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

Supporting information

for

A hybrid proteolytic and antibacterial bifunctional film based on amphiphilic carbonaceous conjugates of trypsin and vancomycin

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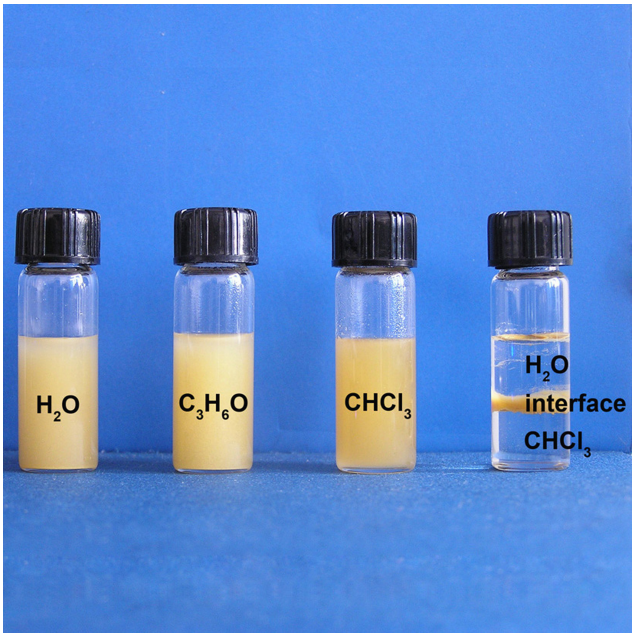

Fig. S1 Photographs of ECD-ACPs dispersed in solvents of different polarities.

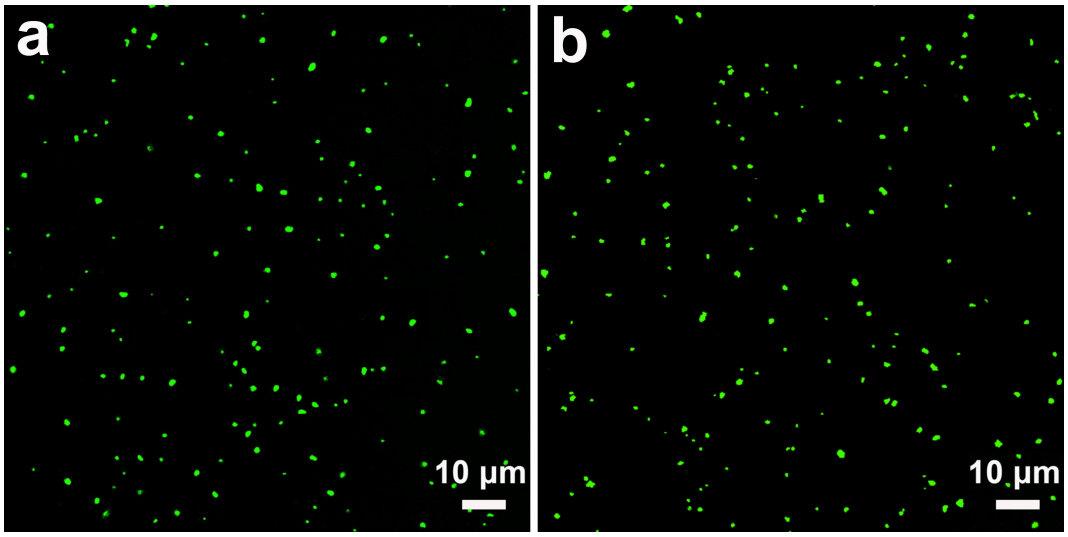

Fig. S2 Fluorescence images of ECD-ACPs particles after their reaction with FITC-labeled (a) Tryp and (b) Van.

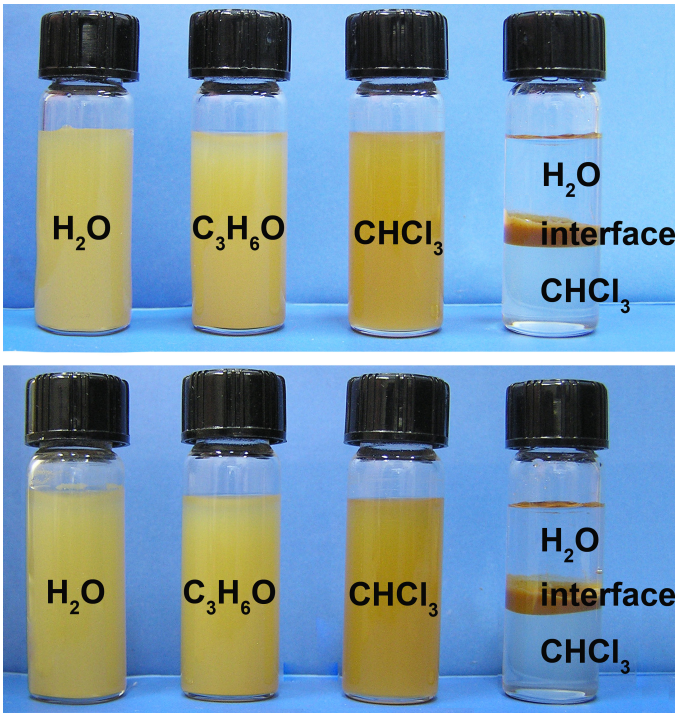

Fig. S3 Photographs of ACPs-Tryp (top) and ACPs-Van (bottom) dispersed in solvents of different polarities.

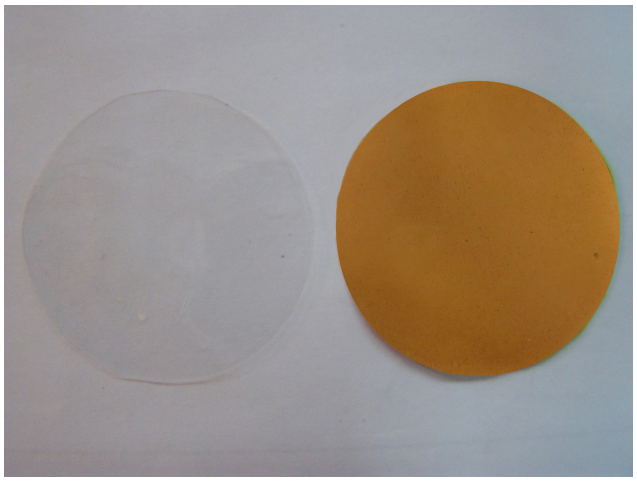

Fig. S4 Photograph of films: blank PMMA (left) and PMMA/ACPs-Tryp/ACPs-Van (right).

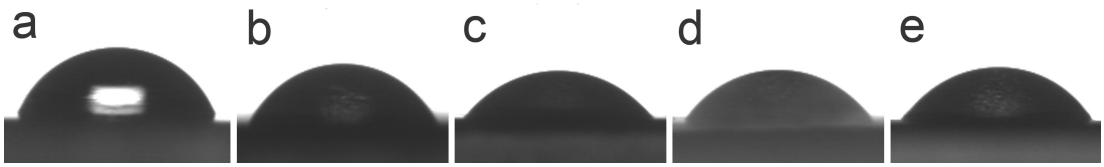

Fig. S5 Photographs of water droplets on different composite films: (a) Blank PMMA; (b) PMMA/ACPs; (c) PMMA/ACPs-Van/ACPs; (d) PMMA/ACPs-Tryp/ACPs; (e) PMMA/ACPs-Tryp/ACPs-Van.

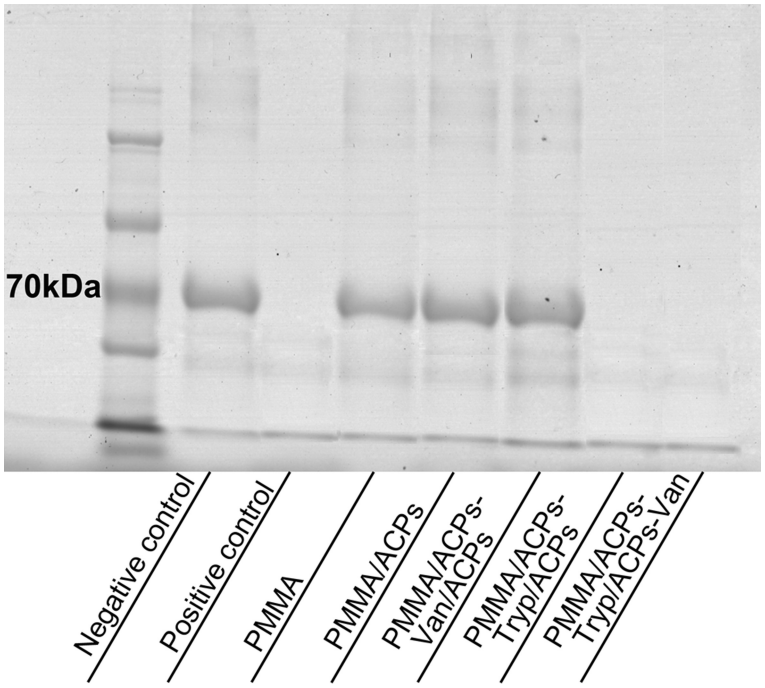

Fig. S6 SDS-PAGE of HSA after its incubation with different composite films at room temperature for 24 h.

Table S1. Water contact angle on different composite films.

Films	Blank PMMA	PMMA/ ACPs	PMMA/ACPs-Van/ACPs	PMMA/ACPs-Tryp/ACPs	PMMA/ACPs-Tryp/ACPs-Van
Contact angle (^{o})	72.3±2.7	59.2±1.6	55.4±2.5	53.6±1.4	52.8±2.0