

Showcasing research from Professor Jeyaraman Sankar's laboratory, Department of Chemistry, Indian Institute of Science Education and Research Bhopal, Bhopal, India.

The deeper it goes, the brighter it glows: NIR emissive nitro-terrylene diimides with deep LUMOs

Molecules with ultra-low LUMO energy levels are highly reactive and unstable under ambient conditions. Herein, we report the identification of nitrated terrylene diimides as a series of stable deep-LUMO materials. Contrary to the expectation for nitroaromatics, the molecules also fluoresce, including in the elusive near-infrared region.



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