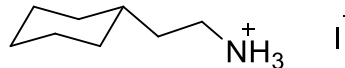


Interfacial Passivation Engineering of Perovskite Solar Cells with Fill Factor over 82% and Outstanding Operational Stability on n-i-p Architecture

Product Specifications

LT-S9645	CEAI
Grade	>99%
Formula	C ₈ H ₁₈ I ₂
M.W.	255.14 g/mole



*Reference: ACS Energy Lett, 2021, 6, 3916–3923

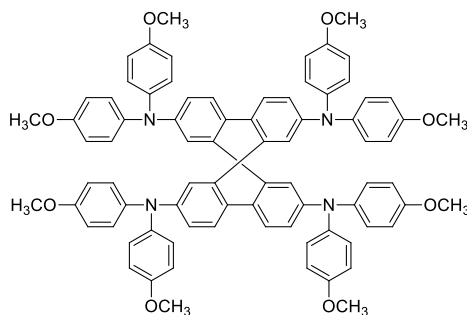
Features

- In this study, a new compound **CEAI**, for interfacial engineering between the perovskite and hole-transporting layer, which enhanced the **fill factor to 82.6%** and consequent **PCE of 23.57%** on the target device.
- The perovskite interlayer along with the cyclohexylethyl group introduced by CEAI treatment also determines a pronounced enhancement in the surface hydrophobicity, leading to an **outstanding stability of over 96%** remaining efficiency of the passivated devices under maximum power point tracking with one sun illumination under N₂ atmosphere at room temperature after 1500 h.

Device Application

Device: FTO / cp-TiO₂ / mp-TiO₂ / 3D perovskite / passivation layer / Spiro-MeOTAD / Au.

Related products from Lumtec:



LT-S922 Spiro-OMeTAD

