Supporting Information for

Highly Carbonylated Cellulose Nanofibrous Membranes Utilizing Maleic Anhydride Grafting for Efficient Lysozyme Adsorption

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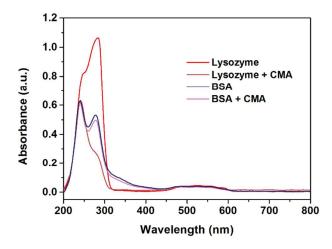


Figure S1. The absorption spectra shown the adsorption performance of as-prepared

CMA nanofibrous membranes towards lysozyme and BSA.

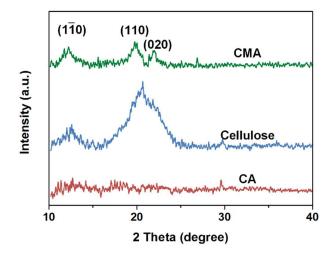


Figure S2. XRD spectra of CA, cellulose, and CMA nanofibrous membranes.

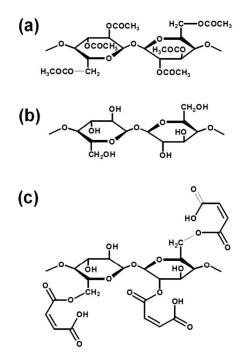


Figure S3. The chemical structure of (a) CA, (b) cellulose, and (c) CMA nanofibrous membranes.

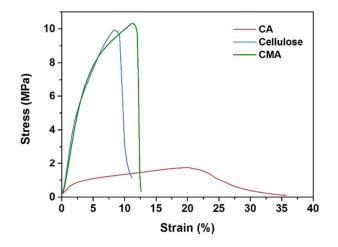


Figure S4. Tensile stress-strain curves of CA, cellulose, and CMA nanofibrous membranes.

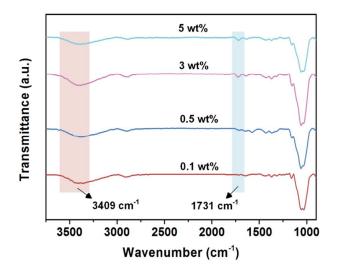


Figure S5. FT-IR spectra of CMA nanfibrous membranes with different contents of MA.

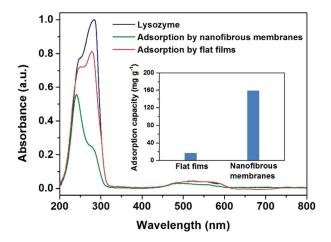


Figure S6. Absorption spectra of lysozyme adsorption by utilizing CMA nanofibrous membranes and filter papers. The insets shown the corresponding adsorption amount of relevant membranes.

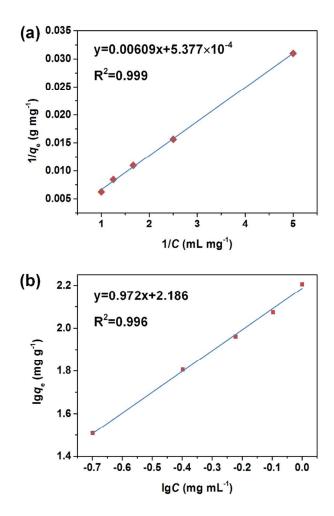


Figure S7. The fitting curves of (a) Langmuir and (b) Freundlich isotherm models for

lysozyme adsorption on CMA nanofibrous membranes.