

## Supporting information

### **Superhydrophobic and slippery cotton fabrics with robust nanolayers for stable wettability, anti-fouling and anti-icing properties**

Xiaoyu Gao<sup>†</sup>,<sup>a,b</sup> Gang Wen<sup>†</sup>,<sup>a,b</sup> Zhiguang Guo<sup>a,b\*</sup>

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<sup>a</sup>State Key Laboratory of Solid Lubrication, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou 730000, People's Republic of China.

<sup>b</sup>Hubei Collaborative Innovation Centre for Advanced Organic Chemical Materials and Ministry of Education Key Laboratory for the Green Preparation and Application of Functional Materials, Hubei University, Wuhan 430062, People's Republic of China.

<sup>†</sup>The authors contributed equally to this work.

E-mail: zguo@licp.cas.cn; Fax: +86-931-8277088; Tel.: +86-931-4968105

Movie S1: A movie recorded for a water droplet rolling from the SHB surface.

Movie S2: A movie recorded for a water droplet sliding from the SLI surface.

Movie S3: A movie recorded for dripping water solution of graphite powder on the SHB surface with slight tilt.

Movie S4: A movie recorded for dripping water solution of graphite powder on the SLI surface with slight tilt.

Movie S5: A movie recorded for dripping Sudan-dyed chlorobenzene on the SHB surface with slight tilt.

Movie S6: A movie recorded for dripping Sudan-dyed chlorobenzene on the SLI surface with slight tilt.

Movie S7: A movie recorded for unfreezing an iced droplet on the SHB surface in room environment with about about 20 °C temperature and 53% relative humidity.

Movie S8: A movie recorded for unfreezing an iced droplet on the SLI surface in room environment with about about 20 °C temperature and 53% relative humidity.