

# Supporting materials

## Spraying preparation of eco-friendly superhydrophobic coatings with ultra-low water adhesion for effective anti-corrosion and anti-pollution

Yizhou Shen<sup>†,\*</sup>, Zhengwei Wu<sup>†</sup>, Jie Tao<sup>†,\*</sup>, Zhenfeng Jia<sup>†</sup>, Haifeng Chen<sup>‡</sup>, Senyun

Liu<sup>§</sup>, Jiawei Jiang<sup>†</sup>, Zhen Wang<sup>†</sup>

<sup>†</sup> *College of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics, Nanjing 210016, P.R. China*

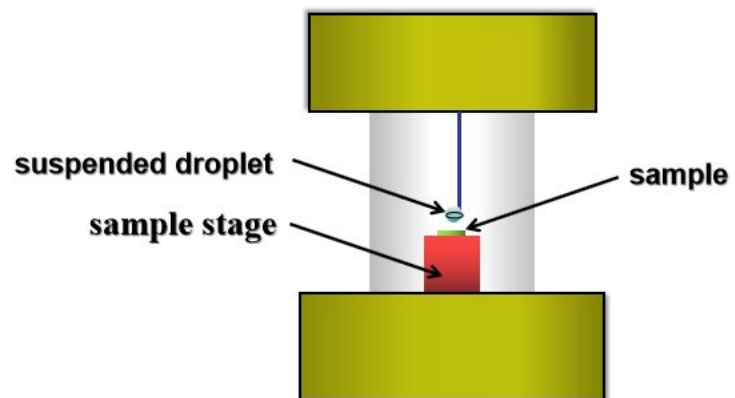
<sup>‡</sup> *School of Engineering, Huzhou University, Huzhou Centre Hospital, Huzhou 313000, P. R. China*

<sup>§</sup> *key Laboratory of Icing and Anti/De-icing, China Aerodynamics Research and Development Center, Mianyang 621000, P. R. China*

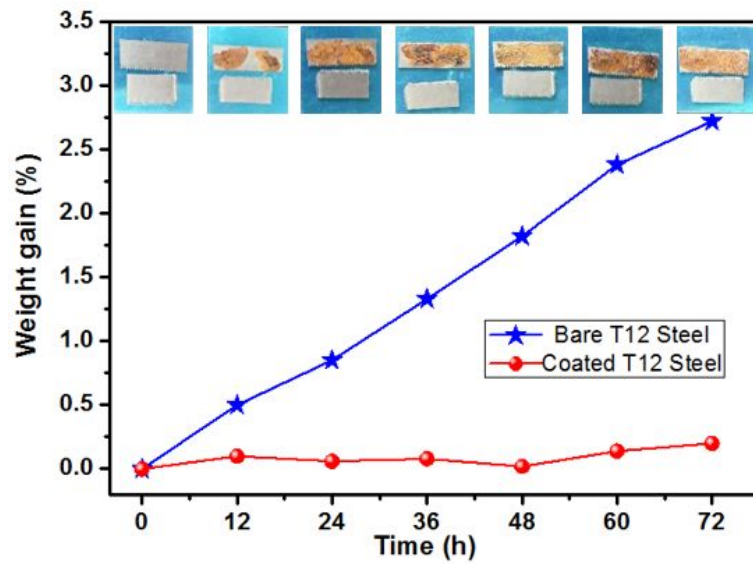
\* Corresponding author: Assoc. Prof. Yizhou Shen and Prof. Jie Tao

E-mail: shenyizhou@nuaa.edu.cn and taojie@nuaa.edu.cn;

Fax/Tel: +86 25 5211 2911.



**Figure S1.** The schematic diagram of water adhesion test system.



**Figure S2.** Mass addition of coated and uncoated T12 steel as a function of time under the condition of immersing in 3.5% NaCl solution.

## **Video Caption**

**Video 1:** The moving process of impact droplets on the bio-based superhydrophobic coatings.

**Video 2:** The self-cleaning dynamic process on the superhydrophobic coatings.