

Electronic Supplementary Information for:

Flux and Surfactant Directed Facile Thermal Conversion Synthesis of Hierarchical Porous MgO for Efficient Adsorption and Catalytic Growth of Carbon Nanotubes

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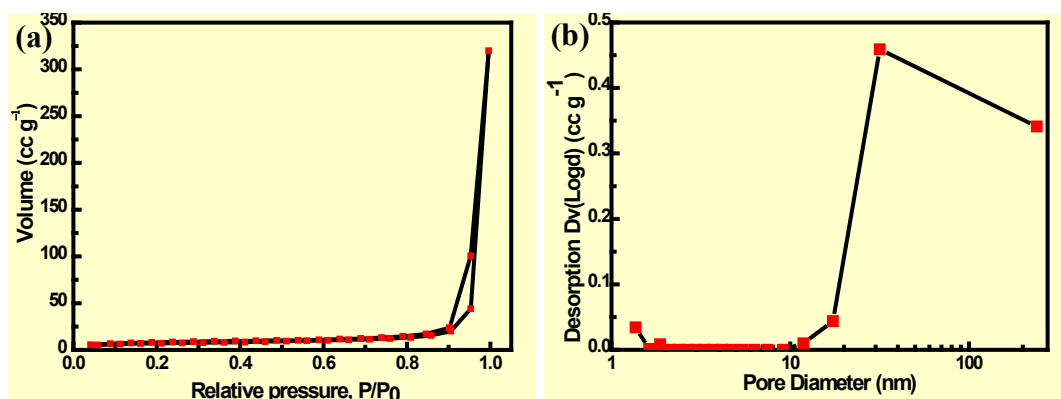


Figure S1. (a) N₂ adsorption-desorption isotherms and (b) pore size distribution of the hierarchical porous MgO superstructures calcined by the precursor at 650 °C (heating rate: 10 °C min⁻¹) for 2.0 h, in the presence of NaCl and NP-9.

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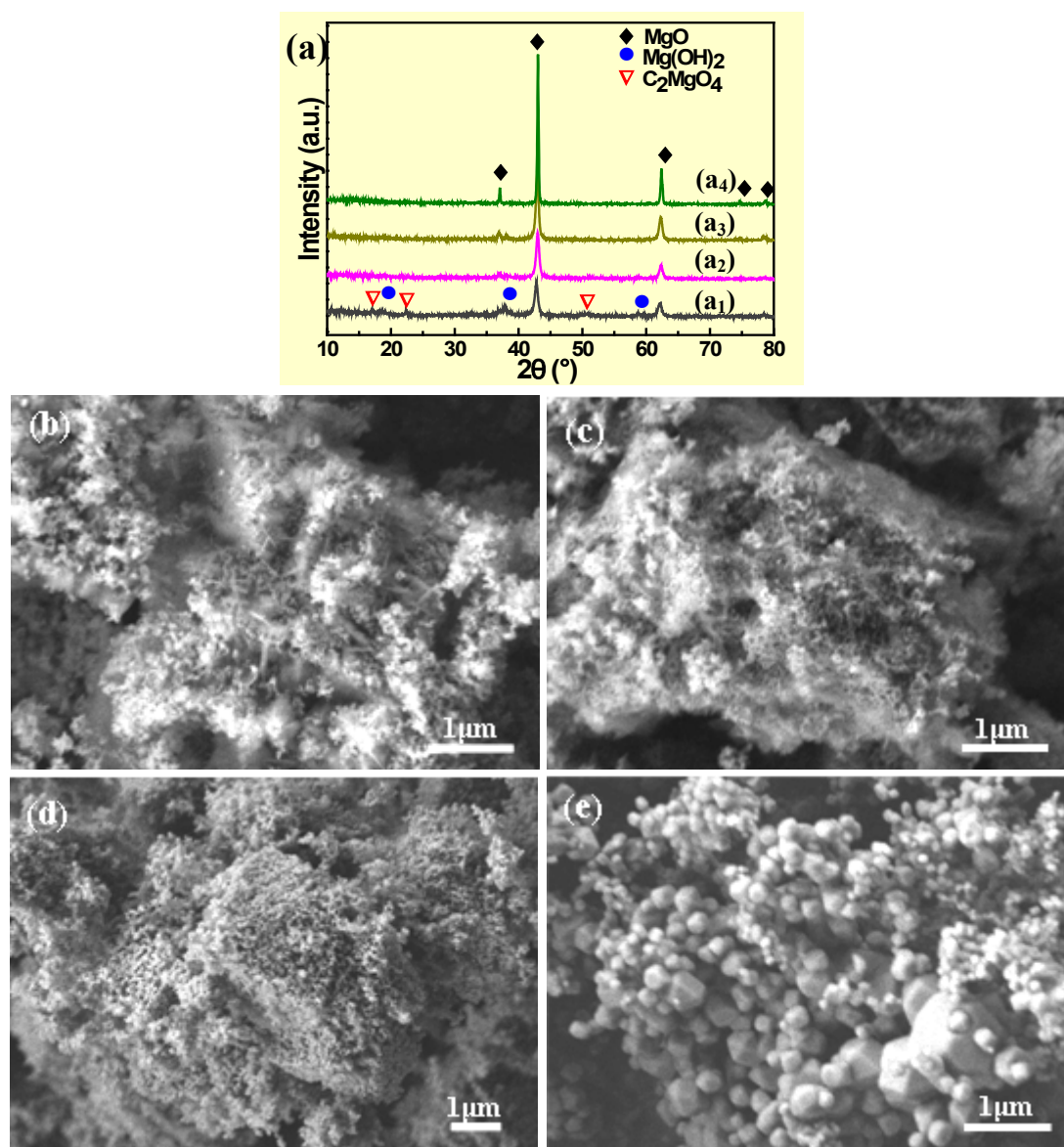


Figure S2. Compositions and morphology of the products calcined by the precursor $\text{MgC}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$ at different temperatures for 2.0 h (heating rate: $2\text{ }^\circ\text{C min}^{-1}$) in the presence of NaCl and NP-9.

Temperature ($^\circ\text{C}$): (a₁, b)-400; (a₂, c)-500, (a₃, d)-650, (a₄, e)-800.

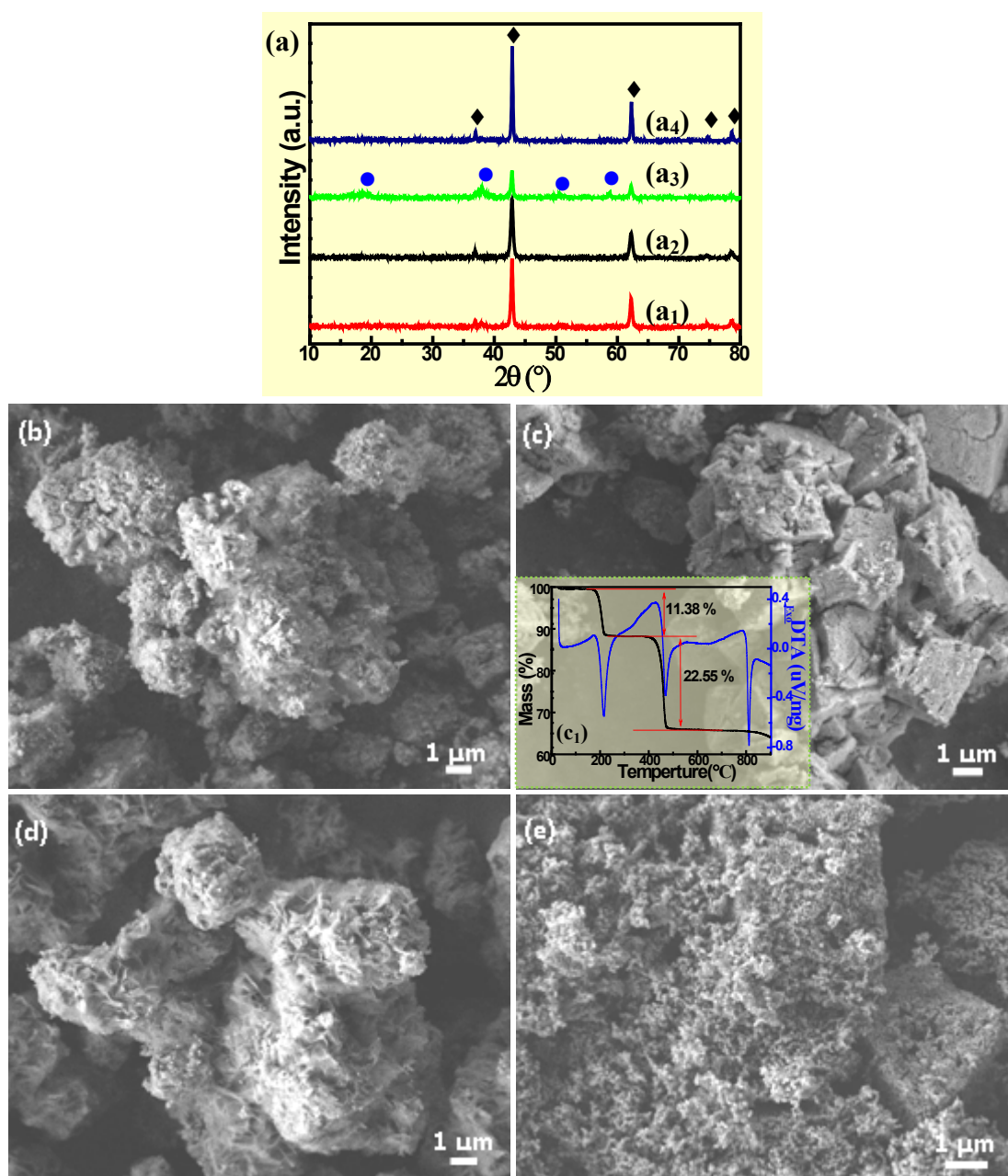


Figure S3. (a) XRD patterns and (b-e) SEM images of the products calcined in the presence of various additives at 650 °C (a₁-a₃,b-d) or 800 °C (a₄,e) for 2.0 h.

Additives: a₁,a₄,b,e-none; a₂,c-NaCl; a₃,d-NP-9. Heating rate: 10 °C min⁻¹. Inset c₁: TG-DTA curves of MgC₂O₄·2H₂O when calcined with NaCl (Molar ratio of NaCl/MgC₂O₄·2H₂O =3:1). ●: Mg(OH)₂ (JCPDS No. 07-0239); ◆: MgO (JCPDS No. 45-0946).