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Title:	Ruthenium Catalyzed C–H Acylmethylation of N-Arylphthalazine-1,4-diones with α -Carbonyl Sulfoxonium Ylides: Highway to Diversely Functionalized Phthalazino-fused Cinnolines
Authors:	Laha, Biswajit (/jspui/browse?type=author&value=Laha%2C+Biswajit) Mandal, S.K. (/jspui/browse?type=author&value=Mandal%2C+S.K.)
Keywords:	Catalysis C–H Activation Cyclization Transition metals Ylides
Issue Date:	2019
Publisher:	Wiley Online Library
Citation:	Chemistry - An Asian Journal, 14(23), pp. 4274-4288.
Abstract:	A direct ortho-Csp ² -H acylmethylation of 2-aryl-2,3-dihydrophthalazine-1,4-diones with α -carbonyl sulfoxonium ylides is achieved through a Rull-catalyzed C–H bond activation process. The protocol featured high functional group tolerance on the two substrates, including aryl-, heteroaryl-, and alkyl-substituted α -carbonyl sulfoxonium ylides. Thereafter, 2-(ortho-acylmethylaryl)-2,3-dihydrophthalazine-1,4-diones were used as potential starting materials for the expeditious synthesis of 6-arylphthalazino[2,3-a]cinnoline-8,13-diones and 5-acyl-5,6-dihydrophthalazino[2,3-a]cinnoline-8,13-diones under Lawesson's reagent and BF ₃ ·OEt ₂ mediated conditions, respectively. Of these, the BF ₃ ·OEt ₂ -mediated cyclization proceeded in DMSO as a solvent and a methylene source via dual C–C and C–N bond formations.
Description:	Only IISERM authors are available in the record.
URI:	https://onlinelibrary.wiley.com/doi/full/10.1002/asia.201901250 (https://onlinelibrary.wiley.com/doi/full/10.1002/asia.201901250) http://hdl.handle.net/123456789/1648 (http://hdl.handle.net/123456789/1648)
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