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Please use this identifier to cite or link to this item: http://hdl.handle.net/123456789/1729 Title: Diastereoselective Desymmetrization of Prochiral Cyclopentenediones via Cycloaddition Reaction with N-Phenacylbenzothiazolium Bromides Authors: Joshi, Mayank (/jspui/browse?type=author&value=Joshi%2C+Mayank) Keywords: Anions Desymmetrization Stereoselectivity Addition reactions Issue Date: 2017 Publisher: **ACS Publications** Citation: Journal of Organic Chemistry, 82 (23) Abstract: A metal-free highly diastereoselctive [3 + 2] cycloaddition reaction has been developed between N-phenacylbenzothiazolium bromides and prochiral cyclopentene-1,3-diones. The active 1,3 dipole benzothiazolium N-phenacylide was generated in situ with the treatment of DIPEA, and the corresponding cycloaddition products were obtained in excellent yields under mild reaction conditions. The scope of the reaction is quite broad, tolerating a variety of aryl and heteroaromatic groups. A catalytic asymmetric approach was also studied preliminarily, and moderate enantioselectivity was achieved. URI: https://pubs.acs.org/doi/10.1021/acs.joc.7b01964 (https://pubs.acs.org/doi/10.1021/acs.joc.7b01964) http://hdl.handle.net/123456789/1729 (http://hdl.handle.net/123456789/1729) Appears in Research Articles (/jspui/handle/123456789/9)

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