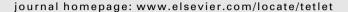


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Tetrahedron Letters Vol. 51, No. 37, 2010

Contents

COMMUNICATIONS

Halogen/lithium exchange in hydrocarbon media; basic and continuous reactor studies

D. W. Slocum*, Damir Kusmic, Jeffrey C. Raber, Thomas K. Reinscheld, Paul E. Whitley*

pp 4793-4796

Diversity-oriented synthesis of N-aryl-N-thiazolyl compounds

Adel Nefzi*, Sergey Arutyunyan

pp 4797-4800

$$R_3$$
 R_4
 R_3
 R_4
 R_3
 R_4
 R_3
 R_4
 R_5
 R_5
 R_5
 R_7
 R_1
 R_2
 R_4
 R_4
 R_5
 R_5
 R_7
 R_7
 R_7
 R_8
 R_9
 R_9

Mild and convenient one-pot synthesis of 1,3,4-oxadiazoles

pp 4801-4805

Paolo Stabile*, Alessandro Lamonica, Arianna Ribecai, Damiano Castoldi, Giuseppe Guercio, Ornella Curcuruto

Condensation of carboxylic acids with benzohydrazide in the presence of TBTU afforded diacylhydrazine intermediates that underwent a smooth TsCl-mediated cyclodehydration reaction to afford 2-phenyl-5-substituted-1,3,4-oxadiazoles in good to very good yields.



Short and straightforward total synthesis of Ammosamide B

Qian Wu, Xiaozhen Jiao, Liping Wang, Qiong Xiao, Xiaoyu Liu, Ping Xie*

pp 4806-4807

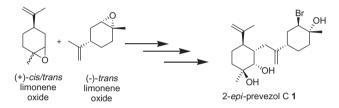
Ammosamide B



Towards the synthesis of prevezol C: total enantioselective synthesis of (-)-2-epi-prevezol C

Michael Blair, Craig M. Forsyth, Kellie L. Tuck*

pp 4808-4811



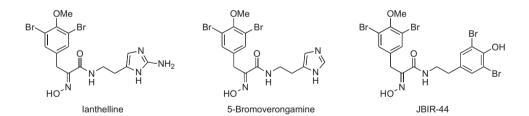
(-)-2-epi-Prevezol C was readily accessed from the chirons (-)- and (+)-limonene oxide in a total of nine steps and in 24% yield.



Total syntheses of the bromotyrosine-derived natural products ianthelline, 5-bromoverongamine and JBIR-44

pp 4812-4814

James W. Shearman, Rebecca M. Myers, Thomas M. Beale, James D. Brenton, Steven V. Ley*





Microwave-assisted N-debenzylation of amides with triflic acid

pp 4815-4818

Frederik Rombouts*, Dennis Franken, Carolina Martínez-Lamenca, Mirielle Braeken, Chiara Zavattaro, Jinsheng Chen, Andrés A. Trabanco*

$$\begin{array}{c|c} O \\ \hline R_1 & N \\ \hline N \\ R_2 & \hline \end{array} \qquad \begin{array}{c} \hline \text{TfOH (4 equiv), toluene} \\ \hline \mu W, 150 \ ^{\circ}\text{C}, 15 \ \text{min} \\ \hline \end{array} \qquad \begin{array}{c} O \\ \hline NH \\ R_2 \\ \end{array}$$

20 examples, 45-90%

A new and facile microwave-assisted protocol for the debenzylation of *N*-benzylamides with triflic acid has been developed. Both secondary and tertiary aliphatic or aromatic amides are obtained in moderate to good yields.

Efficient syntheses of 3H-azuleno[8,1-cd]pyridazines and their thermal and photochemical reactions

pp 4819-4822

Chi-Phi Wu*, Rammohan Devulapally, Tsung-Chieh Li, Chien-Kuo Ku*, Hsien-Chung Chung

Azulenopyridazines **6** were efficiently synthesized from ethyl 4-hydrazinylazulene-1-carboxylate (**2**) using *p*-toluenesulfonic acid-catalyzed imine formation and intramolecular cyclization followed by dehydrogenation with KOH/MeOH in a one-pot operation. Thermal and photochemical reactions of azulenopyridazines **6** afforded 1-vinylazulenes **7** in good yields.

Expedient synthesis of ialibinones A and B by manganese(III)-mediated oxidative free radical cyclisation

pp 4823-4826

Nigel S. Simpkins*, Michael D. Weller

lalibinones A and B were prepared in four steps from phloroglucinol by acylation under Friedel-Crafts conditions, double prenylation and dearomatising methylation, followed by oxidative free radical cyclisation using manganese(III) acetate.



HBF₄·OEt₂ as a mild and versatile reagent for the Ritter amidation of olefins: a facile synthesis of secondary amides B. V. Subba Reddy*, N. Sivasankar Reddy, Ch. Madan, J. S. Yadav

pp 4827-4829

+
$$CH_3CN$$
 $\frac{HBF_4 \cdot OEt_2}{7-8h,rt}$

Perfectly regioselective acylation of a cardiac glycoside, digitoxin, via catalytic amplification of the intrinsic reactivity

pp 4830-4832

Keisuke Yoshida, Takumi Furuta, Takeo Kawabata*

no over-acylation ~100% regioselectivity
$$R = 0$$
 $R = 0$ $R =$



Sulfate additives generate robust and highly active palladium catalysts for the cyanation of aryl chlorides Michael Shevlin

pp 4833-4836



Synthesis of a tetracyclic lactam system of Nuevamine by four-component reaction and free radical cyclization

pp 4837-4839

Angel Zamudio-Medina, Ma. Carmen García-González, Juan Padilla, Eduardo González-Zamora*

$$R^{1}$$
 H
 $H_{2}N$
 $gee^{p^{*}}$
 $gee^{p^$

A series of aza-analogs of nuevamine were prepared from readily available aldehyde, amine, and isonitrile compounds and maleic anhydride by combining a novel four-component reaction and free radical cyclization. The operational simplicity of this novel heterocycle synthesis process will be valuable for the synthesis of fused ring systems.

Metal-catalyzed phosphinyl ester forming reaction of alcohols and phenols with diphosphine disulfides and a dioxide

pp 4840-4842

Mieko Arisawa, Masahiko Yamaguchi*

ROH +
$$R'_2P - PR'_2$$
 Rh or Pd cat. $RO - PR'_2$ R = R' = aryl, alkyl; X = S, O



Direct conversion of thiols and disulfides into sulfonamides

Kiumars Bahrami*, Mohammad M. Khodaei*, Mehdi Soheilizad

R—SH or + R'—NH₂
$$\xrightarrow{\text{H}_2\text{O}_2\text{-ZrCl}_4}$$
 R—S—N—R

RS—SR $\xrightarrow{\text{CH}_3\text{CN, pyridine, rt}}$ R—S—N—R

R, R' = Alkyl, aryl



Pseudoceratinazole A: a novel bromotyrosine alkaloid from the Australian sponge Pseudoceratina sp.

pp 4847-4850

Yunjiang Feng, Rohan A. Davis, Melissa L. Sykes, Vicky M. Avery, David Camp, Ronald J. Quinn*



Bromophilic substitution/carbophilic substitution cascade reactions of α , α -dibromo-2-methoxyacetophenone with C-, N- and O-nucleophiles

pp 4851-4855

Jovana Tatar, Rade Marković, Milovan Stojanović, Marija Baranac-Stojanović*

Fimbrolide disulfanes: synthesis and crystal interactions

pp 4856-4858

 $Samuel\ K.\ Kutty,\ Mohan\ M.\ Bhadbhade,\ George\ Iskander,\ Roger\ Bishop,\ Renate\ Griffith,\ David\ StC.\ Black,\ Naresh\ Kumar^*$

$$R^3$$
 R^3
 R^4
 R^3
 R^4
 R^3
 R^4
 R^3
 R^4
 R^3
 R^4
 R^3

Intramolecular 1,3-dipolar cycloaddition as a route to triazolobenzodiazepines and pyrrolobenzodiazepines Christopher S. Chambers, Nilesh Patel, Karl Hemming*

pp 4859-4861

$$\begin{bmatrix}
R^1 \\
X - N \\
N_3
\end{bmatrix}$$

$$\begin{bmatrix}
R^1 \\
R^2
\end{bmatrix}$$

$$\begin{bmatrix}
R^1 \\
N_3
\end{bmatrix}$$

$$X = CO \text{ or } SO_2$$
; $R^1 = R^2 = H \text{ or } OMe/OBn$; $R^4 = Ph$, Pr

Treatment of N-(2-azidoaroyl)aminals with the Bestmann-Ohira reagent leads to triazolobenzodiazepines in high yields.

A green approach for the electrochemical synthesis of 4-morpholino-2-(arylsulfonyl)benzenamines

pp 4862-4865

D. Nematollahi*, R. Esmaili

K_2CO_3 -assisted one-pot sequential synthesis of 2-trifluoromethyl-6-difluoromethylpyridine-3,5-dicarboxylates under solvent-free conditions

pp 4866-4869

Li Shen, Song Cao*, Jingjing Wu, Hui Li, Jian Zhang, Mingxi Wu, Xuhong Qian*

A novel synthesis of 2-trifluoromethyl-6-difluoromethylpyridine-3,5-dicarboxylates via K_2CO_3 -assisted one-pot sequential Hantzsch reaction/dehydration/dehydrofluorination under solvent-free conditions was described.



Highly effective and enantioselective α -amination of aldehydes promoted by chiral proline amide—thiourea bifunctional catalysts

pp 4870-4873

Ji-Ya Fu, Qing-Chun Huang, Qiao-Wei Wang, Li-Xin Wang*, Xiao-Ying Xu*

A series of secondary amine–thiourea catalysts derived from L-proline and chiral diamine were prepared and first applied to highly enantioselective amination of unmodified aldehydes with various azodicarboxylates in excellent yields (up to 99%) and enantioselectivities (up to 99% ee) within a few minutes.



Total synthesis of pulverolide: revision of its structure

pp 4874-4876

Wanqiu Yang, Jikai Liu*, Hongbin Zhang*

1: Proposed structure of Pulverolide

2: Revised structure of Pulverolide



Synthesis, characterization, and catalytic activity of ionic liquids based on biosources

pp 4877-4881

P. Moriel, E. J. García-Suárez*, M. Martínez, A. B. García, M. A. Montes-Morán, V. Calvino-Casilda*, M. A. Bañares

R¹ = -H (Glycine), -CH₃ (Alanine), -CH₂-Ph (Phenylalanine), -CH(OH)CH₃ (Threonine), -CH₂-Ph (Phenylalanine), -CH₃ (NH) (Histidine)



Synthetic studies of mycalolide B, an actin-depolymerizing marine macrolide: construction of the tris-oxazole macrolactone using ring-closing metathesis

pp 4882-4885

Masaki Kita, Hidekazu Watanabe, Tomoya Ishitsuka, Yuzo Mogi, Hideo Kigoshi*

Tris-oxazole macrolactone 2, a key intermediate of mycalolide B, was synthesized through the use of ring-closing metathesis (RCM).

Pd₂(dba)₃-promoted synthesis of 3-N-substituted 4-aryl-1,2,3,6-tetrahydropyridine

pp 4886-4889

Meng-Yang Chang*, Chung-Han Lin, Yeh-Long Chen, Ru-Ting Hsu, Ching-Yao Chang

Low-valent zirconocene-mediated cyclization of $\gamma,\!\delta\text{-unsaturated}$ oximes

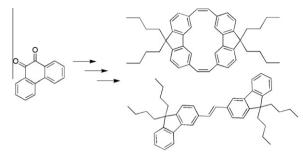
pp 4890-4893

Mitsuru Kitamura*, Yuki Shintaku, Daisuke Kudo, Tatsuo Okauchi

Synthesis and properties of cyclic ethylene-bridged 3,6-fluorene dimer and its linear analogues

pp 4894-4897

Yabin Song, Wei Xu*, Daoben Zhu*



Three oligomers of ethylene-bridged 3,6-fluorene were synthesized starting from phenanthrenequinone.



Metal-free oxidative C–C bond formation of active methylenic sp³ C–H bonds with benzylic sp³ C–H and allylic sp³ C–H bonds mediated by DDQ

pp 4898-4903

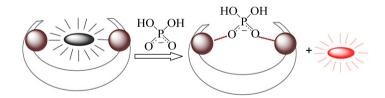
D. Ramesh, U. Ramulu, S. Rajaram, P. Prabhakar, Y. Venkateswarlu*



Fluorescent detection of phosphate anion by a highly selective chemosensor in water

pp 4904-4907

Musabbir A. Saeed, Douglas R. Powell, Md. Alamgir Hossain*





$Efficient\ synthesis\ of\ new\ 1-alkyl (aryl)-5-(3,3,3-trihalo-2-oxopropylidene)-1 H-pyrrol-2 (5 H)-ones$

pp 4908-4910

Alex F. C. Flores*, Lucas Pizzuti, Luciana A. Piovesan, Darlene C. Flores, Juliana L. Malavolta, Claudio M. P. Pereira

$$X_3C$$
 \xrightarrow{O}
 $\xrightarrow{Br_2}$
 X_3C
 \xrightarrow{O}
 \xrightarrow{R}
 \xrightarrow{R}
 \xrightarrow{O}
 \xrightarrow{R}
 \xrightarrow{R}
 \xrightarrow{O}
 \xrightarrow{R}
 \xrightarrow{R}
 \xrightarrow{O}
 \xrightarrow{O}

 $R = Pr, Bz, Ph, 4-BrC_6H_4$



Au-doped TiO₂ nanoparticles for selective photocatalytic synthesis of quinaldines from anilines in ethanol K. Selvam, M. Swaminathan*

pp 4911-4914

$$R$$
 + C_2H_5OH $\frac{h\nu(\lambda>300 \text{ nm})}{\text{Au-TiO}_2}$ R CH_3 Aniline quinaldine



Pentaerythritol fragmentation during conversion to a polyamine ligand—isolation of 1,1-bis(2'-aminoethylaminomethyl)-ethene

pp 4915-4917

Young Hoon Lee, Cindy Mora, Ji Young Choi, Jong Chul Byun, Jack M. Harrowfield, Pierre Thuéry, Yang Kim*

HO—Br
$$H_2N$$
 NH_2 H_2N NH_2 H_2N NH_2 H_2N NH_2

*Corresponding author

**D+ Supplementary data available via ScienceDirect

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