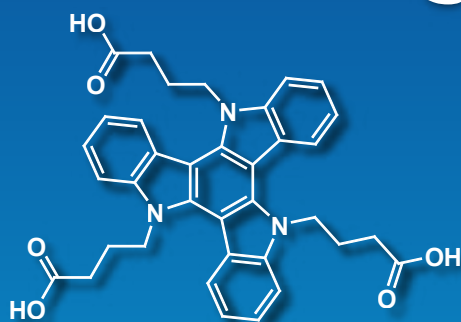


New

MATERIALS

TCI

SAM Formation Reagent with Three Carboxylic Acid Moieties as Anchors 3CATAT-C3

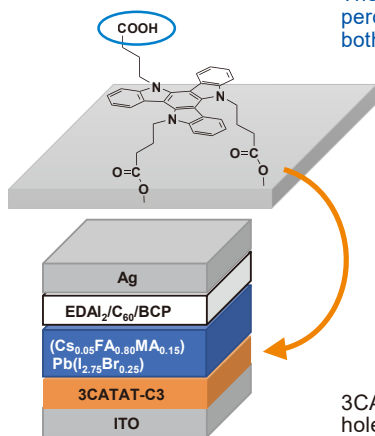


3CATAT-C3
500mg
[C4192]

Advantages

- Efficient charge collection from the perovskite layer
- Superior wettability for large area fabrication
- Applicable to co-depositon process
- Available with high purity / in large quantities

Application



3CATAT-C3 is a high-performance hole-collecting material (HCM) for inverted perovskite solar cells. The partially exposed carboxy groups form a monolayer with high wettability, making it suitable for perovskite layer deposition. By coating the mixture of 3CATAT-C3 with a perovskite precursor on ITO, both a hole-collecting layer and a perovskite layer can be fabricated simultaneously.¹⁾

HCM	Method	J _{sc} (mA·cm ⁻²)	V _{oc} (V)	FF	PCE (%)
3CATAT-C3	Spin-coating (Layer by layer)	23.6	1.07	0.84	21.2
3CATAT-C3	Spin-coating (Co-deposition)	23.7	1.08	0.81	20.8
3PATAT-C3	Spin-coating (Layer by layer)	24.7	1.12	0.82	22.7
3PATAT-C3	Spin-coating (Co-deposition)	22.0	0.99	0.79	17.3

3CATAT-C3 [C4192] shows comparable performance to 3PATAT-C3 [P3172], a high-performance hole recovery material. 3CATAT-C3 shows similar performance in the co-deposition method as in the layer by layer deposition method.

Reference 1) M. A. Truong, A. Wakamiya, et al., *J. Am. Chem. Soc.* **2025**, 147, 2797. <https://doi.org/10.1021/jacs.4c15857>

3CATAT-C3 is commercialized under the instruction of Professor Atsushi Wakamiya of Kyoto University, and under an invention license by EneCoat Technologies Co., Ltd.

Related Products

3PATAT-C3	500mg [P3172]
Lead(II) Iodide (99.99%, trace metals basis) [for Perovskite precursor]	1g / 5g / 25g / 100g / 1kg [L0279]
Lead(II) Bromide (Low water content) [for Perovskite precursor]	1g / 5g / 25g / 100g [L0346]
Formamidinium Iodide (99.99%, trace metals basis) [for Perovskite precursor]	1g / 5g / 25g [F1263]
Methylamine Hydrobromide (Low water content)	1g / 5g / 25g [M2589]

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