

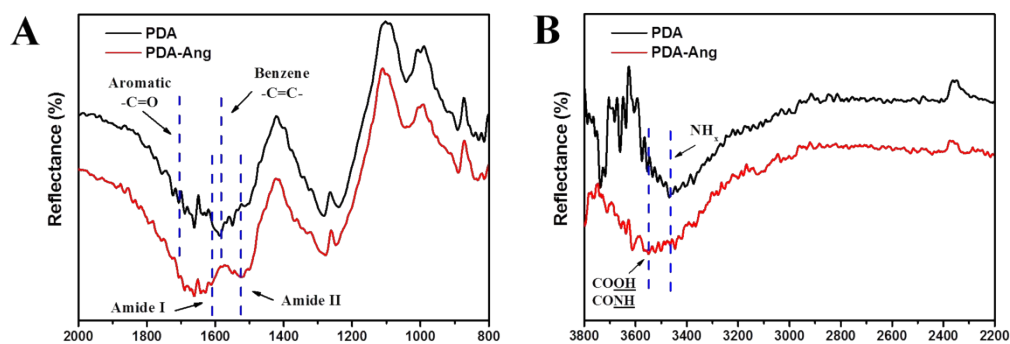


Figure S1. The ATR-FTIR spectrum of PDA and PDA-Ang surfaces (A: expanded region of 800-2000 wave numbers; B: expanded region of 2200-3800 wave numbers).

Table.S1 The chemical bonds of C1s spectra of PDA and PDA-Ang.

Samples	C=C (%)	C-C, CHx (%)	aromatic C-N, aliphatic C-N(%)	aromatic C=N, quinone C=O, C-OH (%)
PDA	21.00	27.18	28.79	23.04
PDA-Ang	19.62	28.47	32.20	19.71

Table.S2 The chemical bonds of N1s spectra of PDA and PDA-Ang.

Samples	Aliphatic C-N (%)	Aromatic C=N (%)	Aromatic C-N (%)	Ammonium salt or C-NH ₃ ⁺
PDA	18.13	29.62	29.48	22.76
PDA-Ang	24.44	29.43	23.11	23.11