

Tetrahedron Letters Vol. 47, No. 51, 2006

Contents

COMMUNICATIONS

New modular P-chiral ligands for Rh-catalyzed asymmetric hydrogenation

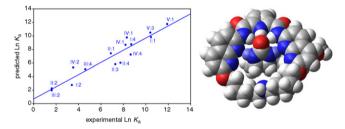
pp 9013-9015

Oleg G. Bondarev * and Richard Goddard

A new tool for the rational design of methylbiotin hosts

pp 9017-9020

Fernando Herranz, M. Dolores Santa María and Rosa M. Claramunt*



A Partial Least Square Cross-Validated model has been developed to use in the design of new, better hosts capable of interacting with biotin derivatives.

Stereoselective synthesis of rac-(8R,13S,14S)-7-oxa-estra-4,9-diene-3,17-dione

pp 9021-9024

Fu-An Kang,* Nareshkumar Jain and Zhihua Sui

A stereoselective synthesis of the 7-oxa-steroid with the *cis*-C/D ring junction was achieved, which provides a new template for developing novel biologically interesting 7-oxa-steroidal compounds.



Solid-phase synthesis of fused [2,1-b]quinazolinone alkaloids

pp 9025-9028

Ahmed Kamal,* N. Shankaraiah, V. Devaiah and K. Laxma Reddy

$$H_3CO$$
 H_3CO
 H_3C

Scandium(III) triflate–TMSCl promoted cyclization of aziridin-1-yl oximes to 5,6-dihydro-4*H*-[1,2,4]- pp 9029–9033 oxadiazines

Sung Yun Cho,* Seung Kyu Kang, Jin Hee Ahn, Jae Du Ha and Joong-Kwon Choi

Synthesis of chiral non-proteinogenic 4,5-dihydroxytetrahydropyran derived α -amino acids from D-mannitol

pp 9035-9038

Anita Brar and Yashwant D. Vankar*



An efficient glycosidation method using 2,3-unsaturated glycosyl donors

pp 9039–9043

Kaname Sasaki, Shuichi Matsumura and Kazunobu Toshima*

New compounds via Mannich reaction of cytosine, paraformaldehyde and cyclic secondary amines Dorota Prukała

pp 9045-9047

The Mannich reaction of cytosine, paraformaldehyde and cyclic secondary amines in the presence of acetic acid gives derivatives of 5-(cycloamino)methylcytosine. These products are quite different from those of cytosine aminomethylation previously described.

Lower rim arylation of calix[n]arenes with extended perfluorinated domains

pp 9049-9052

Silvestre Buscemi, Andrea Pace, Antonio Palumbo Piccionello, Sebastiano Pappalardo, Domenico Garozzo, Tullio Pilati, Giuseppe Gattuso, Andrea Pappalardo, Ilenia Pisagatti and Melchiorre F. Parisi*

$$CH_2 = n$$

$$R = 4-8$$

$$R =$$

(i)+

A simple synthesis of cytotoxic endoperoxide lactones

pp 9053-9056

Eugenia Aldeco-Pérez, Henri Rudler,* Andrée Parlier, Cecilio Alvarez, Maria Teresa Apan, Patrick Herson and Alfredo Toscano

$$\bigcup_{\mathsf{Cr}(\mathsf{CO})_3}^{\mathsf{SiMe}_3} \longrightarrow \bigcup_{\mathsf{Me}_3\mathsf{Si}} \mathsf{O} = \mathsf{O}$$

Chemoselective 1-ethylpiperidine hypophosphite (EPHP)-mediated intermolecular radical additions of pp 9057–9060 1-deoxy-1-halo-1-iodo-alditols to electron-deficient olefins

Cosme G. Francisco, Concepción C. González, Antonio J. Herrera, Nieves R. Paz and Ernesto Suárez*



Asymmetric synthesis of activated cyclopropanes catalyzed by cinchonidine as a chiral Brønsted base pp 90 Satoshi Kojima,* Maki Suzuki, Akito Watanabe and Katsuo Ohkata

pp 9061-9065

$$\begin{array}{c} O \\ R \end{array} + \begin{array}{c} R' \\ \hline \\ CN \end{array} \begin{array}{c} \text{cinchonidine (0.01eq)} \\ \hline \\ Na_2CO_3 \ (2.0 \ eq) \\ \hline \\ \text{toluene, 0 °C} \end{array} \begin{array}{c} NC \ CN \\ \hline \\ R' \end{array} \begin{array}{c} CO \\ \hline \\ C(O)F \end{array}$$

Organocatalyzed asymmetric α -hydroxyamination of α -branched aldehydes: asymmetric synthesis of optically active N-protected α, α -disubstituted amino aldehydes and amino alcohols

pp 9067-9071

Sung-Gon Kim* and Tae-Ho Park

Microbial screening in hydroxylation of L-proline

pp 9073-9076

M.-C. Bontoux and M. Gelo-Pujic*

Microbial screening resulted in identification of five strains with the activity of prolyl 4-hydroxylase. All five strains hydroxylated regions electively and enantios electively L-proline into 4(R)-trans-hydroxy-L-proline 1.

$Mo(CO)_6$ -mediated synthesis of calix[4]arenes carrying β -hydroxy ketones or α,β -unsaturated- β -amino pp 9077–9081 ketones

Annamalai Senthilvelan, Ming-Tsung Tsai, Kai-Chi Chang and Wen-Sheng Chung*

(i)+

A new tetrathiafulvalene-perylene diimide dyad with a pentaoxa-heptadecane chain as the spacer: metal-ions-induced aggregation

pp 9083-9087

Xiaoping Zheng, Deqing Zhang* and Daoben Zhu*

The aggregation of a new TTF-perylene diimide dyad 1 with a pentaoxa-heptadecane chain as the spacer was observed.

Efficient and practical catalytic vinylogous aldol reaction of dioxinone-derived silyl dienol ethers with aromatic aldehydes

pp 9089-9092

Thierry Ollevier,* Valerie Desyroy, Cristian Catrinescu and Raphael Wischert

Ring expansions of a spirocyclohexadienone system

pp 9093-9094

Lionel Moisan, Mathieu Wagner, Sébastien Comesse and Eric Doris*

A practical and selective reduction of nitroarenes using elemental sulfur and mild base

pp 9095-9097

Maureen A. McLaughlin* and David M. Barnes

A method was developed to reduce aromatic nitro compounds to the corresponding anilines using sulfur and base. The method tolerates a range of functional groups on the benzene ring, avoids the use of hydrogen and transition metals and provides the anilines in moderate to high yields.



Polarimetry as a useful tool for the determination of binding constants between cyclodextrins and organic pp 9099–9102 guest molecules

Paolo Lo Meo, Francesca D'Anna, Serena Riela, Michelangelo Gruttadauria and Renato Noto*

$$\vartheta_{i} = \frac{\vartheta_{0} + \frac{\left[\Delta\Theta\right]}{2} \left(H_{0}^{0} + \frac{G_{0}^{0} \frac{V_{i}}{V_{0}} + \frac{1}{F_{i}} / V_{0}}{K} - \sqrt{\left(H_{0}^{0} + G_{0}^{0} \frac{V_{i}}{V_{0}} + \frac{1+f_{i}}{F_{i}} / V_{0}\right)^{2} - 4H_{0}^{0}G_{0}^{0} \frac{V_{i}}{V_{0}}}}{1+f_{i} / V_{0}} - \frac{1+f_{0}^{0} / V_{0}}{V_{0} + \frac{1}{F_{0}} / V_{0}}\right)^{2} - 4H_{0}^{0}G_{0}^{0} \frac{V_{i}}{V_{0}}}$$

Polarimetry can quickly provide precise and reliable information on host-guest inclusion equilibria between cyclodextrins and suitable organic guest molecules.

Efficient synthesis of homoallylic alcohols and amines using 2,4,6-trichloro-1,3,5-triazine

pp 9103-9106

Biswanath Das,* Keetha Laxminarayana, B. Ravikanth and B. Ramarao

Reactions of novel trifluoromethyl propargylic carbocation with carbon nucleophiles

pp 9107-9111

Sung Lan Jeon, Joa Kyum Kim, Jang Bae Son, Bum Tae Kim and In Howa Jeong*

A comparative study of the multicomponent Ugi reactions of an oxabicycloheptene-based β -amino acid in pp 9113–9116 water and in methanol

Iván Kanizsai, Zsolt Szakonyi, Reijo Sillanpää and Ferenc Fülöp*

yields: 43-76% in methanol and 47-71% in water diastereomeric ratios: from 56:44 up to 87:13 in methanol and from 52:48 up to 100:0 in water

The synthesis of oxabicyclo β -lactam derivatives was accomplished, starting from di-exo-3-amino-7-oxabicyclo[2.2.1]hept-5-ene-2-carboxylic acid, observing the solution effect of pure water and methanol.

Nafion-H mediated selective deprotection of terminal isopropylidene acetals and trityl ethers. Application pp 9117–9120 in the synthesis of a substituted piperidone

Girish K. Rawal, Shikha Rani, Amit Kumar and Yashwant D. Vankar*

Nafion-H acts as an excellent reagent for the deprotection of a variety of terminal isopropylidenes and trityl ethers without affecting the other protecting groups. A facile synthesis of a biologically important piperidone derivative has been achieved via selective deprotection, reductive amination and cyclization.



Selective Michael additions of primary and secondary amines to perfluoroalkylated sulfoxides and sulfones as a tool for fluorous tagging

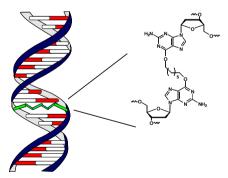
pp 9121-9124

Caroline Magnier-Bouvier, Jean-Claude Blazejewski, Chantal Larpent and Emmanuel Magnier*

Synthesis of oligonucleotides containing an O^6 -G-alkyl- O^6 -G interstrand cross-link

pp 9125-9128

Christopher J. Wilds,* Jason D. Booth and Anne M. Noronha



Electrocatalytic multicomponent cyclization of an aldehyde, malononitrile and a malonate into 3-substituted-2,2-dicyanocyclopropane-1,1-dicarboxylate—the first one-pot synthesis of a cyclopropane ring from three different molecules

pp 9129-9133

Michail N. Elinson,* Sergey K. Feducovich, Anatolii N. Vereshchagin, Sergey V. Gorbunov, Pavel A. Belyakov and Gennady I. Nikishin

Synthesis of a redox-active molecular switch based on dibenzo[1,2]dithiine

pp 9135-9138

Irantzu Llarena, Andrew C. Benniston,* Guillaume Izzet, Dorota B. Rewinska, Ross W. Harrington and William Clegg

Synthesis of retro-inverso peptides employing isocyanates of N^z -Fmoc-amino acids/peptide acids catalyzed by DMAP

pp 9139-9141

Rao Venkataramanarao and Vommina V. Sureshbabu*

The Goldschmidt–Wick type reaction between isocyanates of N^{α} -Fmoc-amino acids/peptide acids and N^{α} -Boc-/Z-/Bsmoc-amino acids catalyzed by DMAP leads to retro-inverso peptides in high yields and a few steps.

FeCl₃-catalyzed propargylation of aromatic compounds with propargylic acetates

pp 9143-9146

Zhuang-Ping Zhan,* Yuan-Yuan Cui and Hui-Juan Liu

$$\begin{array}{c} \text{OAC} \\ \text{Ph} \\ \\ \text{R} \end{array} + \begin{array}{c} \text{NuH} \\ \\ \\ \text{R} \end{array} + \begin{array}{c} \text{5 mol\% FeCl}_3 \\ \\ \text{rt, CH}_3\text{CN} \end{array} + \begin{array}{c} \text{Nu} \\ \\ \text{R} \end{array}$$

$$\begin{array}{c} \text{R} \\ \text{Ph} \\ \\ \text{R} \end{array} + \begin{array}{c} \text{Nu} \\ \\ \text{R} \end{array} + \begin{array}{c} \text{55-93\% yield} \\ \\ \text{Nu} \\ \\ \text{R} \end{array}$$

A new method for the synthesis of propargylated aromatic compounds is developed. The reaction was carried out at room temperature in the presence of a catalytic amount of FeCl₃ in acetonitrile, high product yields were obtained with excellent regionselectivity and the reaction proceeded smoothly without exclusion of moisture or air.

The first syntheses of 6,7-dihydroxylated calystegines and homocalystegines

pp 9147-9150

Birgit Groetzl, Sandeep Handa* and John R. Malpass

Bis(1,3-dithiol-2-ylidene)-[3.3]paracyclophanes: orthogonal intramolecular charge transfer interaction

pp 9151-9154

Katsuya Sako,* Yukiharu Mase, Yousuke Kato, Tetsuo Iwanaga, Teruo Shinmyozu, Hiroyuki Takemura, Mitsuhiro Ito, Kousuke Sasaki and Hitoshi Tatemitsu*

A flexible route to immunosuppressive agent FR252921. Asymmetric total synthesis of its (13R,14R,19R)-isomer

pp 9155-9157

Shouyun Yu, Feng Liu and Dawei Ma*

OTHER CONTENTS

Corrigendum p 9159

*Corresponding author

** Supplementary data available via ScienceDirect

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