

Supporting Information

Clotting Mimicry from Robust Hemostatic Bandages Based on Self-Assembling Peptides

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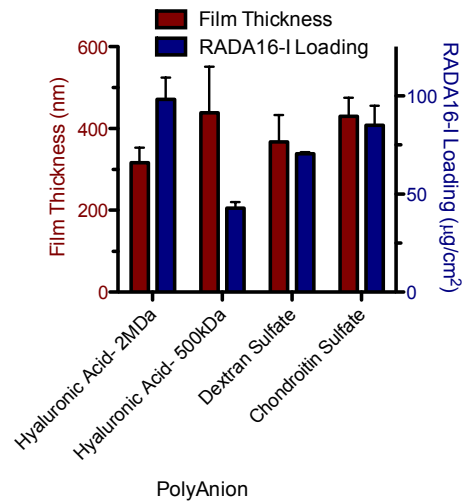


Figure S1 | Characteristics of different dip-LbL assembled films deposited onto silicon. Different types of polyanions used in (RADA16-I/polyanion)₄₀ films results in different RADA16-I loadings and film thicknesses, which can be attributed to their differences in intrinsic chemical characteristics.

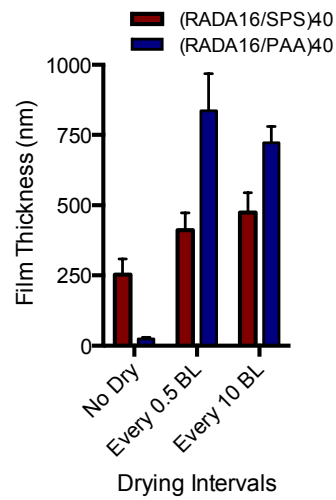


Figure S2 | Effect of drying intervals during LbL film assembly on film thickness. Film growth characteristics of dip-LbL assembled (RADA16-I/SPS)₄₀ (n = 6) and (RADA16-I/PAA)₄₀ (n = 6) films with intermittent dry steps shows that introduction of a drying step can increase the amount of film deposited.

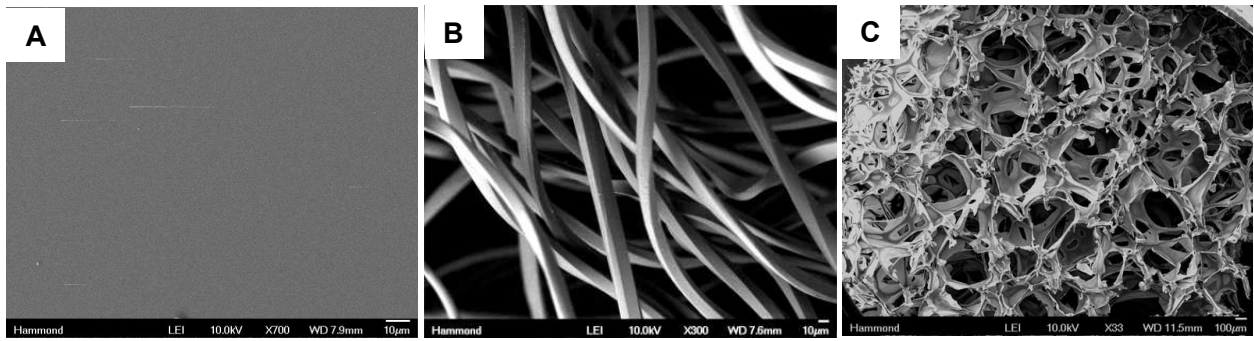


Figure S3 | Surface morphologies of uncoated substrates. SEM images of an uncoated glass slide (A), gauze (B), and gelatin sponge (C) revealing relatively smooth surfaces as compared to those coated with LbL films. Higher magnification images can be found in Figure 4. Scale bars represent 10 μm (A-B) and 100 μm (C).

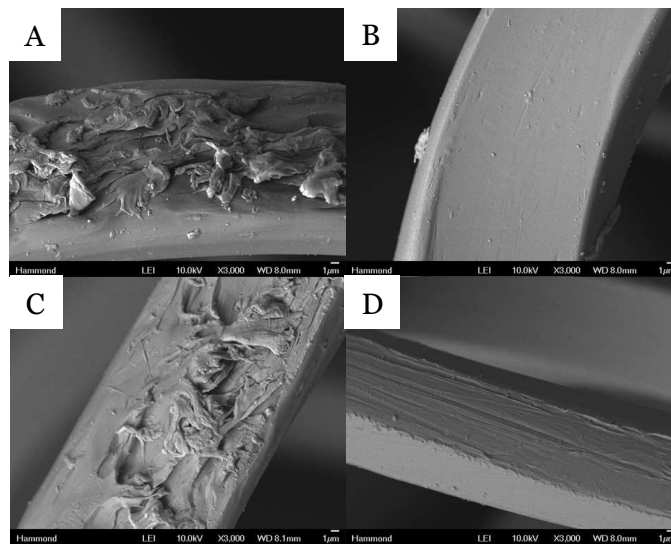


Figure S4 | Surface morphologies of gauze coated by alternative, non-LbL methods. SEM images of two representative regions with coating (A,C) and without coating (B,D) of gauze after immersion in a RADA16-I solution (A,B) or spray-LbL coated with (RADA16-I/nothing)₂₀₀ films (C,D) show some areas of deposition, but is largely uncoated and inconsistent. Scale bars represent 1 μm .

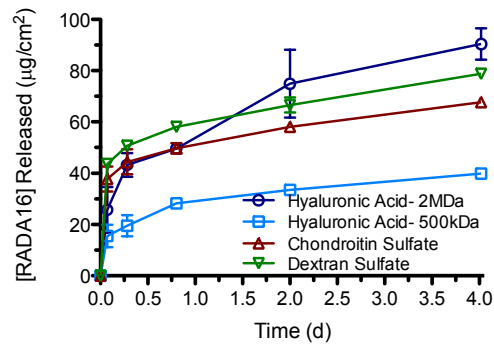


Figure S5 | Release of RADA16-I from dip-LbL assembled films. Release profiles of (RADA16-I/polyanion)₄₀ films incubated in PBS, pH 7.4 at 37°C.

Table S1 | Scoring criteria for the severity of skin wound puncture bleeding. Wounds were scored blind to the type of sample applied (i.e., LbL-coated or uncoated gauze).

Score	Description
0	No bleeding
1	Very slight bleeding
2	Slow and steady bleeding
3	Moderate bleeding with well defined blood flow
4	Severe bleeding that flows freely