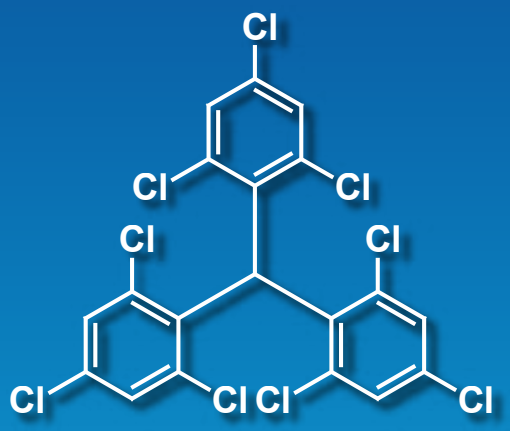
New

MATERIALS

Building Block for Stable Radical Materials



Tris(2,4,6-trichlorophenyl)-methane

1g / 5g

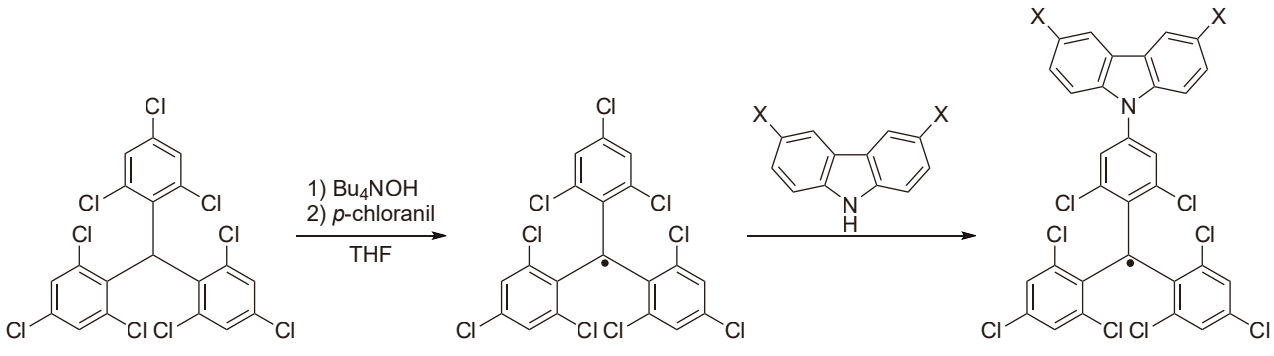
[B7114]

Advantages

- Applicable as a building block for the synthesis of highly stable radical compounds.[1,2)]
- Emission efficiency of organic electroluminescent devices (OLEDs) can theoretically achieve 100% by using luminescent radical materials.[3,4)]
- Usable in studies on spin-optical modulation, such as magnetoluminescence response.[3,4)]
- Regulates crystal growth and blocks moisture penetration by introducing radical compounds when the perovskite layer is deposited in perovskite solar cells.[7)]

Application

Example of the synthesis of stable radical materials [1,3)]



[B7114]

References

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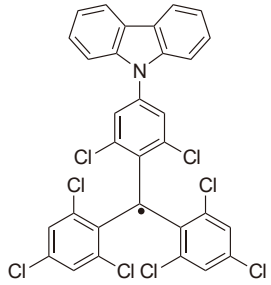
3) Q. Peng *et al.*, *Angew. Chem. Int. Ed.* **2015**, *54*, 7091. https://doi.org/10.1002/anie.201500242
4) R. Xiaotian *et al.*, *Angew. Chem. Int. Ed.* **2023**, *62*, e202302550. https://doi.org/10.1002/anie.202302550
5) A. Abdurahman *et al.*, *Light Sci. Appl.* **2023**, *12*, 272. https://doi.org/10.1038/s41377-023-01314-z
6) X. Wang *et al.*, *Angew. Chem. Int. Ed.* **2025**, *64*, e202513593. https://doi.org/10.1002/anie.202513593
7) Y. Zou *et al.*, *Science* **2025**, *385*, 161. https://doi.org/10.1126/science.adn9646

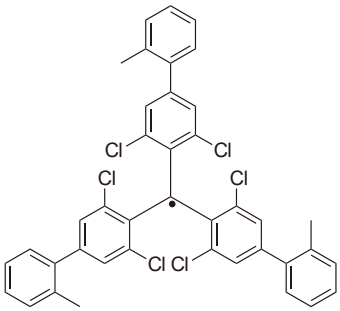
Building Block for Stable Radical Materials

Application: Example of the synthesis of stable radical materials [1,3]

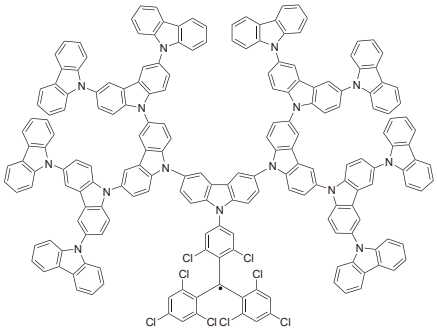
Luminescent Radical Materials [1-4]



TTM-1 Cz

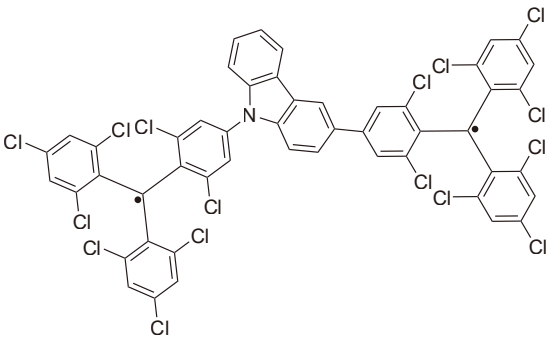


2-T_3TTM

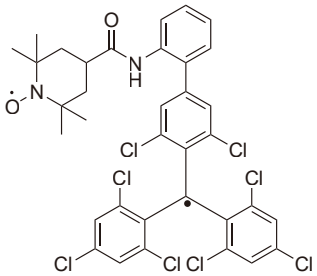


G4TTM

Spin-Optical Modulation [5]

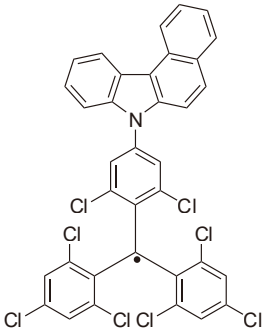


DR1



TEMPO-Pho-TTM

Perovskite Solar Cells [6]



TTM-7BCz

Related Products

Tetrabutylammonium Hydroxide (10% in Water)	25mL / 100mL / 500mL	[T0955]
Tetrabutylammonium Hydroxide (40% in Water)	25g / 100g / 500g	[T1685]
Chloranil	25g / 500g	[T0061]
Carbazole (High Purity)	1g / 5g / 25g	[C3722]
3,6-Diiodocarbazole	5g / 25g	[D4548]
4-Carboxy-2,2,6,6-tetramethylpiperidine 1-Oxyl Free Radical	100mg / 1g	[C1428]

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