Electronic Supplementary Information

Polymer brushes on structural surfaces: a novel synergistic strategy for perfectly resisting algae settlement

Yu Zhang\textsuperscript{a,b,c}, Haiyuan Hu\textsuperscript{a}, Xiaowei Pei\textsuperscript{a}, Yupeng Liu\textsuperscript{a}* , Qian Ye\textsuperscript{a,d}* , and Feng Zhou\textsuperscript{a}

\textsuperscript{a} State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, 730000, China
\textsuperscript{b} University of Chinese Academy of Sciences, Beijing, 100049, China
\textsuperscript{c} School of Electromechanical Engineering and Key Laboratory of Mechanical Equipment Manufacturing and Control Technology of Ministry of Education, Guangdong University of Technology, Guangzhou, 510006, China
\textsuperscript{d} Research & Development Institute of Northwestern Polytechnical University in Shenzhen, School of Materials Science and Engineering, Northwestern Polytechnical University, Xi’an, 710072, China

*E-mail: yeqian213@nwpu.edu.cn
**Figure S1.** AFM images of wrinkled PDMS (Up) and the corresponding section analysis (Down).

**Figure S2.** High-resolution C (left), S, and Si (right) spectra of wPDMS, wPDMS-POEGMA, and wPDMS-PSPMA samples.
Figure S3. FT-IR spectra (a) and XPS survey spectra (b) of wPDMS-PMMA and wPDMS-PMETAC, respectively.