

Tetrahedron Letters Vol. 47, No. 35, 2006

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COMMUNICATIONS

 $Palladium\text{-}catalyzed\ reactions\ for\ the\ synthesis\ of\ chlorins\ and\ 5, 10\text{-}porphodimethenes}$

pp 6169-6172

Natalia N. Sergeeva and Mathias O. Senge*

Dual Si-H effects in platinum-catalyzed silane reduction of carboxamides leading to a practical synthetic process of tertiary-amines involving self-encapsulation of the catalyst species into the insoluble silicone resin formed

pp 6173-6177

Shiori Hanada, Yukihiro Motoyama and Hideo Nagashima*

(i)+

An efficient protocol for solid phase aminothiazole synthesis

pp 6179-6182

Kumaran G. Sreejalekshmi, Satyabhama K. C. Devi and Kallikat N. Rajasekharan*

$$R^{1}HN \xrightarrow{N} H \xrightarrow{NH} NHR^{1} \xrightarrow{R^{2}COCH_{2}Br} R^{2}COCH_{2}Br$$

A solid phase synthesis of 2,4-diamino-5-ketothiazoles that incorporates thiocarbamoylamidine transfer onto an amino polymer and traceless cleavage of the product is reported.

The first total synthesis and structural determination of lagunamycin

pp 6183-6186

Seijiro Hosokawa,* Shoichi Kuroda, Keisuke Imamura and Kuniaki Tatsuta*

Synthesis of 28-19F-amphotericin B methyl ester

pp 6187-6191

Hiroshi Tsuchikawa, Naohiro Matsushita, Nobuaki Matsumori, Michio Murata and Tohru Oishi*

Synthesis and photo DNA-damaging activities of fluoroquinolone analogues

pp 6193-6196

Ichiro Suzuki,* Mayuko Takahashi, Akira Shigenaga, Hisao Nemoto and Kei Takeda

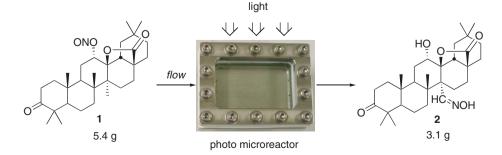
 $\begin{array}{lll} \textbf{1a} \colon R = \mathsf{OH}; \ \textbf{1b} \colon R = \mathsf{OMe}; \ \textbf{1c} \colon R = \mathsf{NMe}_2; \\ \textbf{1d} \colon R = \mathsf{NHMe}; \ \textbf{1e} \colon R = \mathsf{NH}_2; \\ \textbf{1f} \colon R = \mathsf{NHCOMe}; \ \textbf{1g} \colon R = \mathsf{H}; \ \textbf{1h} \colon R = \mathsf{Me} \end{array}$

Fluoroquinolone derivatives were synthesized and their DNA photocleaving activities were assayed.

The Barton reaction using a microreactor and black light. Continuous-flow synthesis of a key steroid intermediate for an endothelin receptor antagonist

pp 6197-6200

Atsushi Sugimoto, Yukihito Sumino, Makoto Takagi, Takahide Fukuyama and Ilhyong Ryu*



Efficient synthesis of 2-imidazol-2-ylacetates

pp 6201-6204

Jae Du Ha,* Su Jung Lee, So Yeun Nam, Seung Kyu Kang, Seung Yoon Cho, Jin Hee Ahn and Joong-Kwon Choi

One-pot synthesis of *meso*-tris-aryl-substituted *N*-21-methyl- and *N*-21-benzyl-corroles Beata Koszarna and Daniel T. Gryko*

pp 6205-6207

A one-pot, versatile, regioselective transformation of N-alkylpyroles into N-alkylcorroles is presented.



Synthesis of N-substituted 2-arylpyrroles by the reaction of $(\eta^2\text{-imine})$ titanium complexes with 3,3-diethoxypropyne

pp 6209-6212

Mutsumi Ohkubo, Daisuke Hayashi, Daisuke Oikawa, Kouki Fukuhara, Sentaro Okamoto* and Fumie Sato

$$Ar = \begin{pmatrix} R & Ti(O-i-Pr)_4 \\ 2i-PrMgCl \\ then & OEt \\ \hline \\ in one pot \end{pmatrix}$$

Friedel-Crafts alkylation of indoles with epoxides catalyzed by nanocrystalline titanium(IV) oxide M. Lakshmi Kantam,* Soumi Laha, Jagjit Yadav and B. Sreedhar

pp 6213-6216

Pentafluorophenyltrifluorosilane in the silicon Mannich reaction

pp 6217-6219

Alexander D. Dilman,* Vladimir V. Gorokhov, Pavel A. Belyakov, Marina I. Struchkova and Vladimir A. Tartakovsky

$$\begin{array}{c|c}
R^2 & R^2 \\
O & SiMe_3 \\
\hline
C_6F_5SiF_3
\end{array}$$
AcOLi, DMF
$$\begin{array}{c|c}
R^2 & R^2 \\
\hline
2 & h, r.t.
\end{array}$$

A three-component coupling reaction affording α -C₆F₅-substituted amines has been developed.



pp 6221-6224

Synthesis of novel dinucleosides via tandem cross-metathesis and ring-closing metathesis

S. Zhong, M. Mondon, S. Pilard and C. Len*

Development of a tandem cyclization mediated by samarium(II) iodide: sequential intramolecular conjugate addition/nucleophilic acyl substitution

pp 6225-6227

David J. St. Jean, Jr.,* Edward P. Cheng and Eric A. Bercot

The development of a one-pot tandem intramolecular conjugate addition/nucleophilic acyl substitution using samarium(II) iodide is reported. The reaction relies on the reagent's unique ability to mediate both radical and anionic pathways, which are likely integral to the mechanism of this transformation. The tricyclic hemiacetal product was formed in good yield, with excellent diastereoselectivity, and its structure was verified by X-ray crystallographic analysis.



Latent fluorophores based on a Mannich cyclisation trigger

pp 6229-6233

Guillaume Clavé, Aude Bernardin, Marc Massonneau, Pierre-Yves Renard* and Anthony Romieu*



New and efficient RCM in pyridinic series: synthesis of 2H-dihydropyrano- or 2,3H-dihydrooxepino[3,2-b]pyridines

pp 6235-6238

Estelle Banaszak, Corinne Comoy and Yves Fort*

An unexpected aromatization during the N-alkylation reaction of 3,4-dihydro-1*H*-pyrazole derivatives: pp 6239–6242 insight into the reaction mechanism

Luisa C. López-Cara, M. Encarnación Camacho, María D. Carrión, Miguel A. Gallo,

Antonio Espinosa and Antonio Entrena*

Convergent stereocontrolled synthesis of substituted *exo*-glycals by Stille cross-coupling of halo-*exo*-glycals and stannanes

pp 6243-6246

Ana M. Gómez,* Aitor Barrio, Iñigo Amurrio, Serafín Valverde, Slawomir Jarosz and J. Cristóbal López*

Oxalic acid catalyzed reaction between dithioacetals and acetals. A simple and eco-friendly method for a conversion of a dithioacetal to a carbonyl compound

pp 6247-6250

Hideyoshi Miyake,* Yuichi Nakao and Mitsuru Sasaki

$$\begin{array}{c}
R^{1} \\
S - R \\
S - R
\end{array}$$

$$\begin{array}{c}
CH_{2}(OMe)_{2} \text{ or } CH_{2}(OEt)_{2} \\
\hline
(COOH)_{2}/CH_{3}NO_{2}, 60 ^{\circ}C
\end{array}$$

$$\begin{array}{c}
R^{1} \\
O + CH_{2}(SR)
\end{array}$$

A new simple method for conversion of dithioacetals to carbonyl compounds.

Novel stereoselective synthesis of enantiopure (+)-N-Boc-norpandamarilactonine-A, the intermediate for pandamarilactonines

pp 6251-6254

Toshio Honda,* Makoto Ushiwata and Hirotake Mizutani

A novel synthesis of enantiopure N-Boc-norpandamarilactonine-A was established by employing a double ring-closing metathesis of a tetraene derivative, as a key step.

Iron-catalyzed allylation of ketones

pp 6255-6258

Muriel Durandetti* and Jacques Périchon

Daphnilongerine, an unprecedented fused pentacyclic ring system alkaloid from Daphniphyllum longeracemosum Rosenth.

pp 6259-6262

Lin Li, Hong-ping He, Ying-tong Di, Suo Gao and Xiao-jiang Hao*

An unusual yuzurine-type alkaloid daphnilongerine (1), with an unprecedented fused pentacyclic skeleton in addition to seven known ones, was isolated from the fruits of *Daphniphyllum longeracemosum*.



Radical cyclizations in 1,4-dimethylpiperazine

pp 6263-6266

Hiroyuki Ishibashi,* Shigeki Haruki, Masahiko Uchiyama, Osamu Tamura and Jun-ichi Matsuo

N-Allylic or *N*-vinylic α,α,α -trichloroacetamides, upon heating in 1,4-dimethylpiperazine, undergo radical cyclization to give the corresponding γ -lactams.



Reactivity in the upper limits of the reduction potential in solution: arene dianion intermolecular carbolithiation of alkenes

pp 6267-6271

Cristóbal Melero, Albert Guijarro and Miguel Yus*

A mild access to γ - or δ -alkylidene lactones through gold catalysis

pp 6273-6276

Hassina Harkat, Jean-Marc Weibel and Patrick Pale*

 ω -Acetylenic acids are efficiently and stereoselectively converted to the corresponding alkylidene lactones in the presence of catalytic amounts of AuCl and K_2CO_3 .

Unnatural multidentate metal ligating α -amino acids

pp 6277-6280

Christopher M. Micklitsch, Qian Yu and Joel P. Schneider*

A family of penta- and hexadentate metal ligating α -amino acids, suitably protected for Fmoc solid-phase chemistry, has been prepared. These residues incorporate the mono-amides of ethanolaminetriacetic acid, ethylenediaminetriacetic acid, and ethylenediaminetetraacetic acid as side chains. Side chains are tethered varying distances (n) from the $C\alpha$ -carbon to allow metal binding events to occur at distinct distances from the peptide backbone. These residues are designed to allow the facile installation of metal chelates along a peptide backbone.



Microwave-assisted cleavage of phosphate, phosphonate and phosphoramide esters

pp 6281-6284

G. D. Kishore Kumar, David Saenz, G. L. Lokesh and Amarnath Natarajan*

$$\begin{array}{cccc} O & TMSBr & O \\ X-P-OEt & \longrightarrow & X-P-OH \\ R & OEt & Microwave & R & OH \end{array}$$



Oxidation products of 2-acyl-4,5-dihydrofurans

pp 6285-6287

Jeremy Robertson,* Andrew J. Tyrrell and Sarah Skerratt

2-Benzoyl-4,5-dihydrofuran undergoes rapid oxidation on standing or during chromatography to afford 2-benzoylbutyrolactone and a tricyclic bisacetal as the major products.

One-pot synthesis of aldehydes or ketones from carboxylic acids via in situ generation of Weinreb amides using the Deoxo-Fluor reagent

pp 6289-6292

Cyrous O. Kangani,* David E. Kelley and Billy W. Day



Reactions of Weinreb amides: formation of aldehydes by Wittig reactions

pp 6293-6295

Kevin Hisler, Regis Tripoli and John A. Murphy*



New rhodium(II) catalyzed synthesis of 1,4-dicarbonyl compounds from α -diazo ketones using vinyl ethers as two-carbon synthons

pp 6297–6300

Sengodagounder Muthusamy* and Pandurangan Srinivasan

The $Rh_2(OAc)_4$ catalyzed reaction of α -diazo ketones and vinyl ethers afforded 1,4-dicarbonyl compounds. The scope of this protocol has been demonstrated with the synthesis of a seratonin antagonist.

$$\begin{array}{c} O \\ N_2 \\ R^1 \\ R^2 \\ \end{array} + \begin{array}{c} O \\ R^3 \\ \end{array} \\ \begin{array}{c} O \\ Rh_2(OAc)_4 \\ \hline \\ CICH_2CH_2CI \\ \end{array} \\ \begin{array}{c} O \\ R^3 \\ \hline \\ R^2 \\ \end{array} \\ \begin{array}{c} O \\ R^3 \\ \end{array} \\ \begin{array}{c} R^3 \\ R^4 \\ \end{array} \\ \begin{array}{c} O \\ R^4 \\ \end{array} \\ \begin{array}{c} R^3 \\ \end{array} \\ \begin{array}{c} O \\ R^4 \\ \end{array} \\ \begin{array}{$$

Synthesis and oxidative reactivity of new chiral hypervalent iodine(V) reagents based on (S)-proline Uladzimir Ladziata, Jeffrey Carlson and Viktor V. Zhdankin*

pp 6301-6304

Synthesis and evaluation of chiral N-(2-iodyl-phenyl)-acylamides (NIPAs) were performed. Preliminary results indicate that NIPA scaffold is a promising structure for further elaboration of chiral iodine(V) oxidants.

Highly efficient RuCl₃-catalyzed disproportionation of (diacetoxyiodo)benzene to iodylbenzene and iodobenzene; leading to the efficient oxidation of alcohols to carbonyl compounds

pp 6305-6308

Mekhman S. Yusubov, Ki-Whan Chi, Joo Yeon Park, Rashad Karimov and Viktor V. Zhdankin*

Fluorous dimethylthiocarbamate (FDMTC) protecting groups for alcohols

pp 6309-6314

Masaru Kojima, Yutaka Nakamura, Takuma Ishikawa and Seiji Takeuchi*

Regioselective synthesis of polysubstituted phenol derivatives from Baylis-Hillman adducts via [3+3] pp 6315-6319 annulation strategy

Da Yeon Park, Seong Jin Kim, Taek Hyeon Kim and Jae Nyoung Kim*

OAc
$$R_1$$
One-pot
$$K_2CO_3, DMF$$

$$R_2$$
One-pot
$$R_2$$
OH

R₁ = Me, Et; R₂ = COOMe, COOEt, COPh

Synthesis of α-chloroamides in water

pp 6321-6324

Andrew J. Harte and Thorfinnur Gunnlaugsson*

The synthesis of mono- and bis- α -chloroamides from chloroacetyl chloride and mono or bis-amines in water in the presence of base is described. These were formed in good yields after simple filtration of the desired products. This method was particularly effective for the formation of functionalized aromatic α -chloroamides.



*Corresponding author

**D+ Supplementary data available via ScienceDirect



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