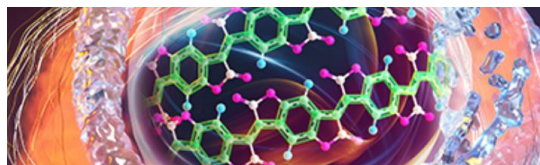


## Solution processible n-Type super conducting polymer, n-PBFDO (n-PBDF)



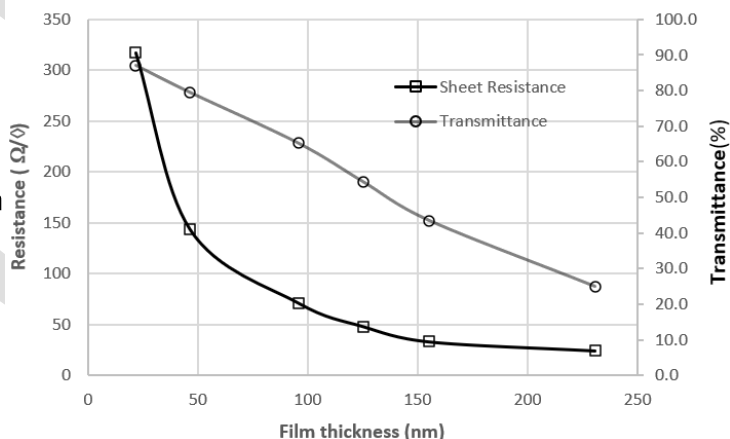
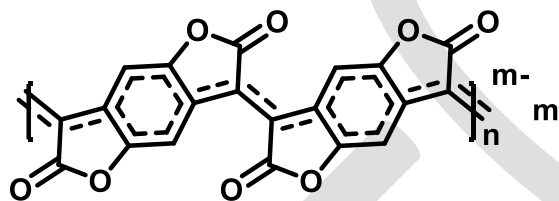
**1-Material Inc**

2290 Chemin St-Francois  
Dorval, Quebec  
H49P 1K2, Canada

Organic Nano Electronic (ONE=1) Materials for these who understand quality

### Technical Data Sheet

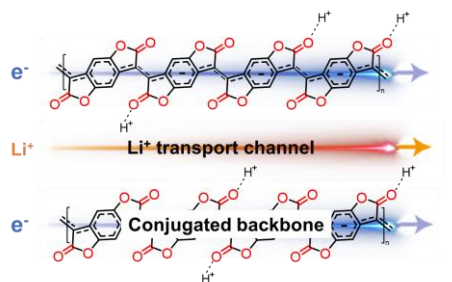
1M Material: n-PBFDO polymeric ink  
Common Name: Poly(benzodifurandione) (PBFDO), n-PBFDO, n-PBDF  
Potential Applications: Printable n-Type superconductive solution for flexible electrodes, capacitors, electrochromic, batteries, energy storage, bioelectronics, OECT, OPV, OPD, EMS, and thermoelectric devices.



Appearance: Black/brown liquid  
Viscosity(mPa.s@25°C): 200~800 (Rotary Viscometer)  
Solid content(mg/ml): 10 ± 2  
Conductivity(S/cm): ~1500 (DMAc), ~800 (Alcohol)  
Solvent: N,N-Dimethylacetamide(DMAc) or Alcohol  
Safety: Please consult Material Safe Data Sheet (MSDS) before using

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## Solution processible n-Type super conducting polymer, n-PBFD0 (n-PBDF)

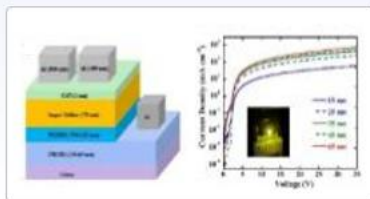


- ✓ High conductivity
- ✓ Insoluble in electrolytes
- ✓ Ordered structure
- ✓ No oxygen evolution



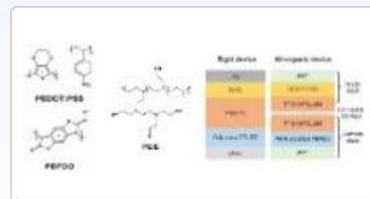
Z. Li, H. Tang, Y. Xu, F. Huang, *et al.* *Nature*, 2026, 10.1038/s41586-026-10174-7.

### Organic light-emitting diode



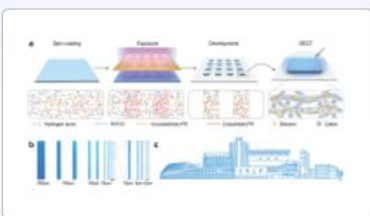
L. Ying, *et al.* *npj Flexible Electronics* 2024, 8, 38.

### Organic solar cell



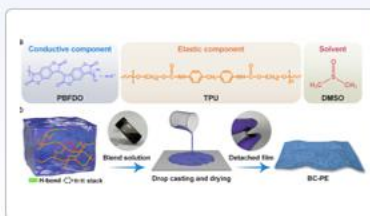
S. Fabiano, *et al.* *Adv. Sci.* 2024, 11, 2405676.

### lithographic circuit



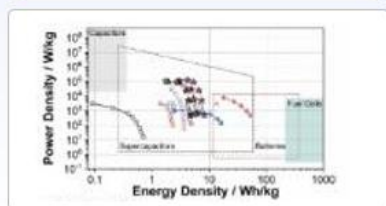
G. Wang, *et al.* *Adv. Mater.* 2025, 37, 2417452.

### Flexible electronic skin



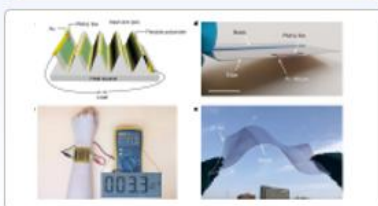
W. Yu, *et al.* *Adv. Mater.* 2025, 37, 2506511

### Supercapacitor



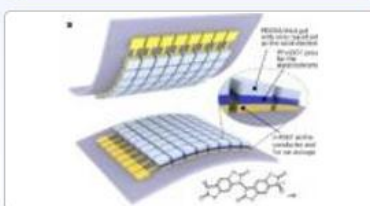
G. Bazan, *et al.* *Adv. Mater.* 2024, 36, 2410512.

### Organic thermoelectric



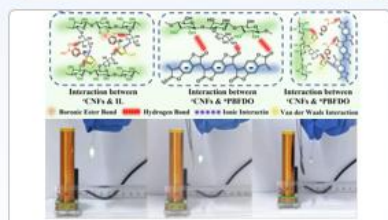
C. Di, *et al.* *Nature* 2024, 632, 528.

### Electrochromism



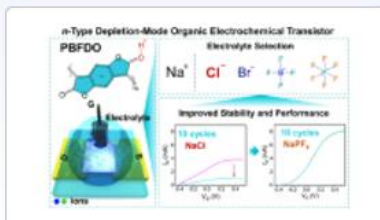
J. Mei, *et al.* *Nat. Electron.* 2024, 7, 1158.

### Electromagnetic shielding



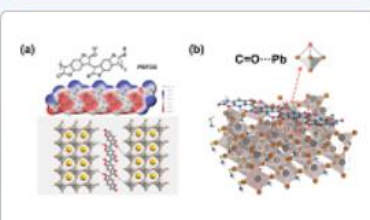
W. Li, *et al.* *Nat Commun* 2025, 16, 8608.

### Electrochemical transistor



W. Leong *et al.* *Chem. Mater.* 2024, 36, 8639.

### Perovskite photodetector



G. Dong *et al.* *Small* 2025, 21, 2406568

Disclaimer: PBFDO materials are covered by patent (CN 115960338 B) and the trademark Jurong Co.,Ltd., 1M has been granted the right for these materials.

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