nanomaterials

Supplementary Materials

Role of Graphene in Constructing Multilayer Plasmonic SERS Substrate with Graphene/AgNPs as Chemical Mechanism—Electromagnetic Mechanism Unit

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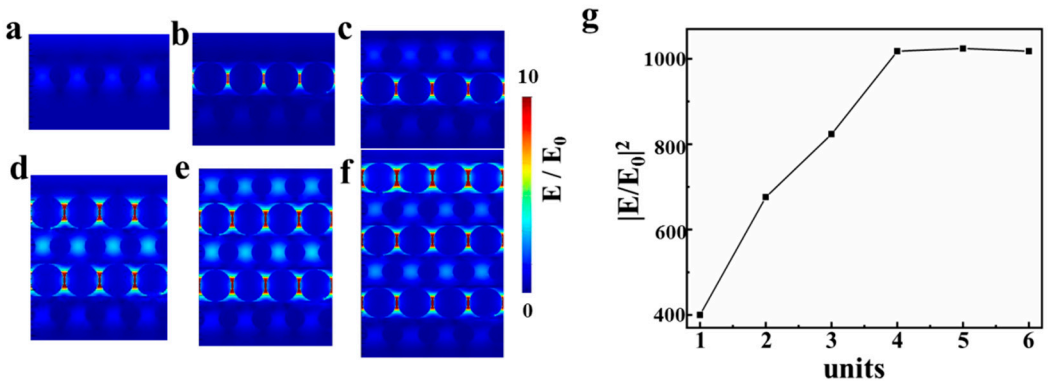

Figure S1. The x-z views of electric field distribution of different number of CM−EM units substrate at 532 nm wavelength: (**a**) one unit, (**b**) two units, (**c**) three units, (**d**) four units, (**e**) five units, (**f**) six units. (**g**) Electric field enhancement ($|E/E_0|^2$) for substrate with different CM−EM units.

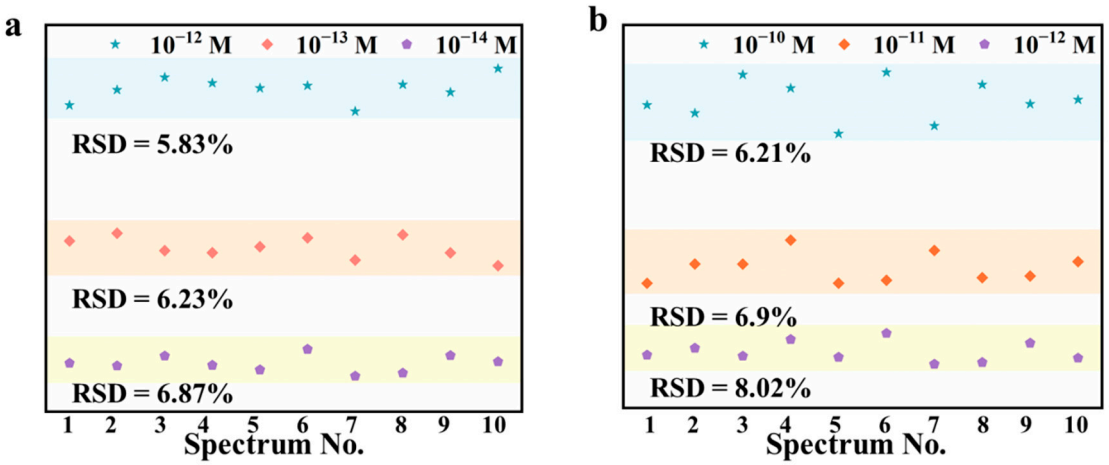

Figure S2. The Raman signal intensity distribution of (**a**) R6G at 613 cm^{-1} and (**b**) CV at 914 cm^{-1} on multilayer substrate with four CM-EM unit respectively from 10^{-12} M to 10^{-14} M and from 10^{-10} M to 10^{-12} M.

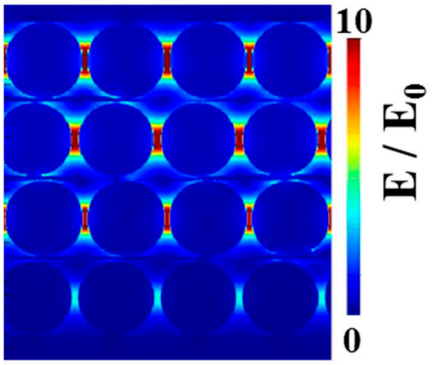

Figure S3. The x−z views of electric field distribution of substrate shifted horizontally.