

## Supplementary Information

### Decoration of silicon nanostructures with copper particles for simultaneous selective capture and mass spectrometry detection of His-tagged model peptide

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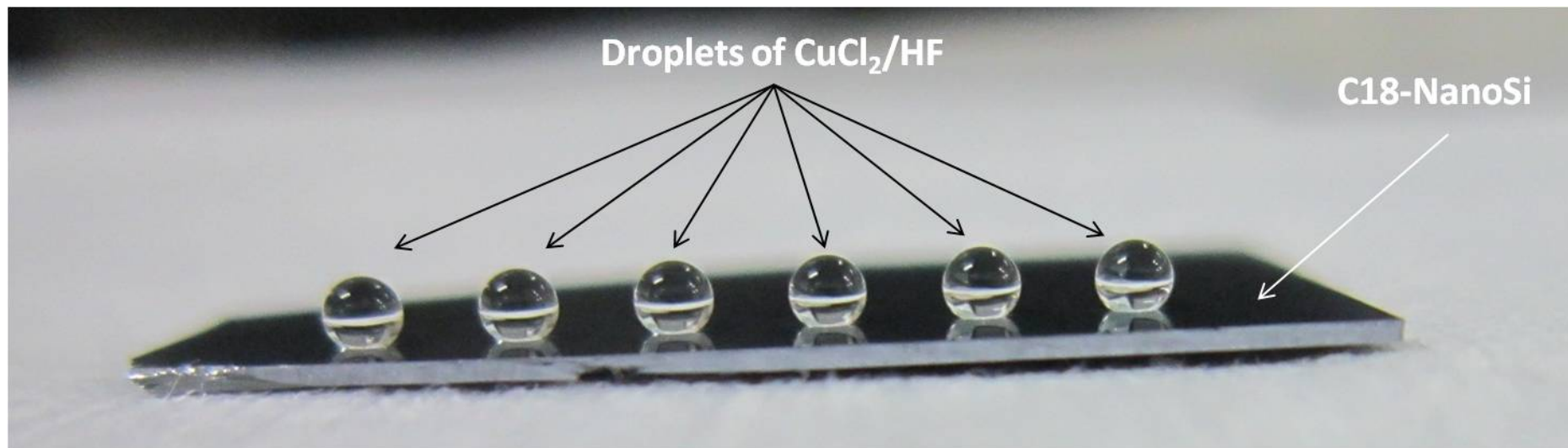
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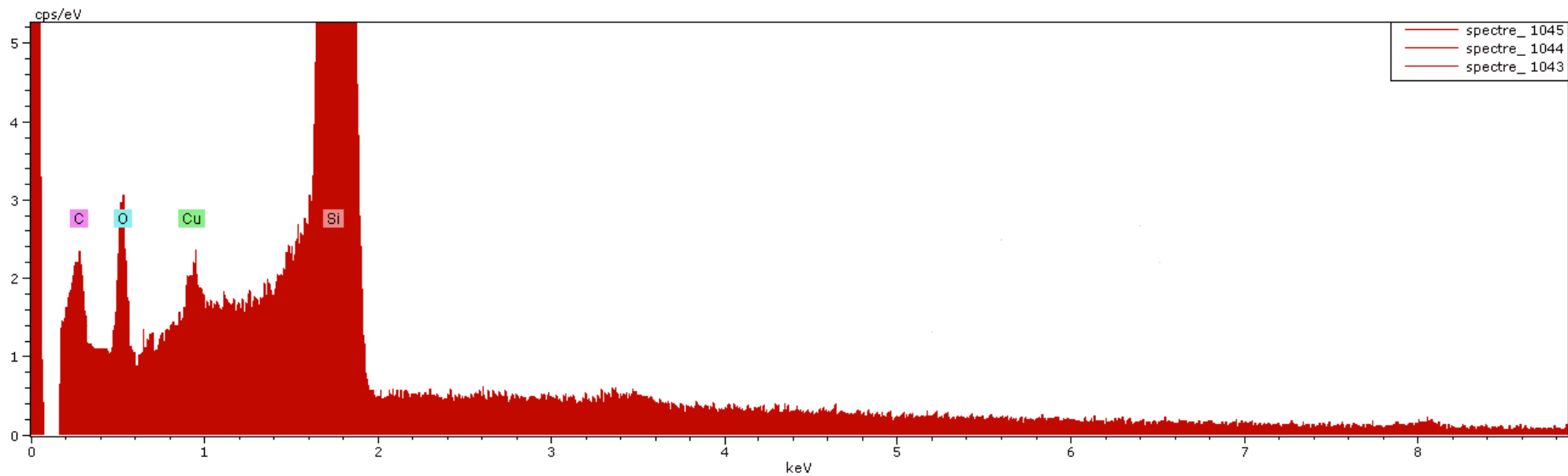
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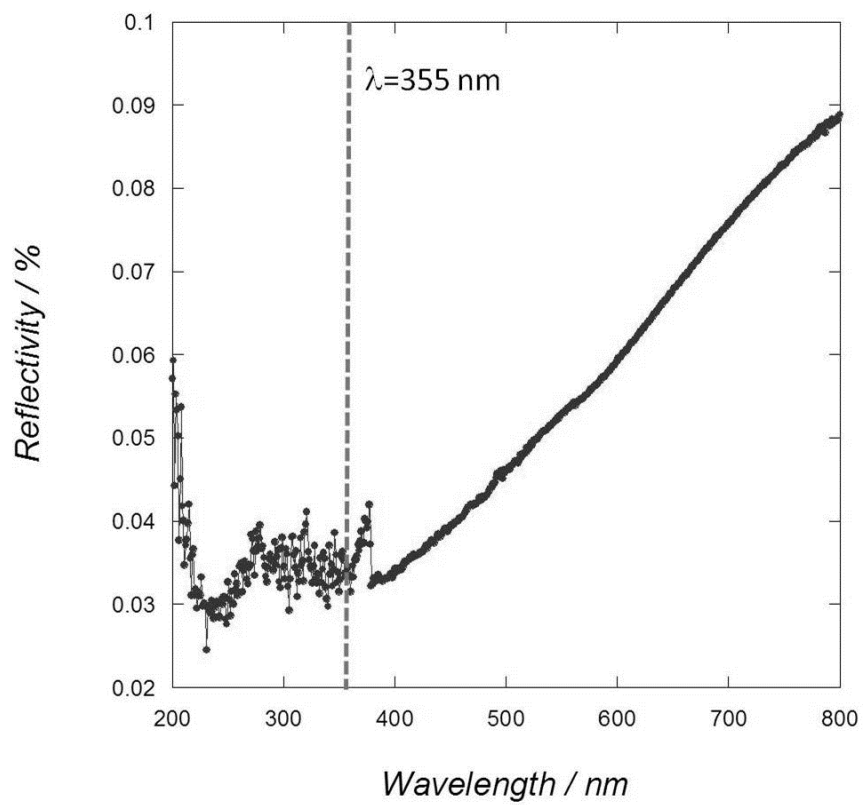
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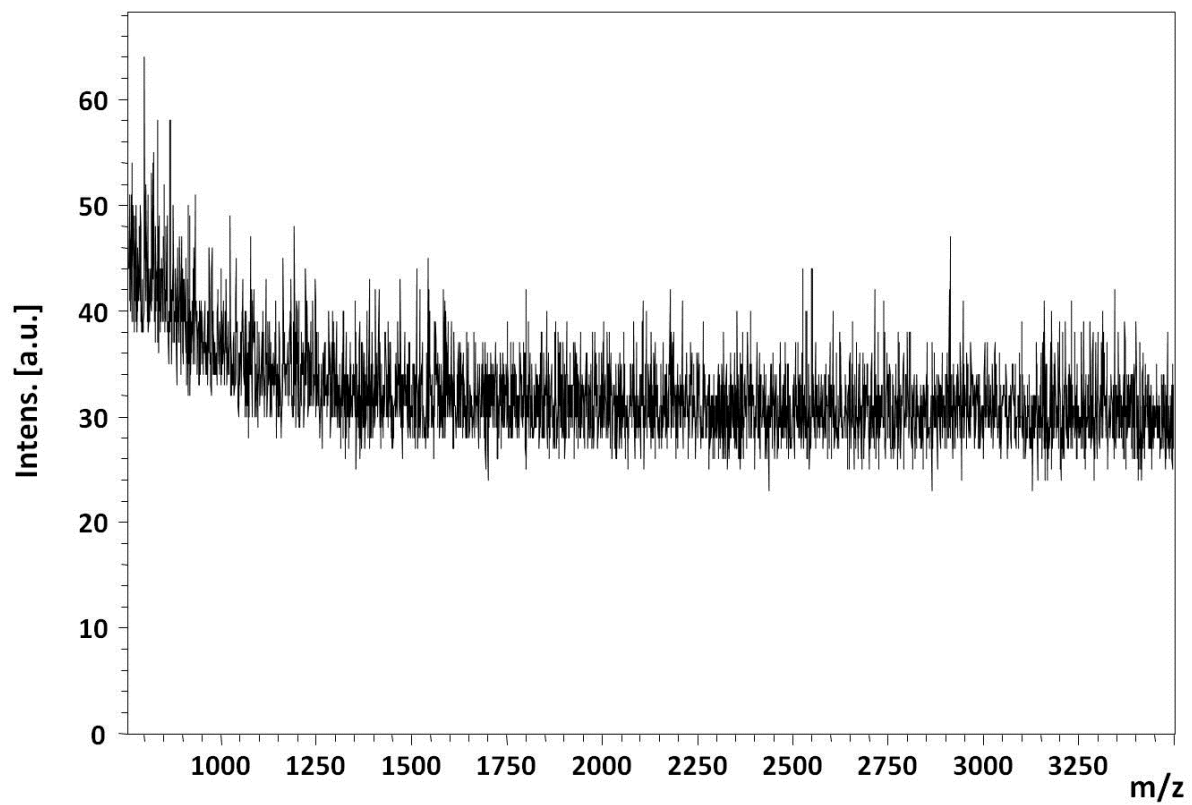
**Figure S1:** Picture of  $\text{CuCl}_2/\text{HF}$  droplets confined in superhydrophilic zones.



**Figure S2:** EDX analysis of silicon nanostructures decorated by Cu particles.



**Figure S3:** Reflectivity spectrum of the Cu-NanoSi surface.



**Figure S4:** Mass spectra of His-DAB in FBS solution (20%) with imidazole (50 mM in PBS).