

Vibrational Analysis and Concentration Dependent SERS Study of Cefoperazone

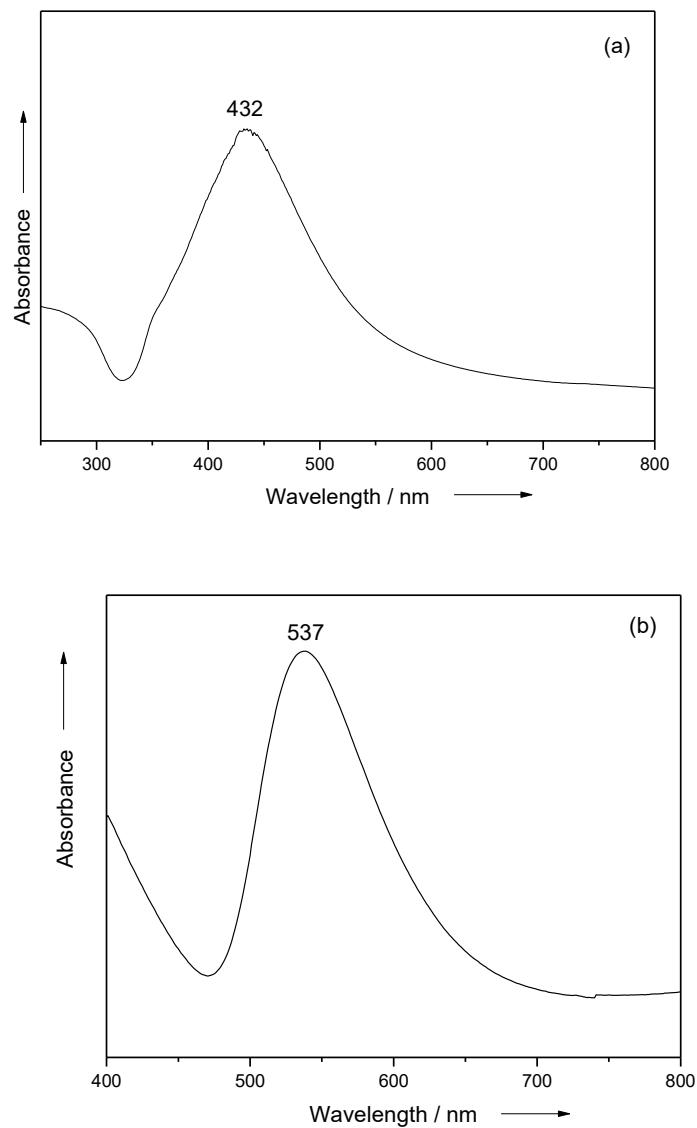


Figure S1. The UV-VIS absorption spectrum of silver (a) and gold (b) colloid.

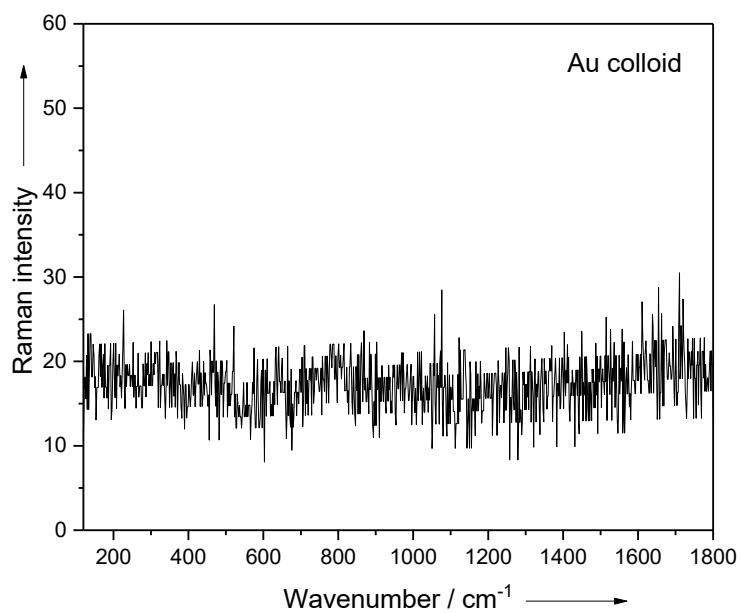
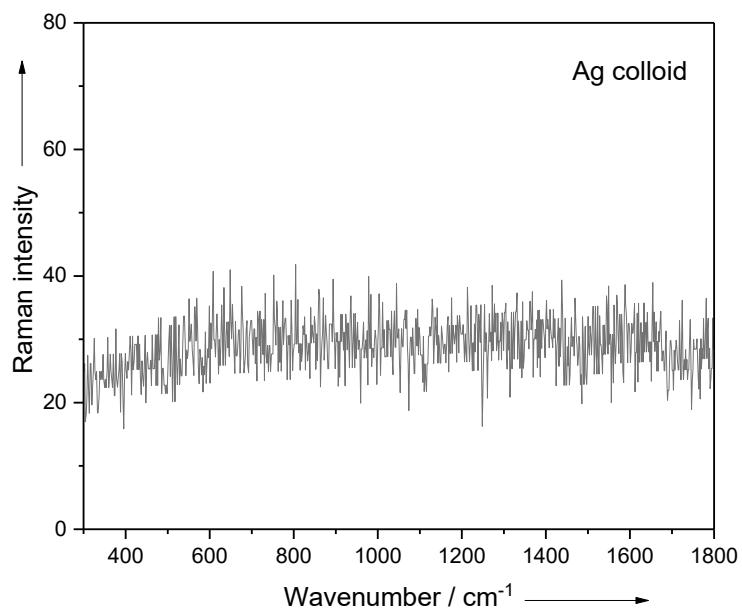


Figure S2. The Raman spectrum of silver and gold colloids.

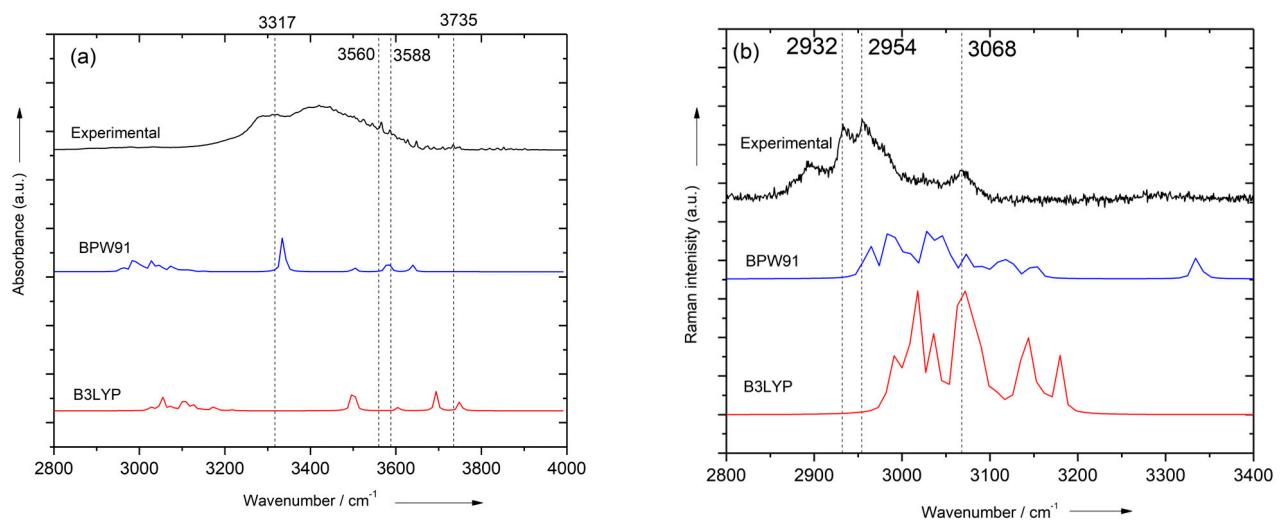


Figure S3. Experimental and theoretical (BPW91 and B3LYP) FT-IR **(a)** and Raman **(b)** spectra of cefoperazone in the high wavenumber region.