Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2014

## **Supporting Information**

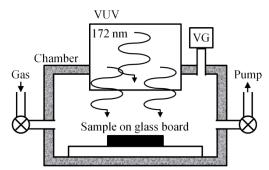


Figure S1. Schematic illustartion of vacuum ultraviolet apparatus used in this work. Note that VG means vacuum gauge.

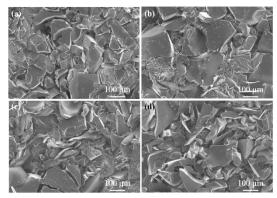


Figure S2. Scanning electron microscopy images of (a) the pristine, and the vacuum ultraviolet irradiated activated carbons for (b) 10, (c) 30 and (d) 60 min, respectively.

 Table S1. Relative concentrations of oxygen-containing functional groups of the pristine and the vacuum-ultraviolet irradiated carbon nanotube for 60 min.

Bond types	Pristine (%)	Irradiation for 60 min (%)
C=C	61.7	47.0
C-C	18.2	14.2
C-O	11.3	11.5
C=O	3.1	10.8
O-C=O	5.7	16.5

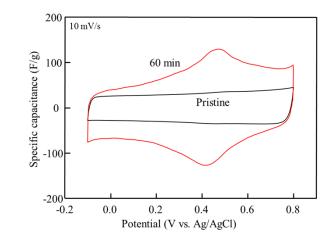


Figure S3. Cyclic voltammograms of the pristine and the vacuum ultraviolet irradiated carbon nanotube for 60 min.