

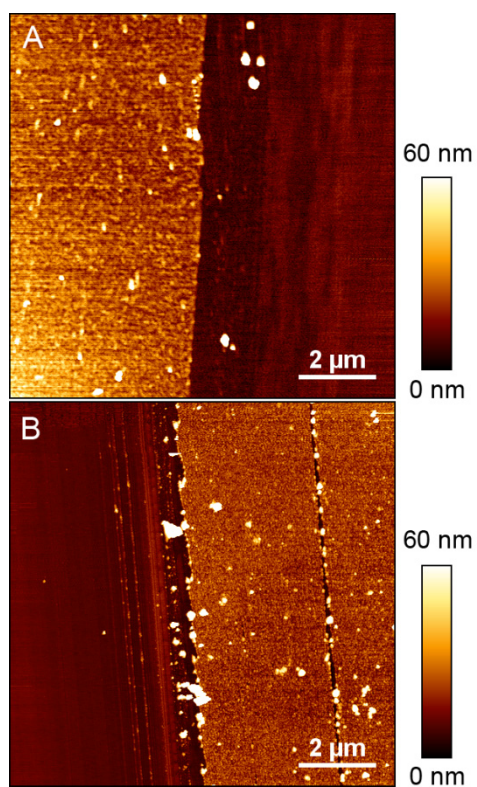
## Supporting Information

# Nanoscale Engineering of Low-Fouling Surfaces through Polydopamine Immobilisation of Zwitterionic Peptides

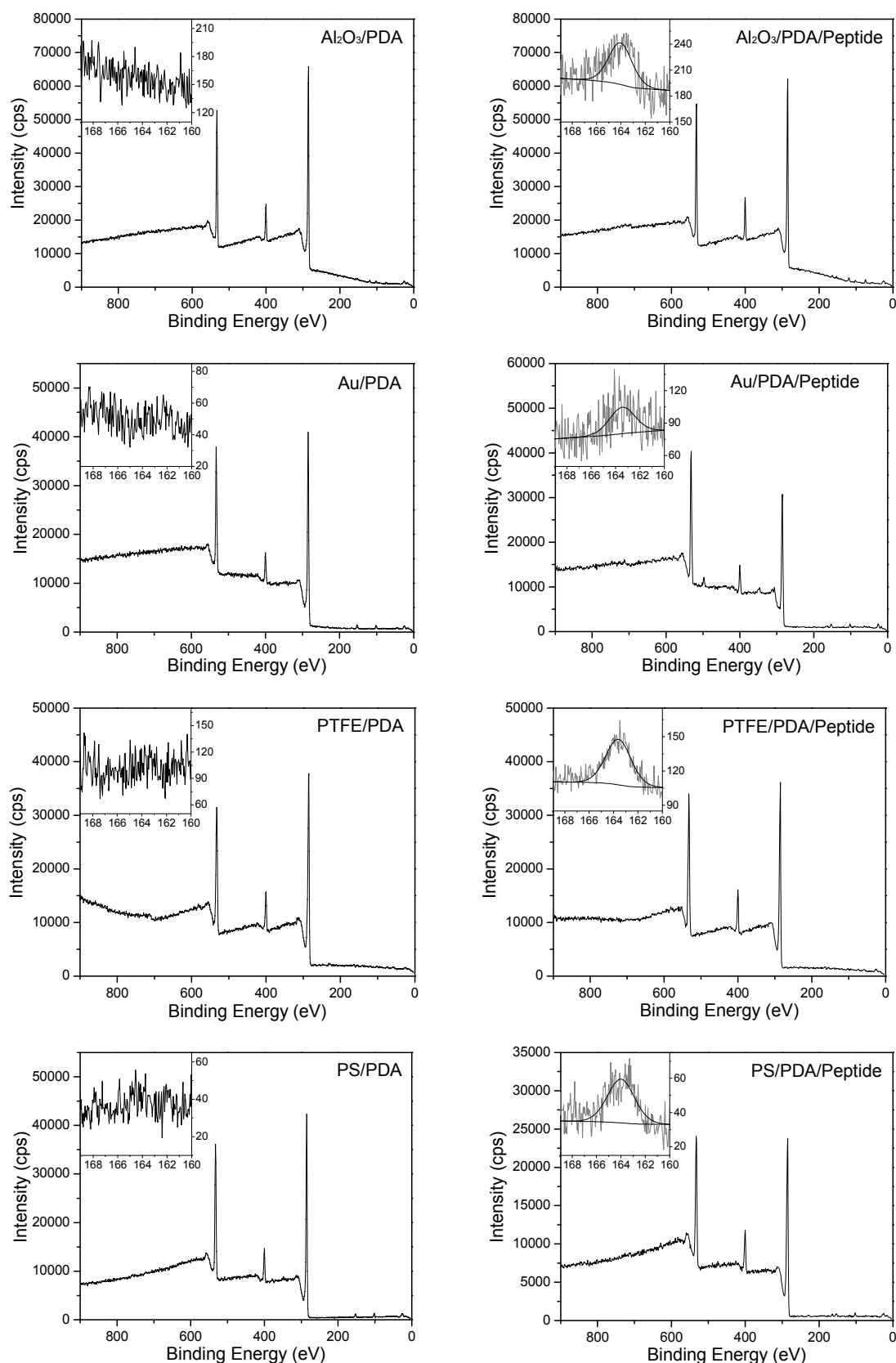
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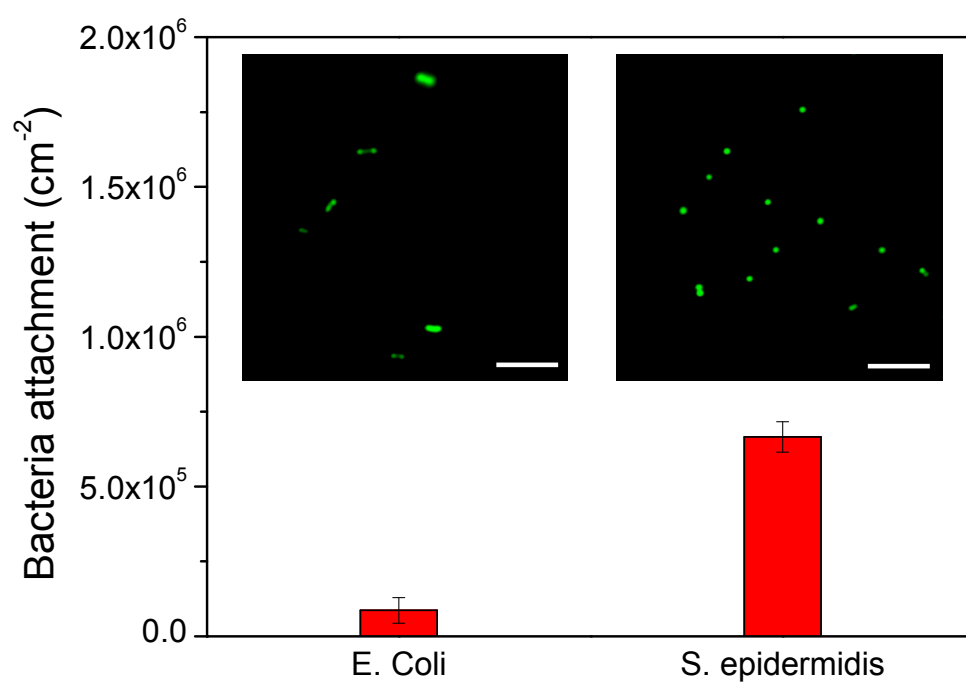
**Fig. S1.** AFM images of scratched (a) PDA and (b) PDA/peptide films.



**Fig. S2.** XPS characterisation of PDA-coated (left column) and PDA/peptide-coated (right column) surfaces. Inset shows the high-resolution spectra. The peak at 164 eV represents the sulphur 2p signal derived from the surface-immobilised peptide.

**Table S1. Contact angles of films formed on various substrates.**

| Substrates          | Al <sub>2</sub> O <sub>3</sub> | Au   | PTFE  | PS   | SiO <sub>2</sub> |
|---------------------|--------------------------------|------|-------|------|------------------|
| Bare                | 76±4                           | 18±2 | 114±2 | 92±4 | 22±3             |
| PDA coating         | 50±2                           | 47±1 | 57±1  | 49±3 | 48±3             |
| PDA/peptide coating | 32±3                           | 23±2 | 29±3  | 30±3 | 22±2             |



**Fig. S3.** Quantitative *E. coli* and *S. epidermidis* adhesion onto glass/PDA/PEG substrates after incubation for 24 h. The inset fluorescence microscopy images show the bacteria adhesion on glass/PDA/PEG substrates. All scale bars are 10  $\mu$ m.