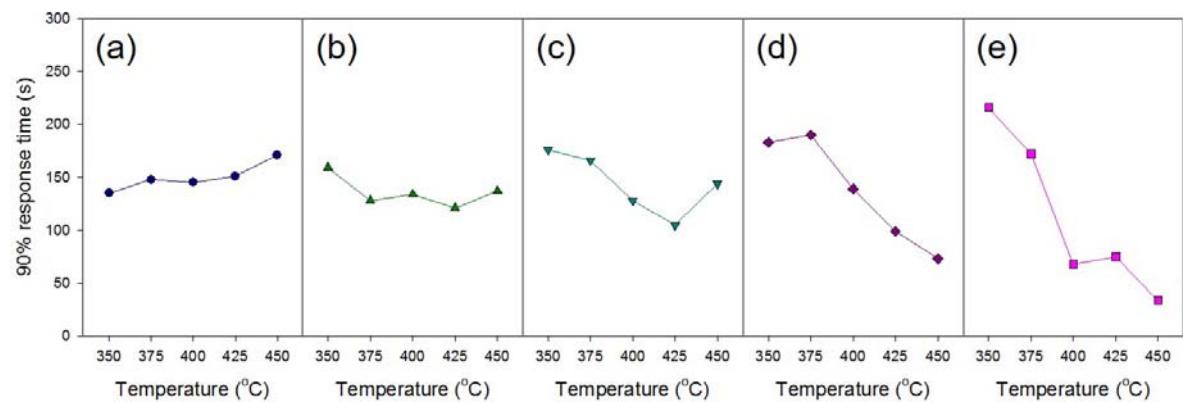


Figure S7. 90% response times upon exposure to 5 ppm *p*-xylene of (a) pure NiO, (b) 0.01W-Ni, (c) 0.05W-Ni, (d) 0.1W-Ni, (e) 0.2W-Ni and (f) 0.5W-Ni sensors.