Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A. This journal is © The Royal Society of Chemistry 2016

## **Supplementary Information:**

## Molecular Surface Functionalization to Enhance Power Output of Triboelectric Nanogenerators

Sihong Wang<sup>I, ‡</sup>, Yunlong Zi<sup>I, ‡</sup>, Yu Sheng Zhou<sup>I</sup>, Shengming Li<sup>I</sup>, Fengru Fan<sup>2</sup>, Long Lin<sup>I</sup>,

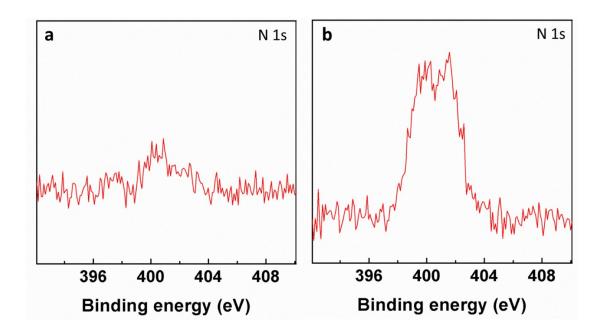
Zhong Lin Wang<sup>I, 2, \*</sup>

<sup>1</sup> School of Materials Science and Engineering, Georgia Institute of Technology, Atlanta, Georgia 30332-0245, United States

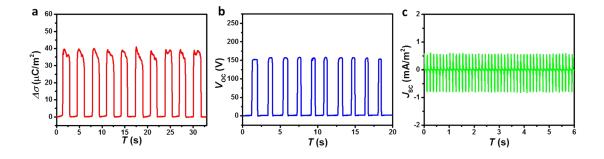
‡These authors contributed equally.

\* Corresponding author: e-mail: <a href="mailto:zlwang@gatech.edu">zlwang@gatech.edu</a>

<sup>&</sup>lt;sup>2</sup> Beijing Institute of Nanoenergy and Nanosystems, Chinese Academy of Sciences, Beijing, China



**Figure S1.** N 1s peaks of XPS spectra of (a) pristine silica and (b) functionalized silica by 10% APTES.



**Figure S2.** (a) Measured charge density, (b) the open-circuit voltage and (c) the short-circuit current density of the TENG with silica functionalized by 1% (in volume ratio) APTES, respectively.