



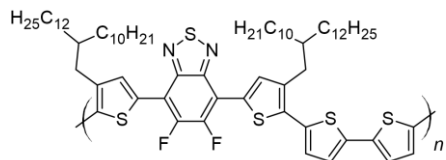
Brilliant Matters



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brilliant
future**

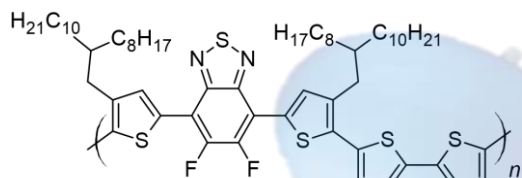


Active Layer: Electron Rich Materials (Donor)



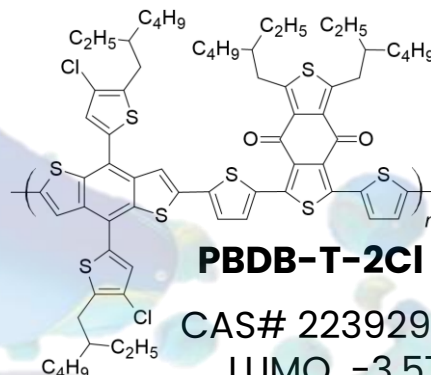
PffBT4T-2DT

CAS# 1430201-60-7
LUMO -3.69 eV
HOMO -5.34 eV



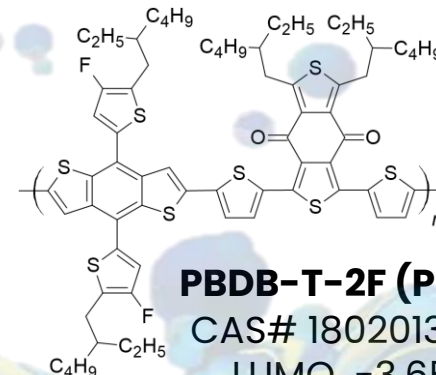
PffBT4T-2OD

CAS# 145929-80-4
LUMO -3.53 eV
HOMO -5.33 eV



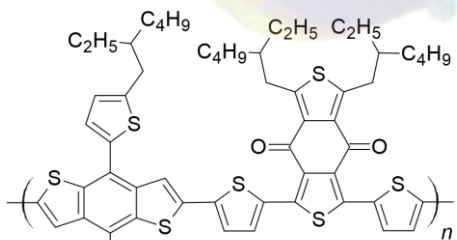
PBDB-T-2Cl (PM7)

CAS# 2239295-71-5
LUMO -3.57 eV
HOMO -5.52 eV



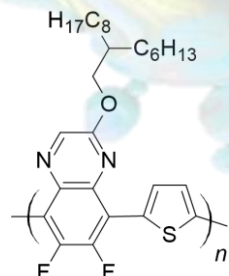
PBDB-T-2F (PM6)

CAS# 1802013-83-7
LUMO -3.65 eV
HOMO -5.45 eV



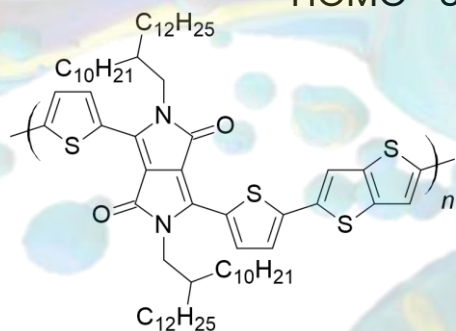
PBDB-T (PCE-12)

CAS# 145929-80-4
LUMO -3.68 eV
HOMO -5.10 eV



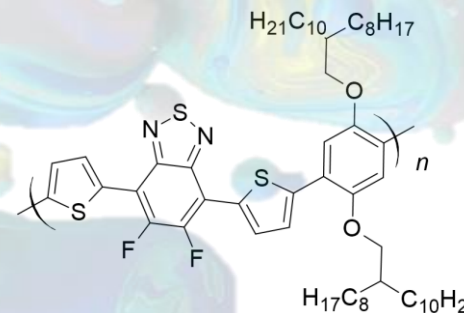
PTQ10

CAS# 2270233-86-6
LUMO -2.98 eV
HOMO -5.54 eV



PffBT4T-2DT

CAS# 1224573-31-2
LUMO -3.68 eV
HOMO -5.10 eV

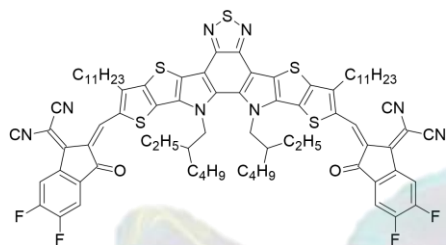


PPDT2FBT (PCE 9.3)

CAS# 1224573-31-2
LUMO -3.68 eV
HOMO -5.10 eV

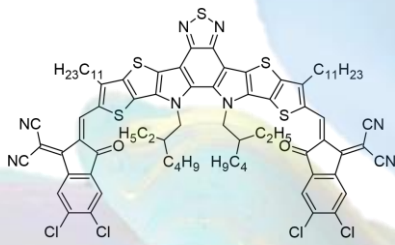


Active Layer: Electron Deficient Materials (Acceptor)



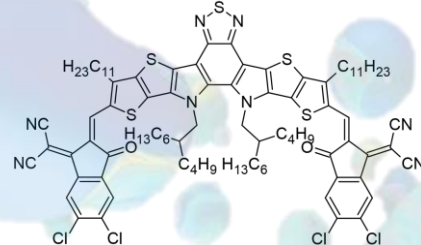
BTP-4F (Y6)

CAS# 2304444-49-1
LUMO -4.10 eV
HOMO -5.64 eV



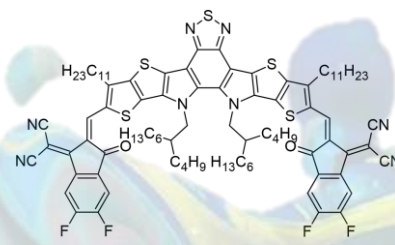
BTP-4Cl (Y7)

CAS# 2414918-25-3
LUMO -4.12 eV
HOMO -5.68 eV



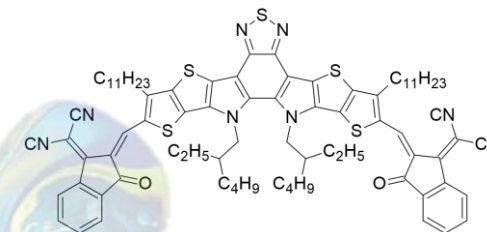
BTP-4Cl-12 (Y7-12)

CAS# N/A
LUMO -4.08 eV
HOMO -5.66 eV



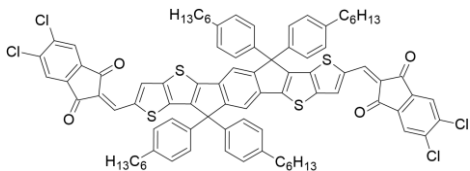
BTP-4Cl-12 (Y6-12)

CAS# 2389125-23-7
LUMO -4.06 eV
HOMO -5.68 eV



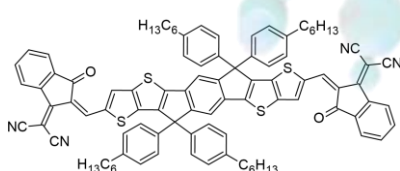
BTP (Y5)

CAS# 2304444-48-0
LUMO -3.87 eV
HOMO -5.55 eV



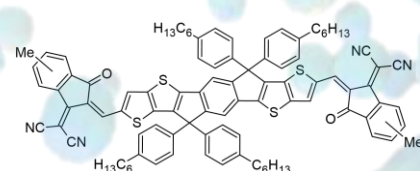
IO-4Cl

CAS# N/A
LUMO -3.83 eV
HOMO -5.72 eV



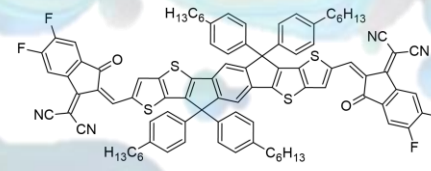
ITIC-H

CAS# 1664293-06-4
LUMO -4.03 eV
HOMO -5.61 eV



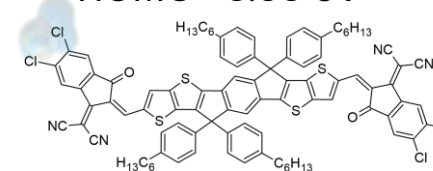
ITIC-M

CAS# 2047352-80-5,
2047352-83-8, 2047352-
86-1 (3 isomers) LUMO -
3.98 eV
HOMO -5.58 eV



ITIC-F

CAS# 2097998-59-7
LUMO -4.14 eV
HOMO -5.66 eV

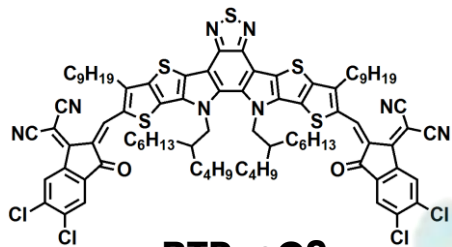


ITIC-Cl

CAS # 2253663-
81-7
LUMO: -4.20
HOMO: -5.68

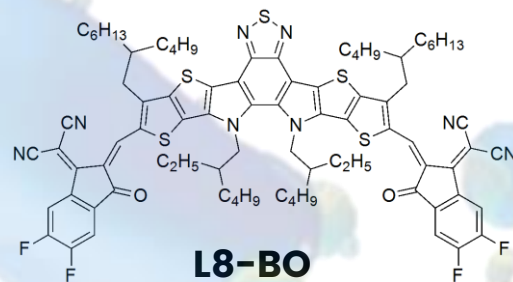


Active Layer: Electron Deficient Materials (Acceptor) - continued



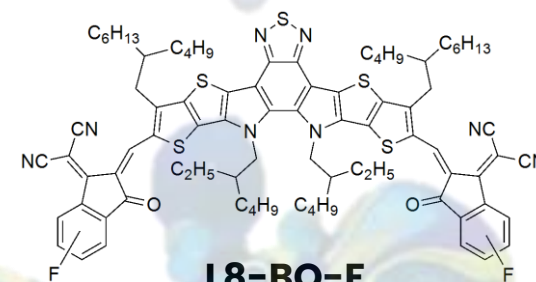
BTP-eC9

CAS# N/A
LUMO -4.05 eV
HOMO -5.64 eV



L8-BO

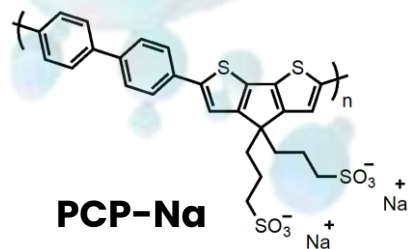
CAS# N/A
LUMO -3.90 eV
HOMO -5.68 eV



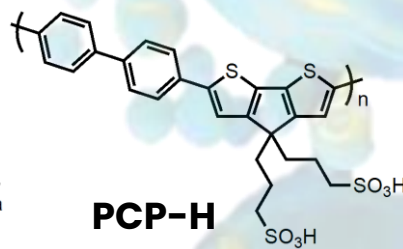
L8-BO-F

CAS# N/A
LUMO -3.85 eV
HOMO -5.59 eV

Hole Selective Interlayers



PCP-Na



PCP-H

Work Function Modification (PCP-X on ITO electrode)

PCP-Na / ITO = 4.98 eV

PCP-H / ITO = 5.11 eV



Brilliant Matters

**Let's work
together
toward a
brilliant
future**

