

Supplementary Materials

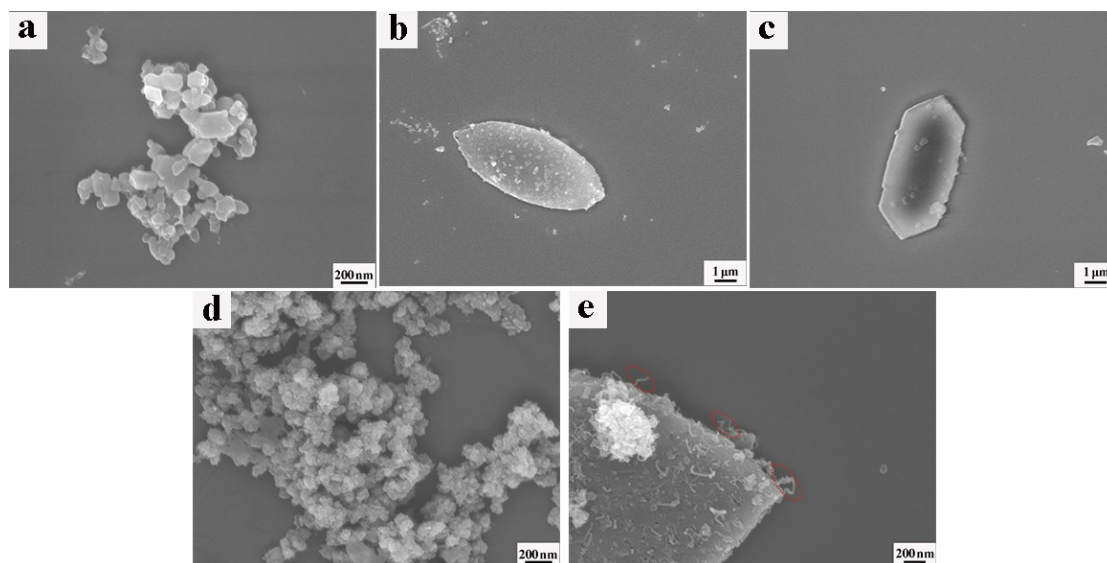


Figure S1. SEM of (a) ZIF-67 (b) ZIF-L@ZIF-67-1 (c) ZIF-L@ZIF-67-4 (d) Co/C (e) DPC/CNTs-4.

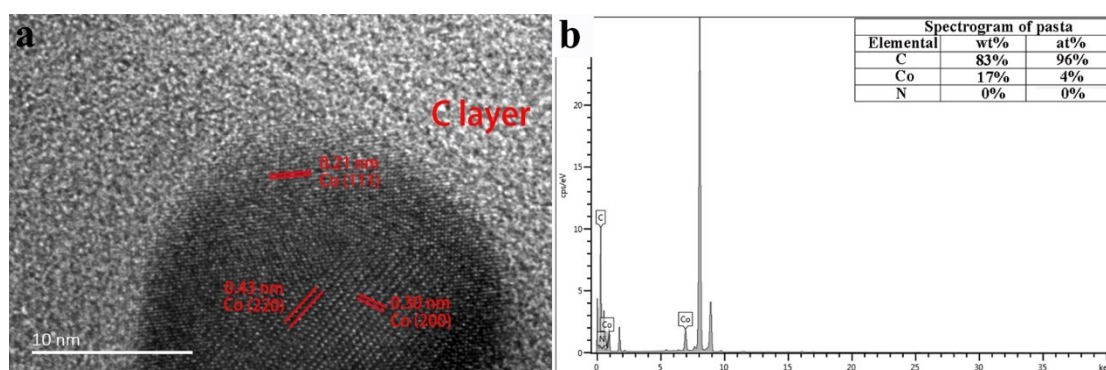


Figure S2. (a) HRTEM images of DPC/CNTs-2, (b) Elemental mapping of DPC/CNTs-2.

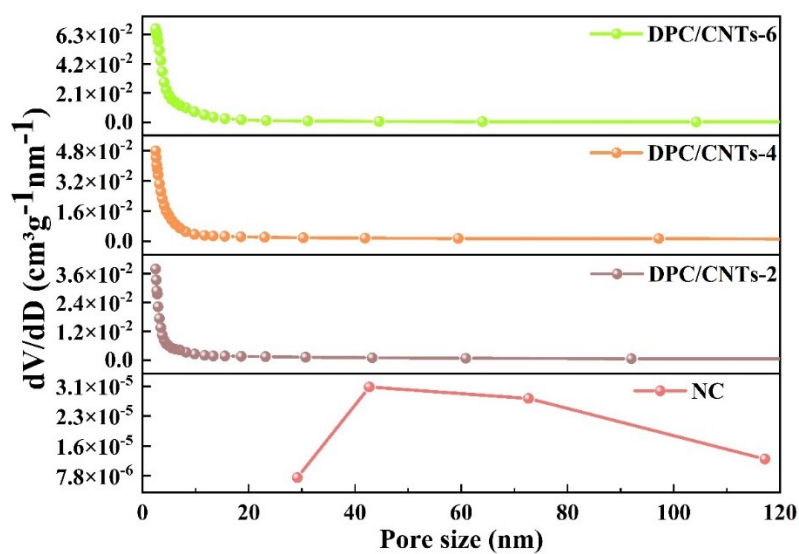


Figure S3. pore size distribution profiles of NC, DPC/CNTs-2, DPC/CNTs-4, DPC/CNTs-6.

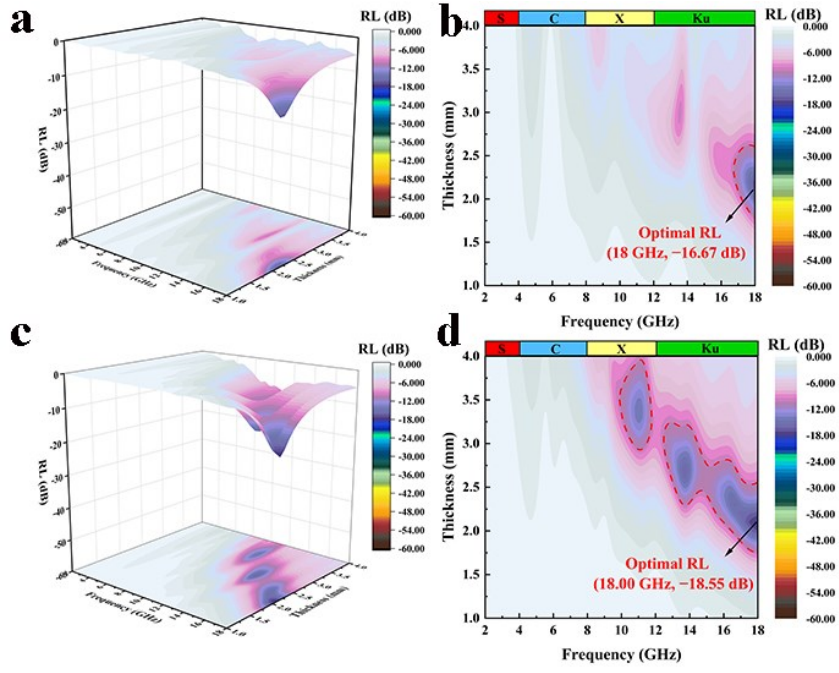


Figure S4. The RL and EAB values for (a,b) Co/C, (c,d) DPC/CNTs-1.

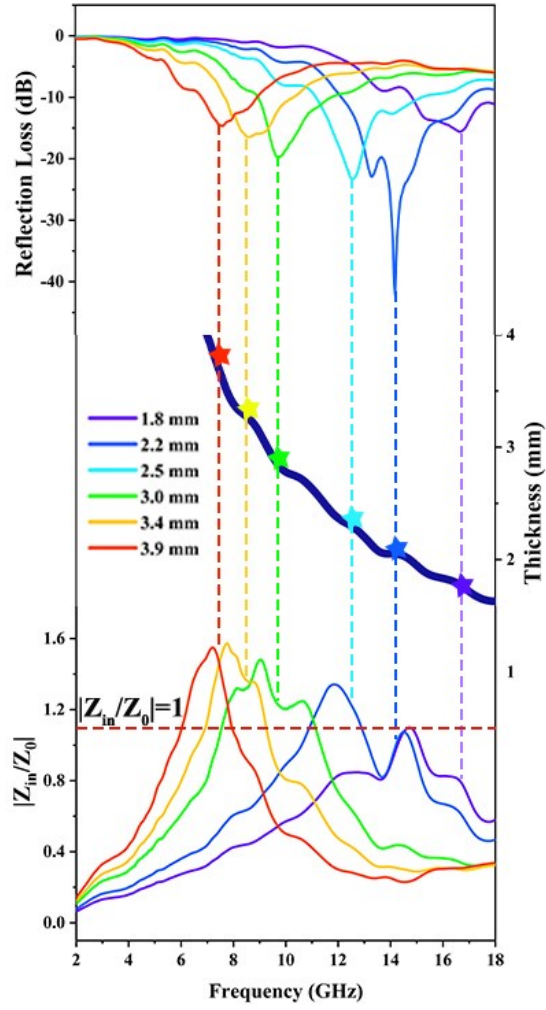


Figure S5. RL , t_m and $|Z_{in}/Z_0|$ vs f curves of DPC/CNTs-2.

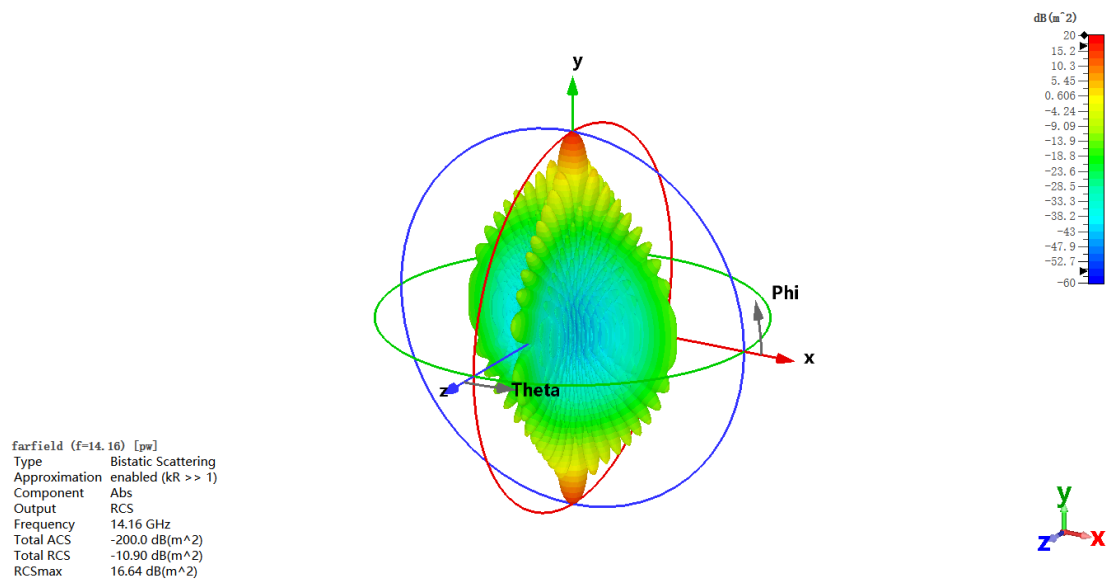


Figure S6. Simulation results based on far-field response of PEC.