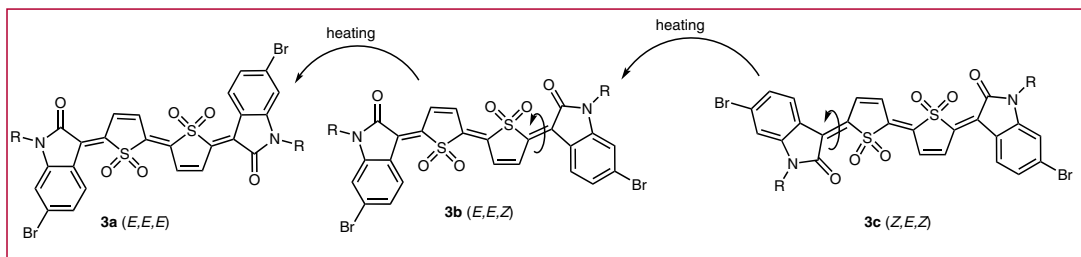
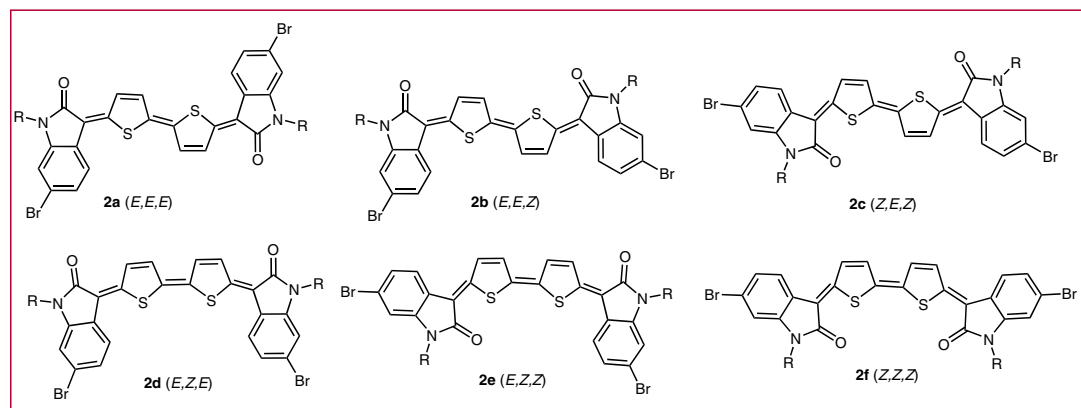
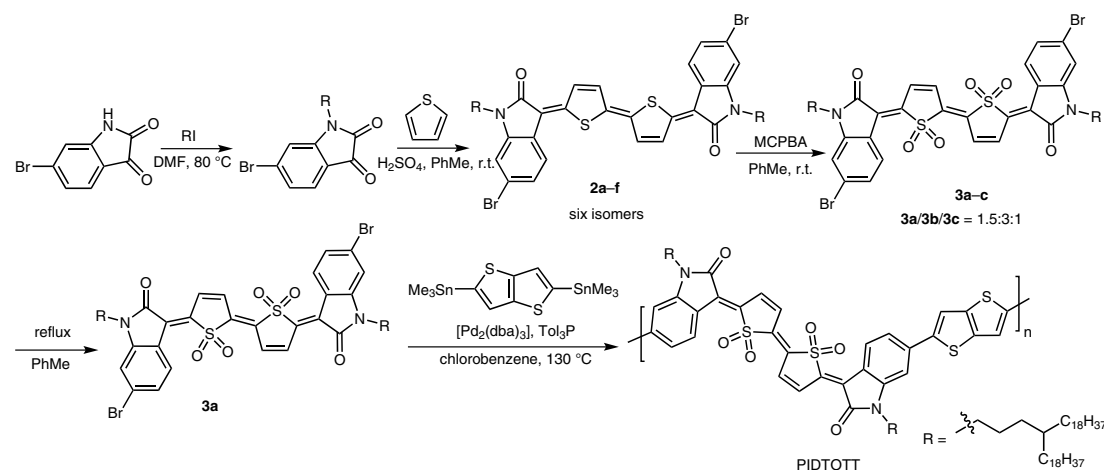


Y. DENG, B. SUN, Y. HE, J. QUINN, C. GUO, Y. LI\* (UNIVERSITY OF WATERLOO, CANADA)  
 Thiophene-*S,S*-dioxidized Indophenine: A Quinoid-Type Building Block with High Electron Affinity for  
 Constructing *n*-Type Polymer Semiconductors with Narrow Band Gaps  
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## A Super Electron Deficient Polymer



**Significance:** The authors report the synthesis of a thiophene-*S,S*-dioxidized indophenine-containing conjugated polymer PIDTOTT. This polymer exhibits unipolar *n*-type semiconductor characteristics with exceptionally high electron mobility (up to  $0.14 \text{ cm}^2 \text{V}^{-1} \text{s}^{-1}$ ).

**Comment:** Compound **2** is oxidized without separation of the six isomers (**2a–f**). The resulting three isomers (**3a–c**) could convert into the most stable isomer **3a** by heating at  $110^\circ \text{C}$ . This study provides an efficient way of making conjugated polymers with high electron affinity.

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