

Antioxidant N-acetylcysteine Removing ROS: An antifouling strategy inspired by mussels

Jine Wang, Chen Zhang, Rui Zhao, Pei Wang,* Meihua Jin* jiuju Xu

Department of Materials Science and Engineering, Dalian Maritime University,
Dalian 116026, P. R. China.

*Corresponding author.

E-mail addresses: jinewangxrc@163.com (J. Wang), pudding@dlmu.edu.cn (C. Zhang), zhaorui0004@163.com (R. Zhao), peterwp@dlmu.edu.cn (P. Wang), jinmh@dlmu.edu.cn (M. Jin), jjxu@dlmu.edu.cn (J. Xu).

Supporting Information

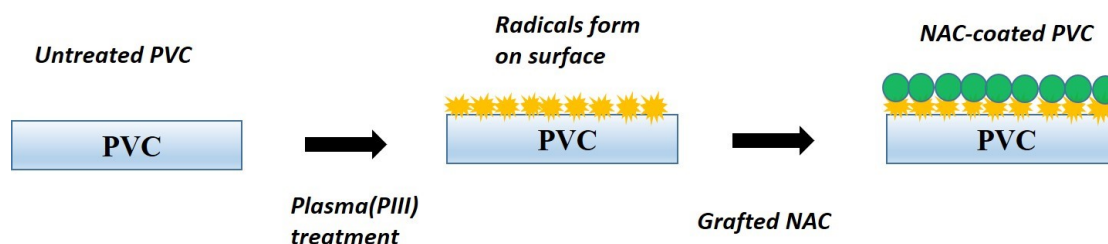


Fig. S1. Preparation process of PVC-NAC coatings. After PIII treatment, free radicals were generated on the PVC surfaces. Then the PVC coatings containing a large number of free radicals were immersed in the NAC solution, and continuously stirred under constant temperature (37 °C), and the PVC-NAC coatings were obtained after 24 hours.

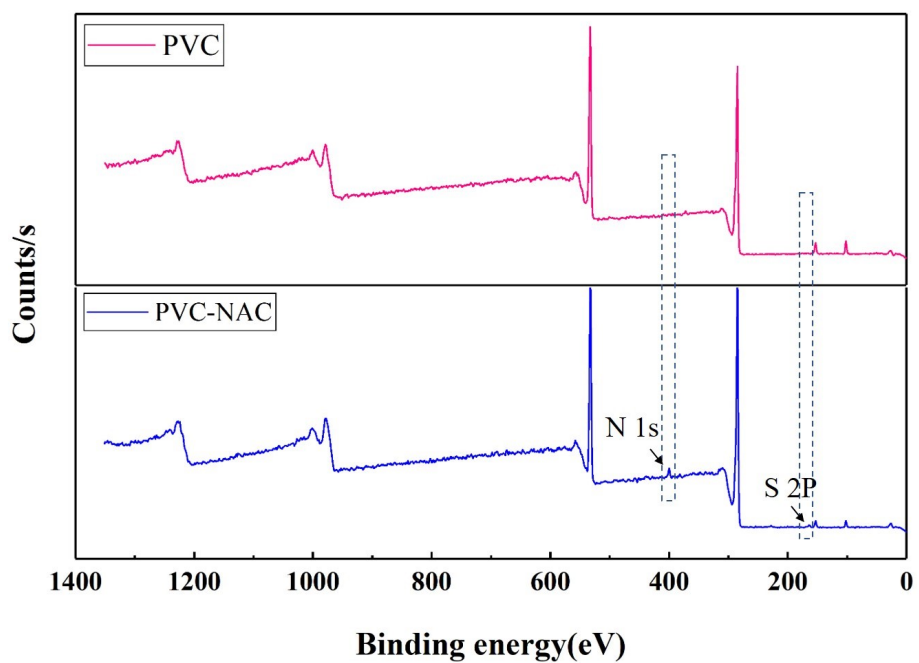


Fig. S2. XPS survey spectra for PVC and PVC-NAC coatings.

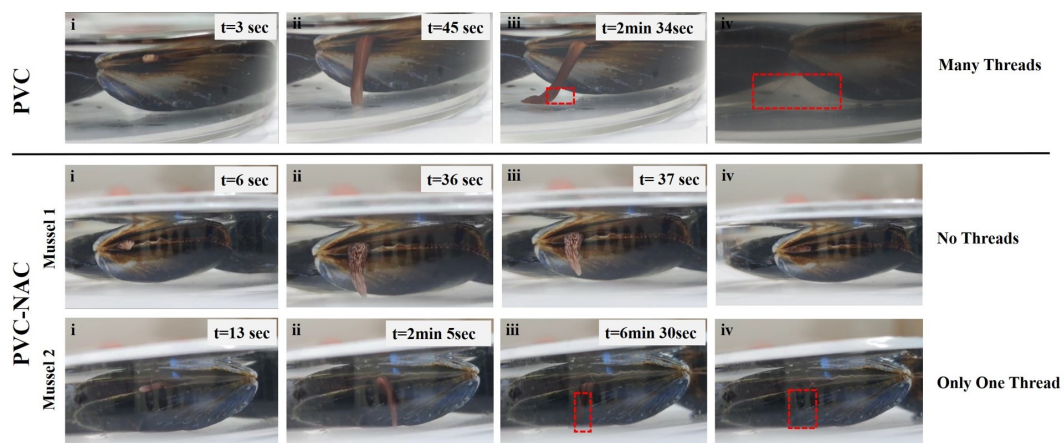


Fig. S3. Live observation of mussel surface exploration behavior and thread secretion on different surfaces.