

## Aggregation-induced emissions in mesogenic BF<sub>2</sub> complexes

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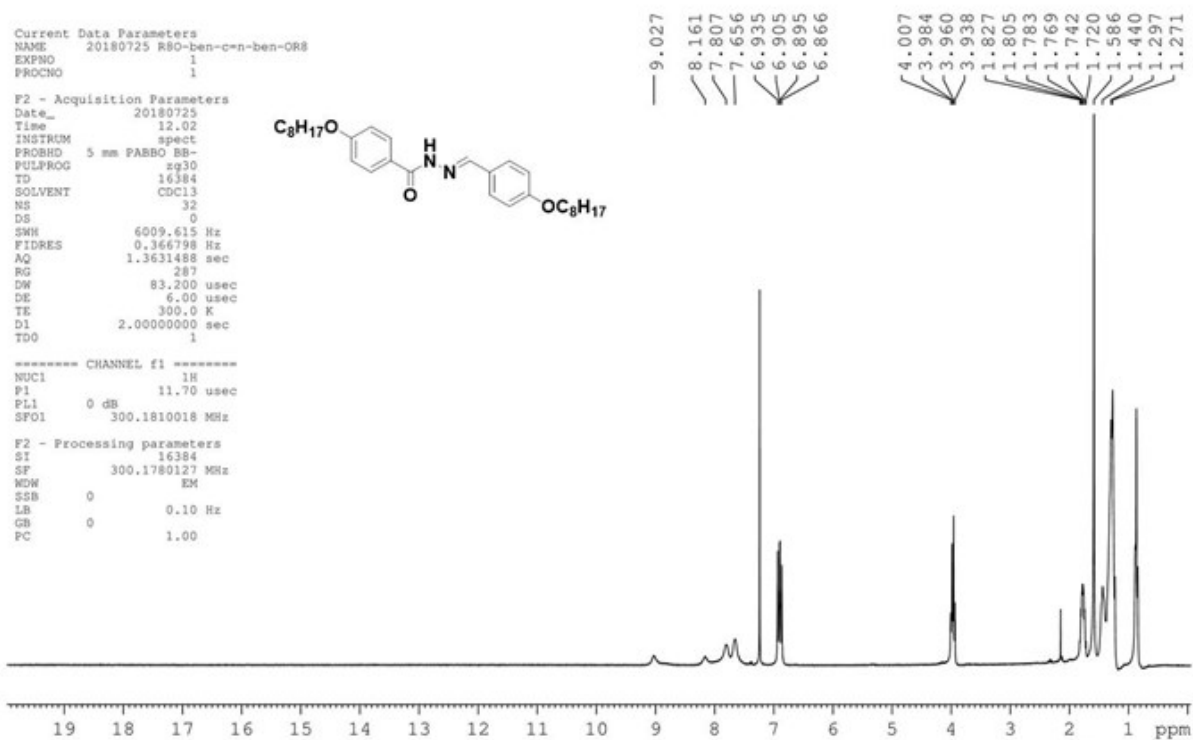
<sup>a</sup> Department of Chemistry, National Central University, Chung-Li 32011, Taiwan, ROC

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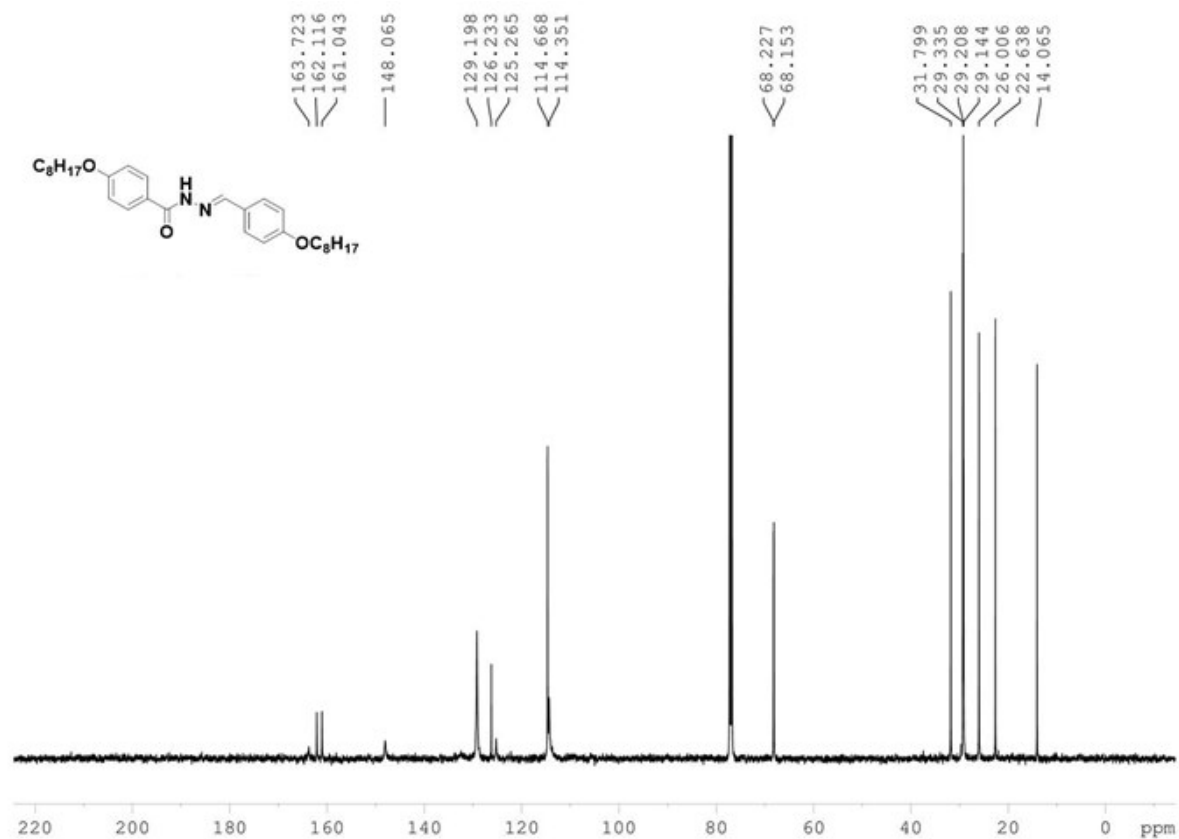
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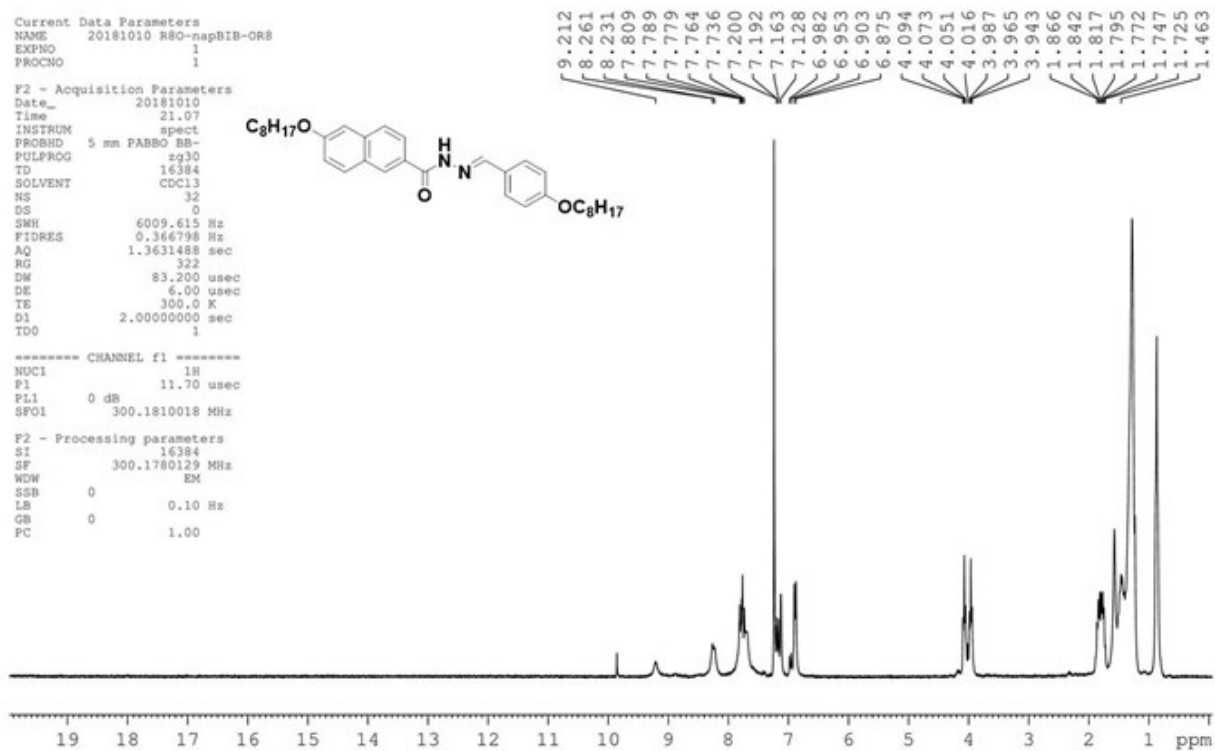
# 1. The $^1\text{H}$ , $^{13}\text{C}$ and $^{19}\text{F}$ NMR spectra of compounds **1a**, **1b**, **1a-BF<sub>2</sub>** and **1b-BF<sub>2</sub>**



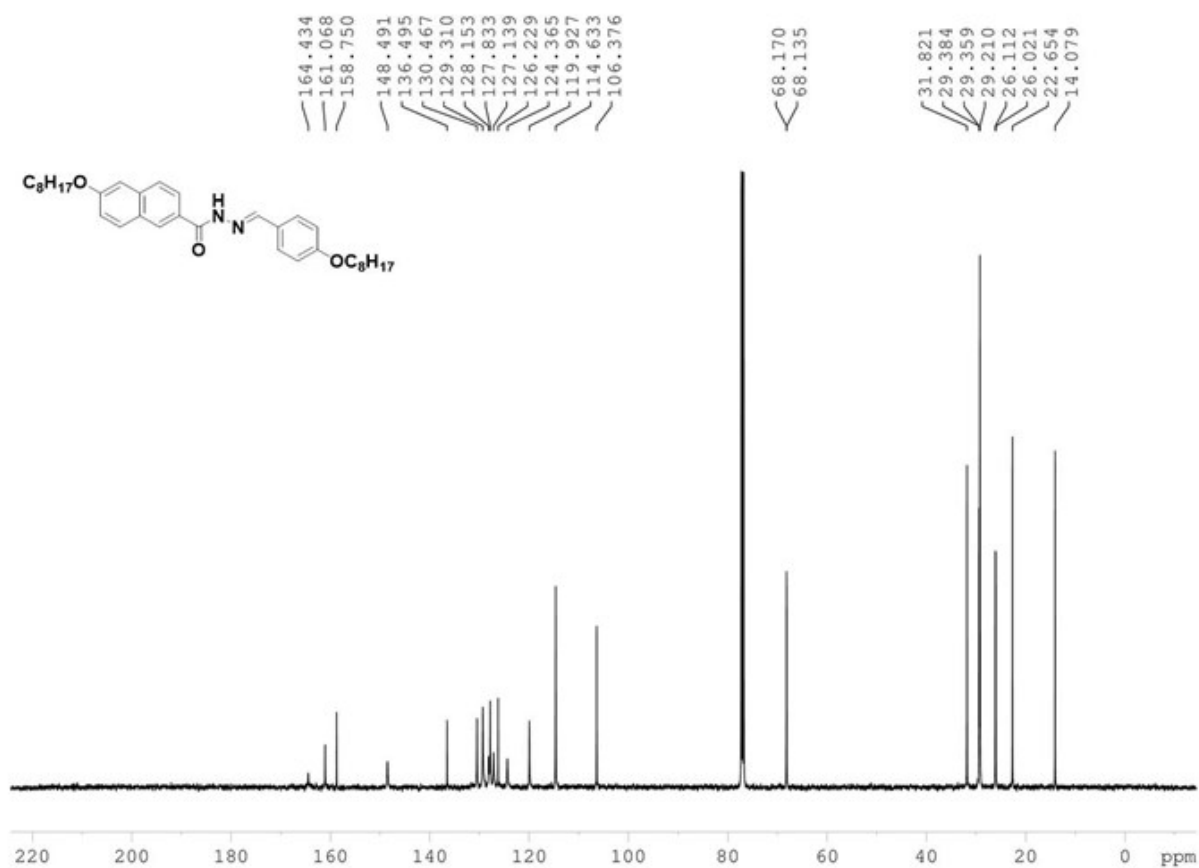
**Fig. S1** The  $^1\text{H}$  spectrum of compound **1a** ( $n = 8$ ).



**Fig. S2** The  $^{13}\text{C}$  NMR spectrum of compound **1a** ( $n = 8$ ).



**Fig. S3** The  $^1\text{H}$  spectrum of compound **1b** (n = 8).



**Fig. S4** The  $^{13}\text{C}$  NMR spectrum of compound **1b** (n = 8).

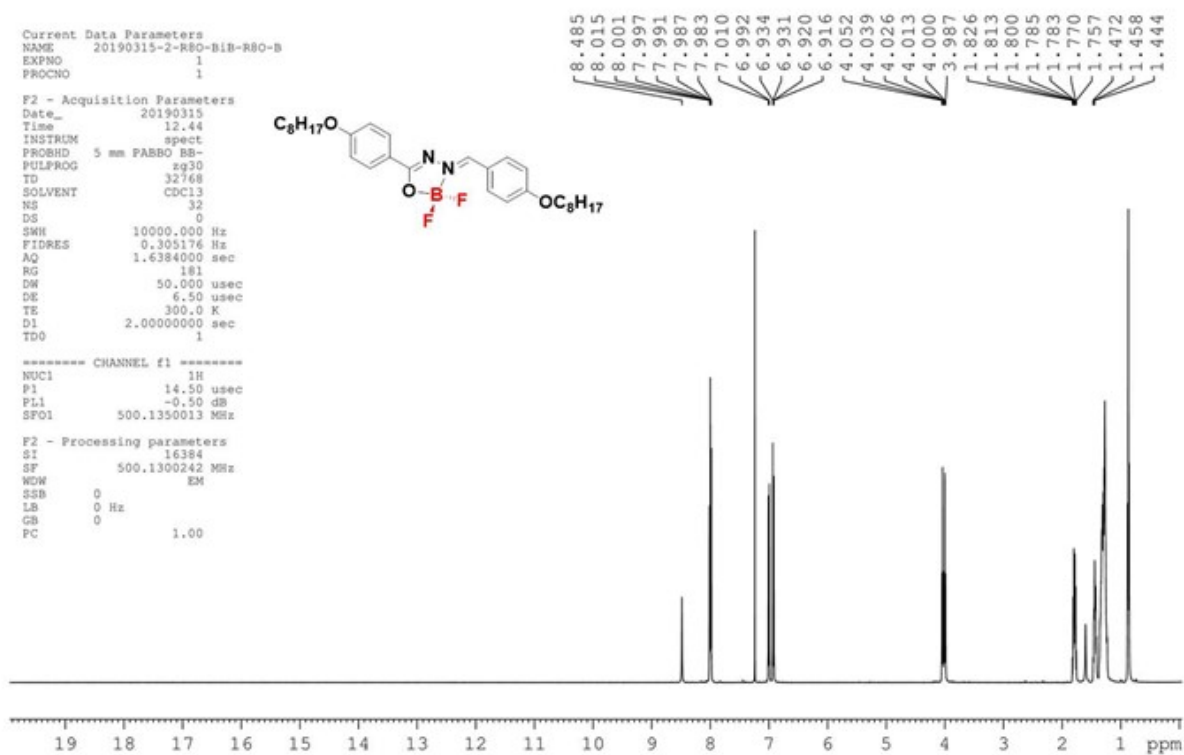


Fig. S5 The <sup>1</sup>H spectrum of compound **1a-BF<sub>2</sub>** (n = 8).

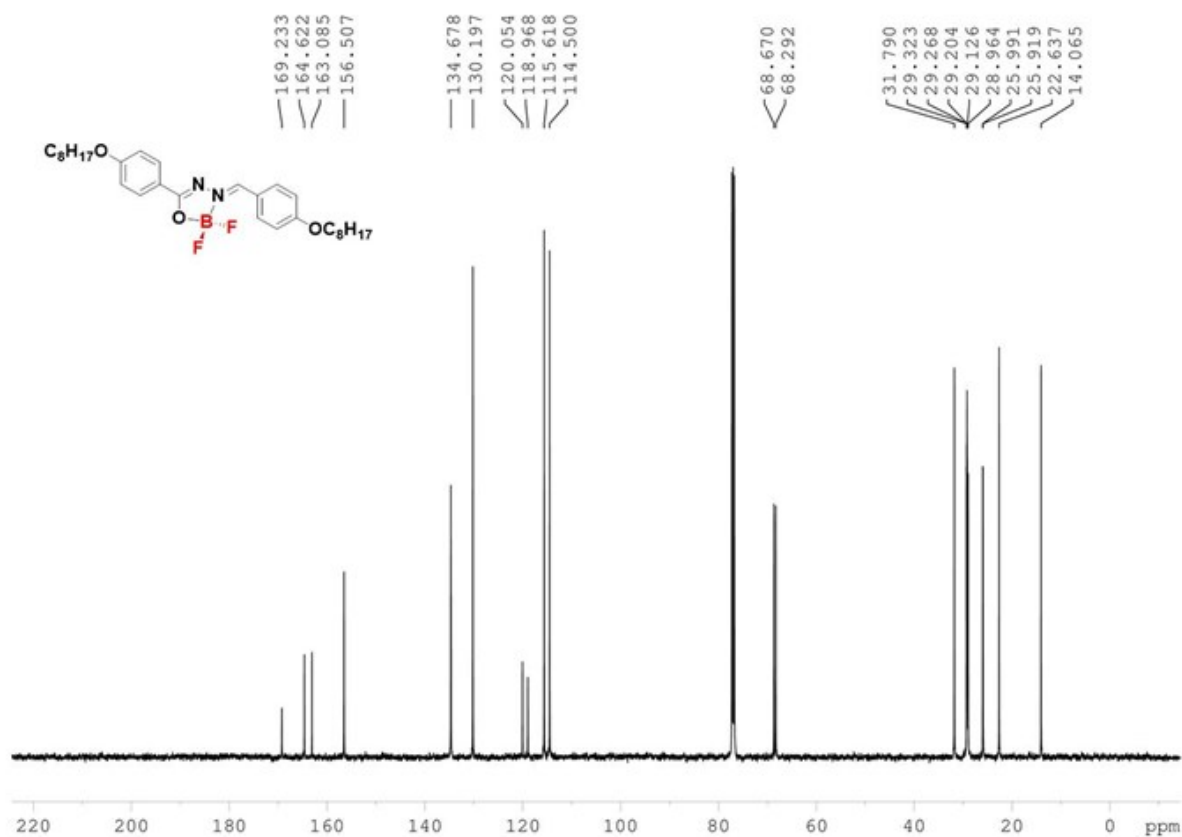


Fig. S6 The <sup>13</sup>C NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 8).

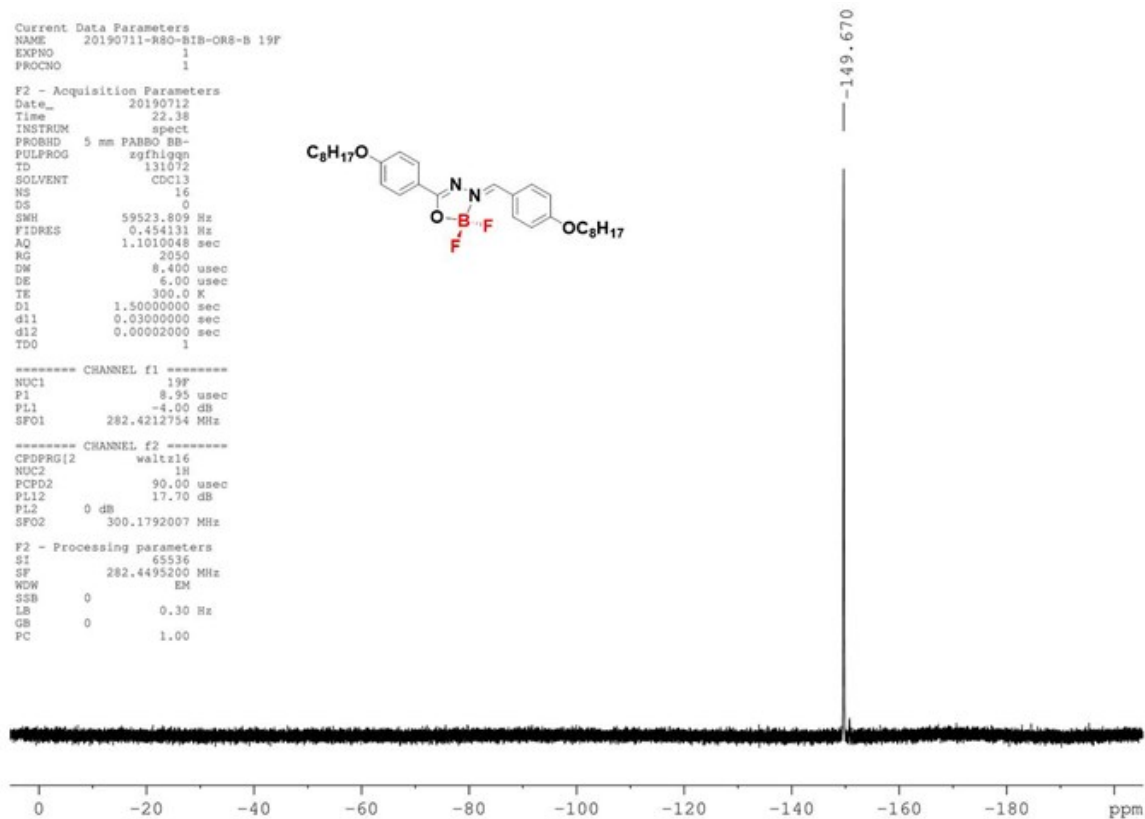


Fig. S7 The  $^{19}\text{F}$ -NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 8).

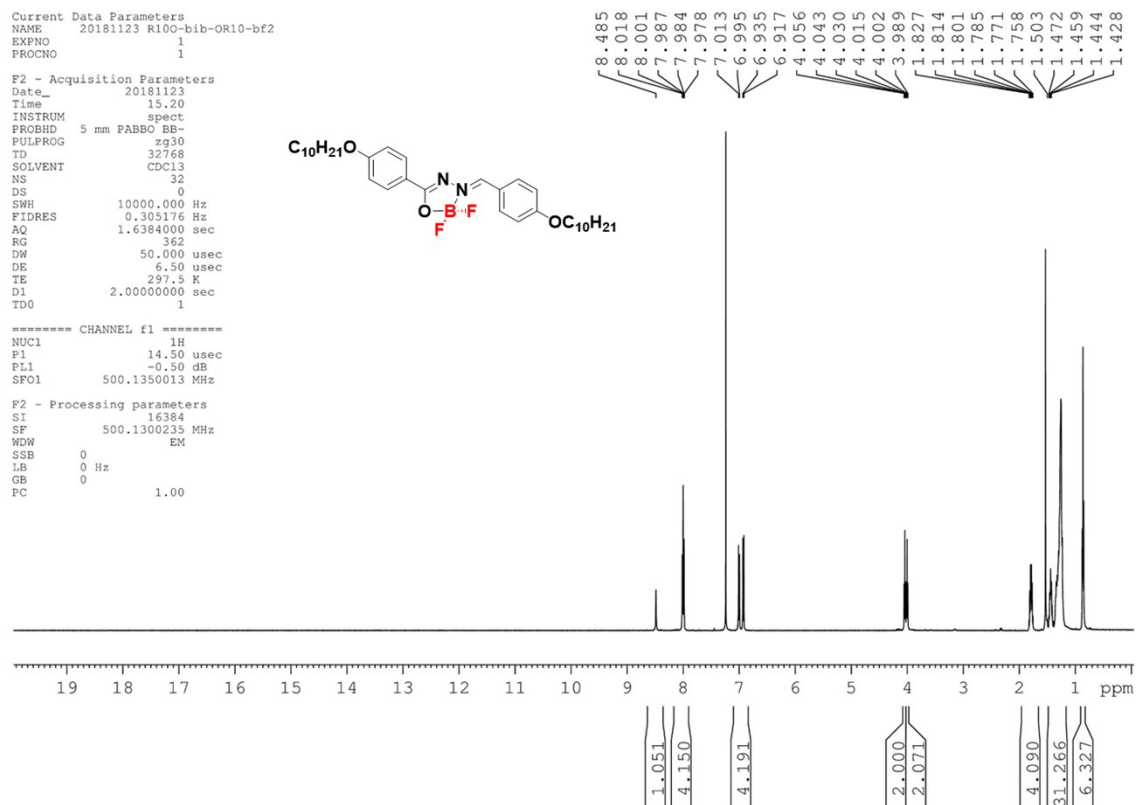
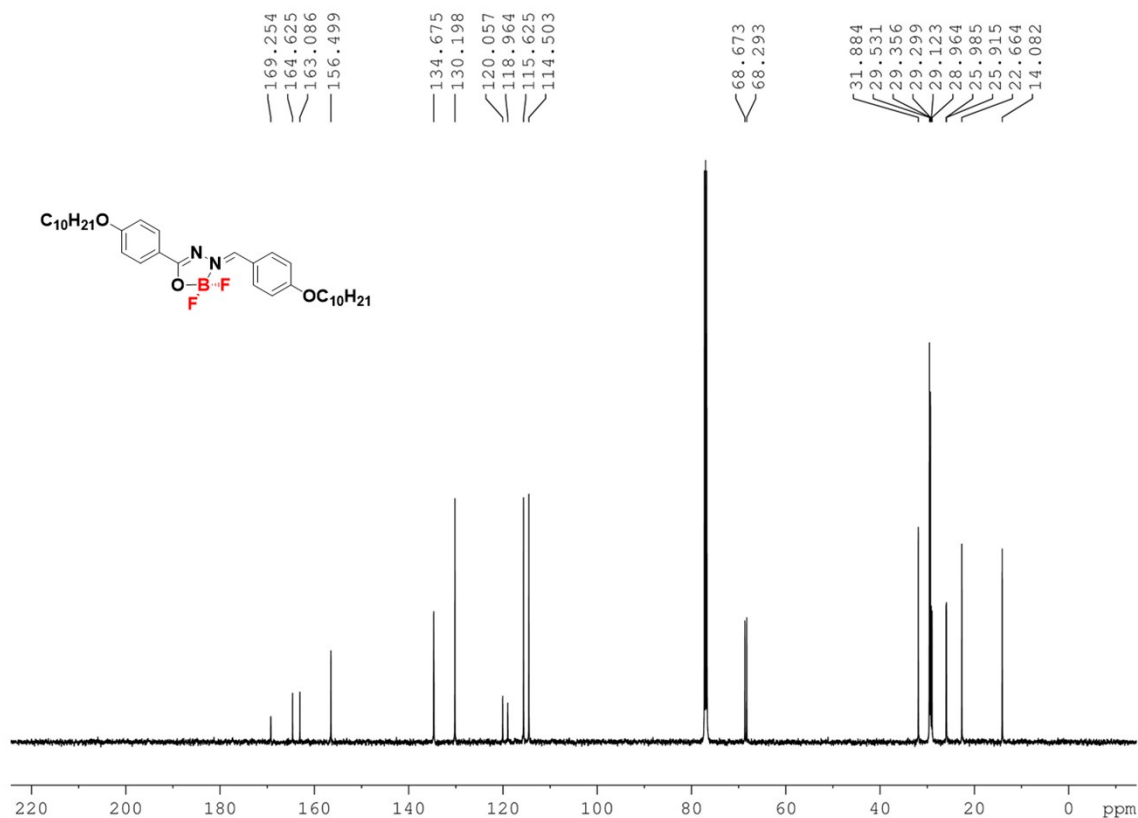
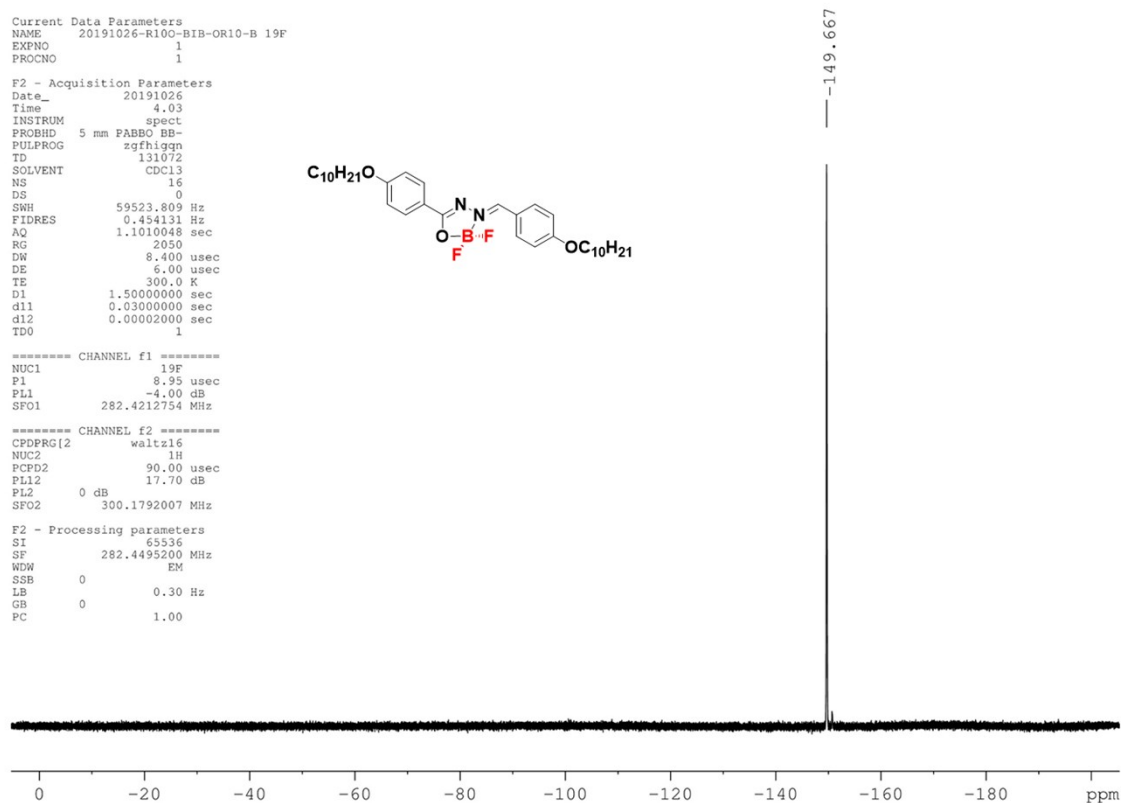


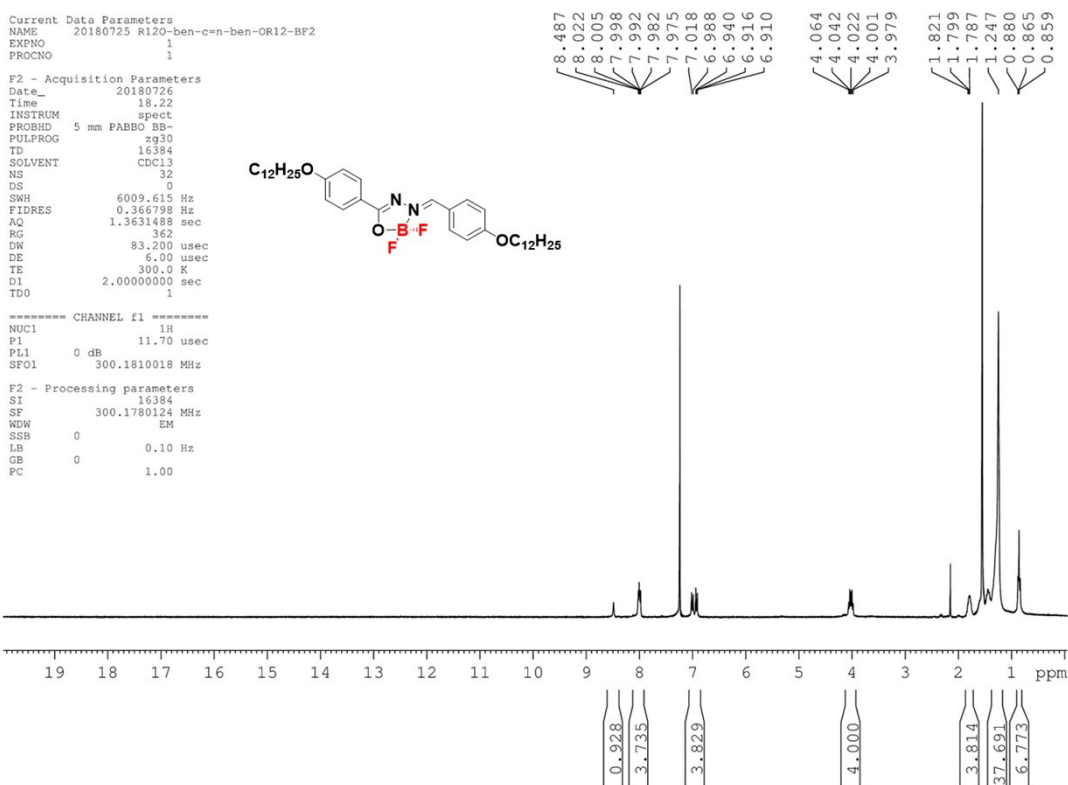
Fig. S8 The  $^1\text{H}$  spectrum of compound **1a-BF<sub>2</sub>** (n = 10).



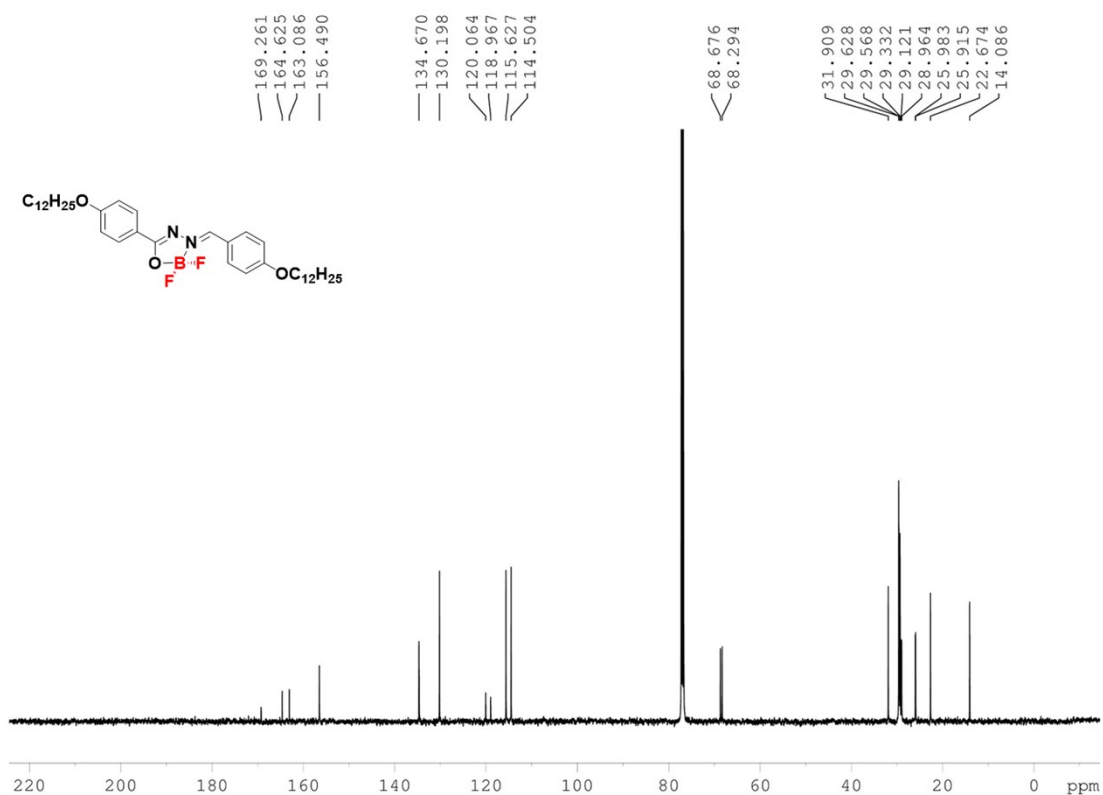
**Fig. S9** The <sup>13</sup>C NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 10).



**Fig. S10** The <sup>19</sup>F-NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 10).



**Fig. S11** The <sup>1</sup>H spectrum of compound **1a-BF<sub>2</sub>** (n = 12)



**Fig. S12** The <sup>13</sup>C NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 12).

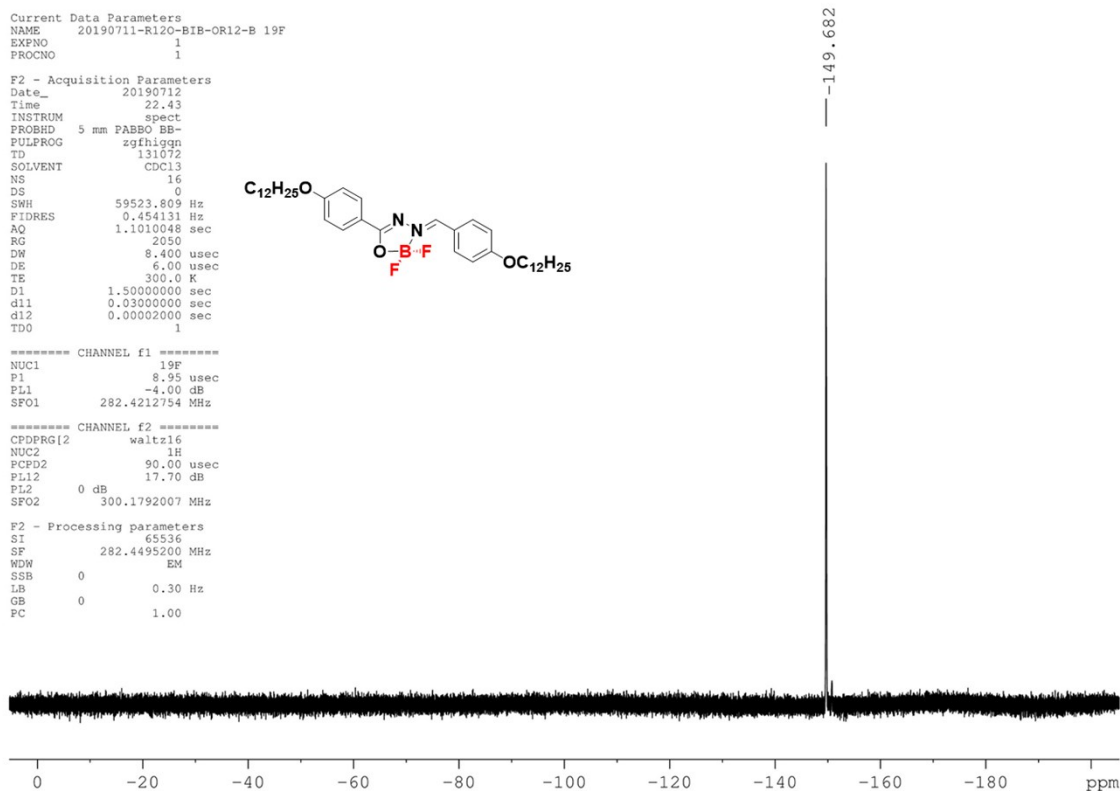


Fig. S13 The  $^{19}\text{F}$ -NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 12).

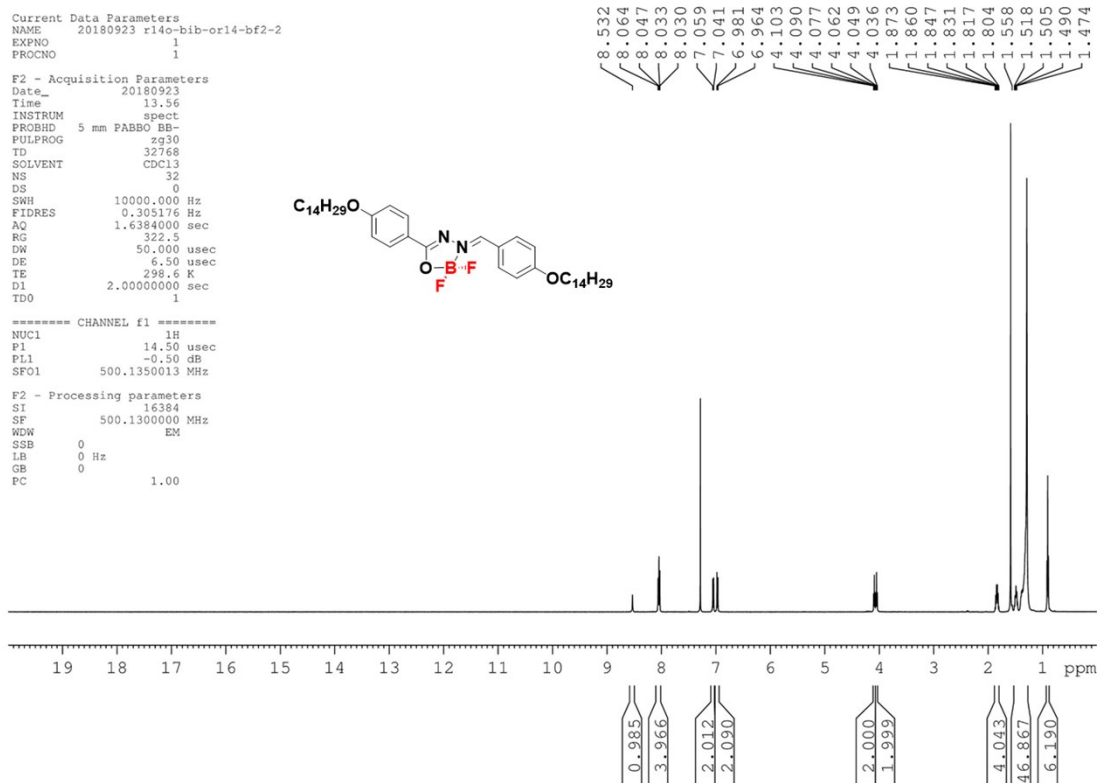


Fig. S14 The  $^1\text{H}$  spectrum of compound **1a-BF<sub>2</sub>** (n = 14).



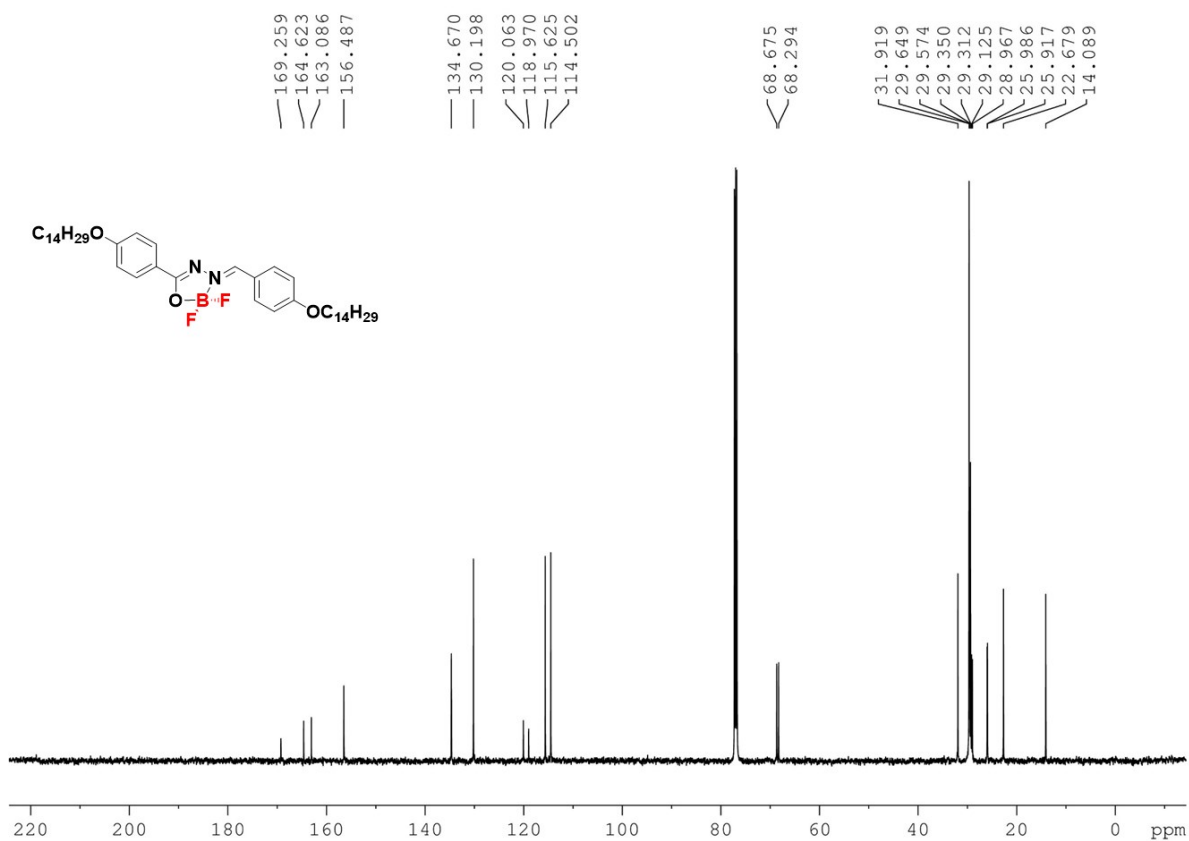


Fig. S15 The  $^{13}\text{C}$  NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 14).

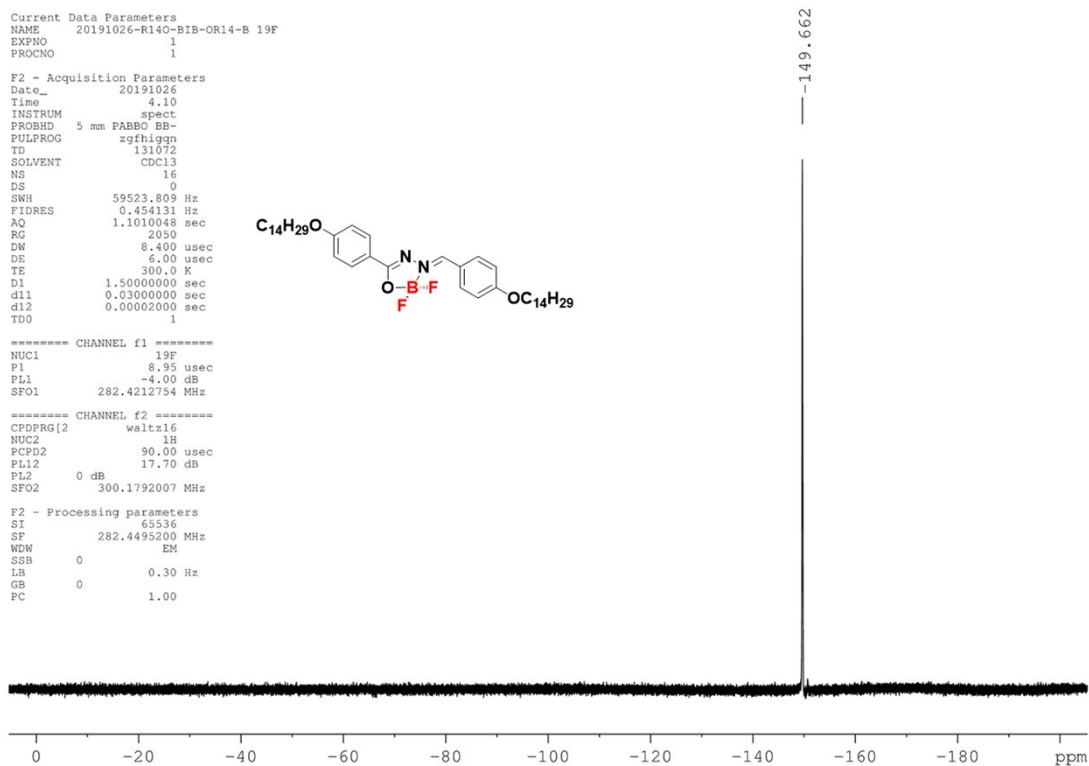


Fig. S16 The  $^{19}\text{F}$ -NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 14).

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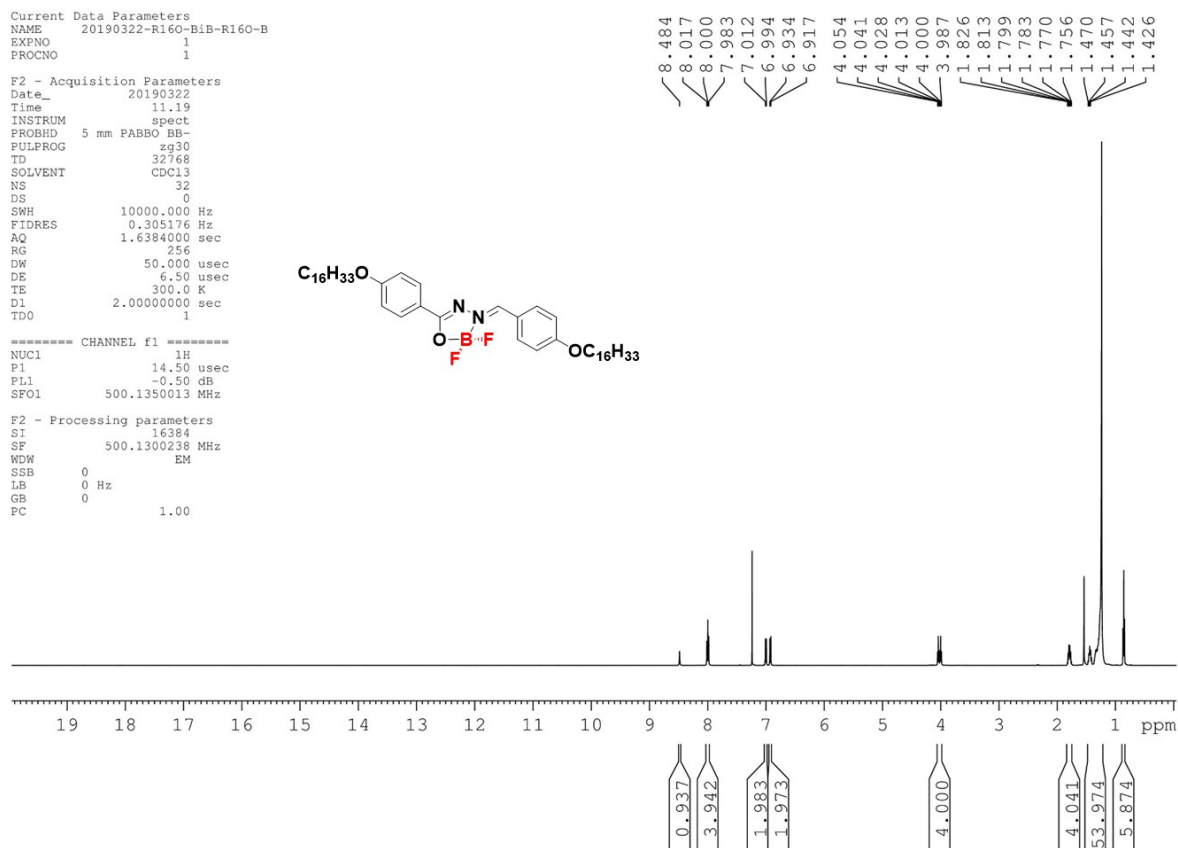
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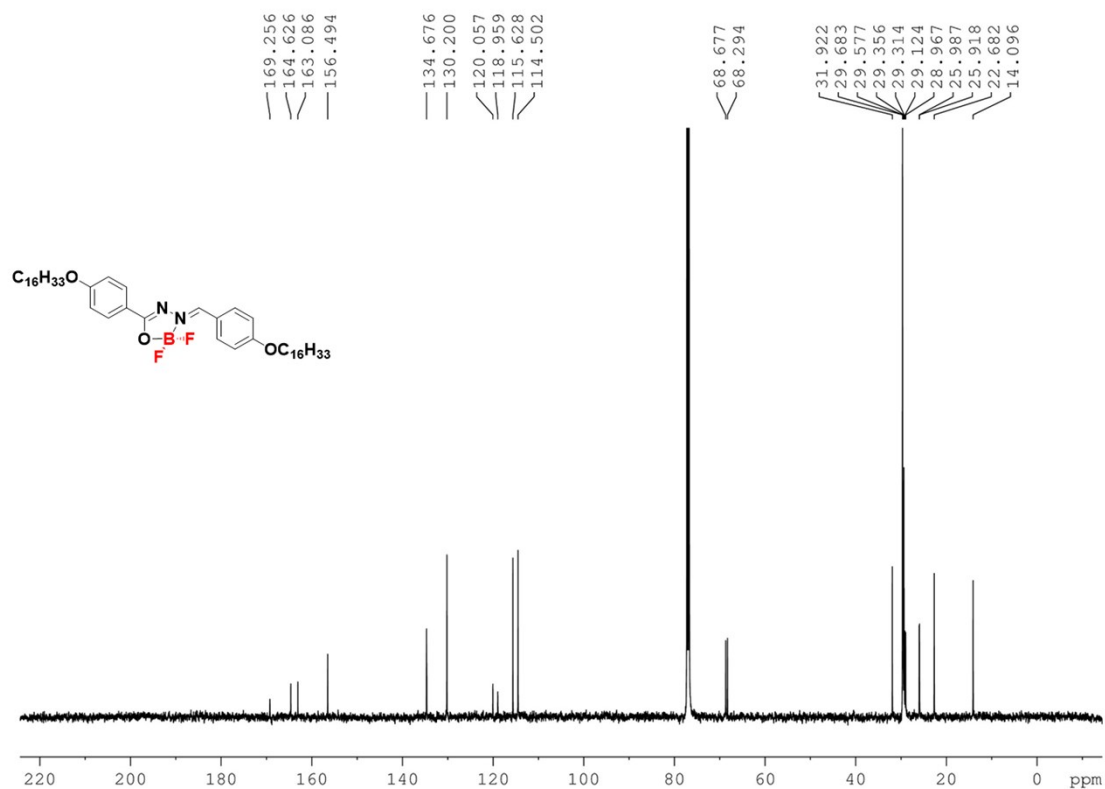
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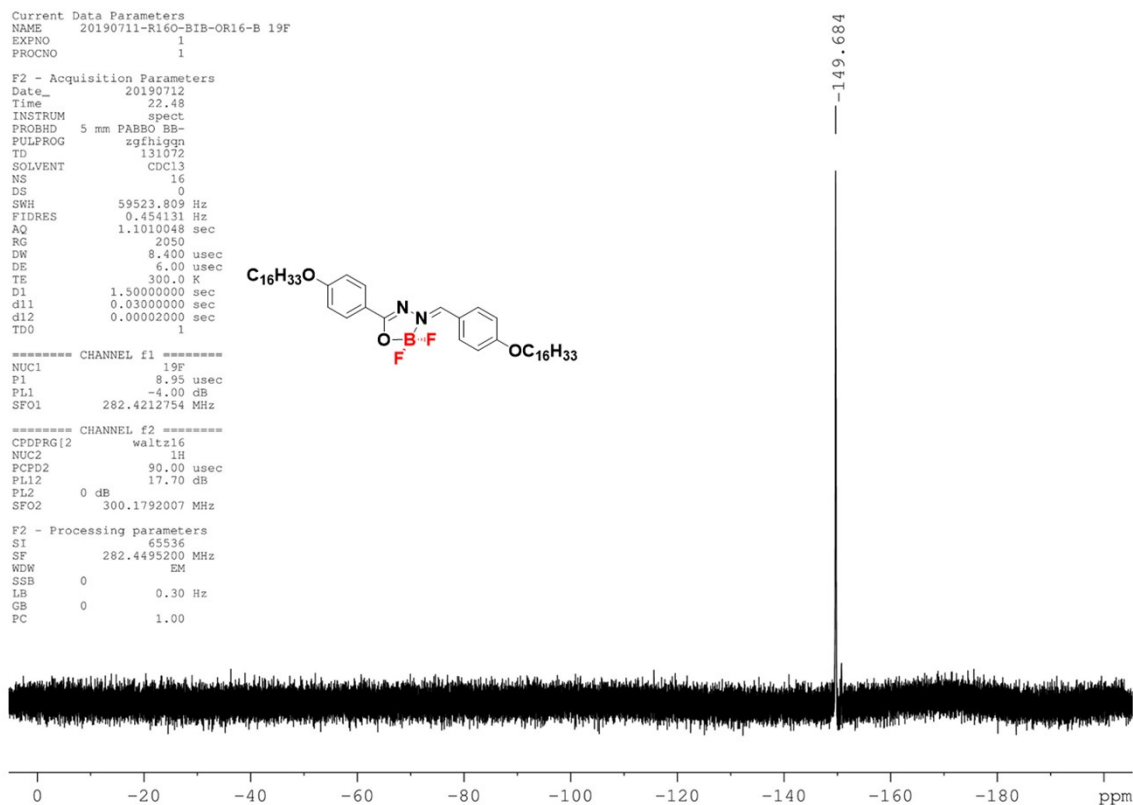
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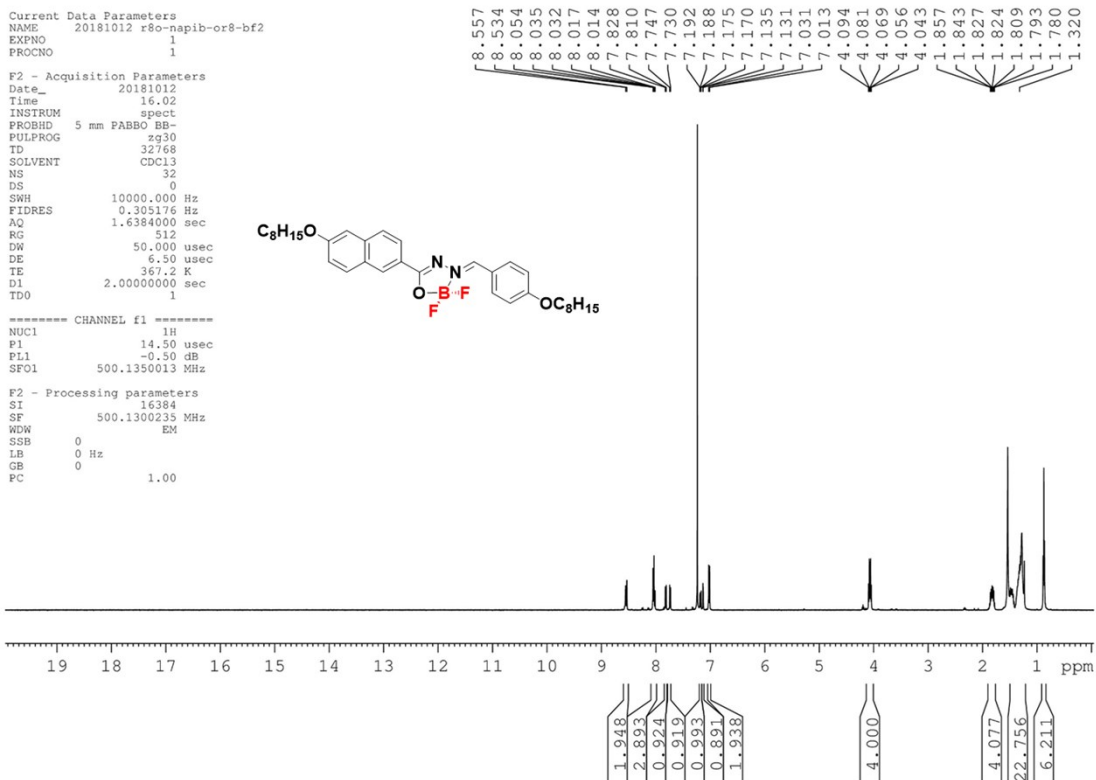
**Fig. S17** The  $^1\text{H}$  spectrum of compound **1a-BF<sub>2</sub>** ( $n = 16$ ).



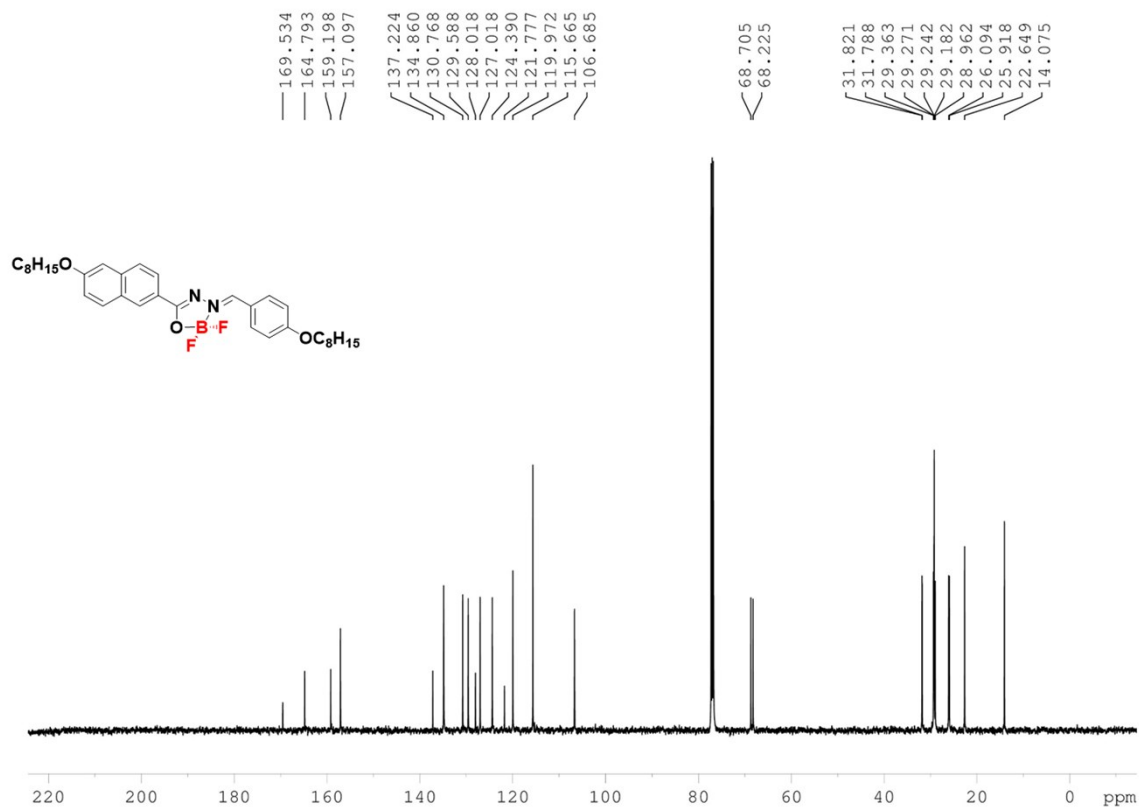
**Fig. S18** The  $^{13}\text{C}$  NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 16).



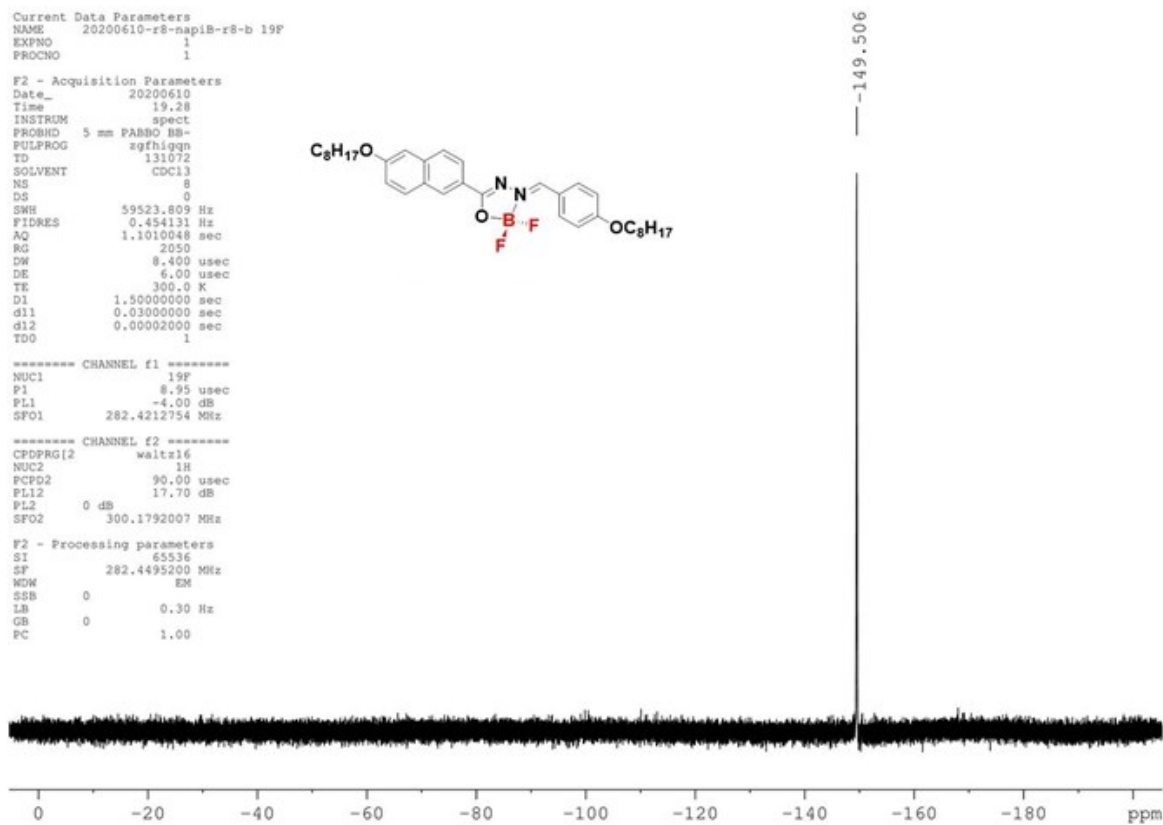
**Fig. S19** The  $^1\text{H}$ -NMR spectrum of compound **1a-BF<sub>2</sub>** (n = 16).



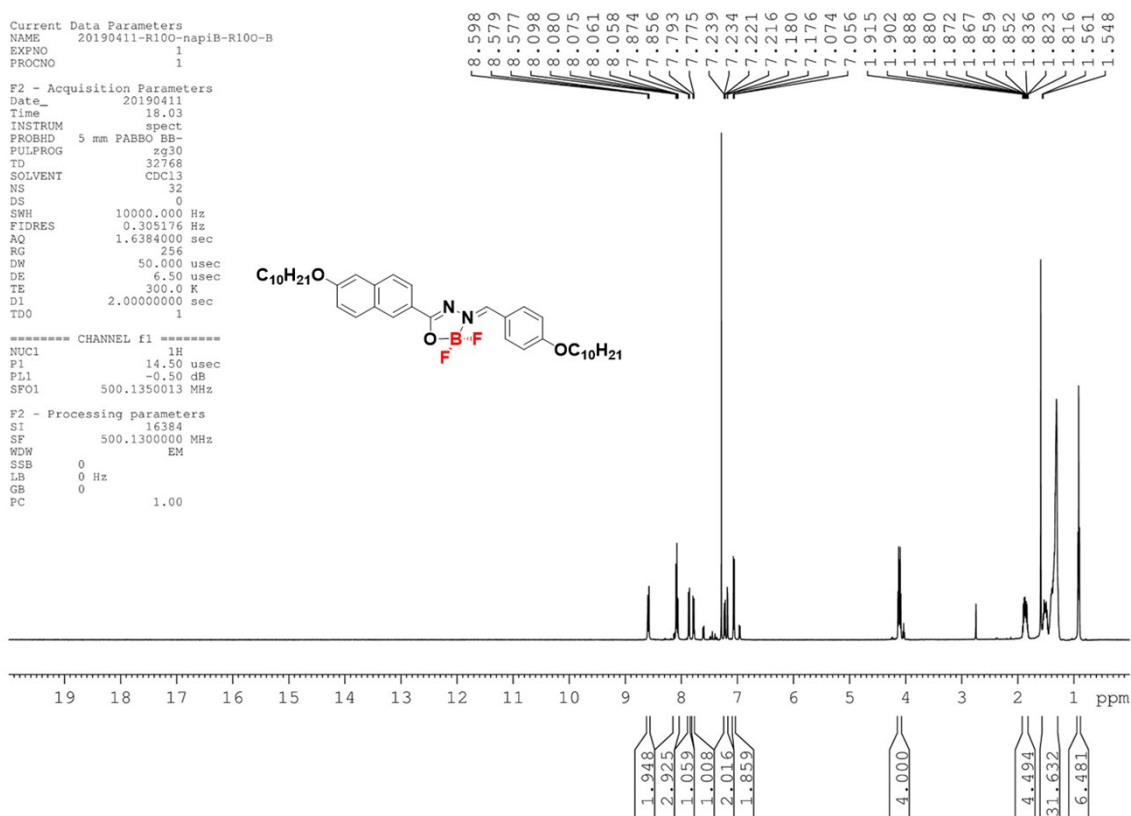
**Fig. S20** The  $^1\text{H}$  NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 8).



**Fig. S21** The  $^{13}\text{C}$  NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 8).



**Fig. S22** The  $^{19}\text{F}$  NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 8).



**Fig. S23** The  $^1\text{H}$  spectrum of compound **1b-BF<sub>2</sub>** (n = 10).

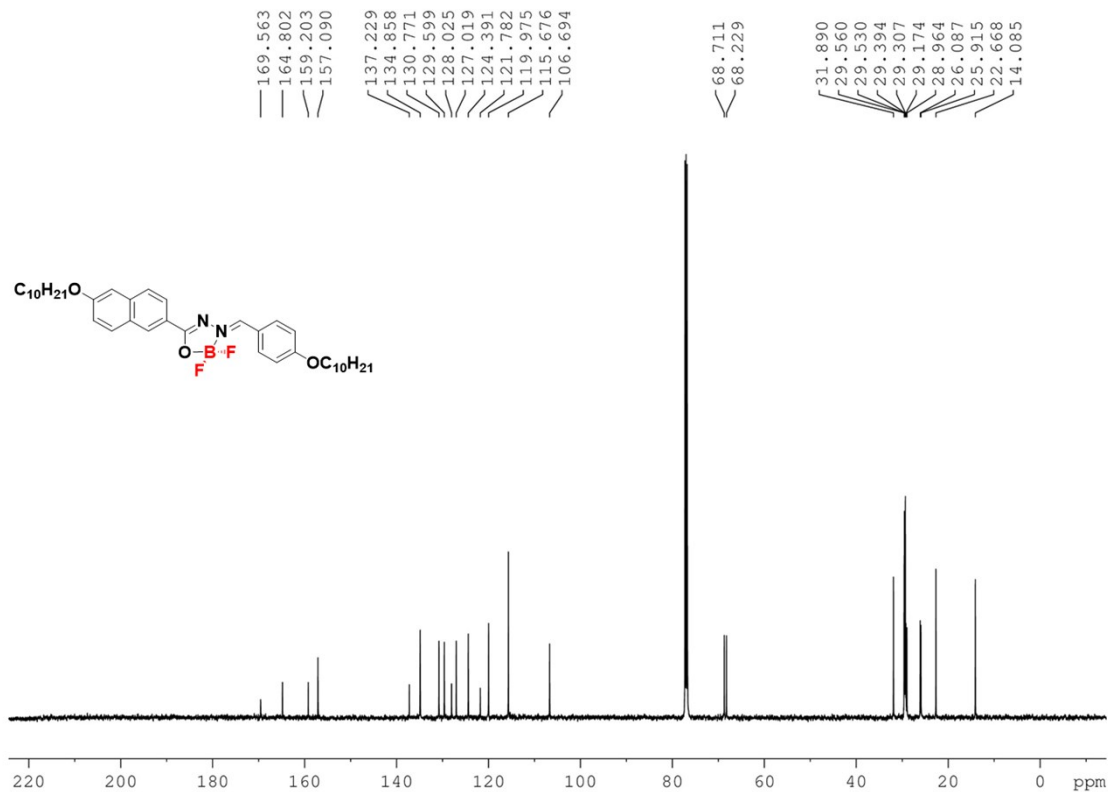


Fig. S24 The  $^{13}\text{C}$  NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 10).

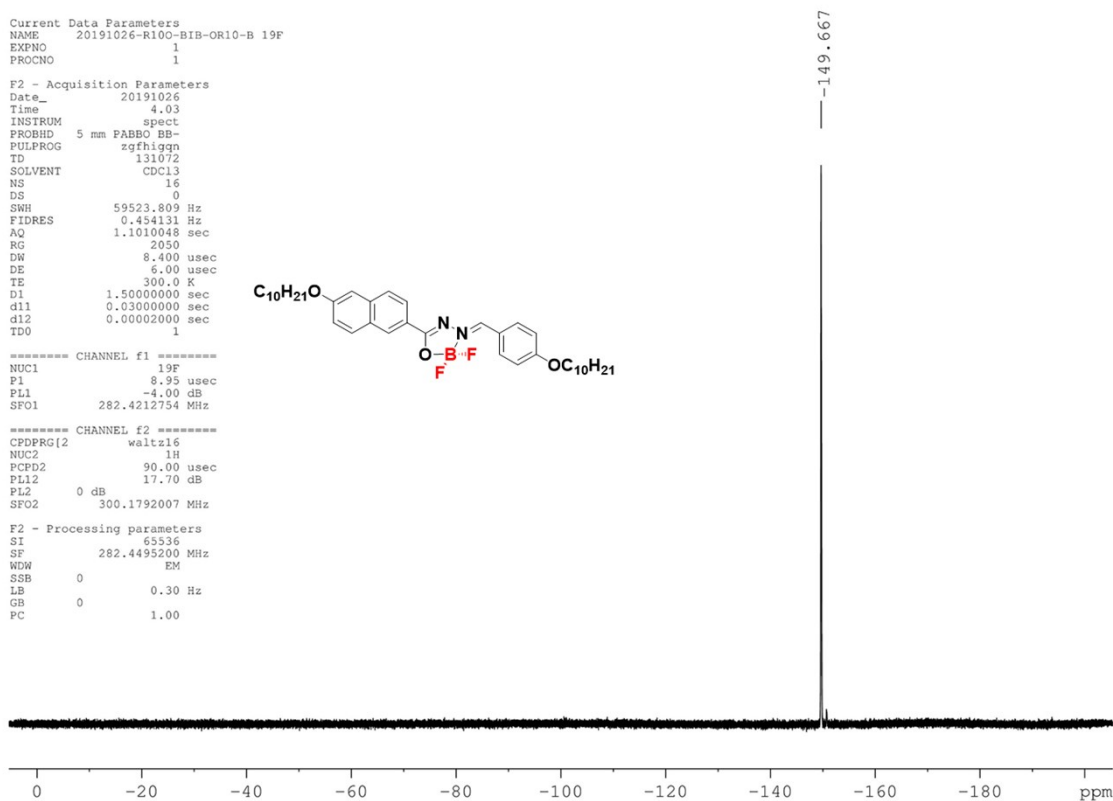
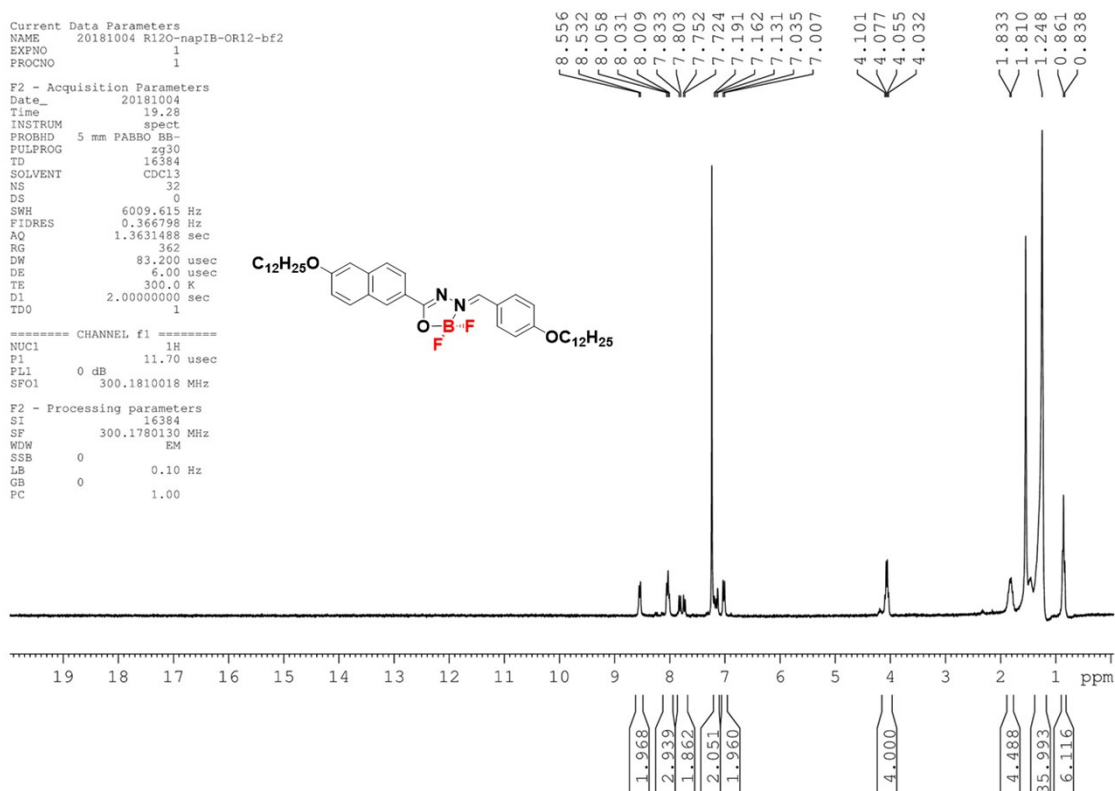
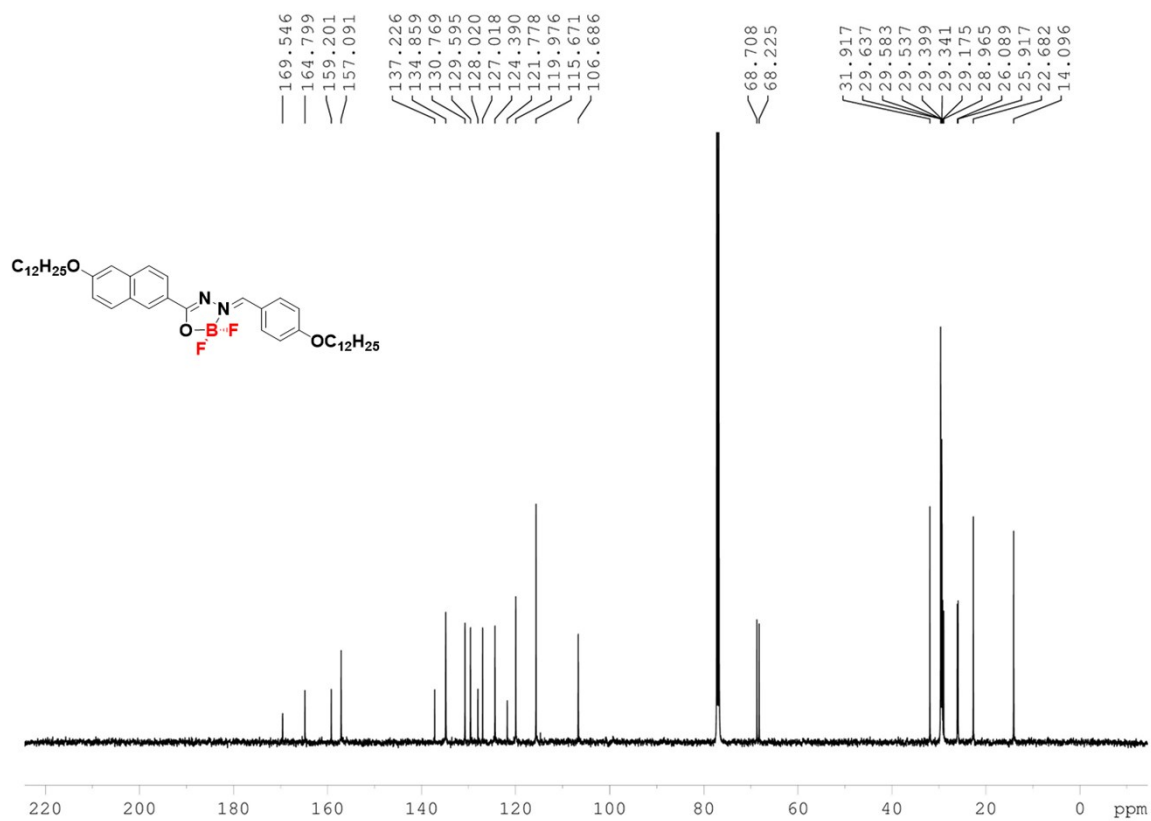


Fig. S25 The  $^{19}\text{F}$ -NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 10).



**Fig. S26** The  $^1\text{H}$  spectrum of compound **1b-BF<sub>2</sub>** (n = 12).



**Fig. S27** The  $^{13}\text{C}$  NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 12).

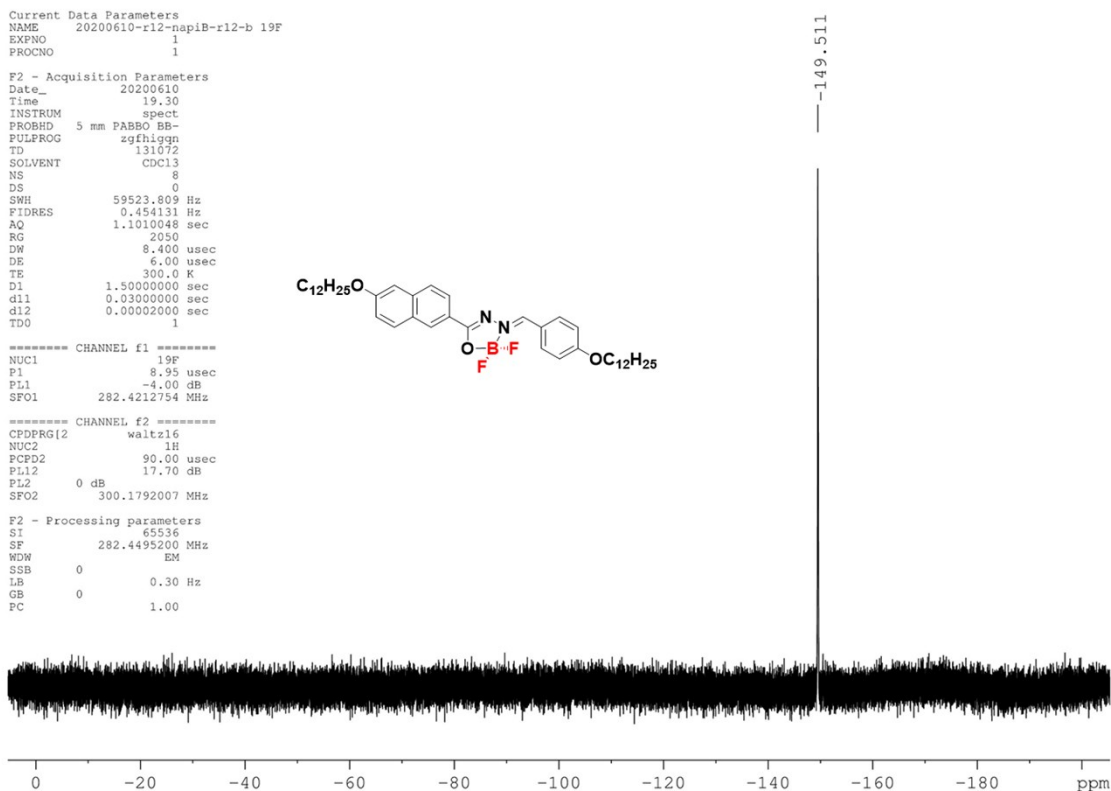


Fig. S28 The  $^{19}\text{F}$ -NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 12).

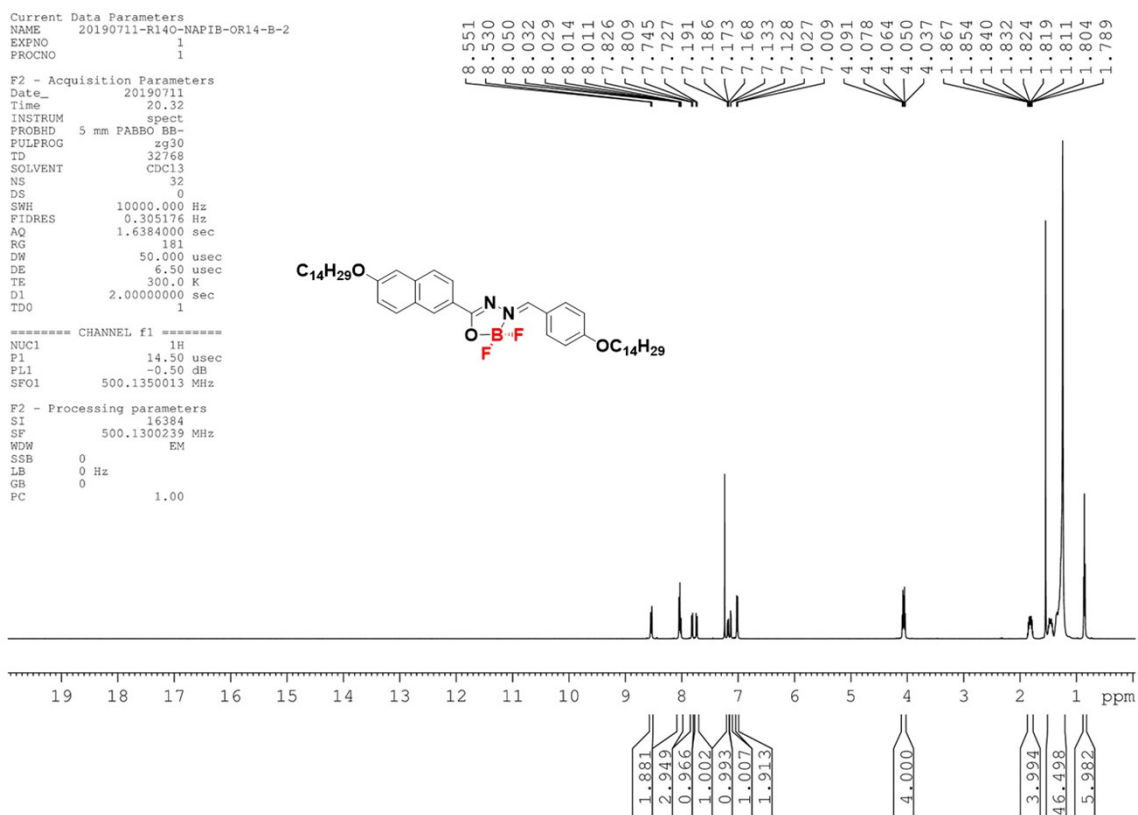
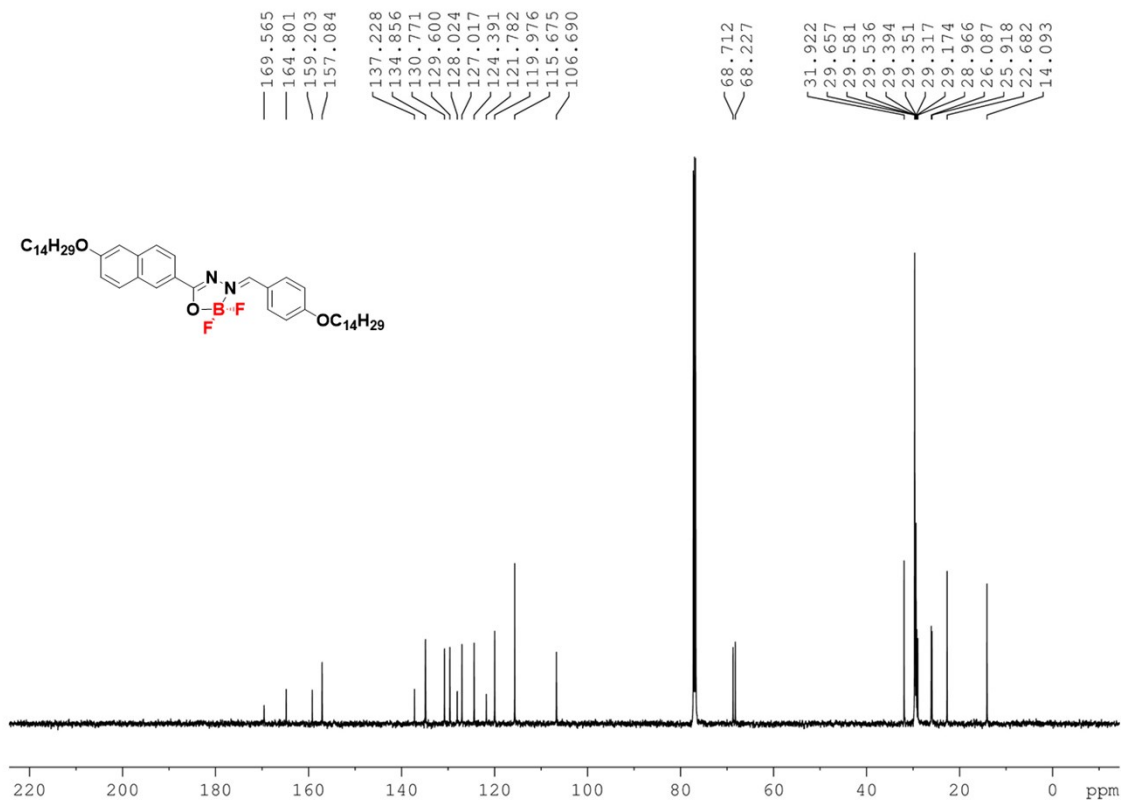
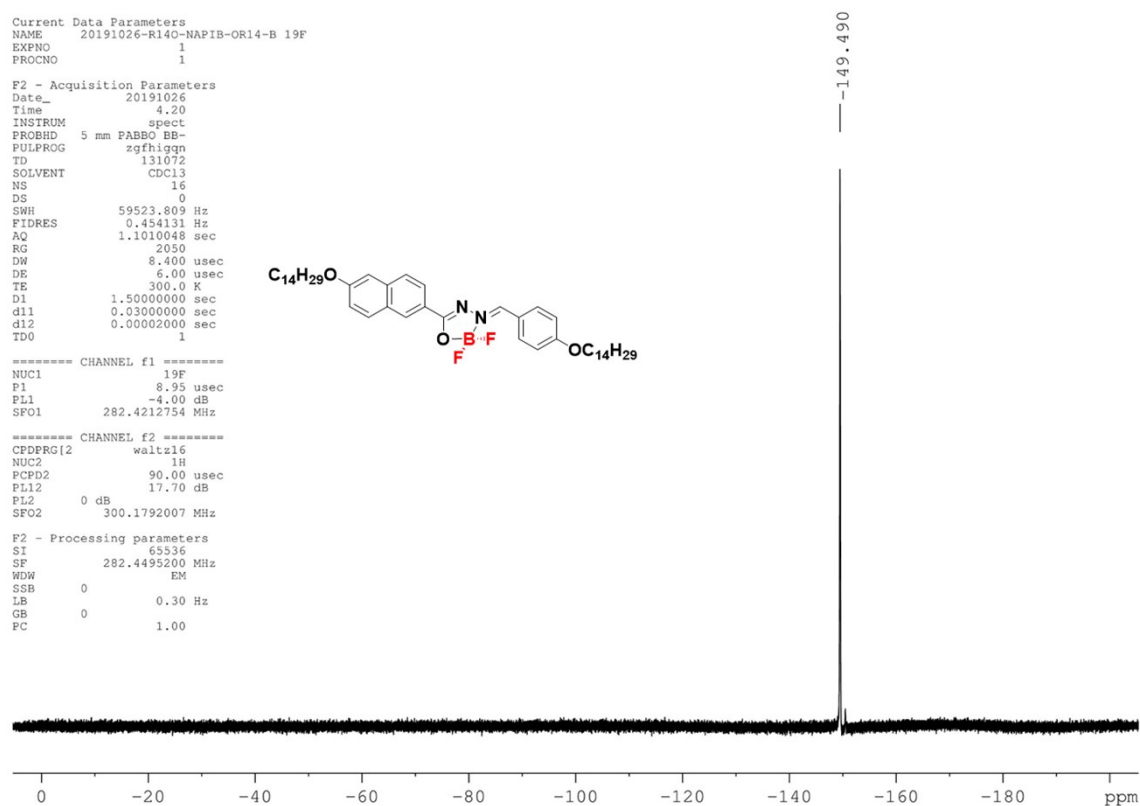


Fig. S29 The  $^1\text{H}$  spectrum of compound **1b-BF<sub>2</sub>** (n = 14).





**Fig. S30** The <sup>13</sup>C NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 14).



**Fig. S31** The <sup>19</sup>F-NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 14).

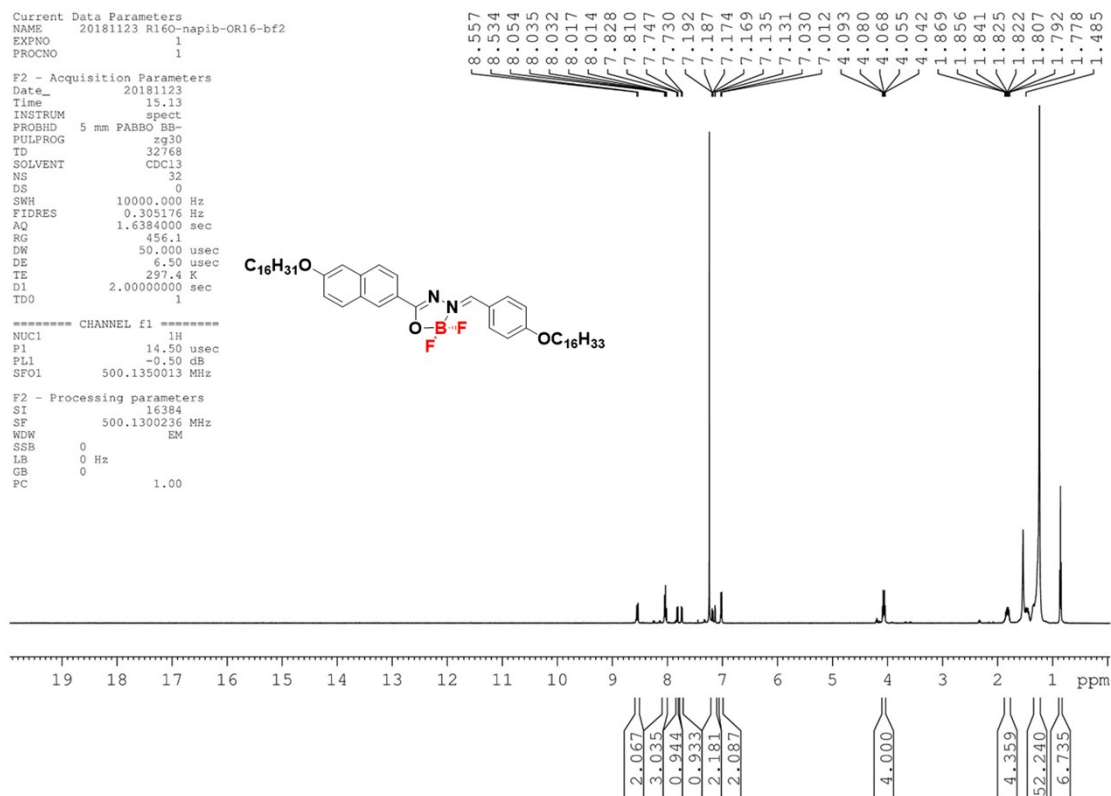


Fig. S32 The  $^1\text{H}$  spectrum of compound **1b-BF<sub>2</sub>** (n = 16).

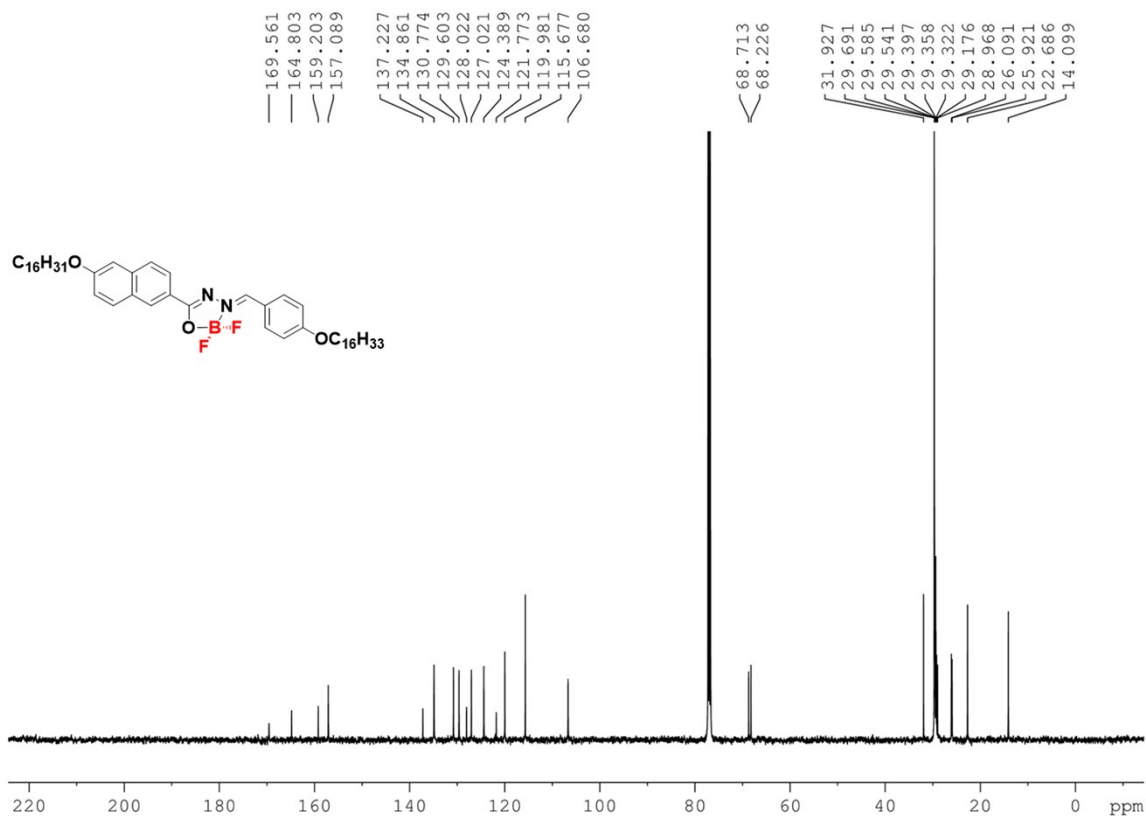


Fig. S33 The  $^{13}\text{C}$  NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 16).

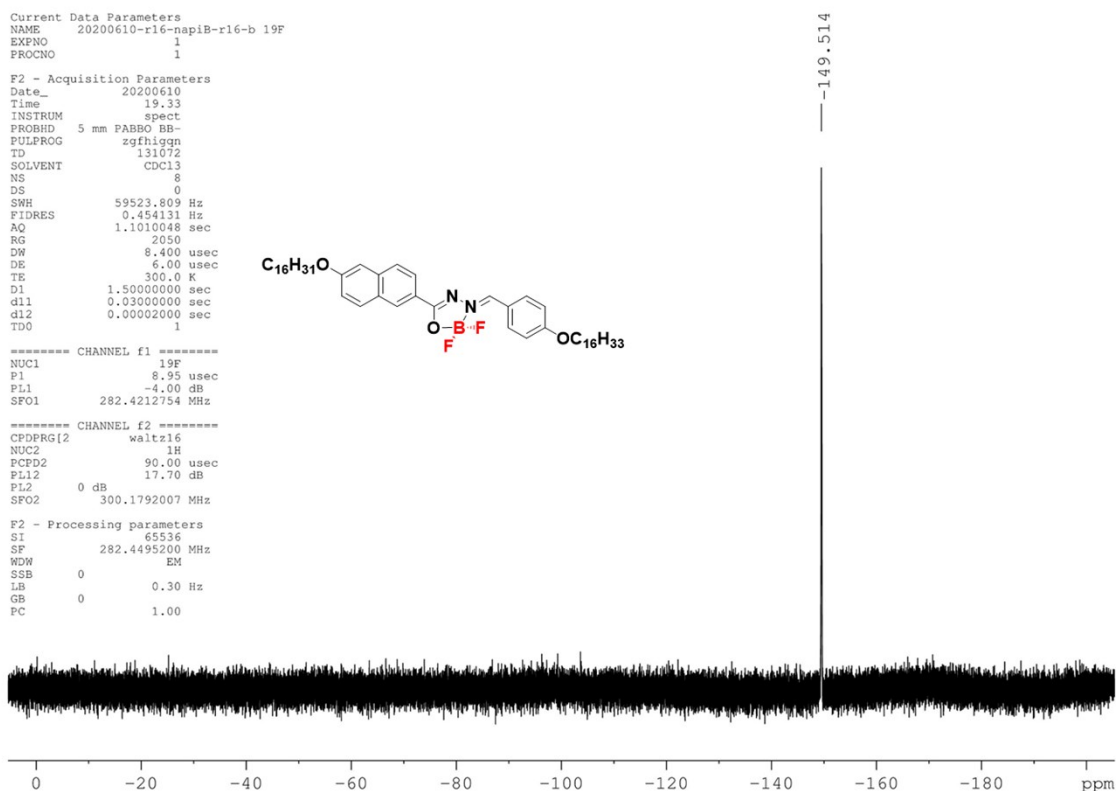


Fig. S34 The  $^{19}\text{F}$ -NMR spectrum of compound **1b-BF<sub>2</sub>** (n = 16).

## 2. The DSC Thermographs of Compounds **1a-BF<sub>2</sub>** (n = 8)

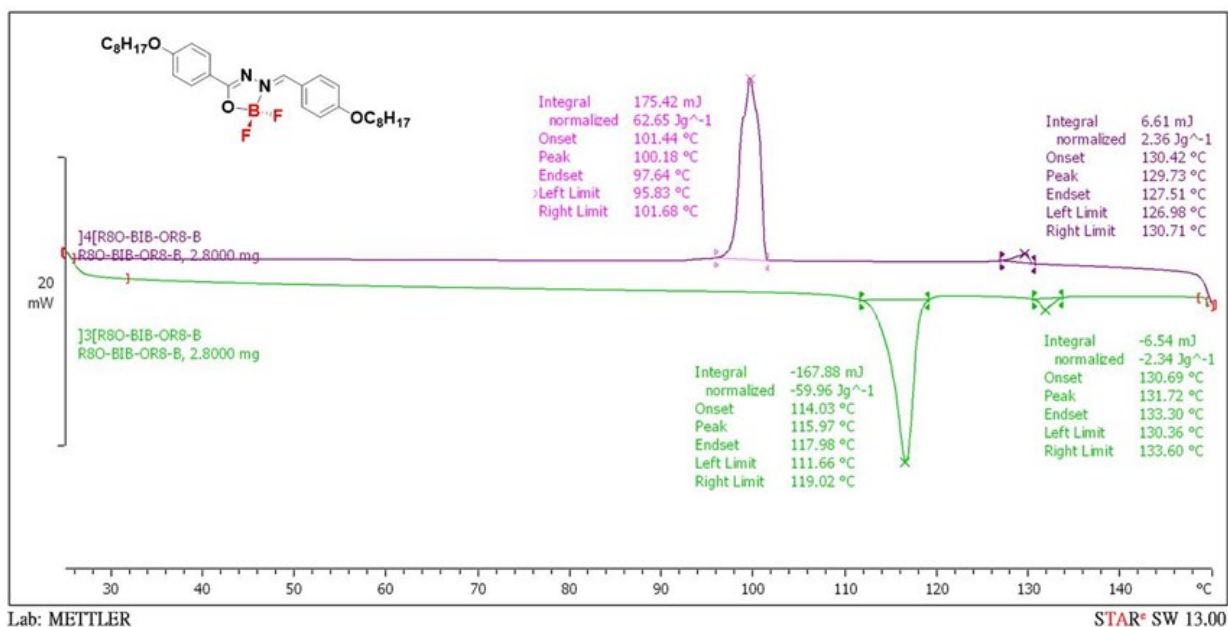


Fig. S35 DSC thermograph of compound **1a-BF<sub>2</sub>** (n = 8).