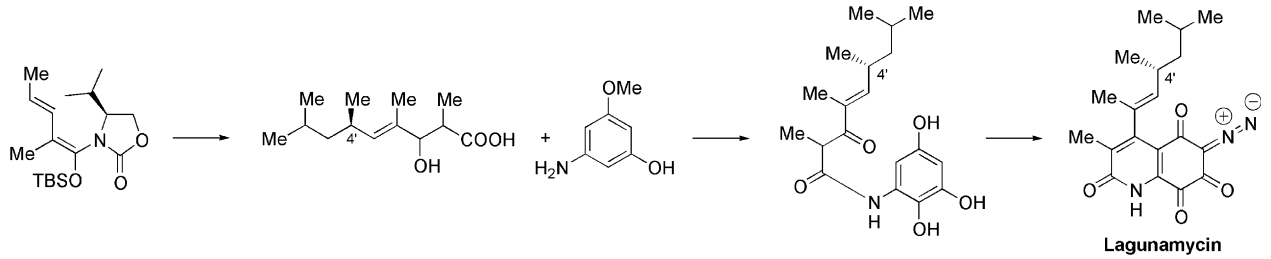
ELSEVIER

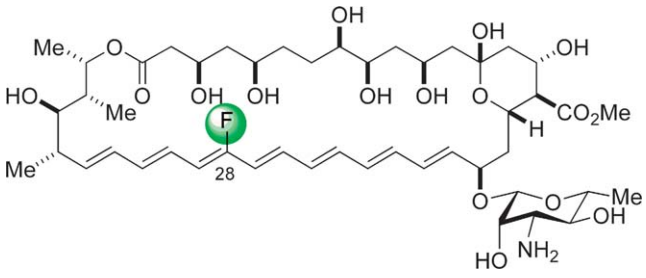
Tetrahedron Letters

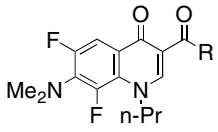
Tetrahedron Letters Vol. 47, No. 35, 2006

Contents

COMMUNICATIONS

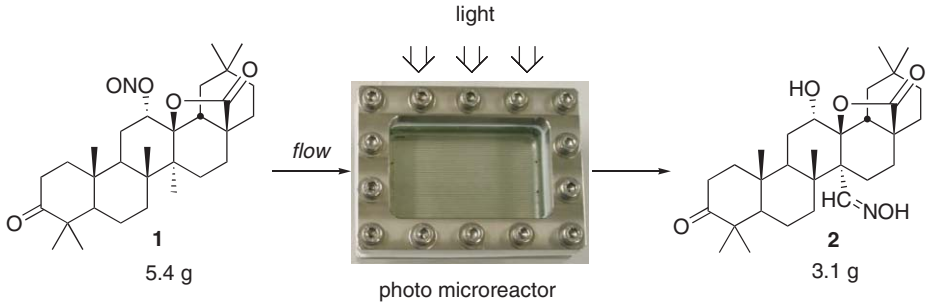


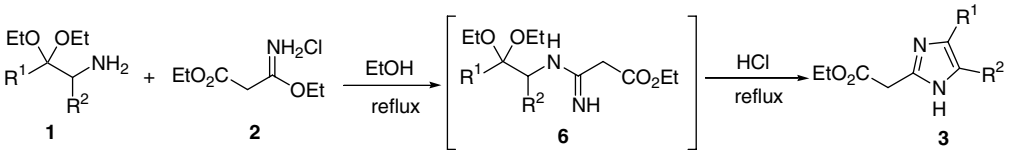


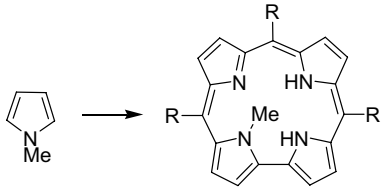


1a: R = OH; **1b**: R = OMe; **1c**: R = NMe_2;
1d: R = NHMe; **1e**: R = NH_2;
1f : R = NHCOMe; **1g**: R = H; **1h**: R = Me

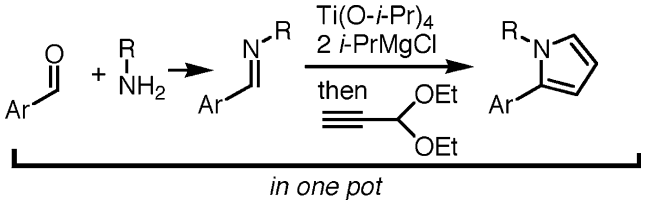
Fluoroquinolone derivatives were synthesized and their DNA photocleaving activities were assayed.

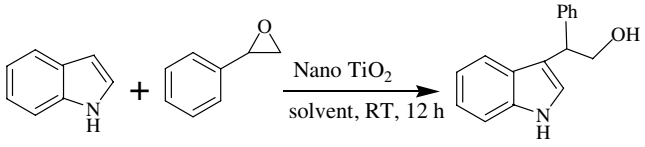


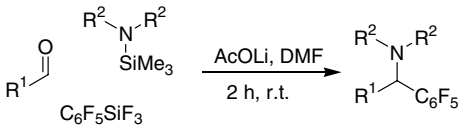




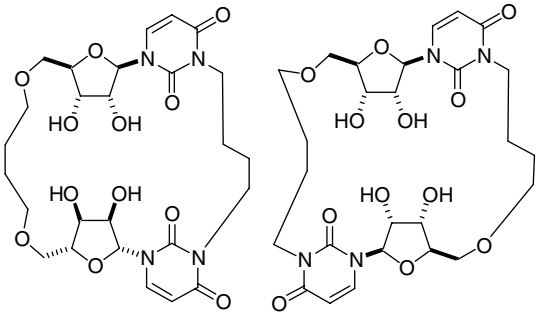
A one-pot, versatile, regioselective transformation of N-alkylpyroles into N-alkylcorroles is presented.



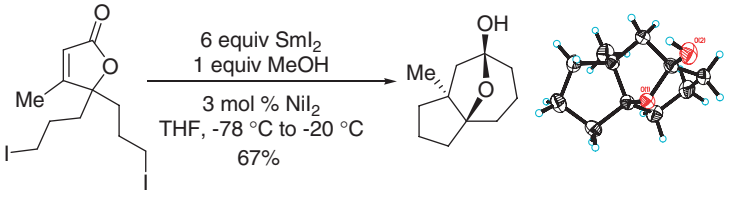


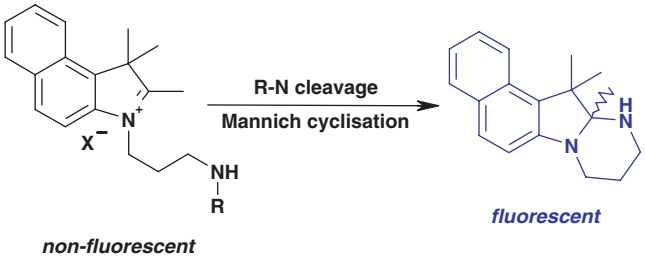


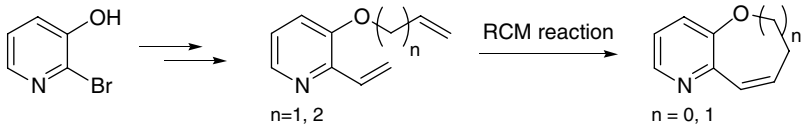
A three-component coupling reaction affording α-C_6F_5-substituted amines has been developed.

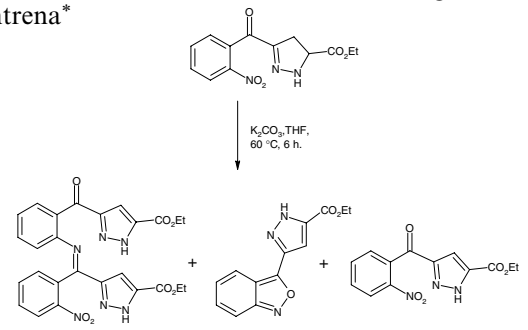


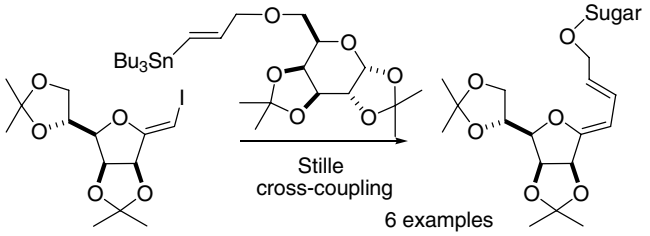
The development of a one-pot tandem intramolecular conjugate addition/nucleophilic acyl substitution using samarium(II) iodide is reported. The reaction relies on the reagent's unique ability to mediate both radical and anionic pathways, which are likely integral to the mechanism of this transformation. The tricyclic hemiacetal product was formed in good yield, with excellent diastereoselectivity, and its structure was verified by X-ray crystallographic analysis.

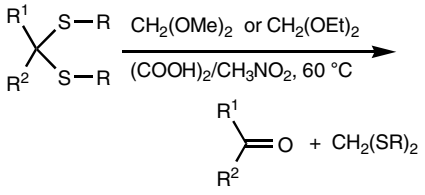




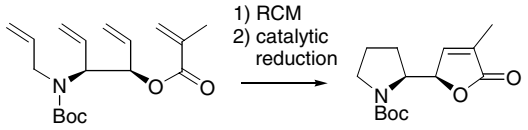




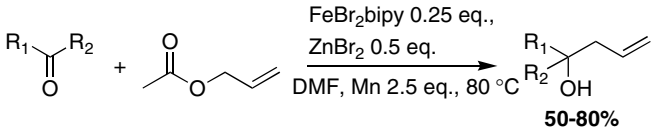




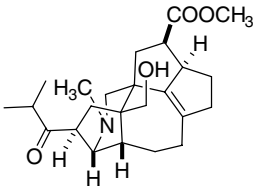
A new simple method for conversion of dithioacetals to carbonyl compounds.



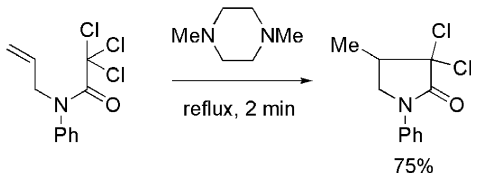
A novel synthesis of enantiopure *N*-Boc-norpandamarilactonine-A was established by employing a double ring-closing metathesis of a tetraene derivative, as a key step.



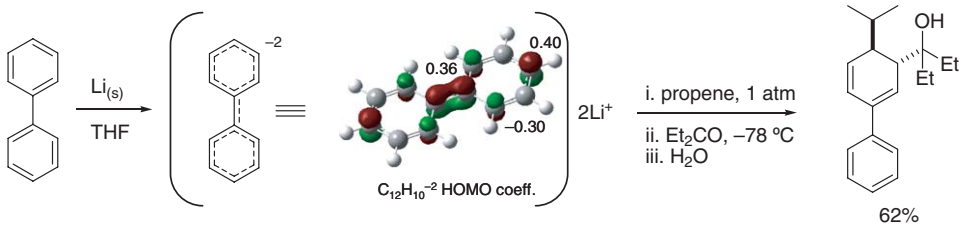
An unusual yuzurine-type alkaloid daphnilongerine (**1**), with an unprecedented fused pentacyclic skeleton in addition to seven known ones, was isolated from the fruits of *Daphniphyllum longeracemosum*.

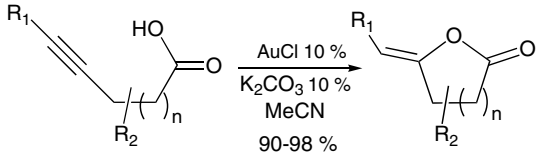


Daphnilongerine

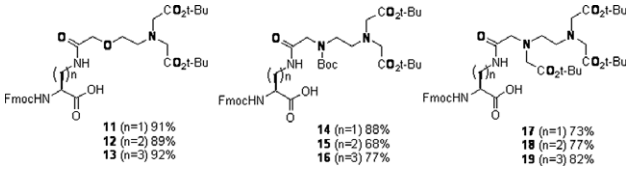


N-Allylic or *N*-vinylic α,α,α-trichloroacetamides, upon heating in 1,4-dimethylpiperazine, undergo radical cyclization to give the corresponding γ-lactams.

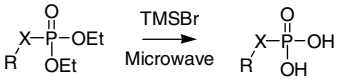


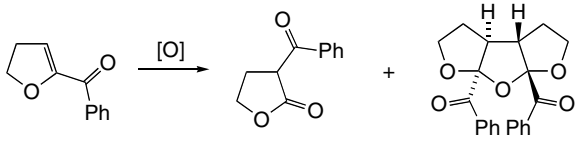


ω-Acetylenic acids are efficiently and stereoselectively converted to the corresponding alkylidene lactones in the presence of catalytic amounts of AuCl and K_2CO_3.

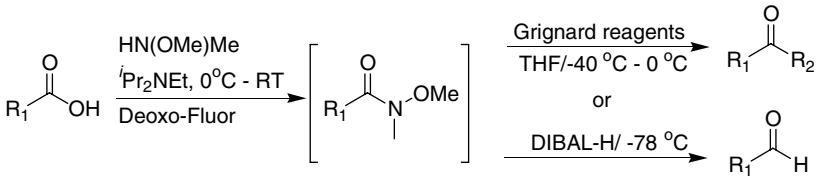


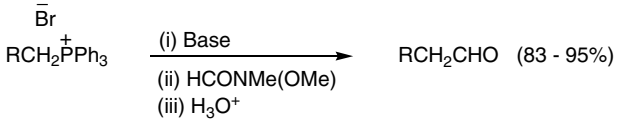
A family of penta- and hexadentate metal ligating α-amino acids, suitably protected for Fmoc solid-phase chemistry, has been prepared. These residues incorporate the mono-amides of ethanolaminetriacetic acid, ethylenediaminetriacetic acid, and ethylenediaminetetraacetic acid as side chains. Side chains are tethered varying distances (*n*) from the Cα-carbon to allow metal binding events to occur at distinct distances from the peptide backbone. These residues are designed to allow the facile installation of metal chelates along a peptide backbone.



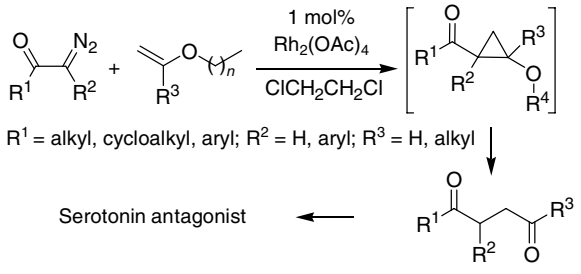


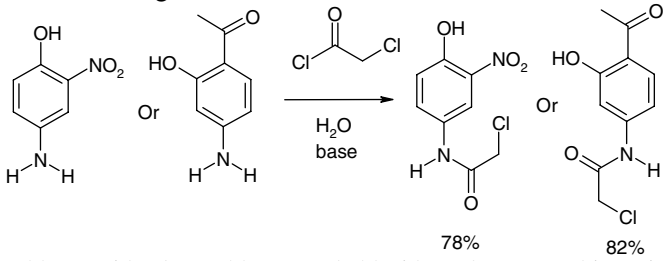
2-Benzoyl-4,5-dihydrofuran undergoes rapid oxidation on standing or during chromatography to afford 2-benzoylbutyrolactone and a tricyclic bisacetal as the major products.





The $Rh_2(OAc)_4$ catalyzed reaction of α-diazo ketones and vinyl ethers afforded 1,4-dicarbonyl compounds. The scope of this protocol has been demonstrated with the synthesis of a seratonin antagonist.





The synthesis of mono- and bis-α-chloroamides from chloroacetyl chloride and mono or bis-amines in water in the presence of base is described. These were formed in good yields after simple filtration of the desired products. This method was particularly effective for the formation of functionalized aromatic α-chloroamides.

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

ELSEVIER

ISSN 0040-4039