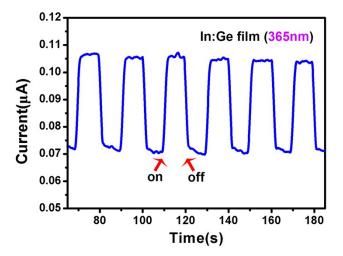
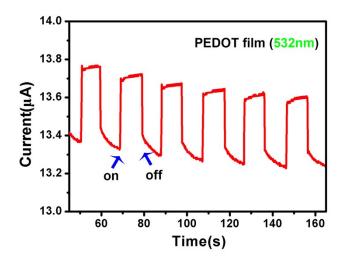
## Electronic Supplementary Information Poly(3,4-ethylenedioxythiophene)/germanium organic-inorganic hybrid thin films: substrate-induced synthesis, enhanced photoelectrochemical and photocatalytic properties

Peng Lu, Pei-hui Yang\*

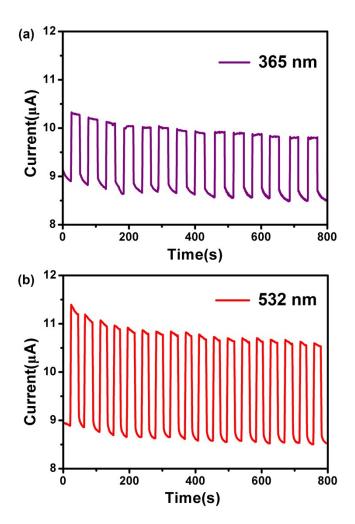
Department of Chemistry, Jinan University, Guangzhou 510632, China \*Corresponding author: E-mail address: typh@jnu.edu.cn (P.-H. Yang) Tel. /fax: +86 020 85223039;



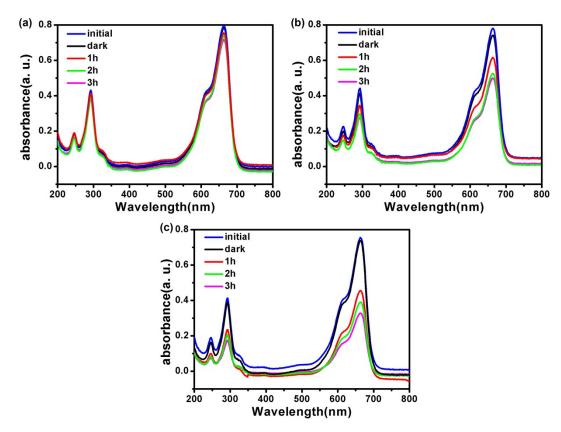
**Figure S1.** Transient photocurrent of Ge films under irradiation (365 nm). Bias voltage: -0.5V.



**Figure S2.** Transient photocurrent of PEDOT films under irradiation (532 nm). Bias voltage: -0.5V.



**Figure S3.** Photocurrent response of the PEDOT/Ge hybrid film under several on/off irradiation cycles for 800 s. (a) 365nm. (b) 532nm. Bias voltage: -0.5V.



**Figure S4.** UV-vis absorption spectra of MB dyes by photocatalysis for different irradiation times under irradiation: (a) Ge film, (b) PEDOT film, (c) PEDOT/Ge hybrid film.