

Supporting Information for the Manuscript Entitled

Self-Assembled Monolayer and Multilayer Films Based on L-Lysine Functionalized Perylene Bisimide

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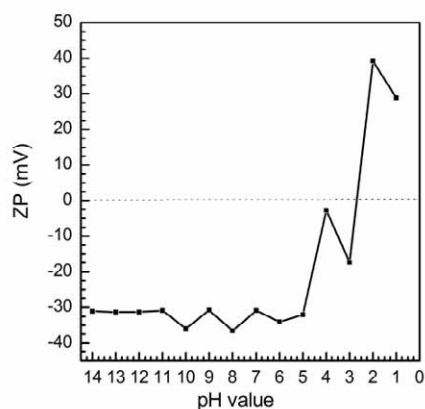


Fig. S1 Zeta potential of Lys-4CIPBI-Lys aqueous solution (50 μ M) at pH value range from 14 to

1.

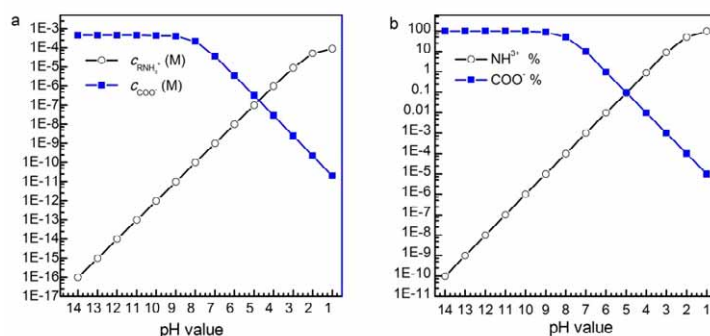


Fig. S2 (a) The concentration of protonated amine and carboxylic acid radical as a function of the pH value in aqueous solution, (b) percent of protonated amine and carboxylic acid radical as a function of the pH value in aqueous solution.

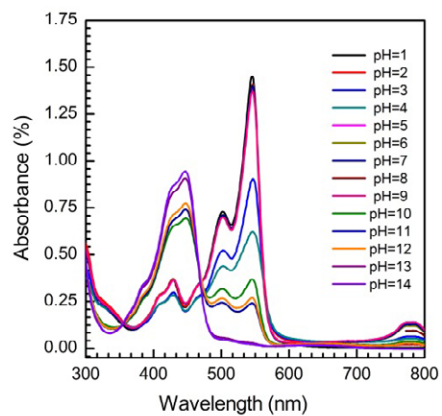


Fig. S3 UV-vis spectra of Lys-4CIPBI-Lys in aqueous solution (50 μ M) at different pH range from 1 to 14.

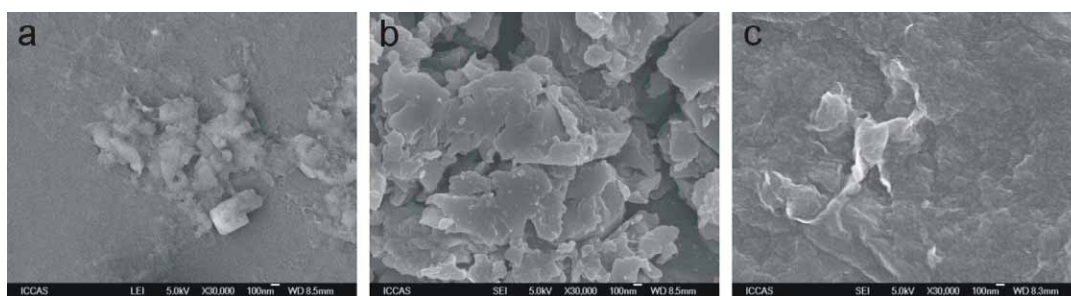


Fig. S4 SEM images of film formed from Lys-4CIPBI-Lys at at different pH, (a) pH=1, (b) pH=6, (c) pH=9.

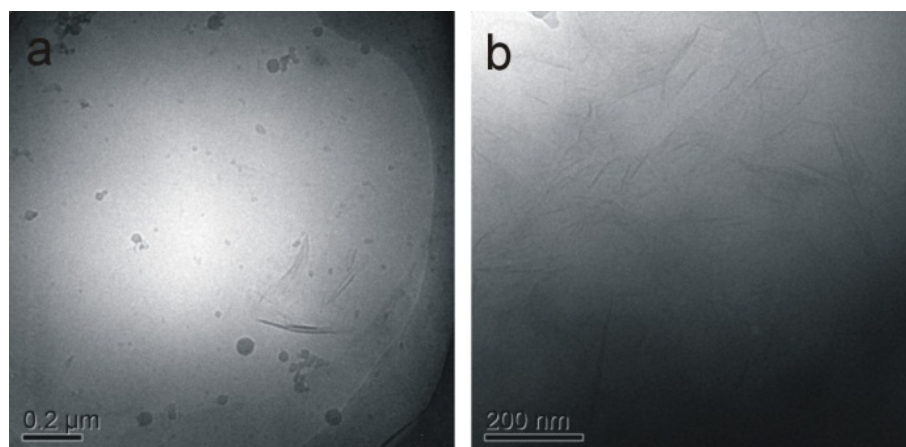


Fig. S5 Cryo-TEM images of film formed from Lys-4CIPBI-Lys in aqueous solution at different concentrations: (a) 10 μ M, (b) 1mM.

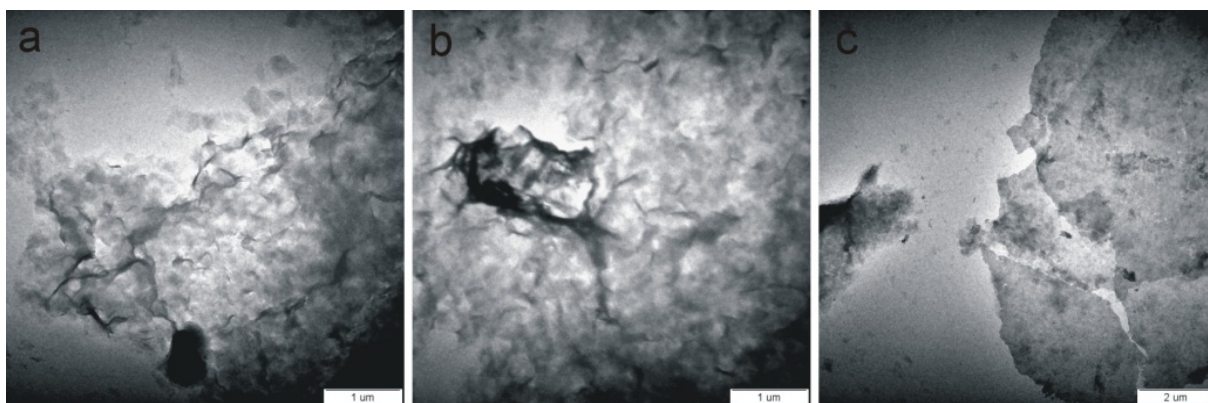


Fig. S6 TEM image of multilayer formed by the addition of Cu^{2+} at different $\text{NH}_2/\text{Cu}^{2+}$ (a) 1, (b) 2, (c) 4.