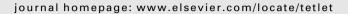


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Tetrahedron Letters Vol. 50, No. 38, 2009

Contents

COMMUNICATIONS

 $In tramolecular\ radical\ cyclizations\ onto\ quinones.\ A\ direct\ synthesis\ of\ Bauhinoxepin\ J$

pp 5303-5304

George A. Kraus *, Aniket Thite, Feng Liu

$$\begin{array}{c|c} O & O & O \\ \hline O & O & Ag^+ \\ \hline O & O & O \\ \hline O &$$

Bauhinoxepin | has been synthesized in four steps using an intramolecular persulfate-mediated radical addition to a quinone as the key step.

Ring-closing metathesis as a tool for the efficient preparation of chiral spirocyclic ethers from homoallylic alcohols

pp 5305-5307

Sara Rosenberg, Reko Leino *

The preparation of chiral spirocyclic ethers via allylic etherification/olefin metathesis of enantiopure homoallylic alcohols is reported.



 $Characterization \ of \ the \ complex \ formed \ between \ samarium \ diiodide \ and \ the \ dehydro \ dimer \ of \ HMPA \ (diHMPA)$

pp 5308-5310

Chriss E. McDonald *, Jeremy D. Ramsey, James A. Grant, Kelly A. Howerter

Synthesis and characterization of cross-conjugated cruciforms with varied functional groups

pp 5311-5314

Hairong Li, Suresh Valiyaveettil

$$R = \begin{pmatrix} S \\ R = \begin{pmatrix} S \\ C_6H_{13} & C_6H_{13} \end{pmatrix} \begin{pmatrix} C_6H_{13} & NO_2 \\ N & NO_2 \end{pmatrix}$$

Ten cross-conjugated cruciforms with various donor and acceptor groups on different segments are described.



[3+2] Cycloaddition-mediated synthesis of 3-methylsulfanyl-pyrrolidine-3-carboxylic acid methyl ester

pp 5315-5316

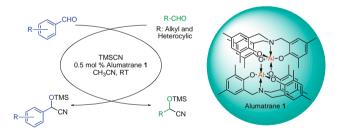
Sobhana B. Boga *, Abdul-Basit Alhassan, Alan B. Cooper, Neng-Yang Shih, Ronald J. Doll

Montmorollonite K-10 was found to be an efficient catalyst for the [3+2] annulation of thiomethylacrylate **2** and azomethine ylide precursor **3** towards the synthesis of novel 3-methylsulfanyl-pyrrolidine **4**.

A tricyclic aluminum alkoxide catalyst for aldehyde trimethylsilylcyanation

pp 5317-5321

Steven M. Raders, John G. Verkade



Dimeric alumatrane ${\bf 1}$ efficiently catalyzes this reaction at low concentrations (generally 0.5 mol %).



An expedient synthesis of 2,4,5-trisubstituted 1,4-pentadienes from Baylis-Hillman adducts via the Pd-catalyzed decarboxylation-elimination protocol

pp 5322-5325

Ko Hoon Kim, Eun Sun Kim, Jae Nyoung Kim *

2,4,5-trisubstituted 1,4-pentadiene

Synthesis of 3-aryl-4-chalcogen-2*H*-benzopyrans from 3-iodo-4-chalcogen-2*H*-benzopyrans using a Suzuki cross-coupling

pp 5326-5328

Benhur Godoi, José S. S. Neto, Adriane Sperança, Carmine Ines Acker, Cristina W. Nogueira, Gilson Zeni

$$R \stackrel{\text{II}}{\underset{\text{Ia-c}}{\bigcup}} + \text{ArB(OH)}_2 \stackrel{\text{Pd(PPh}_3)_2\text{Cl}_2 \text{ (5 mol\%)},}{\underset{\text{K}_2\text{CO}_3/\text{H}_2\text{O}, \text{ DMF, } 60 °C}{\bigcup}} R \stackrel{\text{II}}{\underset{\text{II}}{\bigcup}} A$$

$$3a-p \quad SeR^1$$

$$(30-99\%)$$

A facile synthetic route for 2-pyridyl derivatives: direct preparation of a stable 2-pyridylzinc bromide and its copper-free and pd-catalyzed coupling reactions

pp 5329-5331

Seung-Hoi Kim, Reuben D. Rieke



A novel and direct synthesis of 1,3,4-oxadiazoles or oxazolines from carboxylic acids using cyanuric chloride/indium

pp 5332-5335

Cyrous O. Kangani *, Billy W. Day

$$\begin{array}{c} O & CI & N & CI \\ R & OH + N & N & + HO \end{array} \begin{array}{c} NH_2 & \frac{CH_2CI_2, Pyridine}{In, 0 °C \longrightarrow RT} \end{array} \begin{array}{c} O \\ R & N \end{array}$$

Synthesis of spiroindolenine derivatives by a tandem radical-oxidation process

pp 5336-5339

Holber Zuleta-Prada, Luis D. Miranda

A robust and recyclable ruthenium catalyst immobilised on polyethylene glycol

pp 5340-5343

Shazia Zaman *, Andrew D. Abell *

An investigation into oxo analogues of molybdenum olefin metathesis complexes as epoxidation catalysts for alkenes

pp 5344-5346

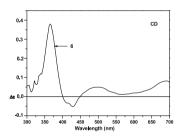
James C. Anderson *, Neil M. Smith, Michelle Robertson, Mark S. Scott

The mixed oxo-imido molybdenum complex 2a is an effective catalyst for the epoxidation of alkenes with BuOOH, being selective for electron-rich alkenes and allylic alcohols.

Novel optically active organometallic derivatives of fullerenes with non-central types of chirality in addends: synthetic and CD studies

pp 5347-5350

 $\hbox{Viatcheslav I. Sokolov}^*, \hbox{Vasily V. Bashilov, Fedor M. Dolgushin, Natalya V. Abramova, Kyrill K. Babievsky, Allan G. Ginzburg, Pavel V. Petrovskii \\$



Iodine-catalyzed intermolecular hydroamination of vinyl arenes

pp 5351-5353

J. S. Yadav *, B. V. Subba Reddy, T. Srinivasa Rao, B. Bala M. Krishna

Ion-supported PhI-catalyzed cyclization of N-methoxy-2-arylethanesulfonamides with mCPBA

pp 5354-5357

Yoshihide Ishiwata, Hideo Togo

R
$$\begin{array}{c} \text{IS-Ari (cat), } \textit{mCPBA,} \\ \text{SO}_2 \text{NHOCH}_3 \\ \text{CF}_3 \text{CH}_2 \text{OH} \text{, r.t.} \\ \text{R} = \text{H, CH}_3, \text{F, CI, Br, CICH}_2 \\ \end{array}$$

Palladium-catalyzed Mizoroki–Heck reaction of allyl aryl ethers with aryl iodides using phosphine-free hydrazone ligands

pp 5358-5360

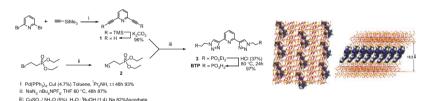
Takashi Mino ^{*}, Hiroaki Shindo, Tomoko Kaneda, Tomoko Koizumi, Yoshio Kasashima, Masami Sakamoto, Tsutomu Fujita

()+

Click-chemistry-based bis-triazolylpyridine diphosphonate ligand for the sensitized luminescence of lanthanides in the solid state within the layers of γ -zirconium phosphate

pp 5361-5363

Ernesto Brunet *, Olga Juanes, Laura Jiménez, Juan Carlos Rodríguez-Ubis *



The synthesis by means of 'click' chemistry of a new ligand bearing the bis-triazolylpyridine motif and pendant phosphonate groups is described. The topotactic phosphate/phosphonate exchange of the ligand into gamma-zirconium phosphate led to an organic-inorganic-layered material which revealed an excellent matrix to achieve the efficient sensitization of emitting lanthanides.

Efficient synthesis of new N-alkyl-p-ribono-1,5-lactams from p-ribono-1,4-lactone

pp 5364-5366

Céline Falentin, Daniel Beaupère, Gilles Demailly, Imane Stasik

Diastereoselective Ti-mediated preparation of bicyclic aminocyclopropanes from N-alkenyl amides

pp 5367-5371

Claire Madelaine, Andrea K. Buzas, Justyna A. Kowalska-Six, Yvan Six *, Benoît Crousse

$$\begin{array}{c} R^{3} \bigcirc \\ R^{1} \stackrel{\text{N}}{\longrightarrow} \\ R^{2} \end{array} \xrightarrow[]{\begin{array}{c} \text{Ti}(Oi\text{-Pr})_{4}, \ c\text{-}C_{5}H_{9}MgCl} \\ \text{THF or Et}_{2}O, \ 20^{\circ}\text{C} \\ \text{11 examples} \\ \\ \text{diastereoselectivity up to 90 : 10} \end{array}} \begin{array}{c} R^{3} \stackrel{\text{N}}{\longrightarrow} \\ R^{1\cdot N} \stackrel{\text{N}}{\longrightarrow} \\ R^{2} \\ \end{array}$$

Diastereoselective intramolecular Ti-mediated alkene–amide couplings of a range of *N*-alk-3-enyl amides bearing a substituent at the homoallylic position are described. Best results are obtained in Et₂O rather than in THF.



pp 5372-5375

Asymmetric total synthesis of (+)-carneic acid A and structure revision of its natural form

Shuhei Yamakoshi, Nobuyuki Hayashi, Takahiro Suzuki, Masahisa Nakada *

TIPSO TIPSO TIPSO TO THE CHO CHO CH₂Cl₂
$$-30\,^{\circ}\text{C}$$
 $-30\,^{\circ}\text{C}$ $-30\,^$



A different photo-sensitivity of isostructural crystals of N-(3,5-dihalosalicylidene)-2,6-dimethylaniline analogues: search for the definite reaction room in the crystal to exhibit photochromism

pp 5376-5378

Hisatane Fukuda, Kiichi Amimoto, Hiroyuki Koyama, Toshio Kawato

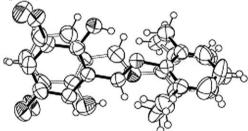


Photo-sensitivity and X-ray crystal structure of three *N*-(3,5-dihalosalicylidene)-2,6-dimethylaniline analogues were determined to reveal a definite space maintained in the photochromic crystals.

Azidation of β -carbonyl lactones and lactams

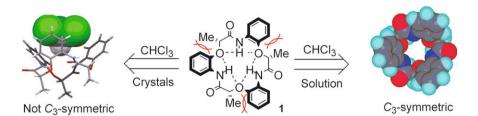
pp 5379-5381

Dhurke Kashinath, Ghyslain Budin, Rachid Baati, Stéphane Meunier^{*}, Alain Wagner^{*}

A cyclic trimer of 2-(2-aminophenoxy)propionic acid with a bowl-shaped structure

Motohiro Akazome *, Junpei Sukegawa, Yohei Goto, Shoji Matsumoto

pp 5382-5385





pp 5386-5388

Ruthenium-catalysed asymmetric transfer hydrogenation of N-(tert-butanesulfinyl)imines

David Guijarro *, Óscar Pablo, Miguel Yus *

Synthesis of the new ring system 6,8-dihydro-5H-pyrrolo[3,4-h]quinazoline

Paola Barraja, Virginia Spanò, Patrizia Diana, Anna Carbone, Girolamo Cirrincione

pp 5389-5391

A series of pyrrolo[3,4-h]quinazolines, were synthesized by annelation of a pyrimidine ring to an isoindole moiety. Compound **8o** showed antiproliferative activity against all the 59 tested cell lines at micromolar level.



pp 5392-5394

Chemo-enzymatic asymmetric total synthesis of penienone

Tridib Mahapatra, Rajib Bhunya, Samik Nanda

Stereoselective synthesis of N,N-acetals by cyclization of an N-acyliminium ion through interaction with an N-sulfonyl group

pp 5395-5398

Shinji Yamada *, Yasuko Takahashi

Microwave-assisted, solvent-free oxidative cleavage of α -hydroxyketones

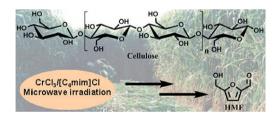
pp 5399-5402

Ignacio Carrera, Margarita C. Brovetto, Juan Carlos Ramos, Gustavo A. Seoane

The oxidative C–C cleavage of α -hydroxy ketones proceeds smoothly in solvent-free, silica-supported sodium metaperiodate, under microwave irradiation.



Direct conversion of glucose and cellulose to 5-hydroxymethylfurfural in ionic liquid under microwave irradiation pp 5403–5405 Changzhi Li, Zehui Zhang, Zongbao K. Zhao *



Under microwave irradiation, $CrCl_3$ -mediated conversion of glucose and cellulose in ionic liquids afforded 5-hydroxymethylfurfural in ca. 90% and 60% isolated yields, respectively.



$AgNO_3$ catalyzed cyclization of propargyl-Meldrum's acids in aqueous solvent: highly selective synthesis of $Z-\gamma$ -alkylidene lactones

pp 5406-5408

Wei Jia, Si Li, Miao Yu *, Wei Chen, Ning Jiao *

 γ -Alkylidene lactones have attracted considerable attention due to their diverse biological activities and ubiquitous structural units in natural products. Herein, an efficient AgNO₃ catalyzed highly regio- and stereo-selective cyclization of propargyl-Meldrum's acids in aqueous solvent was developed, which provides a practical synthetic strategy for the synthesis of substituted Z- γ -alkylidene butyrolactones under neutral reaction conditions.



Novel redox active bifunctional crosslinkers from unsymmetrical 1,1 $^{\prime}$ -disubstituted ferrocenes

pp 5409-5412

Paul A. Bertin *, Thomas J. Meade *

EC-backward-E electrochemistry supported by an alkoxyphenyl group

pp 5413-5416

Yohei Okada, Ryoichi Akaba, Kazuhiro Chiba

EC-backward-E electrochemistry was clearly described by using cyclic voltammetric studies.

The first total synthesis of putaminoxin and determination of its absolute configuration

pp 5417-5419

Gowravaram Sabitha *, K. Yadagiri, R. Swapna, J. S. Yadav

$The first \ diastere ose lective \ nitroaziri dination \ of \ \textit{N-tosylaldimines} \ with \ 1-bromonitroal kanes$

pp 5420-5423

Lal Dhar S. Yadav *, Garima, Ritu Kapoor

Ar,
$$N$$
 Ts + Br NO_2 NO_2



Radical-mediated thiodesulfonylation of the vinyl sulfones: access to (α -fluoro)vinyl sulfides

pp 5424-5427

Pablo R. Sacasa, Jessica Zayas, Stanislaw F. Wnuk

Radical-mediated thiodesulfonylation of the vinyl and (α -fluoro)vinyl sulfones provides vinyl and (α -fluoro)vinyl sulfides.

The first stereoselective total synthesis of (3S,4R)-dihydroxy-(6S)-undecyl- α -pyranone and total synthesis of (2S,3R,5S)-(-)-2,3-dihydroxytetradecan-5-olide

pp 5428-5429

Gowravaram Sabitha *, Sambit Nayak, M. Bhikshapathi, J. S. Yadav

$$C_{11}H_{23}$$
 OH $C_{9}H_{19}$ OH OH 1

Synthesis and structures of novel enantiopure inherently chiral calix[4]arene-derived salphen ligands and their transition-metal complexes

pp 5430-5433

Zhen-Xiang Xu, Zhi-Tang Huang, Chuan-Feng Chen *

$$R_2$$
 R_1
 R_2
 R_1
 R_2
 R_3
 R_4
 R_4
 R_5
 R_4
 R_5
 R_5
 R_7
 R_8
 R_9
 R_9

(i)+

CuCl-catalyzed reaction of zirconacyclopentenes with oxalyl chloride: a new pathway for the preparation of cyclopentenones

pp 5434-5436

Chao Chen, Yundong Liu, Chanjuan Xi

$$Cp_2Zr \xrightarrow{R^1} \xrightarrow{R^2} \xrightarrow{O} \xrightarrow{Cl} \xrightarrow{CuCl(10 \text{ mol}\%)} \xrightarrow{O} \xrightarrow{R^2}$$



*Corresponding author (1)+ Supplementary data available via ScienceDirect

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