Erratum to: Preparation of gold nanoparticle-loaded silica gels and their localized surface plasmon resonance sensing properties

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There was an error in the original publication of the article in section “Preparation of bulk silica gel”. The corrected text has been presented with this erratum.

Preparation of bulk silica gel

The starting solution composition was TEOS:H₂O:ethanol:EG = 1:4:5:0.2 in molar ratio terms. First, TEOS was mixed with ethanol and EG. Then, a quarter amount of H₂O (pH = 3, adjusted with HCl) was added to the solution. After stirring at 40 °C for 2 h, the remaining water (adjusted to pH = 11 with ammonium solution) was added and stirred at

40 °C for 5 min to enhance gel formation. Subsequently, 200 µL of the sol solution was poured into polypropylene cylindrical containers (diameter, ϕ = 10.4 mm) and aged at room temperature (RT) for 6–9 h and wet gels have been obtained. After further aging at 60 °C for 1 day, the solvent was slowly evaporated for 90 min in the closed containers pierced with pinholes. To prevent cracking during drying, the remaining solvent in the sample pores, mainly water, was exchanged with acetone. Then, 1.5 mL of acetone was added to each container. The containers were sealed and left for 1 day at RT. Acetone was removed and the samples were first dried in air at 60 °C for 1 h, then in vacuum at the same temperature for 1 h and subsequently in air at 120 °C for 24 h. The dry gels were finally heated in air at 500, 600, 700, or 800 °C for 6 h or at 900 °C for 2 h.

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