

High Electroluminescence Efficiency and Long Device Lifetime of a Fluorescent Green-Light Emitter Using Aggregation-Induced Emission

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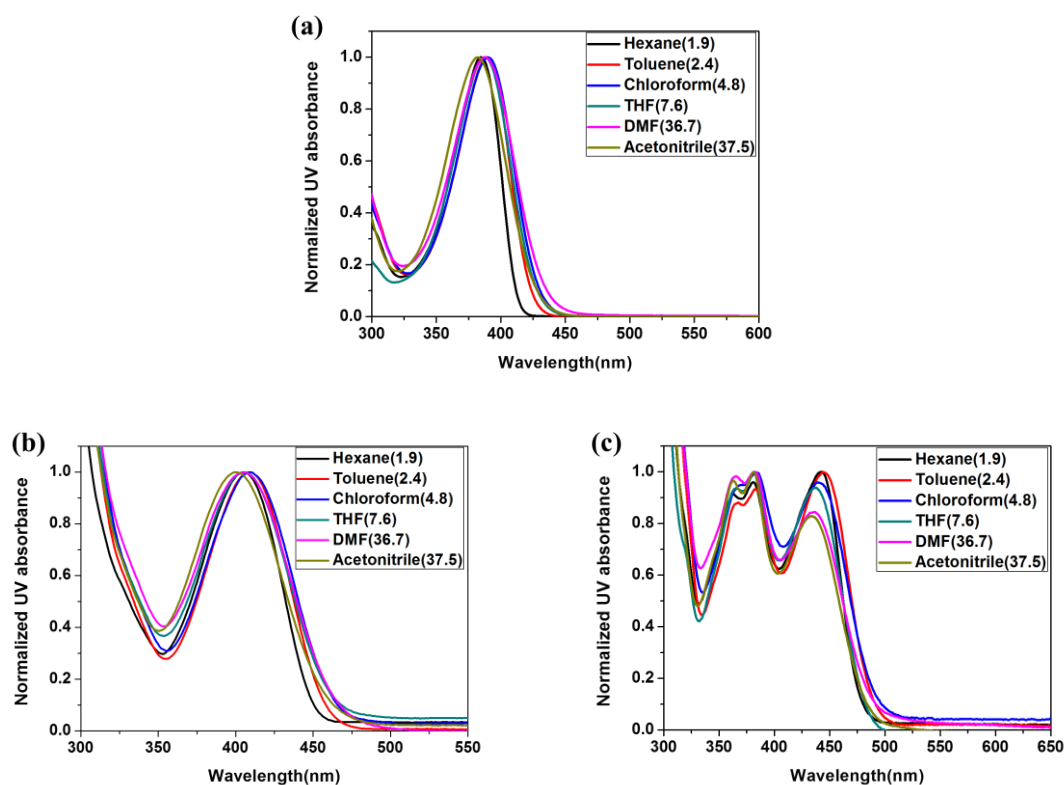


Fig. S1. Normalized UV-Visible absorption spectra according to the solvent dielectric constant (a: DPAT-Ph, b: DPAT-Na, c: DPAT-An, concentration: $1 \times 10^{-5} \text{M}$).

Table S1. UV-Visible absorption maximum wavelength according to the solvent dielectric constant (concentration: $1 \times 10^{-5} \text{M}$).

Synthesized compounds	Hexane (1.9)	Toluene (2.4)	CHCl_3 (4.8)	THF (7.6)	DMF (36.7)	Acetonitrile (37.5)
DPAT-Ph	385	389	390	388	388	382
DPAT-Na	405	409	409	405	405	400
DPAT-An	443	444	441	438	437	434

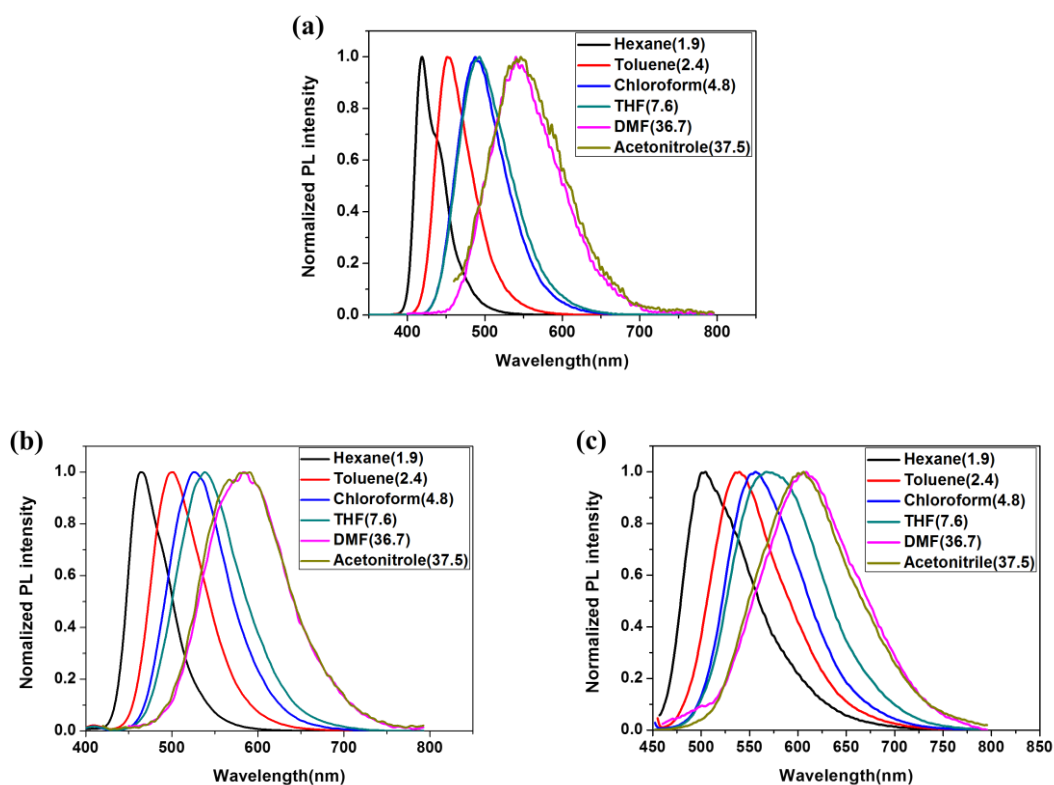


Fig. S2. Normalized PL spectra according to the solvent dielectric constant (a: DPAT-Ph, b: DPAT-Na, c: DPAT-An, concentration: $1 \times 10^{-5} \text{M}$).

Table S2. PL maximum wavelength according to the solvent dielectric constant (concentration: $1 \times 10^{-5} \text{M}$).

Synthesized compounds	Hexane (1.9)	Toluene (2.4)	CHCl_3 (4.8)	THF (7.6)	DMF (36.7)	Acetonitrile (37.5)
DPAT-Ph	419	452	488	490	540	546
DPAT-Na	464	501	526	538	584	590
DPAT-An	504	540	556	568	609	606

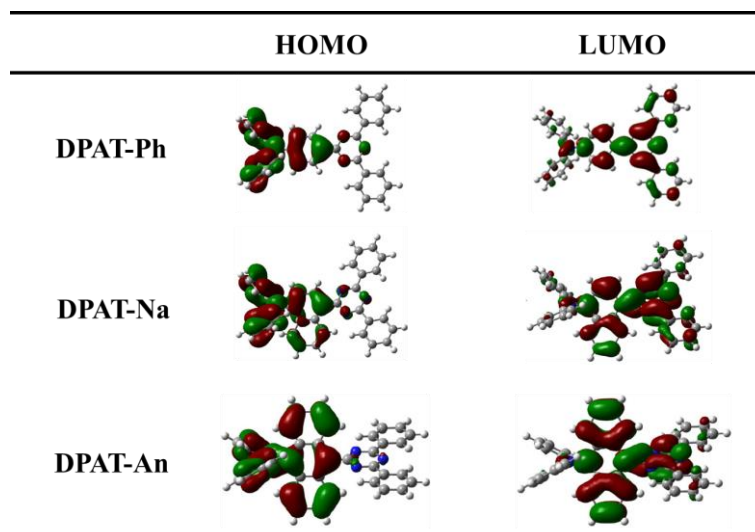


Fig. S3. HOMO and LUMO shapes of synthesized compounds calculated by CAMB3LYP/6-311G(d,p).

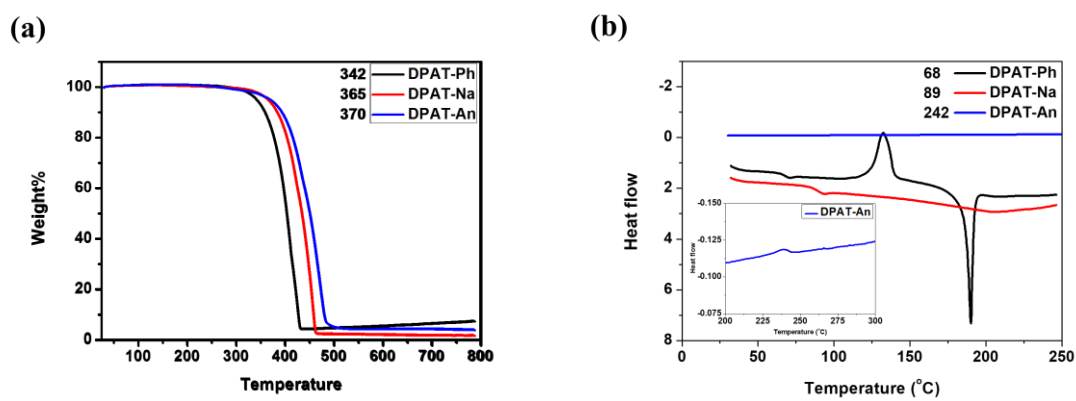


Fig. S4. Thermal properties of synthesized compounds (a) TGA data, (b) DSC data, inset: enlarged DSC data of DPAT-An.

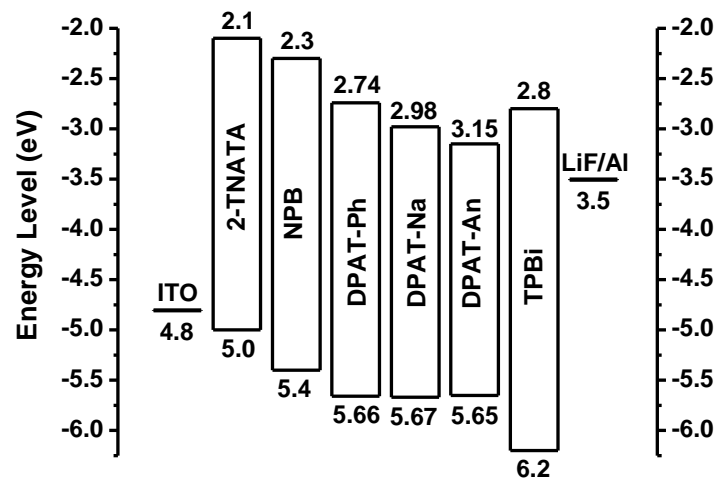


Fig. S5. Band diagram of fabricated OLED devices.