

Electronic Supplementary Information (ESI)

Salt Gradient Driven Ion Transport in Solid-State Nanopores: The Crucial Role of Reservoir Geometry and Size

Chih-Yuan Lin,^{1,+} Fu Chen,^{2,+} Li-Hsien Yeh,^{2,*} Jyh-Ping Hsu,^{1,*}

¹Department of Chemical Engineering, National Taiwan University, Taipei 10617, Taiwan

²Department of Chemical and Materials Engineering, National Yunlin University of Science and Technology, Yunlin 64002, Taiwan

+ These two authors contributed equally to this work

* Corresponding authors:

Fax: +886-5-5312071; E-mail: lhyeh@yuntech.edu.tw (Li-Hsien Yeh),

jphsu@ntu.edu.tw (Jyh-Ping Hsu)

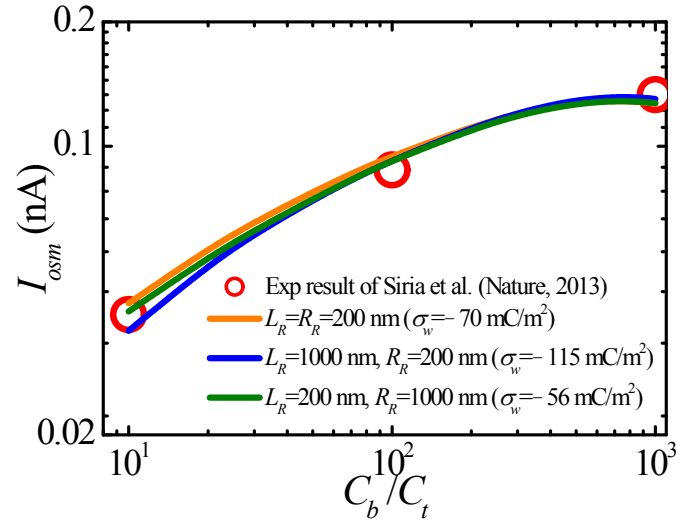


Fig. S1. Dependence of the osmotic current I_{osm} on the bulk salt concentration ratio C_b / C_t at $R_N = 40$ nm, $L_N = 1250$ nm, and $C_t = 1$ mM. Open circles: experimental data of Siria et al.¹ at pH 5.5. Curves: present results under various conditions.

Reference

1. A. Siria, P. Poncharal, A. L. Biance, R. Fulcrand, X. Blase, S. T. Purcell and L. Bocquet, *Nature*, 2013, **494**, 455-458.