Supporting Information

Optofluidic Sensing from Inkjet-Printed Droplets: the Enormous Enhancement by Evaporation-Induced Spontaneous Flow on Photonic Crystal Biosilica

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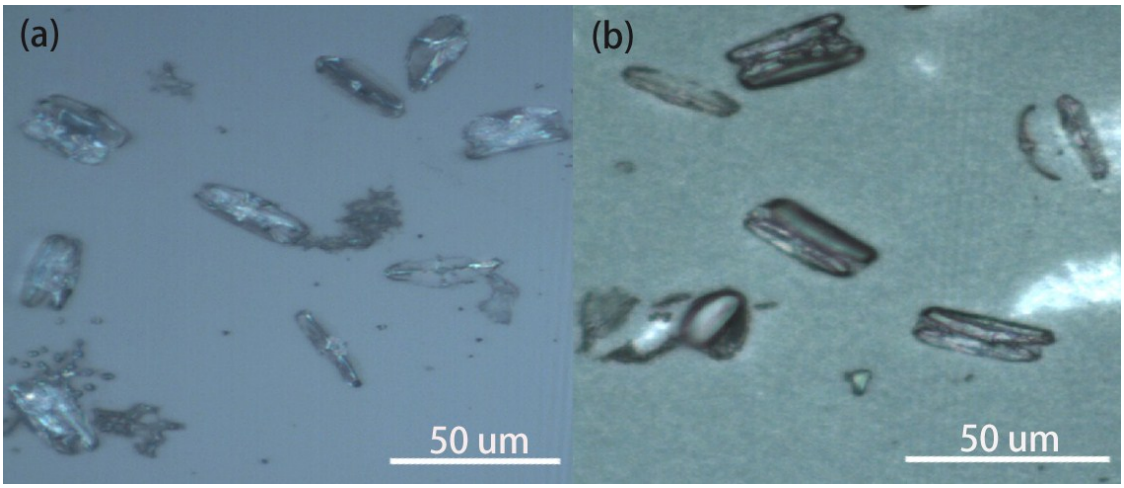

Figure S1 The microscopic optical images of the diatom frustules (a) and diatom-Ag NPs after inkjet-printing (b).

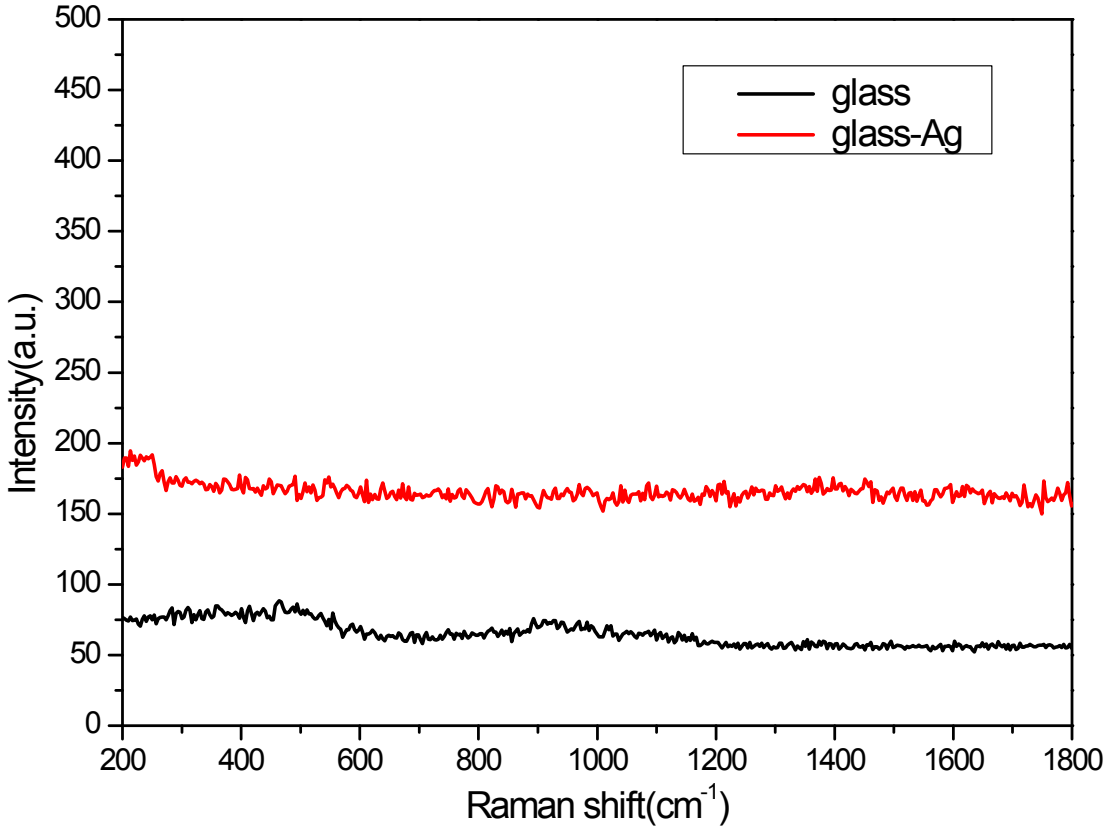

Figure S2 Raman spectra of glass and glass-Ag NPs.

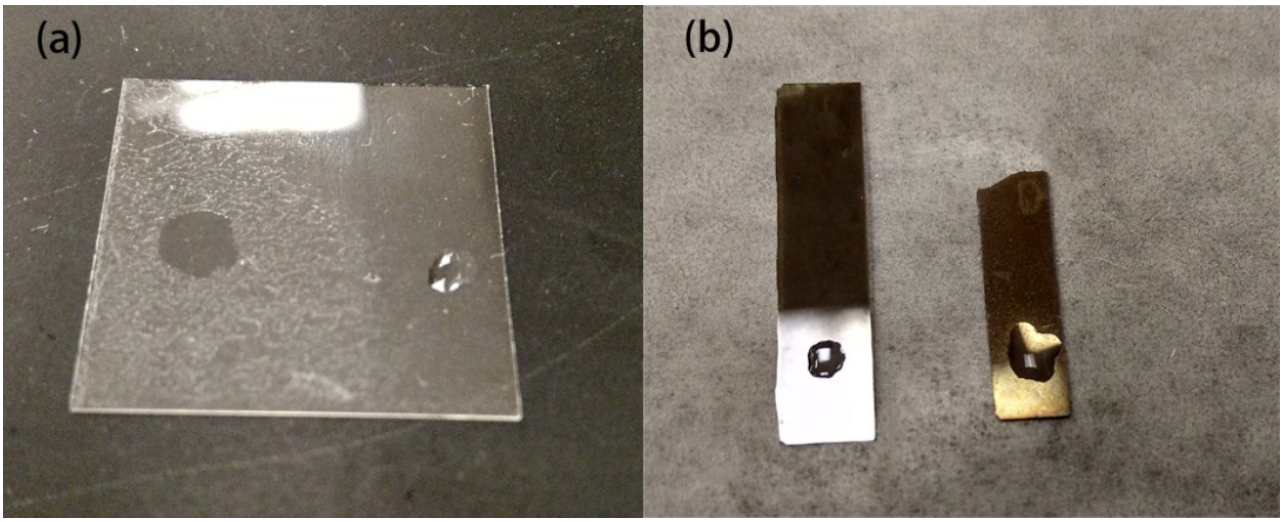

Figure S3 Image of 2 μL droplet of water on glass with and without diatom (a) and on glass-Ag NPs and diatom-Ag NPs SERS substrate (b).

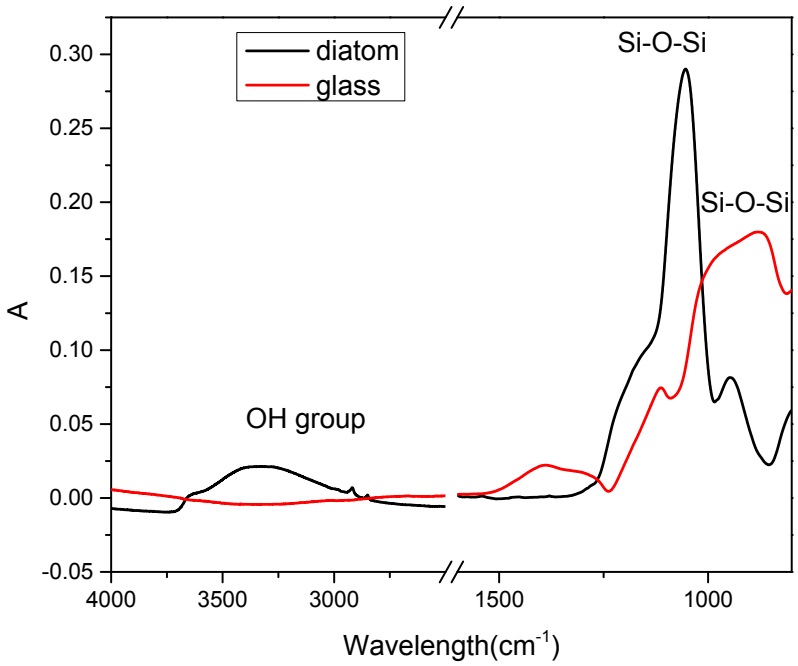

Figure S4 FTIR spectra of glass and glass-diatom.

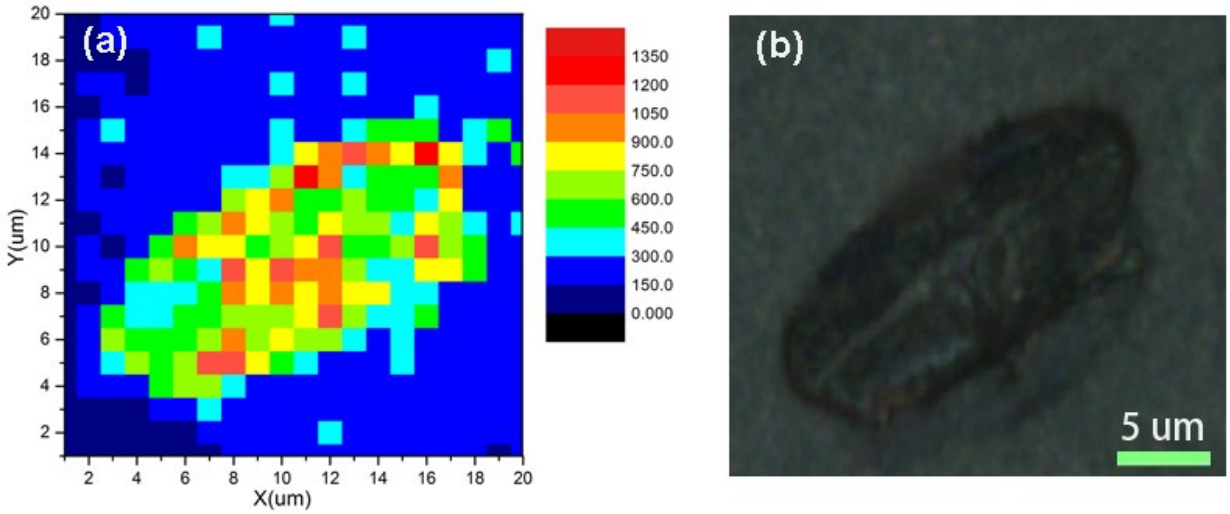

Figure S5 Raman mapping image of 400 droplets TNT (10^{-5} M) on a single diatom SERS substrate (a) and the corresponding microscopy image (b).