Supporting Information for

Three-dimensional ordered mesoporous carbon spheres modified with ultrafine zinc oxide nanoparticles for enhanced microwave absorption properties

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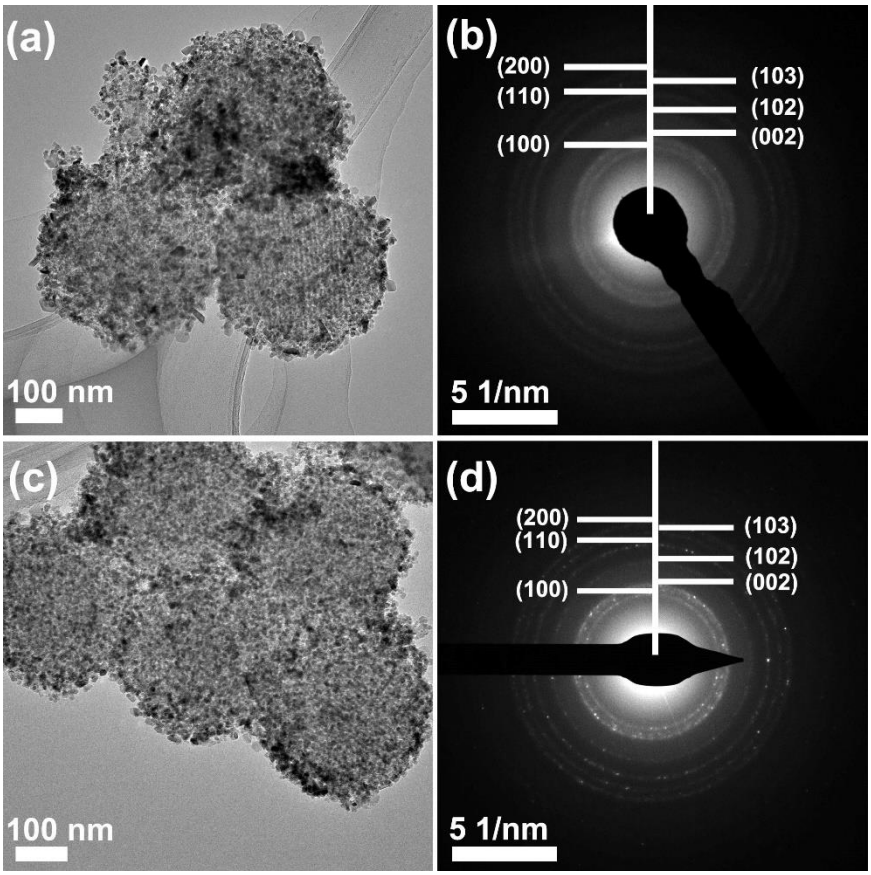


Fig. S1. a TEM image of ZnO/OMCS-20, **b** the SAED pattern of ZnO/OMCS-20, **c** TEM image of ZnO/OMCS-30, and **d** SAED pattern of ZnO/OMCS-30.

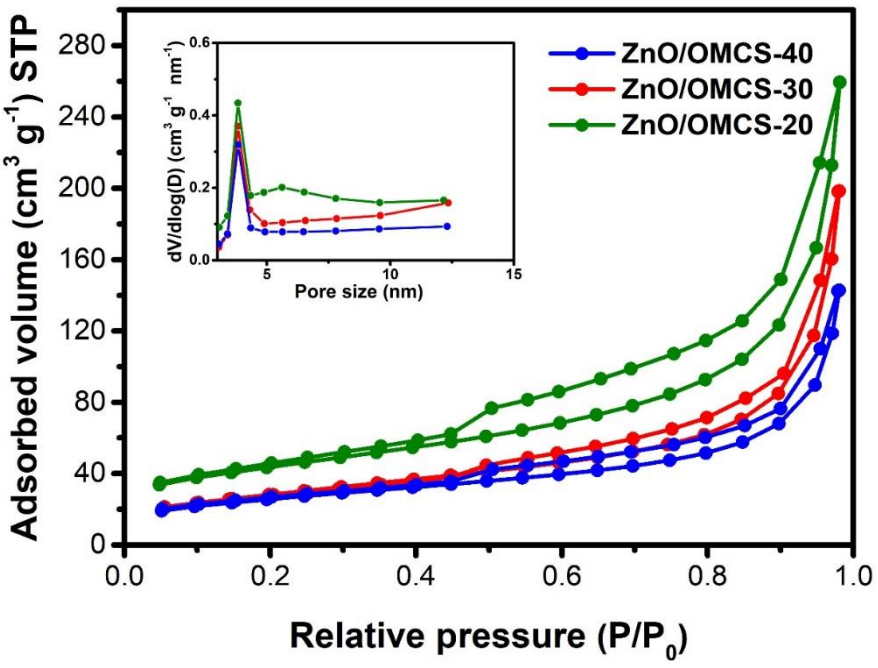


Fig. S2. N_2 adsorption/desorption isotherms and pore size distributions for the ZnO/OMCS-20, ZnO/OMCS-30 and ZnO/OMCS-40 nanocomposites.

Table S1 BET surface areas (*S*), pore volumes (*V*) and pore sizes (*D*) for the prepared samples.

samples	S^a (m^2 g^{-1})	V^b (cm^3 g^{-1})	D^c (nm)
OMCS	537.3	0.72	12.4
ZnO/OMCS-20	155.9	0.37	5.6
ZnO/OMCS-30	103.1	0.3	—
ZnO/OMCS-40	92.4	0.2	—

[a]The Brunauer-Emmett-Teller (BET) surface area was measured by applying the linear part of the BET plot.

[b]The pore volume is calculated using adsorption isotherms by BJH method.

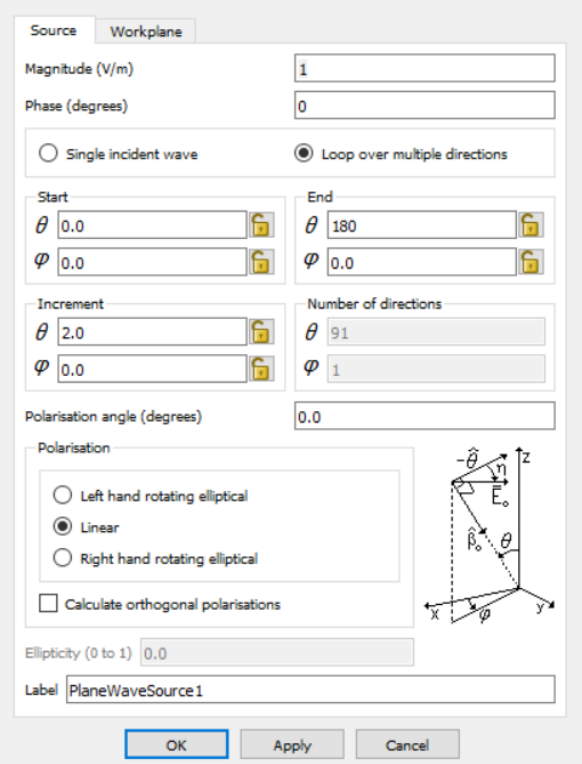
[c]The pore size is referred to the peak position in Fig. 3a and Fig. S2.

Radar cross section (RCS) simulation

Geometry settings: The width of the metal groove structure is 100 ×100 mm, the width of the groove is 10 mm while the height of the groove is 5 mm.

Frequency: The frequency of the incident waves is 10.4 GHz.

Excitation source: Plane waves were chosen as excitation source. The start θ is -90° and the end θ is 90 °.



Simulation method: The moment of method was chosen to simulate the surface current distribution and radar cross section.