

Tetrahedron Letters Vol. 49, No. 4, 2008

Contents

COMMUNICATIONS

A practical, green, and selective approach toward the synthesis of pharmacologically important quinonecontaining heterocyclic systems using alumina-catalyzed Michael addition reaction

Sabrina Castellano, Alessia Bertamino, Isabel Gomez-Monterrey, Marisabella Santoriello, Paolo Grieco, Pietro Campiglia, Gianluca Sbardella, Ettore Novellino *



Synthesis of 4-sulfonatooxy-2,2,6,6-tetramethylpiperidine-1-yloxyl derivatives for investigation of ionic pp 586–588 liquids

Veronika Strehmel *, Hans Rexhausen, Peter Strauch



A new method presents synthesis of 4-sulfonatooxy-2,2,6,6-tetramethylpiperidine-1-yloxyl and its salts to study ionic liquids in the molecular domain.

Synthesis of novel fluorinated 4*H*-benzo[*h*]chromen-4-one and 4*H*-pyrano[3,2-*h*]quinolin-4-one derivatives pp 589–593 Maurice Médebielle *, Robert Keirouz, Etsuji Okada, Dai Shibata, William R. Dolbier, Jr.



Synthesis of *N*-hydroxyenamide, a potential precursor of chartelline Shigeo Kajii, Toshio Nishikawa *, Minoru Isobe

pp 594-597



N-Acylation of an oxime gave the corresponding *N*-hydroxyenamide, which is a key precursor in our synthetic plan for the synthesis of the chartelline alkaloids.

Selective C–N bond oxidation: demethylation of *N*-methyl group in *N*-arylmethyl-*N*-methyl-α-amino esters pp 598–600 utilizing *N*-iodosuccinimide (NIS)

Takahiro Katoh, Tsunefumi Watanabe, Mitsuyoshi Nishitani, Minoru Ozeki, Tetsuya Kajimoto, Manabu Node *



Chemo-enzymatic synthesis of ester-linked taxol–oligosaccharide conjugates as potential prodrugs Kei Shimoda *, Hatsuyuki Hamada, Hiroki Hamada * pp 601-604



Enantioselective synthesis of valoneic acid derivative

Hitoshi Abe *, Yusuke Sahara, Yuki Matsuzaki, Yasuo Takeuchi, Takashi Harayama



pp 605–609





pp 610-613

 $(\mathbf{i})^{+}$

Copper(II)-catalyzed allylation of propargylic and allylic alcohols by allylsilanes: a facile synthesis of pp 614–618 1,5-enynes

J. S. Yadav *, B. V. Subba Reddy, T. Srinivasa Rao, K. V. Raghavendra Rao



Mechanistic study on the enzymatic oxidation of flavonols

Souhila Ghidouche, Nour-Eddine Es-Safi, Paul-Henri Ducrot *

Flavonols **1–6** have been transformed upon treatment by *Trametes versicolor* laccase. Most of the major oxidation products have been investigated through spectral methods. The results are coherent with the predominance of a dismutation process, leading to cation formation, over direct radical–radical coupling.

Synthesis of stereo-defined 1,1,4,4-tetrahalo- and 1,1,4,4-mixed-tetrahalo-1,3-butadienes Hui-Jun Zhang, Zhiyi Song, Chao Wang, Christian Bruneau *, Zhenfeng Xi *



pp 619–623

pp 624-627





Radical initiation using borole derivatives

Isabella Montgomery, Andrew F. Parsons *, Franco Ghelfi, Fabrizio Roncaglia

pp 628-630



Some physical organic aspects of salicylaldehydes oximes, a theoretical study Tareq Irshaidat





A novel, convenient access to acylferrocenes: acylation of ferrocene with acyl chlorides in the presence of pp 636–639 zinc oxide

Rong Wang, Xiang Hong, Zixing Shan *



Fe(Cp)2PF6 catalyzed efficient Strecker reactions of ketones and aldehydes under solvent-free conditionspp 640–644Noor-ul H. Khan *, Santosh Agrawal, Rukhsana I. Kureshy, Sayed H. R. Abdi, Surendra Singh,
Eringathodi Suresh, Raksh V. Jasrapp 640–644

$$\frac{O}{R^{1}} + R-NH_{2} + TMSCN \xrightarrow{Fe(Cp)_{2}PF_{6} (5 \text{ mol } \%)}{rt, \text{ neat, } 20min.} \xrightarrow{R^{1}} \frac{CN}{NH-R}$$

Electrochemical oxidation of catechol in the presence of indole: a facile and one-pot method for the synthesis pp 645–649 of trisindolyl-*o*-benzoquinone

D. Nematollahi *, S. Dehdashtian



Stereoselectivity in the organoiron-mediated synthesis of (\pm) -mesembrine

Caroline Roe, Elizabeth J. Sandoe, G. Richard Stephenson *, Christopher E. Anson



A 1-aryl-substituted electrophilic η^5 -cyclohexa-dienyliron 'C₁₂ building block' for the synthesis of (±)-mesembrine adopts a flattened conformation to allow nucleophile addition *ipso* to the arene.

The biosynthesis of sorbicillinoids in *Trichoderma* sp. USF-2690: prospect for the existence of a common pp 654–657 precursor to sorbicillinol and 5-epihydroxyvertinolide, a new sorbicillinoid member

Kouichi Sugaya, Hiroyuki Koshino, Yayoi Hongo, Katsuaki Yasunaga, Jun-ichi Onose, Kunie Yoshikawa, Naoki Abe *



A quinoline-based tripodal fluororeceptor for citric acid Kumaresh Ghosh *, Suman Adhikari

The quinoline-based tripodal fluororeceptor 1 has been designed and synthesized to bind citric acid. Receptor 1 shows strong excimer emission upon hydrogen bond-mediated complexation of citric acid.



рр 650-653 ме

Core protonation of meso-tetraphenylporphyrin with tetrafluoroboric acid: unusual water-mediated hydrogen pp 664-667 bonding of $H_4 tpp^{2+}$ to the counterion

Saeed Rayati *, Saeed Zakavi *, Akbar Ghaemi, Patrick J. Carroll

N-Protonation of meso-tetraphenylporphyrin (H₂tpp) with HBF₄ yields the compound [H₄tpp](BF₄)₂·2H₂O·CHCl₃, which exhibits intricate water-mediated hydrogen bonds between $[H_4 tpp]^{2+}$ and the counterions. The structure forms a network in which the porphyrin molecule is hydrogen bonded to two water molecules and each water molecule is hydrogen bonded to two tetrafluoroborate ions.





Novel chiral ligands of dihydro-QUINAP (FLiNAP) and dihydro-QUINOL (FLiNOL) have been synthesized in optically pure forms.

A proline-catalyzed aldol approach to the synthesis of 1-N-iminosugars of the D-glucuronic acid type Chen Chen, Biao Yu *



Synthesis of heterospiranes by cyclization of dinucleophiles with 1,1-bis(tosyloxymethyl)cyclopropane and -cyclobutane

pp 675-677

Sven Rotzoll, Helmut Reinke, Peter Langer *





pp 672-674

An efficient approach to the stereoselective synthesis of 2,6-disubstituted dihydropyrans via stannyl-Prins pp 678–681 cyclization

Magdalena Dziedzic, Bartłomiej Furman *



HSCN condensation with ulosides: preferred formation of carbohydrate-fused hemiaminals of the pp 682–686 4-hydroxy-1,3-oxazolidine-2-thione type

Sandrina Silva, Ana Catarina Simão, Arnaud Tatibouët *, Patrick Rollin, Amelia Pilar Rauter



Selected ulofuranosides and ulopyranosides react with thiocyanic acid to give good yields of stable carbohydrate-fused hemiaminal 1,3-oxazolidine-2-thiones.

Novel aziridination of α-halo ketones: an efficient nucleophile-induced cyclization of phosphoramidates to pp 687–690 functionalized aziridines

Lal Dhar S. Yadav *, Ankita Rai, Vijai K. Rai, Chhama Awasthi



Environmentally friendly organic synthesis using bismuth compounds: bismuth(III) iodide catalyzed deprotection of acetals in water

pp 691-694

Aaron D. Bailey, Ashvin R. Baru, Kendall K. Tasche, Ram S. Mohan *

An efficient chemoselective etherification of phenols in polyfunctional aromatic compounds Jvoti Pandey, Mridul Mishra, Surendra Singh Bisht, Anindra Sharma, Rama P. Tripathi *

A simple method for chemoselective phenol alkylation with different phenolic substrates and alkyl halides is described using TBAB as catalyst.

An imido-transfer reaction of aldehydes with N-sulfinylamines using vanadium and molybdenum oxochlorides pp 699-702 as catalysts

ArN=S=O + O $\stackrel{R}{\longrightarrow}$ $\stackrel{\text{cat. (3-4 mol%)}}{\stackrel{\text{heptane or toluene}}{\stackrel{\text{heptane or toluene}}{$

cat.: VOCl₃, MoOCl₃, MoO₂Cl₂

2-3 steps

Anton A. Zhizhin, Dmitry N. Zarubin *, Nikolai A. Ustynyuk

Design and synthesis of angucyclinone AB-pyrido[2,3-d] pyrimidine analogues Jaime A. Valderrama *, David Vásquez

aminouracil 6 and preliminary evidence of their antitumour activity are reported.

A straightforward access to angucyclinone AB-pyridopyrimidine analogues 15 from acylhydroquinones 4 and

A new method for [c,d] pyridine *peri*-annelation: synthesis of azapyrenes from phenalenes and their dihydro derivatives

Alexander V. Aksenov^{*}, Ivan V. Borovlev, Inna V. Aksenova, Sergey V. Pisarenko, Dmitry A. Kovalev

 $\begin{array}{c} Me \\ N \neq 0 \\ N M \\ N M \\ N M \\ \end{array} \begin{array}{c} Ag_2 0 \\ H_2 Cl_2, rt \end{array}$

An effective synthesis of various azapyrenes from phenalenes and their dihydro derivatives has been developed using 1,3,5-triazines in polyphosphoric acid (PPA).







15



pp 695-698



Electrochemical synthesis of 6-amino-5-(3,4-dihydroxyphenyl) pyrimidine

Saied Saeed Hosseiny Davarani *, Neda Sheijooni Fumani, Hamid Arvin-Nezhad, Farzaneh Moradi



A new access to efaroxan and its 5-amino derivatives

Thierry Lomberget *, Roland Barret



The formal total synthesis of (\pm) -efaroxan and the preparation of some 5-amino derivatives were achieved using a convergent strategy, based on a [3+2] cycloaddition reaction.

The first approach to optically active 2,2'-bipyridine alkyl sulfoxides Justyna Ławecka, Bogdan Bujnicki, Józef Drabowicz *, Andrzej Rykowski *



Method A: (+)-(8,8-dichlorocamphorylsulfonyl)oxaziridine; method B: modified Sharpless reagent.

Sequential homo-coupling Diels-Alder/*retro* Diels-Alder reaction of 5,5'-bi-1,2,4-triazine-containing thiamacrocycles as a new route to thiacrown ethers incorporating a 2,2'-bipyridine subunit Justyna Ławecka, Ewa Olender, Paweł Piszcz, Andrzej Rykowski *



pp 715-718

pp 719–722

581



Copper nanoparticles in an ionic liquid: an efficient catalyst for the synthesis of bis-(4-hydroxy-2-oxothiazolyl)methanes

Prashant Singh, Anju Katyal, Rashmi Kalra, Ramesh Chandra *

Copper nanoparticles were synthesized and characterized by TEM, XRD and UV-vis techniques and were employed as the catalyst for the synthesis of bis-(4-hydroxy-2-oxothiazolyl)methanes in excellent yields and in short reaction times.



Novel route in the synthesis of ψ [CH₂NH] amide bond surrogate

Pietro Campiglia, Claudio Aquino, Alessia Bertamino, Marina Sala, Isabel M. Gomez-Monterrey, Ettore Novellino, Paolo Grieco *



An alternative method for the synthesis of pseudopeptides containing a ψ [CH₂NH] amide bond surrogate is reported.

*Corresponding author (*P*⁺ Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com



Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS[®]. Full text available on ScienceDirect[®]



ISSN 0040-4039

