

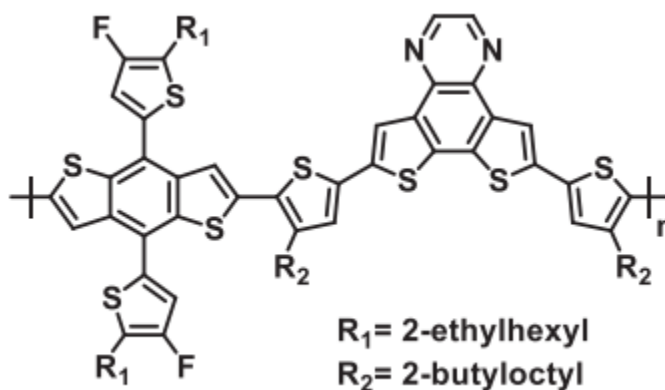


Technical Data Sheet

1M Material: PTQ_x-TF, PBQ_x-TF, PCE187, Custom Made for Laboratory Research

Remark: Polymer donor for OPV, a natural marriage between PCE10 and D18
Single-junction OPV PCE ~19%

Chemical Structure:



Specification	PTQ _x -TF (PBQ _x -TF), PCE187
Appearance	Deep red-purple solid
Solubility	Soluble in chlorobenzene and other selected solvents
Molecular Weight	100K, PDI ~2.5 (GPC, PS standards)
Availability	On demand
Reference	DOI: 10.1002/adma.202102420

1-Material is dedicated to provide the material according to customer's needs, and some material we promoted may be solely offered to certain customers for their specific needs in their research and development projects on a custom synthesis basis or on a contract research basis. All the material is offered as it is, along with the information and technical advice-where verbal, in writing or by way of trials-are given in good faith and are believed to be accurate but without warranty since the conditions of use are beyond the control of 1-Material, and this also applies where proprietary rights of third parties are involved. For the condition and term of our offer and service, please consult the disclaimer in our web: www.1-material.com

PTQx-TF/PBQx-TF

References Data Selection

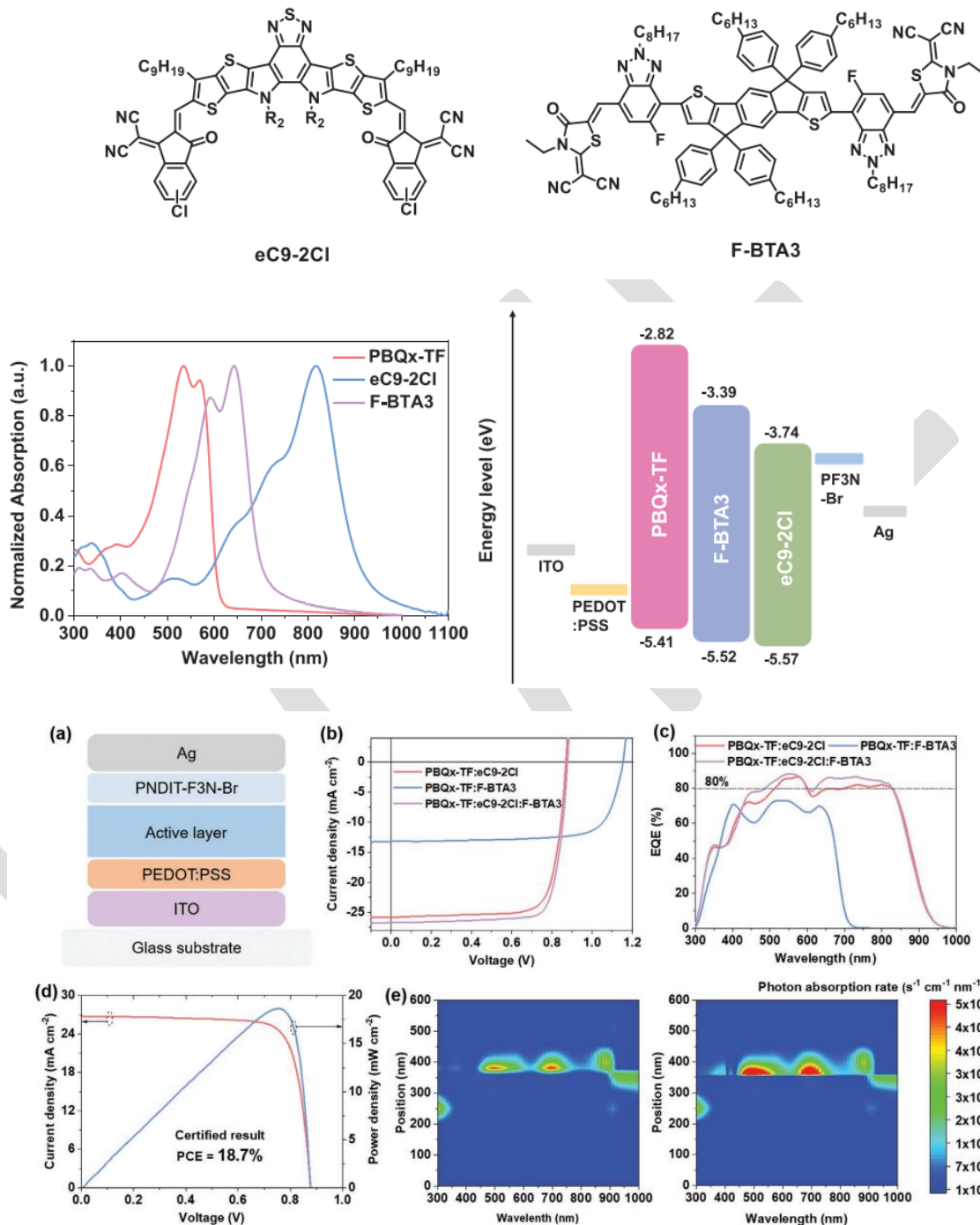


Figure a) Device structure used in this work. b) J-V and c) EQE curves of the OPV cells. d) J-V and power density curves obtained from NIM, China. e) Simulated photon absorption rate of the OPV cells based on PBQx-TF:eC9-2Cl (left) and PBQx-TF:eC9-2Cl:F-BTA3 (right). The thicknesses of the different layers are as follows: 200 nm for glass substrate, 150 nm for ITO, 10 nm for PEDOT:PSS, 100 nm for the active layer, 5 nm for PF3N-Br, and 150 nm for Ag electrode.

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PTQ_x-TF/PBQ_x-TF

Other Suggested Materials

Reference Name	1M Code	CAS No.
eC9-2Cl	BTP-eC9-2Cl	NA
F-BTA3	F-BTA3, OS9675	2662369-67-5
PNDIT-F3N-Br	OS1799	2169941-79-9
D18	PCE18	NA
PTB7-Th	PCE10, PCE-10, OS0100	1469791-66-9
PM6, PBDB-T-2F, PBDB-TF	OS0135, PCE135	1802013-83-7
eC9, eC9-4Cl	BTP-eC9, OS5398	2598965-39-8
PFN, PFN-P1	OS0743, PFN-P1	673474-74-3
PDINN	CIM0011, BDMAPAP-PDI	1020180-01-1

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