Supporting Information

Upconversion nanoparticles-Ag@C@Ag composite film for rapid temperature

sensing

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Fig. S1. Thermal Gravity Analysis (TGA) of Ag@C@Ag, the measurement temperature range is from room temperature to 300 °C, and the heating rate is 10 °C·min⁻¹



Fig. S2. SEM images of the composite film with different weight ratios of UCNPs to Ag@C@Ag NPs: (a,b) 1:0.25, (c,d) 1:0.5, (e,f) 1:1. (Notes: The volume of UCNPs solution is fixed as 100 μL; UCNPs and Ag@C@Ag NPs have the same concentration of 2 mg·mL⁻¹)