Tetrahedron Letters 49 (2008) 4201–4208

Contents lists available at ScienceDirect

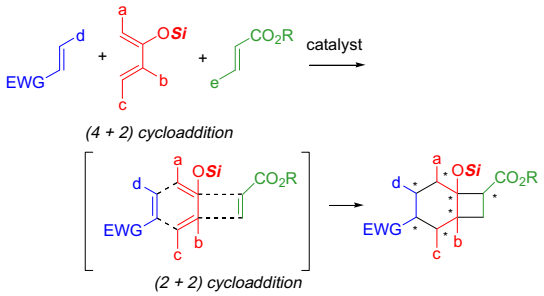
Tetrahedron Letters

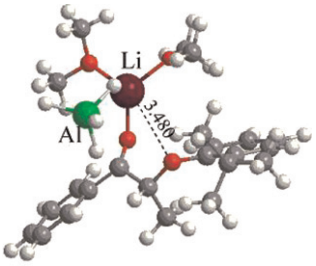
journal homepage: www.elsevier.com/locate/tetlet

Tetrahedron Letters Vol. 49, No. 27, 2008

Contents

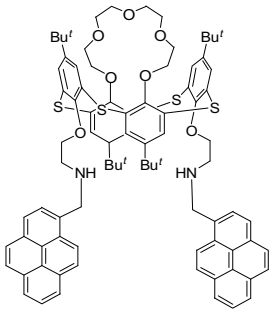
COMMUNICATIONS

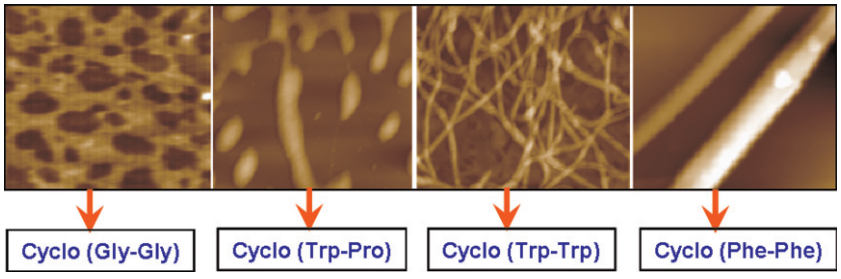


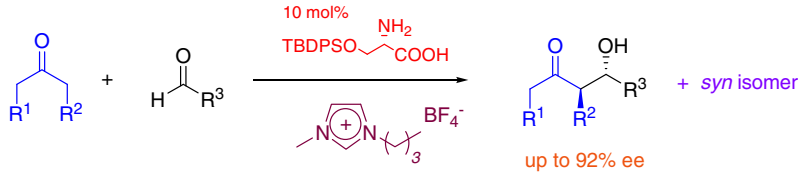


It was found that steric effects of solvent may be responsible for the diastereoselection in $LiAlH_4$ reduction of acyclic ketones.

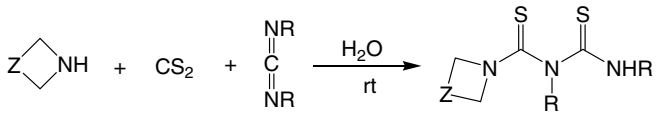
A new thiacalix[4]arene derivative of 1,3-*alternate* conformation possessing two pyrene moieties has been synthesized and its ability to recognize cations and to form logic gates has been examined.

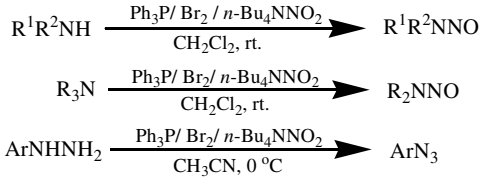




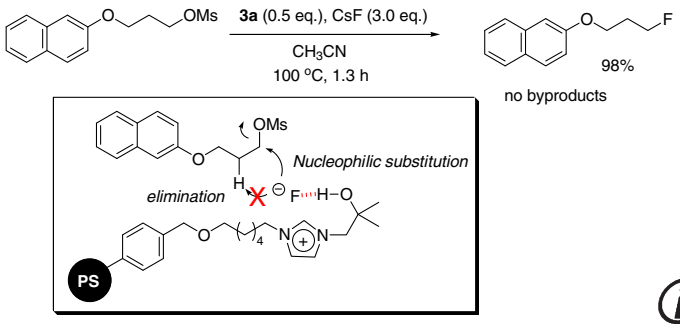


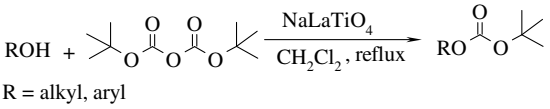
A recyclable siloxy-L-serine organocatalyst has been developed to catalyze asymmetric direct aldol reactions in [bmim][BF_4], furnishing the β-hydroxy carbonyl scaffold in high enantio- and diastereoselectivities using a selection of aromatic aldehydes and cycloalkanes. The siloxy serine organocatalyst in the ionic liquid can be reused for up to four successive cycles with comparable enantioselectivities.



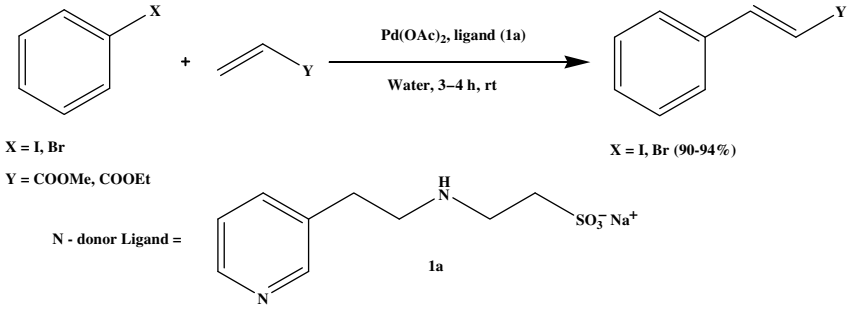


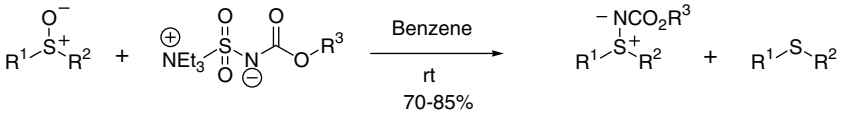
Tertiary alcohol containing polymer PS[him-^{t}OH][OMs] exhibited superior activity and good recyclability without any loss of catalytic activity or product yield.



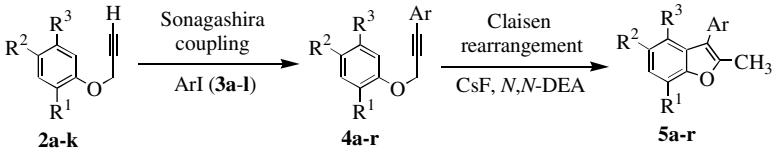


A facile, efficient and chemoselective protocol for *O-tert*-butoxycarbonylation of various hydroxy compounds has been developed using $NaLaTiO_4$ (layered perovskite) as a novel catalyst.



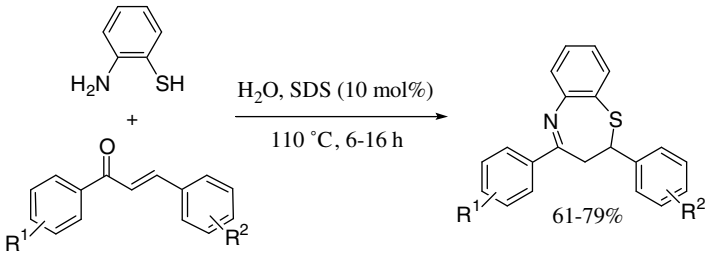


A novel preparation of sulfilimines from the corresponding sulfoxides using the Burgess reagent is described.



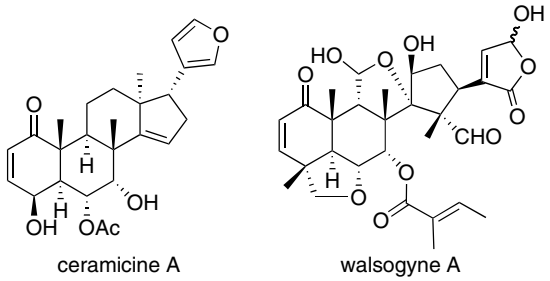
A variety of mono- and disubstituted phenols are alkylated with propargyl bromide to give phenyl 2-propynyl ethers, which were further coupled with aryl iodides under Sonogashira-reaction conditions to give 3-phenoxy-1-aryl-1-propyne derivatives. The latter compounds underwent Claisen rearrangement followed by ring closure to give functionalized benzo[*b*]furans in moderate to good yields.

Chemosensors **5** and **6** exhibit visible absorption (yellow to pink) and emission (low emission to green fluorescent) changes with fluoride ions only and can be used for ratiometric fluorescence analysis of fluoride ions.

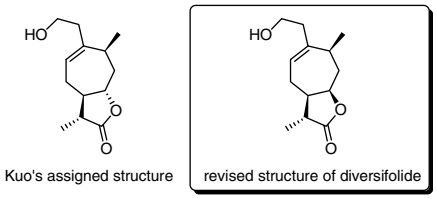


An efficient synthesis of 2,4-diaryl-2,3-dihydro-1,5-benzothiazepines has been achieved by the reaction of 1,3-diaryl-2-propenones with 2-aminothiophenol in water catalysed by SDS.

HBF_4–SiO_2 efficiently catalyses the thia-Michael addition to α,β-unsaturated carbonyl compounds and finds application in the one-pot synthesis of 2,3-dihydro-1,5-benzothiazepines.



Two novel limonoids, ceramicine A with no methyls at C-4, and walsogyne A with a ring C-*seco* limonoid, have been isolated from the barks of *Chisocheton ceramicus* and *Walsura chrysogyne*, respectively, and the structures were fully elucidated on the basis of spectroscopic data. Ceramicine A and walsogyne A showed a moderate cytotoxic activity.



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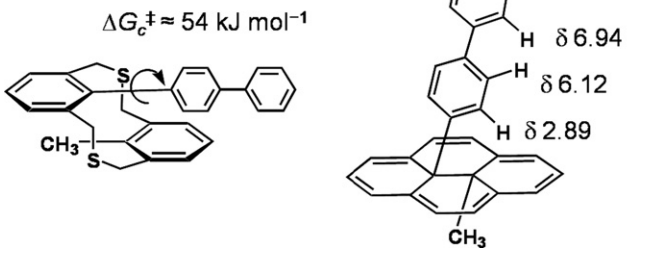
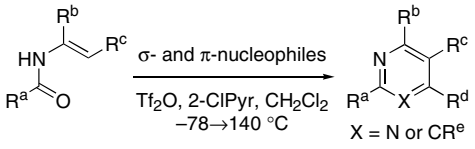
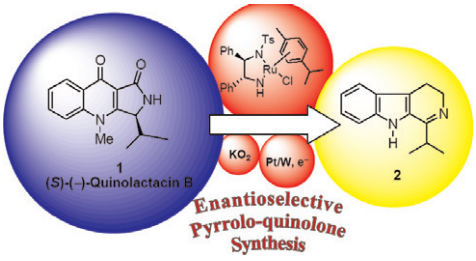
A unique terphenyl has one ring that is rigid, another undergoes free rotation and the third experiences restricted mobility. A dihydropyrene exhibits a ring current effect extended to eight conjugated carbon atoms away from its molecular plane.

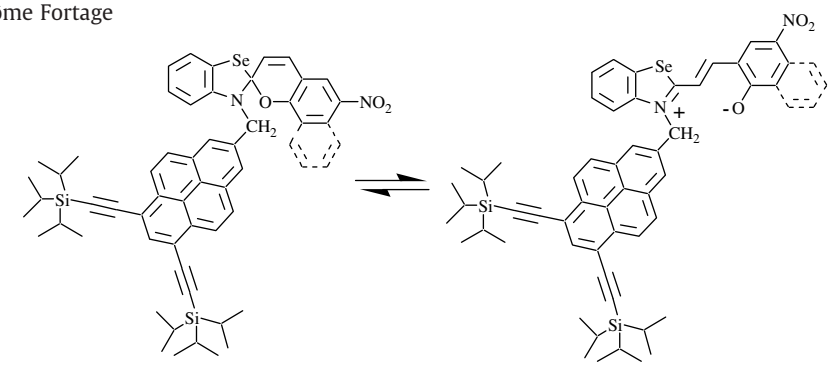


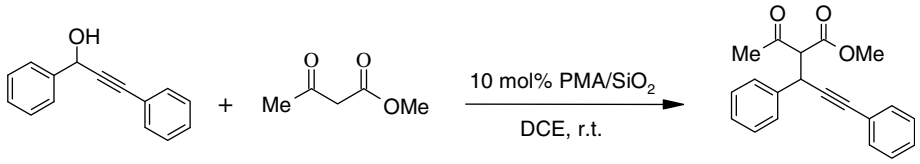


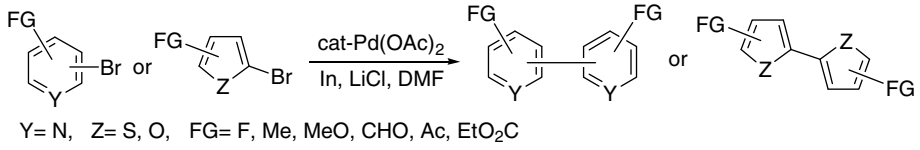
A comparison of conventional heating and microwave irradiation in the synthesis of azaheterocycles is discussed. Microwave irradiation was found to increase the yields of the desired products, shorten the reaction times, and extended this chemistry to recalcitrant amide substrates and weak nucleophiles.



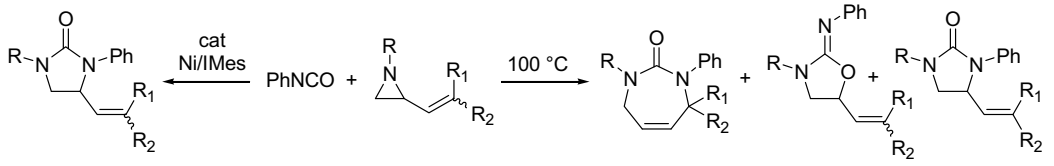
The enantioselective total synthesis of (−)-quinolactacin B (−)-**1** was performed in seven steps and 33% overall yield from tryptamine. The synthetic quinolactacin B displayed optical rotations that was in accordance with that of the natural product, thereby supporting the (*S*) configuration for natural quinolactacin B. The final product stereochemical assignment is in agreement with the proposed by Nakagawa and co-workers.



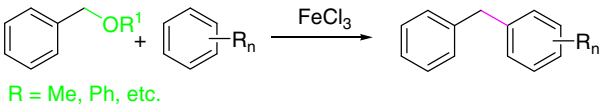


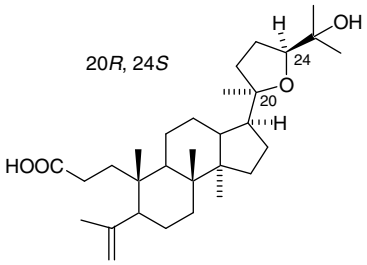


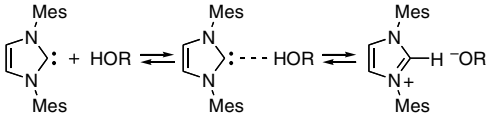
Homo-coupling reactions of heterocyclic aromatic bromides smoothly proceeded with cat-$Pd(OAc)_2$, indium, and LiCl in DMF to afford exclusively symmetric biaryls possessing heterocyclic aromatic ring in good to excellent yields.



Thermal coupling of vinyl aziridines and phenyl isocyanate was evaluated. Although oxazolidinone products were predominant, some reactions afforded a seven-membered ring heterocycle. When Ni/IMes was employed as a catalyst, a wider array of vinyl aziridines underwent coupling reactions. The Ni catalyzed reactions generally afforded vinyl imidazolidinones as major products.







The interaction of *N,N′*-bismesitylimidazolin-2-yl (IMes) with alcohols is discussed.

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

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ISSN 0040-4039