Support information

Designing of Hierarchical Comb Hydrophilic Polymer Brush (HCHPB) Surfaces

Inspired by Fish mucus for anti-biofouling

Xin Su\textsuperscript{ab}, Dezhao Hao\textsuperscript{cd}, Zhengning Li\textsuperscript{a*}, Xinglin Guo\textsuperscript{b*} and Lei Jiang\textsuperscript{cd}

\textbf{a.} College of Environmental and Chemical Engineering, Dalian University, Dalian 116622, China.

\textbf{b.} Beijing National Laboratory for Molecular Sciences (BNLMS), Key Laboratory of Green Printing, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China.

\textbf{c.} Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China.

\textbf{d.} School of Future Technology, University of Chinese Academy of Sciences, Beijing, 100190, P. R. China
Fig. S1 Identification for modified substrate. FTIR-ATR spectra of a) PVC membranes and b) PET membranes.
Fig. S2 Characterization of the molecular weight after grafting PAA determined by MALDI-TOF. The polymer was pull down by H⁺ aqueous solution at 100 °C.