Supporting Information

Antibacterial abilities of Vancomycin interactions in PDEGMA brushes fabricated by interface-mediated PET-RAFT polymerization on implant surfaces

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Supporting Information list:

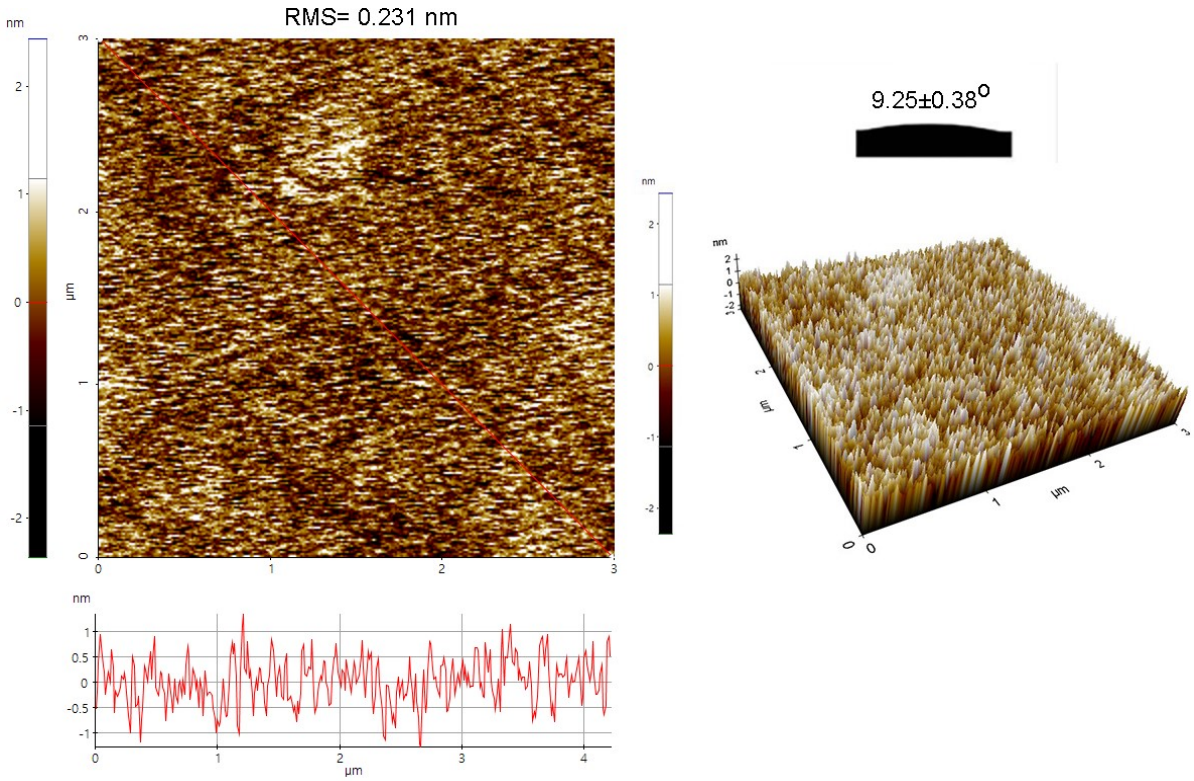
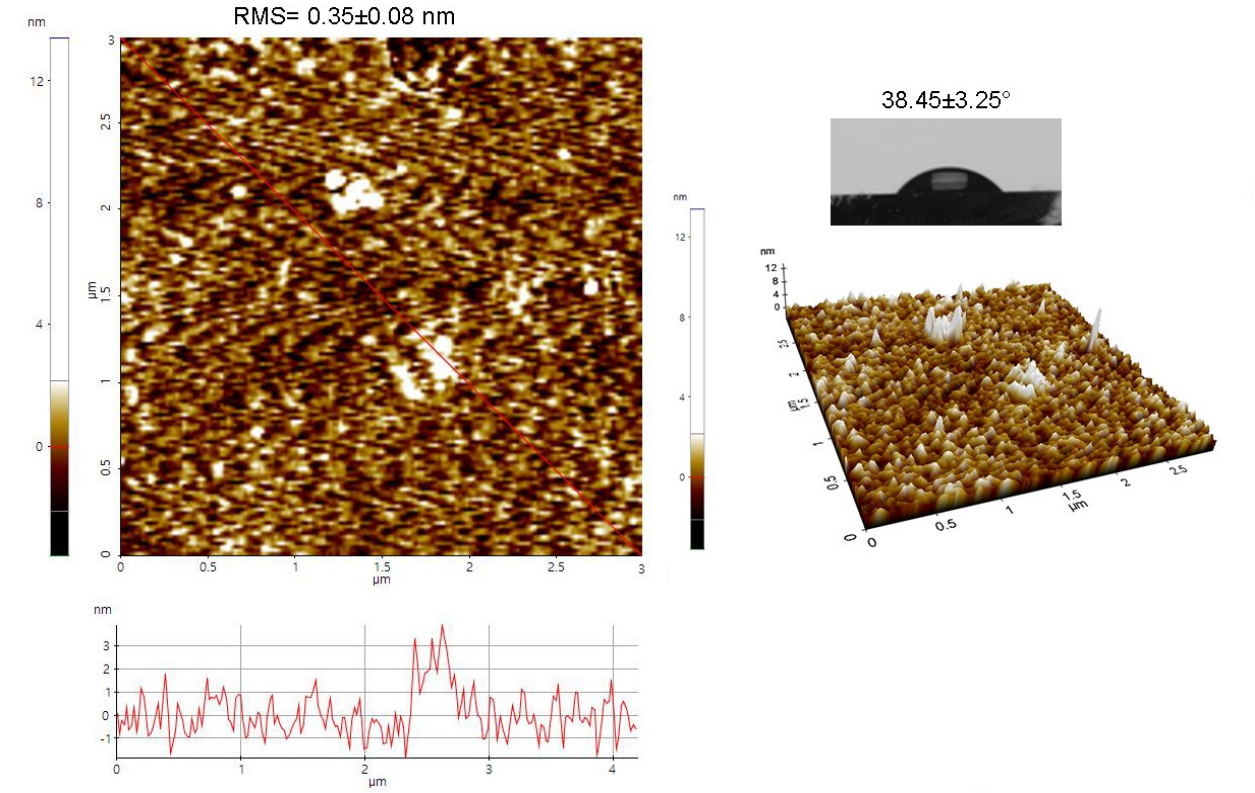


Figure S1. Water contact angle and AFM (2D and 3D) images of activated titanium surfaces.

a)



b)

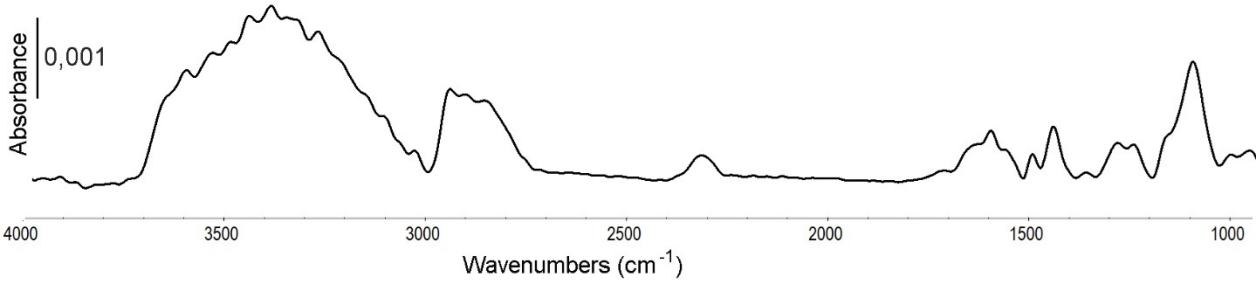


Figure S2. 2D and 3D AFM, water contact angle images (a) and ATR-FTIR spectrum (b) of Ti-CCC.

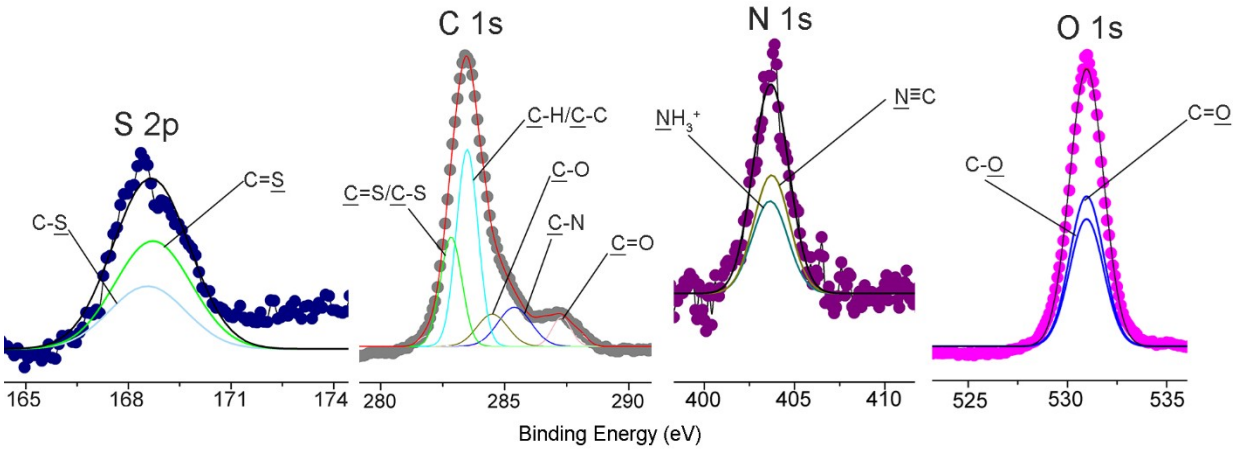


Figure S3. High resolution partial XPS spectra of atoms on Ti-CCC bonded surfaces.

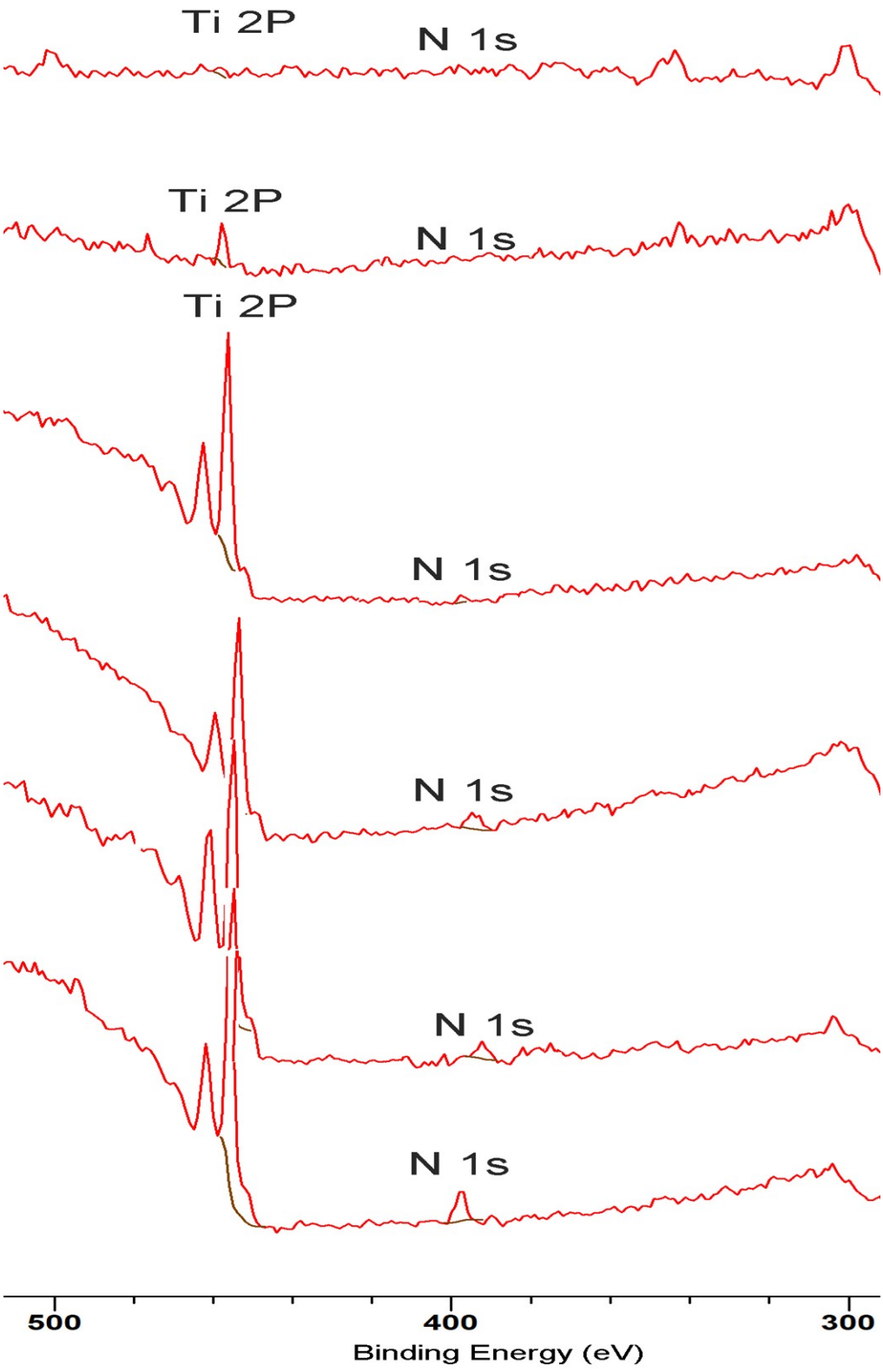


Figure S4. Survey scan XPS spectra of PDEGMA brushes synthesized at different times (for Titanium and Nitrogen atoms).

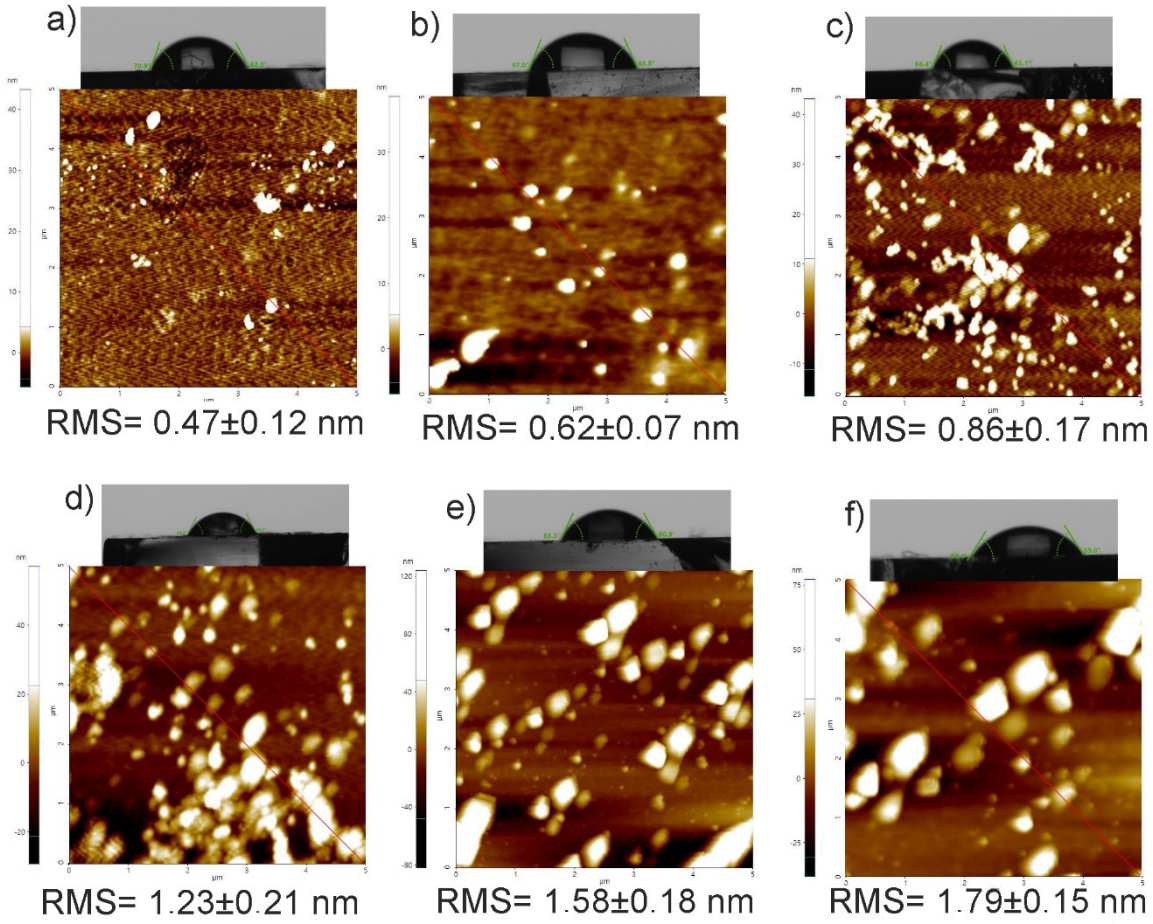


Figure S5. AFM and water contact angle images of PDEGMA brushes taken at different times (a. 1st hour, b. 2nd hour, c. 3rd hour, d. 4th hour, e. 5th hour, f. 6th hour).

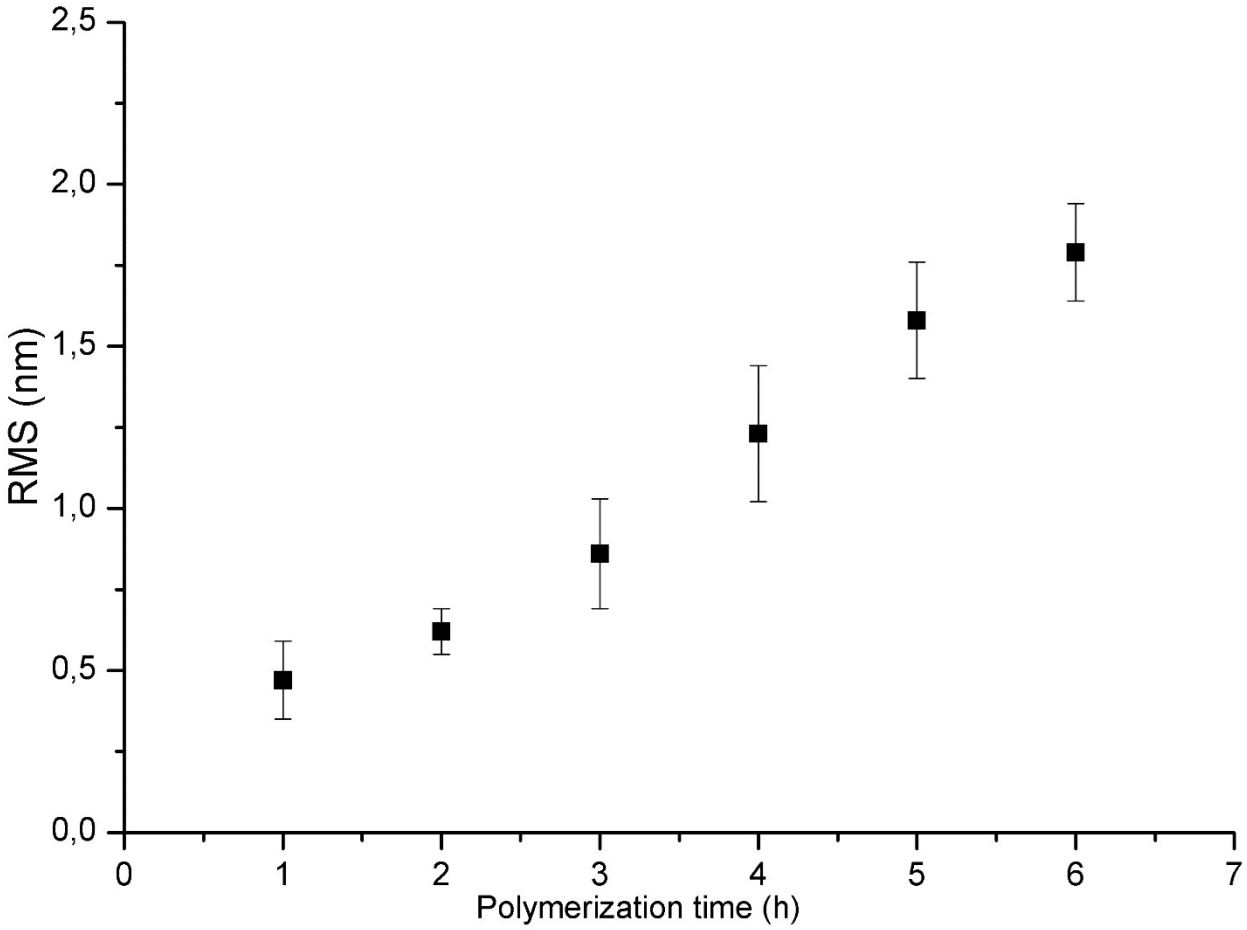


Figure S6. Change in surface roughness (RMS) value with polymerization time.

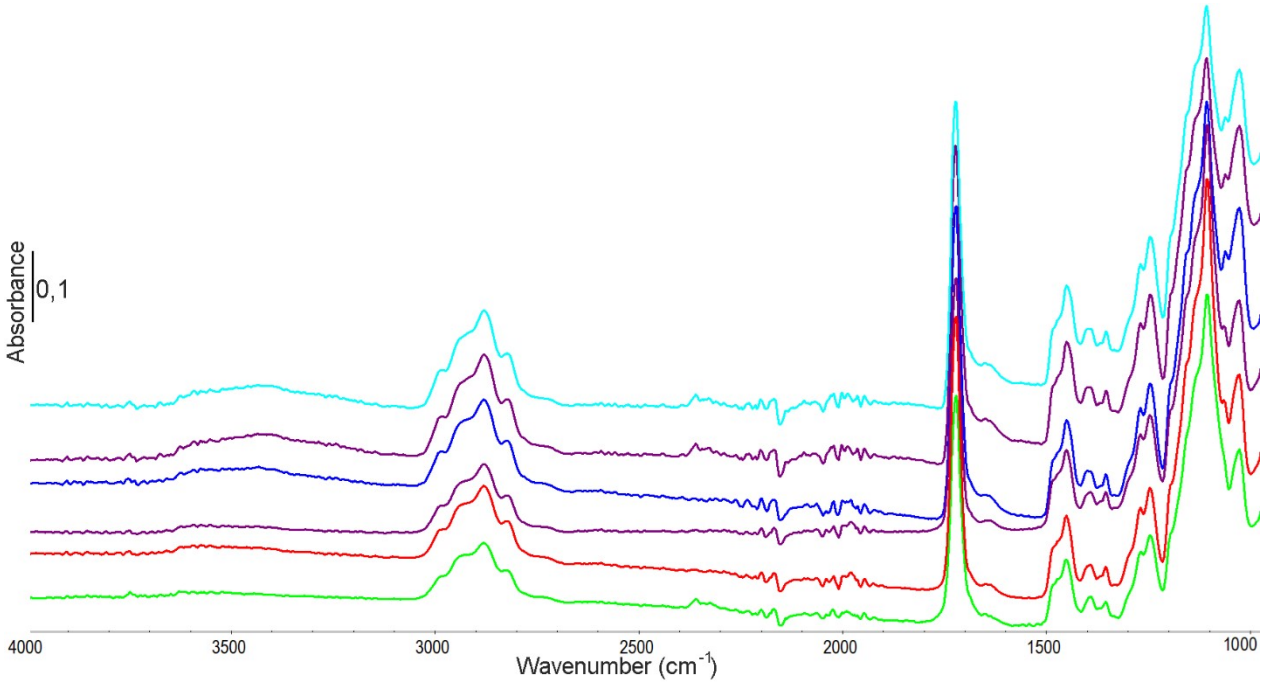


Figure S7. GAATR-FTIR Spectra of PDEGMA brushes taken from the surface at different times.

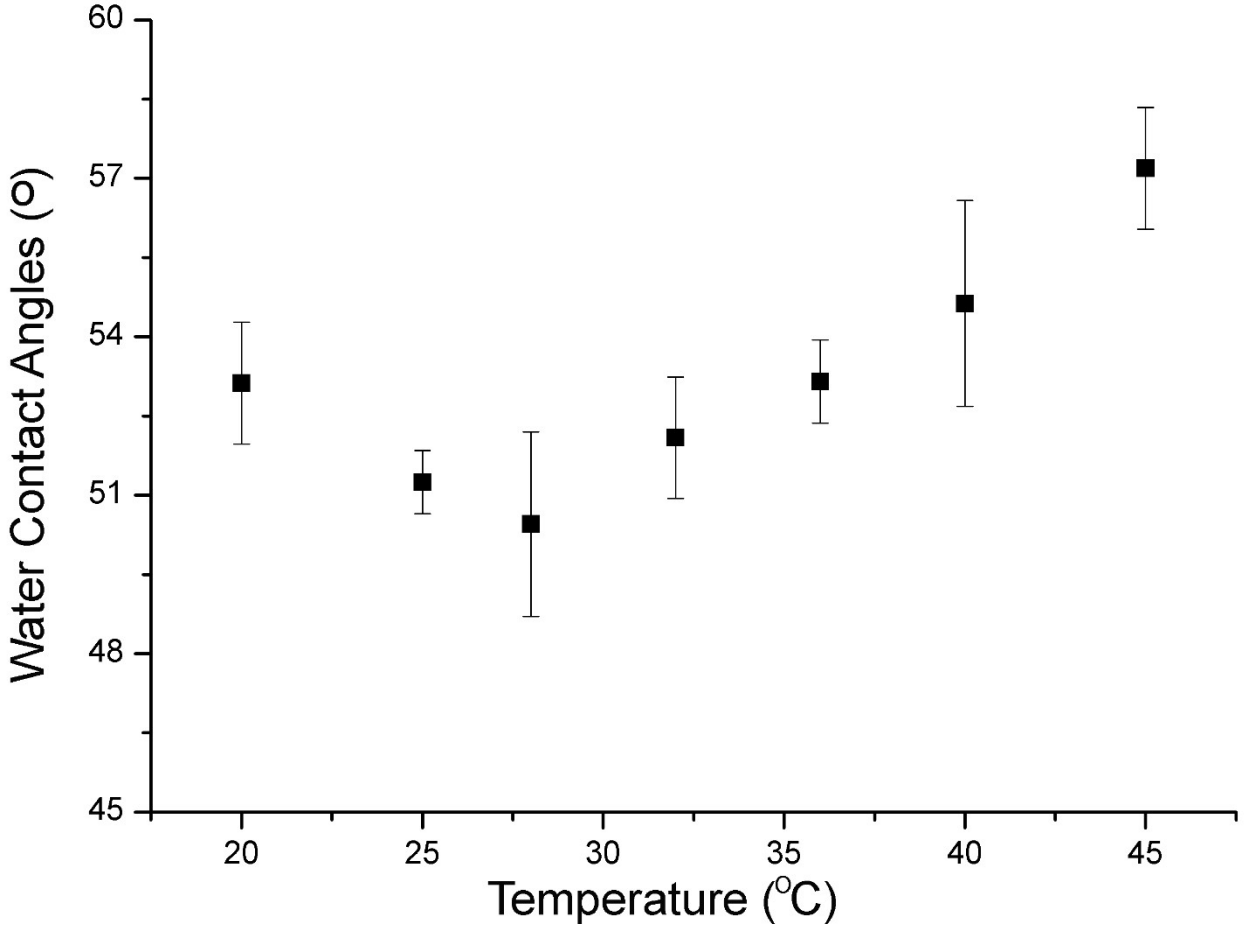


Figure S8. Water contact angle measurements taken at different temperatures

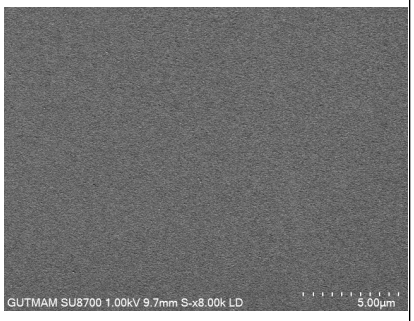
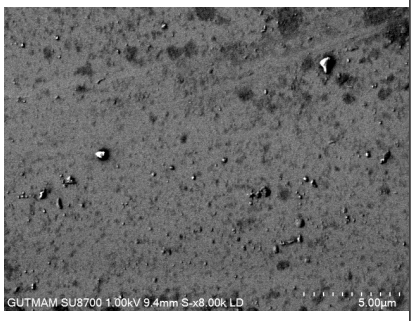
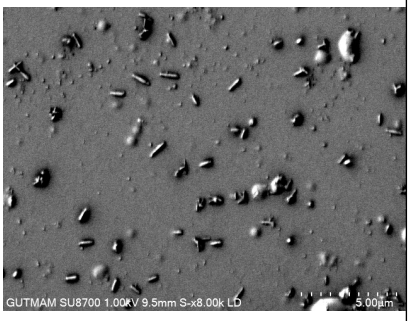
Bare Ti implant	Ti-CCC implant	Ti-PDEGMA brush (6h)
		

Figure S9. SEM images of Bare-Ti implant, Ti-CCC implant and Ti-PDEGMA brush (6h)