

Supporting Information

Mussel-inspired one-step fabrication of ultra-low friction coatings on diverse biomaterial surfaces

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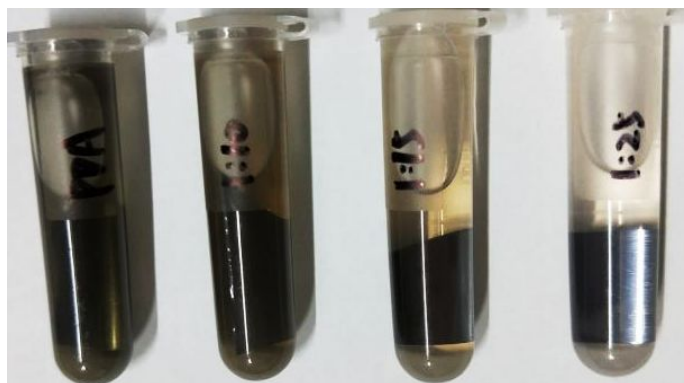


Figure S1. Color change of mixed solution with different dopamine/SBMA mass ratios after 8 h.

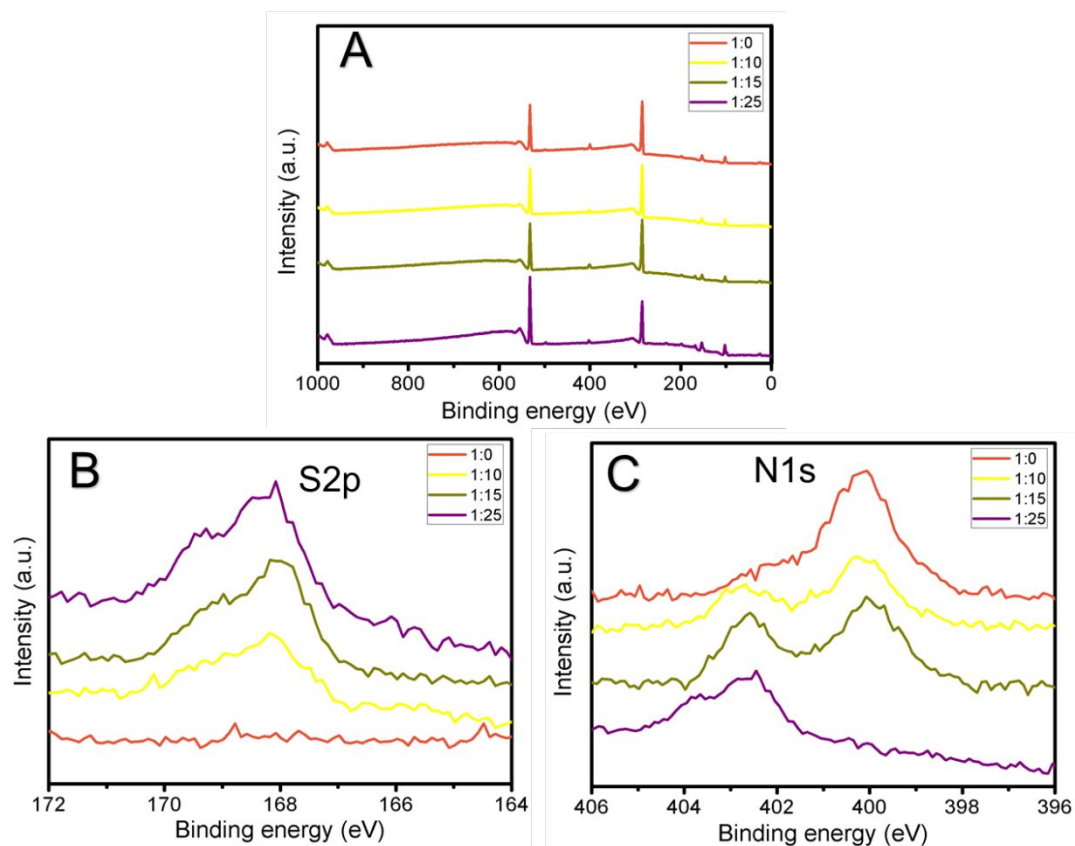


Figure S2. XPS spectra of PDA-PSBMA coatings with different mass ratios.

Table S1. XPS element ratio analysis of PDA-PSBMA coatings with different mass ratios.

Samples with different dopamine/SBMA ratios	Elements ratio (%)			
	C	O	N	S
1:0	70.3	20.6	9.0	0
1:10	68.9	20.0	6.4	4.6
1:15	67.0	19.5	7.4	6.2
1:25	55.6	31.1	6.9	6.4

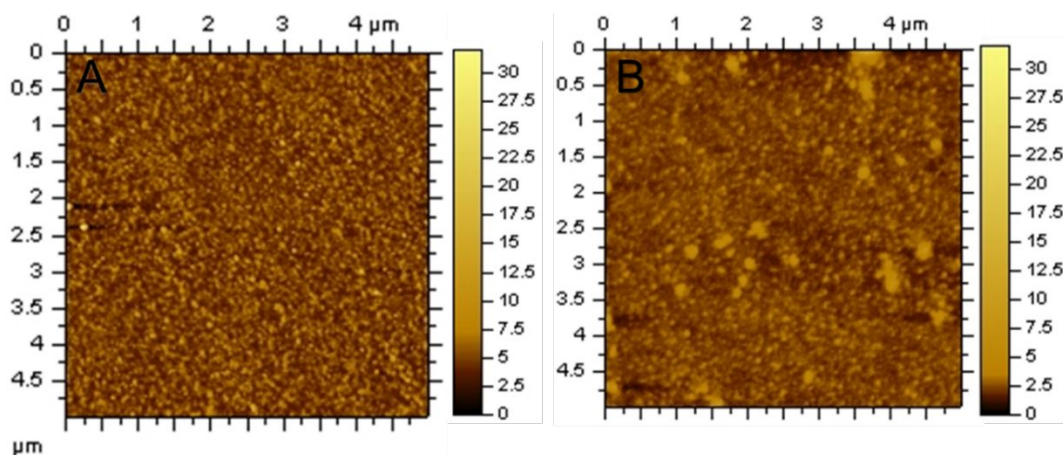


Figure S3. AFM images of PDA-PSBMA coatings with dopamine/SBMA mass ratio of 1:10 (A) and 1:25 (B), the deposition is 8 h.

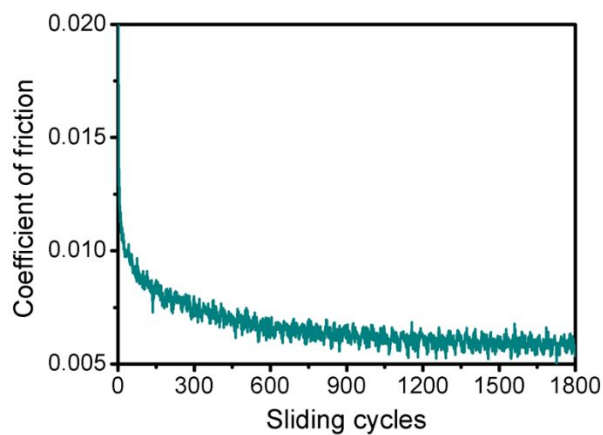


Figure S4. Coefficient of friction curve of PDA-PSBMA coating for 1800 sliding cycles. Deposition time: 8 h, Load: 1N, frequency: 1 Hz

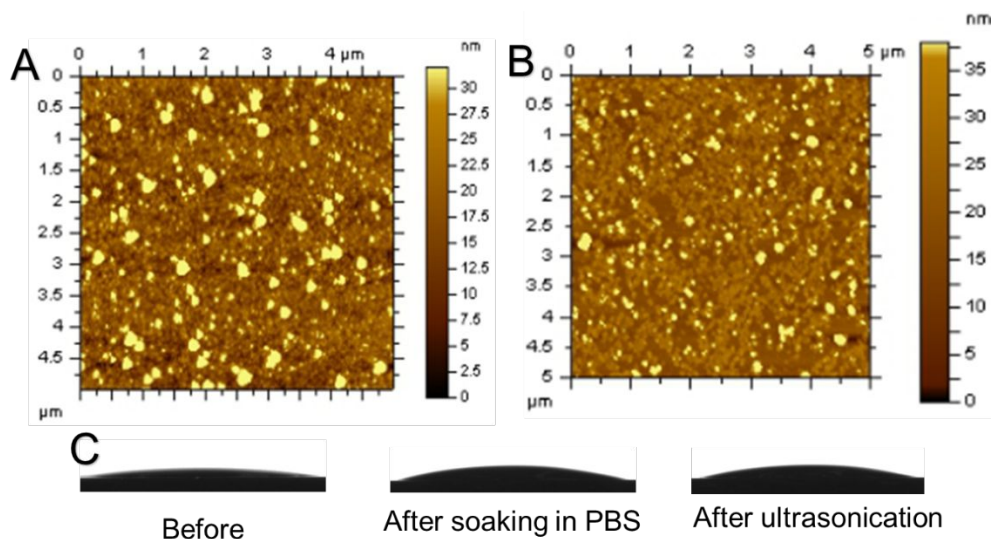


Figure S5. AFM images of PDA-PSBMA coating (mass ratio=1:15) before (A) and after (B) soaking in PBS solution for 6 h; (C) contact angles of PDA-PSBMA coating.

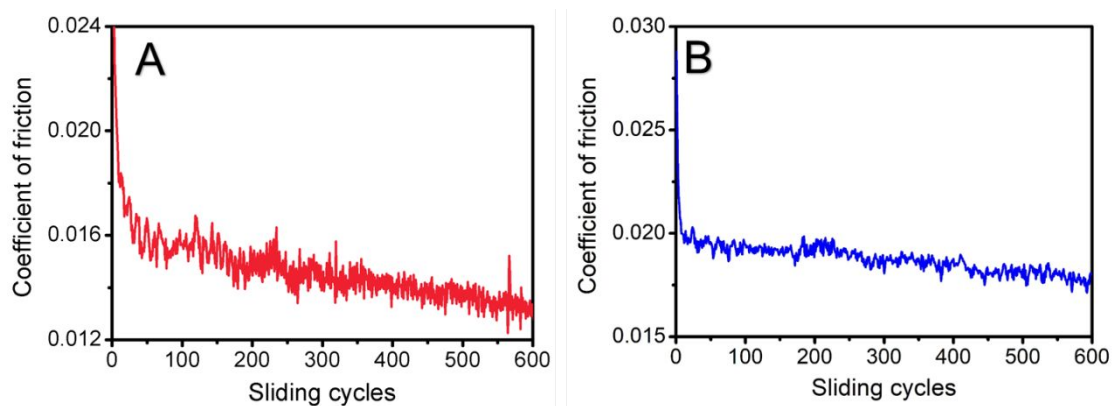


Figure S6. Coefficient of friction curve of PDA-PSBMA coating after soaking in PBS solution for 6 h (A) and ultrasonication in water for 1 min (B).

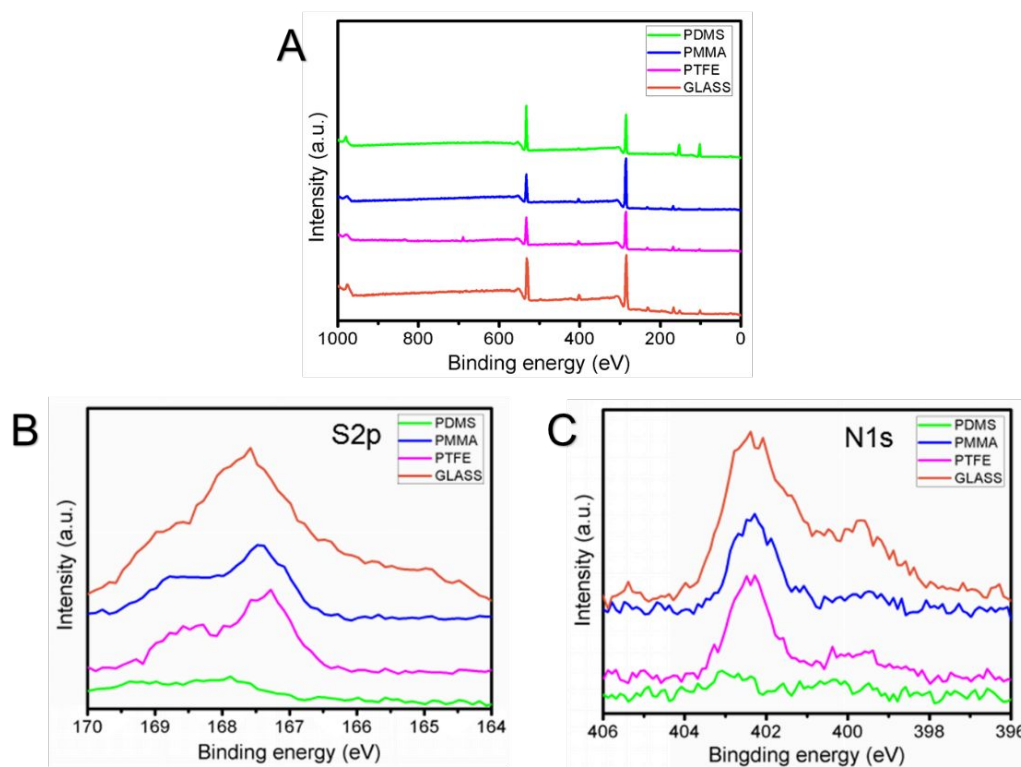


Figure S7. XPS spectra of PDA-PSBMA coatings on different substrates.

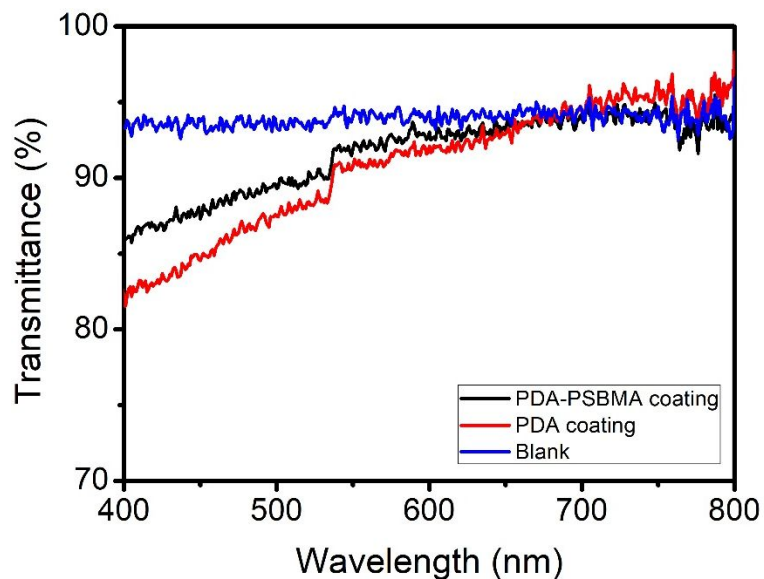


Figure S8. The transmission spectra of uncoated, PDA-PSBMA coated and PDA coated PVC catheter. The deposition time is 24 h.