Supporting Information

Direct Measurements of the Saturated Vapor Pressure of Water Confined in Extended Nanospaces using Capillary Evaporation Phenomena

Takehiko Tsukahara¹, Taku Maeda², Kazuma Mawatari²,

Akihide Hibara², and Takehiko Kitamori²#

¹ Research Laboratory for Nuclear Reactors, Tokyo Institute of Technology, 2-12-1-N1-32, O-Okayama, Meguro-ku, Tokyo 152-8550 Japan,

² Department of Applied Chemistry, School of Engineering, The University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo 113-8656, Japan

# CORRESPONDING AUTHOR; Prof. Takehiko Kitamori
Tel: +81-3-5841-7231, Fax: +81-3-5841-6039
E-mail: kitamori@icl.t.u-tokyo.ac.jp
Table S1 The fabricated sizes and its capillary radius of the extended nanospaces.

<table>
<thead>
<tr>
<th>Width / nm</th>
<th>Depth / nm</th>
<th>Capillary radius $r$ / nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
<td>90</td>
<td>103</td>
</tr>
<tr>
<td>420</td>
<td>190</td>
<td>262</td>
</tr>
<tr>
<td>840</td>
<td>370</td>
<td>514</td>
</tr>
</tbody>
</table>

Figure S1 Plots of the experimental in chip temperatures vs. on chip temperatures, and their fitted line.
**Figure S2** Plots of the experimental and theoretical vapor pressure values against temperatures. The theoretical values were calculated using Wagner’s equation (see Ref. 18.). Error bars represent $2\sigma$ uncertainties.