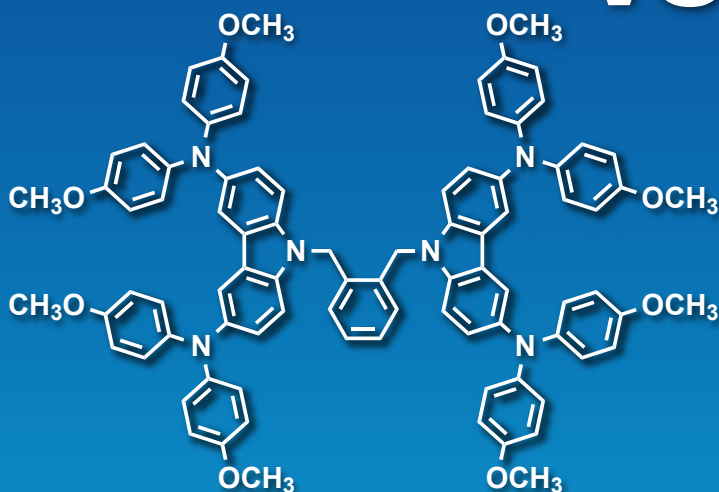


New

MATERIALS



Useful for Perovskite Solar Cell Hole Transport Material V886

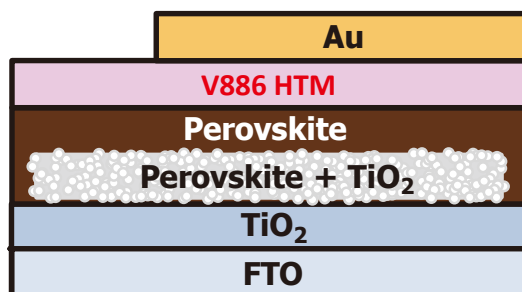


[V0146]

Advantages

- Low cost HTM for perovskite solar cells
- Serves comparable photovoltaic performance with Spiro-OMeTAD¹⁾
- Soluble in organic solvents (Chlorobenzene, THF, etc.)¹⁾

Application for Perovskite Solar Cell¹⁾



Performance of mixed cation-anion perovskite solar cell

$\text{Cs}_{0.1}(\text{MA}_{0.15}\text{FA}_{0.85})_{0.9}\text{Pb}(\text{I}_{0.85}\text{Br}_{0.15})_3$
V886 (with FK209 and LiTFSI dopants)²⁾

Power Conversion Efficiency (PCE): 18.45%

Current Density: $J_{\text{SC}} = 22.09 \text{ mA/cm}^2$

Open-circuit Voltage: $V_{\text{OC}} = 1.107 \text{ V}$

Fill Factor (FF) = 0.757

Spiro-OMeTAD (with FK209 and LiTFSI dopants)²⁾

Power Conversion Efficiency (PCE): 18.79%

Ref. 1) P. Gratia, A. Magomedov, T. Malinauskas, M. Daskeviciene, A. Abate, S. Ahmad, M. Grätzel, V. Getautis, M. K. Nazeeruddin, *Angew. Chem. Int. Ed.* **2015**, *54*, 11409.

2) A. Magomedov, S. Paek, P. Gratia, E. Kasparavicius, M. Daskeviciene, E. Kamarauskas, A. Gruodis, V. Jankauskas, K. Kantminiene, K. T. Cho, K. Rakstys, T. Malinauskas, V. Getautis, M. K. Nazeeruddin, *Adv. Funct. Mater.* **2018**, *28*, 1704351.

V886

1g / 5g [V0146]

The V886 compound and its use in dye or perovskite sensitized solar cells is covered by patents of EPFL, Switzerland, and a joint patent of EPFL and KTU, Lithuania. TCI has been granted the right to manufacture and sell this compound in limited quantities for research and development purposes. Please contact us for further information.



Related Product H101

200mg [D5155]

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hole transport



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