

Tetrahedron Letters Vol. 48, No. 7, 2007

Contents

COMMUNICATIONS

A new palladium catalyst system for the cyanation of aryl chlorides with K₄[Fe(CN)₆]

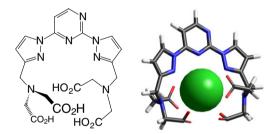
pp 1087-1090

Thomas Schareina, Alexander Zapf, Wolfgang Mägerlein, Nikolaus Müller and Matthias Beller*

The development of a novel Pd-catalyzed synthesis of (hetero)aromatic nitriles from the corresponding aryl chlorides and potassium hexacyanoferrate(II) is described.

Lanthanide complexes of new polyaminocarboxylates with the bis-pyrazolylpyrimidine chromophore Ernesto Brunet,* Olga Juanes, Rosa Sedano and Juan Carlos Rodríguez-Ubis*

pp 1091-1094



We describe the straightforward synthesis of a new polyacid ligand derived from the bis-pirazolylpyrimidine motif that displayed excellent properties concerning its ability to sensitize the emission of lanthanides.

CuCl-catalyzed cleavage of S-triphenylmethyl thioether: a new detritylation method for thio group

Ming Ma, Xiu Zhang, Lingling Peng and Jianbo Wang*

pp 1095–1097

$$\text{RS-CPh}_{3} \xrightarrow{ \text{CuCl (20 mol \%)} \atop \text{H}_{2}\text{O (200 mol \%)} \atop \text{CH}_{2}\text{Cl}_{2}, \text{r. t.} } \text{R}^{\text{S}} \text{S}^{\text{R}} + \text{Ph}_{3}\text{COH}$$

Synthesis of heteroarylazulenes: transition metal free coupling strategy of azulene with heterocycles

pp 1099-1103

Taku Shoji,* Ryuji Yokoyama, Shunji Ito, Masataka Watanabe, Kozo Toyota, Masafumi Yasunami and Noboru Morita*



Highly *anti*-selective dihydroxylation of 1,2-dialkyl substituted (Z)-allylic amines: stereoselective synthesis of a D-ribo-phytosphingosine derivative

pp 1105-1108

Jongho Jeon, Moonyong Shin, Jae Won Yoo, Joon Seok Oh, Jae Gwang Bae, Seung Hwan Jung and Young Gyu Kim*

$$\begin{array}{c} \underset{\stackrel{\bullet}{\text{NBoc}_2}}{\text{NBoc}_2} & \underset{\stackrel{\bullet}{\text{Disc}_2}}{\text{1) OsO_4, NMO}} & \underset{\stackrel{\bullet}{\text{Boc}_2}\text{N}}{\text{NBOC}_2} & \underset{\stackrel{\bullet}{\text{OAc}}}{\text{OAc}} & \underset{\stackrel{\bullet}{\text{AcO}} \xrightarrow{\stackrel{\bullet}{\text{NACO}}}}{\text{OAc}} \\ \text{(Z)-allylic amine} & \underset{\stackrel{\bullet}{\text{anti}}}{\text{OAc}} & \underset{\stackrel{\bullet}{\text{OAc}}}{\text{OAc}} & \underset{\stackrel{\bullet}{\text{OAc}}}{\text{OAc}} & \underset{\stackrel{\bullet}{\text{OAc}}}{\text{AcO}} & \underset{\stackrel{\bullet}{\text{OAc}}}{\text{OAc}} \\ & \underset{\stackrel{\bullet}{\text{OAc}}}{\text{OAc}} & \underset{\stackrel{\bullet}{\text{OAc}}}{$$

The first total synthesis of (+)-(Z)-laureatin

pp 1109-1112

Masashi Sugimoto, Toshio Suzuki,* Hisahiro Hagiwara and Takashi Hoshi

Stereoselective synthesis of various α -selenoglycosides using in situ production of α -selenolate anion Masahiro Nanami, Hiromune Ando,* Yumiko Kawai, Mamoru Koketsu and Hideharu Ishihara*

pp 1113-1116

A novel reaction of 2-(arylamino)-1-(methylthio)-1-tosylethenes with hydrogen iodide leading to quinoline pp 1117–1120 derivatives

Shoji Matsumoto and Katsuyuki Ogura*



The organocatalytic direct self-trimerization of acrolein: application to the total synthesis of montiporyne F

pp 1121-1125

Bor-Cherng Hong,* Roshan Y. Nimje and Chun-Yao Yang



Enantioselective Friedel-Crafts alkylation of indoles with nitroalkenes catalyzed by a bis(oxazoline)- pp 1127-1129 Cu(II) complex

Pradeep K. Singh, Alakesh Bisai and Vinod K. Singh*

The catalytic enantioselective Friedel–Crafts reaction of indole with *trans*-β-nitrostyrene in the presence of copper triflate–bisoxazoline complexes furnished nitroalkylated indoles in excellent yields (up to 95%) and high enantioselectivities up to an 86% ee.

Facile synthesis of phenacyl iodides from styrenes under visible light irradiation with fluorescent lamps pp 1131–1133 Hiroki Nakayama and Akichika Itoh*

Direct reductive amination and selective 1,2-reduction of α , β -unsaturated aldehydes and ketones by NaBH₄ using H₃PW₁₂O₄₀ as catalyst

pp 1135-1138

Akbar Heydari,* Samad Khaksar, Jafar Akbari, Maryam Esfandyari, Mehrdad Pourayoubi and Mahmoud Tajbakhsh

A convenient procedure for direct reductive amination of aldehydes and ketones and selective 1,2-reduction of α , β -unsaturated aldehydes and ketones with $H_3PW_{12}O_{40}$ (0.5 mol %)/NaBH₄ is described.

Total synthesis of (+)-blastmycinone and formal synthesis of (+)-antimycin A_{3b}

pp 1139-1142

Tushar Kanti Chakraborty,* Amit Kumar Chattopadhyay and Subhash Ghosh

Arboricine and arboricinine, unusual tetracyclic indole regioisomers from Kopsia

pp 1143-1145

Kuan-Hon Lim, Kanki Komiyama and Toh-Seok Kam*

A pair of unusual regioisomeric tetracyclic indoles of the corynantheine-type, arboricine and arboricinine were obtained from the Malayan *Kopsia arborea*. The structures were established by spectroscopic analysis and a possible biogenetic link between the alkaloids is presented.

DBU-catalyzed condensation of acyldiazomethanes to aldehydes in water and a new approach to ethyl pp 1147-1149 β-hydroxy α -arylacrylates

Fengping Xiao, Yu Liu and Jianbo Wang*

Synthesis and characterization of novel N-carbazole end-capped oligothiophene-fluorenes

pp 1151-1154

Vinich Promarak,* Auradee Pankvuang and Somsak Ruchirawat

$$N = 1-3, m = 0-1$$

The synthesis and characterization of a series of novel *N*-carbazole end-capped oligothiophene-fluorenes is reported. The optical, thermal, and electrochemical properties of these materials can be tuned by varying the conjugation length of the oligothiophene segment and an introduction of the carbazole end-caps.

Copper-catalyzed N-arylation of carbamate-protected hydrazones with organobismuthanes

pp 1155-1157

Pavel Starkov, Ivan Zemskov, Rannar Sillard, Olga Tšubrik and Uno Mäeorg*

Efficient copper(II) acetate-catalyzed N-arylation of carbamate-protected hydrazones was achieved under mild reaction conditions with organobismuthanes.



A concise synthetic pathway towards 5-substituted indolizidines

pp 1159-1161

Tamás R. Varga,* Péter Nemes, Zoltán Mucsi and Pál Scheiber

Laccase (EC 1.10.3.2) catalyses the conversion of procyanidin B-2 (epicatechin dimer) to type A-2 pp 1163–1167 A. M. Osman* and K. K. Y. Wong

Halogen-lithium exchange versus deprotonation: synthesis of diboronic acids derived from aryl-benzyl pp 1169-1173 ethers

Tomasz Kliś* and Janusz Serwatowski

Aryl benzyl ethers can be dilithiated using n-butyllithium or t-butyllithium. Quenching with $B(OEt)_3$ yields functionalized diboronic acids in excellent yield.

Regioselective oxidative cleavage of benzylidene acetals: synthesis of highly functionalized chiral intermediates

pp 1175-1178

Pon Minor Senthilkumar, Appu Aravind and Sundarababu Baskaran*

A novel, one-pot and three-component synthesis of α-quinoxalinyl triphenylphosphoranes

pp 1179-1182

Mehdi Adib,* Esmaeil Sheibani, Alireza Abbasi and Hamid Reza Bijanzadeh

pp 1183-1186

Ujjal Kanti Roy, Prithwish Kumar Jana and Sujit Roy*

The $3\text{-}C^3$ strategy involves (i) $Pd(0)/SnX_2$ (X = Cl, Br) mediated generation of allyltin(IV) from allyl bromide in anhydrous DCM, (ii) formation of a homoallyloxytin(IV) intermediate from allyltin(IV) and an aldehyde, and (iii) coupling with an aldehyde, an aryl epoxide or an arene to afford tetrahydropyrans, benzyl tetrahydropyrans or 4,4-diarylbut-1-enes, respectively.



L-Ascorbic acid in organic synthesis: a facile synthesis of 4-(butenolide-5-methylidenyl)-1,4-dihydropyridines

pp 1187-1189

Surendra S. Bisht, Namrata Dwivedi and Rama P. Tripathi*



Synthesis of 4-carboxy-4-pyridylpiperidines through palladium-catalyzed α -arylation of esters Yong Wang* and Reji Nair

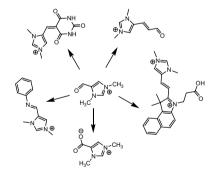
pp 1191-1193

A concise synthesis of 4-carboxy-4-pyridylpiperidines has been achieved. Key step is the palladium-catalyzed α -arylation of esters under basic conditions.

Novel synthon for incorporating 1,3-dimethyl-imidazolium group into molecular architecture Mikhail Berezin and Samuel Achilefu*

pp 1195-1199

The synthesized 1,3-dimethylated imidazolium-carbaldehydes serves as synthons for incorporating a permanently cationic imidazolium group into molecular framework. The utility of new synthon was demonstrated in a variety of reactions: Knoevenagel, Wittig, Schiff base formation, based-mediated electrophilic substitution, and oxidation, including synthesis of the natural product norzooanemonin.





A new synthesis of 2-substituted-1,3-dithianes from trichloromethyl compounds

pp 1201-1204

Nancy González Rivera, David Corona Becerril, Carlos Guadarrama-Pérez, Adrian Covarrubias-Zuñiga, José Gustavo Avila-Zárraga and Moisés Romero-Ortega*

An improved and highly convergent synthesis of 4-substituted-pyrido[2,3-d]pyrimidin-7-ones

pp 1205-1207

Hongxing Yan, Jeffrey C. Boehm, Qi Jin, Jiri Kasparec, Huijie Li, Chongjie Zhu, Katherine L. Widdowson, James F. Callahan and Zehong Wan*

Study of the synthesis of poecillanosine

Ming Xian* and Brian J. Shuhler

pp 1209-1212



pp 1213-1216

A facile, microwave-assisted, palladium-catalyzed arylation of acetone

Harry R. Chobanian,* Ping Liu, Marc D. Chioda, Yan Guo and Linus S. Lin

Ar-X

Me cat Pd₂(dba)₃, cat S-Phos

DMF

microwave or thermal

(25-88%)

S-Phos:

MeO

Cy₂P OMe

Biocatalytic synthesis towards both antipodes of 3-hydroxy-3-phenylpropanitrile a precursor to fluoxetine, atomoxetine and nisoxetine

pp 1217-1219

Richard J. Hammond, Benjamin W. Poston, Ion Ghiviriga and Brent D. Feske*

A novel ferrocene-based thiacalix[4]arene ditopic receptor for electrochemical sensing of europium(III) pp 1221–1224 and dihydrogen phosphate ions

Dian-Shun Guo,* Zhi-Peng Liu, Jian-Ping Ma and Ru-Qi Huang

(i)+

Application of 4,5-O,N-oxazolidinone protected thiophenyl sialosyl donor to the synthesis of α -sialosides pp 1225–1227 Michael D. Farris and Cristina De Meo*

New bichromophoric-2,2'-bipyridines: synthesis and optical properties

pp 1229-1232

On the explosive properties of 1H-benzotriazole and 1H-1,2,3-triazole

pp 1233-1235

Marcus Malow, Klaus D. Wehrstedt* and Steffen Neuenfeld

The decomposition energies of 1H-benzotriazole and 1H-1,2,3-triazole are higher than reported before but explosive properties are not detectable. Both reagents can be handled safely with precautions.

Preparation of 2-trimethylsilylmethyl-1-alkene; cross-coupling and protodesilylation sequence from 1,1-dibromo-1-alkene

pp 1237-1240

Jun'ichi Uenishi,* Takuya Iwamoto and Masashi Ohmi

$$R^{1} = R^{1} - R^{1$$

Fast deprotection of phenoxy benzyl ethers in transfer hydrogenation assisted by microwave

pp 1241-1245

Monica Quai,* Claudio Repetto, Walter Barbaglia and Enzo Cereda

Phenoxy benzyl ethers are easily and quickly deprotected in the presence of ammonium formiate and microencapsulated Pd(0)EnCat under microwave irradiation. The method can be applied in the presence of other functional groups as well.

Chemoenzymatic dynamic kinetic resolution of secondary amines

pp 1247-1250

Matthew Stirling, John Blacker and Michael I. Page*

$Closo \rightarrow nido$ cage degradation of 1-(substituted-phenyl)-1,2-dicarbadodecaborane(12)s in wet DMSO pp 1251-1254 under neutral conditions

C. Linda Powell, Maria Schulze, Steven J. Black, Andrew S. Thompson and Michael D. Threadgill*

A convenient and regioselective oxidative bromination of electron-rich aromatic rings using potassium bromide and benzyltriphenylphosphonium peroxymonosulfate under nearly neutral reaction conditions

pp 1255-1259

Hadi Adibi,* Abdol R. Hajipour and Majid Hashemi

ArH = anilines or phenols bearing electron releasing or withdrawing substituents

Solistatinol, a novel phenolic compactin analogue from Penicillium solitum

pp 1261-1264

Thomas Ostenfeld Larsen,* Lene Lange, Kirk Schnorr, Steen Stender and Jens Christian Frisvad

Solistatinol, a novel phenolic compactin analogue, has been isolated from *Penicillium solitum* using a UV-guided strategy. The structure and relative stereochemistry were determined by NMR spectroscopy and mass spectrometry. The absolute stereochemistry was determined by chemical degradation and comparison of CD data with literature data.



Synthetic study of manzamine B: synthesis of the tricyclic central core by an asymmetric Diels-Alder and pp 1265-1268 RCM strategy

Tomoaki Matsumura, Masakatsu Akiba, Shigeru Arai, Masako Nakagawa and Atsushi Nishida*

A novel one-pot conversion of amines to homologated esters in poly(ethylene glycol)

pp 1269-1271

S. Chandrasekhar,* G. Pavan Kumar Reddy, Ch. Nagesh and Ch. Raji Reddy

$$R \xrightarrow{i) 5\% Pd/C, MW, H_2O} ii) Ph_3P=CHCOOEt, rt iii) H_2 (gas), rt PEG-400$$

$$R= aryl or alkyl COOEt$$



Direct reductive amination of carbonyl compounds using bis(triphenylphosphine) copper(I) tetrahydroborate

pp 1273-1276

Mayur J. Bhanushali, Nitin S. Nandurkar, Malhari D. Bhor and Bhalchandra M. Bhanage*

O H2NR3
$$\frac{Cu(PPh_3)_2BH_4, MeOH}{NH_2SO_3H, R.T}$$
 $\frac{NHR^3}{R^1}$ $\frac{R^1}{R^2}$ $\frac{R^2}{R^2}$ $\frac{R^1}{R^3}$ = alkyl, aryl $\frac{R^2}{R^3}$ $\frac{R^3}{R^3}$ = H2NR3 $\frac{R^3}{R^3}$ $\frac{R^3}{R^3}$

A direct reductive amination protocol for aldehydes/ketones using bis(triphenylphosphine) copper(I) tetrahydroborate as a novel reducing agent in the presence of sulfamic acid has been developed.

A novel and highly efficient method for the silylation of alcohols with hexamethyldisilazane (HMDS) pp 1277–1280 catalyzed by recyclable sulfonic acid-functionalized ordered nanoporous silica

Daryoush Zareyee and Babak Karimi*

$$R-OH \xrightarrow{\mbox{HMDS (0.6-1 equiv.)}, \mbox{SiO}_3\mbox{H (1-3 mol\%)}} R-OSiMe_3$$



A novel synthesis of aryl tethered imidazo[4,5-b]pyrazin-2-ones through in situ ring construction and contraction

pp 1281-1285

Ramendra Pratap, Abhijeet Deb Roy, Raja Roy and Vishnu Ji Ram*

$$X = CN, Y = 1$$
-piperidinyl When $Y = SMe$
 $X = COOMe, Y = SMe$



Dess-Martin periodinane mediated synthesis of thioesters from aldehydes

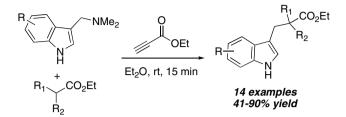
Sunita B. Bandgar, B. P. Bandgar, B. L. Korbad and S. S. Sawant

pp 1287-1290

Coupling of activated esters to gramines in the presence of ethyl propiolate under mild conditions

pp 1291-1294

David T. Jones, Gerald D. Artman, III and Robert M. Williams*





Isoxazoles from 1,1-disubstituted bromoalkenes

pp 1295-1298

Sureshbabu Dadiboyena, Jianping Xu and Ashton T. Hamme, II*

$$X = CO_{2}CH_{3}, C(0)CH_{3}, SO_{2}Ph, S(0)Ph \\ R = H, 2,6-diCl, 4-OCH_{3}$$

OTHER CONTENTS

Corrigendum p 1299

*Corresponding author

** Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com



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