

ARTICLE

NEW JOURNAL OF CHEMISTRY

SUPPORTING INFORMATION

Improvement of morphological structure and electrochemical charge storage performance of a new poly(terthiophene)-based conducting film through side-chain engineering

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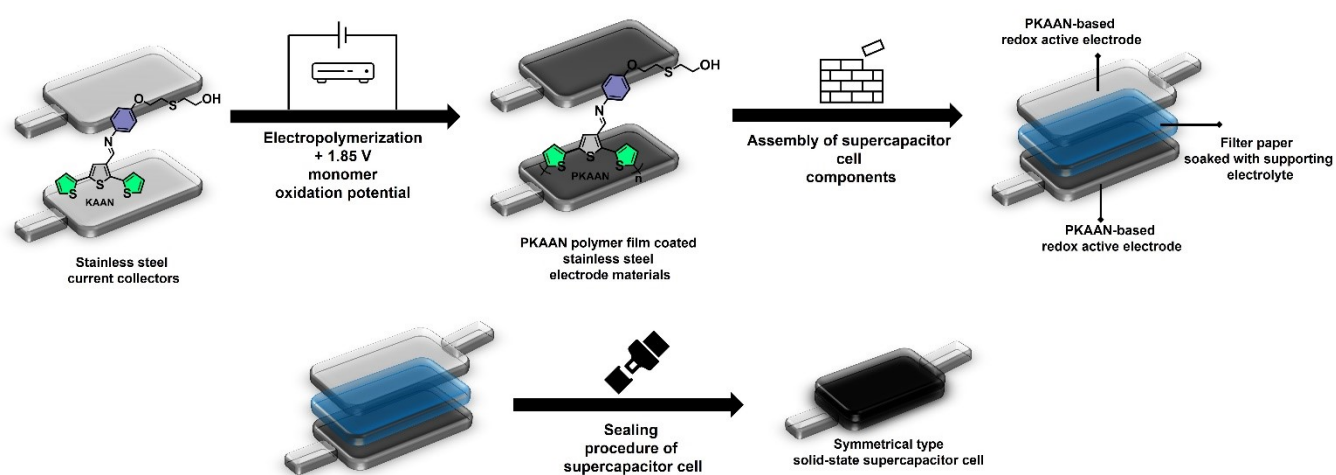


Fig. S1 Schematic representation for the fabrication procedure of symmetrical type solid-state supercapacitor cell

(A)

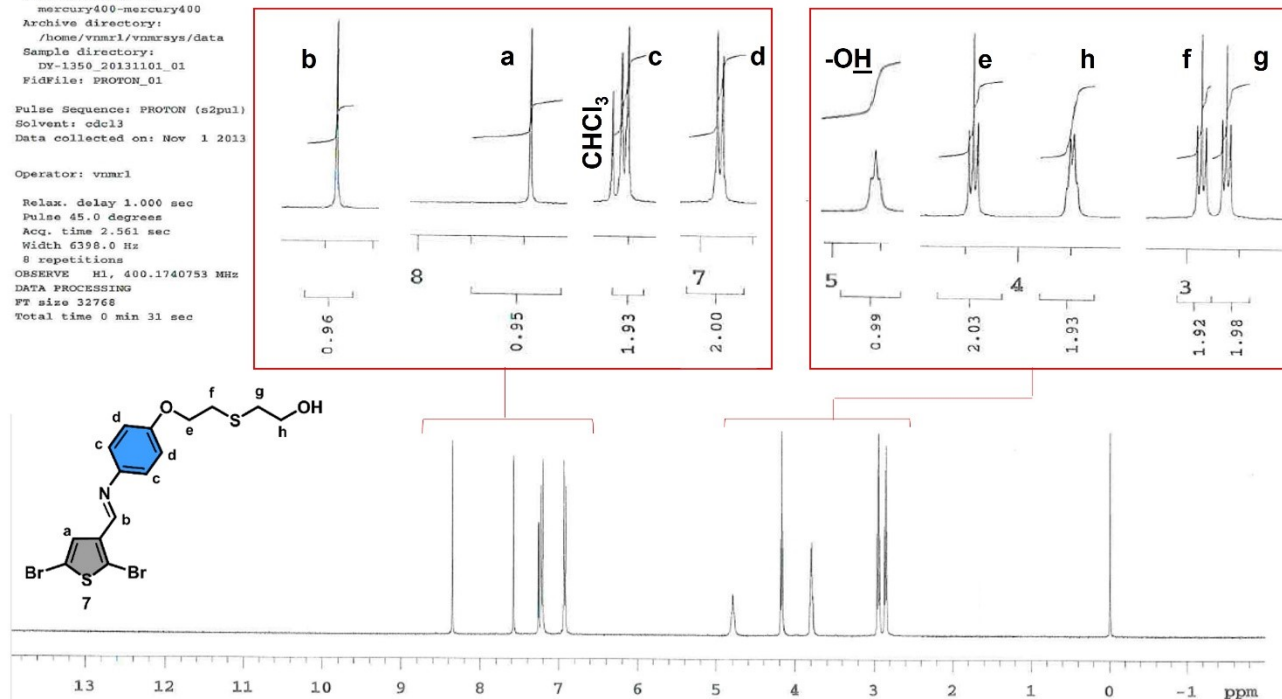
DY-1350

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DY-1350
Data Collected on:
mercury400-mercury400
Archive directory:
/home/vmr1/vmrays/data
Sample directory:
DY-1350_20131101_01
FidFile: PROTON_01

Pulse Sequence: PROTON (s2pul)
Solvent: cdcl3
Data collected on: Nov 1 2013

Operator: vmr1

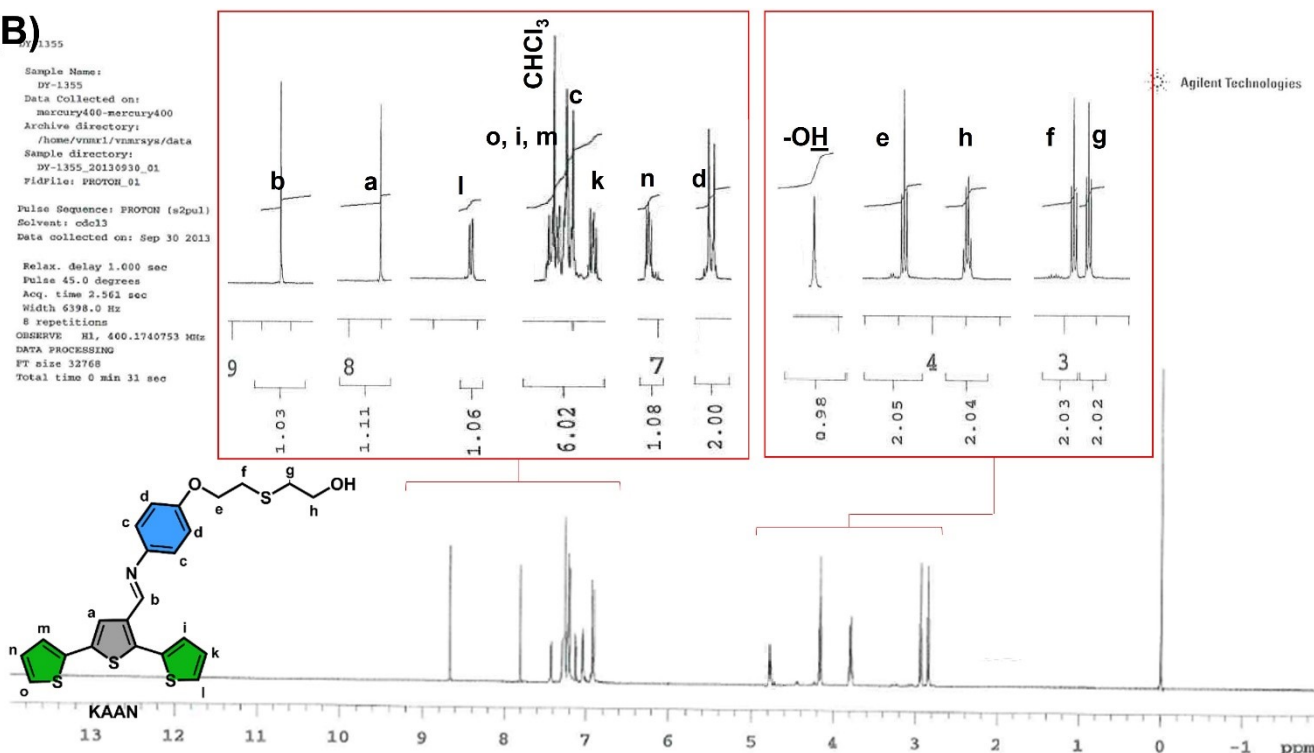
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 2.561 sec
Width 6398.0 Hz
0 repetitions
OBSERVE H1, 400.1740753 MHz
DATA PROCESSING
FT size 32768
Total time 0 min 31 sec

 Agilent Technologies
**(B)**

DY-1355

Sample Name:
DY-1355
Data Collected on:
mercury400-mercury400
Archive directory:
/home/vmr1/vmrays/data
Sample directory:
DY-1355_20130930_01
FidFile: PROTON_01

Pulse Sequence: PROTON (s2pul)
Solvent: cdcl3
Data collected on: Sep 30 2013
Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 2.561 sec
Width 6398.0 Hz
8 repetitions
OBSERVE H1, 400.1740753 MHz
DATA PROCESSING
FT size 32768
Total time 0 min 31 sec

 Agilent Technologies


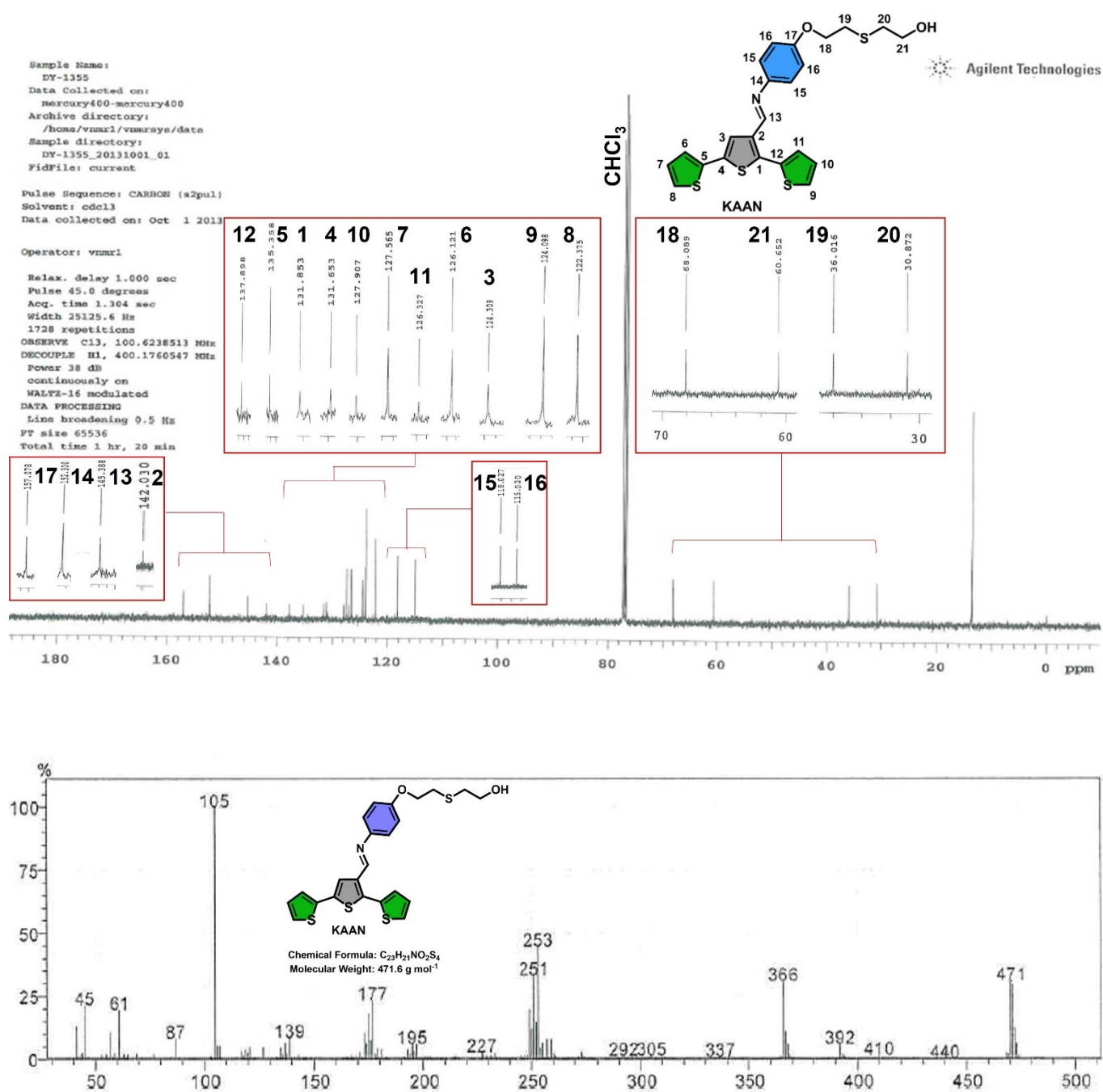


Fig. S2 (A) ¹H NMR spectrum of 2-((2-(4-(((2,5-Dibromothiophen-3-yl)methylene)amino)phenoxy)ethyl)thio)ethanol (7) and **(B)** ¹H NMR, ¹³C NMR and mass spectra of 2-((2-(4-(((2,2':5',2''-Terthiophen]-3'-ylmethylene)amino) phenoxy)ethyl)thio)ethanol (KAAN)

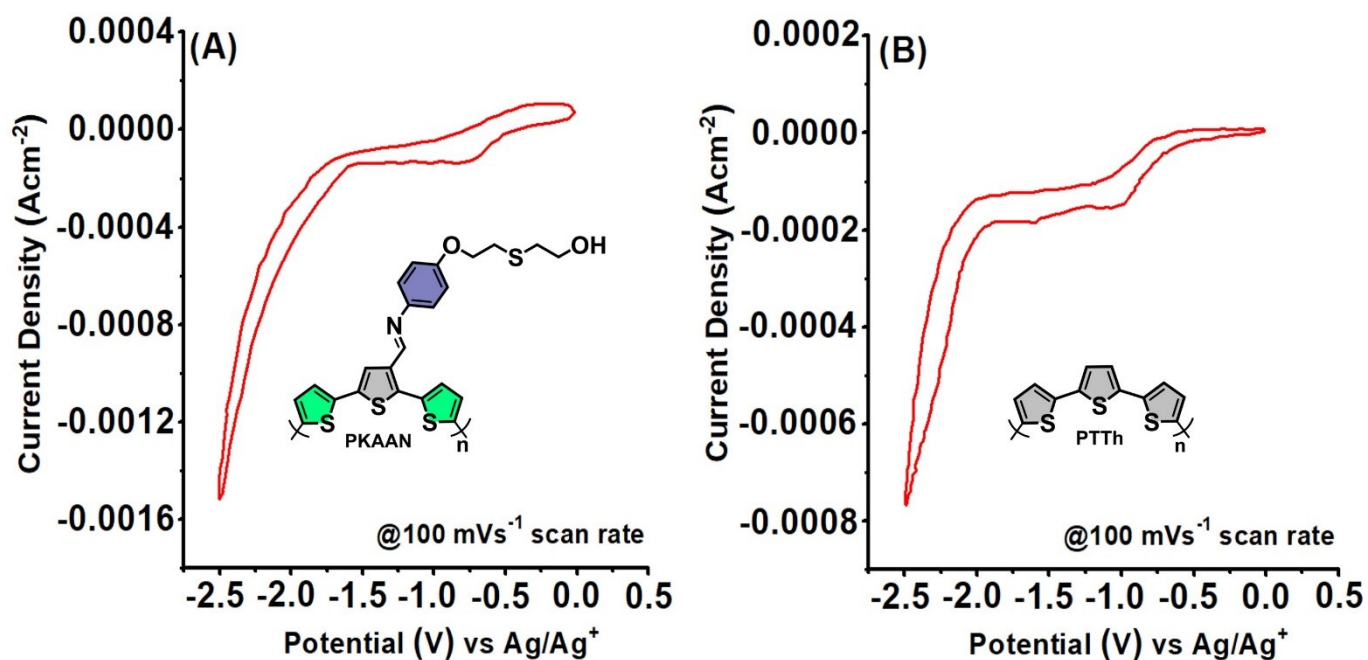


Fig. S3 Single scan cyclic voltammograms in the cathodic direction of (A) PKAAN- and (B) PTTh-based conducting polymer films

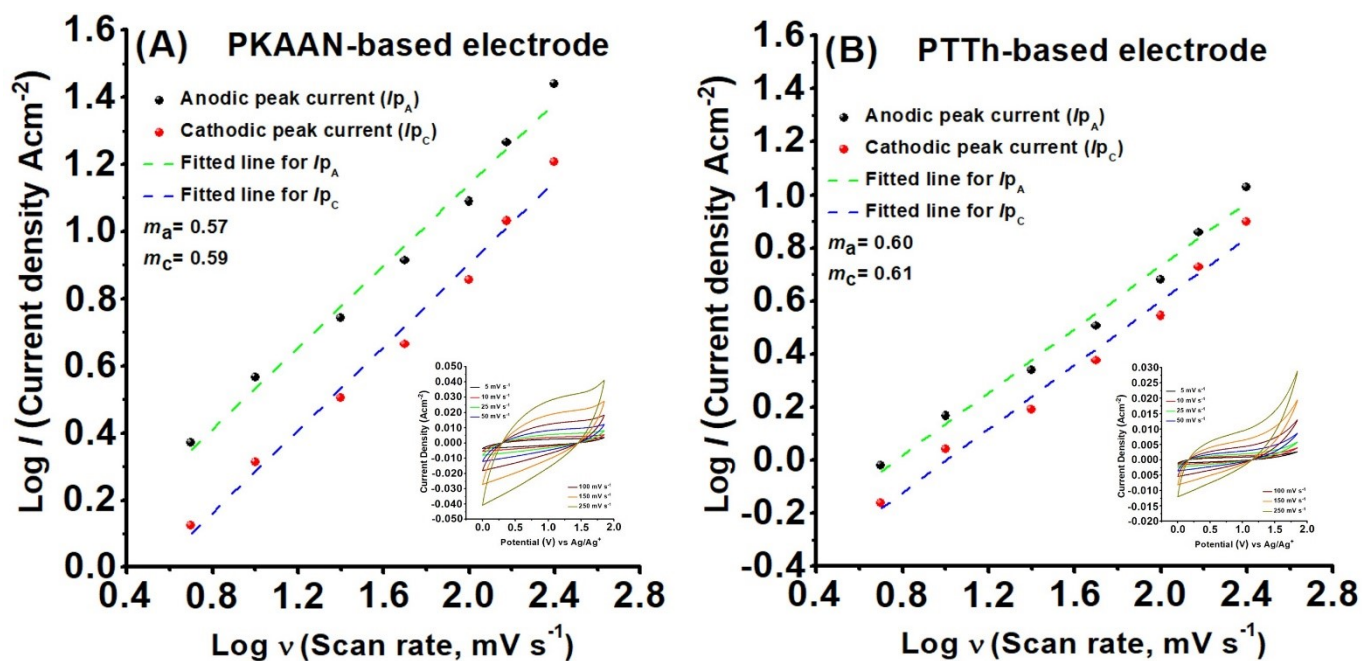


Fig. S4 The plots of Log (current density) versus Log (Scan rate) for (A) PKAAN- and (B) PTTh-based redox active electrode materials