Support information

Light and Heat Triggering Modulation of the Electronic Performance of a Graphdiyne-based Thin Film Transistor

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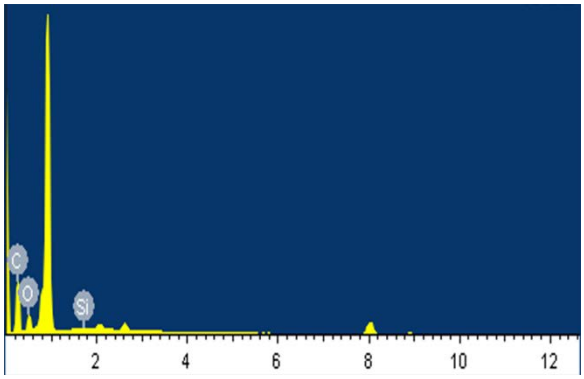

Figure S1 EDS analysis of the content of each element of GDY film.

element	Weight（percent）	atom（percent）
C K	59.94	66.86
O K	38.93	32.60
Si K	1.13	0.54
total	100.00	100.00

Table S1 The proportion of elemental and atomic content of GDY film.

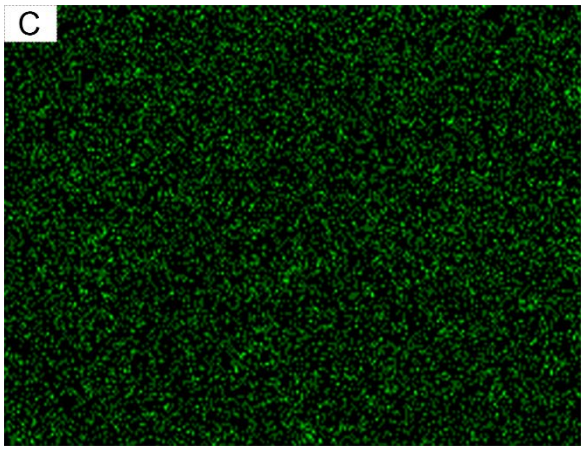

Figure S2 C element mapping of GDY film.

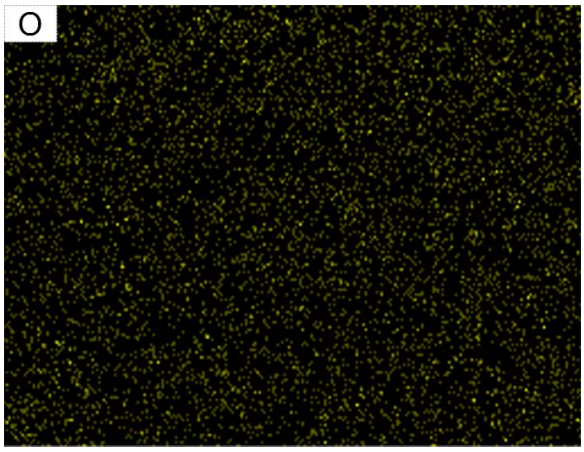

Figure S3 O element mapping of GDY film.

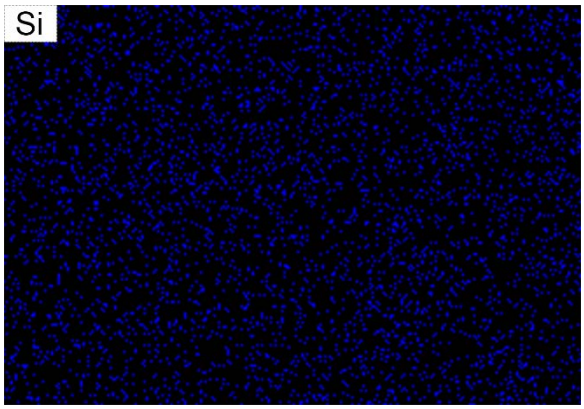

Figure S4 Si element mapping of GDY film.

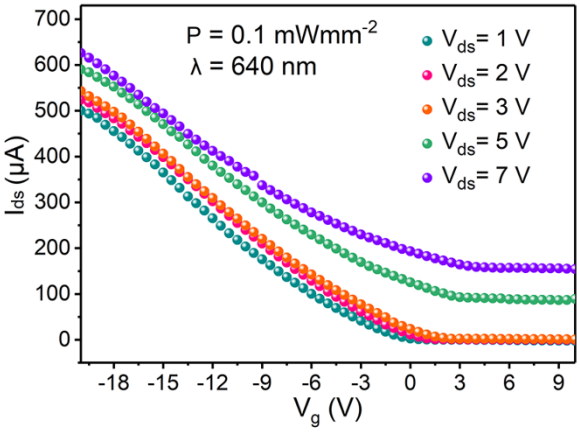

Figure S5 Transfer characteristics of different V_{ds} under fixed wavelength (640 nm) and intensity illumination (0.1mWmm^{-2}).

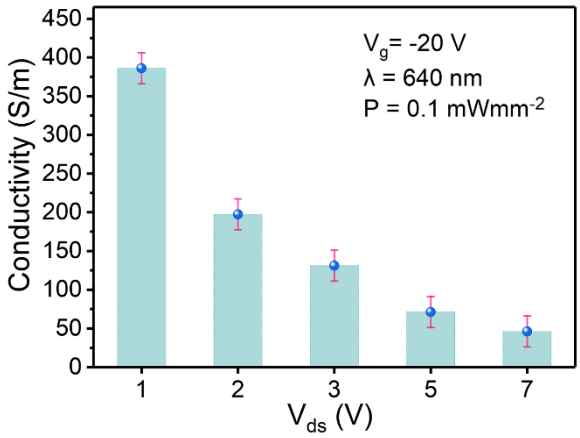

Figure S6 Conductivity of different V_{ds} under fixed wavelength (640 nm) and intensity irradiation (0.1mWmm^{-2}).

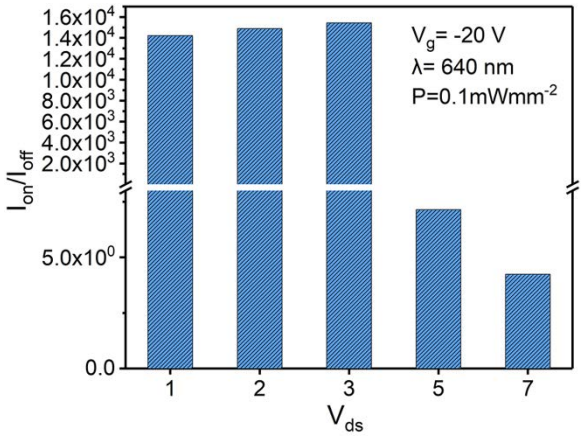

Figure S7 The on/off ratio of different V_{ds} under fixed wavelength (640 nm) and intensity irradiation (0.1mWmm^{-2}).