

Tetrahedron Letters Vol. 47, No. 5, 2006

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COMMUNICATIONS

 $In Br_3-catalyzed\ in tramolecular\ cyclization\ of\ 2-alkynylanilines\ leading\ to\ polysubstituted\ indole\ and\ its\ application\ to\ one-pot\ synthesis\ of\ an\ amino\ acid\ precursor$

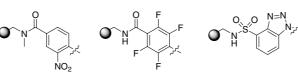
pp 631-634

Norio Sakai,* Kimiyoshi Annaka and Takeo Konakahara*

Solid supported active esters as linkers: modification of reactivity using iron carbonyl complexes Jonas Eriksson, Thomas Olsson, Nina Kann and Henrik Gradén*

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Fluorinated 4H-1,3-diazepines by reaction of difluorocarbene with 2H-azirines

Mikhail S. Novikov,* Amer A. Amer and Alexander F. Khlebnikov

pp 639-642

$$\begin{array}{c|c} \mathsf{CF_2Br_2} & \mathsf{Pb^*}, \mathsf{Bu_4NBr} \\ & \mathsf{CH_2Cl_2} \\ \\ \mathsf{Ar} & & \\ & \mathsf{N} & \\ \hline \\ \mathsf{Ar} & & \\ & \mathsf{CF_2} \end{array} \\ \begin{array}{c} \mathsf{Ar} & \mathsf{Ar} \\ \\ \mathsf{Et_3N} & \\ & \mathsf{Ar} \end{array} \\ \begin{array}{c} \mathsf{Ar} & \mathsf{N} \\ \mathsf{Ar} & \mathsf{Ar} \\ \mathsf{N} & \mathsf{Ar} \\ \mathsf{Ar} &$$

Dimethylsulfoxide-iodine catalysed deprotection of allyl carboxylic esters

pp 643-646

Kiran N. Taksande, Sachin S. Sakate and Pradeep D. Lokhande*

Ring opening of 1,1-dinitrocyclopropane by addition of C, N, O and S nucleophiles

pp 647-649

Ekaterina M. Budynina, Olga A. Ivanova, Elena B. Averina, Tamara S. Kuznetsova* and Nikolai S. Zefirov

Nucleophilic ring opening of 1,1-dinitrocyclopropane was studied with diverse C, N, O and S nucleophiles. A series of 3-X-substituted-1,1-dinitropropanes were obtained. Weak nucleophilic tertiary amines were also active in this reaction and afforded zwitterionic compounds.

A novel and green protocol for two-carbon homologation: a direct amino acid/K₂CO₃-catalyzed four-component reaction of aldehydes, active methylenes, Hantzsch esters and alkyl halides Dhevalapally B. Ramachary,* M. Kishor and K. Ramakumar

Antiinflammatory active cvano-esters pp 651-656



LHMDS mediated tandem acylation-cyclization of 2-aminobenzenecarbonitriles with 2-benzymidazol-2-yl pp 657–660 acetates: a short and efficient route to the synthesis of 4-amino-3-benzimidazol-2-ylhydroquinolin-2-ones

William R. Antonios-McCrea, Kelly A. Frazier, Elisa M. Jazan, Timothy D. Machajewski, Christopher M. McBride, Sabina Pecchi,* Paul A. Renhowe, Cynthia M. Shafer and Clarke Taylor

We herein describe the discovery of a mild, one-pot, tandem acylation-cyclization for the synthesis of 4-amino-3-benzimidazol-2-ylhydroquinolin-2-ones from 2-aminobenzenecarbonitriles and ethyl 2-benzimidazol-2-yl acetates.



Highly polarized dithiafulvenes: synthesis and nonlinear optical properties

pp 661-664

Raquel Andreu, Jorge Aramburo, Miguel Angel Cerdán, Javier Garín,* Jesús Orduna and Belén Villacampa

Solid phase synthesis of peptidotriazoles with multiple cycles of triazole formation

pp 665-669

Zhongsheng Zhang and Erkang Fan*

$$H$$
 $N=N$
 $N=N$
 NH_2
 NH_2
 NH_2
 NH_3
 NH_3
 NH_3
 NH_3
 NH_4
 NH_2
 NH_3
 NH_4
 NH_5
 NH_5

Selective hydrolysis of *anti*-1,3-diol-acetonides for the differentiation of 1,3-*anti* and 1,3-*syn* diols Gérald Coste and Sandrine Gerber-Lemaire*

pp 671–674

PtCl₂-Promoted cyclopropane opening in [4+2+2] homo Diels-Alder cycloadducts

pp 675-678

Alexandra E. Hours and John K. Snyder*

A new and readily available catalytic system has been developed to open the cyclopropane ring in [4+2+2] homo Diels-Alder cycloadducts formed by reaction of norbornadienes and 1,3-butadiene.

Synthesis of per-6-guanidinylated cyclodextrins

pp 679-681

Tomáš Kraus,* Miloš Buděšínský and Jiří Závada

A simple method for per-guanidinylation of α -, β - and γ -cyclodextrins is reported.



Palladium catalyzed reductive decarboxylation of allyl α -alkenyl- β -ketoesters. A new synthesis of (E)-3-alkenones

pp 683–687

Valentine Ragoussis* and Alexandros Giannikopoulos

A rapid acquisition of the bicyclo[3.3.1]nonan-9-one core present in garsubellin A and related phloroglucins

pp 689-692

Goverdhan Mehta* and Mrinal K. Bera

Total synthesis of asperlicin D

pp 693-694

Naim H. Al-Said* and Lina S. Al-Qaisi

Glycosylation of vanillin by amyloglucosidase in organic media

pp 695-699

Ramaiah Sivakumar and Soundar Divakar*

Glycosylation of vanillin using amyloglucosidase with D-glucose, D-galactose, D-mannose, maltose, sucrose and D-sorbitol in di-isopropyl ether yielded the respective C1 and/or C6 glycosides.

Chiral 6-phenyl-2,3-bismethylenemethoxycarbonyl-[1,4]-dioxane as a designer synthon for an efficient and short synthesis of optically pure 2,6-dioxabicyclo[3.3.0]octane-3,7-dione

pp 701-703

Ganesh Pandey,* Amrut L. Gaikwad and Smita R. Gadre

CAN-mediated stereoselective cyclization of epoxypropyl cinnamyl amines to 3,4,5-trisubstituted piperidines and supramolecular assembly of the latter aided by ethyl acetate

pp 705-709

Vijay Nair,* Kishor Mohanan, T. D. Suja and Eringathodi Suresh

A facile one-pot synthesis of 8-oxo-7,8-dihydro-(2'-deoxy)adenosine in water

pp 711-714

Chryssostomos Chatgilialoglu, Maria Luisa Navacchia* and Al Postigo

Br
$$\stackrel{\text{NH}_2}{\stackrel{\text{N}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}}}{\stackrel{\text{N}}}}$$

One-pot selective oxidation/olefination of primary alcohols using TEMPO-BAIB system and stabilized phosphorus ylides

pp 715-718

Jean-Michel Vatèle

Solid-phase synthesis of terminal oligonucleotide-phosphoramidate conjugates

pp 719-722

Leonie A. Cooke, Christian Frauendorf, Manuela A. Gîlea, Stephen C. Holmes and Joseph S. Vyle*

NPr
$$_2$$
 activator, MeCN O RX—P-O-d(Tp)g T—OH

ii) H₂O or RNH₂ or R₂NH / I₂ / cosolvent

or Ph-

iii) deprotection and release from the support

A novel phosphoramidite has been utilised for the solid-phase synthesis of 5'-phosphate monoesters and 5'-phosphoramidate-linked lipophilic, fluorescent and cationic moieties.



Column chromatographic purification free synthesis of long-chain monodisperse oligo(1,4-phenylene-ethynylene)s: towards large-scale automatic synthesis of molecular wires

pp 723-725

Guorong Li, Xianhong Wang* and Fosong Wang

$$\bigcirc C_{12}H_{25} \longrightarrow C_{12}H_{25} \longrightarrow OC_{12}H_{25} \longrightarrow OC_{12}H_{25$$

A facile, mild and rapid solid phase synthetic route free of column chromatographic purification to the synthesis of soluble long-chain monodisperse oligo(1,4-phenyleneethynylene)s was presented.

Asymmetric synthesis of aerothionin, a marine dimeric spiroisoxazoline natural product, employing optically active spiroisoxazoline derivative

pp 727–731

Takahisa Ogamino, Rika Obata and Shigeru Nishiyama*

Successful first synthesis of optically pure (+)- and (-)-aerothionins (1) from the racemic spiroisoxazoline derivative 8 has been accomplished. The absolute configuration of natural (+)-1 was determined by comparison of (+)- and (-)-8 with related derivatives.

Diastereoselective transannular [2+2] photocycloaddition of ascorbic acid derivatives

pp 733-736

Sébastien Redon and Olivier Piva*

Ring-closing metathesis of bis-O,O-alkenyl ascorbic acid derivatives affords cyclic ethers in good yields which can be further converted into polyoxacyclic structures according to a diastereoselective transannular [2+2] photocycloaddition.

Synthesis and lyotropic phase behavior of novel nonionic surfactants for the crystallization of integral membrane proteins

pp 737-741

Jeffrey Walton, Gordon J. T. Tiddy and Simon J. Webb*

New types of surfactants have been synthesized with lyotropic liquid crystalline properties that are promising for the crystallization of integral membrane proteins.



Novel approach to arylhydrazones, the precursor for Fischer indole synthesis, via diazo esters derived from α -amino acid esters

pp 743-746

Eiko Yasui, Masao Wada and Norio Takamura*

Synthesis of the common FGHI-ring part of ciguatoxins

pp 747-751

Ayumi Takizawa, Kenshu Fujiwara,* Eriko Doi, Akio Murai, Hidetoshi Kawai and Takanori Suzuki

Syntheses and evaluation of the bioluminescent activity of (S)-Cypridina luciferin and its analogs Chun Wu, Kosei Kawasaki, Satoru Ohgiya and Yoshihiro Ohmiya*

pp 753-756

Synthesis of β -branched Morita–Baylis–Hillman-type adducts from 1,3-diaryl-2-propynyl trimethylsilyl ethers and aldehydes catalyzed by potassium *tert*-butoxide

pp 757-761

Kazuhiro Yoshizawa* and Takayuki Shioiri

OSiMe₃ (10 mol%)
$$Ar^2$$
 Ar^2 Ar^2

A new efficient deprotection of azines, hydrazones and oximes. An excellent route for exchanging oxygen isotopes in carbonyls

pp 763-766

Mira Carmeli and Shlomo Rozen*



A short synthesis of lennoxamine via ynamides

pp 767–769

Sylvain Couty, Christophe Meyer and Janine Cossy*

Synthesis of trans-1,8,12,13-tetraoxadispiro[4.1.4.2]tridecanes—a new class of peroxides

pp 771-774

- D. Naveen Kumar, N. Sudhakar, B. Venkateswara Rao,* K. Hara Kishore and
- U. Suryanarayana Murty

Microwave-assisted synthesis of 8-mercapto-3-methyl-7-alkyl xanthines—an improved method Lei Zhang and Y. John Zhang*

pp 775-778



Regioselective ring-opening of aziridines with potassium thiocyanate and thiols using sulfated zirconia as a heterogeneous recyclable catalyst

pp 779-782

Biswanath Das,* R. Ramu, B. Ravikanth and K. Ravinder Reddy

The electrochemical polymerisation of a [2]rotaxane

pp 783-786

Graeme Cooke,* James F. Garety, Suhil Mabruk, Gouher Rabani, Vincent M. Rotello, Gheorghe Surpateanu and Patrice Woisel



Rapid synthesis of kahweofuran and its derivatives, the coffee aroma components

pp 787-789

Yanwu Li, Yusuke Murakami and Shigeo Katsumura*

New chemistry of diazafulvenium methides: one way to pyrazoles

pp 791-794

Teresa M. V. D. Pinho e Melo,* Maria I. L. Soares and António M. d'A. Rocha Gonsalves

$$\label{eq:conditions} Pyrazolo[1,5-c] thiazole-2,2-dioxides \\ \Delta \downarrow - SO_2 \\ MeO_2C \quad CO_2Me \quad CO_2Me \quad CO_2Me \quad MeO_2C \quad CO_2Me \\ Me \quad N \quad N \quad Sigmatropic [1,8]H \quad CO_2Me \quad [8\pi+2\pi] \ cycloadditions \\ N = N \quad N \quad Solution \ Pyrolysis \\ R \quad (R = H \ or \ Me) \quad R$$

An efficient synthesis of 5,5'-diaryl-2,2'-bichalcophenes

pp 795-797

Mohamed A. Ismail, David W. Boykin and Chad E. Stephens*

NC
$$X = O, S, Se$$
 $(Bu_3Sn)_2, Pd(PPh_3)_4$ $Y = O, S, Se$ $Y = O, S$ $Y =$

A new and high yielding synthesis of unstable pyrroles via a modified Clauson-Kaas reaction

pp 799-801

Brendon S. Gourlay, Peter P. Molesworth, John H. Ryan and Jason A. Smith*

We report a new procedure for the Clauson-Kaas pyrrole synthesis that provides unstable and chiral *N*-substituted pyrroles in high yields and purity.



Construction of macrocyclic structure using conformational properties of secondary and tertiary aromatic amides

pp 803-807

Hyuma Masu, Takako Okamoto, Takako Kato, Kosuke Katagiri, Masahide Tominaga, Hiroaki Goda, Hiroaki Takayanagi and Isao Azumaya*

A highly enantioselective one-pot synthesis of homoallylic alcohols via tandem asymmetric allyl transfer/olefin cross metathesis

pp 809-812

Cheng-Hsia Angeline Lee and Teck-Peng Loh*

HO H
$$\frac{1) \text{ CSA, CH}_2\text{Cl}_2}{2) \text{ CO}_2\text{Me}}$$
 HO $\frac{1) \text{ CSA, CH}_2\text{Cl}_2}{2) \text{ CO}_2\text{Me}}$ Grahamimycin A $\frac{\text{CI}_2\text{NL}}{\text{PCy}_3\text{ Ph}}$ Grahamimycin A $\frac{\text{CI}_2\text{NL}}{\text{PCy}_3\text{ Ph}}$ $\frac{\text{CI}_2\text{NL}}{\text{PC}}$

A highly enantioselective one-pot synthesis of linear homoallylic alcohols with terminal ester functionality has been achieved. The reactions were controlled by ordered addition of reagents and catalysts, ensuring complete consumption of aldehyde. The synthetic utility of this strategy has been demonstrated in a short synthesis of a low boiling point intermediate for grahamimycin A.



An efficient, high yielding protocol for the synthesis of functionalized quinolines via the tandem addition/annulation reaction of o-aminoaryl ketones with α -methylene ketones

pp 813-816

D. Subhas Bose* and Racherla Kishore Kumar

New synthesis of 3-methoxy-4-substituted pyrazole derivatives

pp 817-820

Bertrand Cottineau, Jacques Chenault and Gérald Guillaumet*

Highly enantioselective hydrogenation of N-phthaloyl enamides

Qin Yang, Wenzhong Gao, Jingen Deng and Xumu Zhang*

pp 821-823

R = Ar, ee up to 99% R = n-butyl, ee 69%

Enantioselective synthesis of the phosphate esters of the immunosuppressive lipid FTY720 Xuequan Lu and Robert Bittman*

pp 825-827

A novel entry to dispiropyrrolo-bicyclo[2.2.1]heptanes through sequential 1,3-dipolar and Diels-Alder cycloaddition reactions

pp 829-832

Rathna Durga R. S. Manian, Jayadevan Jayashankaran, S. Selva Kumar and Raghavachary Raghunathan*

4-(p-Chloro)phenyl-1,2,4-triazole-3,5-dione as a novel and reusable reagent for the oxidation of 1,3,5-trisubstituted pyrazolines under mild conditions

pp 833-836

Mohammad Ali Zolfigol,* Davood Azarifar, Shadpour Mallakpour, Iraj Mohammadpoor-Baltork, Ali Forghaniha, Behrooz Maleki and Mohammad Abdollahi-Alibeik

A new and convenient one-pot solid supported synthesis of 2,4,6-triarylpyridines

pp 837-842

Anil Kumar, Summon Koul, Tej K. Razdan* and Kamal K. Kapoor

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Instructions to contributors pp I–IV

*Corresponding author

*Supplementary data available via ScienceDirect

COVER

The cover picture shows a perspective of green multi-component reactions (MCRs) depicting the bringing together of simple reagents, and amino acid and potassium carbonate catalysts to produce substituted cyano-esters, which are analgesic and anti-inflammatory active compounds. Unlike conventional methods, green MCRs produces stereospecific products with very good yields in a single operation. Multi-component reactions depicted here support the potential of a rich variety of chemistries available to the pre-biotic world and beyond. *Tetrahedron Letters* **2006**, *47*, 651–656.

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