Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting Information

Electrospun fibres encapsulating essential oils as natural antimicrobial wound dressings

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Solution in acetone	Conductivity (μS/cm)
CA	22.1
CA/cinnamon (5%)	21.5
CA/lemongrass (5%)	18.2
CA/peppermint (5%)	19.2

Table S1: Conductivity measurements of the acetone solutions used for the electrospinning process.

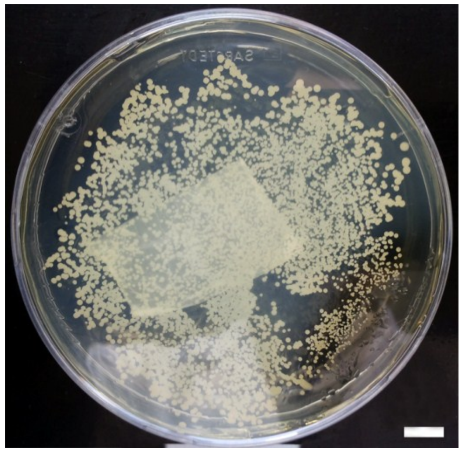

Figure S1: Photograph of *C. albicans* cells colonising a CA fibrous scaffold. Scale bar = 0.5 cm.

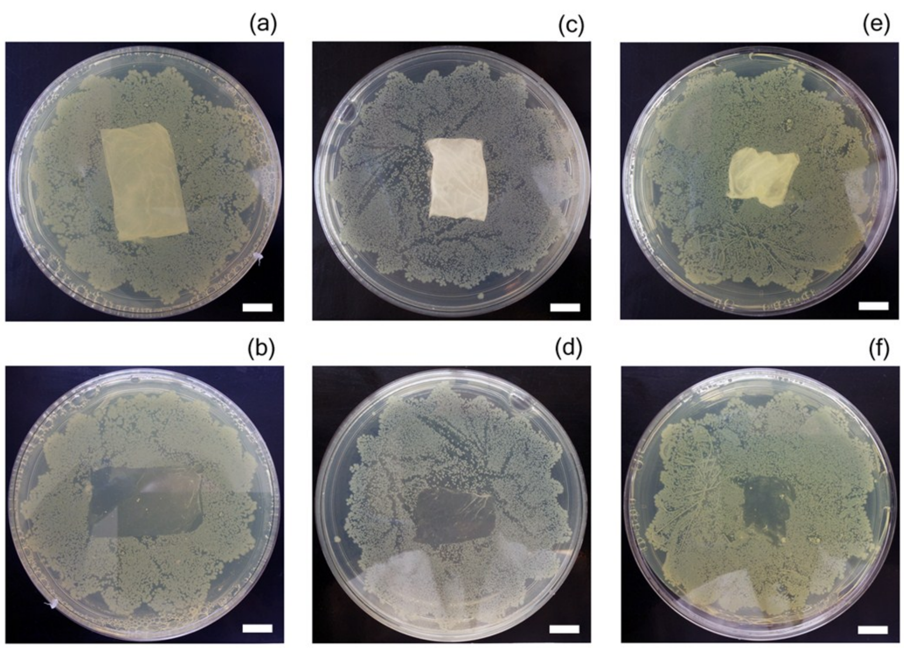

Figure S2: Testing the antibacterial properties against *E. Coli* of electrospun fibres of (a, b) CA/1-CN, (c, d) CA/1-LG, and (e, f) CA/1-PM. Bacterial growth (a, c, e) before and (b, d, f) after the removal of the samples. Scale bar = 0.5 cm.

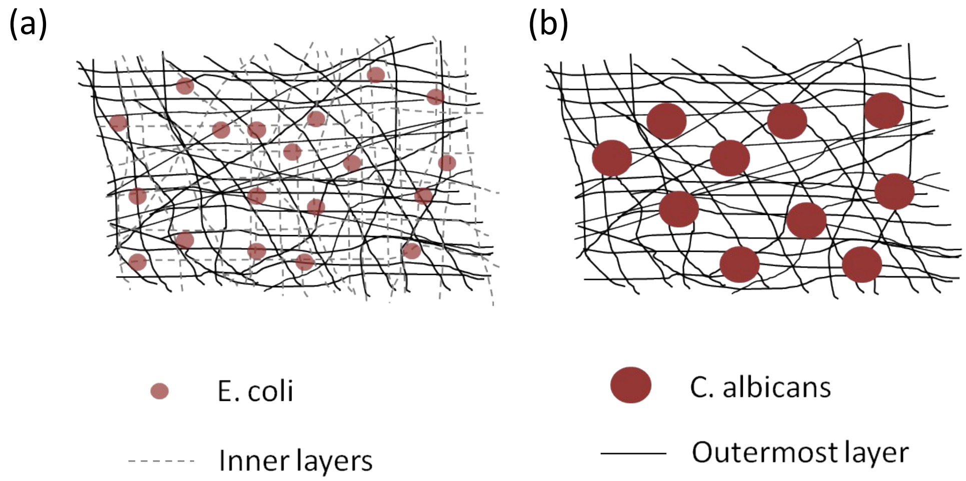

Figure S3. Schematic illustration of the proposed mechanism of interaction of (a) *E. coli* and (b) *C. albicans* with the studied CA-EO fibres.

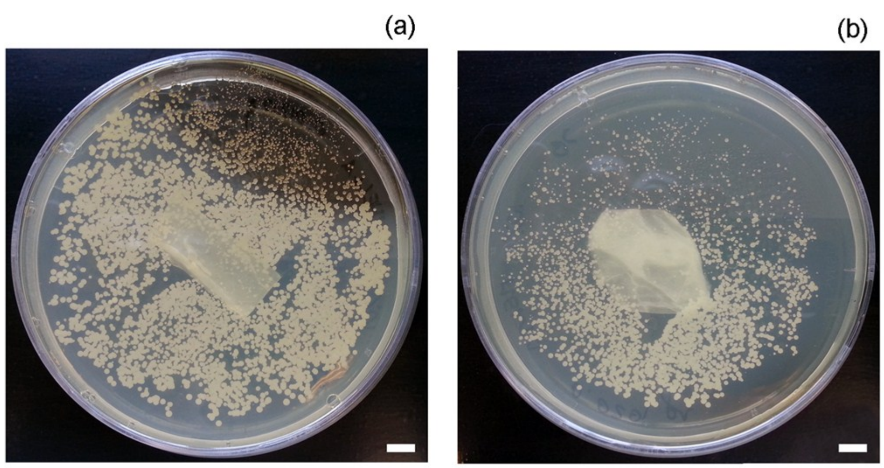

Figure S4: Testing *in-vitro* the antibacterial properties of CA fibres loaded with (a) Cinnamon (5%) and (b) Peppermint oil (5%). Scale bar = 0.5 cm.

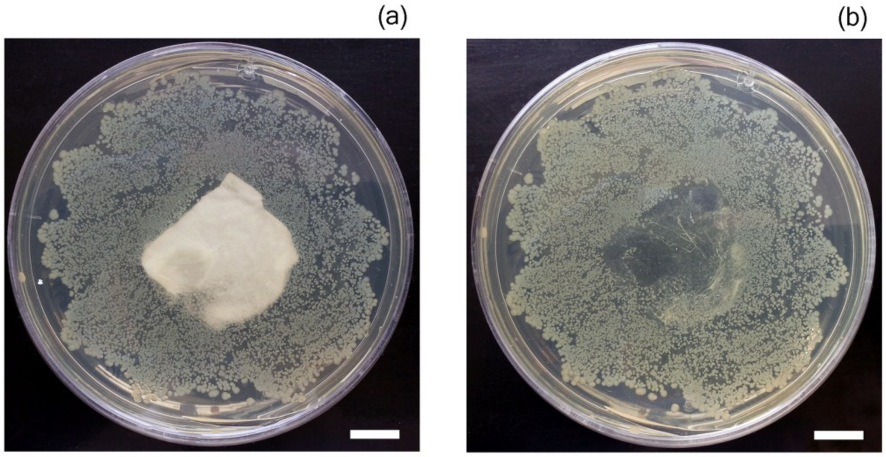

Figure S5: Testing *in-vitro* the antibacterial properties of (a) CA fibres loaded with Peppermint oil, after 2 months of storage in ambient conditions, (b) after removal of the fibres for better visualisation of the antibacterial region. Scale bar = 0.5 cm.