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## Exploring Copper Nanostructures as Highly Uniform and Reproducible Substrates for Plasmon-Enhanced Fluorescence

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**Figure S1.** AFM images from a CuR for distinct areas: a) 50  $\mu$ m x 50  $\mu$ m and b) 1  $\mu$ m x 1  $\mu$ m. c) Profile extracted from the AFM image shown in (b) (green line).



**Figure S2.** SERRS and SEF spectra recorded using 633 nm excitation laser line for 10 nm PVD film of AzoPTCD onto CuR.



**Figure S3.** Microscope images for CuNS film with the laser beam focused with 0% and 100% opened by the beam expander. In 0% opened, the laser is tightly focused while 100% indicates it is a defocused beam.



**Figure S4.** (a) EDX obtained with beam energy of 12 KeV and (b) XRD pattern for Cu film onto Si, respectively. The Cu films was electrodeposited from an electrolyte containing 0.019 mol dm<sup>-3</sup> of CuSO<sub>4</sub>, 0.170 mol dm<sup>-3</sup> of NiSO<sub>4</sub> and 0.19 mol dm<sup>-3</sup> of Na<sub>3</sub>C<sub>6</sub>H<sub>5</sub>O<sub>7</sub>.