

Supplementary Information

Disparity-Amplified Chiral SERS Using PSP-LSP Coupling Substrate

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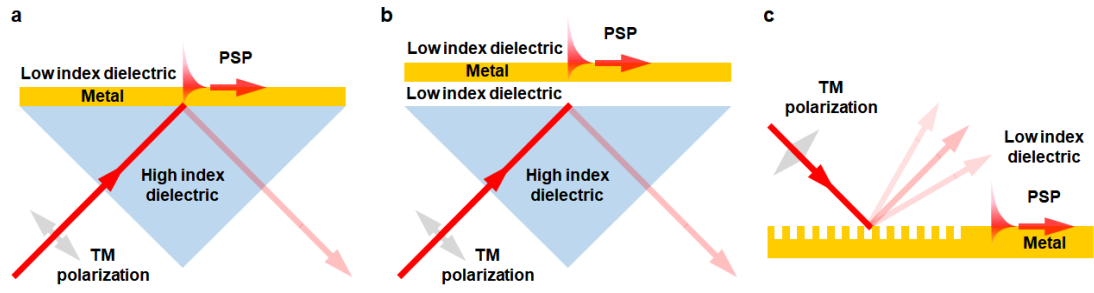


Figure S1. (a) Otto configuration, (b) Kretschmann-Raether configuration, and (c) grating-coupled configuration.

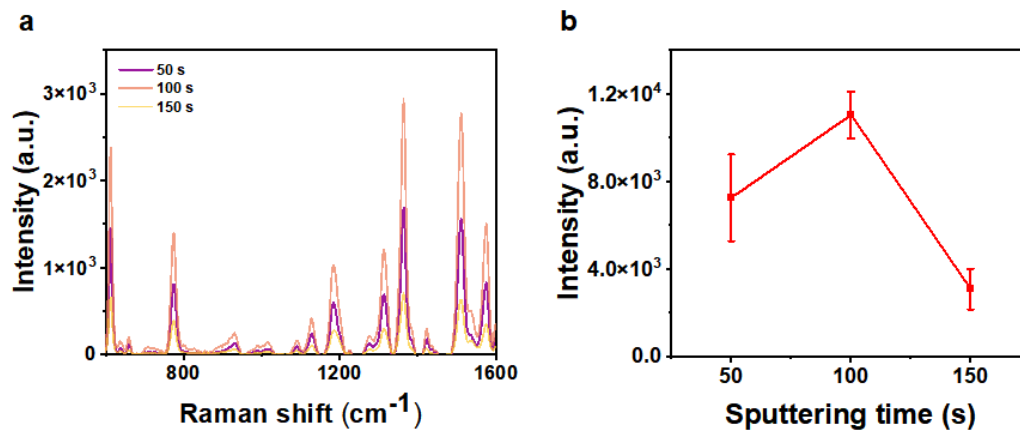


Figure S2. (a) SERS spectra of R6G on LIPSS with gold sputtered for 50 s, 100 s, and 150 s and the corresponding (b) intensities of Raman peak at 610 cm^{-1} .

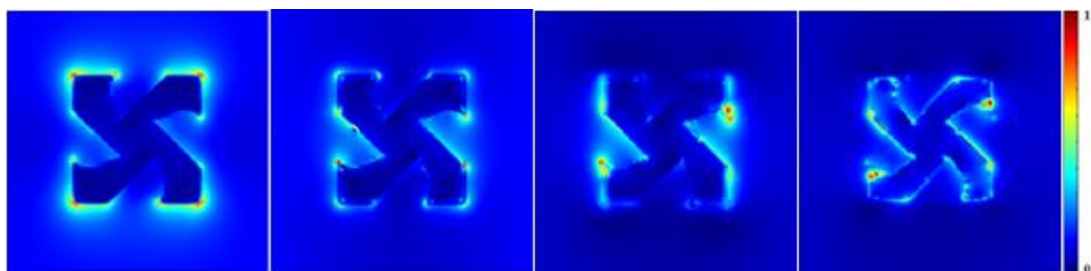


Figure S3. Electric field intensity around 432 helicoid III excited by light with wavelengths of 532 nm, 638 nm, 785 nm, and 1064 nm (from left to right), respectively.

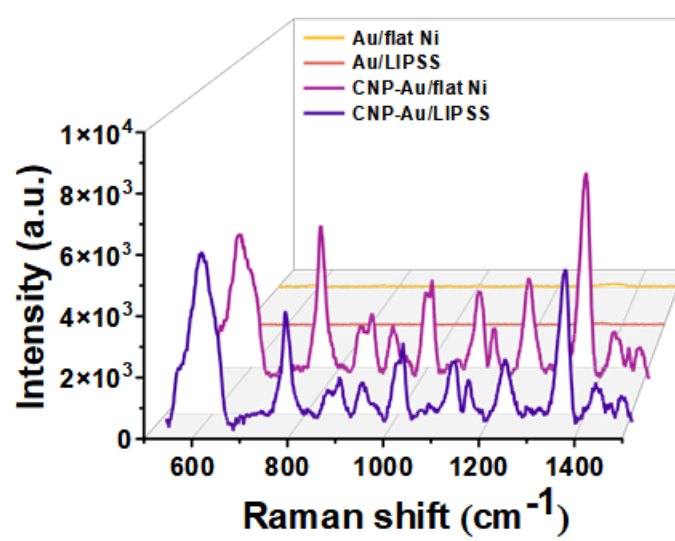


Figure S4. SERS spectra of L-Trp on various substrates.

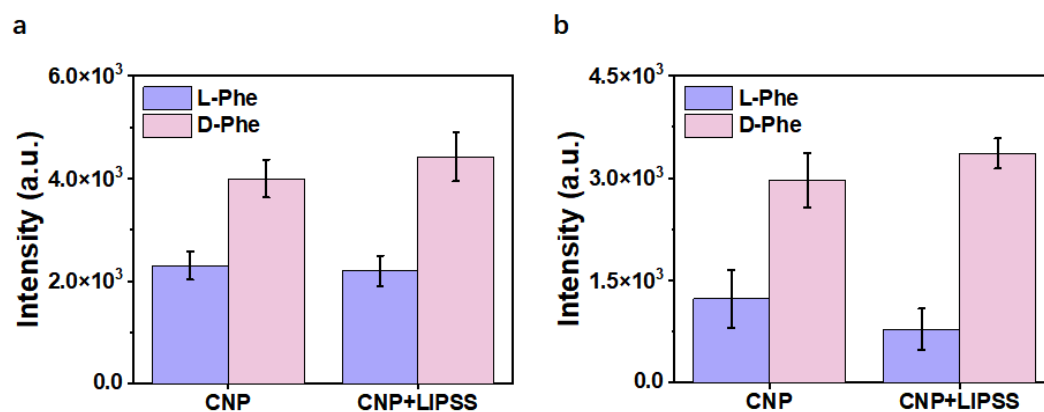


Figure S5. SERS intensities of Raman peak at (a) 1031 cm⁻¹ and (b) 1207 cm⁻¹ of Phe enantiomers on self-assembled CNPs on Au-coated flat Ni sheet and CNP-Au/LIPSS composite substrate, respectively.

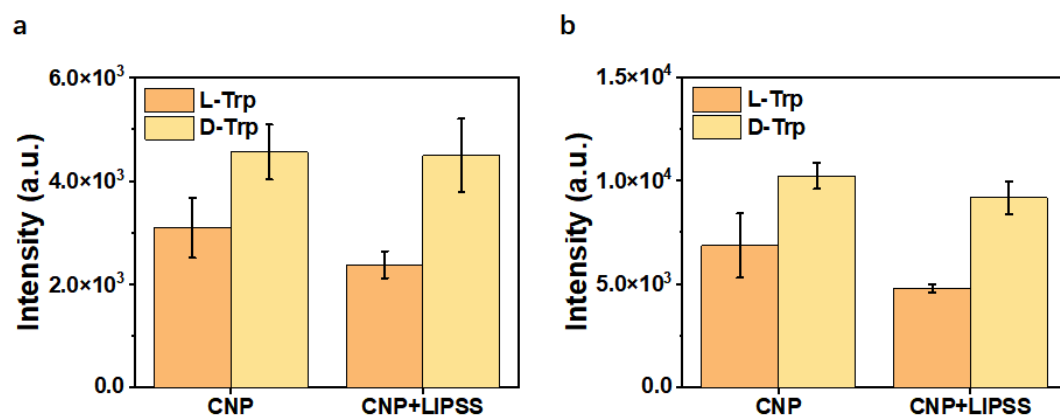


Figure S6. SERS intensities of Raman peak at (a) 1008 cm⁻¹ and (b) 1357 cm⁻¹ of Trp enantiomers on self-assembled CNPs on Au-coated flat Ni sheet and CNP-LIPSS composite substrate, respectively.