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Communications

An efficient access to 3,6-disubstituted 1H-pyrazolo[3,4-b]pyridines via a one-pot double S_N Ar reaction and pyrazole formation

pp 2293-2297

Yong-Li Zhong *, Matthew G. Lindale, Nobuyoshi Yasuda

Unexpected formation of highly functionalized dihydropyrans via addition-cyclization reactions between dimethyl oxoglutaconate and α,β -unsaturated hydrazones

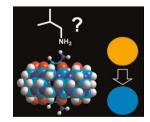
pp 2298-2300

Jason E. Mullins, Jean-Louis G. Etoga, Mariusz Gajewski, Joseph I. DeGraw, Charles M. Thompson *

Dual-response colorimetric sensor array for the identification of amines in water based on supramolecular host-guest complexation

pp 2301-2304

Pedro Montes-Navajas, Laurent A. Baumes, Avelino Corma, Hermenegildo Garcia *





AgOTf and TfOH co-catalyzed isoquinoline synthesis via redox reactions of O-alkyl oximes

pp 2305-2308

Soojin Hwang, Youngun Lee, Phil Ho Lee, Seunghoon Shin

Under AgOTf and Brønsted acid co-catalysis, *O*-alkyl *o*-alkynylbenzaldoxime derivatives undergo a cyclization-induced N–O cleavage to produce isoquinolines with the simultaneous oxidation of *O*-alkyl group. This redox-based method provides a general access to diverse isoquinoline-derived heterocycles that are simple, efficient, and tolerant of various functional groups from readily available and hydrolytically stable oxime precursors.



Ring opening of unprotected aziridines by zinc selenolates in a biphasic system

pp 2309-2311

Antonio L. Braga *, Ricardo S. Schwab, Eduardo E. Alberto, Syed M. Salman, Josimar Vargas, Juliano B. Azeredo

$$\begin{array}{c|c} R'SeSeR' \\ \hline Zn \\ \hline R'SeZnSeR' \\ \hline Zn \\ \hline R'SeZnSeR' \\ \hline NH \\ \hline \end{array}$$

Synthesis of benzophenones from geminal biaryl ethenes using m-chloroperbenzoic acid

pp 2312-2316

Fateh V. Singh, Humberto M. S. Milagre, Marcos N. Eberlin, Helio A. Stefani

$$R^1$$
 R^2
 R^3
 R^3
 R^3

Selective hydroxyl protection of (+)-noviose via improved synthesis

pp 2317-2319

Yiqiu He, Jianjun Xue, Yumei Zhou, Junshan Yang *, Xiaoming Yu *



General and convenient TsOH-induced allylboration of ketones

Hiroaki Matsuoka, Kazuhiro Kondo

pp 2320-2321

Superparamagnetic iron oxide as an efficient catalyst for the one-pot, solvent-free synthesis of α -aminonitriles

pp 2322-2325

Mohammad M. Mojtahedi *, M. Saeed Abaee *, Tooba Alishiri



Benzothiazines in synthesis. Eight-membered ring formation in an intramolecular Friedel-Crafts reaction

pp 2326-2328

Michael Harmata *, Weijiang Ying, Charles L. Barnes

Treatment of certain benzothiazines bearing allylic bromides side chains with indium tribromide resulted in the formation of eight-membered rings in addition to the expected six-membered rings.



Preparation and reactions of N-thioformyl peptides from amino thioacids and isonitriles

pp 2329-2333

Yu Yuan, Jianglong Zhu, Xuechen Li, Xiangyang Wu, Samuel J. Danishefsky

$$\begin{array}{c} R_1 \\ \hline \\ FmocHN \end{array} + \begin{array}{c} CN \\ \hline \\ R_3 \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ R_1 \\ \hline \\ FmocHN \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ FmocHN \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ FmocHN \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ FmocHN \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ FmocHN \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ FmocHN \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \end{array} + \begin{array}{c} CHCl_3 \\ \hline \\ \end{array} + \begin{array}{c} CHCl_3 \\ \hline \end{array} + \begin{array}{$$



A one-pot synthesis of 3-arylglutaric anhydrides by reaction of ketene with aromatic aldehydes and ketones

pp 2334-2336

Hirokazu Matsunaga, Kiyoshi Ikeda, Ken-ichi Iwamoto, Yumiko Suzuki, Masayuki Sato *

$$R_1$$
 R_2 R_2 R_2 R_3 R_4 R_5 R_5 R_5 R_5 R_5 R_6 R_7 R_8 R_9 R_9

Alkaline metal ion-enhanced chemiluminescence of bicyclic dioxetanes bearing a hydroxyaryl group with an 'even' substitution pattern

pp 2337-2341

Masakatsu Matsumoto *, Fumihiko Kakuno, Aoi Kikkawa, Naoyuki Hoshiya, Nobuko Watanabe, Hisako K. Ijuin

Efficient palladium-catalysed carbonylative and Suzuki-Miyaura cross-coupling reactions with bis(di-tert-butylphosphino)-o-xylene

pp 2342-2346

James McNulty *, Jerald J. Nair, Marcin Sliwinski, Al J. Robertson

$$Ar'B(OH)_2$$

$$Ar-Ar'$$

$$+ Pd(OAc)_2$$

$$CO + NuH$$

$$Ar(CO)Nu$$

Dual behavior of alcohols in iodine-catalyzed esterification under solvent-free reaction conditions Marjan Jereb *, Dejan Vražič, Marko Zupan

pp 2347-2352

OH
$$Ph$$
 MeO CF_3 I_2 $(3 mol\%)$ Ph O Ph O Ph loss of chirality MeO MeO

New domino approach for the synthesis of 2,3-disubstituted benzo[b]furans via copper-catalyzed multi-component coupling reactions followed by cyclization

pp 2353-2357

Hongfeng Li, Jun Liu, Bin Yan, Yanzhong Li *

three-component and one-pot formation of benzo[b]furans



Copper nanoparticles in click chemistry: an alternative catalytic system for the cycloaddition of terminal alkynes and azides

pp 2358-2362

Francisco Alonso *, Yanina Moglie, Gabriel Radivoy, Miguel Yus *

$$R^{1}-N_{3}$$
 + = R^{2} $\frac{10 \text{ mol% nanoCu}}{\text{Et}_{3}\text{N, THF, 65 °C}}$ $R^{1}-N$ R^{2} R^{2} 87-98% 12 examples



4-Trifluoromethanesulfonamidyl prolinol *tert*-butyldiphenylsilyl ether as a highly efficient bifunctional organocatalyst for Michael addition of ketones and aldehydes to nitroolefins

pp 2363-2366

Chao Wang, Chun Yu, Changlu Liu, Yungui Peng



H-bonding directed one-step synthesis of novel macrocyclic peptides from $\epsilon\text{-aminoquinoline}\text{carboxylic}$ acid

pp 2367-2369

Fei Li, Quan Gan, Lin Xue, Zhong-ming Wang *, Hua Jiang

As foldamers based on quinoline δ -peptides were capable to cyclize intramolecularly, could their ϵ -peptides counterparts behave in the same way? Absolutely they can, especially from monomeric amino acid in one step!



Expeditious enyne construction from alkynes via oxidative Pd(II)-catalyzed Heck-type coupling

pp 2370-2373

Victor Hadi, Kyung Soo Yoo, Min Jeong, Kyung Woon Jung *

Copper-catalyzed direct thiolation of benzoxazole with diaryl disulfides and aryl thiols

pp 2374-2376

Shin-ichi Fukuzawa *, Eiji Shimizu, Yuka Atsuumi, Masatake Haga, Kenichi Ogata

$$\begin{array}{c} R \\ \hline \\ O \\ \end{array} \begin{array}{c} + \text{ ArSSAr} \\ \hline \\ O_2, 80 \text{ }^{\circ}\text{C}, 2 \text{ h} \\ \end{array} \begin{array}{c} \text{ArSSAr} \\ \hline \\ O_2, 80 \text{ }^{\circ}\text{C}, 2 \text{ h} \\ \end{array} \begin{array}{c} \text{ArSSAr} \\ \hline \end{array}$$

Total synthesis of marinostatin, a serine protease inhibitor isolated from the marine bacterium Pseudoallteromonas sagamiensis

pp 2377-2380

Misako Taichi, Toshimasa Yamazaki, Terutoshi Kimura, Yuji Nishiuchi *

A total synthesis of marinostatin having two internal ester linkages was first achieved by a regioselective esterification employing two sets of orthogonally removable side-chain protecting groups for Asp and Ser/Thr.

An exceptionally simple and efficient synthesis of 6-methyl-6-vinyl fulvene, and its oxidative transformations

pp 2381-2383

Ihsan Erden *, Christian Gärtner

An efficient synthesis of 6-methyl-6-vinylfulvene is reported. Oxidative transformations of the title compound, including singlet oxygenation as well as epoxidation with m-CPBA are also described.



Adenine as aminocatalyst for green synthesis of diastereoselective Mannich products in aqueous medium

pp 2384-2388

Papori Goswami *, Babulal Das

$$\begin{array}{c} R_1 \\ \hline \\ R_2 \\ \hline \\ R_1 = R_2 = H, \, \text{Me, OMe, Br-----} \end{array} \qquad \begin{array}{c} Adenine(20 \, \text{mol}\%)/H_2O_2 \\ \hline \\ R_1 = R_2 = H, \, \text{Me, OMe, Br-----} \end{array}$$

Synthesis of pyrrolo[2,3-a]pyrrolizine and pyrrolizine[2,3-a]pyrrolizine derived from allyl derivatives of Baylis-Hillman adducts through intramolecular 1,3-dipolar cycloaddition

pp 2389-2391

Subban Kathiravan, Ekambaram Ramesh, Raghavachary Raghunathan

$$H_3COOC$$
 $X = CH_2$
 $X = C$

Design and synthesis of an *ortho*-phenylenediamine-based open cleft: a selective fluorescent chemosensor for dihydrogen phosphate

pp 2392-2397

Kumaresh Ghosh *, Indrajit Saha, Amarendra Patra

b NH_a HN b N+ 2PF₆

1. A new *ortho*-phenylenediamine-based open fluorescent cleft **1** has been designed and synthesized. The open cleft selectively recognizes tetrabutylammonium dihydrogen phosphate in CH_3CN . The anthracene emission of **1** is significantly decreased upon the sensing of dihydrogen phosphate $(H_2PO_4^-)$ in CH_3CN . The anion binding properties of **1** were evaluated by 1H NMR, UV-vis, and fluorescence spectroscopic methods.



Novel synthesis of (d,l)-cis-chrysanthemic acid involving α,α' -dibromination of 2,2,5,5-tetramethylcyclohexane-1,3-dione: application to the enantioselective synthesis of (1R)-cis-chrysanthemic acid

pp 2398-2401

Alain Krief *, Willy Dumont, Adrian Kremer

A general approach for the synthesis of 5-substituted-4-amino-pyrrolidin-2-ones and 5-substituted-4-amino-3-pyrrolin-2-ones

pp 2402-2404

Sergio Pinheiro *, Ronaldo C. da Silva Júnior, Acácio Silva de Souza, José Walkimar de M. Carneiro, Estela M. F. Muri, O. A. C. Antunes

Simple protocols for the syntheses of both 5-substituted-4-amino-pyrrolidin-2-ones and 3-pyrrolin-2-ones from tetramic acids are presented.



pp 2405-2406

Direct sulfanylation of 4-hydroxycoumarins with thiols in water

Yi-Yuan Peng *, Yanfang Wen, Xuechun Mao, Guanyinsheng Qiu

$$R^{1} \xrightarrow{\text{II}} O O + R^{2} - SH \xrightarrow{\text{TsCI, Et}_{3}N} R^{1} \xrightarrow{\text{II}} O O O$$

An efficient synthesis of cyanamide from amine promoted by a hypervalent iodine(III) reagent

pp 2407-2410

Harisadhan Ghosh, Ramesh Yella, Abdur Rezzak Ali, Santosh K. Sahoo, Bhisma K. Patel



A novel and efficient total synthesis of (±)-physostigmine

pp 2411-2413

Mukund G. Kulkarni *, Attrimuni P. Dhondge, Ajit S. Borhade, Dnyaneshwar D. Gaikwad, Sanjay W. Chavhan, Yunnus B. Shaikh, Vijay B. Ningdale, Mayur P. Desai, Deekshaputra R. Birhade, Mahadev P. Shinde



The first regio- and diastereoselective direct introduction of α -mercaptoacetic acid/amide units into Morita-Baylis-Hillman acetates

pp 2414-2419

Lal Dhar S. Yadav *, Viaji K. Rai

Stereoselective total synthesis of synparvolide B and epi-synparvolide A

pp 2420-2424

P. Srihari *, E. Vijaya Bhasker, A. Bal Reddy, J. S. Yadav

A new route to 2,2',3,3'-tetrasubstituted binaphthyls

pp 2425-2429

Michael Widhalm *, Christian Aichinger, Kurt Mereiter

\bigcirc +

Synthesis of vulpinic acids from dimethyl tartrate

Brice Nadal, Pierre Thuéry, Thierry Le Gall

pp 2430-2433

Vulpinic acids were prepared by Suzuki-Miyaura cross-coupling involving a common iodoalkene, obtained in a few steps, including a Dieckmann cyclization, from (+)-dimethyl L-tartrate.

Synthesis and photochemical properties of photo-cleavable crosslinkers

Ziad Omran, Alexandre Specht *

pp 2434-2436

\bigcirc +

pp 2437-2439

Microwave-assisted direct biaryl coupling: first application to the synthesis of aporphines

Sandeep Chaudhary, Stevan Pecic, Onica LeGendre, Wayne W. Harding *

A facile synthesis of 5,6-dihydro-5-hydroxy-2(1H)-pyridone

Puspesh K. Upadhyay, Rajendra Prasad, Menaka Pandey, Pradeep Kumar *

1,3-Dipolar cycloaddition of diazoacetate compounds to terminal alkynes promoted by $Zn(OTf)_2$: an efficient way to the preparation of pyrazoles

pp 2443-2445

Sheng He, Li Chen, Yan-Ning Niu, Lu-Yong Wu, Yong-Min Liang *

$$R^{1} = + N_{2}CHCO_{2}R^{2} \xrightarrow{Zn(OTf)_{2}} N^{-N} CO_{2}R^{2}$$

*Corresponding author

(p)+ Supplementary data available via ScienceDirect

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