

Cyclopentadithiophene Based Polymers – a Comparison of Optical, Electrochemical and Organic Field-Effect Transistor Characteristics

Masaki Horie,^{a,b} Leszek A. Majewski,^c Michael J. Fearn,^a Chin-Yang Yu,^{a,b} Yi
Luo,^{a,c} Aimin Song,^c Brian R. Saunders^{*b} and Michael L. Turner^{*a}

*^aOrganic Materials Innovation Centre, School of Chemistry, The University of
Manchester, Oxford Road, Manchester M13 9PL, UK. ^bSchool of Materials ^cSchool of
EEE*

Supplementary Information

Correspondence Address

Prof. Michael L. Turner

Organic Materials Innovation Centre, School of Chemistry,
The University of Manchester,
Oxford Road, Manchester M13 9PL, UK.

Email: michael.turner@manchester.ac.uk

and

Dr. Brian R. Saunders

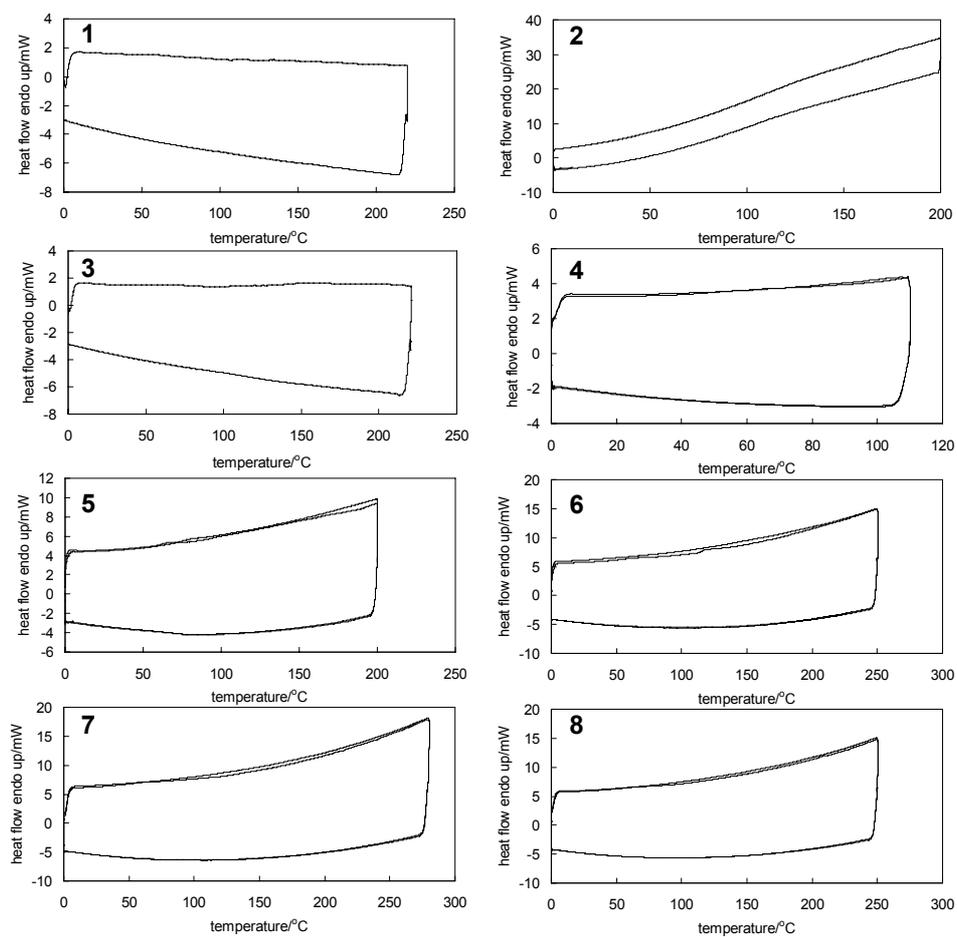
Polymer Science and Engineering Group, School of Materials,
The University of Manchester,
Grosvenor St, Manchester, M1 7HS, UK.

E-mail: brian.saunders@manchester.ac.uk

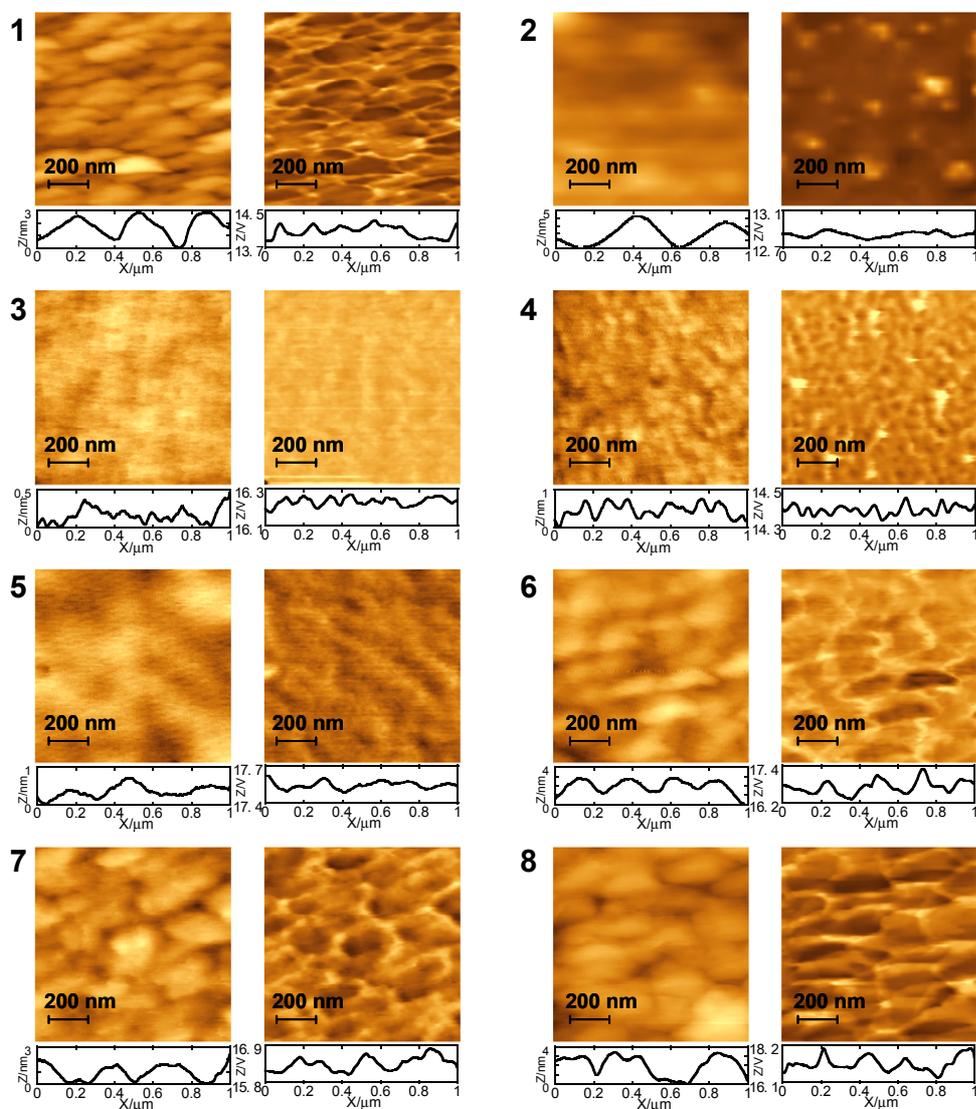
Supporting Table 1 Results of morphology studies of polymer films

polymer	grain size/nm ^a	roughness, R_a /nm ^a	2 theta/degree ^b	$d/\text{\AA}$ ^b
1	140-250	1.01	21.92	4.05
2	300-400	3.37	24.96	3.56
3	80-120	0.21	23.15	3.84
4	60-240	0.27	21.84	4.07
5	250-300	0.33	22.88	3.88
6	120-240	1.21	22.64	3.92
7	110-240	0.69	22.00	4.04
8	150-250	1.99	22.01	4.04

^a Estimated from AFM images. ^b Observed by XRD.



Supporting Figure 1. DSC of polymers. Scanning rate = 20 °C min⁻¹.



Supporting Figure 2. AFM topography (left) and phase (right) images of polymers on OTS-treated SiO₂/Si. Cross section is shown below images.