Supporting information for:

Preparation of Antibacterial Surfaces by Hyperthermal Hydrogen Induced Cross-linking of Polymer Thin Films

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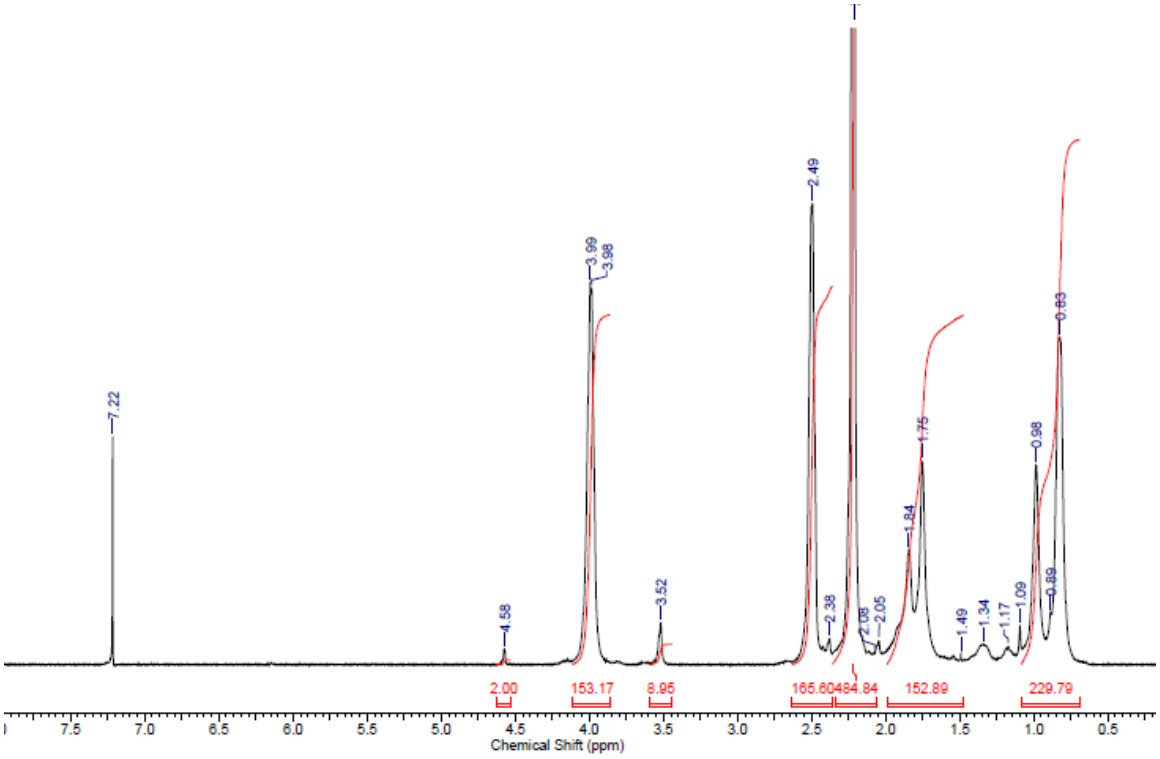

Figure S1. ^{1}H NMR spectrum of PDMAEMA ($CDCl_3$, 400 MHz).

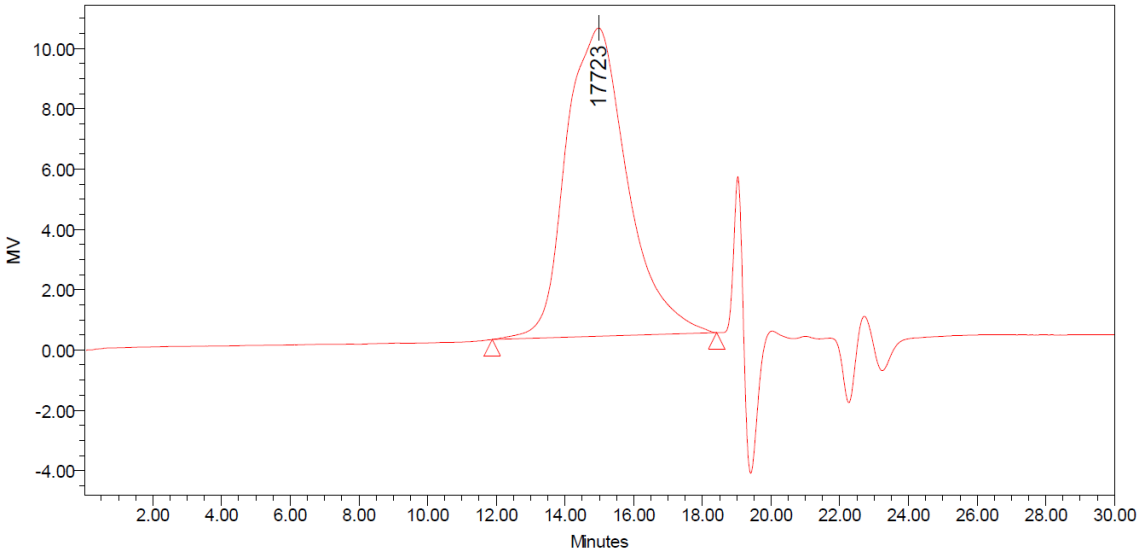

Figure S2. Size exclusion chromatogram of PDMAEMA (differential refractive index detection)

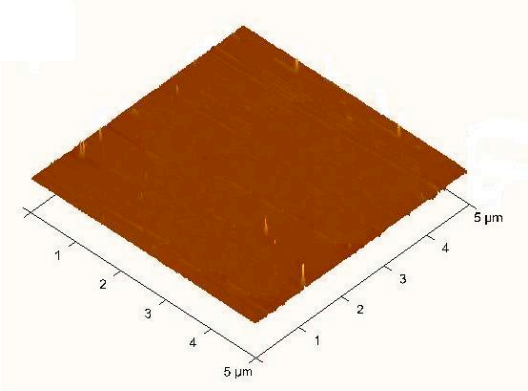

Figure S3. AFM image of ODTS/silicon wafer.

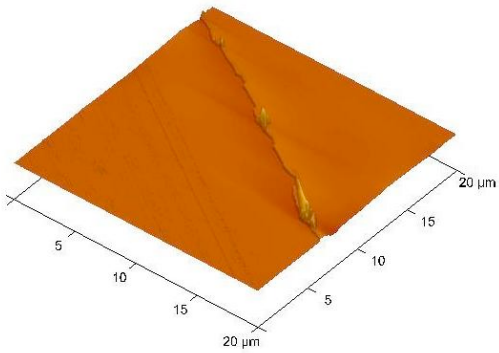

Figure S4. AFM image of PDMAEMA/ODTS/silicon wafer. A film thickness of ~20 nm was measured as the average height difference between the film (top right) and the scratch (lower left).

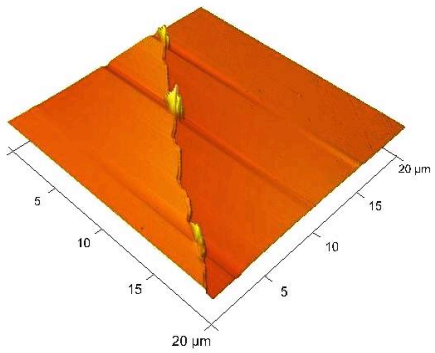

Figure S5. AFM image of PDMAEMA/ODTS/silicon wafer cross-linked for 30 s. A film thickness of ~20 nm was measured as the average height difference between the film (left) and the scratch (right).

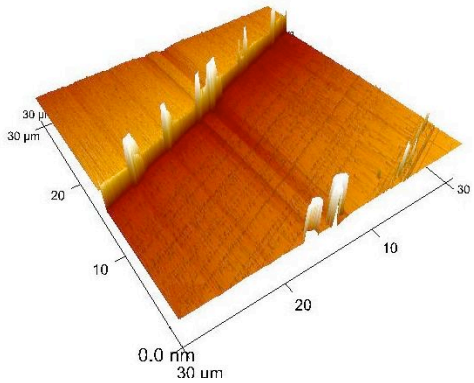

Figure S6. AFM image of PDMAEMA/ODTS/silicon wafer cross-linked for 180 s. A film thickness of ~20 nm was measured as the average height difference between the film (top left) and the scratch (bottom right).

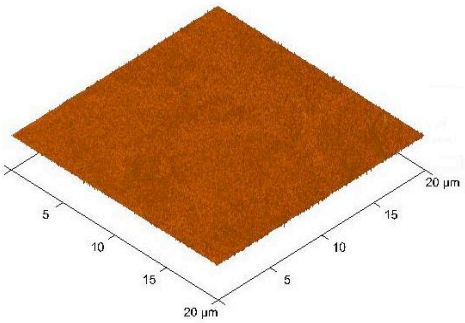

Figure S7. AFM image of uncross-linked PDMAEMA/ODTS/silicon wafer following immersion and sonication in CH_2Cl_2/NEt_3, showing that the film was removed.

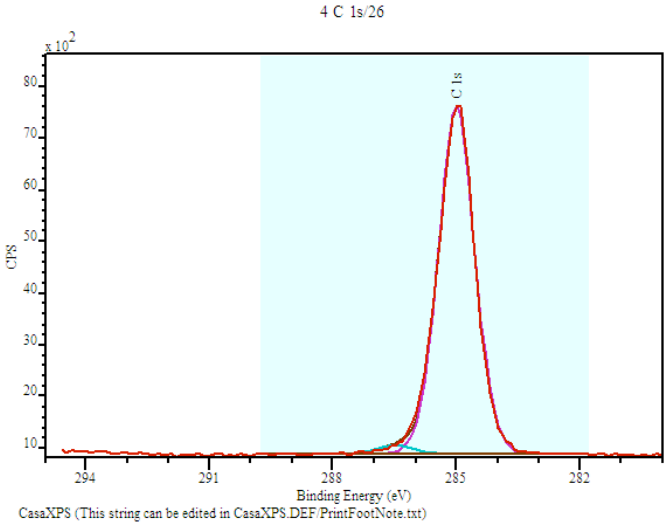

Figure S8. High resolution C 1s XPS spectrum of ODTS/silicon wafer

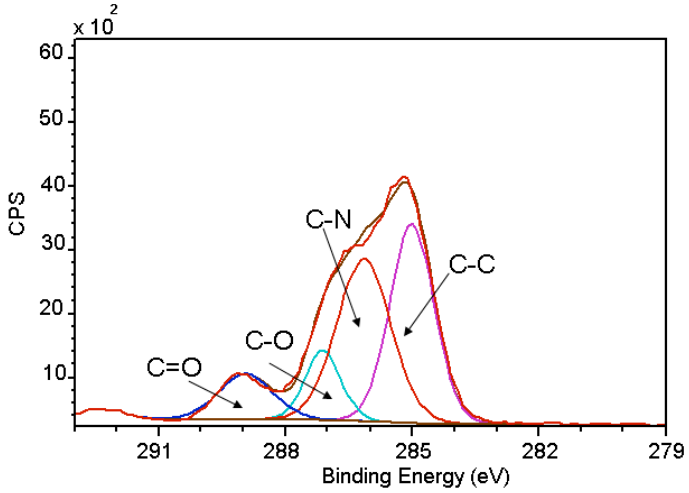

Figure S9. High resolution C 1s XPS spectrum of HHIC treated PDMAEMA/ODTS/silicon wafer (30 s) - washed.

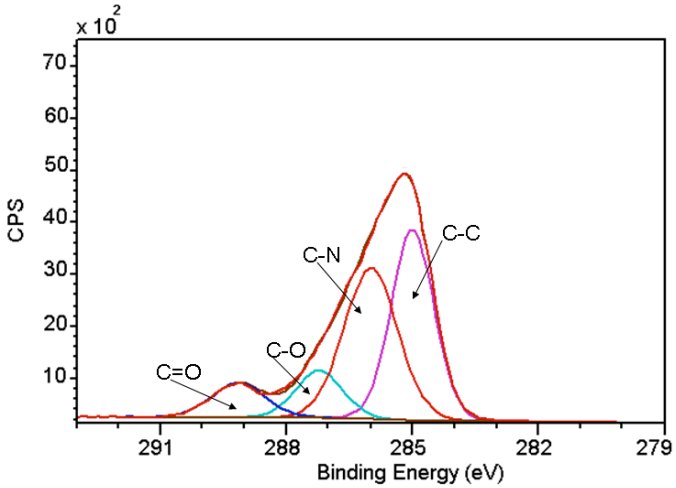

Figure S10. High resolution C 1s XPS spectrum of HHIC treated PDMAEMA/ODTS/silicon wafer (180 s) - washed.

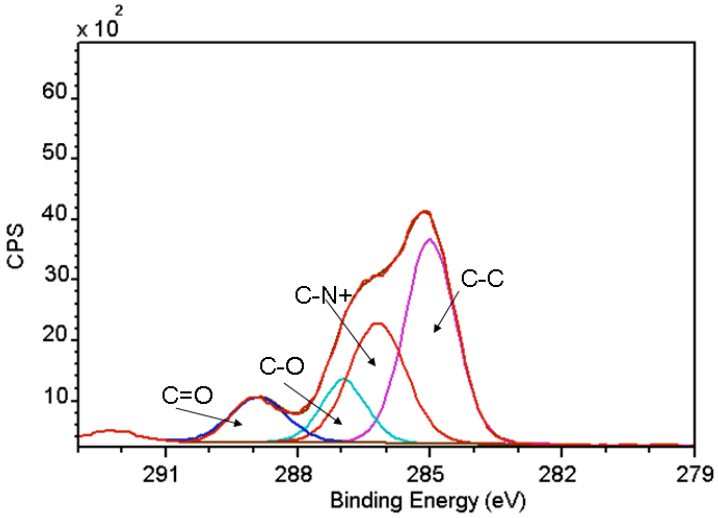

Figure S11. High resolution C 1s XPS spectrum of quaternized PDMAEMA/ODTS/silicon wafer (30 s).

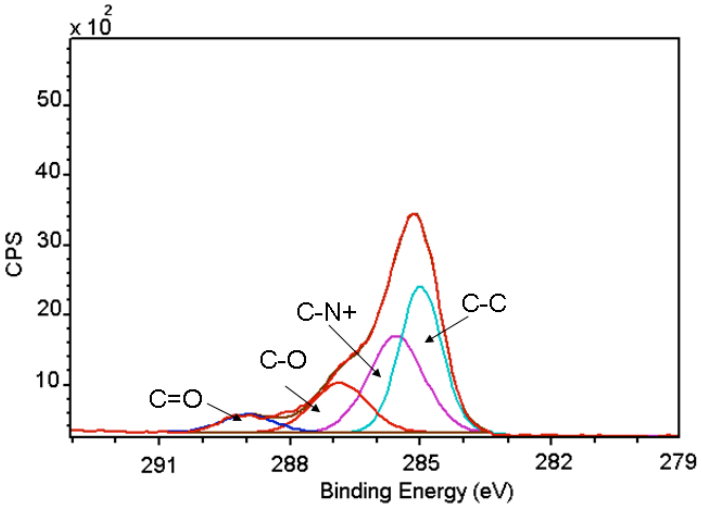

Figure S12. High resolution C 1s XPS spectrum of quaternized PDMAEMA/ODTS/silicon wafer (180 s).

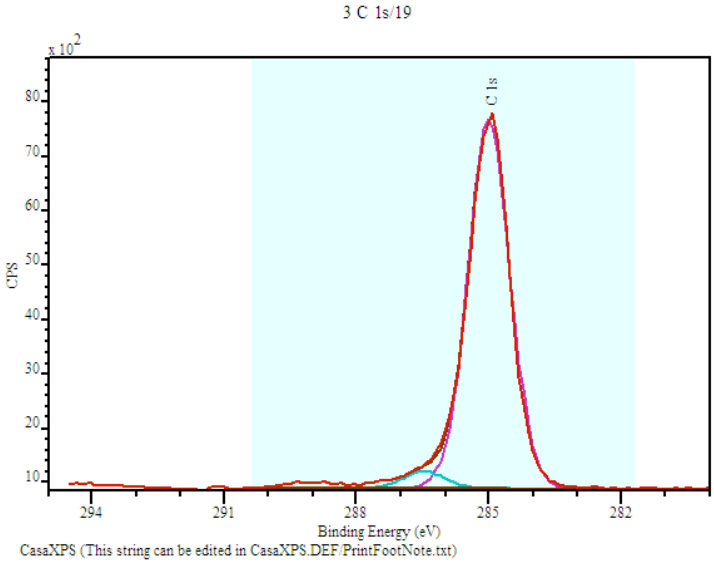

Figure S13. High resolution C 1s XPS spectrum of PDMAEMA/ODTS/silicon wafer - washed.

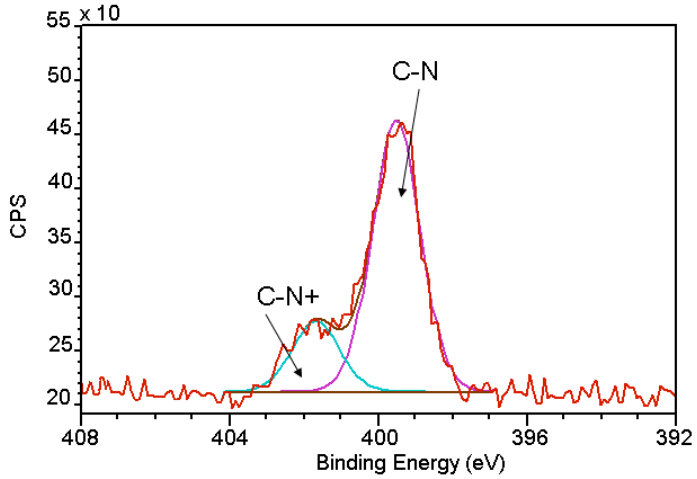

Figure S14. High resolution N 1s XPS spectrum of HHIC treated PDMAEMA/ODTS/silicon wafer (30 s)

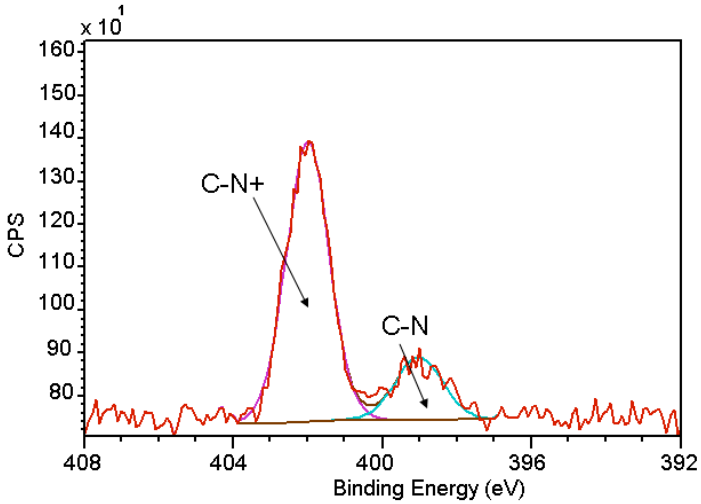

Figure S15. High resolution N 1s XPS spectrum of quaternized PDMAEMA/ODTS/silicon wafer (30 s)

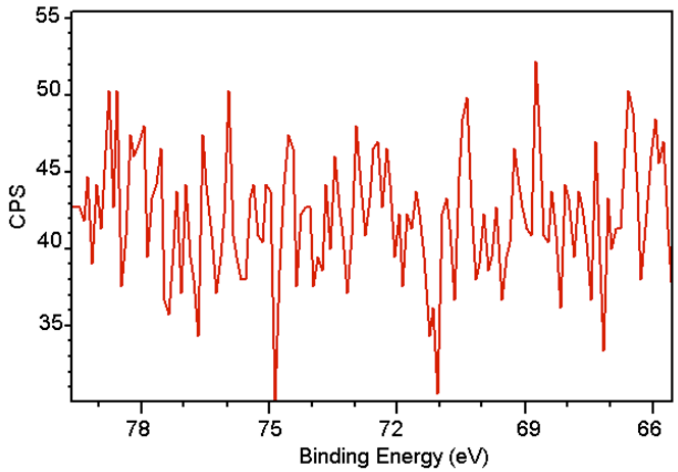

Figure S16. Representative high resolution Br 3d XPS spectrum of an unquaternized surface.

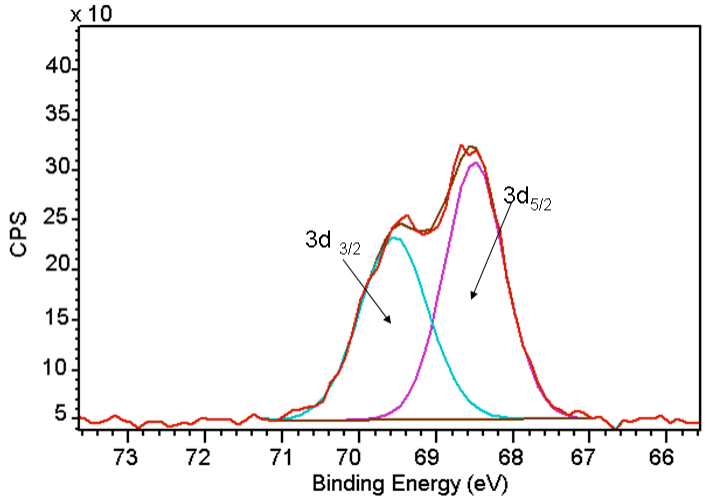

Figure S17. High resolution Br 3d XPS spectrum of quaternized PDMAEMA/ODTS/silicon wafer.

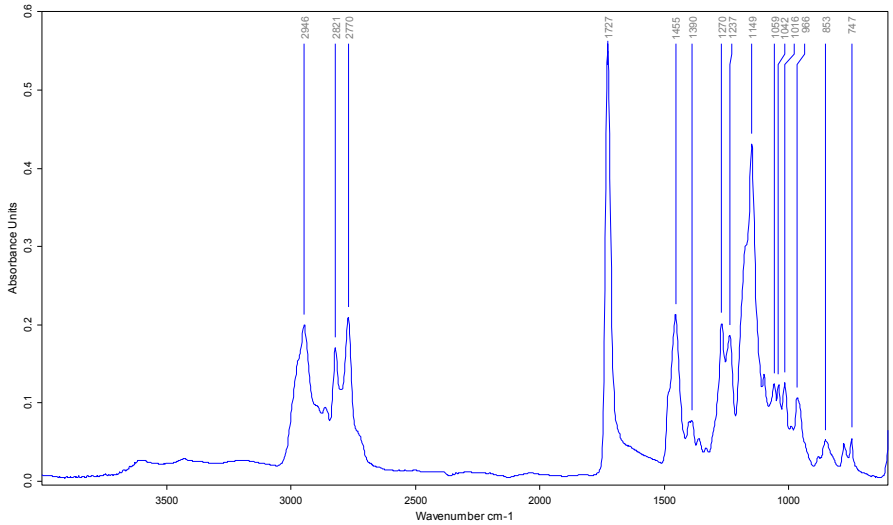

Figure S18. Infrared spectrum of PDMAEMA.

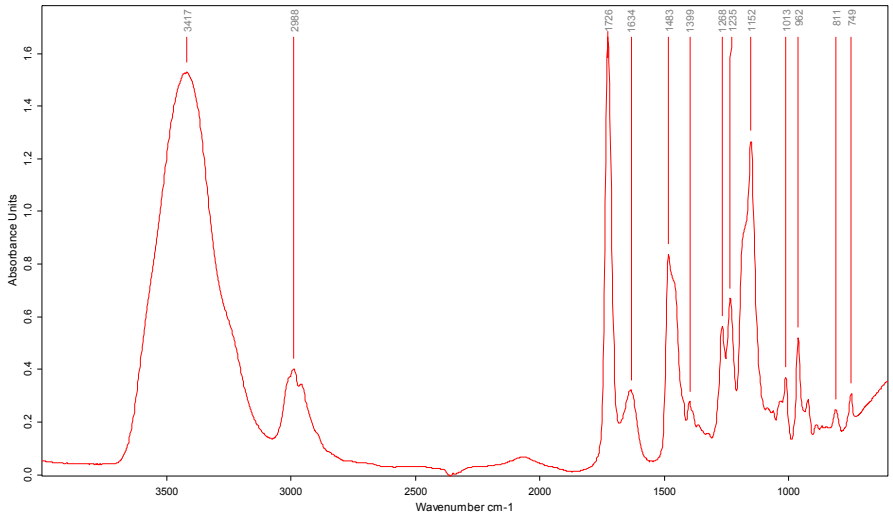

Figure S19. Infrared spectrum of quaternized PDMAEMA.