Synthesis and photopolymerization kinetics of 2-Phenyl-benzodioxole

Bowen Wang, Jinliang Yang, Jun Nie and Xiaoqun Zhu*

State Key Laboratory of Chemical Resource Engineering, Beijing University of

Chemical Technology, Beijing 100029, P.R. China. E-mail:

zhuxq@mail.buct.edu.cn; Fax: (+86) 10-6442-1310; Tel: (+86) 10-6442-1310

Supporting information

The LC-MS experiment was used to study the hydrogen abstraction mechanism of BP/PhBDO system, the system was irradiated 30min by mercury lamp (10 m Wcm⁻²) under Nitrogen environment. The LC spectrum of BP/PhBDO was shown in Fig. S1.

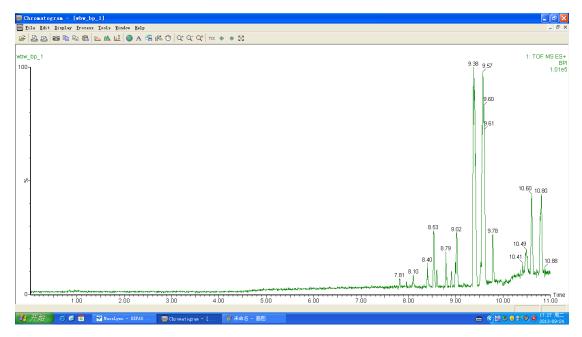


Fig. S1 The LC spectrum of BP/PhBDO after irradiation

The photolytic products of BP/PhBDO system

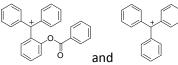
peak (9.57min), and the MS spectrum of



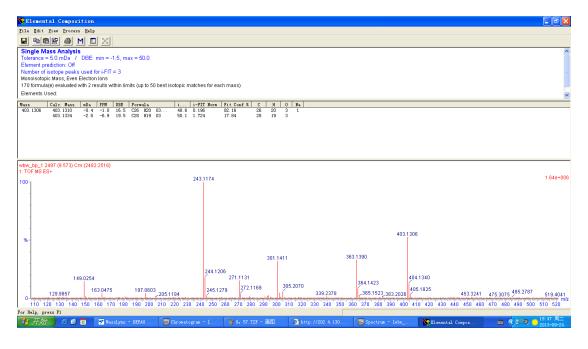
and its fragments were found at

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was shown at Fig. S2, the fragments



were shown at Fig. S3 and Fig. S4.



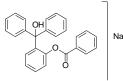
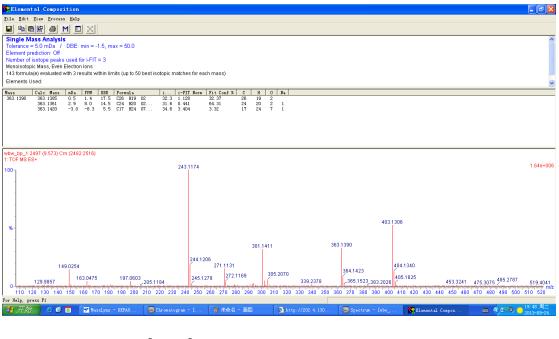


Fig. S2 MS spectrum of



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Fig. S3 MS spectrum of

 $(C_{26}H_{19}O_2^+)$, with 363.1385 molecular weight.

 $(C_{26}H_{20}O_3Na)$, with 403.1310 molecular weight.

105.0460

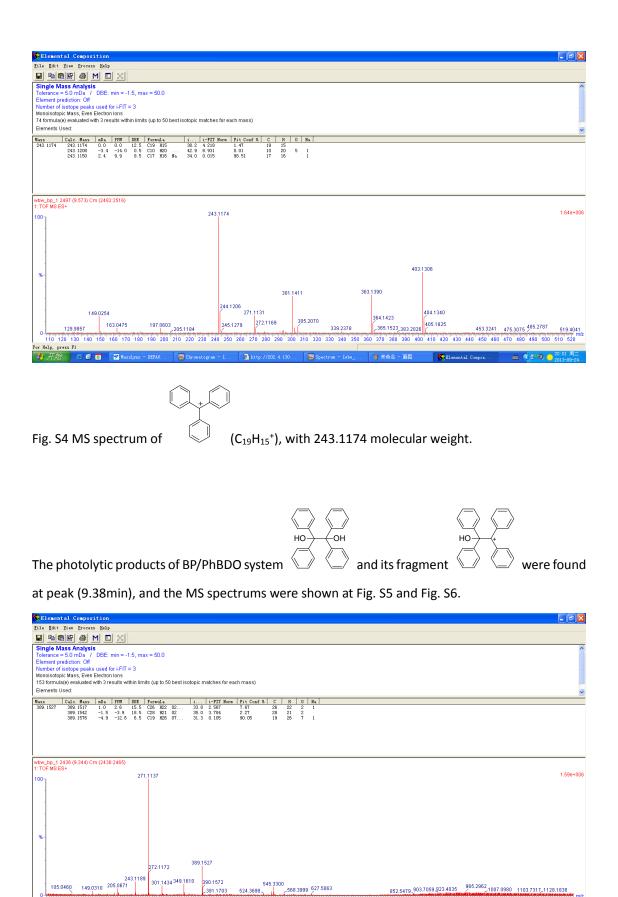
150

6 7

50

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400



852.5479 903.7059 923.4035

850

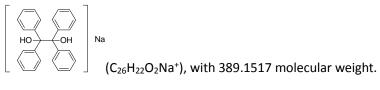
750

900

950

110

Fig. S5 MS spectrum of



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Single Mass Analysis Tolerance = 5.0 mDa / to DBE: min = -1.5, max = 50.0 Element prediction: Off Number of isotope peaks used for i-FIT = 3 Monoisotopic Mass, Even Electron lons 1/28 formulae/be evuldaed with 1 exults with limits (up to 50 best isotopic matches for each mass)
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 $(C_{26}H_{11}O^+)$, with 349.1592 molecular weight. Fig. S5 MS spectrum of