

Fig. S1 XRD patterns of samples P1-P5.

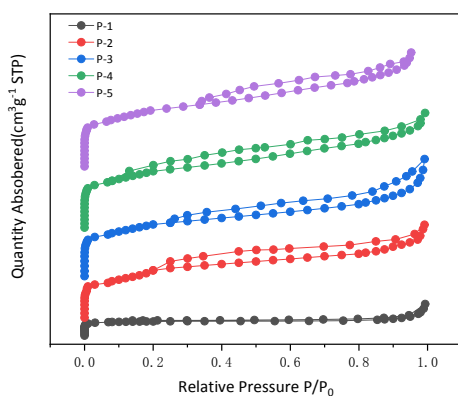


Fig. S2 N₂ adsorption isotherms of samples P-1 to P-5.

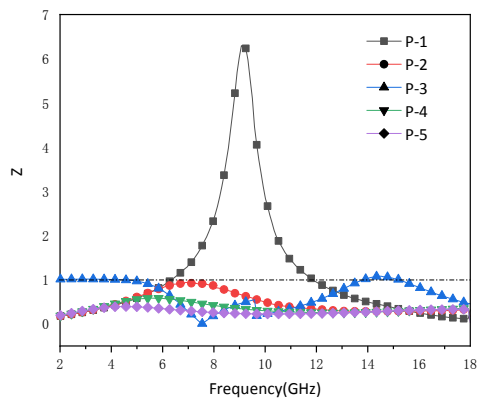


Fig. S3 Modulus of Z of samples P-1 to P-5.

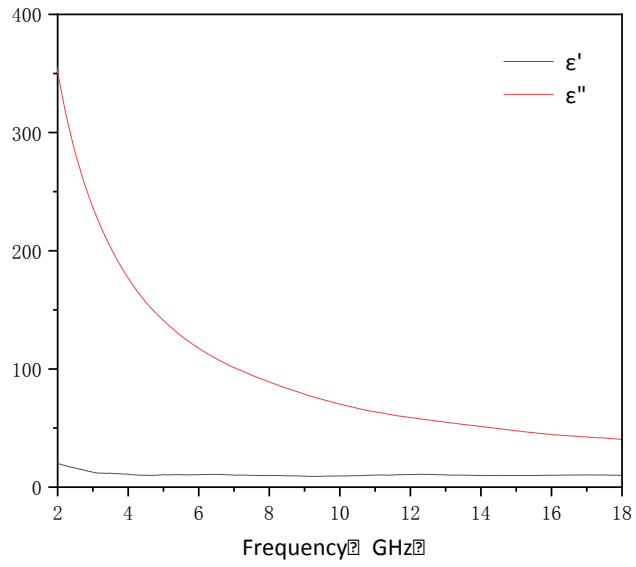


Fig. S4 Complex permittivity values of P3-20wt%.

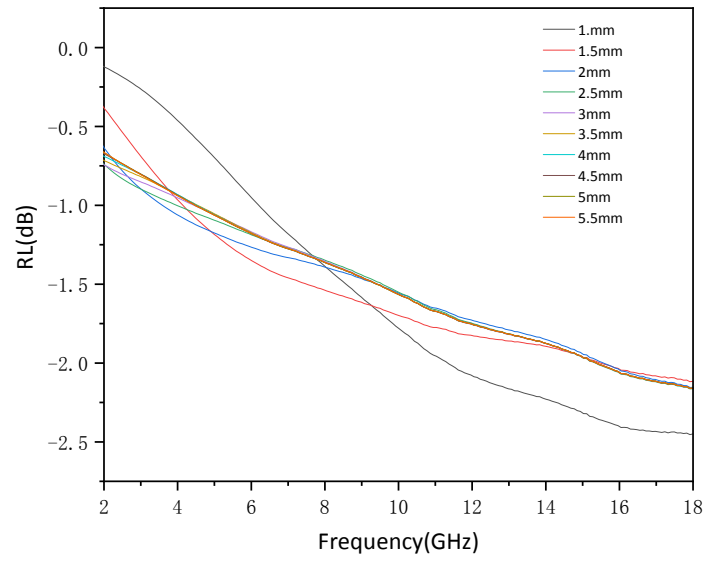


Fig. S5 Microwave reflection loss values at different thickness of different frequency of P3-25wt%.