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Electronic Supplementary Material

Fabrication of hierarchical TiO_2 coating $Co_{20}Ni_{80}$ particle with tunable core size as high-performance wide-band microwave absorber

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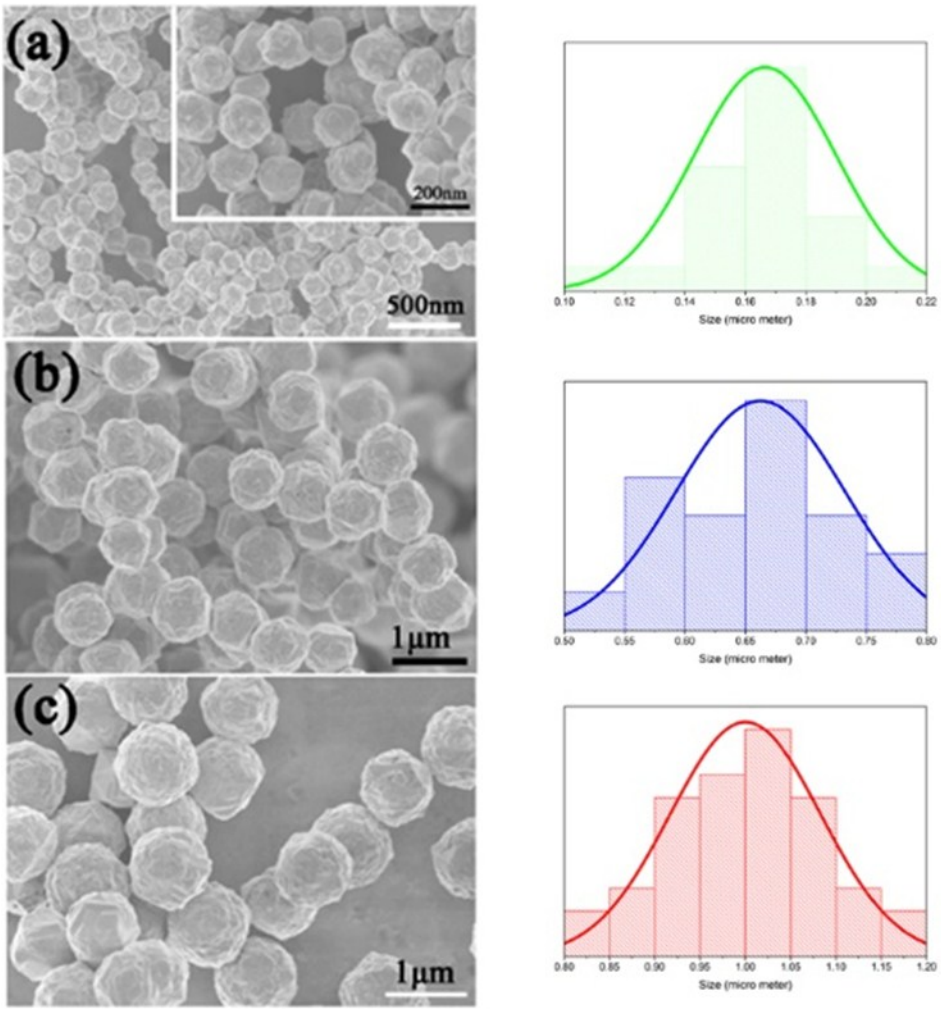

Fig. S-1 Electronic microscopy Images of the CoNi alloy microspheres, (a) 100 nm, (b) 500 nm, (c) 1 μm and the size distribution chart.

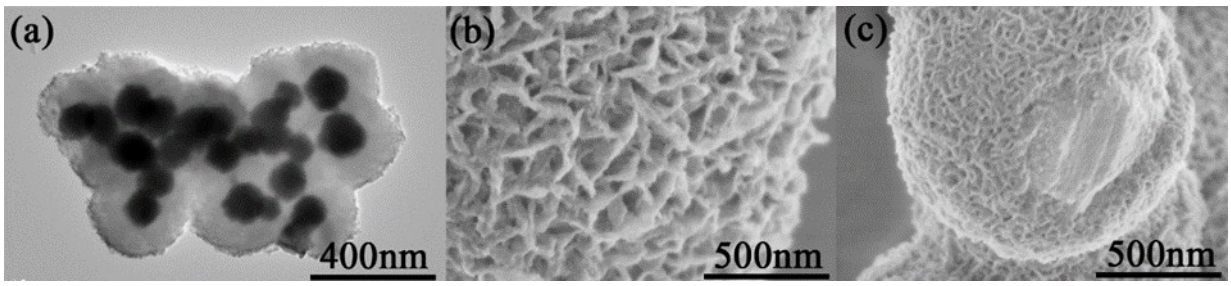

Fig. S-2 (a) SEM image of theCoNi@$TiO_2$with 100 nm CoNi core, 100 nm TiO_2 shell, (b) The enlarged SEM image of the CoNi@TiO_2 with 500 nm CoNi core, 100 nm TiO_2 shell, (c) A single broken CoNi@TiO_2 with 1 μm CoNi core, 100 nm TiO_2 shell.

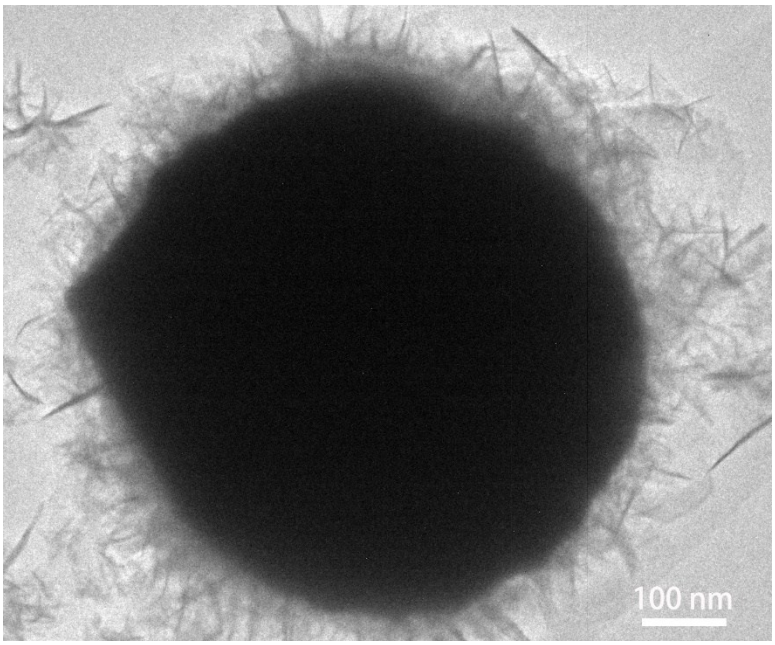

Fig. S-3 TEM image the CoNi@TiO_2 particle with a 500nm CoNi core and a 100nm TiO_2 shell

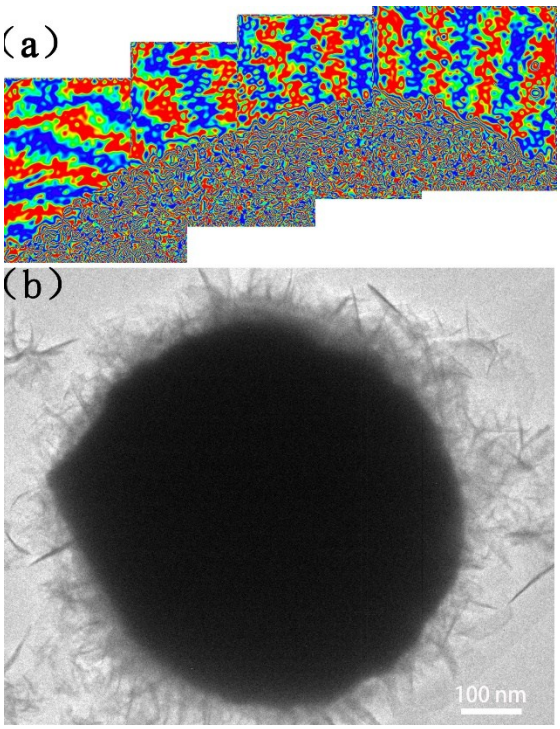

Fig.S-4 The electronic holography of the CoNi@TiO_2 particle with a 500nm CoNi core and a 100nm TiO_2 shell