

Tetrahedron Letters Vol. 48, No. 41, 2007

Contents

COMMUNICATIONS

Efficient enantioselective synthesis of tetramic acids and lactams from threonine Muhammad Anwar and Mark G. Moloney*

pp 7259-7262

Regioselective Dieckmann and aldol cyclisations using an N-acyloxazolidine derived from threonine give substituted tetramic acids and pyroglutamates in high yield and enantioselectivity.

Catalyst-free three-component reaction between 2-aminopyridines (or 2-aminothiazoles), aldehydes, and pp 7263–7265 isocyanides in water

Mehdi Adib,* Mohammad Mahdavi, Mahsa Alizadeh Noghani and Peiman Mirzaei

$$R-\stackrel{+}{N} \equiv \stackrel{-}{C} + ArCHO + \underbrace{\begin{array}{c} H_2O \\ N \end{array}}_{NH_2} \xrightarrow{R_0} \stackrel{N}{R}_{N} \xrightarrow{R}_{H} Ar$$

How stable actually is the planar 'triangular' benzene dication?

pp 7266-7268

Alexander M. Genaev* and Vyacheslav G. Shubin

Quantum chemical calculations indicate that the kinetic stability of an earlier proposed elegant planar 'triangular' benzene dication is very low. The kinetic stability of its methylated derivative is even lower.

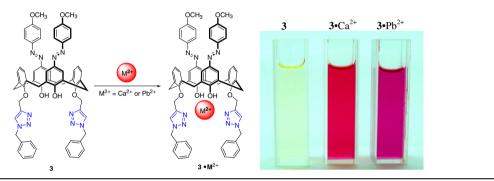
An efficient palladium-catalyzed Negishi cross-coupling reaction with arylvinyl iodides: facile regioselective synthesis of *E*-stilbenes and their analogues

pp 7269-7273

M. Shahjahan Kabir, Aaron Monte and James M. Cook*

ArBr
$$\xrightarrow{\text{n-BuLi; } \text{ZnCl}_2}$$
 $\left[\text{ArZnBr} \right] \xrightarrow{\text{Ar}} \left[\text{ArZnBr} \right] \xrightarrow{\text{Ar}} \left[\text{ArZnBr} \right]$

Triazole- and azo-coupled calix[4]arene as a highly sensitive chromogenic sensor for Ca²⁺ and Pb²⁺ ions pp 7274–7278 Kai-Chi Chang, In-Hao Su, Gene-Hsiang Lee and Wen-Sheng Chung*



A stereoselective total synthesis of (-)-andrachcinidine via an olefin cross-metathesis protocol Palakodety Radha Krishna* and G. Dayaker

pp 7279-7282

A stereoselective total synthesis of (-)-andrachcinidine is reported.

A regioselective palladium-free protocol for accessing unsymmetrical biaryls through ring transformation $\,$ pp 7283–7286 of 6-aryl- α -pyrones

Amit Kumar, Fateh V. Singh and Atul Goel*

One-pot general synthesis of metalloporphyrins

pp 7287-7290

Anil Kumar, Suman Maji, Prashant Dubey, G. J. Abhilash, Sohini Pandey and Sabyasachi Sarkar*

0.38M Aldehyde + 0.38M Pyrrole

$$\frac{\text{I. 50 ml DMF, 0.5 ml HCl, Ar}}{\text{II. 2.5 eq. metal salt, 8 h reflux, air}} \quad \text{Metalloporphyrin}$$

Water promoted one-pot synthesis of 2'-aminobenzothiazolomethyl naphthols and 5-(2'-aminobenzothiazolomethyl)-6-hydroxyquinolines

pp 7291-7294

Ahmad Shaabani,* Abbas Rahmati and Elham Farhangi

$$\begin{array}{c} O \\ R^1 \\ H \end{array} + \begin{array}{c} OH \\ X = CH, N \end{array} + \begin{array}{c} OH \\ S \\ 90 \ ^{\circ}C \end{array} + \begin{array}{c} H_2O \\ Y \\ Y \end{array} + \begin{array}{c} OH \\ Y \\ Y \end{array}$$



A new synthesis of β , γ -unsaturated esters from three components, aldehydes, chloromethyl p-tolyl sulfoxide, and tert-butyl acetate, via magnesium carbenoid 1,2-CH and 1,2-CC insertion as the key reaction

pp 7295-7300

Tsuyoshi Satoh,* Hironori Yamashita and Jun Musashi

Oxidative cross-coupling leading to 3-amido substituted 1,1'-bi-2-naphthol derivatives

pp 7301-7304

Shigeki Habaue,* Yusuke Takahashi and Tomohisa Temma



The first total synthesis and structural determination of TMC-66

pp 7305-7308

Seijiro Hosokawa,* Hitoshi Fumiyama, Hisato Fukuda, Tomohiro Fukuda, Masashi Seki and Kuniaki Tatsuta*

Ring-opening of oxazolines derived from L-serine: a short and efficient stereoselective synthesis of all four pp 7309–7312 diastereomers of 3-mercaptoaspartic acid derivatives

Sang-Hyeup Lee, Juhan Bok, Xin Qi, Sook Kyung Kim, Yoon-Sik Lee* and Juyoung Yoon*



Apply peptide C-terminal semicarbazides to peptide segment coupling using transfer active ester condensation technology

pp 7313-7315

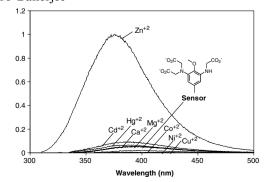
Pu Wang

Long chain and branch peptides, and peptide N-terminal derivatives are synthesized starting with peptide- $NHNHCONH_2$ using transfer active ester condensation (TAEC) technology.

A Zn(II) ion selective fluorescence sensor that is not affected by Cd(II)

pp 7316-7319

Julius N. Ngwendson and Anamitro Banerjee*





A new synthetic route to oligoribonucleotides based on CpRu-catalyzed deallylation

pp 7320-7322

Shinji Tanaka, Takuya Hirakawa, Kazuhiro Oishi, Yoshihiro Hayakawa and Masato Kitamura*

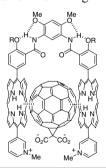
Synthesis of steroidal saponins bearing an aromatic E ring

Ziyu Wang, Ming Li, Xueting Liu and Biao Yu*

pp 7323-7326

Complexation of hydrogen bonding-driven preorganized di- and hexacationic bisporphyrin receptors for $C_{60}C(CO_2^{-})_2$ in aqueous and DMSO media

Hui Liu, Jing Wu, Yun-Xiang Xu, Xi-Kui Jiang and Zhan-Ting Li*



Efficient one-pot synthesis of propargylamines using zinc dust

pp 7332-7334

M. Lakshmi Kantam,* V. Balasubrahmanyam, K. B. Shiva Kumar and G. T. Venkanna

$$R^{1}$$
-CHO + $R^{2}R^{3}NH$ + R^{4} H $CH_{3}CN$ R^{1} = aryl and aliphatic R^{2} , R^{3} = dialkyl and dibenzyl R^{4} = aryl

Highly diastereoselective synthesis of new indolopyrroloquinolines through intramolecular imino Diels-Alder reactions

pp 7335-7338

Vikram Gaddam and Rajagopal Nagarajan*

A new, efficient and highly diastereoselective one-pot synthesis of cis-fused indolopyrroloquinoline derivatives is reported.



pp 7339-7342

Stereoselective formal total synthesis of the cyclodepsipeptide (-)-spongidepsin

Srivari Chandrasekhar,* Srinivasa Rao Yaragorla and Lella Sreelakshmi

Biginelli reaction in aqueous medium: a greener and sustainable approach to substituted 3,4-dihydropyrimidin-2(1H)-ones

pp 7343-7346

Vivek Polshettiwar and Rajender S. Varma*

Synthesis and spectroscopic properties of new 5-oxazolone derivatives containing an N-phenyl-aza-15-crown-5 moiety

pp 7347-7350

Gulsiye Ozturk, Serap Alp* and Yavuz Ergun

Novel 5-oxazolone derivatives containing an N-phenyl-aza-15-crown-5 moiety have been synthesized for the first time.

Chromium(II)-complex mediated formation of C-glycosides from glycosyl halides under aqueous biphasic pp 7351–7353 conditions

Zsuzsa Juhász, Károly Micskei,* Emese Gál and László Somsák*

$$(AcO)_n \longrightarrow AcO \longrightarrow Cr(II) \longrightarrow Cr(III) \times \left[(AcO)_n \longrightarrow AcO \longrightarrow EWG \longrightarrow (AcO)_n \longrightarrow AcO \longrightarrow EWG \longrightarrow AcO \longrightarrow EWG \longrightarrow AcO \longrightarrow EWG \longrightarrow AcO \longrightarrow EWG \longrightarrow AcO \longrightarrow$$

Antimony(III) chloride-catalyzed ring opening of epoxides with anilines

Mahesh Chander Singh and Rama Krishna Peddinti*

$$R = H$$
, alkyl, alkoxy, halo, nitro

The synthesis of metal-free octaazaphthalocyanine derivatives containing bulky phenoxy substituents to pp 7358–7361 prevent self-association

Saad Makhseed,* Fadi Ibrahim, C. Grazia Bezzu and Neil B. McKeown

Phenoxy-substituted octaazaphthalocyanines are prepared for the first time.

An efficient, continuous flow technique for the chemoselective synthesis of thioacetals

Charlotte Wiles, Paul Watts* and Stephen J. Haswell

pp 7362-7365

Owing to the unique reaction conditions obtained in continuous flow packed-bed systems, we are able to overcome selectivity issues frequently encountered in traditional stirred reactor vessels, enabling the synthesis of analytically pure compounds with ease. In addition, the synthesis of numerous thioacetals and thioketals is reported, demonstrating reaction reproducibility unparalleled by traditional stirred or shaken reactor methodology.



Ligand-free copper(I) catalyzed N- and O-arylation of aryl halides

pp 7366-7370

Elena Sperotto, Johannes G. de Vries, Gerard P. M. van Klink and Gerard van Koten*

Selective fluorination of 1-hydroxyisoquinolines using Selectfluor™

pp 7371-7373

David A. Price,* Kim James, Simon Osborne and Gareth W. Harbottle

a. Selectflour, MeCN, reflux, 45%

The highly regioselective fluorination of 1-hydroxyisoquinoline is described using Selectfluor™ (F-TEDA-BF₄) under a variety of conditions.

Regioselective cross-coupling of allylindium reagents with activated benzylic bromides—a simple and efficient procedure for the synthesis of terminal alkenes

pp 7374–7379

Brindaban C. Ranu,* Subhash Banerjee and Laksmikanta Adak

RBr + R¹
Br
$$\frac{\text{In, THF}}{\text{rt, 15-120 min.}}$$
R = benzyl, R¹= H, Me, CO₂Me
$$\frac{R^1}{70-95\%}$$
R = benzyl, R¹= H, Me, CO₂Me

A simple method for chemoselective phenol alkylation

pp 7380-7382

Pingli Liu,* Liang Huang and Margaret M. Faul

HO
$$\frac{0}{1000}$$
 OH $\frac{\text{n-Bu}_4\text{POH (2.0 equiv)}}{\text{R-X (1.0 equiv)}}$ RO $\frac{0}{1000}$ OH $\frac{12}{1000}$ RO $\frac{12}{10000}$ RO $\frac{12}{1000}$ RO $\frac{12}{1000}$ RO $\frac{12}{1000}$ RO $\frac{12}{1000}$ RO $\frac{12}{1000}$ RO $\frac{12}{10000}$ RO $\frac{12}{10000}$ RO $\frac{12}{10000}$ RO $\frac{12}{10000}$ RO $\frac{12}{10000}$ RO $\frac{12}{100$



Electrochemical O-glycosylation using thioglycosides as glycosyl donors in the presence of a catalytic amount of sodium trifluoromethanesulfonate as a supporting electrolyte

pp 7383-7387

Nobuo Tanaka, Fumiaki Ohnishi, Daisuke Uchihata, Shigeru Torii and Junzo Nokami*

RO
(RO)_n

+ HOR"

$$1$$

**Electrolysis* with TfONa (12.5 mol%) in MeCN (2.5 ml) at 15 °C

in an undivided cell with Pt-Pt electrode 5 mA/cm² (1 F/mol)

**RO
(RO)_n

3

RO
(RO)_n

3

OR'

Facile synthesis of 9-(arenethenyl)purines via Heck reaction of 9-vinylpurines and aryl halides

pp 7388-7391

Wei-Sheng Huang,* Yihan Wang, Raji Sundaramoorthi, R. Mathew Thomas, David Wen, Shuangying Liu, Scott P. Lentini, Sasmita Das, Geetha Banda, Tomi K. Sawyer and William C. Shakespeare

$$R^{6}$$
 R^{2}
 R^{6}
 R^{2}
 R^{6}
 R^{5}
 R^{7}
 R^{6}
 R^{5}
 R^{7}
 R^{6}
 R^{7}
 R^{7}
 R^{8}
 R^{7}
 R^{7

Microwave-induced bismuth nitrate-catalyzed synthesis of dihydropyrimidones via Biginelli condensation pp 7392–7394 under solventless conditions

Bimal K. Banik,* Anupama T. Reddy, Arup Datta and Chhanda Mukhopadhyay

OHC
$$\longrightarrow$$
 R + O \longrightarrow NH₂ + O O Catalyst \longrightarrow NH₃C \longrightarrow NH H₃C \longrightarrow NH

A cascade reaction sequence en route to 7-substituted 2-aminopyrrolo[1,2-a]pyrimidine-4,6-diones and pp 7395–7398 the corresponding acrylic acid derivatives

Ju Gao, Rodger F. Henry, Thomas G. Pagano, Richard W. Duerst and Andrew J. Souers*

$$\begin{array}{c|c} O & LiOH, DMF/H_2O & O & O \\ \hline & air & & & \\ H_2N & N & & & \\ \hline & & & & \\ H_2N & N & & & \\ \end{array}$$



Novel cycloalkene indole carbazole alkaloids via the ring closing metathesis reaction

pp 7399-7403

Lawrence J. Wilson,* Cangming Yang and William V. Murray

Ruthenium Catalyst
$$\begin{array}{c|c}
R_{a} & & \\
R_{b} & & \\
R$$

Methodology for the synthesis of cycloalkene indole carbazole natural product derivatives is presented. The methodology is applied to four-, five-, and six-membered rings in good to excellent yields and in as few as five steps. Eight examples are given with yields in the ring closing metathesis varying from 31% to 96%.



Segment coupling to a highly hindered N-terminal, alamethicin-related α-aminoisobutyric acid (Aib) residue

pp 7404-7407

Louis A. Carpino,* Adel Ali Abdel-Maksoud, E. M. E. Mansour and Mohamed A. Zewail

U = Aib; $E^* = Glu (O-t-Bu)$; $Q^* = Gln (Trt)$



Tandem asymmetric conjugate addition-enolacetates formation of enantiomerically enriched zinc and aluminium enolates

pp 7408-7412

Magali Vuagnoux-d'Augustin and Alexandre Alexakis*

O 1- CuX, L* dry Et₂O, -30 °C R OAC R R² Via :
$$\begin{bmatrix} R & OMR_{(x-1)} \\ -2 & Ac_2O & 4 & equiv., RT \\ \hline 3 & MeOH/H^+ \end{bmatrix}$$
R¹
 $\begin{bmatrix} R & OMR_{(x-1)} \\ -2 & R^2 \end{bmatrix}$

The metal enolates resulting from the copper-catalyzed asymmetric conjugate addition of Et₂Zn or R₃Al to cyclic and acyclic enones are quantitatively trapped as enolacetates with Ac₂O.

Synthesis of a novel 4,6'-epoxymorphinan derivative and a highly strained novel conjugated ketone

pp 7413-7417

Toru Nemoto, Hideaki Fujii, Noriko Sato and Hiroshi Nagase*

We synthesized a novel 7-membered ring ether derivative, which was linked by an OCH₂ group between the 4- and 6-position of morphinan skeleton and a highly strained novel conjugated ketone.

N-Nitrosation of (*E*)-2-(benzylidene-amino)ethanols

pp 7418-7421

Li-jun Peng, Zhong-quan Liu, Jian-tao Wang and Long-min Wu*

Reaction of (E)-2-(benzylidene-amino)ethanol **2** with nitric oxide afforded an (E)-rotamer dominant mixture of (E)- and (Z)-N-nitroso-2-aryl-1,3-oxazolidine **3** at room temperature in good overall yields.

OTHER CONTENT

Corrigendum p 7422

*Corresponding author

** Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com



Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS[®]. Full text available on ScienceDirect[®]

