

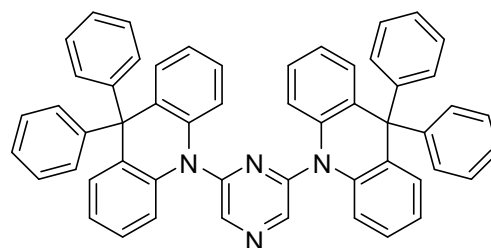


An Effective Host Material with TADF Formed Confined Conjugation for Red PHOLEDs

Product Specifications

LT-N4140 PrDPhAc

Name.	2,6-bis(9,9-diphenylacridin-10(9H)-yl)pyrazine
CAS No.	1982316-90-4
Grade	Sublimed, >99 % (HPLC)
Formula	C ₅₄ H ₃₈ N ₄
Molecular Weight	742.91 g/mole
absorption	375 nm (in CH ₂ Cl ₂)
Photoluminescence	495 nm (in CH ₂ Cl ₂)
HOMO/LUMO	-5.88 eV/ -2.81 eV
ΔE_{ST}	0.08 eV



* Reference: *Chem. Commun.*, **2016**, 52, 8149–8151.

Features

- High efficiencies of the Ir(MDQ)2(acac)-based were achieved and the device showed relatively flat EQE roll-offs. The maximum current efficiency (CE), power efficiency (PE) and external quantum efficiency (EQE) reached 42.5 cd/A, 34.8 lm/W and 25.8%.
- This molecule presented a large intramolecular torsion angle and significant orbital separation, which made it possess a very small ΔE_{ST}.

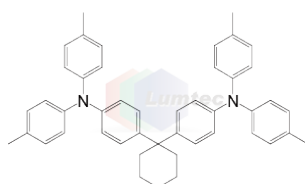
Device Application

The Red PHOLEDs Device:

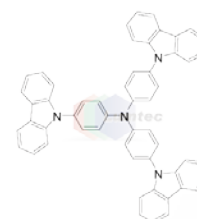
ITO/ HAT-CN (10 nm)/ TAPC (45 nm)/ TcTa (10 nm)/ 4 wt% Ir(MDQ)2(acac) (20 nm)/ TmPyPB (45 nm)/ Liq (2 nm)/ Al (120 nm).



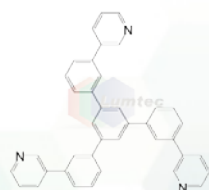
LT-N221 HAT-CN



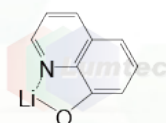
LT-N137 TAPC



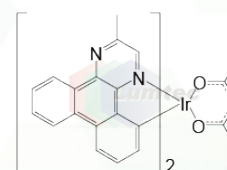
LT-E207 TcTa



LT-N863 TmPyPB



LT-E301 Liq



LT-N753 Ir(MDQ)2(acac)

Materials are used by qualified for testing and research only, there are not guaranteed in patent contention by customer use.

Head Office : 2F, No. 21, R&D Road II, Science-Based Industrial Park, Hsin-Chu 30076, Taiwan, R.O.C., TEL : +886-3-666-3188, FAX : +886-3-666-9288

Taipei Office : 31F-5, No. 99, Sec. 1, Xintai 5th Road, Xizhi, New Taipei City 22175, Taiwan, R.O.C., TEL : +886-2-2697-5600, FAX : +886-2-2697-5601

新竹總公司 : 30076 新竹科學工業園區研發二路 21 號 2 樓, TEL : 03-666-3188, FAX : 03-666-9288

台北分公司 : 22175 新北市汐止區新台五路一段 99 號 31 樓之 5, TEL : +886-2-2697-5600, FAX : +886-2-2697-5601

E-mail : sales@lumtec.com.tw ; Web : <http://www.lumtec.com.tw>