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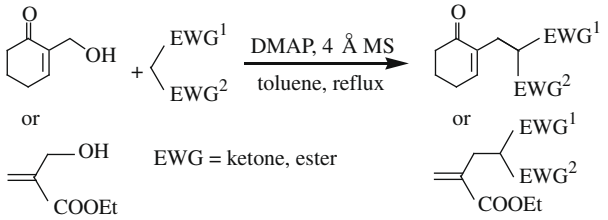
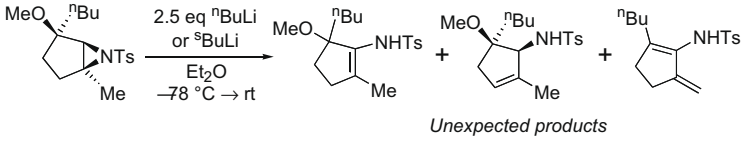
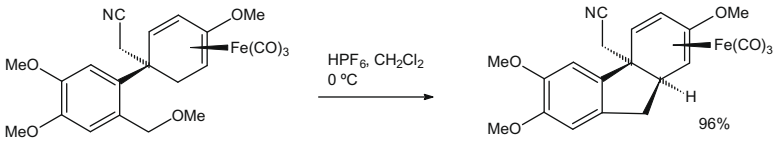
Contents

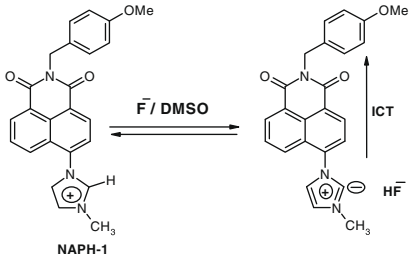
COMMUNICATIONS



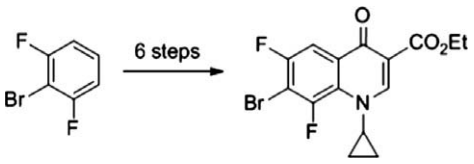


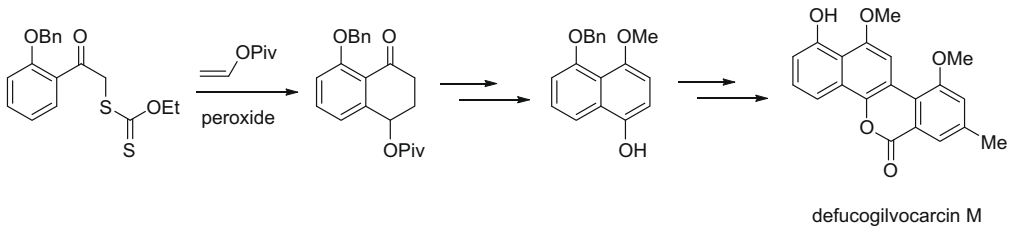


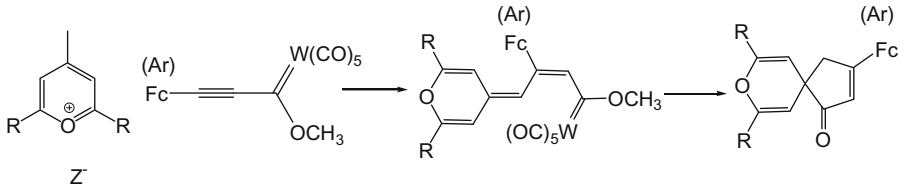
A novel high-yielding cyclisation forms a new tricyclic ligand under S_N1 conditions. S_N1 procedures also allow the replacement of benzyl ethers during the acid-catalysed formation of 1-arylcyclohexadienyliron(1+) complexes.



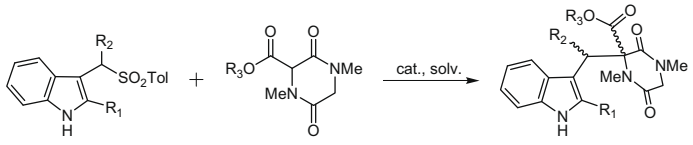
A new internal charge transfer probe, NAPH-1, offers selective colorimetric and ratiometric 'off–on' signaling for targeting F^-, while Cl^-, Br^-, I^-, HSO_4^-, SCN^-, AcO^-, and NO_3^- do not appreciably perturb the photophysical properties of the probe even at relatively higher concentration than F^-.



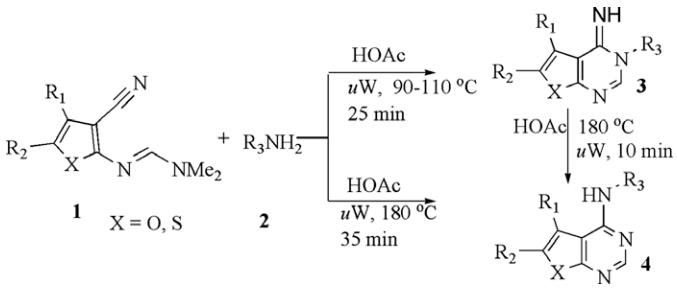


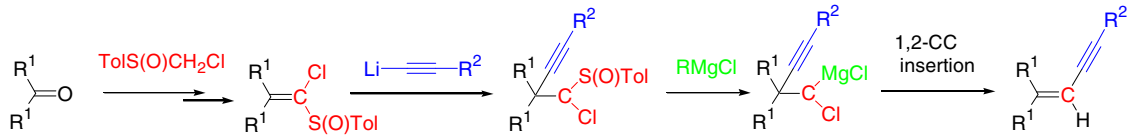


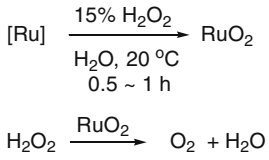
Spiro ferrocenyl and arylcyclopentenones were obtained from pyrylium salts and alkynylcarbenes.



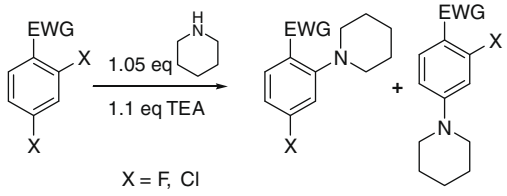
Formation of indole–diketopiperazine linkage by an organocatalytic route is reported.

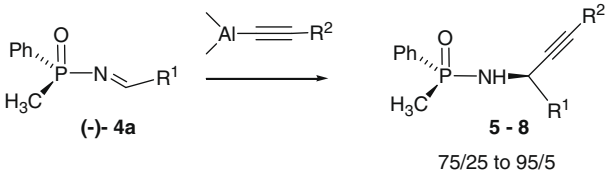


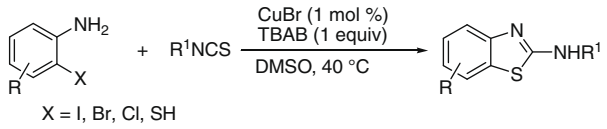


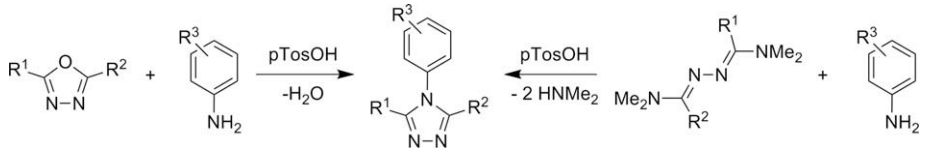


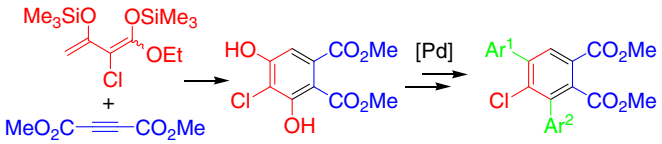
Oxidation of metathesis products contaminated with ruthenium residues using hydrogen peroxide converts the metal into highly insoluble ruthenium dioxide, which then catalyzes the decomposition of any excess peroxide.

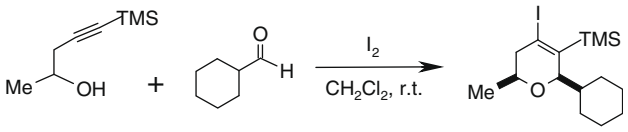


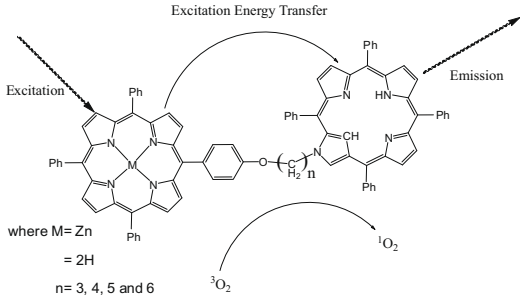


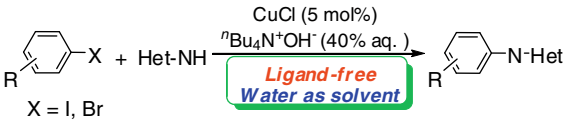


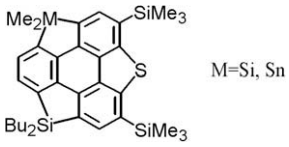




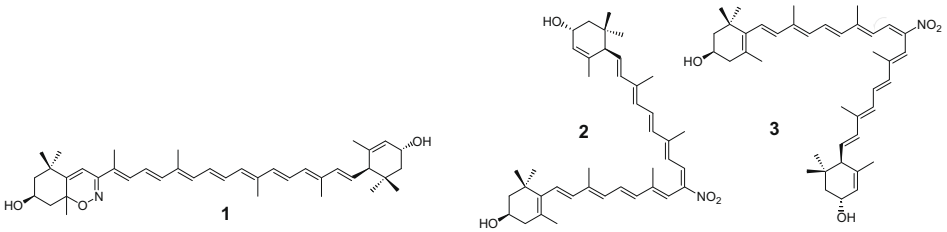




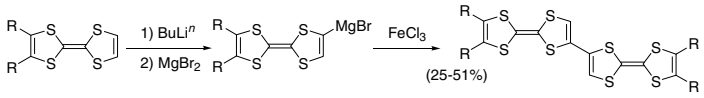




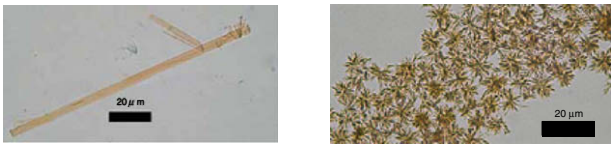
Novel heterasumanenes were successfully synthesized by stepwise heteroatom functionalization from triphenyleno[1,12-*bcd*]thiophene.



A novel lutein-6*H*-1,2-oxazine (**1**) along with 15-nitirolutein (**2**) and 15′-nitrolutein (**3**) was isolated from the products of the reaction of lutein with peroxynitrite.

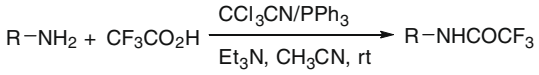


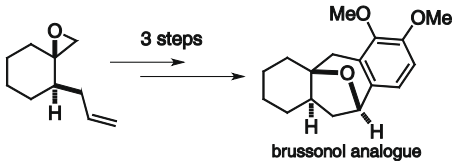
Nanostructure from tetrakis(dodecylthio)bitetrathiafulvalene



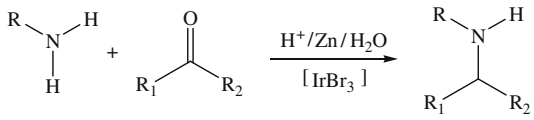
Whisker-like fiber from CH_2Cl_2 ($R = SC_{12}H_{25}$)

Petal-like fiber from CCl_4 - EtOH ($R = SC_{12}H_{25}$)

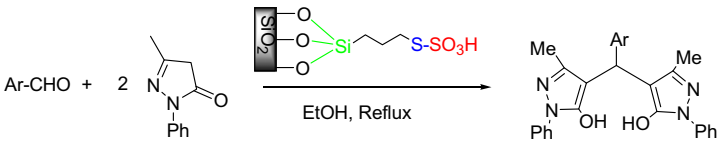




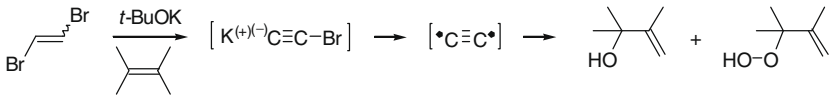
A new approach for the synthesis of the core skeleton of icetexane diterpenoids is presented and deals with an epoxide ring-opening reaction by metallated aromatic compounds. Employing this strategy, a short synthesis of an icetexane analogue of brussonol was achieved in just four steps from 2-allyl-cyclohexanone.

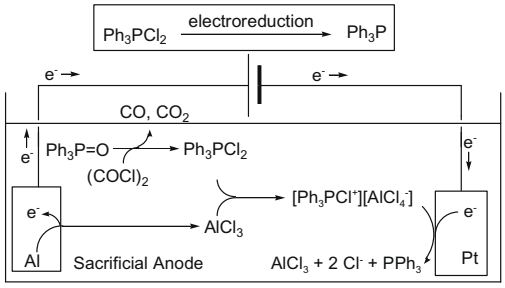


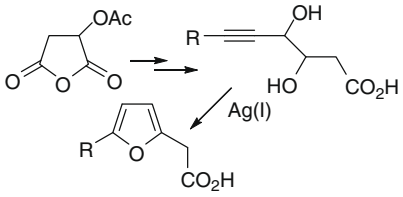
The reductive alkylation of primary aromatic and aliphatic amines with aliphatic ketones has been achieved in aqueous acidic medium using commercially available, non-activated zinc dust catalyzed by a very small quantity of iridium bromide. Anilines react well in aqueous formic acid, whereas monoalkylamines require 1,4-dioxane as a co-solvent and sulfuric acid as the proton source. A plausible mechanism via low-valent iridium hydride species is proposed.



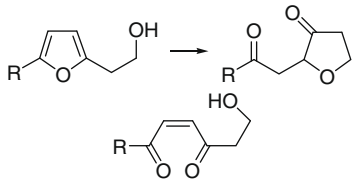
Silica-bonded *S*-sulfonic acid (SBSSA) is employed as a recyclable catalyst for the condensation reaction of aromatic aldehydes with 3-methyl-l-phenyl-5-pyrazolone. This condensation reaction was performed in ethanol under refluxing conditions giving 4,4′-alkylmethylene-bis(3-methyl-5-pyrazolones) in 75–90% yields.





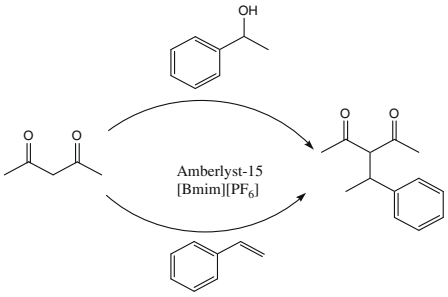


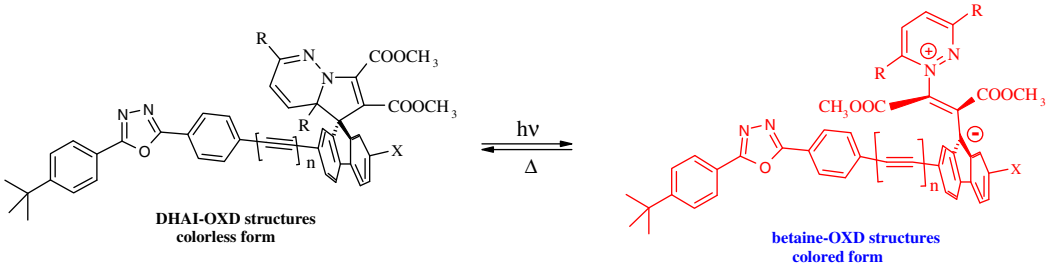
Highly regioselective addition of 1-lithioalkynes to α-acetoxysuccinic anhydride, followed by reduction and hydrolysis and, finally, silver-catalysed cyclisation gives excellent overall yields of 5-substituted-2-furylacetic acids.

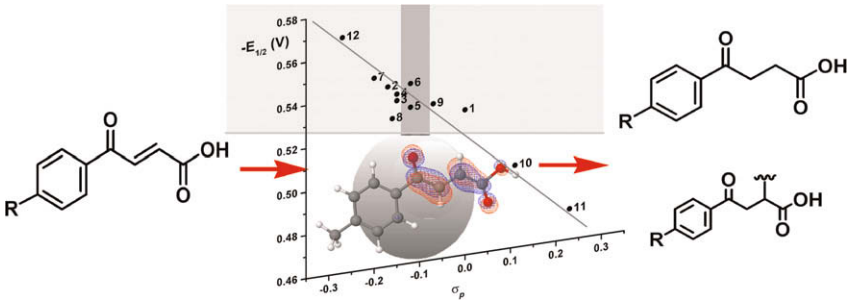


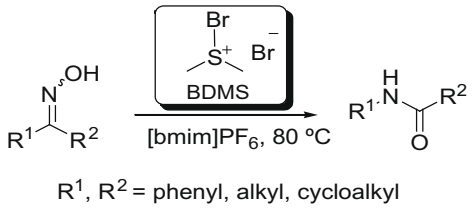
Jones oxidation of 2-furylethanols leads directly to β-keto-tetrahydrofurans; similar oxidations using magnesium monoperoxyphthalate generate the likely enedione intermediates while IBX oxidises the alcohols to the corresponding aldehydes.

An efficient protocol has been developed for both benzylation and hydroalkylation of β-dicarbonyl compounds using Amberlyst-15 in [Bmim][PF_6] ionic liquid as a greener reaction media.

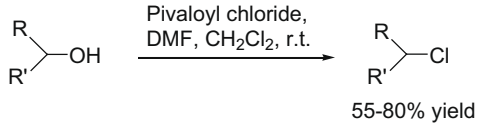




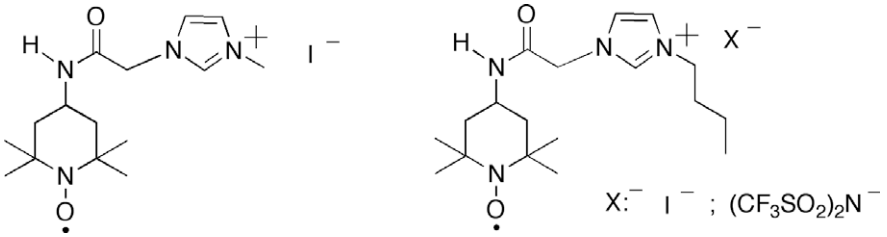




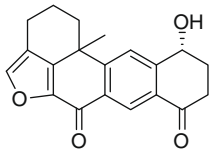
R^1, R^2 = phenyl, alkyl, cycloalkyl



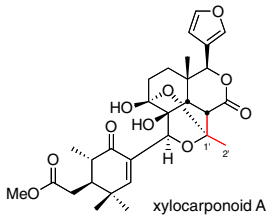
R' = 1°, 2°, allyl, benzyl,
1,2-aminoalcohol



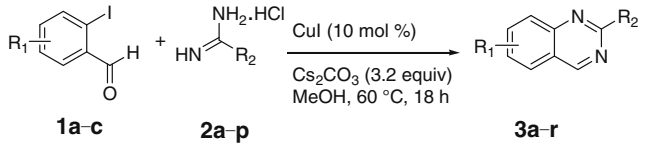
Covalent bonding of a spin probe to the imidazolium ion via an acetamido group opens the possibility to detect the mobility of the ionic liquid cation by ESR spectroscopy.



Two regioisomers belonging to the xestosaprol class of compounds are reported from the Indonesian marine sponge *Xestospongia* sp. Xestosaprol D weakly inhibited the aspartic protease BACE1.

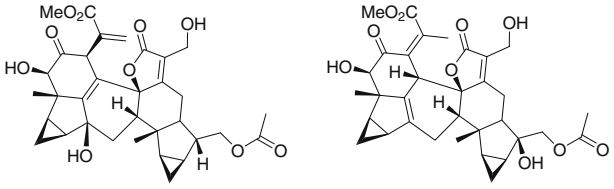


One novel tetranortriterpenoid derivative, xylocarponoid A, representing the first example of C28 skeleton limonoid, was isolated from the seeds of the Chinese mangrove, *Xylocarpus granatum*. Its C-1′-epimer, xylocarponoid B, was formed in $CDCl_3$. The structures were elucidated by extensive spectroscopic analysis. A plausible biosynthetic pathway of xylocarponoid A via intramolecular aldol reaction is also discussed.

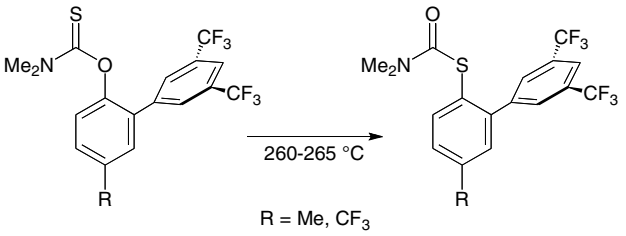


Condensation of *o*-iodobenzaldehydes **1a–c** with amidine hydrochlorides **2a–p** under ligand-free copper-catalyzed Ullmann N-arylation conditions afforded the corresponding quinazolines **3a–r** in good to excellent yields.

Ar = Me_5C_6, 2,4,6-$Me_3C_6H_2$, 2,5-$(MeO)_2C_6H_3$, 4-$MeOC_6H_4$, etc.



Two novel sesquiterpenoid dimers, multistalides A and B (**1–2**), were isolated from the whole plant of *Chloranthus multistachys*. Their structures with absolute configuration were established on the basis of spectroscopic analysis and CD exciton chirality method.



The *O*-thiocarbamates of 2,4-disubstituted phenols with fluorinated groups undergo facile and high yielding Newman–Kwart thermal rearrangement reactions to the corresponding *S*-thiocarbamates, allowing the preparation of thiophenols with bulky groups in the 2-position of the aromatic ring.

*Corresponding author
Supplementary data available via ScienceDirect

COVER

Ruthenium residues can be easily and rapidly removed from Grubbs metathesis products by washing with 15% aqueous hydrogen peroxide, which converts any ruthenium complexes to highly insoluble ruthenium dioxide, which then catalyses the conversion of any excess peroxide into water and oxygen. Ruthenium levels lower than 2 ppm can routinely be obtained; an additional advantage is that any phosphines are also rapidly oxidized to the corresponding, more polar phosphine oxides thereby facilitating their removal as well.
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