Supporting Information

Enhanced visible light photocatalytic properties of TiO$_2$ thin films on the Textured Multicrystalline Silicon Wafers

Jianjiang Li, Jingjiao Zhang, Liang Fang$^*$, Junling Wang$^b$, Mingrong Shen$^a$ and Xiaodong Su$^*$

$^a$ College of Physics, Optoelectronics and Energy, Collaborative Innovation Center of Suzhou Nano Science and Technology, Photovoltaic Research Institute of Soochow University & Canadian Solar Inc., and Jiangsu Key Laboratory of Thin Films, Soochow University, Suzhou 215006, China.

$^b$School of Materials Science and Engineering, Nanyang Technological University, Singapore 639798, Singapore

$^*$Author to whom correspondence should be addressed. e-mail: lfang@suda.edu.cn; xdsu@suda.edu.cn

Summary: There are 4 pages including 3 figures
Figure S1. Cross section SEM images of (a) MT $p$-Si wafer, (b) NT $p$-Si wafer.
Figure S2. Reflectance spectra of the different Si wafers
Figure S3. Current density versus voltage ($J-V$) curve of the NT $pn$-Si solar cell under AM 1.5G illumination (100 mW cm$^{-2}$). The inset is the schematic of the device and working principle.