

Supporting Information

Double-crosslinked GO interlayer framework as pervaporation hybrid membrane with high-performance

Xin Zhang ^a, Ming-Xiao Zhang ^a, Hao Ding ^a, Hu Yang ^a, Xiao-Hua Ma^{*,a}, Xin-Ru Xu ^a, Zhen-Liang Xu ^a, Chuyang Y. Tang ^{b,c,d}

^a *Shanghai Key Laboratory of Multiphase Materials Chemical Engineering, Membrane Science and Engineering R&D Lab, Chemical Engineering Research Center, School of Chemical Engineering, East China University of Science and Technology, 130 Meilong Road, 200237, Shanghai, China*

^b *UNESCO Centre for Membrane Science and Technology, School of Chemical Engineering, University of New South Wales, Sydney, New South Wales 2052, Australia*

^c *UNSW Water Research Centre, School of Civil and Environmental Engineering, University of New South Wales, Sydney, New South Wales 2052, Australia*

^d *Department of Civil Engineering, the University of Hong Kong, Pokfulam Road, Hong Kong S.A.R., China*

Corresponding Author: * (Xiao-Hua Ma) Email: xiaohuama@ecust.edu.cn

Tel.: +86 21 64253670; fax: +86 21 64252989.

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Table S1 the location and area ratio of absorption peaks in FT-IR spectra.

Item	Chemical bonds (wavenumbers cm^{-1})			Peak area		Area ratio (C=O/N-H)
	O-H; N-H	C=O	N-H	C=O	N-H	
CS	3366	1652	1586	3.4	3.3	1.1
CS-GO	3366	1644	1563	6.4	9.6	0.7
CS-GO/TMC	3366	1640	1558	11.0	16.9	0.7

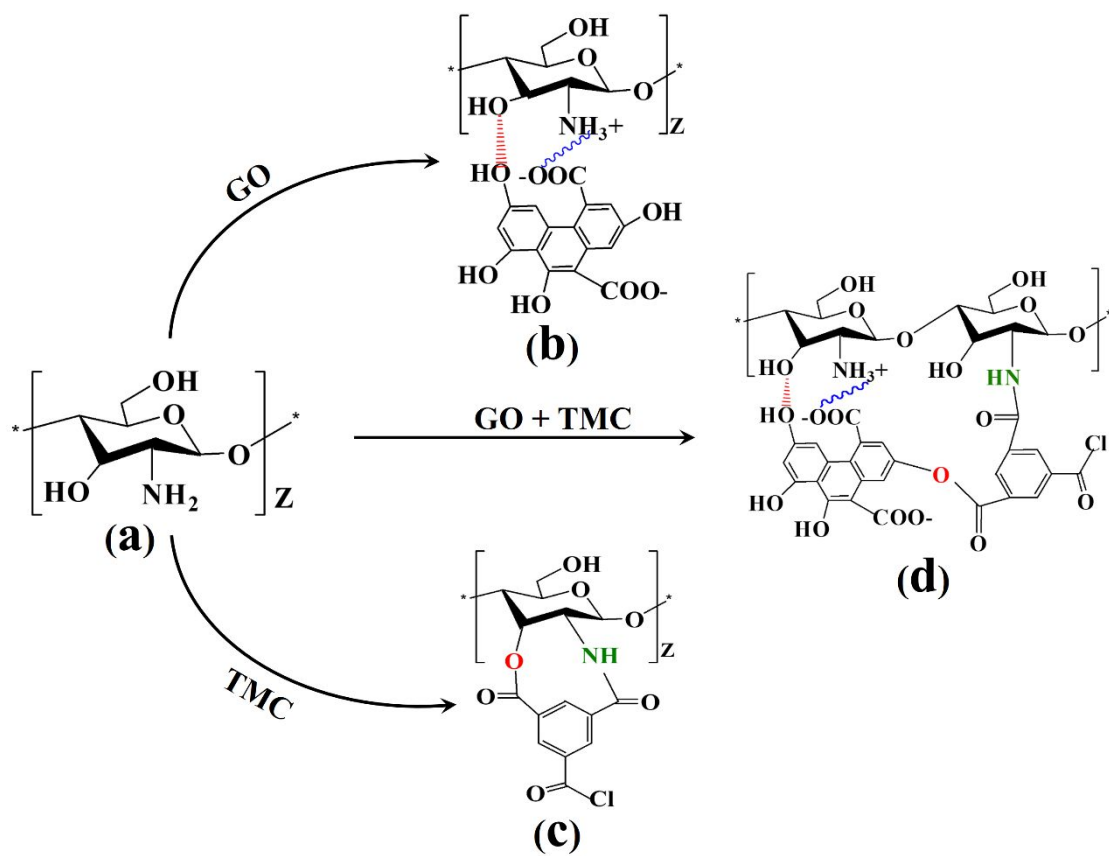


Figure S1 the crosslinking schematic of (a) CS, (b) CS-GO, (c) CS/TMC, (d) CS-GO/TMC crosslinking membranes. The CS, GO, and TMC concentration were 1.0 wt%, 0.1 wt% and 0.5 wt%, respectively.

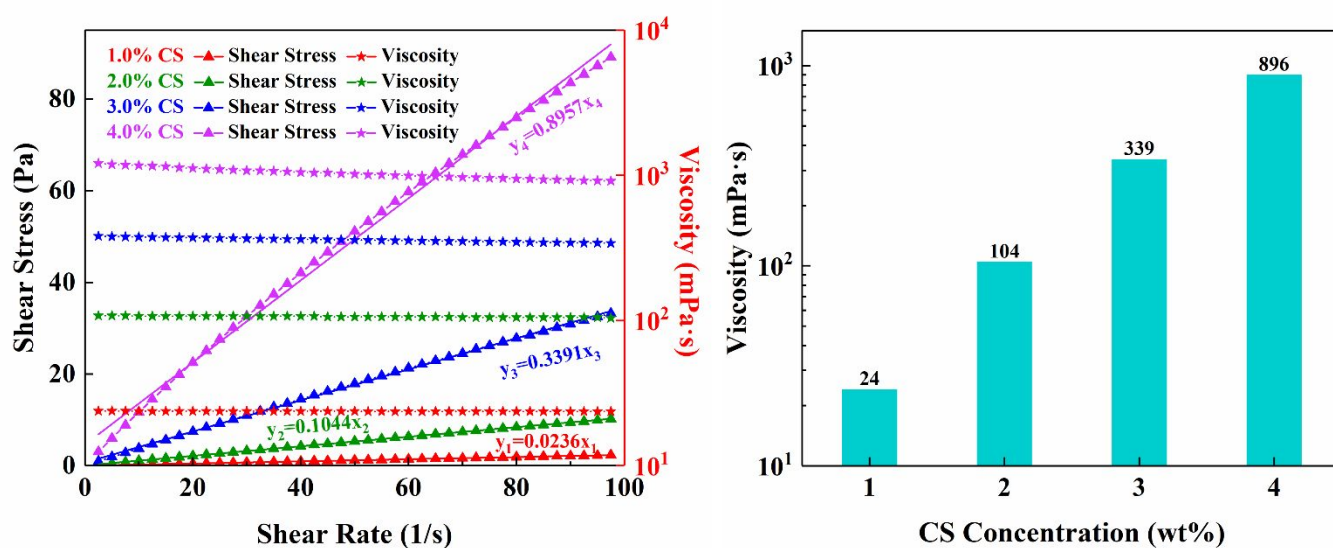


Figure S2 The viscosity of CS with different concentration (1.0 wt% - 4.0 wt%). The testing temperature is 25 °C.

From the Figure S2 (left), CS solution exhibit Newtonian flux performance when the concentration of CS is less than 4.0 wt%. As a result, the slope of shear stress vs. shear rate could be considered as the viscosity of CS solution which were presented in Figure S2 (right).