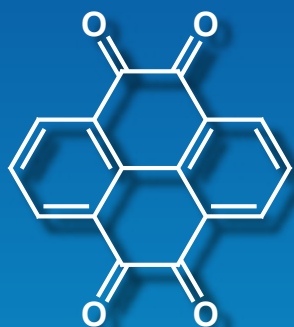


New

MATERIALS

TGI

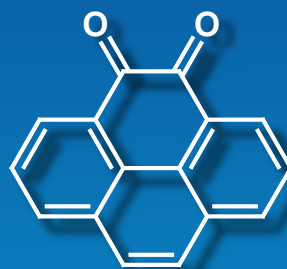
Pyrene Derivatives Bearing Diketone Moieties with Battery Materials and Building Blocks



Pyrene-4,5,9,10-tetraone

1g

[P2947]



Pyrene-4,5-dione

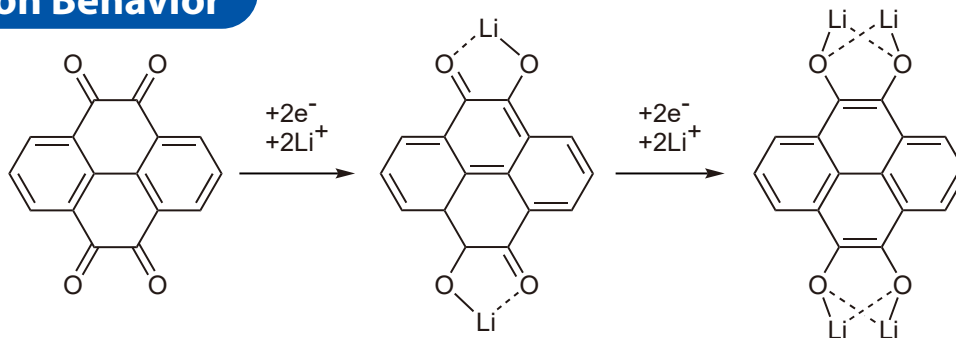
1g

[P3004]

Advantages

- P2947 is a positive electrode material for lithium-ion battery with a high theoretical capacity (408 mAh/g).¹⁾
- The polymers or COFs that use P2947 as a building block, realize a long cycle-life of lithium-ion battery.^{1,2)}
- Applicable to magnesium battery, aqueous zinc battery, etc.^{3,4)}
- Available as building blocks for OLED materials.^{5,6)}

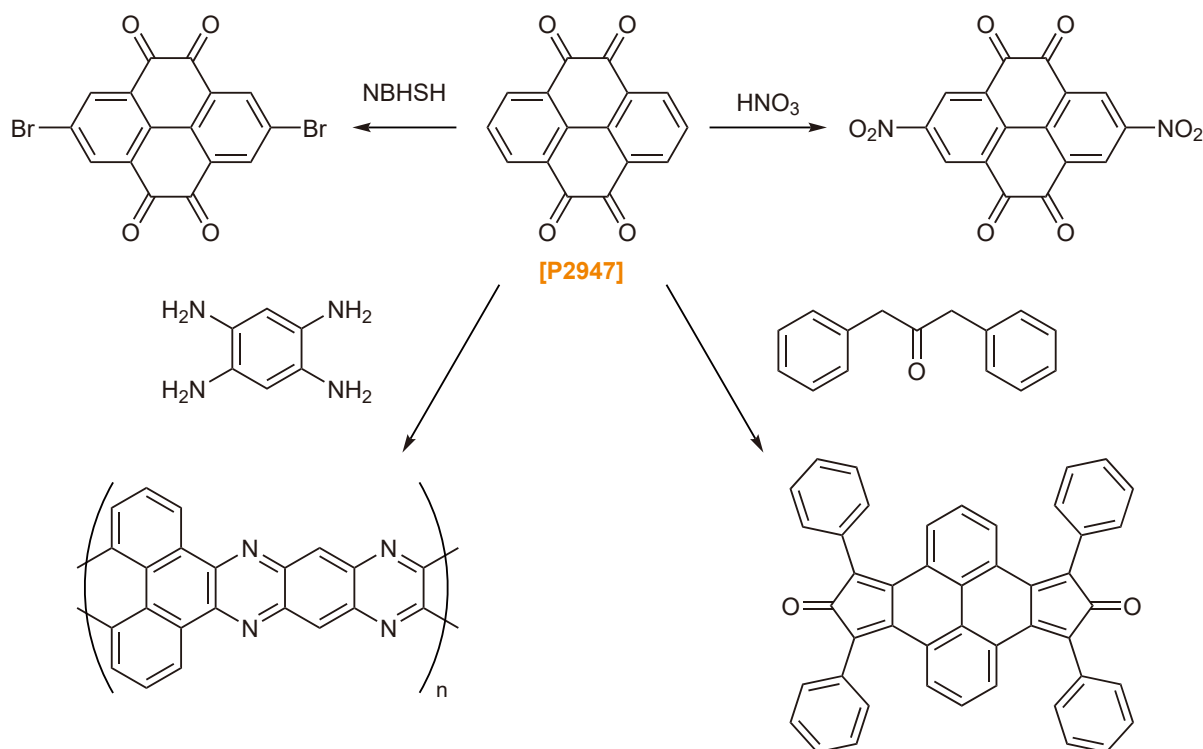
Reduction Behavior



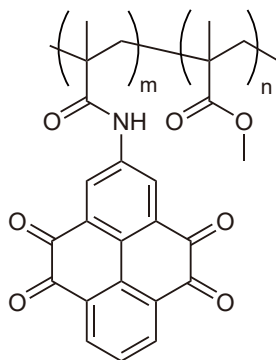
- References
- 1) T. Nokami, J. Yoshida, *et al.*, *J. Am. Chem. Soc.* **2012**, *134*, 19694. <https://doi.org/10.1021/ja306663g>
 - 2) H. Gao, A. I. Cooper, *et al.*, *J. Am. Chem. Soc.* **2022**, *144*, 9434. <https://doi.org/10.1021/jacs.2c02196>
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 - 4) H. Dong, R. Mohtadi, Y. Yao, *et al.*, *Nat. Energy* **2020**, *5*, 1043. <https://doi.org/10.1038/s41560-020-00734-0>
 - 5) Y. Liu, P. Lu, *et al.*, *ACS Appl. Mater. Interfaces* **2020**, *12*, 16715. <https://doi.org/10.1021/acsami.0c01846>
 - 6) Y. Liu, Y. Ma, *et al.*, *Org. Lett.* **2015**, *17*, 6138. <https://doi.org/10.1021/acs.orglett.5b02879>

Pyrene Derivatives Bearing Diketone Moieties with Battery Materials and Building Blocks

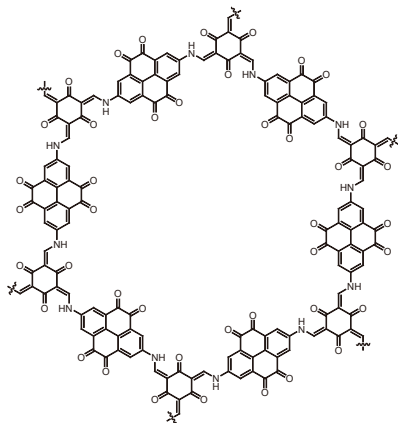
Applications



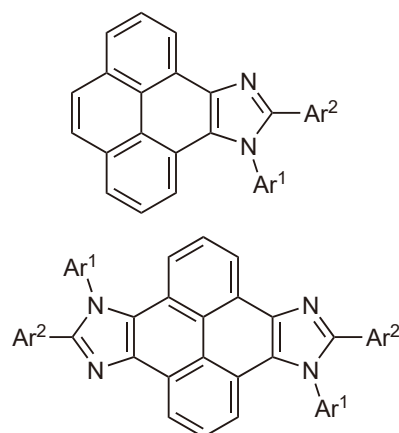
Polymers



COFs



OLED Materials



Related Products

DNP-Li

Lithium Bis(oxalate)borate

TFEP

9,10-Phenanthrenequinone

100mg / 500mg **[D5947]**

5g / 25g **[L0367]**

1g / 5g **[E1456]**

5g / 25g **[P0080]**

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