

Supporting information for

# **Thioxanthone Dicarboxamide Derivatives as One-Component Photoinitiators for Near-UV and Visible LED (365-405nm) Induced Photopolymerizations**

Guangxue Chen,<sup>a, ‡</sup> Xiaoyuan Guan,<sup>a, ‡</sup> Ruixin Xu,<sup>c</sup> Junfei Tian,<sup>a</sup> Fachuang Lu,<sup>a</sup> Minghui He <sup>\*a</sup> and Jianwen Yang<sup>b</sup>

<sup>a</sup> State Key Laboratory of Pulp & Paper Engineering, South China University of Technology, Guangzhou 510640, China

<sup>b</sup> DSAPM Lab, School of Materials Science and Engineering, Sun Yat-Sen University, Guangzhou, 510275, China

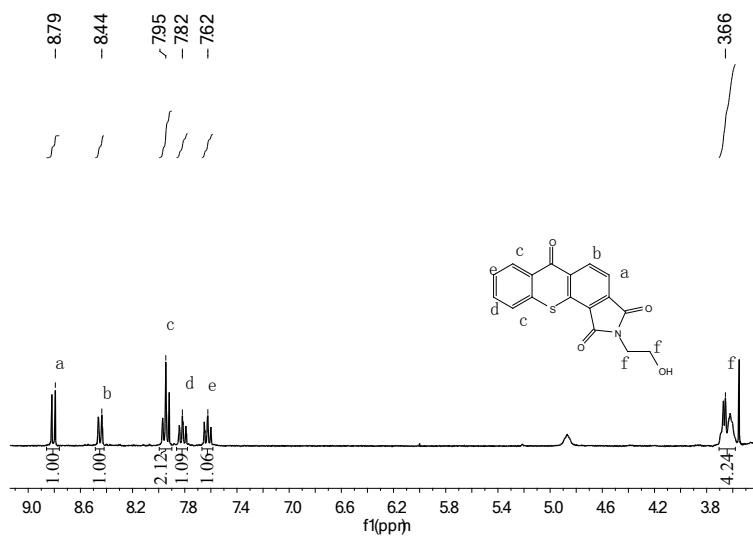
<sup>c</sup> School of Media and Communication, Shenzhen Polytechnic, Shenzhen, 518055, China

## Content

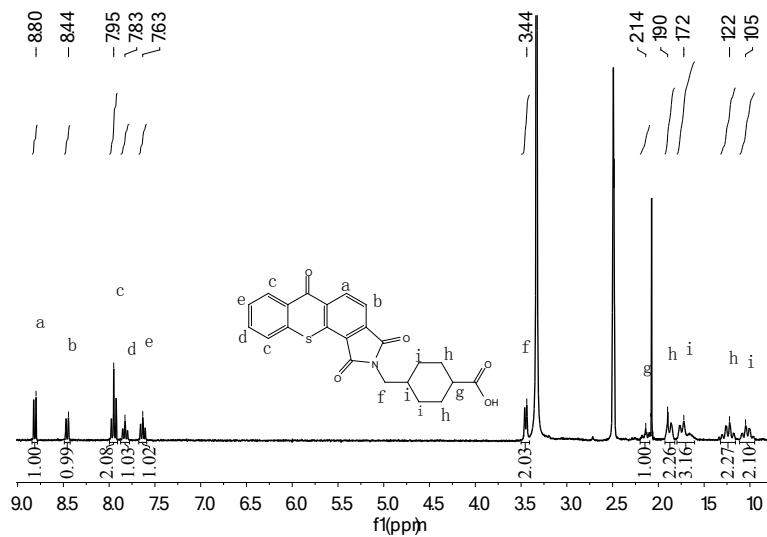
1 <sup>1</sup>H NMR spectra of thioxanthone dicarboxamide derivatives

2 FTIR spectra of thioxanthone dicarboxamide derivatives

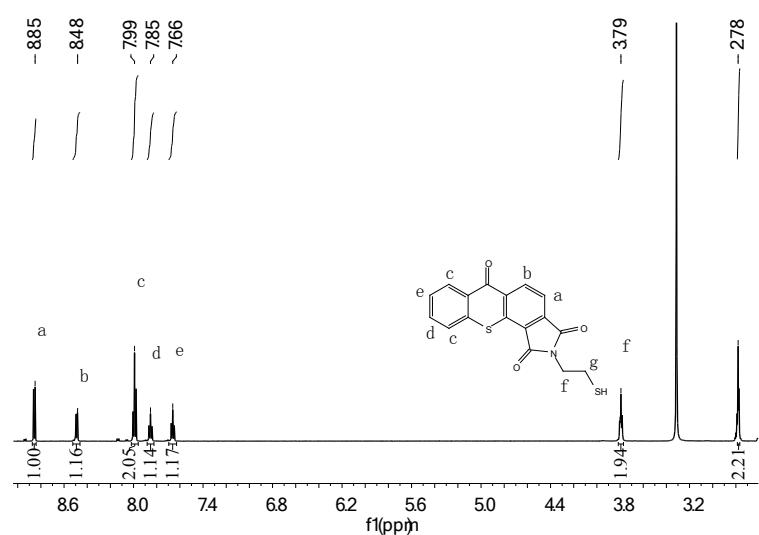
**1 <sup>1</sup>H NMR spectra of thioxanthone dicarboxamide derivatives**



**Figure S1.** <sup>1</sup>H NMR spectrum of TX-DCA-OH

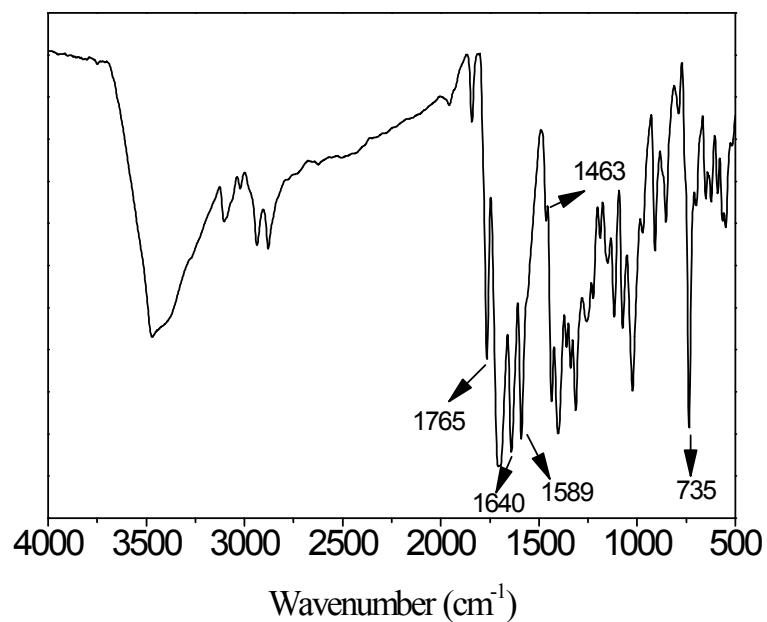


**Figure S2.** <sup>1</sup>H NMR spectrum of TX-DCA-COOH

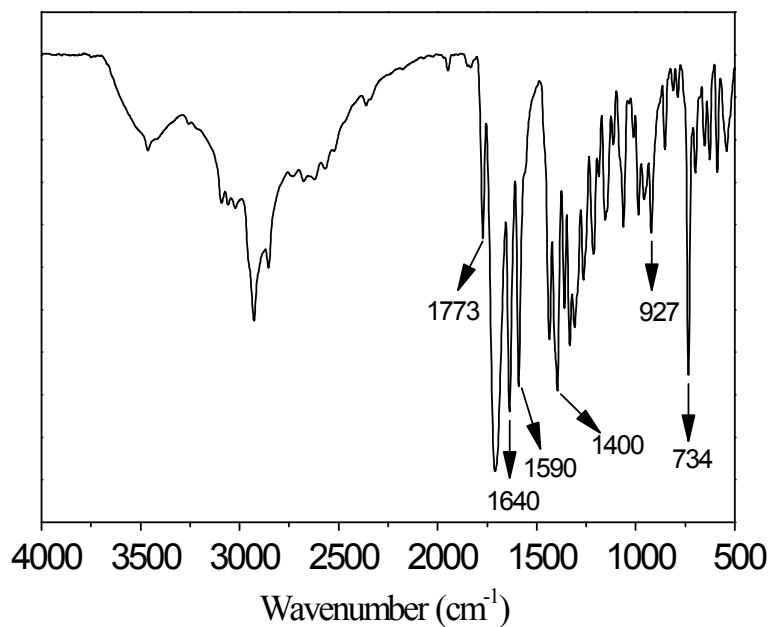


**Figure S3.**  $^1\text{H}$  NMR spectrum of TX-DCA-SH

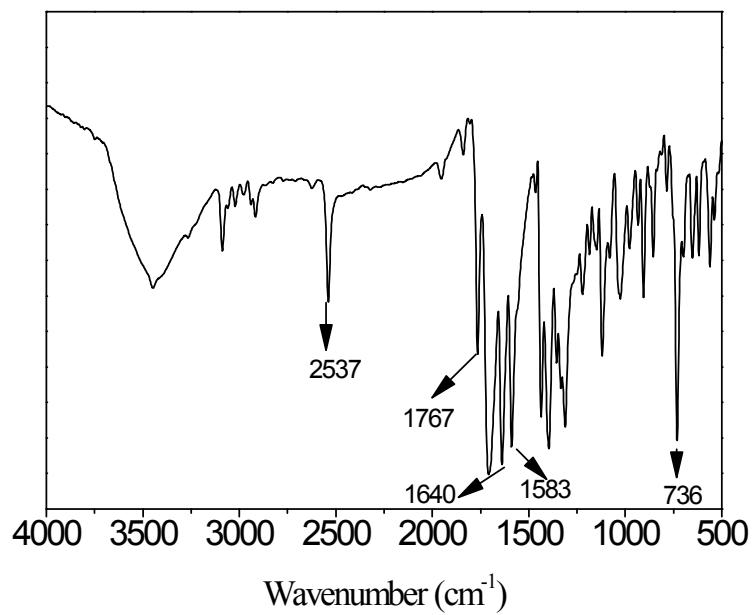
## 2 FTIR spectra of thioxanthone dicarboxamide derivatives



**Figure S4.** FTIR spectrum of TX-DCA-OH



**Figure S5.** FTIR spectrum of TX-DCA-COOH



**Figure S6.** FTIR spectrum of TX-DCA-SH