Supporting information

Fe$_3$O$_4$ Nanoparls Decorated Carbon Nanotubes Stemmed from Carbon Onions with Self-cleaning and Microwave Absorption Properties

Xianyong Lu†*, Yanzi Wu†‡, Hongyan Cai†‡, Xingyuan Qu†‡, Lingmei Ni†, Chao Teng†, Ying Zhu*, Lei Jiang†‡

†Key Laboratory of Bio-Inspired Smart Interfacial Science and Technology of Ministry of Education, Beijing Key Laboratory of Bio-inspired Energy Materials and Devices, School of Chemistry and Environment, Beihang University, Beijing 100191, PR China

‡Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China

* To whom correspondence should be addressed: (X.Lu) xylu@buaa.edu.cn, (Y.Zhu) zhuying@buaa.edu.cn
†‡ These authors contributed equally to this work.
Fig. S1 SEM images of as-prepared nanocomposite film formed on pure copper foil via the flame strategy
**Fig S2**  SEM images and EDX spectra of brass foil (left) and pure copper foil (right).
**Fig. S3** SEM image and the EDS element (CuK and ZnK) mapping images of brass foil
Fig. 4 Values of $\varepsilon'$ a), $\varepsilon''$ b), $\mu'$ c), $\mu''$ d), tan $\delta\varepsilon$ e) and tan $\delta\mu$ f) for CNOs/CNTs@Fe$_3$O$_4$, CNOs/CNTs.