

## Supporting Information

### **Cobalt Nanoparticles Encapsulated in Nitrogen and Oxygen Dual-Doped Carbon Matrix as High-Performance Microwave Absorbers**

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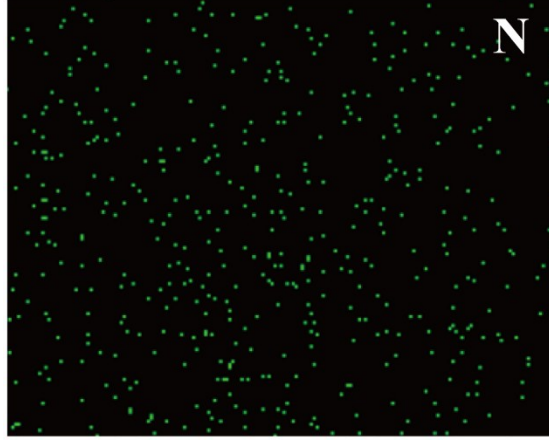
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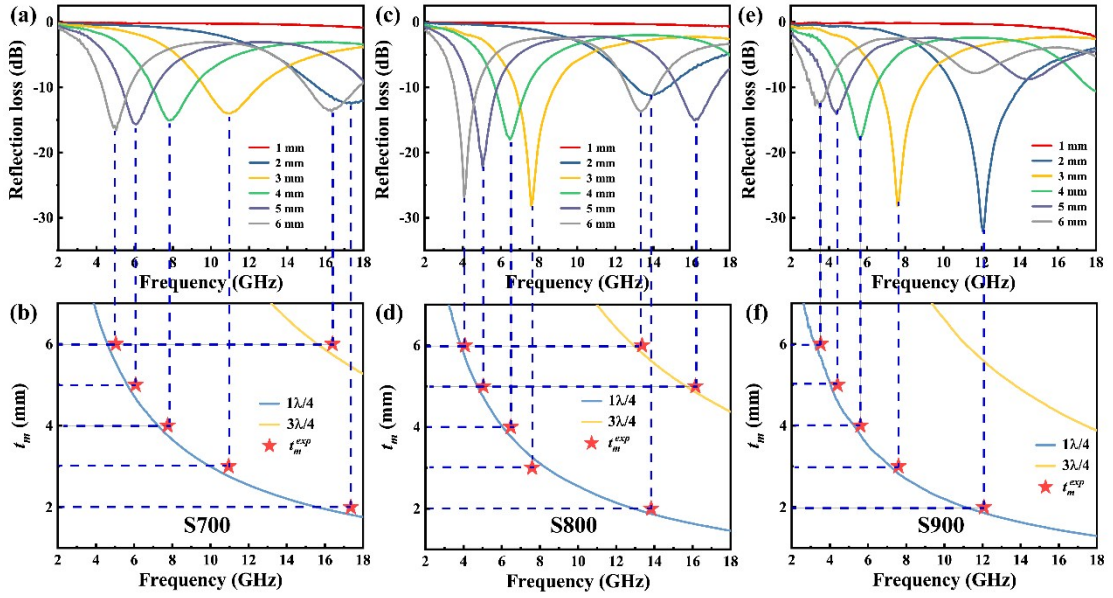
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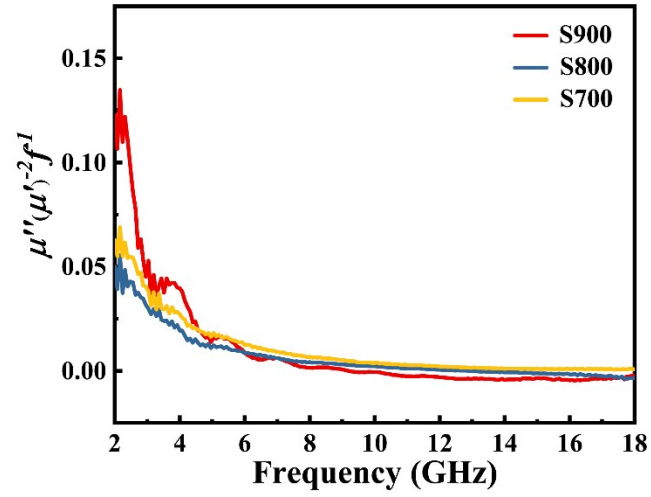
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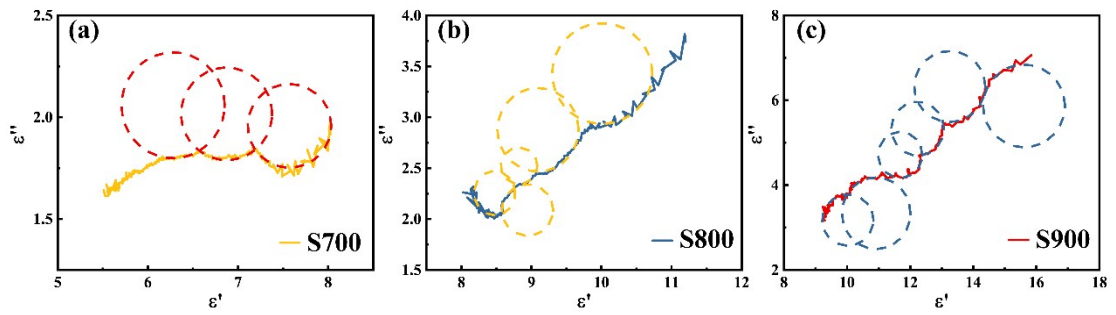
**Figure S1.** The EDS spectroscopy mapping image of N elemental distribution of S900.



**Figure S2.** (a, c, and e) RL curves versus frequency of different absorber layer thickness, and (b, d, and f) dependence of matching thickness ( $t_m$ ) on matching frequency ( $f_m$ ) at the wavelength of  $1\lambda/4$  and  $3\lambda/4$  of S700, S800, and S900/paraffin mixtures, respectively.



**Figure S3.** The eddy current loss of S700, S800, and S900/paraffin mixtures.



**Figure S4.** The Cole-Cole plots of (a) S700, (b) S800, and (c) S900/paraffin mixtures.