

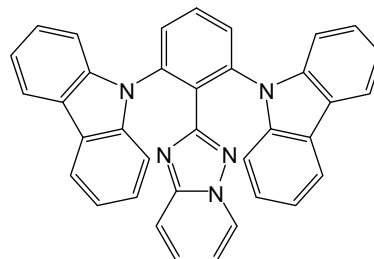


[1,2,4]Triazolo[1,5-*a*]pyridine as Building Blocks for Universal Host Materials for High-Performance Red, Green, Blue and White Phosphorescent Organic Light-Emitting Devices

Product Specifications

LT-N4164 o-CzTP

Name.	9,9'-(2-([1,2,4]triazolo[1,5- <i>a</i>]pyridin-2-yl)-1,3-phenylene)bis(9 <i>H</i> -carbazole)
CAS No.	2127406-34-0
Grade	Sublimed, >99 % (HPLC)
Formula	C ₃₆ H ₂₃ N ₅
Molecular Weight	525.60 g/mole
Absorption	292,325,338 nm
Emission	397 nm (in Toluene solution 10 ⁻⁵ M)
HOMO/LUMO	-5.38 eV/ -1.78 eV



* Reference: ACS Appl. Interfaces **2018**, 10, 5714–5722

Features

- The device hosted by o-CzTP exhibit η_{ext} of 27.1, 25.0, and 15.8% for blue, green, and red light emitting which are comparable with the best electroluminescence performance reported for FIrPic-based blue, Ir(ppy)₃-based green, and Ir(pq)₂(acac)-based red PhOLEDs equipped with a single-component host.

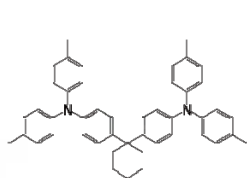
Device Application

The Blue PhOLEDs Device:

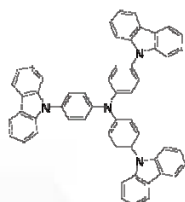
ITO/ PEDOT:PSS (40 nm)/ TAPC (45 nm)/ TcTa (5 nm)/ FIrPic-o-CzTP (10 wt%, 20 nm)/ TmPyPB (55 nm)/ LiF (0.6 nm)/ Al (80 nm).

The WOLEDs Device (contain sky-blue, green, red EMLs):

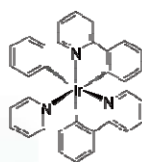
ITO/ PEDOT:PSS (45 nm)/ TAPC (45 nm)/ TcTa (5 nm)/ FIrPic-o-CzTP (10 wt%, 10 nm)/ Ir(pq)₂(acac)-Ir(ppy)₃-o-CzTP (1 wt%, 5 wt%, 10 nm)/ TmPyPB (55 nm)/ LiF (0.6 nm)/ Al.



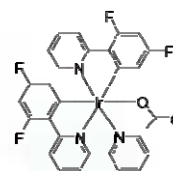
LT-N137 TAPC



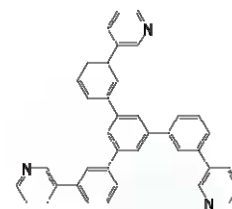
LT-E207 TcTa



LT-E504 fac-Ir(ppy)₃



LT-E607 FIrPic



LT-N863 TmPyPB

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

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

Factory I: 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.

總公司: 22175 新北市汐止區新台五路一段 99 號 31 樓之 5, 電話: 02-2697-5600, 傳真: 02-2697-5601.

新竹廠: 30076 新竹科學工業園區研發二路 17 號 2 樓, 電話: 03-666-3188, 傳真: 03-666-9288.

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