

Electronic Supplementary Information

Stiff Chains Inhibit and Flexible Chains Promote Protein Adsorption to Polyelectrolyte Multilayers

Bo Wu,^{ab} Guangming Liu,^{*a} Guangzhao Zhang^c and Vincent S. J. Craig^{*b}

^aHefei National Laboratory for Physical Sciences at the Microscale, Department of Chemical Physics, University of Science and Technology of China, Hefei, 230026, P. R. China.

^bDepartment of Applied Mathematics, Research School of Physics and Engineering, The Australian National University, Canberra, ACT 0200, Australia.

^cFaculty of Materials Science and Engineering, South China University of Technology, Guangzhou, 510640, P. R. China.

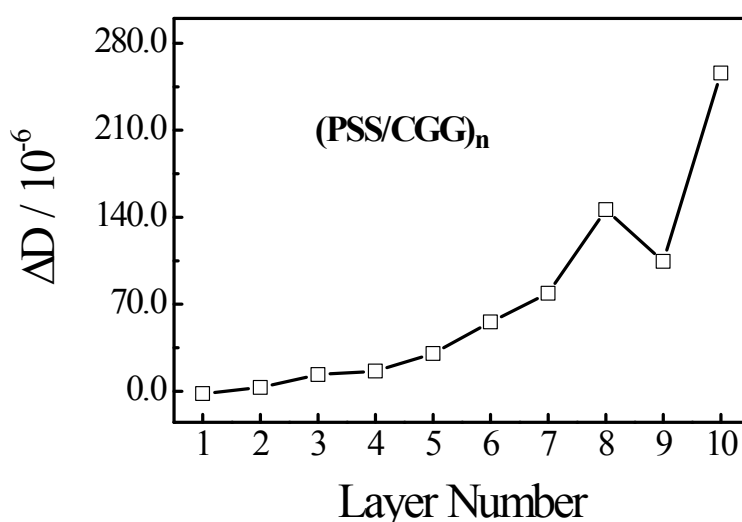


Figure S1. The layer number dependence of shift in dissipation (ΔD) for the growth of PSS/CGG multilayer in a 0.1 M NaCl solution. Here, the odd and even layer numbers correspond to the deposition of PSS and CGG, respectively.

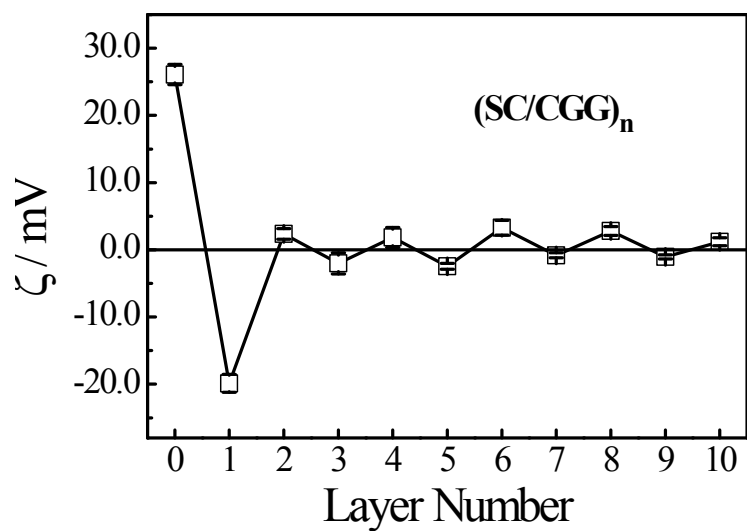


Figure S2. The layer number dependence of change in surface Zeta potential (ζ) for the growth of SC/CGG multilayer in a 0.1 M NaCl solution. Here, the odd and even layer numbers correspond to the deposition of SC and CGG, respectively.

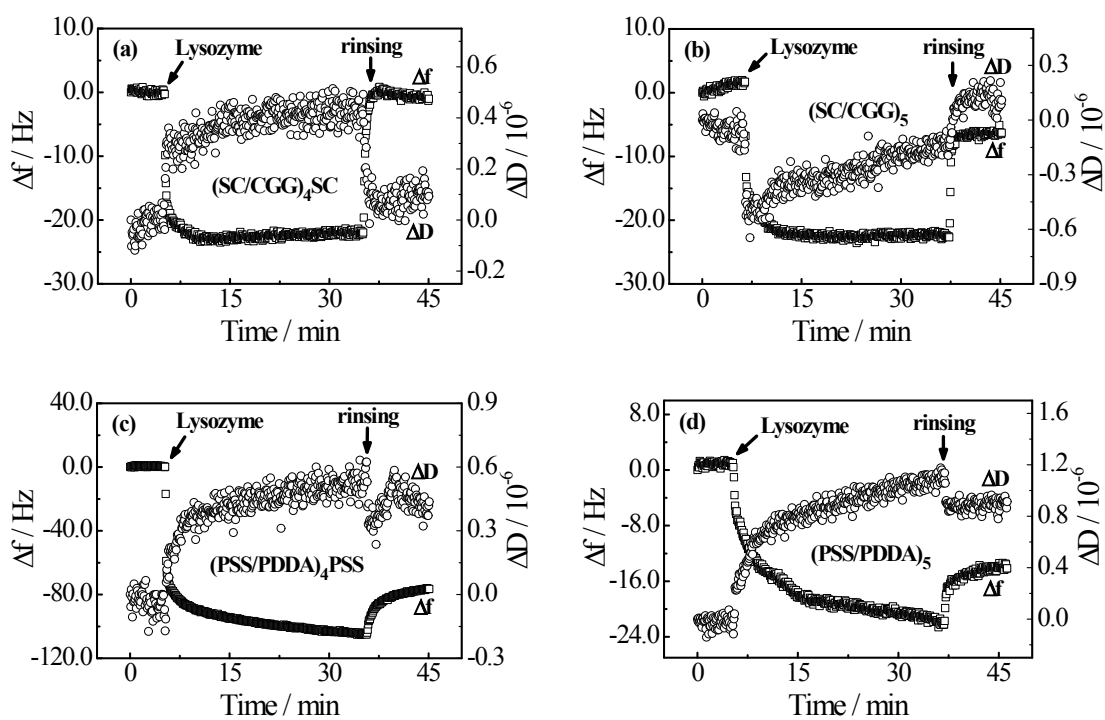


Figure S3. Changes in frequency (Δf) and dissipation (ΔD) as a function of time for the adsorption of lysozyme on the SC/CGG and PSS/PDDA multilayer surfaces, respectively, where the overtone number (n) is 3. For $(SC/CGG)_4SC$, panel (a); $(SC/CGG)_5$, panel (b); $(PSS/PDDA)_4PSS$, panel (c) and $(PSS/PDDA)_5$, panel (d); PEMs.