

Supporting information for: Thieno[3,2-b]thiophene derivatives exhibiting semiconducting liquid-crystalline phases at lower temperatures

Yuna Kim, Masahiro Funahashi, and Nobuyuki Tamaoki

^aResearch Institute for Electronic Science, Hokkaido University, Sapporo, Hokkaido, Japan

^bDepartment of Advanced Materials Science, Faculty of Engineering, Kagawa University, Takamatsu, Kagawa, Japan.

E-mail: tamaoki@es.hokudai.ac.jp; Fax: +81-11-706-9357; TEL:+81-11-706-9356.

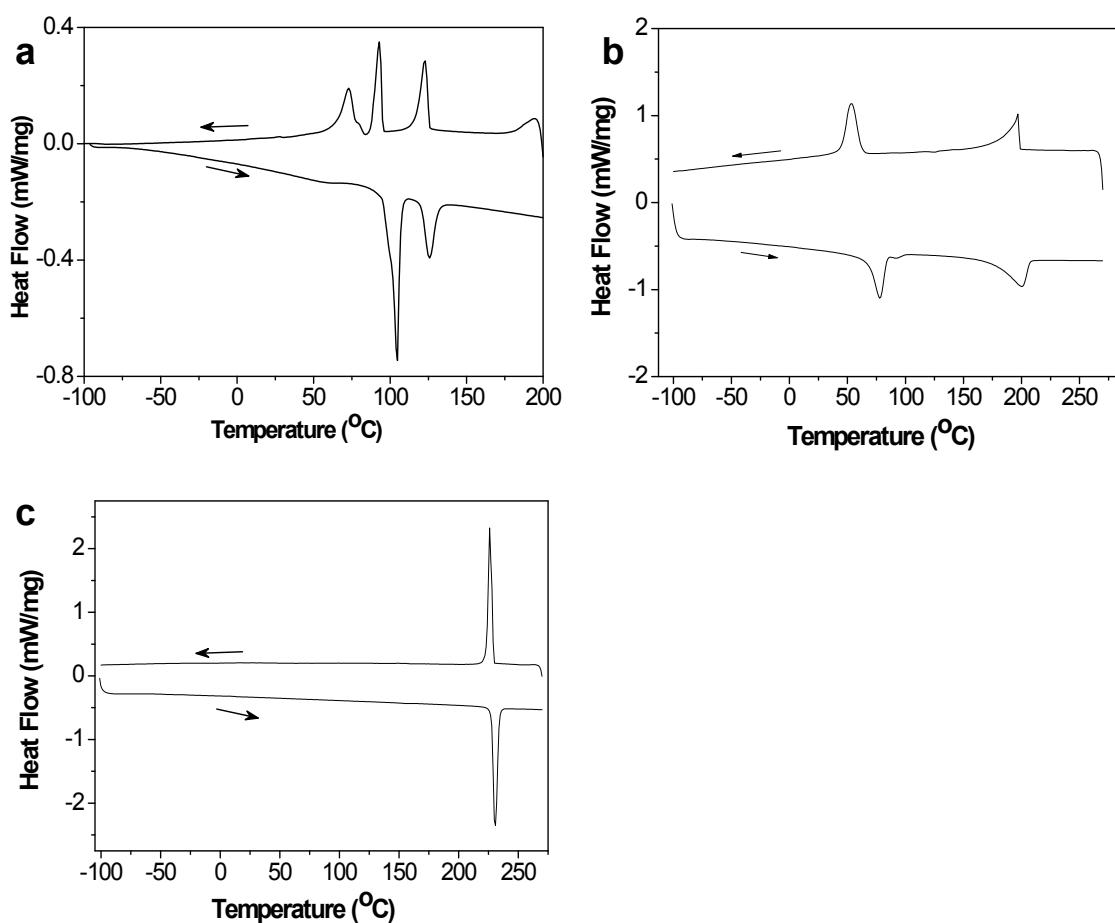


Fig. S1. DSC profiles : (a)1a and (b) 4a and (c) 4b.

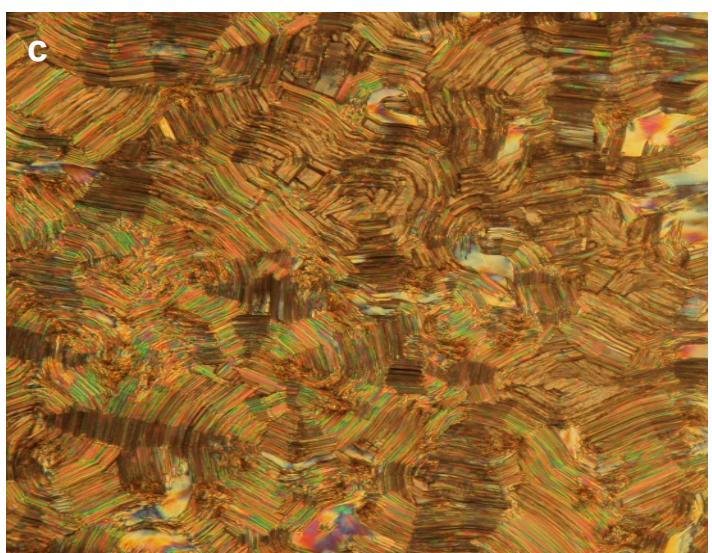
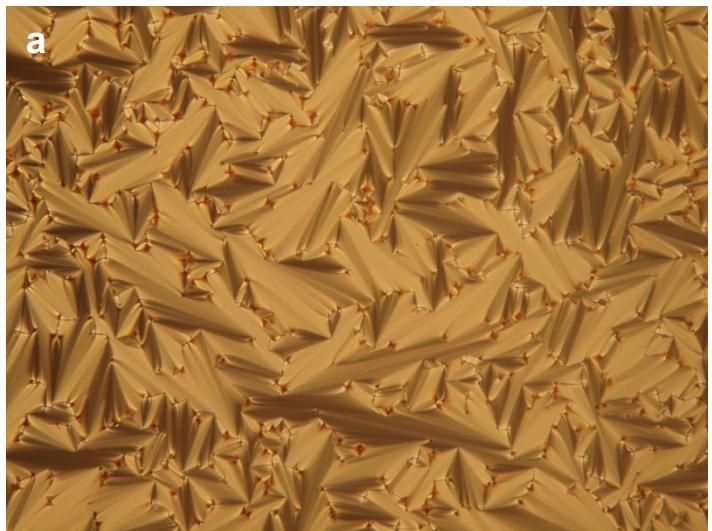


Fig S2. Smectic A (a), smectic E (b) phases and arced focal conic (filament-like) textures (c) of **1a**.

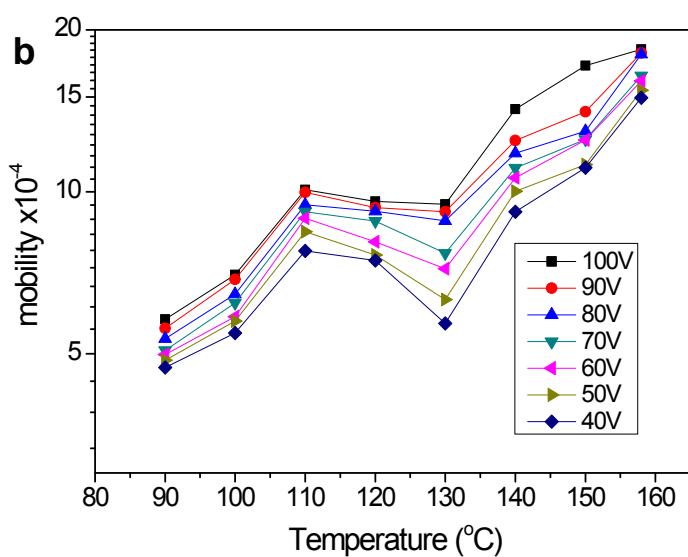
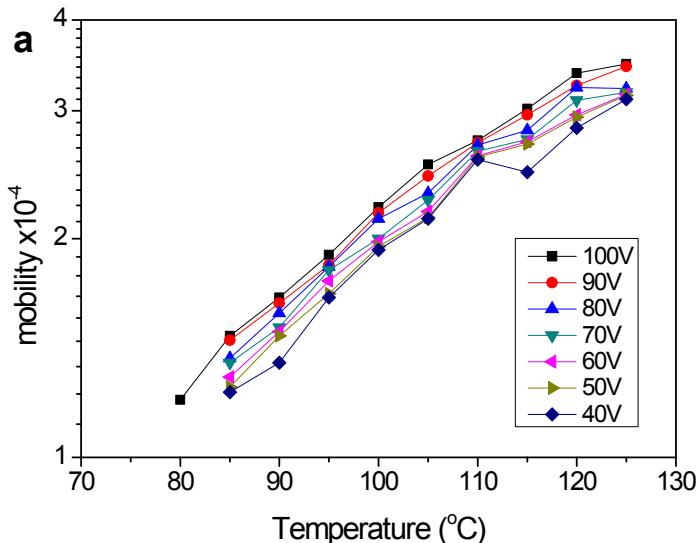


Fig S3. Hole mobilities of **1b** (a) and **3** (b) as a function of temperature.

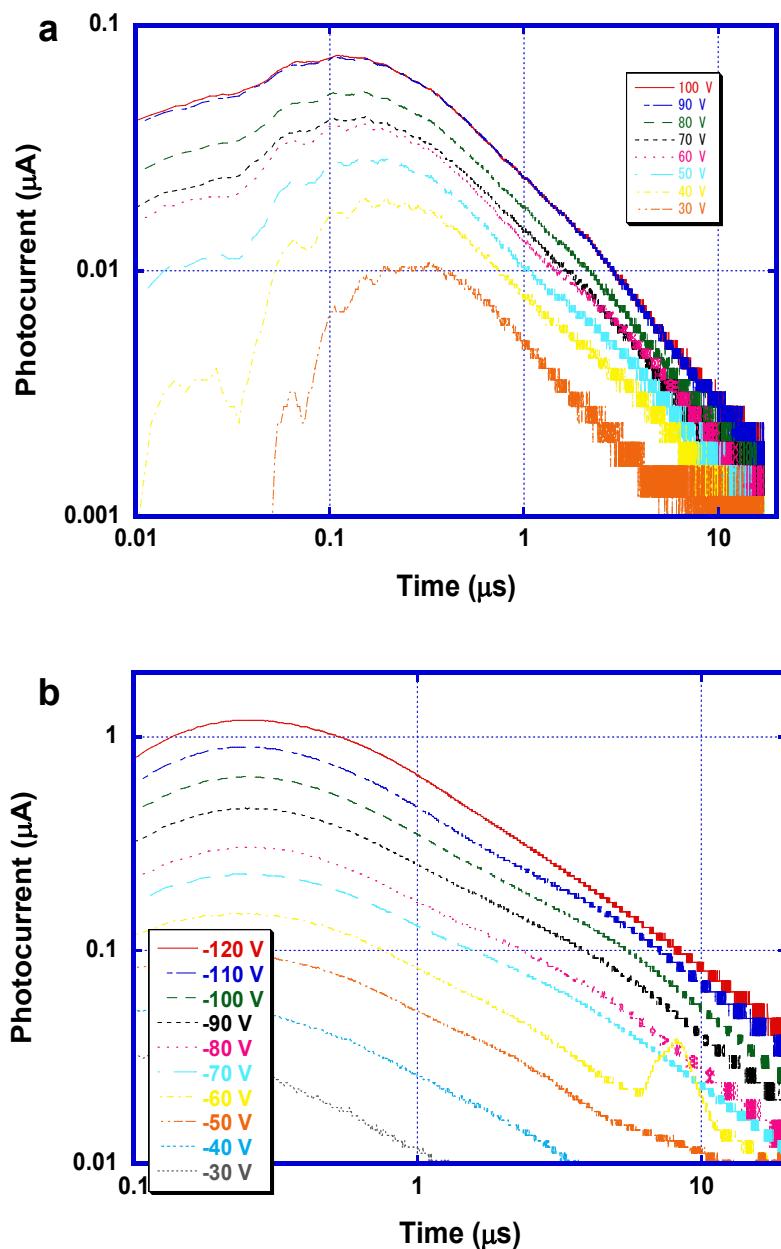


Fig S4. Transient photocurrent of compound **1a** ; (a) hole carrier and (b) electron carrier at room temperature.