

# Copper-Catalyzed Oxidative Cyclization of 2-(1H-pyrrol-1-yl)aniline and Alkylsilyl Peroxides: a Route to Pyrrolo[1,2-a]quinoxalines

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## Abstract

An efficient and convenient method was developed for the one-pot construction of pyrrolo[1,2-a]quinoxalines via a Cu(II)-catalyzed domino reaction between 2-(1H-pyrrol-1-yl)anilines and alkylsilyl peroxides. The synthetic protocol is characterized by a broad sub-strate scope, O<sub>2</sub> as oxidant, and commercially readily available catalysts. This reaction proceeds through a C–C bond cleavage and new C–C and C–N bond formation. A mechanistic study suggests that alkyl radical species participate in the cascade reaction.

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