

Trimeric silver(I) pyrazolates with isopropyl, bromo, and nitro substituents: Synthesis and characterization of $\{[3,5-(i\text{-Pr})_2\text{Pz}]\text{Ag}\}_3$, $\{[3,5-(i\text{-Pr})_2,4\text{-(Br)Pz}]\text{Ag}\}_3$, and $\{[3,5-(i\text{-Pr})_2,4\text{-(NO}_2\text{)Pz}]\text{Ag}\}_3$

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Abstract

Trimeric Ag(I) adducts of 3,5-di(isopropyl)pyrazole, 3,5-di(isopropyl),4-bromopyrazole, and 3,5-di(isopropyl),4-nitropyrazole have been synthesized by reacting the corresponding pyrazoles with silver(I) oxide. They have been characterized by X-ray crystallography as well as NMR and IR spectroscopic methods. Both $\{[3,5-(i\text{-Pr})_2\text{Pz}]\text{Ag}\}_3$ and $\{[3,5-(i\text{-Pr})_2,4\text{-(Br)Pz}]\text{Ag}\}_3$ exist as pairs of trimers with weak Ag–Ag contacts, whereas $\{[3,5-(i\text{-Pr})_2,4\text{-(NO}_2\text{)Pz}]\text{Ag}\}_3$ exists as trimers in the solid state with no inter trimer Ag–Ag contacts.

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