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Facile and Controlled Synthesis of the Self-conjugated Ag@IP₆-Micelle Compositions for Surface-enhanced Spectroscopic Application

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Supplementary Information

**Fig. S1.** Structure of Inositol hexakisphosphoric

**Fig. S2.** The color of the (a) Sample 1 and (b) Sample 2. The photos are taken from solutions
**Fig. S3.** The TEM image of the silver product obtained without the IP₆ micelles at the same reaction condition for synthesis of Sample 2

**Fig. S4.** The TEM images of the Ag nanoparticles obtained by the reduction reaction occurring at (a) room temperature (b) 50°C
**Fig. S5.** SERS spectra of R6G (3×10⁻⁷ M) mixed with the product made: (a) at room temperature, (b) at 50°C (c) under boiling (Sample 2)

(A) 1000 μl of 1.0×10⁻³ M (b) HRTEM image (B) SERS spectrum of R6G of 3×10⁻⁵ M mixed with the product from the addition of L-AA about 1000 μl of 1.0×10⁻³ M
Fig. S7. SERS spectra of (a) 2-amino-5-mercapto-1, 3, 4-thiadiazole (5×10^{-5} M) (b) 4-methyl-4H-1, 2, 4-triazole-3-thiol (5×10^{-5} M) (c) 2-mercapto-1-methyl-imidazole (5×10^{-5} M) (d) 4-aminoantipyrine (5×10^{-5} M) mixed with Sample 2

Fig. S8. SERS spectrum of the L-glutathione (3×10^{-5} M) mixed with Sample 2