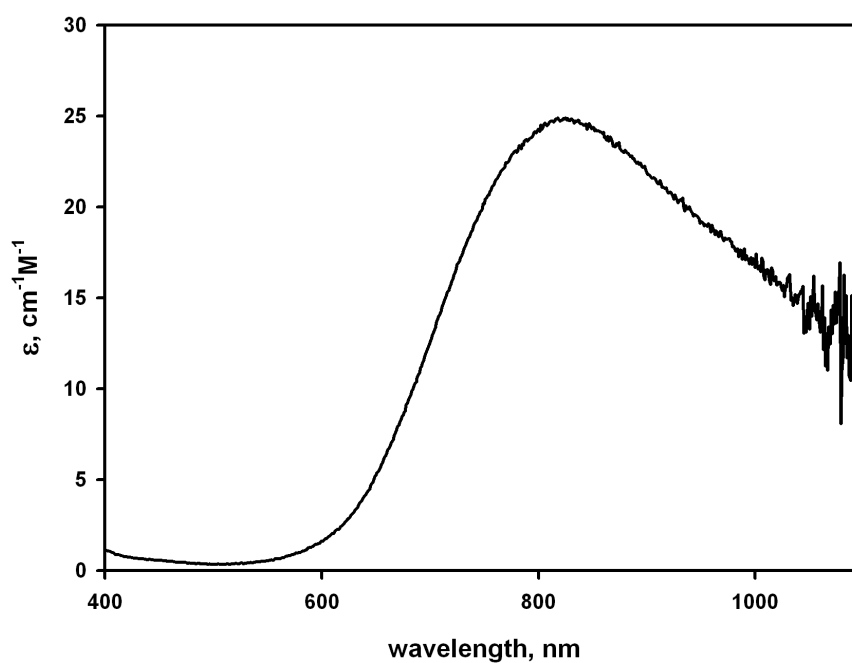


## Electronic Supplementary Material

### Monolayers of polyethylenimine on flat glass: a versatile platform for cations coordination and nanoparticles grafting in the preparation of antibacterial surfaces

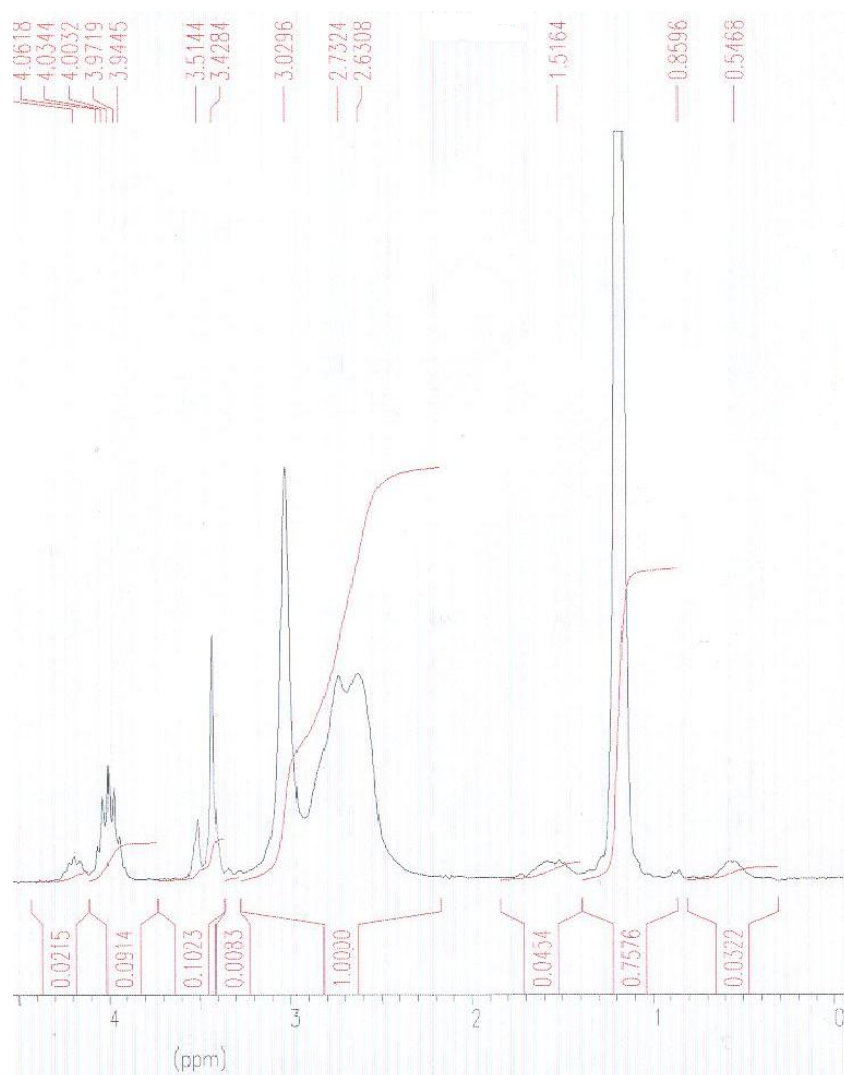
Giacomo Dacarro,<sup>\*a</sup> Lucia Cucca,<sup>b</sup> Pietro Grisoli<sup>c</sup>, Piersandro Pallavicini,<sup>\*d</sup> Maddalena Patrini<sup>a</sup> and Angelo Taglietti<sup>d</sup>

**Fig.S1. UV-Vis spectrum of copper trifluoromethanesulfonate ( $10^{-3}M$ ) in ethanol**



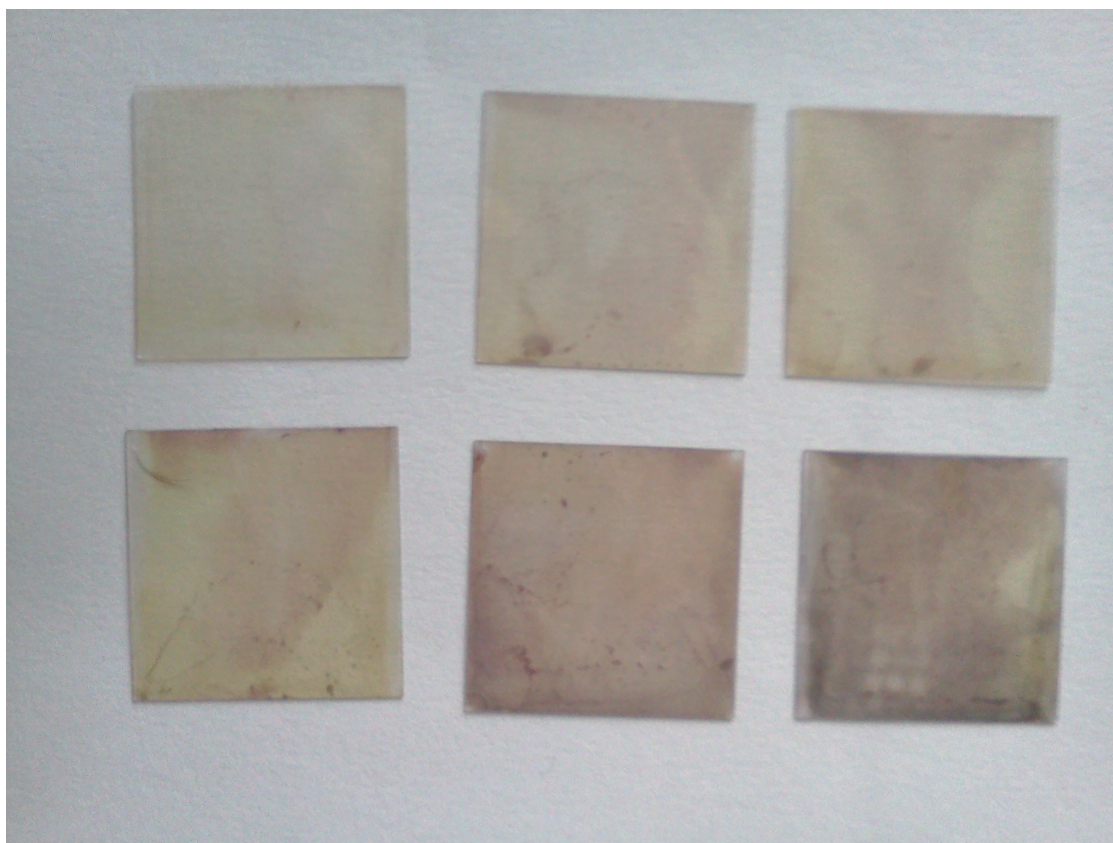
**Fig.S2.  $^1\text{H-NMR}$  spectrum of PEI-silane**

$^1\text{H-NMR}$  spectrum was recorded in  $\text{CDCl}_3$ . Commercial PEI-silane is a 50%v solution in isopropanol.



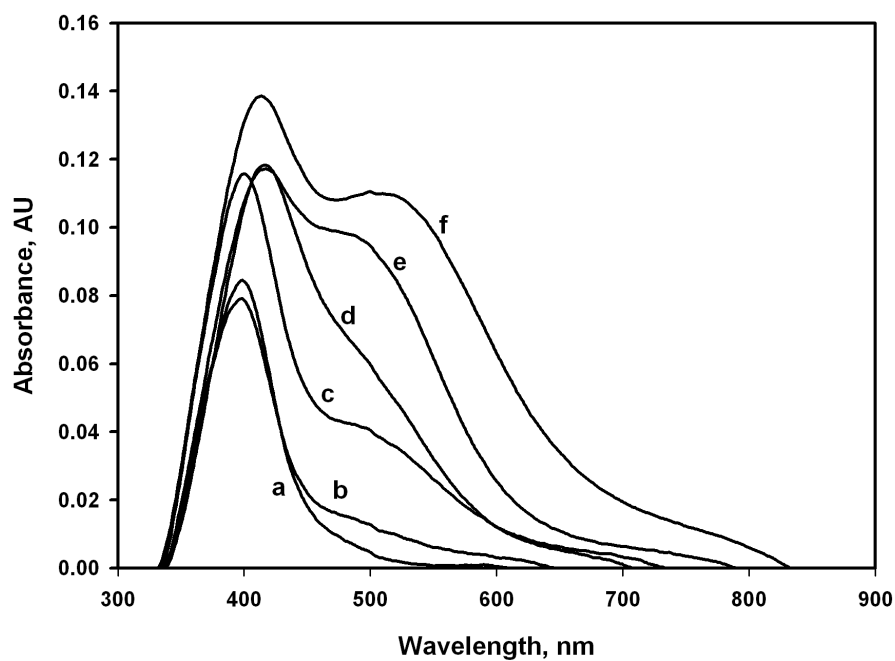
Signal at 0.55 ppm is assigned to the  $\text{CH}_2\text{-Si}$  protons and it has been used to calculate the ratio between the propylsilane moieties and the ethylamino monomers (signals in the 2.5-3.2 ppm region).

**Fig. S3. Pictures of SURF-PEI-NP glasses prepared at different immersion times**



SURF-PEI-NP glasses prepared with immersion times of 15 min, 30 min, 60 min (from left to right, first row), 90 min, 120 min and 18 hours (from left to right, second row).

**Fig. S4. Spectra of SURF-PEI-NP at different immersion times, after background subtraction**



Background-corrected UV-Vis spectra as a function of dipping time (a: 15 min, b: 30 min, c: 60 min, d: 90 min, e: 120 min, f: 18 hours) on **SURF-PEI-NP** modified glasses.