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Donor-Acceptor Type Blends Composed of Black Phosphorus and C<sub>60</sub> for Solid-State Optical Limiters

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**Table 1.** Linear and NLO data for the PMMA-based samples. E<sub>I</sub>: Input pulse laser energy; T<sub>0</sub>: linear transmittance; α<sub>0</sub>: linear absorption coefficient; β<sub>eff</sub>: nonlinear coefficient; Imχ<sup>(3)</sup>: imaginary third-order susceptibility. FOM: figure of merit.

Laser	E <sub>I</sub> (μJ)	sample	T <sub>0</sub> %	α <sub>0</sub> (cm <sup>-1</sup> )	β <sub>eff</sub> (cm GW <sup>-1</sup> )	Imχ <sup>(3)</sup> (×10 <sup>-12</sup> esu)	FOM (×10 <sup>-15</sup> esu cm)
532 nm 2Hz, 6 ns	10	BP	53.68	75.87	-36.84	-15.73	207.33
		C <sub>60</sub>	78.64	124.16	-	-	-
		BP:C <sub>60</sub>	44.35	113.94	-	-	-
		BP:C <sub>60</sub> (annealed)	61.72	60.71	87.32	37.29	614.23
532 nm 2Hz, 6 ns	20	BP	53.68	75.87	-30.64	-13.08	172.40
		C <sub>60</sub>	78.64	124.16	-	-	-
		BP:C <sub>60</sub>	44.35	113.94	-25.42	-10.85	95.23
		BP:C <sub>60</sub> (annealed)	61.72	60.71	96.7	41.29	680.12
532 nm 2Hz, 6 ns	40	BP	53.68	75.87	-18.5	-7.90	104.13
		C <sub>60</sub>	78.64	124.16	-	-	-
		BP:C <sub>60</sub>	44.35	113.94	-18.31	-7.82	68.63
		BP:C <sub>60</sub> (annealed)	61.72	60.71	98.7	42.14	694.12
532 nm	120	BP	53.68	75.87	-15.21	-6.49	85.54
		C <sub>60</sub>	78.64	124.16	75.46	32.22	259.50

		BP:C <sub>60</sub>	44.35	113.94	-10.61	-4.53	39.76
		BP:C <sub>60</sub> (annealed)	61.72	60.71	128.62	54.93	904.79
<b>532 nm</b> <b>2Hz, 6 ns</b>	250	BP	53.68	75.869	-7.27	-3.10	40.86
		C <sub>60</sub>	78.64	124.16	134.54	57.45	462.71
		BP:C <sub>60</sub>	44.35	113.94	23.15	9.88	86.71
		BP:C <sub>60</sub> (annealed)	61.72	60.71	174.07	74.33	1224.35
<b>532 nm</b> <b>2Hz, 6 ns</b>	400	BP	53.68	75.87	-5.33	-2.28	30.05
		C <sub>60</sub>	78.64	124.16	162.79	69.51	559.84
		BP:C <sub>60</sub>	44.35	113.94	39.39	16.82	147.62
		BP:C <sub>60</sub> (annealed)	61.72	60.71	241.73	103.22	1700.21
<b>532 nm</b> <b>10Hz, 6 ns</b>	400	BP:C <sub>60</sub>	65.15	5.11	1.43	0.49	9.59
		BP:C <sub>60</sub> (solvent annealed)	60.41	4.29	4.62	1.59	370.63