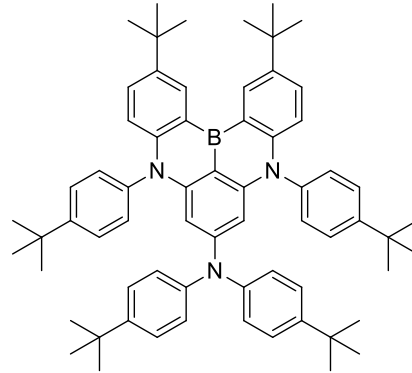


A periphery cladding strategy to improve the performance of narrowband emitters, achieving deep-blue OLEDs with CIE_y < 0.08 and external quantum efficiency approaching 20%

Product Specifications

LT-N6085	3tPAB
Grade	Sublimed, >99%
PL	438 nm (Toluene)
Formula	C ₆₆ H ₇₈ BN ₃
HOMO/LUMO	-5.09/-2.36 eV
M.W.	924.16 g/mole



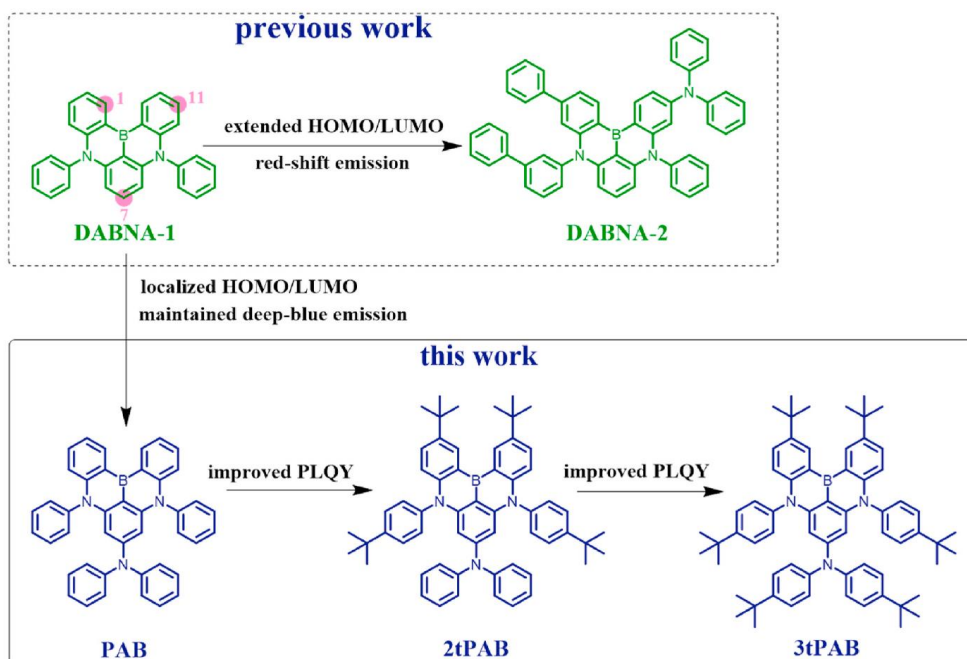
*Reference: *Organic Electronics*, 2021, 97, 106275

Features

- In this study, they designed and synthesized deep-blue narrowband TADF emitters with B- π -N structure by using the periphery cladding strategy. Although the introduction of peripheral *tert*-butyl group increased ΔE_{ST} of emitter and reduced reverse intersystem crossing rate, the intermolecular interactions and the aggregation-induced emission quenching were suppressed effectively.
- By using mCP with low polarity as host, the **3tPAB**-based device exhibited the **EQE_{max} of 19.3%**, **CIE** coordinates of **(0.141, 0.076)**, and **FWHMs of 26 nm**, respectively.

Device Application

Device: ITO / MoO₃ / TAPC / mCP / 3 wt% 3tPAB : mCP / DPEPO / TmPyPB / Liq / Al.



*Figure reference: *Organic Electronics*, 2021, 97, 106275

