

Tetrahedron Letters Vol. 48, No. 51, 2007

Contents

COMMUNICATIONS

Synthesis of unsymmetrical and regio-defined 2,3,6-quinoxaline and 2,3,7-pyridopyrazine derivatives Dan Sherman, Joel Kawakami, Hai-Ying He, Farah Dhun, Raphael Rios, Hu Liu, Weitao Pan, Yong-Jiang Xu, Sang-phyo Hong, Melissa Arbour, Marc Labelle and Matthew A. J. Duncton*

pp 8943-8946

A set of unsymmetrical and regio-defined quinoxalines and pyridinopyrazines were prepared. Regioselectivity was established by the use of differential reactivity in an aromatic diamine precursor.

Hydroxylamine *O*-benzyl ether as an ammonia equivalent in the catalytic amination of aryl halides Robin B. Bedford* and Michael Betham

pp 8947-8950

ArBr +
$$H_2$$
NOBn $\xrightarrow{\text{Pd-P}^{\text{t}}\text{Bu}_3}$ Ar_2 NH or Ar_3 N

Hydroxylamine O-benzyl ether acts as an effective ammonium surrogate in the amination of aryl bromides.

Binaphthalene with substituted tetrathiafulvalene and trichloroquinone: a new example of metal ion-promoted electron transfer

pp 8951-8955

Hui Wu, Deqing Zhang* and Daoben Zhu*

Electron transfer between TTF and quinone units of a substituted binaphthalene was observed in the presence of metal ions (Pb^{2+} , Sc^{3+} , Zn^{2+} , and Ca^{2+}).



Total synthesis of (-)-2-epi-lentiginosine by use of chiral 5-hydroxy-1,5-dihydropyrrol-2-one as a building block

pp 8956-8959

Takayuki Muramatsu, Sho Yamashita, Yumiko Nakamura, Masahisa Suzuki, Nobuyuki Mase, Hidemi Yoda and Kunihiko Takabe*

Synthesis of C-2 methylene glycosides from C-2 propargyloxymethyl glycals exploiting the alkynophilicity of AuCl₃

pp 8960-8962

Sudhir Kashyap, Srinivasa Rao Vidadala and Srinivas Hotha*



Pd/Cu catalyzed homo-coupling reactions of 2-iodo-3-iodomethyl-1,4-diarylnaphthalene in the presence pp 8963-8966 of arvlacetylene

Shuyun Zhang, Minjuan Zhang and Min Shi*

Palladium/CuI catalyzed homo-coupling reaction of 2-iodo-3-iodomethyl-1,4-diarylnaphthalenes in the presence of arylacetylenes produced the corresponding sp³-sp³ homo-coupling products 1,2-bis(3-iodonaphthalen-2-yl)ethane in moderate to good yields.

Effective procedure for selective ammonolysis of monosubstituted oxiranes: application to E7389 synthesis

pp 8967-8971

Yosuke Kaburagi and Yoshito Kishi*



Synthesis of 1,4-dihydro-benzo[d][1,3]oxazin-2-ones from phthalides via an aminolysis-Hofmann rearrangement protocol

pp 8972-8975

Eliud Hernández, Jessica M. Vélez and Cornelis P. Vlaar*

A two-step procedure for the synthesis of benzoxazinones from phthalides was developed.



A novel approach to 3-acylated indolizine structures via iodine-mediated hydrative cyclization Ikyon Kim,* Sun Gi Kim, Ji Young Kim and Ge Hyeong Lee

pp 8976-8981

$$\begin{array}{c|c}
CO_2Et & CO_2Et \\
\hline
 & R_2 & I_2, rt \\
\hline
 & R_2 & R_1
\end{array}$$



Cesium carbonate promoted aerobic oxidation of arylacetamides: an efficient access to N-substituted α -keto amides

pp 8982-8986

Bingrui Song, Siyuan Wang, Caiyun Sun, Hongmei Deng and Bin Xu*

A novel cesium carbonate/tetra-n-butylammonium bromide promoted aerobic oxidation reaction to provide N-substituted α -keto amides from easily available arylacetamides was described.



Facile synthesis of 3-(2-furanyl)indoles via a multicomponent reaction

pp 8987-8989

Chang Sun, Shun-Jun Ji* and Yu Liu

Reversible sol-gel transition of a tris-urea gelator that responds to chemical stimuli

pp 8990-8993

Masamichi Yamanaka,* Tomohiko Nakamura, Tomoe Nakagawa and Hideyuki Itagaki

Anionic WS-TEMPO-mediatory electrooxidation of alcohols in water: halide-free oxidation directed towards a totally closed system

pp 8994-8997

Koichi Mitsudo, Hiroki Kumagai, Fumiko Takabatake, Jun Kubota and Hideo Tanaka*

A substituent-controlled general approach to access arylated pyran-2-ones and pyrano[3,4-c]pyran-1,8-diones

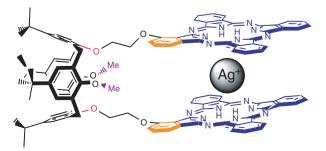
pp 8998-9002

Fateh V. Singh, Manish Dixit, Sumit Chaurasia, Resmi Raghunandan, Prakas R. Maulik and Atul Goel*

Preparation and sensor evaluation of a Pacman phthalocyanine

pp 9003-9007

Shane O'Malley, Benjamin Schazmann, Dermot Diamond and Kieran Nolan*



Synthesis of novel 7-substituted 5,6-dihydroindol-2-ones via a Suzuki–Miyaura cross-coupling strategy pp 9008–9011 Wai Kean Goh, David StC Black and Naresh Kumar*

Latoxanthin, a minor carotenoid isolated from the fruits of yellow paprika (Capsicum annuum var. lycopersiciforme flavum)

pp 9012-9014

Veronika Nagy, Attila Agócs,* Erika Turcsi, Péter Molnár, Zoltán Szabó and József Deli

Latoxanthin was isolated as a minor carotenoid from the ripe fruits of yellow tomato shaped paprika and identified as (all-E,3S,5R,6R,3'S,5'R,6'S)-5',6'-epoxy-5,6,5',6'-tetrahydro- β,β -carotene-3,5,6,3'-tetrol based on spectral data.

β-Cyclodextrin as an efficient catalyst for the one-pot synthesis of 1-aminophosphonic esters in water pp 9015–9017 Babak Kaboudin* and Mina Sorbiun

RCHO + R'NH₂ +H
$$\stackrel{O}{-P}$$
(OEt)₂ $\frac{\beta$ -CD H_2 O/reflux R $\stackrel{O}{-P}$ H_2 O/CEt $\stackrel{O}{-P}$ $\stackrel{$

Reaction of TPP-azodicarboxylate zwitterions and aryl aldehydes: unprecedented synthesis of acyl carbamates

pp 9018-9020

Vijay Nair,* Smitha C. Mathew, A. T. Biju and E. Suresh

$$RO_{2}C$$
 $PPh_{3} + N$
 $CO_{2}R$
 R^{3}
 R^{3}
 CHO
 THF, Ar, rt
 $(37-90\%)$
 (17 examples)
 R^{1}
 R^{2}
 R^{2}

An efficient synthesis of acyl carbamates from aryl aldehydes by the reaction of triphenylphosphine and dialkyl azoesters is described.

Formation of free radicals during the oxidation of *N*-methylhydroxyurea with dioxovanadium(V) ions pp 9021–9024 Tin Weitner, Erim Bešić, Ivan Kos, Mario Gabričević and Mladen Biruš*

$$H_2\ddot{N}$$
 \ddot{N}
 \ddot{O}
 $-2e^ +H_2\ddot{N}$
 \ddot{O}
 CH_3
 \ddot{O}
 CH_2
 CH_2
 CH_3

The transformation of free radicals derived from N-methylhydroxyurea on reaction with VO_2^+ is described.

Asymmetric reductions using the chiral boronic ester TarB–H: a practical and inexpensive procedure for pp 9025–9029 synthesizing chiral alcohols

Scott Eagon, Jinsoo Kim, Katie Yan, Dustin Haddenham and Bakthan Singaram*



Diversity oriented synthesis of benzoxazoles and benzothiazoles

pp 9030-9034

Julia H. Spatz,* Thorsten Bach, Michael Umkehrer, Julien Bardin, Günther Ross, Christoph Burdack and Jürgen Kolb

$$H_2N-R_1$$
 + R_2 R_3 + R_4 R_4 R_5 R_6 R_7 R_8 R

Chiral bis(oxazoline)-copper complex catalyzed Diels-Alder reaction in ionic liquids: remarkable reactivity and selectivity enhancement, and efficient recycling of the catalyst

pp 9035-9039

Chang-Eun Yeom, Hye Won Kim, Yong Je Shin and B. Moon Kim*

Aza-Michael reactions with vinyl sulfones and Amberlyst-15 as catalyst

pp 9040-9043

Ana P. Esteves,* Marília E. Silva, Lígia M. Rodrigues, Ana M. F. Oliveira-Campos and Radim Hrdina

$$\begin{array}{c} \begin{array}{c} R^1 \\ NH \\ R^2 \end{array} \\ \hline \begin{array}{c} R^2 \\ \hline Amberlyst-15 \end{array} \\ 1 \text{ R=Me} \\ \mathbf{2} \text{ R=} p\text{-}H_2 NC_6 H_4 \end{array}$$

Synthesis of rigid photoswitchable hemithioindigo ω-amino acids

pp 9044-9047

Torsten Schadendorf, Christian Hoppmann and Karola Rück-Braun*

NHPG
$$\lambda_1$$
 λ_2, Δ E -form λ_1 λ_2

The synthesis of novel N-Boc- and N-Fmoc protected hemithioindigo-based ω -amino acids is described. An approach to modulate the thermal stability of a hemithioindigo subunit is presented. Placing the amino-group in the stilbene part from the *para*- to *meta*-position leads to an increase of the half-life of the thermally labile E-form from 19 h to 47 h.



InCl₃ catalyzed C-C coupling of aryl alcohols and TosMIC

pp 9048-9050

Palakodety Radha Krishna,* E. Raja Sekhar and Y. Lakshmi Prapurna

The InCl₃ mediated C-C coupling reaction between aryl alcohols and TosMIC is reported.

[1.1] meta-Stilbenophanes as calixarene analogs: preparation, crystal structure, and cis-trans photoisomerization

pp 9051-9055

Tsuyoshi Sawada,* Minoru Morita, Kazufumi Chifuku, Yutaka Kuwahara, Hideto Shosenji, Makoto Takafuji and Hirotaka Ihara



Diels-Alder adducts from flavonoid

pp 9056-9058

Marie-France Laroche, Arnaud Marchand, Alain Duflos and Georges Massiot*

A quinoflavonoid was synthesized from commercially available products over three steps. The quinoflavonoid turned out to be an excellent dienophile in Diels-Alder reaction. Reactions were easily performed in dichloromethane, and after evaporation of the solvent, expected products were obtained in good yields.

Synthesis of N-alkylimidazolium salts and their utility as solvents in the Beckmann rearrangement

pp 9059-9062

Kandasamy Elango, Renganathan Srirambalaji and Ganapathi Anantharaman*

N Toluene Toluene H
$$\frac{M^{+}X^{-}}{CH_{2}Cl_{2}/CH_{3}OH}$$
 H $\frac{M^{+}X^{-}}{N}$ H $\frac{M^{+} = NH_{4}, K, Ag}{N}$ $\frac{M^{+} = NH_{4}, K, Ag}{X^{-} = BF_{4} (\mathbf{b}), M}$ $\frac{R}{1a, 2a}$ $\frac{R}{1b - d, 2b - d}$ $\frac{PF_{6} (\mathbf{c}), OTf (\mathbf{d})}{OTf (\mathbf{d})}$



*Corresponding author

*Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com



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