

Tetrahedron Vol. 62, No. 23, 2006

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REPORT

Ring C closure as key step in the synthesis of steroids

pp 5363-5383

Florence C. E. Sarabèr and Aede de Groot*

Steroid syntheses using Torgov syntheses, Michael additions and cyclisations, aldol cyclisation, polyene cyclisations, Friedel-Crafts cyclisations, Wittig reactions, McMurray reactions, Dieckmann cyclisation, Diels-Alder cyclisations, electrocyclisations, radical cyclisation and Mukaiyama chemistry for the construction of ring C are reviewed. The report contains 170 references.

ARTICLES

On the importance of the pore inner cavity for the ionophoric activity of 1,3-alternate calix[4]arene/ pp 5385-5391 steroid conjugates

Irene Izzo,* Nakia Maulucci, Cristina Martone, Agostino Casapullo, Lidia Fanfoni, Paolo Tecilla and Francesco De Riccardis

Sesterterpene metabolites from the sponge Hyatella intestinalis

pp 5392-5400

Claudia J. Hernández-Guerrero, Eva Zubía,* María J. Ortega and J. Luis Carballo

Influence of intramolecular hydrogen bonds in the enzyme-catalyzed regioselective acylation of quinic and shikimic acid derivatives

pp 5401-5410

Nuria Armesto, Susana Fernández, Miguel Ferrero and Vicente Gotor*

$$\begin{array}{c} \text{Asp} \overset{\bigcirc}{\bigcirc} \overset{\bigcirc}{\bigcirc} \overset{\oplus}{\bigcirc} \overset{\oplus}{\longrightarrow} \overset{\wedge}{\longrightarrow} \overset{\longrightarrow}{\longrightarrow} \overset{\wedge}{\longrightarrow} \overset{\wedge}{\longrightarrow} \overset{\wedge}{\longrightarrow} \overset{\wedge}{\longrightarrow} \overset{\longrightarrow}{\longrightarrow} \overset{\longrightarrow}{\longrightarrow} \overset{\longrightarrow}{\longrightarrow} \overset{\longrightarrow}{\longrightarrow}$$



Tandem aza-Michael additions under high pressure: a shortcut to the azanorbornyl skeleton

pp 5411-5416

Alexandre Yu. Rulev, Nilgun Yenil, Anthony Pesquet, Hassan Oulyadi and Jacques Maddaluno*



Synthesis and crystal structures of extremely crowded oligophenylenes as model precursors to 'cubic graphite'

pp 5417-5420

Daniel Wasserfallen, Gunter Mattersteig, Volker Enkelmann and Klaus Müllen*

Stereoselective synthesis of pachastrissamine (jaspine B)

Celia Ribes, Eva Falomir,* Miguel Carda and J. A. Marco*

pp 5421–5425

Synthesis of 4-(3-hydroxyalkyl)pyrimidines by ring transformation reactions of 2-alkylidenetetrahydrofurans with amidines

pp 5426-5434

Esen Bellur and Peter Langer*

Homogeneous electro-mediated reduction of unsaturated compounds using Ni and Fe as mediators in DMF pp 5435–5440 Aderivaldo P. da Silva, Saulo D. C. Mota, Lothar W. Bieber and Marcelo Navarro*

HEMR
Galvanostat

Med²⁺

Sacrificial
anode
(M)

Med⁰ + S bulk
Med²⁺ + S_{red}

$$M^{2^+}$$
 + 2e⁻
 M^{0}
 M^{0}
 M^{2^+} + 2e⁻
 M^{0}
 M^{0}
 M^{0}
 M^{0}
 M^{0}
 M^{2^+} + 2e⁻

Preparation of a new 1,2,3-trithiolane, *trans*-9,10,11-trithiabicyclo[6.3.0]undecane, and its oxidation pp 5441–5447 reactions

Akihiko Ishii,* Manami Suzuki and Remi Yamashita

Mechanism of catalytic asymmetric hydrogenation of 2-formyl-1-methylene-1,2,3,4-tetrahydroisoquinoline using Ru(CH₃COO)₂[(S)-binap]

pp 5448-5453

Masaki Tsukamoto, Masahiro Yoshimura, Kazuomi Tsuda and Masato Kitamura*

$$\begin{array}{c} \text{CH}_3\text{O} \\ \text{CH}_3\text{O} \\ \end{array} \\ \begin{array}{c} \text$$

Synthesis of highly-functionalised pyridines via hetero-Diels-Alder methodology: reaction of 3-siloxy-1-aza-1,3-butadienes with electron deficient acetylenes

pp 5454-5463

Matthew D. Fletcher, Timothy E. Hurst, Timothy J. Miles and Christopher J. Moody*

$$R^{1}_{3}SIO \qquad R^{3} \qquad \frac{\text{heat or MW}}{21 - 58\%} \qquad R^{1}_{3}SIO \qquad R^{2}$$

$$X = NR_{2} \text{ or } OSiR_{3}$$

Novel mercaptoacetylative expeditious annulation of 5-mercaptopyrimidine ring on azoles using 1,3-oxathiolan-5-one

pp 5464-5468

Lal Dhar S. Yadav,* Vijai K. Rai and Seema Yadav

An autoxidation study of C2 substituted pyrimidine amino reductones

pp 5469-5473

Rachel Ta-Shma, Avital Torres, Mordechai Chevion, Eli Breuer, Abed Al Aziz Quntar, Claes D. Enk and Morris Srebnik*

Ba:
$$R = CH_3$$
8b: $R = SCH_3$
8d: $R = OH$ (isouramil)
8e: $R = NH_2$ (divicine)

The rates of autoxidation of C2 substituted 5-hydroxy-6-aminopyrimidines were investigated and correlated with Hammett σ_n^+ .

An in-depth analysis of the effect of substituents on imines in cycloaddition reactions with nitrosoalkenes

pp 5474-5486

Alka Marwaha, Parvesh Singh and Mohinder P. Mahajan*

The effect of substituents on nitrogen of simple acyclic imines in their cycloaddition reactions with nitrosoalkenes supported by theoretical calculations is reported. The effect of substituents on carbon of imines has also been examined to broaden the scope of these reactions. The reactions of various simple as well as functionalized imines with nitrosoalkenes have been explored profoundly.

R = alkyl R
$$\frac{1}{\sqrt{p}}$$
 $\frac{1}{\sqrt{p}}$ $\frac{1}$

Synthesis of some multi-β-substituted cationic porphyrins and studies on their interaction with DNA pp 5487–5497 Bo Chen, Song Wu, Aixiao Li, Feng Liang, Xiang Zhou,* Xiaoping Cao and Zhike He

A series of multi- β -substituted cationic porphyrins have been synthesized. Their photooxidative abilities and interactions with DNA were investigated. Substituents at β -position of the porphyrins have significant effect on the interactions and binding modes of the porphyrins with DNA compared to the β -unsubstituted one. Increasing positive charges in porphyrins strengthen their interactions with DNA.

Preparation of thiocyanates and isothiocyanates from alcohols, thiols, trimethylsilyl-, and tetrahydropyranyl ethers using triphenylphosphine/2,3-dichloro-5,6-dicyanobenzoquinone (DDQ)/n-Bu₄NSCN system

pp 5498-5501

Nasser Iranpoor,* Habib Firouzabadi* and Najmeh Nowrouzi

$$\text{RX} \ \frac{\text{PPh}_3, \, \text{DDQ}, \, n\text{-Bu}_4 \text{NSCN}}{\text{CH}_3 \text{CN}} \ \stackrel{\text{RSCN}}{\longrightarrow} \ \frac{(\text{R= 1}^\circ, \, 2^\circ)}{\text{RNCS}}$$

$$\text{RNCS} \ \ (\text{R= 3}^\circ)$$

$$\text{X= OH, SH, OSiMe}_3, \, \text{OTHP}$$

A DFT study of the Diels-Alder reaction between methyl acrolein derivatives and cyclopentadiene. Understanding the effects of Lewis acids catalysts based on sulfur containing boron heterocycles

pp 5502–5509

C. N. Alves,* A. S. Carneiro, J. Andrés* and L. R. Domingo*

¹H and ¹³C NMR assignments of the three dicyclopenta-fused pyrene congeners

pp 5510-5518

María José Otero-Lobato, Cornelis A. van Walree, Remco W. A. Havenith, Leonardus W. Jenneskens,* Patrick W. Fowler and Erich Steiner

Novel 24-nor-, 24-nor-2,3-seco-, and 3,24-dinor-2,4-seco-ursane triterpenes from *Diospyros decandra*: pp 5519–5526 evidences for ring A biosynthetic transformations

Parichat Nareeboon, Wolfgang Kraus, Uwe Beifuss, Juergen Conrad, Iris Klaiber and Somyote Sutthivaiyakit*

Photomediated synthesis of β -alkylketones from cycloalkanes

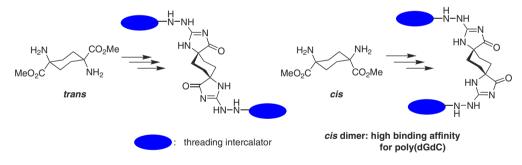
Daniele Dondi, Anna Maria Cardarelli, Maurizio Fagnoni* and Angelo Albini*

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Synthesis and DNA binding studies of bis-intercalators with a novel spiro-cyclic linker

pp 5536-5548

Yongjun Chu, Vincent Lynch and Brent L. Iverson*





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*Corresponding author

(1) Supplementary data available via ScienceDirect



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