Author's Accepted Manuscript

Selective removal of divalent cations by polyelectrolyte multilayer nanofiltration membrane: Role of polyelectrolyte charge, ion size, and ionic strength

Wei Cheng, Caihong Liu, Tiezheng Tong, Razi Epsztein, Meng Sun, Rafael Verduzco, Jun Ma, Menachem Elimelech



PII: S0376-7388(18)30194-7 DOI: https://doi.org/10.1016/j.memsci.2018.04.052 Reference: MEMSCI16136

To appear in: Journal of Membrane Science

Received date: 22 January 2018 Revised date: 2 April 2018 Accepted date: 28 April 2018

Cite this article as: Wei Cheng, Caihong Liu, Tiezheng Tong, Razi Epsztein, Meng Sun, Rafael Verduzco, Jun Ma and Menachem Elimelech, Selective removal of divalent cations by polyelectrolyte multilayer nanofiltration membrane: Role of polyelectrolyte charge, ion size, and ionic strength, *Journal of Membrane Science*, https://doi.org/10.1016/j.memsci.2018.04.052

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain. **ACCEPTED MANUSCRIPT**

Selective removal of divalent cations by polyelectrolyte multilayer nanofiltration membrane: Role of polyelectrolyte charge, ion size, and ionic strength

Wei Cheng^{1,2}, Caihong Liu¹, Tiezheng Tong³, Razi Epsztein², Meng Sun², Rafael Verduzco^{4,5}, Jun Ma^{1*}, Menachem Elimelech^{2,5*}

¹State Key Laboratory of Urban Water Resource and Environment, Harbin Institute of Technology, Harbin 150090, China

²Department of Chemical and Environmental Engineering, Yale University, New Haven, Connecticut 06520-8286, USA

³Department of Civil and Environmental Engineering, Colorado State University, Fort Collins, Colorado, 80523, USA

⁴Department of Chemical and Biomolecular Engineering, Rice University, Houston, Texas, 77005, USA

⁵Nanosystems Engineering Research Center for Nanotechnology-Enabled Water Treatment (NEWT), Yale University, New Haven, Connecticut 06520-8286, USA

^{*}Corresponding authors: Tel: +86 451 86283010; fax: +86 451 86283010, majun@hit.edu.cn ^{*}Corresponding authors: +1 203 432 2789; +1 203 432 4387, menachem.elimelech@yale.edu Download English Version:

https://daneshyari.com/en/article/7019810

Download Persian Version:

https://daneshyari.com/article/7019810

Daneshyari.com