

Tetrahedron Letters Vol. 46, No. 5, 2005

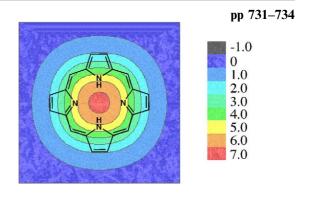
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A model of porphyrin ring current effect

Hajime Iwamoto, Kenji Hori and Yoshimasa Fukazawa*

Porphyrin ring current contour map (ppm, vertical section, 3.5 Å)



Novel and convenient synthesis of 4(1H) quinolones

Jan Tois, Mikko Vahermo and Ari Koskinen*

pp 735–737

A facile two-step synthesis of 4(1H) quinolones is presented.

Asymmetric synthesis of (+)-L-733,060

pp 739-741

Youn-Jung Yoon, Jae-Eun Joo, Kee-Young Lee, Yong-Hyun Kim, Chang-Young Oh and Won-Hun Ham^*

1,3:4,6-Di-O-benzylidene-D-mannitol as a source for novel chiral intermediates through regioselective reductive cleavage

pp 743-745

Appu Aravind and Sundarababu Baskaran*

Synthetically useful chiral intermediates have been synthesized starting from 1,3:4,6-di-*O*-benzylidene-D-mannitol through regioselective reductive cleavage using BF₃·Et₂O/Et₃SiH.

Nucleophilic addition to 3,4-cis-diacetyl-1,2,3,4-tetramethyl-1-cyclobutene: remarkably fast intramolecular hemiketalization

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Janusz Baran, Jacek G. Sośnicki,* Yuji Nonami, Araki Masuyama and Masatomo Nojima

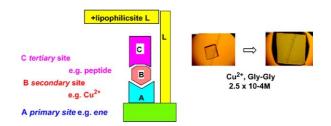


Ternary complex formation inducing large expansions of chemomechanical polymers by metal chelators, aminoacids and peptides as effectors

pp 751-754

Nino Lomadze and Hans-Jörg Schneider*

The presence of ethylenediamine-type binding sites for copper or zinc ions in a chemomechanical polymer allows ternary complex formation with additional metal chelators. For the first time otherwise silent effectors such as aminoacids and peptides can thus be shown to trigger large motions in a responsive polymer, which can be made selective by interaction with a second lipophilic binding site. Such intelligent new materials need no external devices or voltage supply for their function.



A facile access to chalcogen and dichalcogen bearing dialkylamines and diols

pp 755-758

Marilyn Daisy Milton, Shabana Khan, Jai Deo Singh,* Vivek Mishra and Bishan Lal Khandelwal

$$E + NaBH_4 \longrightarrow Na_2E / Na_2E_2$$

$$E = \frac{CI(CH_2)_nOH}{(n = 2 \text{ or } 3)} E[(CH_2)_nOH]_2 / E_2[(CH_2)_nOH]_2$$

$$E[(CH_2)_nNH_2]_2 / E_2[(CH_2)_nNH_2]_2 / E_2[(CH_2)_nNH_2]_2$$

A practical entry to C18-constrained-E-ring analogues of methyllycaconitine (MLA): a concise new stereoselective approach to 8-oxa-decahydroisoquinolines accompanied by a simple microwaves-assisted synthesis of the succinimidobenzoate appendage of MLA

pp 759–762

Daniele Simoni,* Marcello Rossi, Riccardo Rondanin, Riccardo Baruchello, Giuseppina Grisolia, Marco Eleopra, Riccardo Giovannini, Andrea Bozzoli, Silvia Davalli, Romano Di Fabio and Daniele Donati

Synthesis of conjugated enediynes via palladium catalyzed cross-coupling reactions of potassium alkynyltrifluoroborates

pp 763-765

George W. Kabalka,* Gang Dong and Bollu Venkataiah

$$R \xrightarrow{Br} + R' \xrightarrow{Br_3K} \xrightarrow{Pd(dppf)cl_2} R$$

An efficient synthesis of cross-conjugated enediynes has been developed utilizing the palladium catalyzed cross-coupling reactions of 1,1-dibromo-1-alkenes with potassium alkynyltrifluoroborates under mild conditions.



Synthesis of regiospecifically substituted quinolines from anilines

pp 767-770

Giorgio Chelucci,* Ilaria Manca and Gerard A. Pinna

A protocol for the regiospecific synthesis of substituted quinolines from a number of anilines and carbonyl compounds is reported.

Dithioacetal as a 1,1-zwitterion synthon. Synthesis of functionalized alkenes by the coupling of benzylic dithioacetals with another 1,1-zwitterion synthon

pp 771-773

Hai-Yang Tu, Yi-Hung Liu, Yu Wang and Tien-Yau Luh*

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

 R^1 = Aryl or Alkynyl; R^2 = Aryl, Alkyl, or Alkynyl EWG = RCO-. CO_2 Et, CN, NO_2

Transformation of thioacetals to cyclopropanes

pp 775-778

Takeshi Takeda,* Koutaro Arai, Hirohisa Shimokawa and Akira Tsubouchi

$$R^{1} \underbrace{\begin{array}{c} \text{1) } Cp_{2}Ti[P(OEt)_{3}]_{2} \\ \text{2)} & \text{OCO}^{f}Bu \end{array}}_{\text{QCO}^{f}Bu} \underbrace{\begin{array}{c} SPh \\ R^{1} \\ \text{SPh} \end{array}}_{\text{P}} \underbrace{\begin{array}{c} \text{1) } Cp_{2}Ti[P(OEt)_{3}]_{2} \\ \text{2)} & R^{2} \end{array}}_{\text{R}^{1}} \underbrace{\begin{array}{c} R^{2} \\ R^{1} \\ \text{R}^{2} \end{array}}_{\text{R}^{1}}$$

Stereoselective synthesis of substituted dienes by the double ortho ester Claisen rearrangement Suk-pyo Hong, Sung-jun Yoon and Byung-chan Yu*

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Aerobic oxidation of primary alcohols in the presence of activated secondary alcohols

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Hiromichi Egami, Hideki Shimizu and Tsutomu Katsuki*

Rhenium complex-catalyzed allylation of aldehydes with allyltributylstannane

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Yutaka Nishiyama,* Fujio Kakushou and Noboru Sonoda*

Synthesis and ESR studies of nitronyl nitroxide-tethered oligodeoxynucleotides

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Akimitsu Okamoto,* Takeshi Inasaki and Isao Saito*

Regioselective cleavage of *cis*- and *trans*-2-methyl-3,4-epoxy alcohols with diethylpropynyl aluminum Raymond Tirado, Gerardo Torres, Wildeliz Torres and José A. Prieto*

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Synthesis of butyrolactones by nickel-catalyzed reductive cyanation of alkynols in water José Luis García Gutiérrez,* Federico Jiménez-Cruz and Noé Rosas Espinosa

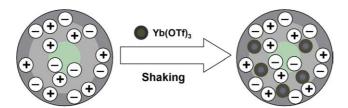
pp 803-805

$$R \xrightarrow{\qquad \qquad \qquad } R' \xrightarrow{\qquad \qquad } 1) \ K_2[Ni(CN)_4]/NaBH_4/KCN \xrightarrow{\qquad \qquad } 0$$

Novel method for catalyst immobilization using an ionic polymer: a case study using recyclable ytterbium triflate

pp 807-810

Byoung Se Lee, Suresh Mahajan and Kim D. Janda*



A novel method for immobilization of a homogeneous neutral metal catalyst using the strong interaction between metal and ions within an ionic polymer is presented, as exemplified by Yb(OTf)₃.



A systematic strategy for preparation of uncommon sugars through enzymatic resolution and ring-closing metathesis

pp 811-813

Lizhi Zhu, James P. Kedenburg, Ming Xian and Peng George Wang*

Synthesis of functionalized benzopyrans by sequential [3+3]-cyclization—Williamson reactions of 1,3-bis(trimethylsilyloxy)-7-chlorohepta-1,3-dienes

pp 815-817

Van Thi Hong Nguyen and Peter Langer*

Isotope effects and the mechanism of fragmentation of epoxy imino-1,3,4-oxadiazolines

pp 819-822

Daniel A. Singleton* and Zhihong Wang

Isotope effects and theoretical calculations support a multi-step mechanism rather than a concerted fragmentation.



Synthesis of (±)-cartorimine

pp 823-825

Barry B. Snider* and James F. Grabowski

MeO₂C

$$ACO$$
 ACO
 ACO

Heating the pyranulose diacetate and the cinnamate ester in the presence of 2,6-di-*t*-butylpyridine in CH₃CN afforded the [5+2] cycloadduct, which was hydrolyzed to give 13% of cartorimine.

Total synthesis of psorospermin

pp 827-829

Michael K. Schwaebe,* Terence J. Moran and Jeffrey P. Whitten

The xanthone natural product psorospermin was synthesized in 13 steps with an overall yield of 1.7%. This compound shows potent antineoplastic activity in a variety of cancer cell lines.



$\hbox{${\tt D-2-Deoxy-2-fluoro-$\it chiro$-inositol$}$ — a new member of the deoxy fluoro inositol family }$

pp 831-833

Ralf Miethchen,* Thomas Pundt and Manfred Michalik

One-pot synthesis of N-substituted (3-oxobutanyl)carbamates from primary amines using modified zeolite $H\beta$ at room temperature

pp 835–837

Vivek P. Raje, Ramakrishna P. Bhat and Shriniwas D. Samant*

New deuterium isotope effects on $^{13}\mathrm{C}$ and $^{19}\mathrm{F}$ chemical shifts across intramolecular hydrogen bonds of non-resonance assisted systems

pp 839-842

Jacek G. Sośnicki* and Poul Erik Hansen*

Z = S,O; $Q = CH_2, O, NCH_3, CHCH_3$



En route to the total synthesis of tashironin: on the exercise of stereochemical control by a methyl group in mediating remote cyclization reactions

pp 843-847

Silas P. Cook, Christoph Gaul and Samuel J. Danishefsky*

The synthesis of the [2.2.2]-bicyclic core (23) of the neurotrophic factor 11-O-debenzoyltashironin (1) has been achieved by an oxidative dearomatization-transannular Diels-Alder cascade. We have shown that the reaction sequence is also valuable for the efficient construction of related, complex [2.2.2]-bicyclic compounds (vide infra).

Probing the resolution of 2-phenylpropanoyl chloride using quasi-enantiomeric Evans' oxazolidinones

pp 849-853

Gregory S. Coumbarides, Jason Eames,* Anthony Flinn, Julian Northen and Yonas Yohannes

Synthesis, properties, and electrogenerated chemiluminescence (ECL) of a novel carbazole-based chromophore

pp 855-858

Ken-Tsung Wong,* Tsung-Hsi Hung, Teng-Chih Chao and Tong-Ing Ho*

A novel chromophore containing electron-rich carbazole and electron-deficient pyrimidine moieties exhibits useful and intriguing physical properties, including promising reversible redox behavior that gives rise to electrogenerated chemiluminescence (ECL).



Rapid access to reactive polymer-supported isocyanates

pp 859-861

Nicola Galaffu and Mark Bradley*

Highly efficient polymer-supported isocyanates were prepared by reacting diisocyanates with aminomethyl PS-resin.

Enantioselective alkynylation of aromatic aldehydes catalyzed by new chiral oxazolidine ligands Yong-feng Kang, Rui Wang,* Lei Liu, Chao-shan Da, Wen-jin Yan and Zhao-qing Xu

pp 863-865

pp 867-869

Ph
$$\longrightarrow$$
 + RCHO $\stackrel{\text{2d, Et}_2Zn}{\text{toluene-ether}}$ Ph $\stackrel{\text{OH}}{=}$ R $\stackrel{\text{Ph}}{=}$ Ph $\stackrel{$

Reductive debromination of 1,2-bis(bromomethyl)arenes using tetrakis(dimethylamino)ethylene (TDAE)
Yutaka Nishiyama,* Hiroshi Kawabata, Akihiro Kobayashi, Toshiki Nishino and Noboru Sonoda*

$$X$$
 + Y TDAE

Synthesis, structure and fluorescence of a novel diarylethene

pp 871–875

Shouzhi Pu,* Jingkun Xu, Liang Shen, Qiang Xiao, Tianshe Yang and Gang Liu

The novel photochromic diarylethene BMDTP was synthesized in 93% yield by the condensation reaction of diarylethene BMFTP with 1,2-ethandithiol. It's structure and fluorescence property in solution were also investigated.

Unclassical hydrogen bonds of C–H···O and C–H···Cl in the crystals of 1,4-diaryl Hantzsch esters

Xiao-Qing Zhu,* Jian-Shuang Wang and Jin-Pei Cheng*



An efficient synthesis of novel heterocycle-fused derivatives of 1-oxo-1,2,3,4-tetrahydropyrazine using Ugi condensation

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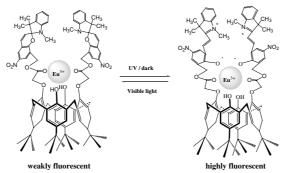
Alexey P. Ilyn, Julia A. Kuzovkova, Victor V. Potapov, Alexandre M. Shkirando, Denis I. Kovrigin, Sergey E. Tkachenko and Alexandre V. Ivachtchenko*



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Photo-switchable molecular devices based on metal-ionic recognition

Zhilian Liu, Lin Jiang, Zhi Liang and Yunhua Gao*



A practical and efficient procedure for the cleavage of acylals to aldehydes catalyzed by indium tribromide in water

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Zhan-Hui Zhang, Liang Yin, Yi Li and Yong-Mei Wang*

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*Supplementary data available via ScienceDirect



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