**Supporting Information**

**Multifunctional carbon aerogels from *typha orientalis* for oil/water separation and** **simultaneous removal of oil-soluble pollutants**

Jin Yanga\*, Peng Xua, Yunfei Xiaa, Beibei Chena

*aInstitute for Advanced Materials, School of Materials Science and Engineering, Jiangsu University, Zhenjiang, 212013, P.R. China*

*\*Corresponding author: E-mail:* [*yangjin@mail.ujs.edu.cn*](mailto:yangjin@mail.ujs.edu.cn)

**C:\Users\Administrator\Desktop\20180514香蒲\拼合图\sm1.tif**

**Figure S1.** SEM images of (a) TOFs, (b) SC-TOFs, and (c) MCAs.

**C:\Users\Administrator\Desktop\20180514香蒲\拼合图\sm2.tif**

**Figure S2.** (a) UV-vis spectra of 5 ppm SDI in methylbenzene and the filtrate. (b) Flux in the filtrates and REs of SDI in water-in-oil emulsions.

C:\Users\Administrator\Desktop\20180514香蒲\拼合图\Figure S4.tif

**Figure S3.** Flux and water content in the filtrates of water-in-oil emulsions dyed SDI (a) or SDIII (c) using MCAs. REs of water/SDI (b) or water/SDIII (d) in different water-in-oil emulsions.

**Movie S1:** Variation of brightness of strain-controlled on-off of a LED light by the MCAs. (captured by a digital camera) (AVI)

**Movie S2:** The MCAs for absorbing free oil on or in the water and separating oil/water mixtures. (AVI)

**Movie S3:** The MCAs for separating water-in-methylbenzene emulsion. (AVI)

**Movie S4:** The MCAs for purifying various water-in-oil emulsions dyed SDIII or SDI. (AVI)

**Movie S5:** The MCAs for purifying colored diesel. (AVI)

**Movie S6:** The MCAs for purifying water-in-three-oil emulsions dyed SDIII and SDI. (AVI)