

Supporting Information

Functionalization of nylon 6,6 with polyetheramine improves wettability and antibacterial properties

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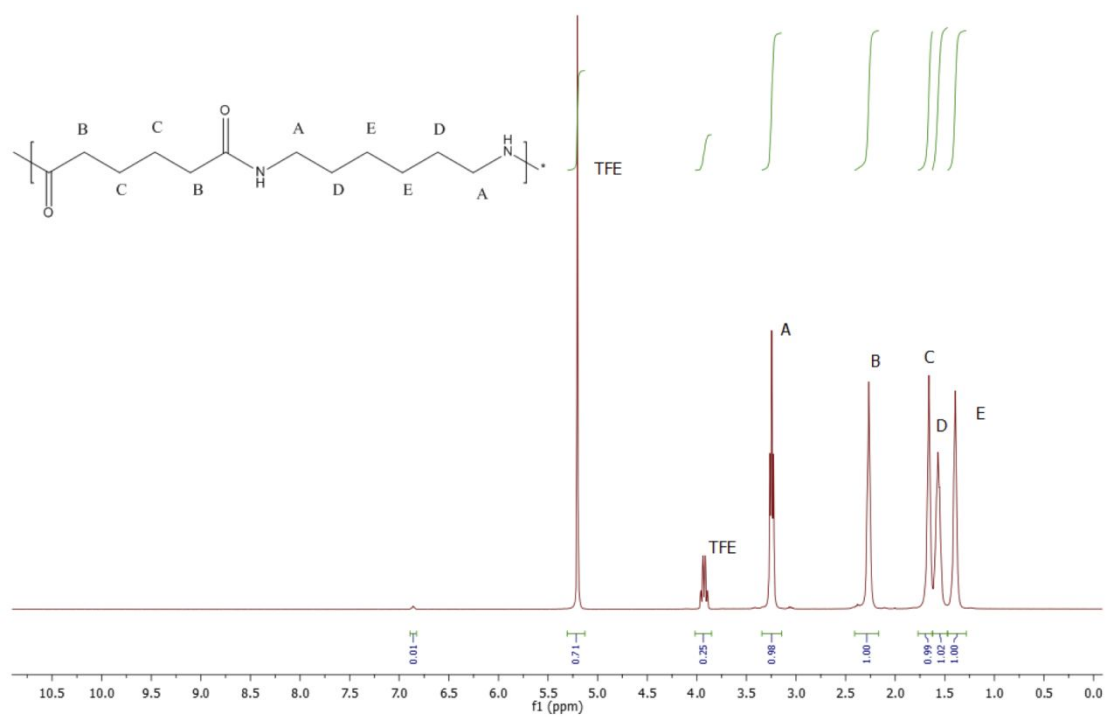


Figure S1. NMR spectrum of PA6,6.

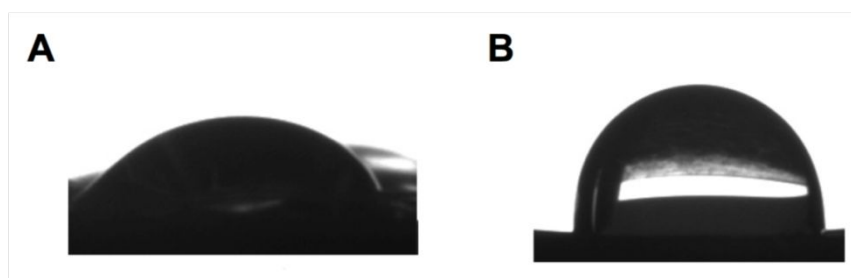


Figure S2. Contact angle of PA-JA: $45^\circ \pm 5^\circ$ (A) and PA6,6: $105^\circ \pm 5^\circ$ (B).

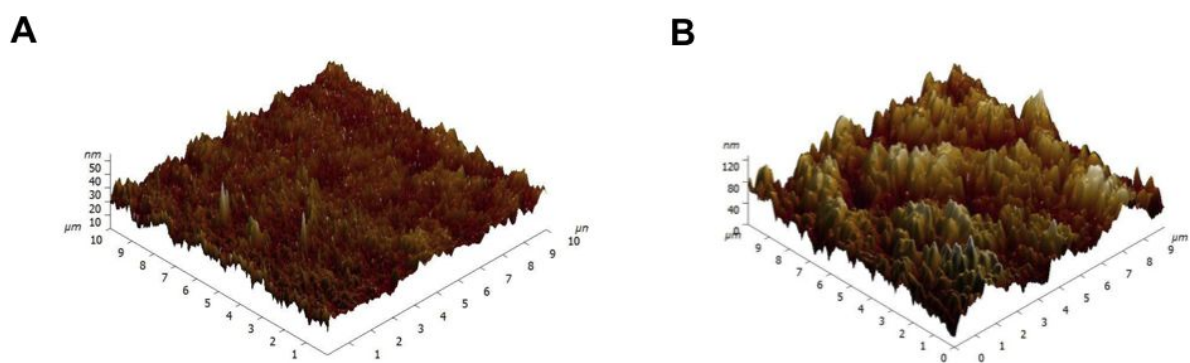


Figure S3. AFM images of PA-JA (A) and PA6,6 (B).

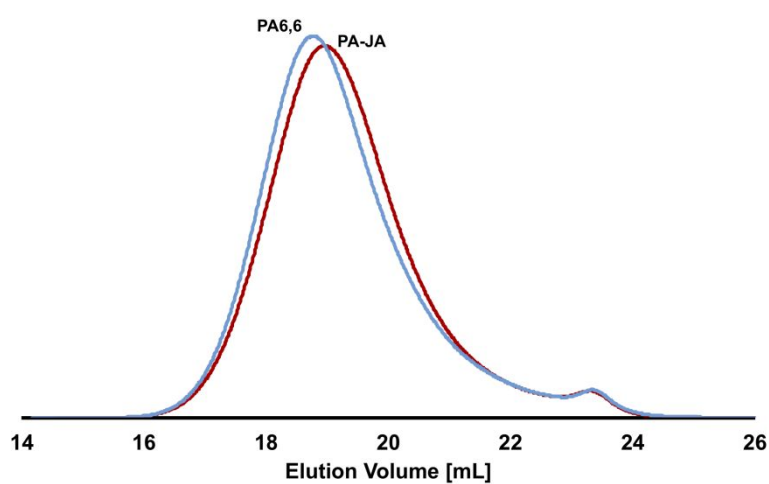


Figure S4. Gel permeation chromatogram of PA-JA (red line) and PA6,6 (blue line).

Table S1. Values of mean roughness of nylon-based fibers.

	mean roughness [nm]
PA-JA	24.56
PA6,6	63.67

Table S2. FWHM and L_{hkl} at different percentage of jeffamine linked to neat PA6,6

jeffamine linked [%]	FWHM [°]	L_{hkl} [Å]
0	5.3	0.26
1	7.5	0.19
4	10	0.14
5	10.5	0.13
10	11	0.12

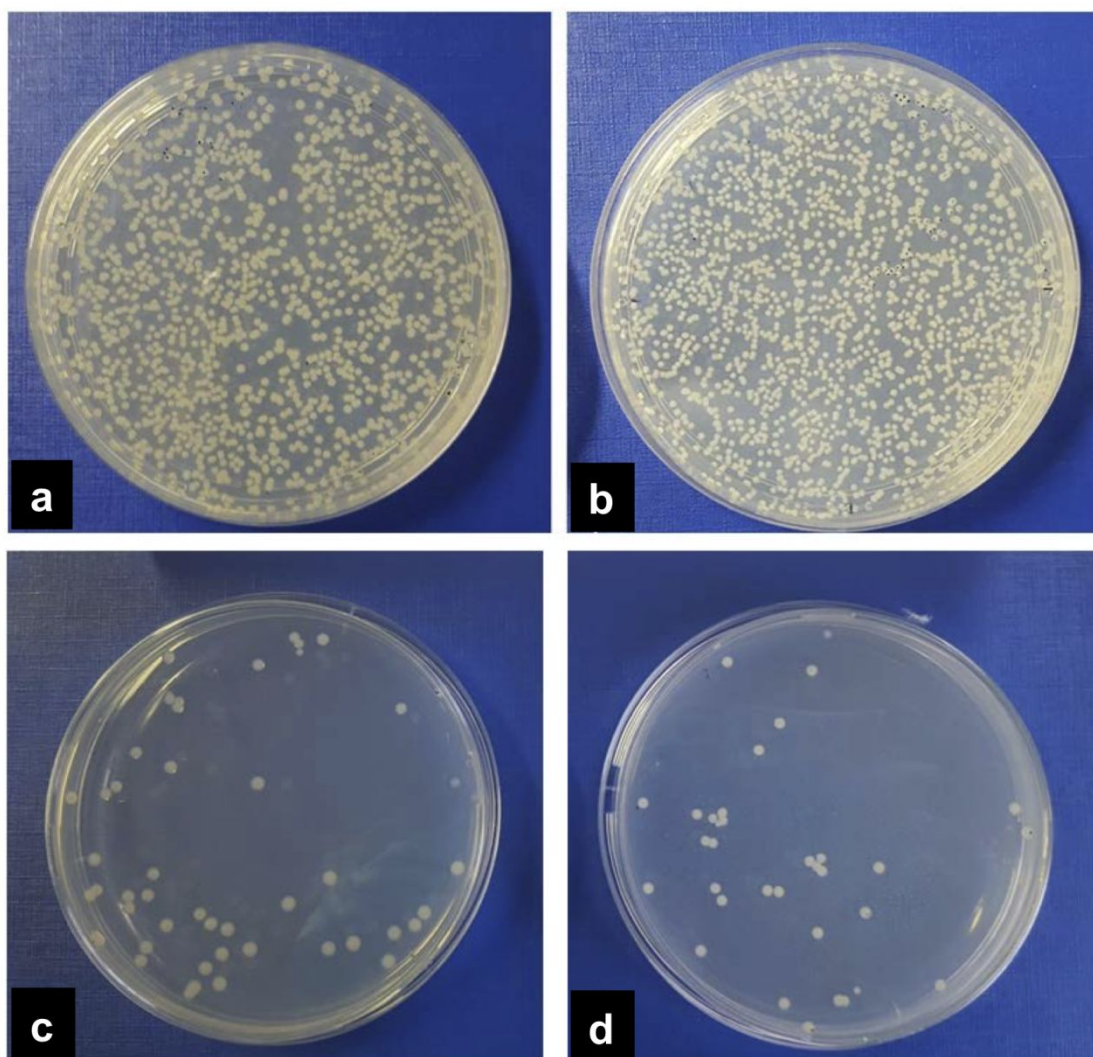


Figure S5. Images of bacterial studies with *Klebsiella pneumoniae*: a) PA6,6 $t=0$; b) PA-JA $t=0$; c) PA6,6 24 h; d) PA-JA 24 h.

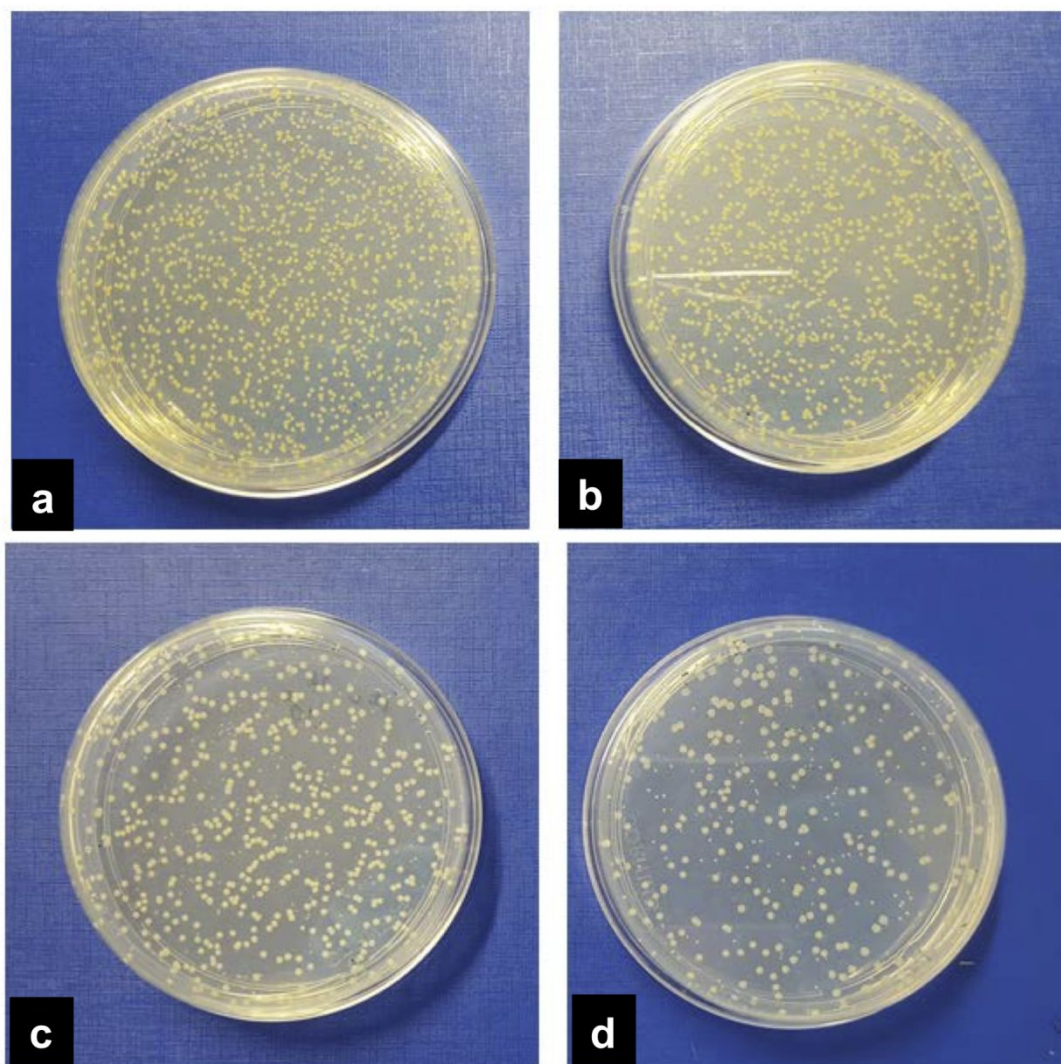


Figure S6. Images of bacterial studies with *Staphylococcus aureus*: a) PA6,6 $t = 0$; b) PA-JA $t = 0$; c) PA6,6 24 h; d) PA-JA 24 h.