

## Electronic Supplementary Information

Permittivity regulating strategy to achieve high-performance  
electromagnetic wave absorbers with compatibility of  
impedance matching and energy conservation

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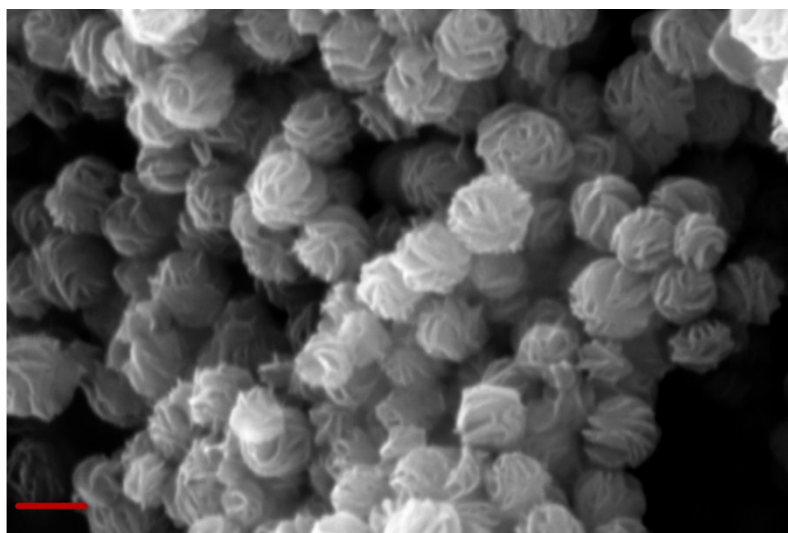
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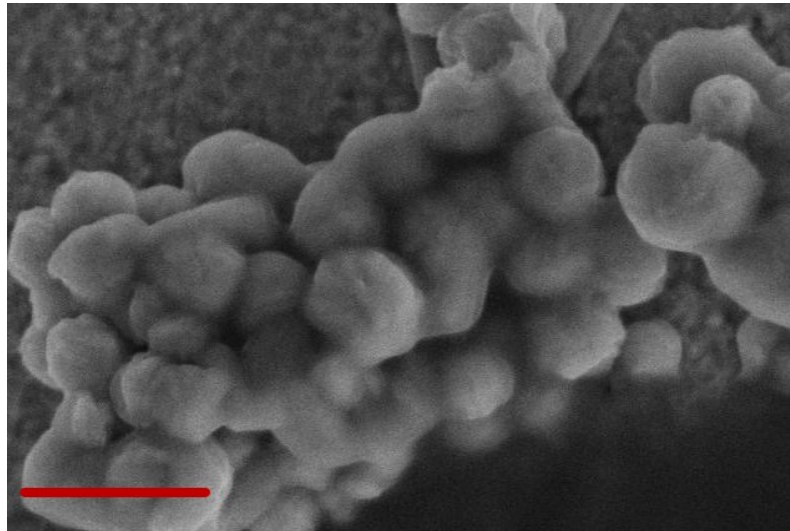
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**Table S1.** Experimental parameters (material, temperature, time, and so on) for the preparation of three MoS<sub>2</sub>/RGO composites.

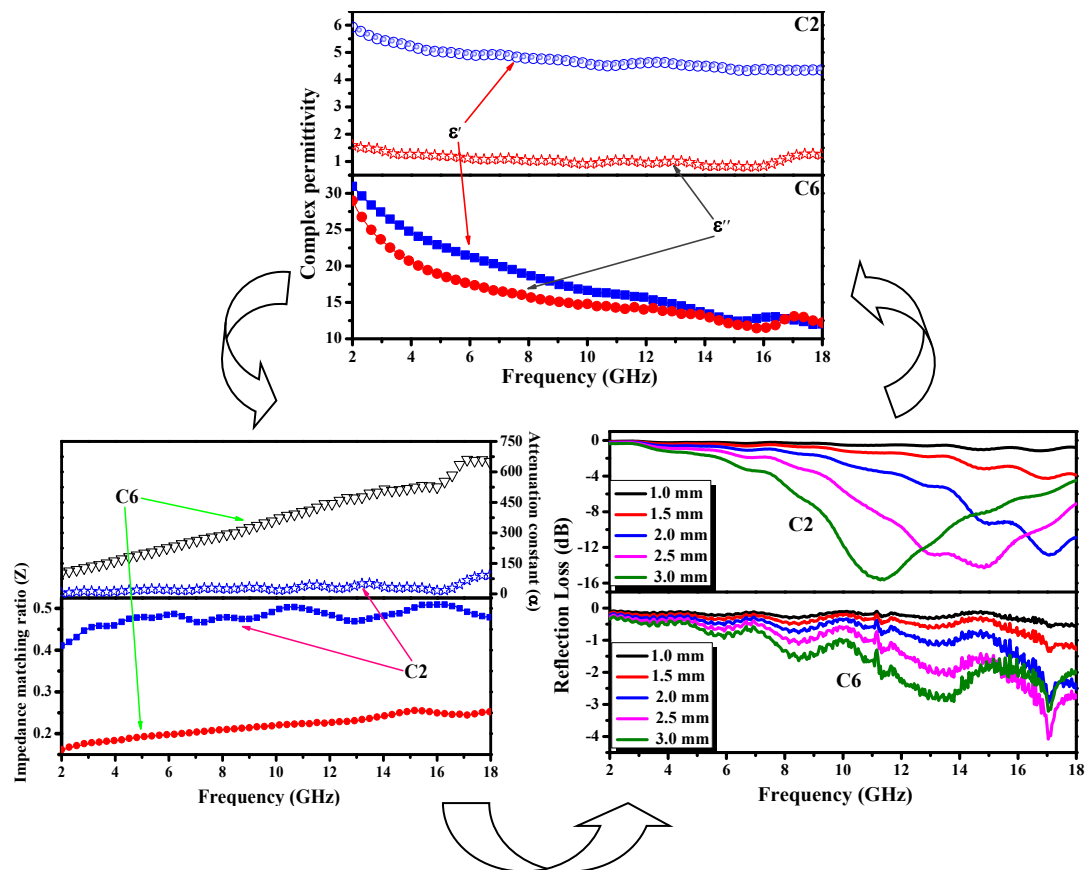
Sample No.	Raw reagents	Hydrothermal conditions
C1	0.2 g MoS <sub>2</sub> + 2 mL GO + 58 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	150 °C, 10 h
C2	0.2 g MoS <sub>2</sub> + 3 mL GO + 57 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
M1	0.2 g MoS <sub>2</sub> + 4 mL GO + 56 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
C3	0.2 g MoS <sub>2</sub> + 5 mL GO + 55 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
M2	0.2 g MoS <sub>2</sub> + 6 mL GO + 54 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
M3	0.2 g MoS <sub>2</sub> + 8 mL GO + 52 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
C4	0.2 g MoS <sub>2</sub> + 10 mL GO + 50 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
C5	0.2 g MoS <sub>2</sub> + 20 mL GO + 40 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	
C6	0.2 g MoS <sub>2</sub> + 30 mL GO + 30 mL H <sub>2</sub> O + 15 mL anhydrous ethanol	



**Figure S1.** SEM images of flower-like MoS<sub>2</sub> spheres. Scale bar is 200 nm.



**Figure S2.** SEM images of MoS<sub>2</sub>/rGO composites synthesized with 20 mL GO. Scale bar is 200 nm.



**Figure S3.** The relationship between complex permittivity, impedance matching, attenuation ability and reflection loss for C2 and C6 samples.