Supporting Information

Influence of PEG stoichiometry on structure-tuned formation of self-assembled submicron nickel particles

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Fig.S1 shows the XRD patterns of Ni-$P_{1.5}/T_{160}/H_{15}$, the samples have characteristic diffraction peaks at 11.3 °,22.7 °, 34.4 °and 45.9 °corresponding to Ni (003), (006),(012) and (110), which match well with the values of the FCC phase α*-$Ni(OH)_2 \cdot 0.75H_2O$ (JCPDS Card No. 04-0850).

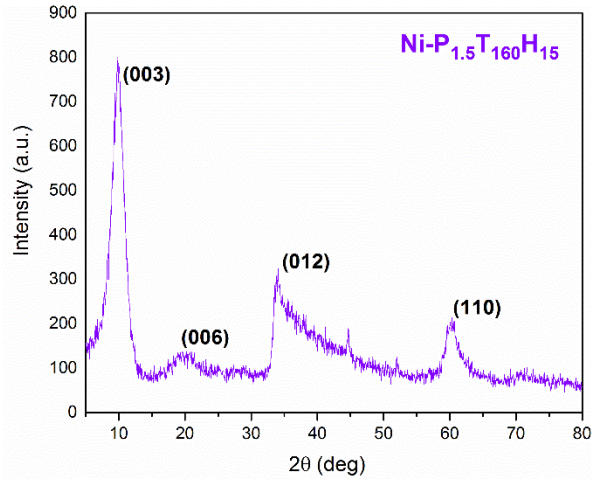

Fig.S1 XRD patterns of Ni-$P_{1.5}/T_{160}/H_{15}$.

Fig.S2 shows the XRD patterns of Ni-$P_{1.5}/T_{200}/H_{15}$ (a), and Ni-$P_{1.5}/T_{200}/H_{15}$(b). The XRD patterns indicate that the Ni-$P_{1.5}/T_{200}/H_{10}$ and Ni-$P_{1.5}/T_{200}/H_{15}$ contain a small amount of nickel hydroxide.

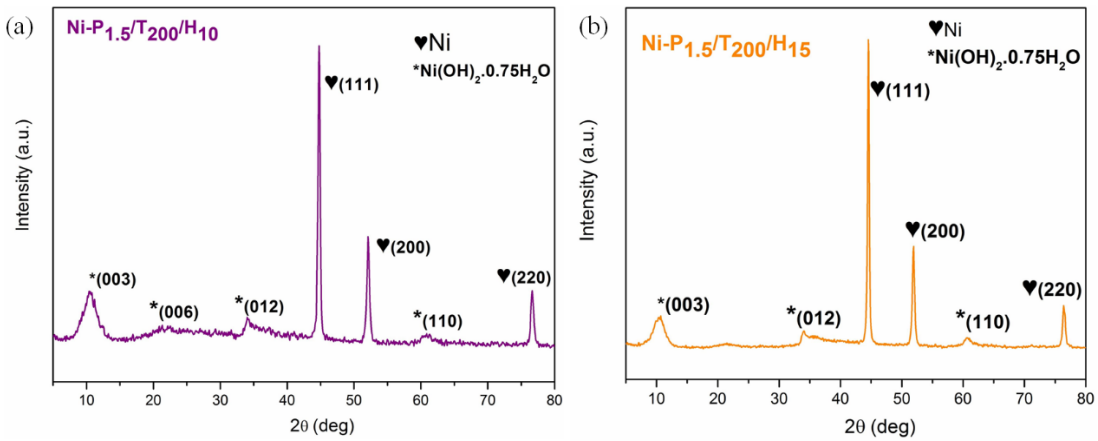

Fig.S2 XRD patterns of Ni-$P_{1.5}/T_{200}/H_{10}$ (a) and Ni-$P_{1.5}/T_{200}/H_{15}$ (b).

Fig.S3 shows the calculated reflection losses of pure paraffin with thicknesses of 5 mm. It can be inferred that pure paraffin can hardly cause any effect on the electromagnetic properties of the Ni-$P_9/T_{200}/H_{15}$.

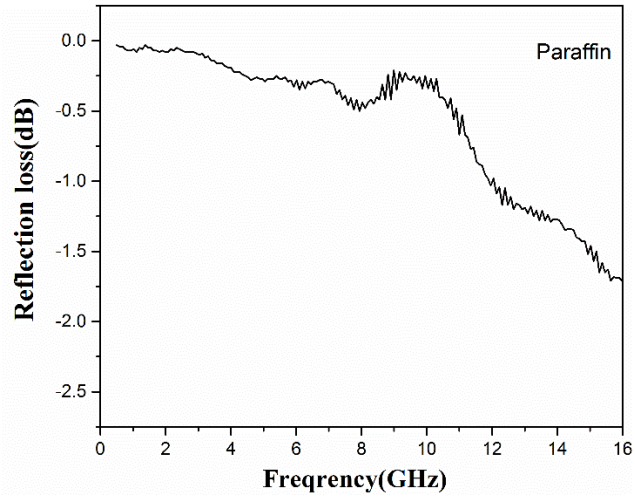

Fig.S3 The calculated reflection losses of pure paraffin with thicknesses of 5 mm.