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BENTO GONÇALVES, RS - BRAZIL

## A Visible Light-Mediated Strategy for the Cyclopropenation of Ynamides with Aryldiazoacetates

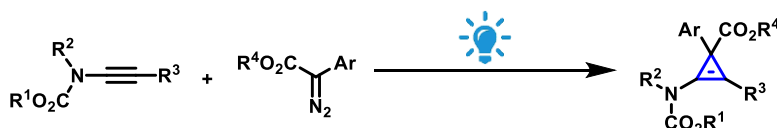
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### ABSTRACT

Ynamides are a special class of alkynes attached to a nitrogen atom bearing an electron-withdrawing group. Over the past years, these compounds have been widely used as building blocks for promoting many transformations in organic chemistry.<sup>1</sup> In particular, their unique structure and reactivity allow these substrates to be efficiently reacted with different electrophiles or in tandem reaction sequences, thus allowing a plethora of transformations. On the other hand, the chemistry of aryldiazoacetates under blue light irradiation has also emerged as a powerful strategy<sup>2,3</sup> to afford different heterocycles. In this context, we became interested on the chemistry of ynamides under such photochemical conditions using aryldiazoacetates to produce densely substituted cyclopropenes under mild conditions.



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- 2 For a seminal work in this field from our group, see: Jurberg, I. D.; Davies, H. M. L.; *Chem. Sci.*, **2018**, *9*, 5112.
- 3 For a selection of recent reviews, see: a) Zhang, Z.; Gevorgyan, V.; *Chem. Rev.*, **2024**, *124*, 7214. b) Gallo, R. D. C.; Cariello, G.; Goulart, T. A. C.; Jurberg, I. D.; *Chem. Commun.*, **2023**, *59*, 7346. c) Yang, Z.; Stivanin, M. L.; Jurberg, I. D.; Koenigs, R. M.; *Chem. Soc. Rev.*, **2020**, *49*, 6833.