

Electronic Supplementary Information

A star-shape bipolar host material based on carbazole and dimesitylboron moieties for fabrication of highly efficient red, green and blue electrophosphorescent devices

Heping Shi,^{*a} Dehua Xin,^a Xiuqing Dong,^a Jian-xin Dai,^a Xiaohuan Wu,^a Yanqin Miao,^b Li Fang,^a Hua Wang^{*b} and Martin M. F. Choi^{*c}

^aSchool of Chemistry and Chemical Engineering, Shanxi University, 92 Wucheng Road, Taiyuan 030006, Shanxi Province, China. E-mail: hepingshi@sxu.edu.cn; Fax: +86-351-7011688; Tel.: +86-351-7010588

^bKey Laboratory of Interface Science and Engineering in Advanced Materials, Taiyuan University of Technology, Taiyuan 030024, Shanxi Province, China. E-mail: wanghua001@tyut.edu.cn

^cDepartment of Chemistry, Hong Kong Baptist University, 224 Waterloo Road, Kowloon Tong, Hong Kong SAR, China. E-mail: mfchoi@hkbu.edu.hk; Fax: +852-34117348; Tel.: +852-34117839

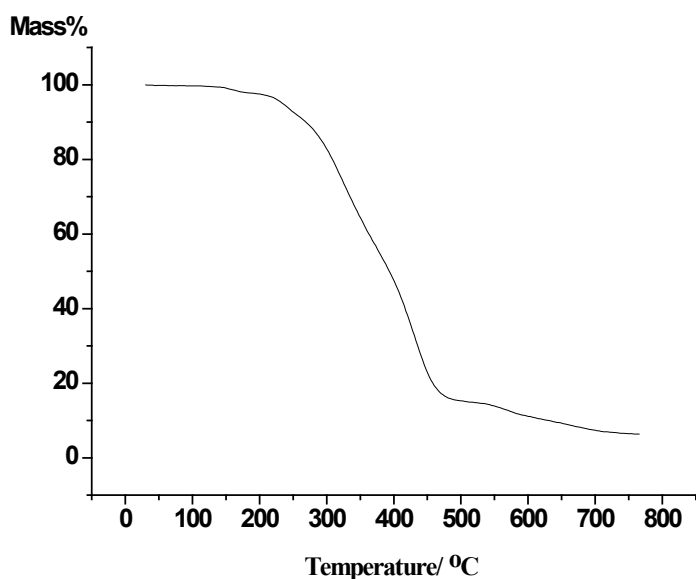


Fig. S1. TGA curve of BDDPC.

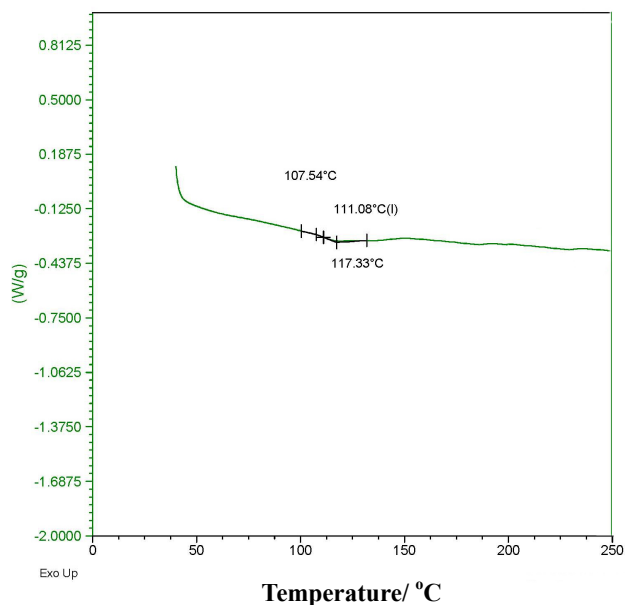


Fig. S2. DSC curve of BDDPC.

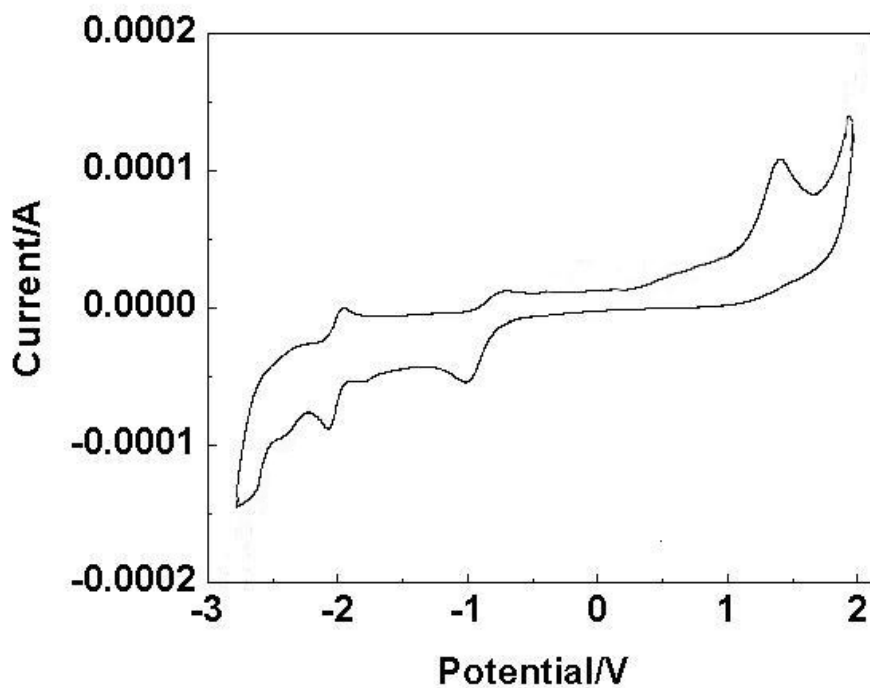


Fig. S3. Cyclic voltammogram of **BDDPC**.

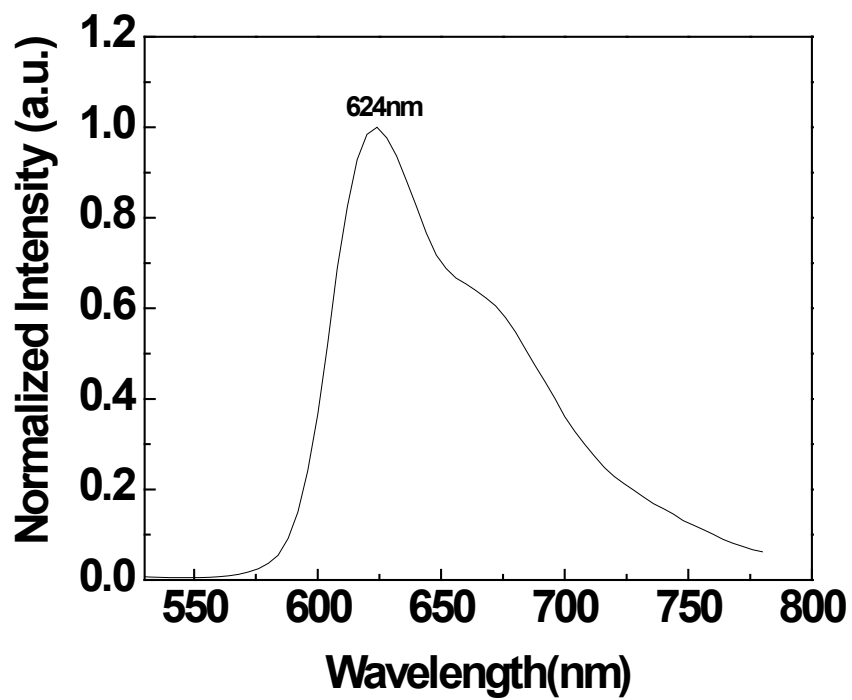


Fig. S4. Normalized electroluminescence spectra of **Device R** measured at different applied voltages. All spectra show the same spectral feature.

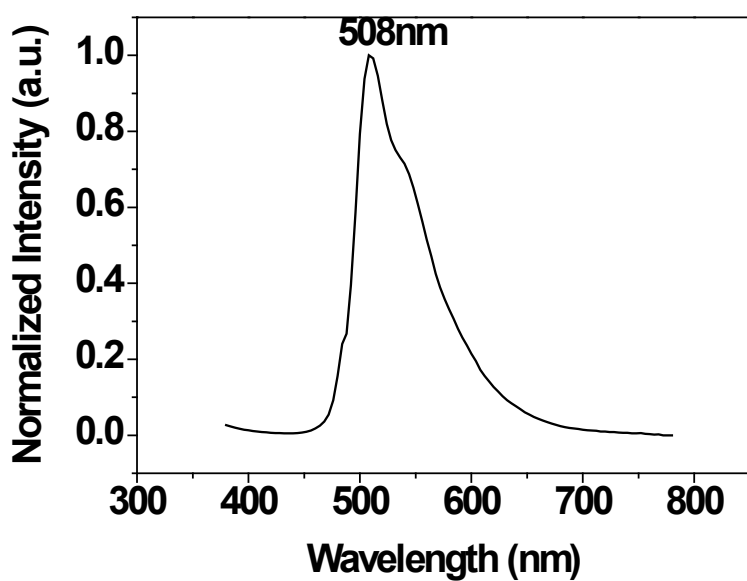


Fig. S5. Normalized electroluminescence spectrum of **Device G** taken at different voltages. All spectra display similar spectral characteristics.

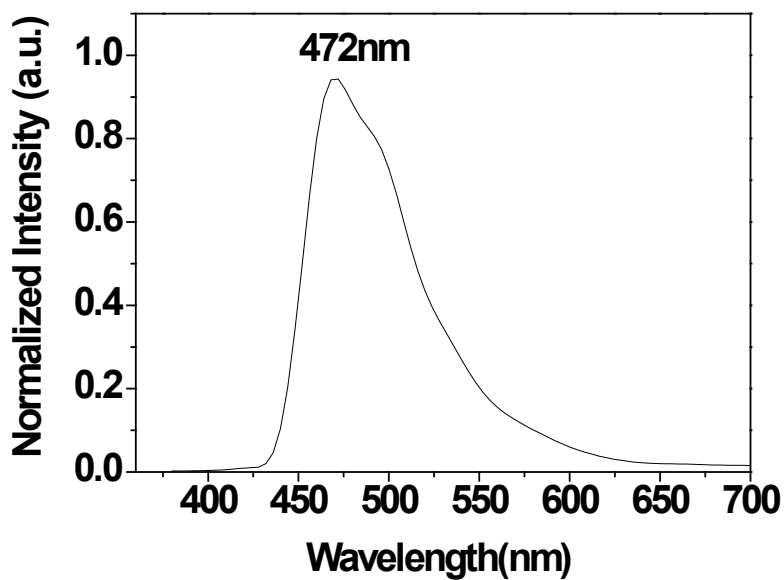


Fig. S6. Normalized electroluminescence spectrum of **Device B** taken at different voltages. All spectra display similar spectral characteristics.