

1 **Supplementary data**

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3 **Table S1.** The main geometric parameters of BODIPY moiety for molecules of [BF₂L] in a crystal
4 according to X-ray diffraction data.

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	Bond	Distance, Å
6	N ¹ -C ⁷	1.3488(19)
7	C ⁷ -C ⁸	1.398(2)
8	C ⁸ -C ⁹	1.383(2)
9	C ⁹ -C ²	1.431(2)
10	C ² -C ³	1.403(2)
11	C ³ -C ⁴	1.408(2)
12	C ⁴ -C ¹⁰	1.427(2)
13	C ¹⁰ -C ¹¹	1.387(2)
14	C ¹¹ -C ¹²	1.393(2)
15	C ¹² -N ⁵	1.3510(18)
16	C ⁴ -N ⁵	1.4056(18)
17	N ¹ -B ⁶	1.5459(19)
18	N ⁵ -B ⁶	1.541(2)
19	B ⁶ -F ⁶	1.3929(18)
20	B ⁶ -F ⁷	1.3987(17)

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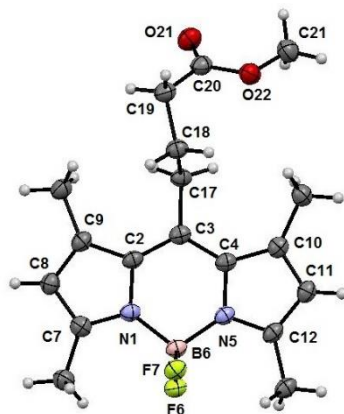
19 **Table S2.** Selected torsion angle values for BODIPY [BF₂L] molecule in a crystal according to X-ray
20 diffraction data.

	Angles, degrees
C ² C ³ C ¹⁷ C ¹⁸	86.23(16)
C ³ C ¹⁷ C ¹⁸ C ¹⁹	-166.06(12)
C ¹⁷ C ¹⁸ C ¹⁹ C ²⁰	-53.68(17)
C ¹⁸ C ¹⁹ C ²⁰ O ²²	-51.05(17)

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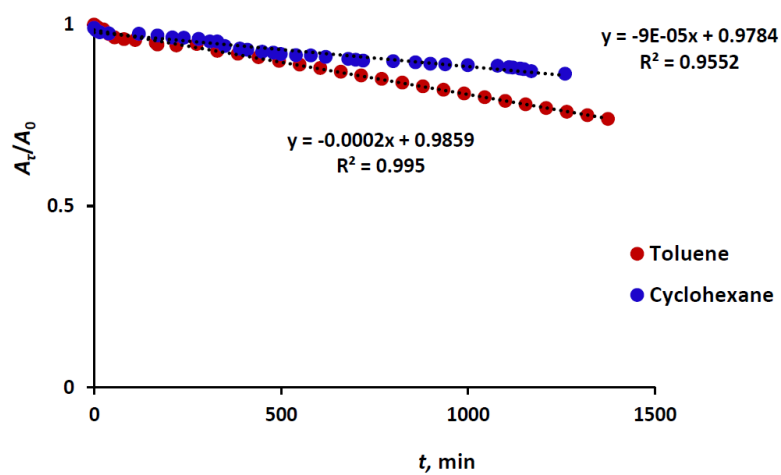
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Figure S1. Geometry of the molecule [BF₂L] in the crystal by X-ray data.

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Figure S2. Photobleaching curves of [BF₂L] measured in toluene and cyclohexane solutions recorded at regular intervals following photo irradiation at 365 nm.

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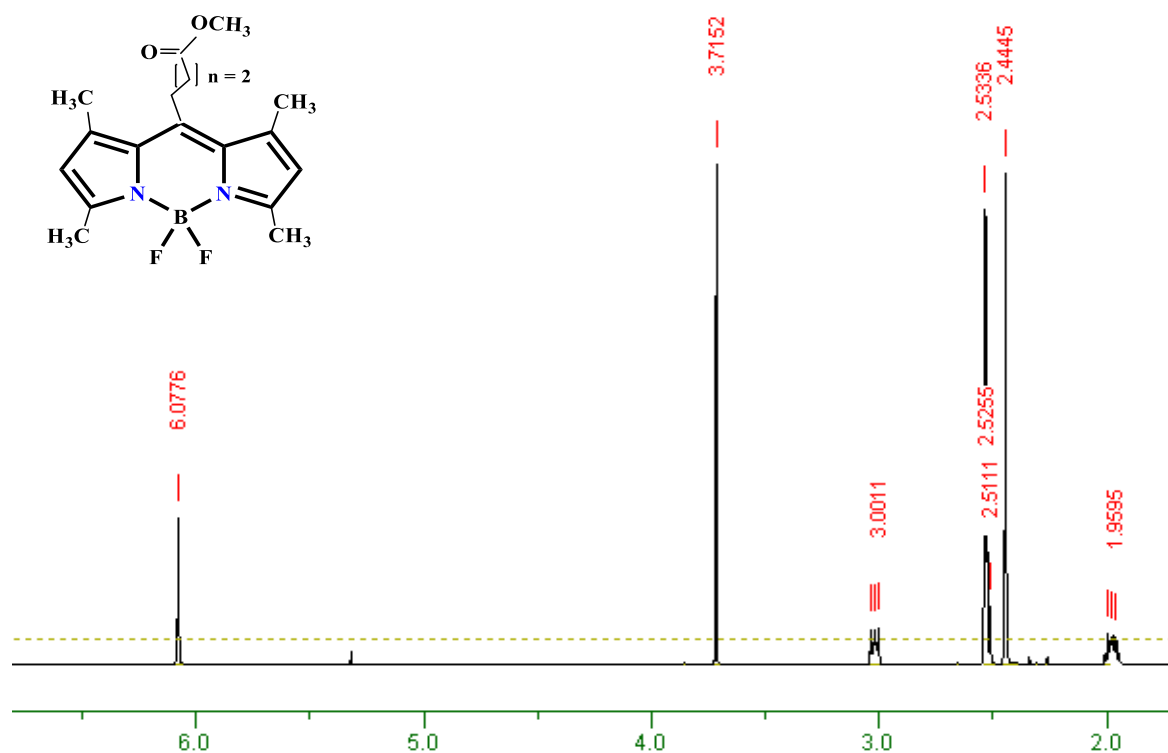
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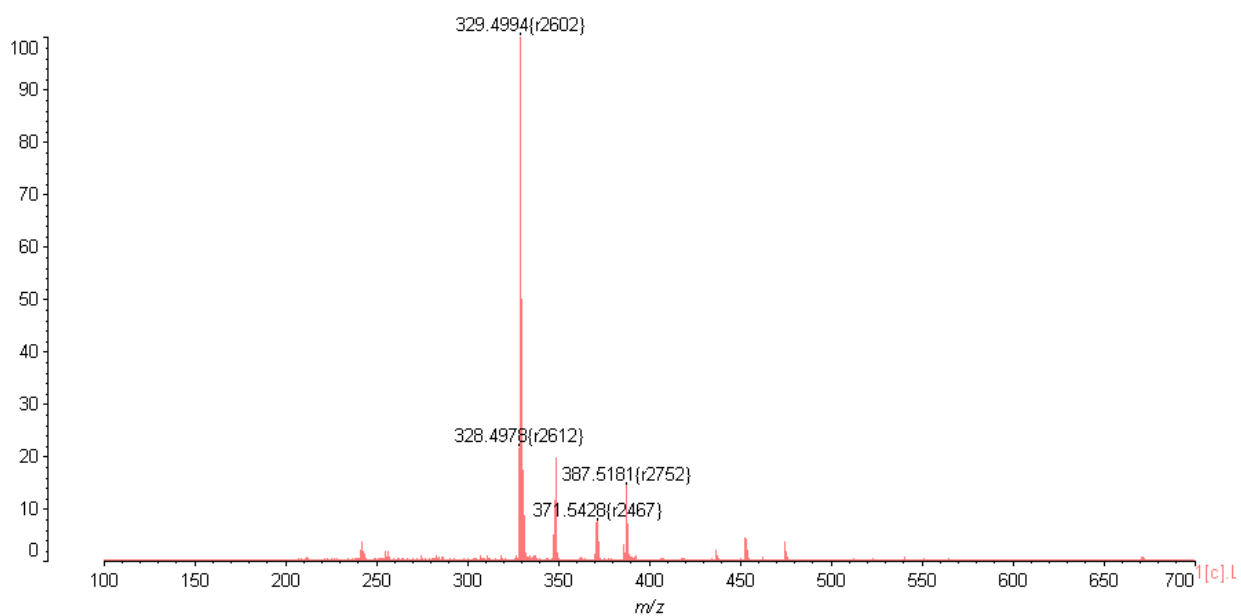
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^1H NMR spectrum (CDCl_3), δ , ppm: 6.08s (2H, 4,4'-H); 3.72s (3H, OCH_3); 2.99-3.05m (2H, *ms*- CH_2); 2.53s+2.52t (6+2H, $J = 7,2\text{Hz}$, $\text{CH}_3+\text{CH}_2\text{CO}$); 2.45s (6H, CH_3); 1.94-2.02m (2H, CH_2).

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Figure S3. ^1H NMR spectrum of the $[\text{BF}_2\text{L}]$.



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Figure S4. Mass spectrum of the $[\text{BF}_2\text{L}]$.

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