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Contents

COMMUNICATIONS

Reductive amination using ammonia borane

pp 3167-3169

P. Veeraraghavan Ramachandran*, Pravin D. Gagare, Kaumba Sakavuyi, Paul Clark

A variety of primary, secondary, and tertiary amines were prepared in 84–95% yields using ammonia borane for the reductive amination of aldehydes and ketones in the presence of titanium isopropoxide.



(Z)-2,2-Dimethyl-5-carboxymethylene-1,3-dioxolan-4-one: a new synthon for the synthesis of α,γ -diketoacid derivatives

pp 3170-3173

Jacques Banville*, Gilles Bouthillier, Serge Plamondon, Roger Remillard, Nicholas A. Meanwell, Alain Martel, Michael A. Walker*

High yielding microwave-assisted synthesis of 2-(arylmethyl)amino-4-arylamino-6-alkyl-1,3,5-triazines

pp 3174-3176

Huixiong Chen*, Pascal Dao, Alice Laporte, Christiane Garbay

$$\begin{array}{c} \text{NH}_2 \\ \text{HN} \\ \text{NH} \end{array} + \begin{array}{c} \text{NH}_2 \\ \text{R}_1 \end{array} \xrightarrow{1) \text{MW}} \begin{array}{c} \text{1) MW} \\ \text{2) R}_2 \text{CO}_2 \text{Et/MW} \\ \text{3) R}_3 \text{PhCH}_2 \text{Br/MW} \end{array} \begin{array}{c} \text{R}_2 \\ \text{N} \\ \text{N} \\ \text{N} \end{array} \xrightarrow{1) \text{R}_3} \text{R}_1 \end{array}$$

Epoxy-based polymer bearing 1-naphthylamine units: highly selective fluorescent chemosensor for ferric ion

pp 3177-3180

Samaresh Ghosh*, Chandan K. Dey, Rajkumar Manna

A simple epoxy-based polymer **1** bearing 1-naphthylamine units has been synthesized and its recognition behaviors toward various metal ions have been investigated in THF-water (8:2, v/v) solution. The designed polymer **1** was found to exhibit selective ON-OFF-type fluorosensing behavior toward Fe³⁺ ions over other representative metal ions such as Cu²⁺, Zn²⁺, Co²⁺, Ni²⁺, and Hg²⁺ ions.

Copper oxide nanoparticles catalyzed vinylation of imidazoles with vinyl halides under ligand-free conditions

pp 3181-3185

V. Prakash Reddy, A. Vijay Kumar, K. Rama Rao*



An expedient approach to tetrahydrofuro [3,2-b] pyridine -2(3H)-ones via activation of pyridine N-oxide by triflic anhydride

pp 3186-3189

N. Gualo-Soberanes, M. C. Ortega-Alfaro, J. G. López-Cortés, R. A. Toscano, H. Rudler, C. Álvarez-Toledano*



Luminescent properties of phenylenediamine derivatives depending on the redox states

pp 3190-3192

Satoshi D. Ohmura, Toshiyuki Moriuchi*, Toshikazu Hirao*

Phenylenediamines bearing the ethoxycarbonyl groups were synthesized to modulate luminescent properties. Switching of the luminescent properties was achieved by redox change between the phenylenediamine and quinonediimine derivatives.



An efficient solvent-free synthesis of NH-pyrazoles from β-dimethylaminovinylketones and hydrazine on grinding

pp 3193-3196

Kelvis Longhi, Dayse N. Moreira, Mara R. B. Marzari, Vagner M. Floss, Helio G. Bonacorso, Nilo Zanatta, Marcos A. P. Martins*

 R^1 = Me, Ph, 3-MeO-Ph, 4-Me-Ph, 4-MeO-Ph, 4-F-Ph, 4-Cl-Ph, 4-Br-Ph, 4-O₂N-Ph, Fur-2-yl, Thien-2-yl; R^2 = H, 2-MeO-Ph; R^1 , R^2 = -(CH₂)₃C(O)-

A series of NH-pyrazoles was efficiently synthesized from the reaction of β -enaminones and hydrazine sulfate in solid-state on grinding in the presence of p-toluenesulfonic acid.



$\textbf{A short synthesis of the anti-leukemic sesquiterpene (+)-caparratriene\ employing\ aqueous\ Wittig\ chemistry}$

pp 3197-3199

Priyabrata Das, James McNulty*

Amberlite IRA 402(OH): an efficient mediator for the exclusive synthesis of fused tricyclic oxaza quinolinium salts Rupankar Paira, Privankar Paira, Arindam Maity, Shyamal Mondal, Abbijit Hazra, Krishnendu B, Sahu, Subbendu Naskar,

pp 3200-3204

Rupankar Paira, Priyankar Paira, Arindam Maity, Shyamal Mondal, Abhijit Hazra, Krishnendu B. Sahu, Subhendu Naskar, Pritam Saha, Maitreyee Banerjee, Nirup B. Mondal*

Staudinger and retro-Staudinger reactions. The dichloro- β -lactam moiety as a useful handle for the synthesis of 4-aryl-2*H*-1,3-benzothiazine 1,1-dioxides

pp 3205-3207

Lajos Fodor*, Péter Csomós, Antal Csámpai, Pál Sohár*

An efficient synthesis of oseltamivir phosphate (Tamiflu) via a metal-mediated domino reaction and ring-closing metathesis

pp 3208-3210

Pawinee Wichienukul, Sunisa Akkarasamiyo, Ngampong Kongkathip, Boonsong Kongkathip*

CO
$$_2$$
Et O,,, CO $_2$ Et O,,, CO $_2$ Et AcHN $_{NH_2,H_3PO_4}^{CO_2Et}$

Tamiflu $_{NH_2,H_3PO_4}^{TM}$
Oseltamivir phosphate



Palladium-catalyzed selective alkoxycarbonylation of α,β -unsaturated amides: a novel approach toward new ω -amido esters and N-substituted cyclic succinimides

pp 3211-3215

Rami Suleiman, Bassam El Ali*

N-Boc 4-nitropiperidine: preparation and conversion into a spiropiperidine analogue of the eastern part of maraviroc

pp 3216-3217

Philip Mullen, Hugues Miel*, M. Anthony McKervey

A simple preparation of previously unreported *N*-Boc 4-nitropiperidine is described. The synthetic utility of this new intermediate is illustrated by the synthesis of a spiropiperidine analogue of the eastern part of maraviroc.

A new safety-catch protecting group and linker for solid-phase synthesis

pp 3218-3220

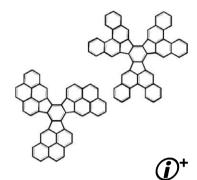
Sathiah Thennarasu, Chuan-Fa Liu*



Synthesis of end-cap precursor molecules for (6, 6) armchair and (9, 0) zig-zag single-walled carbon nanotubes

pp 3221-3225

Andreas Mueller, Konstantin Yu. Amsharov, Martin Jansen*



The synthesis of two precursor molecules for end-caps of single-walled carbon nanotubes, namely $C_{60}H_{30}$ for a (6,6) nanotube and $C_{54}H_{24}$ for a (9,0) nanotube, is presented. Further an attractive approach for the subsequent growth of the corresponding SWCNTs is discussed.

An efficient and scalable synthesis of N-(benzyloxycarbonyl)- and N-(methyloxycarbonyl)-(S)-vinylglycinol

pp 3226-3228

Alexandre Lumbroso, Vincent Coeffard, Erwan Le Grognec*, Isabelle Beaudet, Jean-Paul Quintard*

$$S$$
 NH_2 OH $NHCO_2R$ OH $NHCO_2R$ OH $R = Bn (32\%, overall yield) $R = Me (36\%, overall yield)$$



An efficient synthesis of rufinamide, an antiepileptic drug

pp 3229-3231

Whitney H. Mudd, Erland P. Stevens*



$\label{lem:mid} \mbox{Mild, convenient and versatile Cu-mediated synthesis of N-aryl-2-imidazolidinones}$

pp 3232-3235

Paolo Stabile*, Alessandro Lamonica, Arianna Ribecai, Damiano Castoldi, Giuseppe Guercio, Ornella Curcuruto

Arl +
$$\stackrel{O}{\stackrel{H}{\mapsto}}$$
 $\stackrel{H}{\stackrel{N}{\mapsto}}$ $\stackrel{K_2CO_3, n-BuOH}{\stackrel{100 °C}{\mapsto}}$ $\stackrel{O}{\stackrel{H}{\mapsto}}$ $\stackrel{N}{\stackrel{N}{\mapsto}}$

A mild, general, convenient and practical methodology for the selective copper-mediated mono N-arylation of unprotected 2-imidazolidinone was developed. Strong electron-donating groups and free hydroxy and amino groups on the aryl iodide substrates were well tolerated. The use of *n*-butanol as the solvent for the copper-catalysed mono-arylation of 2-imidazolidinone is unprecedented.



Synthesis and Raman spectra of 3-deoxy-α-ι-rhamnosides as model sugars of the *Ascaris* egg shell

pp 3236-3241

Jean-Pierre Joly*, Frédéric Roze, Sandrine Banas, Fabienne Quilès*

AcO Me
$$R^2$$
 R^2 R^2

The synthesis of two 3-deoxy-α-L-rhamnosides (i.e., 3,6-dideoxy-L-arabino-hexopyranosides) as models of ascaroside natural products is reported.



Protecting group effect on the 1,2-dehydrogenation of 19-hydroxysteroids: a highly efficient protocol for the synthesis of estrogens

pp 3242-3245

Yu Jing, Cheng-Gong Xu, Kai Ding*, Jing-Rong Lin, Rong-Hua Jin, Wei-Sheng Tian*



Facile synthesis of benzoxazoles from 1,1-dibromoethenes

pp 3246-3249

Kemei Tao, Jianlong Zheng, Zhaogui Liu, Wang Shen*, Jiancun Zhang*

$$R_{1} \stackrel{\text{II}}{=} R_{1} + H_{2} \stackrel{\text{N}}{=} R_{2} \xrightarrow{\text{DABCO/NMP}} R_{1} \stackrel{\text{II}}{=} 0 \stackrel{\text{N}}{=} R_{2}$$

Direct coupling of 1,1-dibromoethenes with 2-aminophenols had been achieved to form corresponding benzoxazoles under mildly basic reaction conditions.

*Corresponding author

**D+ Supplementary data available via ScienceDirect

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