

Photochemical Reductive Elimination of Nitrogen from Triazidogallium(III). Generation of Luminescent Gallium(I)

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The irradiation of $\text{Ga}(\text{N}_3)_3$ in CH_3CN leads to a reductive elimination of nitrogen according to the equation $\text{Ga}^{\text{III}}(\text{N}_3)_3 \rightarrow \text{Ga}^{\text{I}}\text{N}_3 + 3\text{N}_2$ ($\phi = 0.002$ at $\lambda_{\text{irr}} = 254 \text{ nm}$). Ga^+ in CH_3CN is characterized by its absorption ($\lambda_{\text{max}} = 298 \text{ nm}$) and emission ($\lambda_{\text{max}} = 475 \text{ nm}$) spectrum.

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