## SUPPORTING INFORMATION

## In-situ Crystallization and Growth of TiO<sub>2</sub> Nanospheres between

## MXene Layers for Improved Adsorption and Visible Photocatalysis

Li Zhang\*a, Pingping Maa, Li Daia, Shijie Lib, Wei Yua, and Jie Guan\*a



Fig. S1. XRD patterns of ML-Ti<sub>3</sub>C<sub>2</sub> MXene before (black line) and after (red line)

water vapor treatment.

<sup>a</sup> Research Center of Resource Recycling Science and Engineering, School of Environmental and Materials Engineering, Shanghai

Polytechnic University, Shanghai 201209, People's Republic of China

<sup>b</sup> Innovation & Application Institute, Zhejiang Ocean University, Zhoushan 316022, People's Republic of China

§ These authors contribute equally to this work. \* Author to whom correspondence should be addressed. E-mail: zhangli@sspu.edu.cn; guanjie@sspu.edu.cn.