

Facile method to prepare silver-coated porous silica

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In this research, cheap precursors, sodium silicate, was used to synthesize silver-coated porous silica. Porous silica was synthesized by dropping 10%-H₂SO₄ to well mixing solution containing 5%-sodiumsilicate and 5%-NaCl . H₂SO₄ was continuous dropped until pH 6. Synthesized silica was aged at 80°C for 30min. and then modified with 3-aminopropyltriethoxysilane(APTS). Procedure was followed by adding AgNO₃ and then NaBH₄. Both porous silica and silver-coated porous silica was characterized with BET analyzer, SEM, TEM and XRD.