

Tetrahedron Letters Vol. 47, No. 18, 2006

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COMMUNICATIONS

Spirobicyclic diamines 1: synthesis of proline-derived spirolactams via thermal intramolecular ester aminolysis

pp 3005-3008

Fintan Kelleher* and Sinead Kelly

Reductive amination of primary amines with a proline-derived aldehyde followed by thermal cyclisation in refluxing toluene gave spirolactams in good yields.

A novel solid-phase linker strategy for the side-chain anchoring of arginine: an expeditious route to arginine 7-amido-4-methylcoumarins

pp 3009-3012

Joerg Beythien, Sophie Barthélémy, Peter Schneeberger and Peter D. White*

'O-Acyl isopeptide method' for the efficient synthesis of difficult sequence-containing peptides: use of 'O-acyl isodipeptide unit'

pp 3013-3017

Youhei Sohma, Atsuhiko Taniguchi, Mariusz Skwarczynski, Taku Yoshiya, Fukue Fukao, Tooru Kimura, Yoshio Hayashi and Yoshiaki Kiso*

'O-Acyl isodipeptide unit' was used for the peptide synthesis based on the 'O-acyl isopeptide method'.

R₁ = H; Boc-Ser(Fmoc-Xaa)-OH R₁ = CH₃; Boc-Thr(Fmoc-Xaa)-OH "*O*-acyl isodipeptide unit"

Synthesis of novel indole based cyclophanes and cylindrical cyclophanes by tandem alkylation methodology using NaH

pp 3019-3022

Perumal Rajakumar* and Merikapudi Gayatri Swaroop

A copper-free Sonogashira reaction using a Pd/MgLa mixed oxide

pp 3023-3026

Agnieszka Cwik, Zoltán Hell* and François Figueras

A new Pd/MgLa mixed oxide is found to be an efficient catalyst for the Sonogashira reaction of aryl iodides, bromides and even activated chlorides in the absence of a copper salt.

A short and efficient synthesis of (±)-β-cuparenone

pp 3027-3029

Mukund G. Kulkarni,* Saryu I. Davawala, Mahadev P. Shinde, Attrimuni P. Dhondge, Ajit S. Borhade, Sanjay W. Chavhan and Dnyaneshwar D. Gaikwad

A Wittig olefination–Claisen rearrangement strategy has been applied to achieve one of the shortest and efficient synthesis of (\pm) - β -cuparenone.

Ionic liquid promoted one-pot synthesis of 3-aminoimidazo[1,2-a]pyridines

pp 3031-3034

Ahmad Shaabani,* Ebrahim Soleimani and Ali Maleki

$$R^{1} \xrightarrow{H} \xrightarrow{R^{2}} N \xrightarrow{NH_{2}} R^{3} \xrightarrow{N} = \overline{C} \xrightarrow{\text{[bmim]Br}} R^{2} \xrightarrow{N} R$$

β-Tosylethylazide: a useful synthon for preparation of N-protected 1,2,3-triazoles via click chemistry

pp 3035–3038

Amy H. Yap and Steven M. Weinreb*

Organocatalytic oxy-Michael addition of alcohols to $\alpha,\!\beta\text{-unsaturated}$ aldehydes

pp 3039-3041

Taichi Kano, Youhei Tanaka and Keiji Maruoka*

$$R^1$$
 CHO $\frac{5 \text{ mol}\% \ \mathbf{3}}{R^2 \text{OH/H}_2 \text{O}}$ R^1 CHO $\frac{5 \text{ mol}\% \ \mathbf{3}}{\text{OR}^2}$ CHO $\frac{5 \text{ mol}\% \ \mathbf{3}}{\text{NHMe}}$ $\frac{1}{\text{NHSO}_2 \text{CF}_3}$

Palladium catalyzed coupling reactions of cationic porphyrins with organoboranes (Suzuki) and alkenes (Heck)

pp 3043-3046

Jean-Philipe Tremblay-Morin, Hasrat Ali and Johan E. van Lier*

A novel and efficient ionic liquid supported synthesis of oligosaccharides

pp 3047-3050

Jian-Ying Huang, Ming Lei and Yan-Guang Wang*

A novel ionic-liquid-support synthesis of oligosaccharides with a general protocol of coupling and purification is described.

Convenient removal of N-tert-butyl from amides with scandium triflate

pp 3051-3053

A. K. Mahalingam, Xiongyu Wu and Mathias Alterman*

$$\begin{array}{c|c} O & & & O \\ \hline R & N & & & CH_3NO_2 \end{array} \longrightarrow \begin{array}{c} O & & \\ R & & NH_2 \end{array}$$



Cu(I)-catalyzed one-pot synthesis of 1,4-disubstituted 1,2,3-triazoles via nucleophilic displacement and 1,3-dipolar cycloaddition

pp 3055-3058

B. Sreedhar,* P. Surendra Reddy and N. Sailendra Kumar

Three-component coupling of alkynes, Baylis-Hillman adducts and sodium azide: a new synthesis of substituted triazoles

pp 3059-3063

S. Chandrasekhar,* Debjit Basu and Ch. Rambabu

A three-component coupling was used to prepare a series of 1,4-disubstituted-1,2,3-triazoles from the corresponding acetylated Baylis–Hillman adducts, sodium azide and terminal alkynes. This one-pot reaction further increases the efficacy of 'Click' synthesis and diversifies the preparation of multi-functional 1,4-disubstituted-1,2,3-triazoles.

Convenient preparation of tert-butyl esters

pp 3065-3066

Douglass F. Taber,* David A. Gerstenhaber and Xia Zhao

Crassiflorone, a new naphthoquinone from Diospyros crassiflora (Hien)

pp 3067-3070

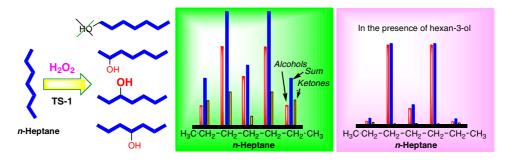
Jean Gustave Tangmouo, Alain Lannang Meli, Justin Komguem, Victor Kuete, Fernande Ngninzeko Ngounou, David Lontsi,* Veronique Penlap Beng, M. Iqbal Choudhary and Beban Luc Sondengam

A new naphthoquinone, crassiflorone 1 was isolated from the stem bark of *Diospyros crassiflora* together with two known naphthoquinones, three pentacyclic triterpenoids and one coumarin.

Regioselective alkane oxygenation with H₂O₂ catalyzed by titanosilicalite TS-1

pp 3071-3075

Georgiy B. Shul'pin,* Tawan Sooknoi, Vladimir B. Romakh, Georg Süss-Fink and Lidia S. Shul'pina



An efficient and improved synthesis of 1,5-diketones: versatile conjugate addition of nucleophiles to α,β -unsaturated enones and alkynones

pp 3077-3079

Ravi Shankar, Ashok K. Jha, Uma Sharan Singh and K. Hajela*

A stereodivergent approach to 1-deoxynojirimycin, 1-deoxygalactonojirimycin and 1-deoxymannojirimycin derivatives

pp 3081-3084

Charlotte Boucheron, Philippe Compain* and Olivier R. Martin*

Enzymatic formation of pyrrole-containing novel cyclic polyprenoids by bacterial squalene:hopene cyclase

pp 3085-3089

Hideya Tanaka, Hisashi Noma, Hiroshi Noguchi and Ikuro Abe*

2-(Farnesyldimethylallyl)pyrrole was enzymatically converted to a 10:1 mixture of a tricyclic and a bicyclic unnatural novel polyprenoids by recombinant squalene:hopene cyclase from *Alicyclobacillus acidocaldarius*.



A highly regioselective synthesis of 2-aryl-6-chlorobenzothiazoles employing microwave-promoted Suzuki-Miyaura coupling reaction

pp 3091-3094

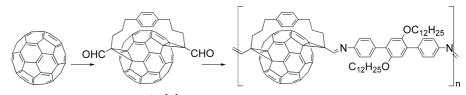
Yeon Heo, Young Seob Song, Bum Tae Kim and Jung-Nyoung Heo*

$$\begin{array}{c} \text{CI} \\ \text{S} \\ \text{N} \\ \text{CI} \\ \begin{array}{c} \text{Pd}(\text{PPh}_3)_4 \\ \text{Na}_2\text{CO}_3 \\ \text{dioxane/H}_2\text{O} \\ \end{array} \\ \text{Maveve, 150 °C, 5 min} \\ \end{array} \\ \begin{array}{c} \text{CI} \\ \text{S} \\ \text{NA} \\ \text{NA} \\ \text{Iigand 5} \\ \text{NaOt-Bu} \\ \text{toluene} \\ \text{pwave, 150 °C, 10 min} \\ \end{array} \\ \begin{array}{c} \text{S} \\ \text{NA} \\$$

Regio- and diastereo-controlled synthesis of bis(formylmethano)[60]fullerenes and their application to the formation of [60]fullerene pearl-necklace polyimines

pp 3095-3098

Hiroshi Ito, Yasuhiro Ishida and Kazuhiko Saigo*



equatorial-Bis(formylmethano)C₆₀

C₆₀ Pearl-necklace Polyimine



A novel 1-tert-butoxy-2-tert-butoxycarbonyl-1,2-dihydroisoquinoline (BBDI)-catalyzed esterification of N-protected amino acids with nearly equimolar amounts of alcohols in the presence of Boc_2O

pp 3099-3102

Yukako Saito, Tomokazu Watanabe and Hiroki Takahata*

Anthracene derivatives bearing thiourea group as fluoride selective fluorescent and colorimetric chemosensors

pp 3103-3106

Eun Jin Jun, K. M. K. Swamy, Hyunjin Bang, Sung-Jin Kim and Juyoung Yoon*





An efficient method for the esterification of phosphonic and phosphoric acids using silica chloride Manisha Sathe, Arvind K. Gupta and M. P. Kaushik*

pp 3107-3109

R = CH₃,
$$C_2H_5$$
, n - C_3H_7 , i - C_3H_7
R' = CH₃, C_2H_5 , n - C_3H_7 , i - C_3H_7 , n - C_4H_9 , C_6H_{11} , C_6H_8

$$C_6H_5O$$
 O SiO₂-Cl (1 mmol) C_6H_5O O P OR C_6H_5O P OR C_6H_5O OR

$$R' = CH_3, C_2H_5, n-C_3H_7, i-C_3H_7, n-C_4H_9, C_6H_{11}$$

A solvent-free organic synthesis from solid-state reactants through autogenous fusion due to formation of molecular complexes and increasing alcohol nucleophilicity

pp 3111-3114

Ryota Hiraoka, Hiroto Watanabe and Mamoru Senna*



Asymmetric epoxidation catalyzed by novel azacrown ether-type chiral quaternary ammonium salts under phase-transfer catalytic conditions

pp 3115-3118

Kazushige Hori,* Mina Tamura, Keita Tani, Nagatoshi Nishiwaki, Masahiro Ariga and Yasuo Tohda

Asymmetric epoxidation of (*E*)-chalcone with alkaline hydrogen peroxide by novel chiral phase-transfer catalysts (chiral PTCs) with quaternary ammonium salts of azacrown ether proceeded in high yield and good enantioselectivity.



New self-assembled dinuclear Pd(II) and Pt(II) metallomacrocycles of a 4,4'-bipyridin-1-ium ligand with an inner cavity

pp 3119-3122

Marcos Chas, Carlos Platas-Iglesias, Carlos Peinador* and José Mª Quintela*



Evidence of the central tetrathiafulvalene bond opening by copper(II) salts. In situ generation of 2,3-bis(2'-cyanoethylchalcogeno)-7,8-benzo-1,4,6,9-tetrathia-10-ceto spiro[4,5]decane

pp 3123-3125

Louiza Boudiba, Lahcène Ouahab* and Abdelkrim Gouasmia

Molecular iodine-catalyzed one-pot synthesis of substituted quinolines from imines and aldehydes Xu-Feng Lin, Sun-Liang Cui and Yan-Guang Wang*

pp 3127-3130

$$R^{1}$$
 R^{2} R^{2} R^{3} R^{2} R^{3} R^{2} R^{3} R^{3} R^{2} R^{2} R^{2}

Synthesis and Diels-Alder reaction of a sapphyrin derivative

pp 3131-3134

João P. C. Tomé, Dong-Gyu Cho, Jonathan L. Sessler,* Maria G. P. M. S. Neves, Augusto C. Tomé, Artur M. S. Silva and José A. S. Cavaleiro*



A one-pot synthesis and self-assembled superstructure of organic salts of a 1,5-benzodiazepine derivative

pp 3135-3138

Harjyoti Thakuria, Avijit Pramanik, Ballav Moni Borah and Gopal Das*

$$\begin{array}{c} NH_2 \\ +2 \\ NH_2 \end{array} \\ \begin{array}{c} Organic \ acid \\ RT, \ Grinding \end{array}$$

$$2[1H]^*[Trimesic \ acid]^{-2} \\ [1H]^*[Picric \ acid]^{-1} \\ \end{array}$$

An efficient one-pot synthesis and organic salt superstructure of a 1,5-benzodiazepine derivative is described.

Highly regio- and stereocontrolled synthesis of $\beta\text{-substituted}$ $\alpha\text{-tributylstannyl}$ enamides

pp 3139-3143

David Buissonneaud and Jean-Christophe Cintrat*

Organocatalytic enantioselective Michael addition of thioacetic acid to enones

pp 3145-3148

Hao Li, Liansuo Zu, Jian Wang and Wei Wang*



Anions from dihydro substituted ethyl benzoates and quinoline. New hydrogen donors for tin-free radical chemistry

pp 3149-3152

Javier I. Bardagí, Santiago E. Vaillard and Roberto A. Rossi*



Mitsunobu reactions of nucleoside analogs using triisopropyl phosphite-DIAD

pp 3153-3156

Eduardo A. Véliz and Peter A. Beal*

A new route to extended tetrathiafulvalenes from α-acetyl ketene-S,S-acetals

pp 3157-3159

Yu-Long Zhao,* Wei Zhang, Ji-Qing Zhang and Qun Liu*

A new route to extended tetrathiafulvalenes was described. The extended TTFs with hexa-2,4-diyne-1,6-diylidene spacer between the two 1,3-dithiole rings were prepared simply from the easily available α -acetyl ketene-(S,S)-acetals in good yields under mild conditions.



Highly diastereoselective chemoenzymatic synthesis of (2'R)- and (2'S)-2'-deoxy[2'-2H]guanosines

pp 3161-3165

Etsuko Kawashima,* Yusuke Terui, Riho Kodama and Kenzo Yokozeki

The efficient synthesis of (2'R > 98% de)- and (2'S > 98% de)-2'-deoxy[2'- 2 H]guanosines was achieved by chemoenzymatic conversion of (2'R > 98% de)- and (2'S > 98% de)-2'-deoxy[2'- 2 H]uridine, respectively.

Substituent position effect on the optoelectronic properties of photochromic diarylethenes

pp 3167-3171

Shouzhi Pu,* Tianshe Yang, Guizhen Li, Jingkun Xu and Bing Chen

Photochromic diarylethenes bearing fluorine atoms at the *ortho-*, *meta-*, or *para-*position of both terminal phenyl groups have been synthesized. The substituent position effect on their optoelectronic properties were investigated for the first time.

A new one-step synthesis of stable 3-aryl-trans-5,6-dihydroxy-5,6-dihydro-1,2,4-oxadiazines

pp 3173-3176

Rajendra M. Srivastava,* Lécia P. F. de Morais, Suzana C. de Melo Souto, Gene B. Carpenter and Luciano T. de Carvalho

An easy and simple synthesis of 3-aryl-*trans*-5,6-dihydroxy-5,6-dihydro-1,2,4-oxadiazines **4a**-**e** from arylamidoximes **1a**-**e** and glyoxal **2** is described.

Ar NH₂ H C
$$O$$
 EtOH / H₂O O O CHO O Ar O CHO O CH

A facile, KF/Al_2O_3 mediated method for the preparation of functionalized pyrido[2,3-d]pyrimidin-7(8H)-ones

pp 3177-3180

Benjamin E. Blass,* Keith Coburn, Neil Fairweather, Mark Sabat and Laura West

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*Corresponding author

** Supplementary data available via ScienceDirect

COVER

The cover figure shows the X-ray crystal structures of three different anthracene thiourea derivatives, which display unique charge transfer peaks at 568 nm upon the addition of fluoride ions. *Tetrahedron Letters* **2006**, *47*, 3103–3106. © 2006 J. Yoon. Published by Elsevier Ltd.



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