

Palladium-Catalyzed [5+2] Oxidative Annulation Of N-Arylhydrazones With Alkyne Through C-H Activation To Synthesize Benzo[D][1,2]Diazepines.

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ABSTRACT:

An efficient and novel method employing palladium catalyst for the synthesis of benzo[d][1,2]diazepines by [5+2] annulation of N-arylhydrazones with alkyne has been developed. This methodology undergoes through eight membered palladacycle serving as a backbone for the formation of C-C/C-N bond to synthesize benzodiazepine derivatives in moderate to good yield possessing bioactive properties.