Electronic Supplementary Information Charged drug delivery by ultrafast exponentially grown weak polyelectrolyte multilayers: amphoteric property, ultrahigh loading capacity and pH-responsiveness

Contents:

- Cross-section FE-SEM images of multilayers assembled at varied assembly pH with different bilayer number (Fig. S1-S3).
- CG loading of PEI/PAA films with different bilayers at loading pH=3.2 (Fig. S4).
- MB Loading of (PEI/PAA)₄-PEI at different loading pH (Fig. S5).
- FE-SEM images of (PEI/PAA)₄-PEI assembled at PEI pH of 9.5 and PAA pH of 3.2 at different magnifications (Fig. S6).



Fig. S1. Cross-section FE-SEM images of multilayers assembled at PEI pH of 6.5 and PAA pH of 6.5 with different bilayer number. A). 4 bilayer; B). 5 bilayer; C). 6 bilayer.



Fig. S2. Cross-section FE-SEM images of multilayers assembled at PEI pH of 8.0 and PAA pH of 4.0 with different bilayer number. A). 4 bilayer; B). 5 bilayer; C). 6 bilayer.



Fig. S3. Cross-section FE-SEM images of multilayers assembled at PEI pH of 9.5 and PAA pH of 3.2 with different bilayer number. A). 4 bilayer; B). 5 bilayer; C). 6 bilayer.



Fig. S4. CG loading of PEI/PAA films with different bilayers at loading pH=3.2.



Fig. S5. MB Loading of (PEI/PAA)₄-PEI at different loading pH.



Fig. S6. FE-SEM images of (PEI/PAA)₄-PEI assembled at PEI pH of 9.5 and PAA pH of 3.2 at different magnifications.