Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C. This journal is © The Royal Society of Chemistry 2014

Supporting Information for

Nonlinear optical chromophores containing novel pyrrole-based bridge: optimization of electro-optic activity and thermal stability by modifying the bridge

Fenggang Liu, ab Haoran Wang, ab Yuhui Yang, ab Huajun Xu, ab Maolin Zhang, ab Airui Zhang, ab Shuhui Bo, a* Zhen Zhen, a Xinhou Liu, a and Ling Qiua*

- ^a Key Laboratory of Photochemical Conversion and Optoelectronic Materials, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing 100190, PR China
- ^b University of Chinese Academy of Sciences, Beijing 100043, PR China
- * Corresponding authors. Tel.: +86-01-82543529; Fax: +86-01-2543529

E-mail address: boshuhui@mail.ipc.ac.cn (S. Bo), qiuling@mail.ipc.ac.cn

- 1 Cyclic voltammograms of chromophores A-C.
- 2 The photoluminescence emission spectra of chromophores A, B and C.
- 3 UV-Vis absorption spectra of E-O polymers before and after poling.
- 4 ¹H and ¹³C NMR spectra

1 Cyclic voltammograms of chromophores A-C

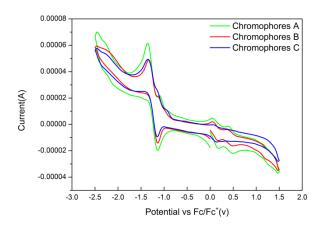


Fig. 7 Cyclic voltammograms of chromophores A-C recorded in CH_3CN solutions containing 0.1 M Bu_4NPF_6 supporting electrolyte at a scan rate of 50 mV s^{-1} .

2 The photoluminescence emission spectra of chromophores A, B and C.

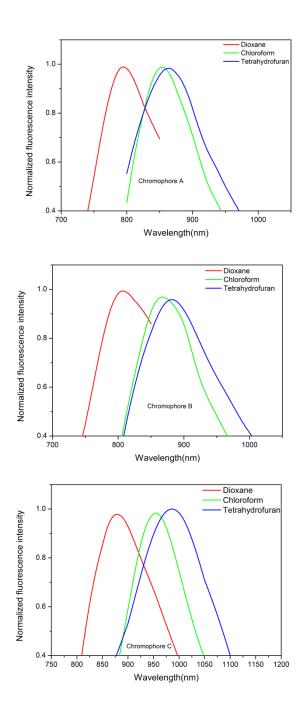


Fig. 8 The photoluminescence emission spectra of chromophores A, B and C in different solvents

3 UV-Vis absorption spectra of E-O polymers before and after poling.

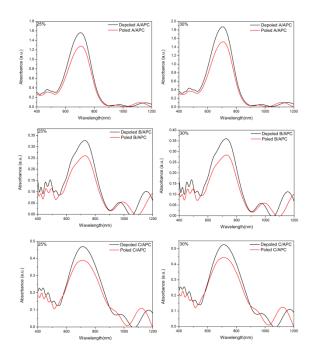
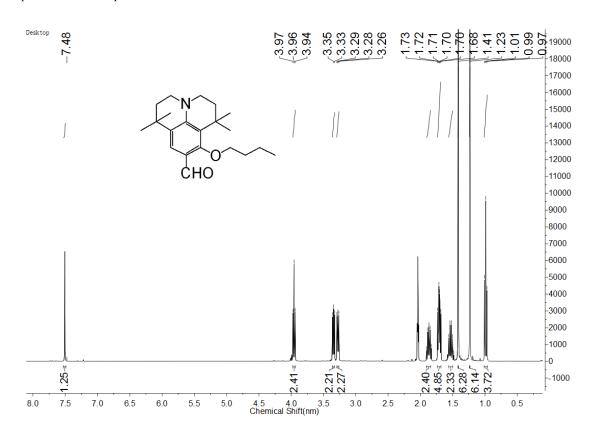
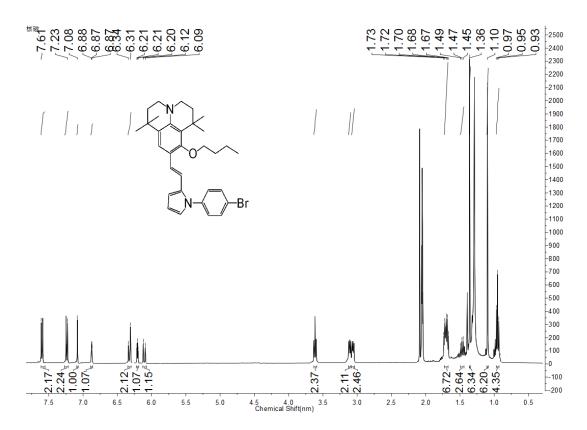


Fig. 9 UV-Vis absorption spectra of E-O polymers before and after poling (25% and 30% wt).

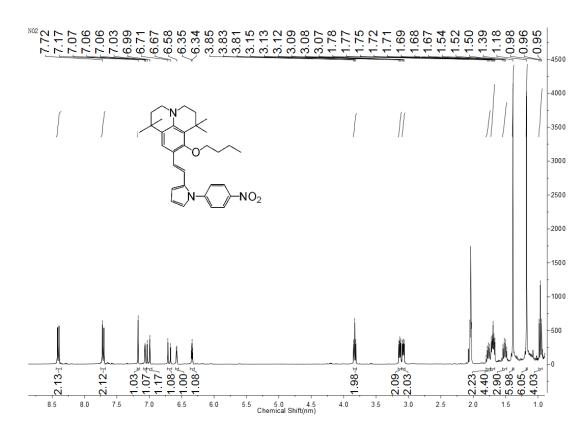
4 ¹H and ¹³C NMR spectra

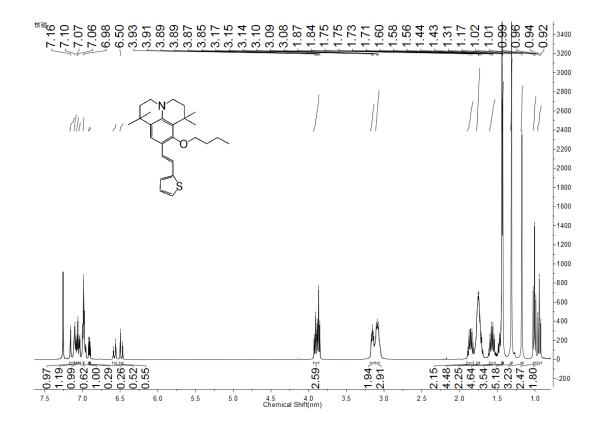
Compound 4 ¹H NMR spectra



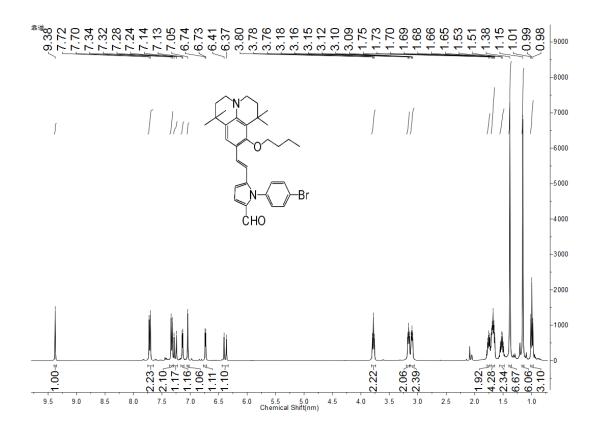


Compound 5b ¹H NMR spectra

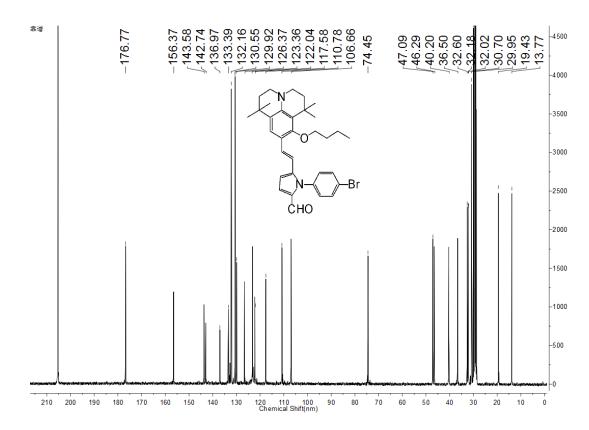




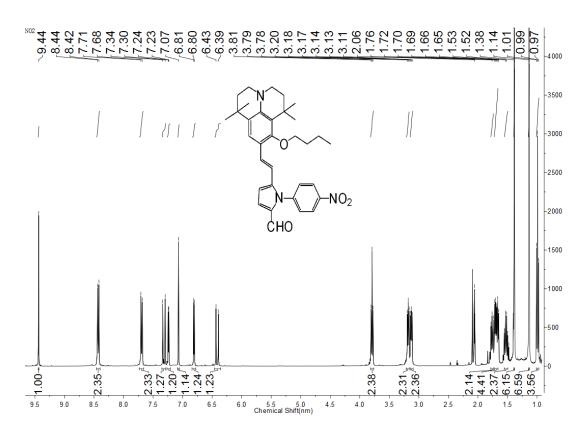
Compound 6a ¹H NMR spectra



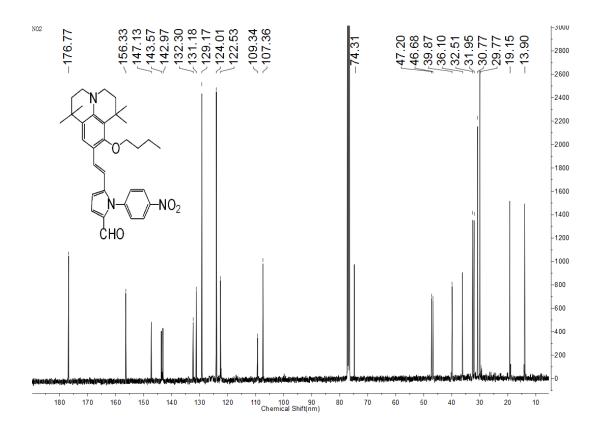
Compound 6a ¹³C NMR spectra



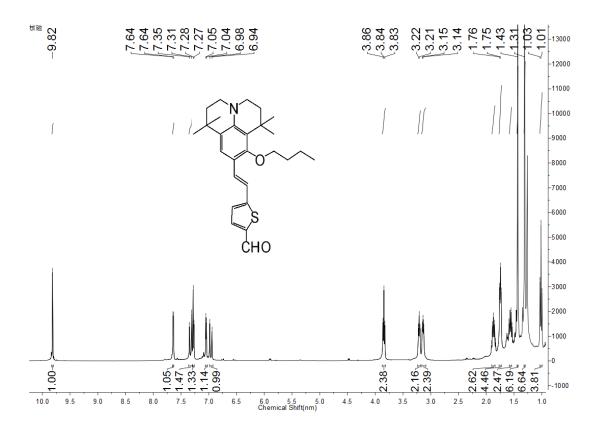
Compound 6b ¹H NMR spectra

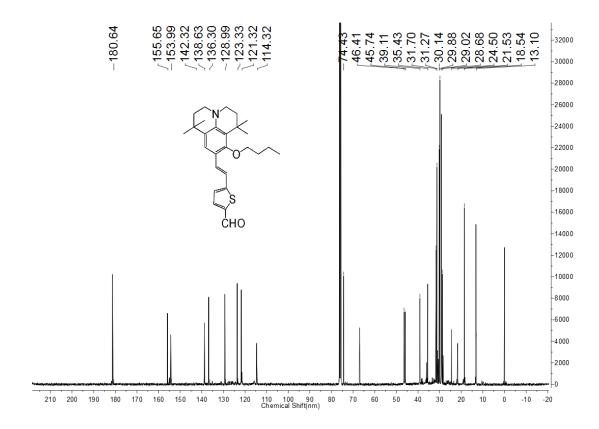


Compound 6b ¹³C NMR spectra

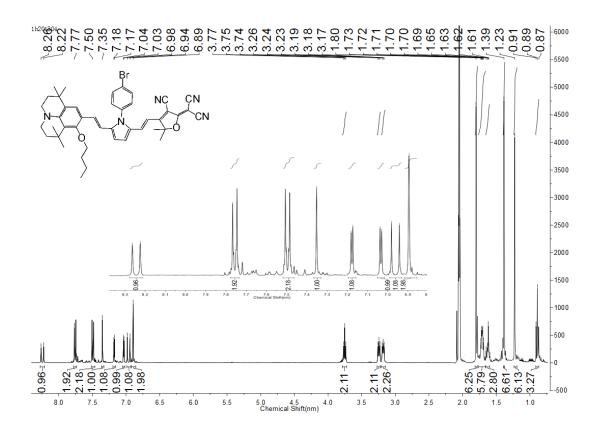


Compound 6c ¹H NMR spectra

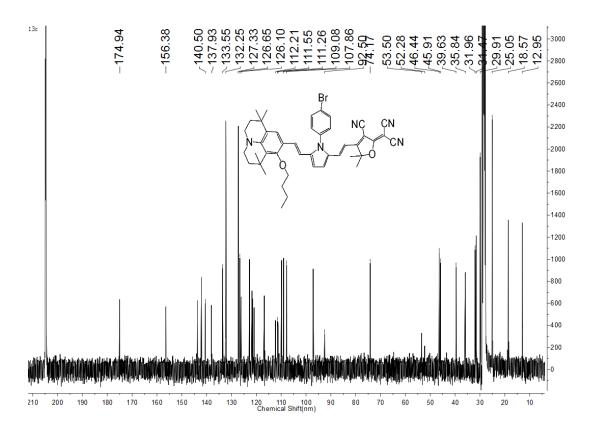




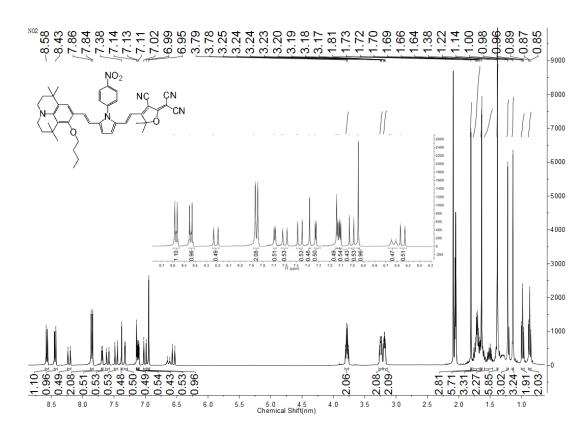
Chromophore A ¹H NMR spectra



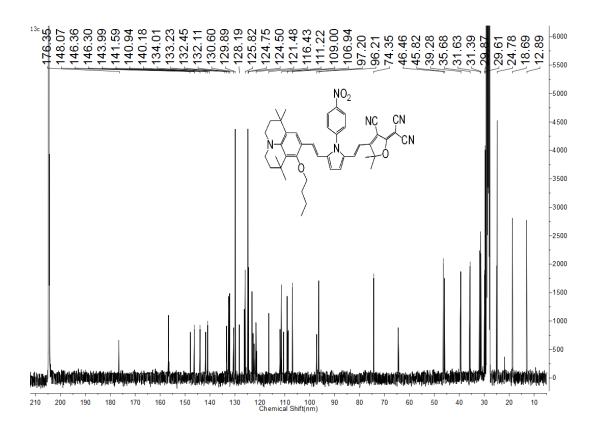
Chromophore A ¹³C NMR spectra



Chromophore B ¹H NMR spectra



Chromophore B ¹³C NMR spectra



Chromophore C ¹H NMR spectra

