

Supporting Information

Electromagnetic Wave Absorption Properties of Carbon Nanotube Modified by Tetrapyrrolineporphyrazine Interface Layer

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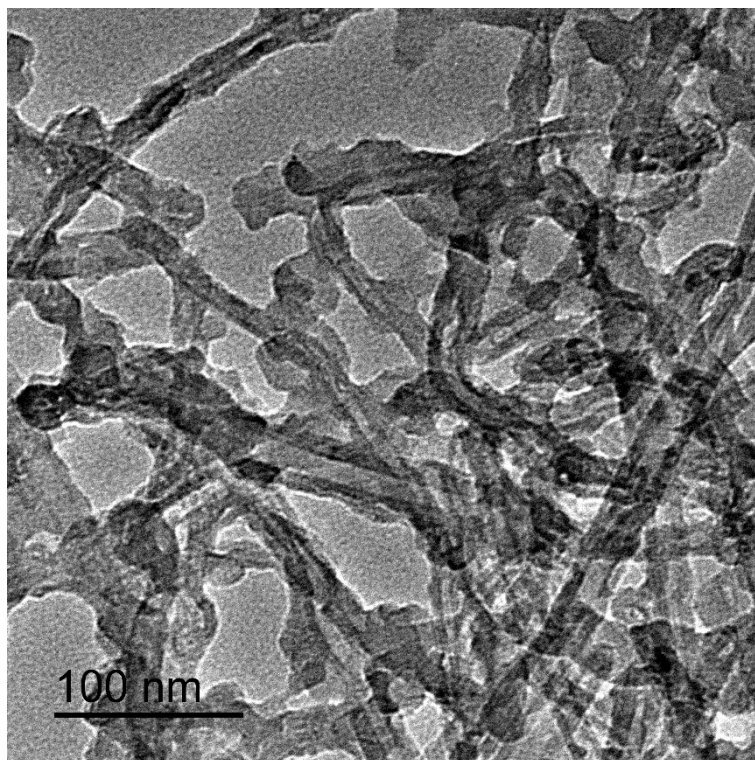


Figure S1 TEM image of CoTAP-CNTs, the CNT content is 40wt%

Figure S1 is the morphology of CoTAP-CNTs, the CNT content is 40wt%. Because the CNT content is too much, the CoTAP content decreases accordingly, and the surface of CNTs can't be coated completely by CoTAP.

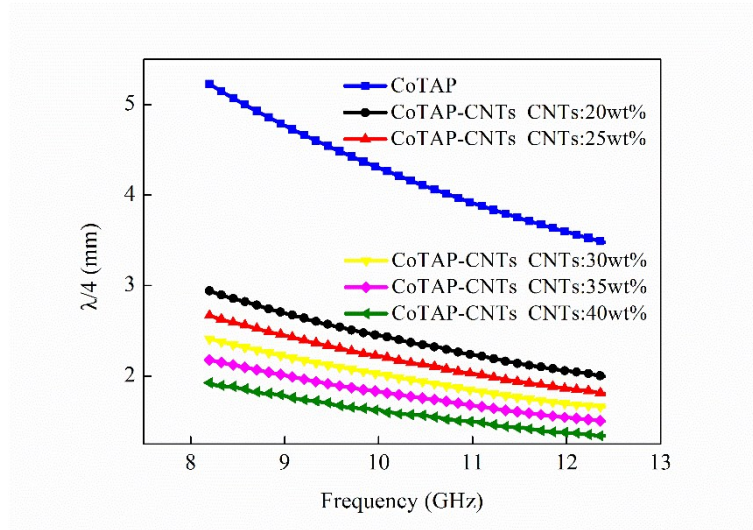


Figure S2 the quarter-wavelength for the hybrids with different CNT contents

The minimum reflection of the EM energy or the matching condition occurs when the thickness of the absorber sample, d , is approximately a quarter of the propagating wavelength multiplied by an odd number, i.e. $d=n\lambda/4$ ($n=1, 3, 5, 7, 9, \dots$), and the cancellation of the reflected waves from upper and bottom surfaces at the air-material interface occurs. Therefore, a maximum absorbing peak corresponding to the minimum RC of the EM wave appears. Figure S2 illustrates the quarter-wavelength in X-band for the hybrids with different CNT contents.