

Supporting Information

Tuning Wet Adhesion of Weak Polyelectrolyte Multilayers.

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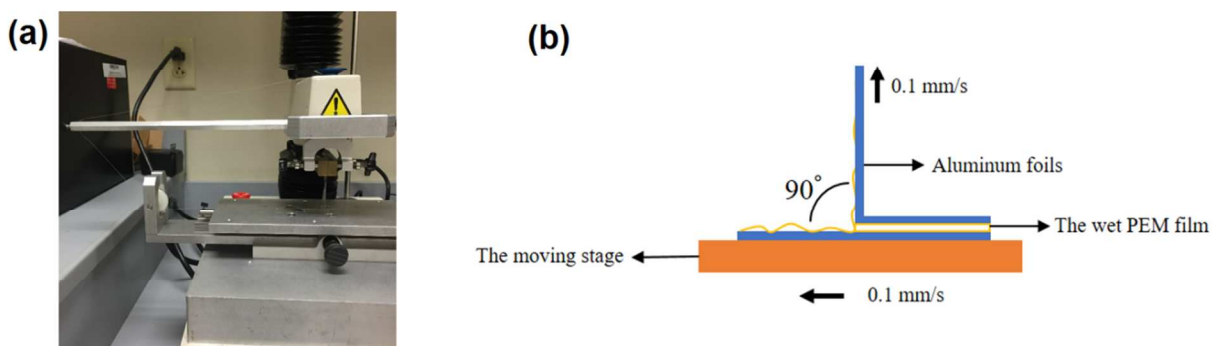


Figure S1. The peel test set up (a) and the scheme of the peel test set up (b).

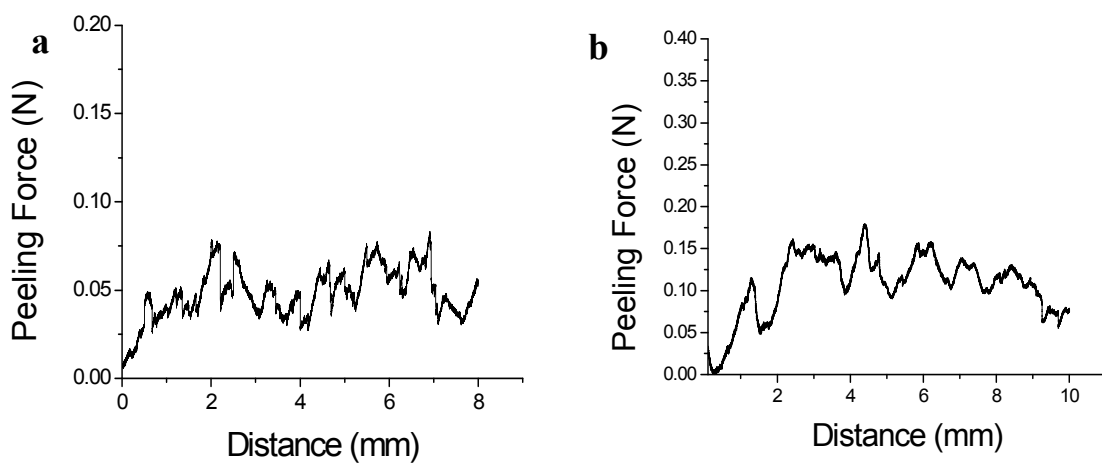


Figure S2. Peel force of (BPEI/PAA)₅₀ wetted by water whose pH was 3 (a), Fe³⁺ (b). The concentration of metal ion was 5mM. The peel rate was 0.1mm/s.

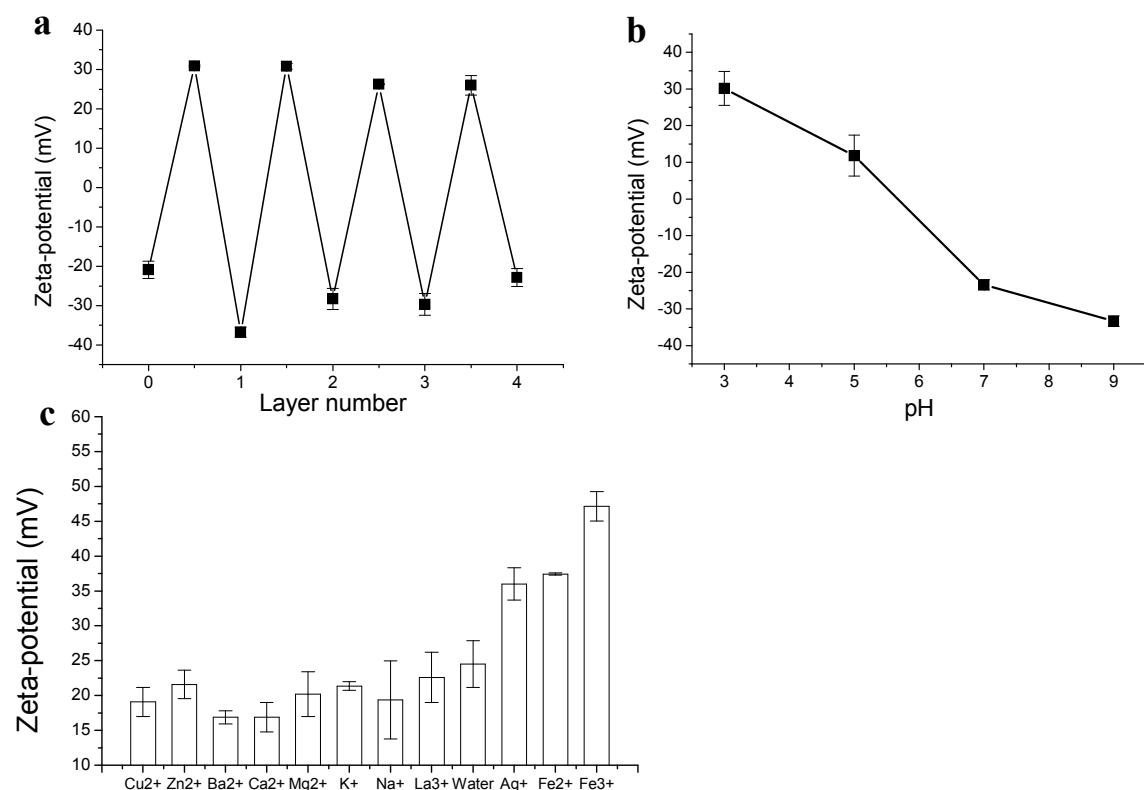


Figure S3. Zeta-potential of BPEI/PAA multilayers coated latex spheres as functions of bilayer number (a), pH of water (b), and metal ion types in ion solutions (c). The concentration of metal ion solution was fixed as 5 mM.

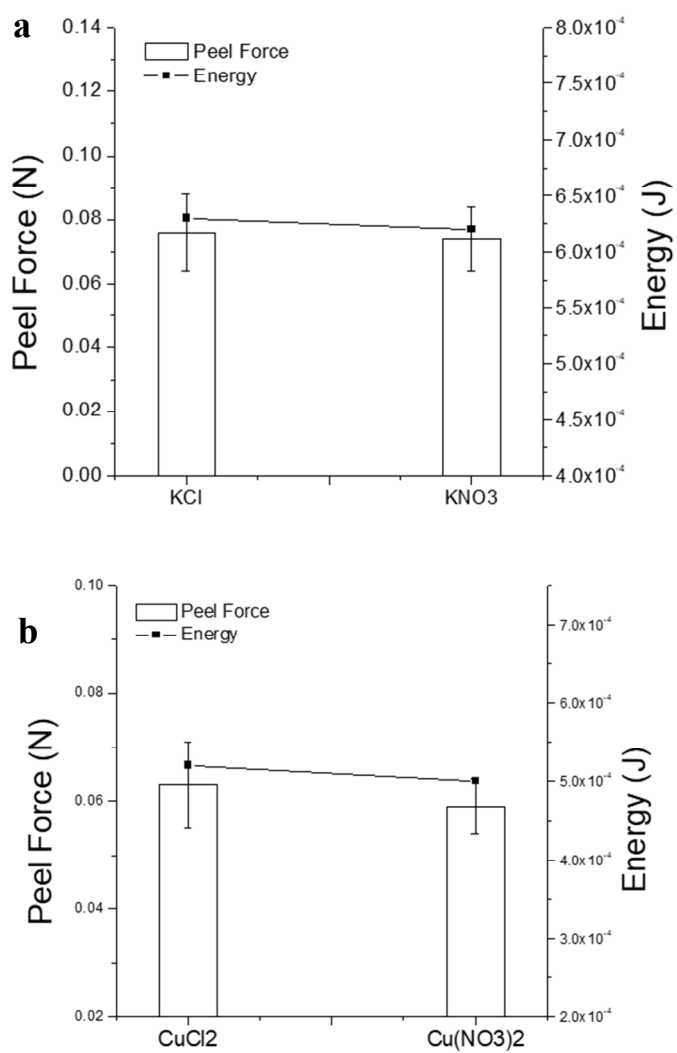


Figure S4. Peel force and energy of a BPEI/PAA film wet with (a) KCl and KNO₃; (b) CuCl₂ and Cu(NO₃)₂.

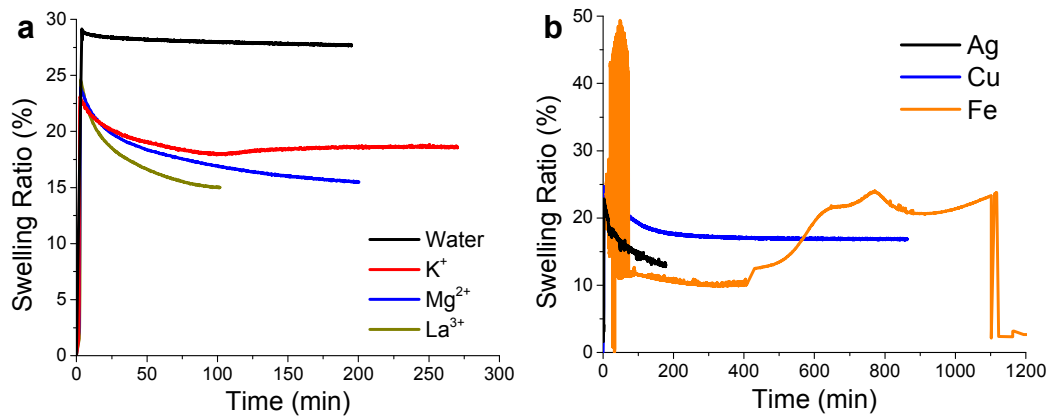


Figure S5. Swelling behavior of (BPEI/PAA)₆ film in water, KCl solution, MgCl₂ solution, and LaCl₃ solution (a) and CuCl₂ (b). The initial dry thickness is ~300 nm. Solution pH was left neutral or adjusted to 2.85.