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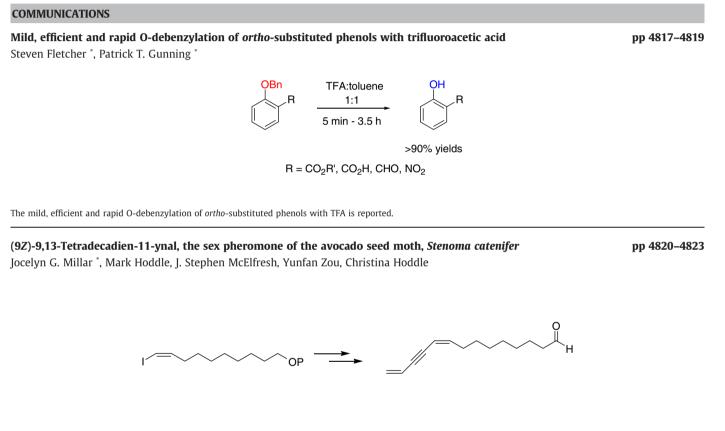
Tetrahedron Letters

journal homepage: www.elsevier.com/locate/tetlet



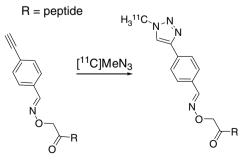
Tetrahedron Letters Vol. 49, No. 33, 2008

Contents



The terminal dienyne of the title compound constitutes the first example of a new class of lepidopteran pheromone structures.

Rapid in situ synthesis of [¹¹C]methyl azide and its application in ¹¹C click-chemistry Ralf Schirrmacher, Younes Lakhrissi, Dean Jolly, Julian Goodstein, Philippe Lucas, Esther Schirrmacher *



The in situ synthesis of [¹¹C]methyl azide and its application in click-chemistry are reported.

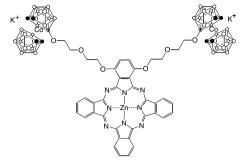
pp 4824-4827

Synthesis and properties of cobaltacarborane-functionalized Zn(II)-phthalocyanines

Hairong Li, Frank R. Fronczek, M. Graça H. Vicente

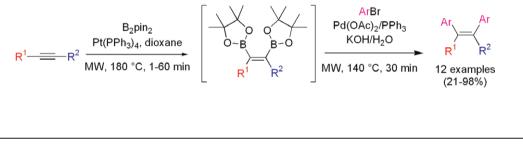
pp 4828-4830

The synthesis of two A3B-type Zn(II)-phthalocyanines containing either one or two cobaltacarborane residues is described. The X-ray structure of one key precursor is presented. The carboranyl-Pcs are highly soluble in polar solvents and might find application as dual sensitizers in PDT and BNCT.



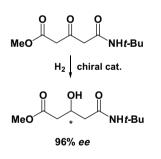
Microwave-assisted one-pot diboration/Suzuki cross-couplings. A rapid route to tetrasubstituted alkenes Hana Prokopcová, Jesús Ramírez, Elena Fernández, C. Oliver Kappe

pp 4831-4835



Highly enantioselective catalytic hydrogenation of a 5-amino-3,5-dioxopentanoic ester

Vasyl Andrushko^{*}, Natalia Andrushko, Gerd König, Armin Börner



A Ce(III)-catalyzed expeditious multicomponent stereoselective synthesis of 3-mercapto-2(1H)-pyridinones Lal Dhar S. Yadav *, Ritu Kapoor

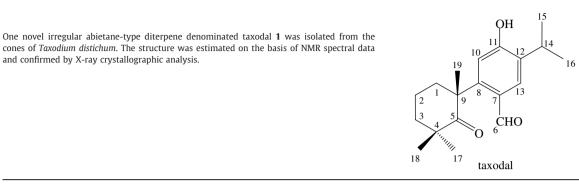
pp 4840-4844

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pp 4836-4839

Taxodal, a novel irregular abietane-type diterpene from the cones of Taxodium distichum

Norihisa Kusumoto *, Tetsuya Murayama, Yasushi Kawai, Tatsuya Ashitani, Koichi Ogiyama, Koetsu Takahashi



Copper mediated atom transfer radical cyclisations with AIBN

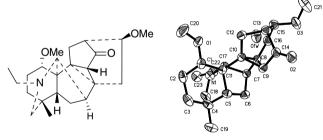
Andrew J. Clark *, Paul Wilson

Addition of AIBN allows either CuBr or CuBr₂/tripyridylamine (2) complexes to facilitate atom transfer radical cyclisations with a 30–300-fold decrease in amount of catalyst required compared to traditional reported reactions.

1 mol% Cu(2)Br 10 mol% AIBN reflux CH₂Cl₂, 1 h, 95%

Vilmoraconitine, a novel skeleton C₁₉-diterpenoid alkaloid from Aconitum vilmorinianum

Jiang Xiong, Ning-Hua Tan^{*}, Chang-Jiu Ji, Yang Lu, Ning-Bo Gong



A novel C₁₉-diterpenoid alkaloid vilmoraconitine A was isolated from *Aconitun vilmorinianum*. This is the first aconitine-type C₁₉-diterpenoid alkaloid with one three-membered ring at C-8, C-9, and C-10.

8

S*p*Tol

Synthesis of a metabolite of an anti-angiogenic lead candidate based on a ρ-glucosamine motif Latika Singh, Ann Lam, Rajaratnam Premraj, Joachim Seifert ^{*}

A rapid synthetic access to ACL 21269 was established in 12 steps starting from thioglycoside 9 utilizing synthons 8 and 6 to introduce the pharmacophores at positions 1 and 2.

12 steps

ACL 21269

pp 4845-4847







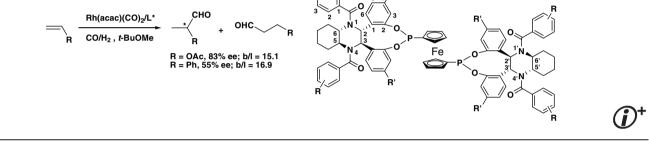
Tunable threading/dethreading efficiency of the pseudorotaxane by ether chain length

Junbo Li, Weidong Zhou, Yuliang Li^{*}, Huibiao Liu, Canbin Ouyang, Xiaodong Yin, Haiyan Zheng, Zicheng Zuo

pp 4857-4861

(n = 1, 2, 3)

Ferrocene-based bidentate phosphonite ligands for rhodium(I)-catalyzed enantioselective hydroformylation Xingao Peng, Zheng Wang, Chungu Xia ^{*}, Kuiling Ding ^{*}



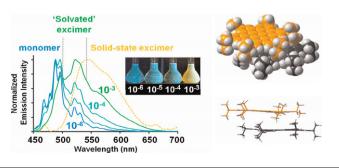
A chiral Mn(III) salen complex immobilized onto ionic liquid modified mesoporous silica for oxidative kinetic resolution of secondary alcohols

Suman Sahoo, Pradeep Kumar, F. Lefebvre, S. B. Halligudi *

$$\begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} \mathsf{R}^{\mathsf{H}} + \mathsf{Phl}(\mathsf{OAc})_{2} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{MnlLSBA} (0.12 \text{ mol } \%) \\ \text{additive } (4 \text{ mol } \%) \\ \hline \mathsf{RT}, 30 \text{ min} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{R}^{\mathsf{H}} \mathsf{R}^{\mathsf{H}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{R}^{\mathsf{H}} \mathsf{R}^{\mathsf{H}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} \textnormal{R}^{\mathsf{H}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} \mathsf{R}^{\mathsf{H}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} \textnormal{R}^{\mathsf{H}} \end{array}} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} \textnormal{R}^{\mathsf{H}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} \textnormal{R}^{\mathsf{H}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}} \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ } \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \mathsf{R}^{\mathsf{H}} } \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \end{array}} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ } \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ } \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ } \end{array} \xrightarrow{ \begin{array}{c} \mathsf{OH} \end{array}} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \end{array}} \xrightarrow{ \begin{array}{c} \mathsf{OH} \\ \end{array}} \xrightarrow{ \begin{array}{c} \mathsf{OH} \end{array}} \xrightarrow{$$

Synthesis and electronic properties of *iso*-alkyl substituted hexa-*peri*-hexabenzocoronenes (HBC's) from a versatile pp 4869–4872 new HBC synthon, *hexakis*(4-acetylphenyl)benzene

Vincent J. Chebny, Chengeto Gwengo, James R. Gardinier *, Rajendra Rathore *

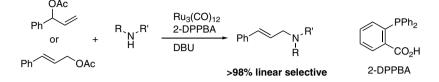




pp 4862-4864



Ruthenium-catalyzed linear selective allylic aminations of monosubstituted allyl acetates Motoi Kawatsura *, Fumio Ata, Takuya Hirakawa, Shuichi Hayase, Toshiyuki Itoh *



NaHSO₄·SiO₂

thiophene, reflux or anisole, 115 °C 3-9 h

X: MeO, Me, NO₂, CO₂Me, Br, OTs, CHO, COMe

ОН

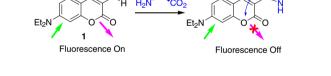
up to 95% yield

Selective debenzylation of aromatic benzyl ethers by silica-supported sodium hydrogen sulfate Linna Zhou, Wenjing Wang, Li Zuo *, Shanyan Yao, Wei Wang *, Wenhu Duan *

OBn

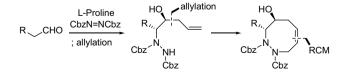
Highly selective fluorescent sensor for homocysteine and cysteine

Tae-Ki Kim, Dong-Nam Lee, Hae-Jo Kim



HS

Organocatalytic *α*-amination-allylation-RCM strategy: enantioselective synthesis of cyclic hydrazines Aram Lim, Jung Hoon Choi, Jinsung Tae *



4809



pp 4876-4878

pp 4879-4881

An efficient, one-pot synthesis of trithiocarbonates from the corresponding thiols using the Mitsunobu reagent Devdutt Chaturvedi ^{*}, Amit K. Chaturvedi, Nisha Mishra, Virendra Mishra pp 4886-4888

pp 4897-4900

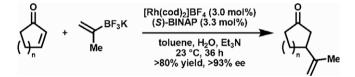


Microwave-assisted generation and reactivity of aza- and diazafulvenium methides: heterocycles via pericyclic pp 4889–4893 reactions

Maria I. L. Soares, Teresa M. V. D. Pinho e Melo *

CO₂Me MeQ₂C CO₂Me CO₂Me Dipolarophile [8π+2π] Cycloadditon $R^1 = R^2 = Ph$ via Electrocyclization $X = CR^2$ $R^1 = Me$ X = NMeO₂C CO₂Me [1,8]H Shift CO₂Me MeO Me

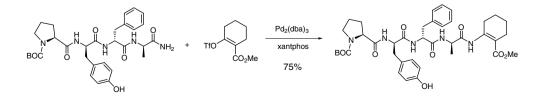
Enantioselective rhodium(I)-triethylamine catalyzed addition of potassium isopropenyl trifluoroborate to enones pp 4894–4896 Gojko Lalic, E. J. Corey *



A general process is reported for the highly enantioselective 1,4-addition of isopropenyl trifluoroborate to cyclic enones under catalysis by a chiral Rh(I) complex and triethylamine at room temperature.

The synthesis and conformational analysis of amino acid-tetrahydroanthranilic acid hybrids

Jason E. Imbriglio ^{*}, Daniel DiRocco, Subharekha Raghavan, Richard G. Ball, Nancy Tsou, Ralph T. Mosley, James R. Tata, Steven L. Colletti

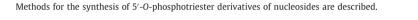


Synthesis and reactions of 2-chloro-1,3-bis(trimethylsilyloxy)-1,3-butadienes

Stefanie Reim, Muhammad Adeel, Ibrar Hussain, Mirza A. Yawer, Zafar Ahmed, Alexander Villinger, Peter Langer

Synthesis and anti-HIV activities of phosphate triester derivatives of 3'-fluoro-2',3'-dideoxythymidine and 3'-azido- pp 4905–4907 2',3'-dideoxythymidine

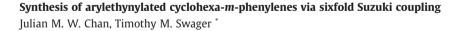
Hitesh K. Agarwal, Gustavo F. Doncel, Keykavous Parang *

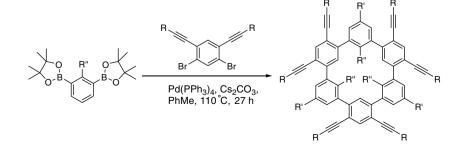


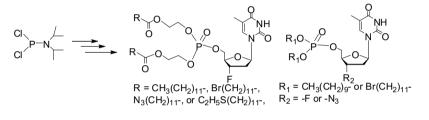
Gold-catalyzed intermolecular hydroalkoxylation of allenes; difference in mechanism between hydroalkoxylation pp 4908–4911 and hydroamination

R⁴OH

Naoko Nishina, Yoshinori Yamamoto *







HO

 $\begin{array}{c} 5 \text{ mol\% ClAuPPh}_3 \\ \underline{5 \text{ mol\% AgOTf}} \\ \hline \text{neat, 30 °C} \\ \end{array} \begin{array}{c} R^2 \\ R^3 \\ R^4 \\ \hline \end{array}$

4811

pp 4912-4914

 $(\mathbf{i})^{+}$

Sequential asymmetric homoallenylation of primary amines with a palladium catalyst Yasushi Imada ^{*}, Masayuki Nishida, Takeshi Naota ^{*}

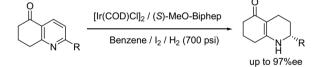
pp 4915-4917



Highly efficient fluorescent sensing for α -hydroxy acids with C₃-symmetric boronic acid-based receptors Wen-Zhi Xu, Zhi-Tang Huang, Qi-Yu Zheng * pp 4918-4921

Iridium-catalyzed asymmetric hydrogenation of pyridine derivatives, 7,8-dihydro-quinolin-5(6H)-ones Xiao-Bing Wang, Wei Zeng, Yong-Gui Zhou * pp 4922-4924

pp 4925-4928



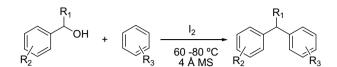
 $[Ir(COD)CI]_2/MeO-Biphep/I_2$ catalyst system is highly effective for asymmetric hydrogenation of pyridine derivatives, 7,8-dihydro-quinolin-5(6H)-ones, up to 97% ee was obtained.

PhI(OAc)₂/**I**₂ **induced aziridination of alkenes with TsNH**₂ **under mild conditions** Renhua Fan ^{*}, Dongming Pu, Jianhong Gan, Bing Wang ^{*}

 $\begin{array}{c} \mathsf{R}^2 \\ \mathsf{R}^1 \\ \mathsf{R}^1 \\ \mathsf{R}^3 \end{array} + \mathsf{TsNH}_2 \xrightarrow{\begin{array}{c} (3 \text{ equiv}) \mathsf{Phl}(\mathsf{OAc})_2 \\ (0.5 \text{ equiv}) \mathsf{l}_2 \\ (6 \text{ equiv}) \mathsf{t}\mathsf{BuOK} \\ \hline \mathsf{ClCH}_2\mathsf{CH}_2\mathsf{Cl} \\ 4 \mathring{A} \text{ MS}, 25 \ ^\circ\mathsf{C} \\ \mathbf{3} \\ 48 \text{ --} 88\% \text{ yield} \end{array}} \xrightarrow{\begin{array}{c} \mathsf{Ts} \\ \mathsf{R}^2 \\ \mathsf{R}^3 \\ \mathsf{R}^3 \\ \mathsf{R}^3 \\ \mathsf{R}^3 \end{array}}$

Molecular iodine-catalyzed benzylation of arenes with benzyl alcohols

Gaojun Sun, Zhiyong Wang

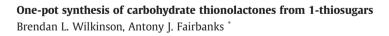


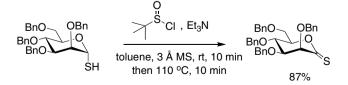
A molecular iodine-catalyzed benzylation was carried out under mild condition to afford the corresponding product in high yield and good regioselectivity.

Tuning the reduction of 9,11,20,22-tetraaza-tetrapyridopentacene (TATPP) Wen Guo, Sherine O. Obare ^{*}

Synthesis of hybrids between the alkaloids rutaecarpine and luotonins A, B

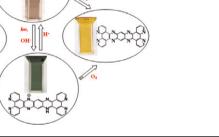
Máté Bubenyák^{*}, Melinda Pálfi, Mária Takács, Szabolcs Béni, Éva Szökő, Béla Noszál, József Kökösi





1a X=H 1b X=OH

high yield and good regioselectivity



pp 4933-4936

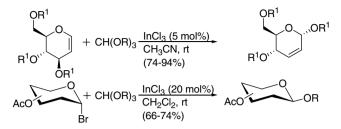


pp 4929-4932



Indium trichloride promoted stereoselective synthesis of O-glycosides from trialkyl orthoformates

Debaraj Mukherjee, Syed Khalid Yousuf, Subhash C. Taneja *



A novel, highly stereoselective O-glycosylation method, in which orthoesters have been used as acceptors with glycals and glycosylbromides in the presence of $lnCl_3$ to afford the corresponding O-glycopyranosides in 66–95% yield, is developed. Both perbenzyl and peracetyl glycals afford the corresponding 2,3-unsaturated O-glycosides with high α -selectivity.

Divergent synthesis and optoelectronic properties of oligodiacetylene building blocks Gregor S. Pilzak, Barend van Lagen, Ernst J. R. Sudhölter, Han Zuilhof *

pp 4949-4952

 $= \bigvee_{Bu}^{Pr} \xrightarrow{-S_{i}}_{Bu} \xrightarrow{Pr} \xrightarrow{-S_{i}}_{Bu} \xrightarrow{-S_{i}}_{Bu} \xrightarrow{-S_{i}}_{Bu} \xrightarrow{-S_{i}}_{Bu} \xrightarrow{-S_{i}}_{Bu} \xrightarrow{-S_{i}}_{Bu}$

A novel and divergent synthetic route to prepare oligodiacetylene building blocks via Sonogashira reactions under a reductive atmosphere is described.

Synthesis of a novel pyrrolo-[3,2-c]quinoline N-oxide by aza-Baylis–Hillman adduct of *o***-nitrobenzaldehyde** Evelina Colacino, Christophe André, Jean Martinez, Frédéric Lamaty * pp 4953-4955

Carbohydrates in asymmetric synthesis: enantioselective allylation of aldehydes

Helmoz R. Appelt * , Jane B. Limberger, Minéia Weber, Oscar E. D. Rodrigues, Julieta S. Oliveira, Diogo S. Lüdtke, Antonio L. Braga *

TsNH₂

Ô



pp 4956-4957

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Ν - Ο Θ pp 4944-4948

PEG-PS

H₂N

ArO₂S

. NH₂

-CO₂Bu^t

resin

Tullia Tedeschi, Stefano Sforza^{*}, Francesca Maffei, Roberto Corradini, Rosangela Marchelli

OH-

Convergent total synthesis of the racemic HIF-1 inhibitor laurenditerpenol

Michael E. Jung^{*}, G-Yoon J. Im

A Fmoc-based submonomeric strategy for the solid phase synthesis of optically pure chiral PNAs

HN

сно

Me

1a

The convergent total synthesis of the HIF-1 inhibitor laurenditerpenol 1a is reported. The key step is the Julia olefination-reduction process between the two readily available components, the sulfone 4 and the aldehyde 3.

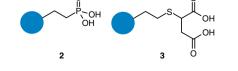
3

New synthesis of t-butyl arylpropiolates using diazo(trimethylsilyl)methylmagnesium bromide

 $\begin{array}{c} O \\ Ar \\ \hline \\ CO_2Bu^t \end{array} \xrightarrow{TMSC(MgBr)N_2} \begin{bmatrix} C \\ I \\ Ar \\ \hline \\ CO_2Bu^t \end{bmatrix}$

Yoshiyuki Hari, Koji Date, Ryosuke Kondo, Toyohiko Aoyama





pp 4958-4961



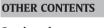
pp 4965-4967



Photochromic properties of tetrakis(2-methylthien-3-yl)ethene and its tetrakis(methylthio) derivative Hiroshi Ikeda *, Azusa Sakai, Akinori Kawabe, Hayato Namai, Kazuhiko Mizuno *

Development of the first and practical method for enantioselective synthesis of ¹⁰B-enriched *p*-borono-L-phenylalanine

Yoshihide Hattori, Tomoyuki Asano, Mitsunori Kirihata, Yoshihiro Yamaguchi, Tateaki Wakamiya *



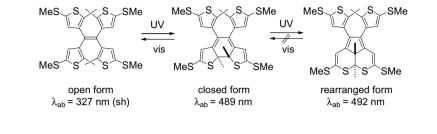
Corrigendum

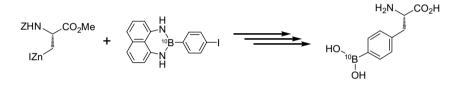
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*Corresponding author ()⁺ Supplementary data available via ScienceDirect

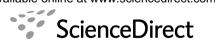
Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent 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[®]







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