Surface-Enhanced Raman Scattering-Active Au/SiO_2 Nanocomposites Prepared by Using Sonoelectrochemical Pulse Deposition Methods

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Supporting Information

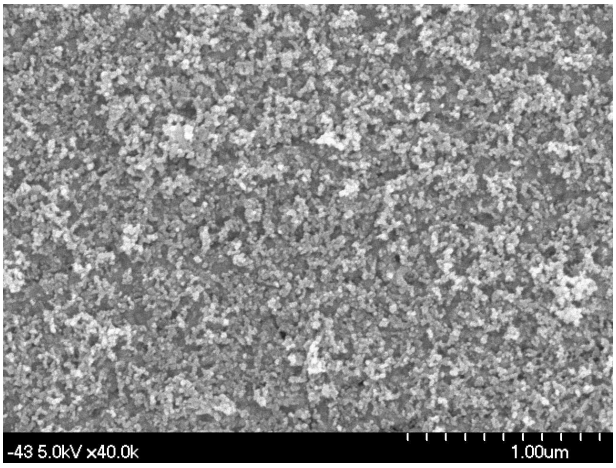

Figure S1. SEM image of SiO_2 NPs-deposited Pt substrate prepared in acidic solutions by using SEPD methods under a cathodic overpotential of 0.6 V and a rest overpotential of 0 V from OCP with a ratio of reaction times of pulse deposition of Au NPs to rest being 0.1; Au/SiO_2 NCs prepared in 0.1 M HCl containing 10 mM SiO_2 NPs (addition before ORCs)

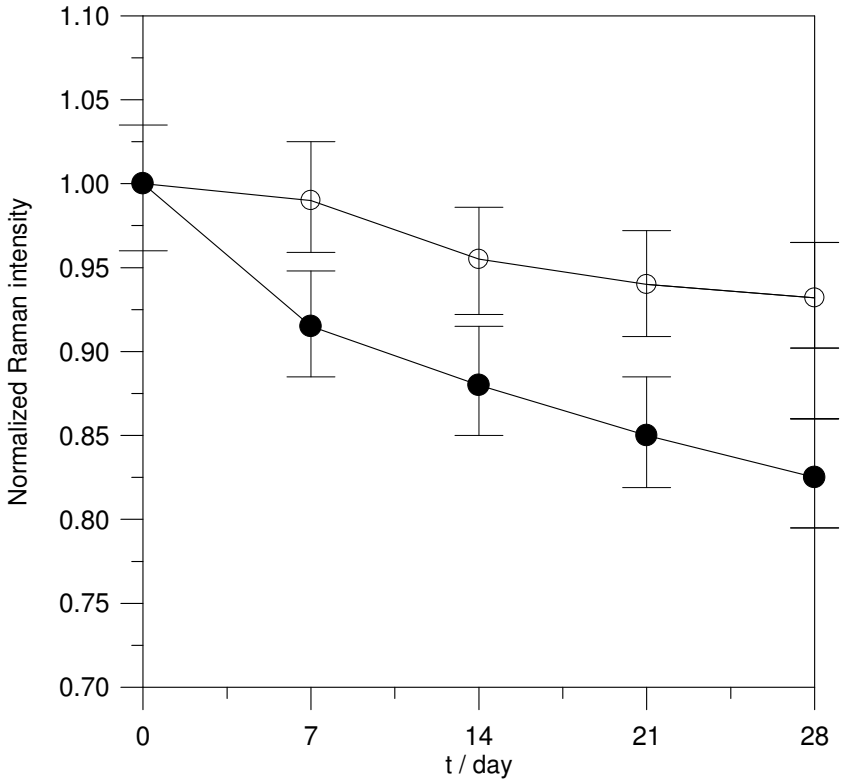

Figure S2. Variation of normalized Raman intensity of R6G adsorbed on Au/SiO_2 NCs-deposited and Au NPs-deposited (blank experiment) Pt substrates in 50% RH and 20% (v/v) O_2 at 30 ^oC for 4 weeks. Open and solid circles representing R6G adsorbed on Au NPs-deposited Pt substrates with and without the modification of SiO_2 NPs (0.1 M KCl containing 1 mM SiO_2 NPs before ORC in preparation), respectively.