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Chemistry plays a critical role

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# Antifouling membrane surface construction: Chemistry plays a critical role

Xueting Zhao<sup>b</sup>, Runnan Zhang<sup>a</sup>, Yanan Liu<sup>a</sup>, Mingrui He<sup>a</sup>, Yanlei Su<sup>a</sup>, Congjie Gao<sup>b</sup>, Zhongyi Jiang<sup>a\*</sup>

<sup>a</sup> *Key Laboratory for Green Chemical Technology of Ministry of Education, School of Chemical Engineering and Technology, Tianjin University, Tianjin 300072, China*

<sup>b</sup> *Center for Membrane and Water Science & Technology, Ocean College, Zhejiang University of Technology, Hangzhou 310014, China.*

## ABSTRACT

Membrane technology has been broadly utilized in water purification including wastewater treatment, seawater or brackish water desalination. However, it often suffers from the severe membrane fouling due to the nonspecific interactions between membrane surface and foulants. Antifouling membrane surface construction thus becomes an everlasting and ubiquitous issue, where chemistry plays a critical role in membrane material design, hierarchical structure manipulation, antifouling mechanism integration and separation performance intensification. Many emerging chemistries enable the rational design and construction of state-of-the-art antifouling membrane surfaces. This review will highlight the recent progress in antifouling membrane surface construction

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\* Corresponding author. School of Chemical Engineering and Technology, Tianjin University, No. 92, Weijin Road, Nankai District, Tianjin 300072, China

Tel: 86-22-27406646. Fax: 86-22-27406646.

E-mail address: [zhyjiang@tju.edu.cn](mailto:zhyjiang@tju.edu.cn) (Z.Y. Jiang)

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