

Tetrahedron Letters Vol. 48, No. 47, 2007

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COMMUNICATIONS

Ruthenium-catalysed synthesis of tertiary amines from alcohols

pp 8263-8265

M. Haniti S. A. Hamid and Jonathan M. J. Williams*

$$R^1 \frown OH + HN \frown R^2 \longrightarrow R^1 \frown N \frown R^2$$

Secondary amines have been alkylated with alcohols using borrowing hydrogen methodology.

Rhodium-catalyzed addition of aryl boronic acids to 1,2-diketones and 1,2-ketoesters Gregory R. Ganci and John D. Chisholm*

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Asymmetric synthesis of (+)-iso-6-cassine via stereoselective intramolecular amidomercuration Satwinder Singh, Om V. Singh and Hyunsoo Han*

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Rendering a calixarene having dipyridyl pendants soluble in water results in different species with smaller pp 8274–8276 binding constants

Giuseppe Arena, Annalinda Contino,* Giuseppe Maccarrone, Domenico Sciotto and Carmelo Sgarlata

A novel dipyridyl-based sulfonato-calixarene is able to complex Co(II) and Cu(II) in water.

One-pot synthesis of β -amino acid derivatives via addition of bis(O-silyl) ketene acetals on iminium salts pp 8277–8280 Roba Moumné, Bernard Denise, Andrée Parlier, Solange Lavielle, Henri Rudler and Philippe Karoyan*

Diamond projection of α,β -unsaturated δ -amino acid derivative.

Highly efficient microwave-accelerated preparation of \(\beta\)-ketoimines

pp 8281-8284

Dong Hwan Lee, Sang-Eon Park, Kyuho Cho, Younsoo Kim, Taimur Athar and Ik-Mo Lee*

$$R^1$$
 R^2
 $+$
 H_2N
 R^3
 R^2
 R^1
 R^2
 R^3



Carbamoyl radicals from carbamoylxanthates: a facile entry into isoindolin-1-ones

pp 8285-8289

Germán López-Valdez, Simón Olguín-Uribe and Luis D. Miranda*

Pauferrol A, a novel chalcone trimer with a cyclobutane ring from *Caesalpinia ferrea* mart exhibiting pp 8290–8292 DNA topoisomerase II inhibition and apoptosis-inducing activity

Hiroshi Nozaki,* Ken-ichiro Hayashi, Masahiro Kido, Kazuyuki Kakumoto, Shogo Ikeda, Nobuyasu Matsuura, Hiroyuki Tani, Daisuke Takaoka, Munekazu Iinuma and Yukihiro Akao

Pauferrol A showed potent human topoisomerase II inhibitory activity and induction of apoptosis in human leukemia HL60 cells.

Stereoselective nitration of asymmetric hydrazones with nitric oxide

Wen-tao Wu, Gang Su, Zhou Lu and Long-min Wu*

pp 8293-8296

Ar Ar Ar
$$NO_2$$
 NO_2 NO_2

Nitration of asymmetric hydrazones with nitric oxide occurred stereoselectively, giving mono-nitrated trans isomer as a major outcome. The ratio of trans to cis was up to >99.

Total synthesis of the novel seco-prezizaane sesquiterpenoid (+)-1S-minwanenone

pp 8297-8300

Goverdhan Mehta* and Harish M. Shinde

The first total synthesis of (+)-1S-minwanenone, an archetypical seco-prezizaane sesquiterpene, has been accomplished from a readily available chiral endo-tricyclic synthon following a flexible strategy.

The first examples of cyclizations of a glycal with enamines leading to oxa-aza bicyclononene scaffolds pp 8301–8305 J. S. Yadav,* B. V. Subba Reddy, M. Srinivas, Ch. Divyavani, A. C. Kunwar and Ch. Madavi

Niobium(V) pentachloride: an efficient catalyst for C-, N-, O-, and S-nucleophilic substitution reactions pp 8306–8310 of benzylic alcohols

J. S. Yadav,* Dinesh C. Bhunia, K. Vamshi Krishna and P. Srihari

$$R = H, OH, OMe \\ R' = H, Me, Ph \\ R' = Allyl, propargyl, 3-benzyloxypropyl \\ R = M, OH, OMe \\ R' = R, Me, Ph \\ R' = Allyl, propargyl, 3-benzyloxypropyl \\ Nu-H = 2-naphthol, indole, resorcinol, anisole, PhSH \\ R'' = Allyl, propargyl, 3-benzyloxypropyl \\ Nu-H = 2-naphthol, indole, resorcinol, anisole, PhSH \\ R'' = Allyl, propargyl, 3-benzyloxypropyl \\ X = SCN, N_3$$

Reaction of selenofenchone with propiolic acid: first instance of Wagner-Meerwein rearrangement in selone

Kentaro Okuma,* Yuichi Mori, Toshiyuki Shigetomi, Miki Tabuchi, Kosei Shioji and Yoshinobu Yokomori

The first asymmetric esterification of free carboxylic acids with racemic alcohols using benzoic anhydrides and tetramisole derivatives: an application to the kinetic resolution of secondary benzylic alcohols

pp 8314-8317

pp 8311-8313

Efficient, solventless *N*-Boc protection of amines carried out at room temperature using sulfamic acid as pp 8318–8322 recyclable catalyst

Dharita J. Upadhyaya, Alessandro Barge, Rachele Stefania and Giancarlo Cravotto*

$$(R) ArNH_2 + (Boc)_2 O \xrightarrow{\begin{array}{c} \text{Sulfamic acid (5 mol \%), Solventless} \\ \text{RT, 1 - 30 min,} \end{array}} (R) ArNHBoc$$
 85-100%

Reduction of pentafluorophenyl esters to the corresponding primary alcohols using sodium borohydride pp 8323–8325 Eleni Papavassilopoulou, Petros Christofis, Despina Terzoglou and Panagiota Moutevelis-Minakakis*

The reduction of a variety of pentafluorophenyl esters of carboxylic acids, including N-protected amino acids, by NaBH₄ in THF has been developed.

Various P^* -chiral phosphite-type ligands: their synthesis, stereochemistry and use in Pd-catalysed allylation

pp 8326-8330

Eduard B. Benetsky,* Sergey V. Zheglov, Tatiana B. Grishina, Fliur Z. Macaev, Liudmila P. Bet, Vadim A. Davankov and Konstantin N. Gavrilov

Various P*-chiral phosphite-type ligands used in Pd-catalysed allylation

A convenient route to prepare isodicyclopentadiene—precursor of 1,5-dihydro-pentalene

pp 8331-8333

F. Burgos O,* I. Chávez, J. M. Manríquez* and S. Alegría

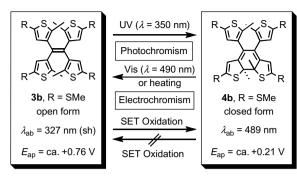
Secondary alcohols act as better nucleophiles than primary alcohols in the lipase-catalyzed regioselective pp 8334–8337 deacylation of dihydroxybenzenes acylated at both phenolic hydroxyls

Toshifumi Miyazawa,* Manabu Hamada, Ryohei Morimoto, Takashi Murashima and Takashi Yamada

Synthesis, X-ray crystallographic analysis, and theoretical structure analysis of tetrathienylethenes designed for photo- and electrochromism

pp 8338-8342

Hiroshi Ikeda,* Azusa Sakai, Hayato Namai, Akinori Kawabe and Kazuhiko Mizuno*





Rapid syntheses of (\pm) -pterocarpans and isoflavones via the gold-catalyzed annulation of aldehydes and pp 8343–8346 alkynes

Rachid Skouta and Chao-Jun Li*

(±)-Pterocarpan and analogues have been synthesized efficiently via the annulation of salicylaldehydes and o-methoxymethoxylphenylacetylene followed by a one-pot reduction and acidic cyclization of ketones. In addition, isoflavone derivatives have been synthesized rapidly via the annulation of salicylaldehyde and arylacetylenes followed by IBX/DMSO oxidation of the isoflavanones.

Synthesis, characterisation and antimicrobial activity of new benzo[a]phenoxazine based fluorophores pp Vânia H. J. Frade, Maria J. Sousa, João C. V. P. Moura and M. Sameiro T. Gonçalves*

pp 8347-8352

$$\begin{array}{c} R\text{-}CO_2H \\ \hline a) \\ \text{Bze-NHCO-R} \\ \hline R^1\text{-}SO_2C1 \\ \hline b) \\ \end{array} \quad \text{Bze-NHSO}_2\text{-}R^1$$

Bze =
$$H_3C$$
 N H N $(CH_2)_3$ -

R = azo dye, anthraquinone or pyrene $R^1 = toluene$

Reagents and conditions: (a) DCC/HOBt, rt; (b) 1 M NaOH/H₂O, 0 °C and rt.

2-Alkylidene oxetanes by stereospecific elimination of mesylates

pp 8353-8355

Paul S. Sabila and Amy R. Howell*



3-Silyloxytetrahydrofurans via sulfoxonium ylide reactions with $\alpha\text{-silyloxyepoxides}$

pp 8356-8359

Paul S. Sabila, Yanke Liang and Amy R. Howell*



pp 8360-8362

Synthesis of new trifluoromethyl peptidomimetics with a triazole moiety

Julien Bonnamour, Julien Legros, Benoit Crousse* and Danièle Bonnet-Delpon

A simple and efficient synthesis of new cyclic ureas

pp 8363-8365

Delphine Baumann, Khalil Bennis, Isabelle Ripoche* and Yves Troin*

Original N-heterocyclic ureas 9a-e were prepared efficiently from aminoketal 1 and ethyl-trans-4-oxo-buten-2-oate 2.

A versatile access to pyridazines with tethered imidazolium groups—new precursors for mono- and binucleating NHC/pyridazine hybrid ligands

pp 8366-8370

Ulrich J. Scheele, Sebastian Dechert and Franc Meyer*

$$C \vdash \bigvee_{N-N} C \vdash + \bigvee_{R} \bigvee_{R} \bigvee_{R} \bigvee_{R} \bigvee_{R} \bigvee_{R} \bigvee_{N-N} \bigvee_{N-N} \bigvee_{N-N} \bigvee_{R} \bigvee_{R$$

Solvent-free heterogeneous organocatalysis: stereoselective isomerization of α,β -ynones to (E,E)- α,β - γ,δ -dienones catalyzed by polymer-supported tertiaryphosphines

pp 8371-8375

Hai-Ling Liu, Huan-Feng Jiang,* Lin Xu and Hai-Ying Zhan

Stereoselective isomerization of α,β -ynones was catalyzed by polymer-supported tertiaryphosphines under solvent-free conditions. (E,E)- α,β - γ,δ -Dienones were obtained with up to 93% isolated yields when *JJ*-**TPP** was employed.

A facile method for the synthesis of substituted 2-ylidene-1,3-oxathioles from acetophenones

pp 8376-8378

R. Samuel, C. V. Asokan, S. Suma, P. Chandran, S. Retnamma and E. R. Anabha*

(i)+

Synthesis of a hexahydropyrimido[1,2-a]azepine-2-carboxamide derivative useful as an HIV integrase inhibitor

pp 8379-8382

Marco Ferrara,* Benedetta Crescenzi, Monica Donghi, Ester Muraglia, Emanuela Nizi, Silvia Pesci, Vincenzo Summa and Cristina Gardelli

From the study of naturally occurring N-allylated phenazines towards new Pd-mediated transformations pp 8383–8387

Elena Merişor and Uwe Beifuss*

New Pd-mediated reductive heteroannulations of N-allyl diphenylamines through Pd-catalyzed N-arylation and of O-allylethers are reported.

Functional group selectivity in reactions of epoxides with tungsten hexachloride

pp 8388-8391

Michael E. Jung* and Jennifer M. Murphy

The reactions of substituted cyclohexene oxides with tungsten hexachloride were carried out to learn the functional group tolerance of this reagent. Several groups proved stable—esters, sufides, sulfones—while others were unstable—alcohols, silyl ethers, ketones. The diaxial dichloride is usually formed although the diequatorial dichloride could also be prepared.

A convenient synthesis of linear pyridinoimidazo[1,2-a]pyridine and pyrroloimidazo[1,2-a]pyridine cores pp 8392–8395 Mounir Andaloussi,* Emmanuel Moreau, Olivier Chavignon and Jean C. Teulade

*Corresponding author

(1) Supplementary data available via ScienceDirect

COVER

This protocol directly produces chiral carboxylic esters from free carboxylic acids and racemic secondary alcohols, by utilizing the trans-acylation process to generate mixed anhydrides from acid components and benzoic anhydride derivatives under the influence of chiral catalysts.

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