

Tetrahedron Letters Vol. 49, No. 10, 2008

Contents

COMMUNICATIONS

Stereomeric studies on the oxidation and alkylation of 4-thiazolidinones

pp 1569-1572

Aina Colombo, Joan Carles Fernàndez, Dolors Fernández-Forner, Natalia de la Figuera, Fernando Albericio *, Pilar Forns *

Diastereoselectivity in the oxidation of different 4-thiazolidinones was discussed. Alkylation of these compounds with benzyl bromide was also studied. The stereoselectivity obtained was interpreted by the presence of the sulfoxide.

Chiral N-phosphonyl imine chemistry: new reagents and their applications for asymmetric reactions Adiseshu Kattuboina, Guigen Li *

pp 1573-1577

Synthesis of 2-substituted 2H-chromenes using potassium vinyltrifluoroborates Fei Liu, Todd Evans, Bhaskar C. Das *

pp 1578-1581

Novel photochromic macrocycles composed of thiophene and ethylene building blocks: synthesis, structure, pp 1582–1585 and photochromic property

Jun Yin, Yan Lin, Xiufang Cao, Guang-Ao Yu, Sheng Hua Liu *

Two novel photochromic macrocycles composed of thiophene and ethylene building blocks have been synthesized, and their crystal structure and photochromic properties are described. Macrocycle 2 shows good photochromic properties.

 ${\it N-} Nitroso-2-aryl-1, 3-oxazolidines\ catalyzed\ aromatization\ of\ Hantzsch\ 1, 4-dihydropyridines$

pp 1586-1588

Li-jun Peng, Jian-tao Wang, Zhou Lu, Zhong-quan Liu, Long-min Wu *

EtO₂C R H
$$CO_2$$
Et + $X = H$, p -Cl CO_2 Et CO_2 ET

A catalytic amount of *N*-nitroso-2-aryl-1,3-oxazolidines leading to the aromatization of Hantzsch 1,4-dihydropyridines (DHPs) was successfully achieved. A catalytic mechanism for the reaction is proposed.

 $(\mu\text{-Hydroxo})\text{-platinum complex-catalyzed enantioselective aldol reaction of aldehydes with 1-methoxy-2-methyl-1-(trimethylsilyloxy) propene in DMF$

pp 1589-1592

Syun-ichi Kiyooka *, Satoshi Matsumoto, Masafumi Kojima, Kazuyuki Sakonaka, Hirofumi Maeda

Two types of rhodium-catalyzed CS/CS metathesis reactions: formation of CS/CS bonds and CC/SS bonds pp 1593–1597 Mieko Arisawa, Yoko Tagami, Masahiko Yamaguchi *



Copper-mediated direct arylation of benzoazoles with aryl iodides

pp 1598-1600

Tomoki Yoshizumi, Hayato Tsurugi, Tetsuya Satoh, Masahiro Miura *

A formal convergent synthesis of (+)-trans-solamin

pp 1601-1604

Sadagopan Raghavan *, S. Ganapathy Subramanian, K. A. Tony

A modular formal synthesis of (+)-solamin is disclosed.

Stereoselective synthesis of α -difluoromethyl- β -amino alcohols via nucleophilic difluoromethylation with Me₃SiCF₂SO₂Ph

pp 1605-1608

Jun Liu, Chuanfa Ni, Fang Wang, Jinbo Hu *

$$\begin{array}{c} \mathsf{R} & \mathsf{H} \\ \mathsf{NBn}_2 \end{array} + \\ \mathsf{Me}_3 \mathsf{SiCF}_2 \mathsf{SO}_2 \mathsf{Ph} \\ \hline \\ (2) \\ \mathsf{TBAF}, \\ \mathsf{H}_2 \mathsf{O} \end{array} \\ \begin{array}{c} \mathsf{OH} \\ \mathsf{NBn}_2 \\ \mathsf{NBn}_2 \end{array} \\ \begin{array}{c} \mathsf{OH} \\ \mathsf{NF} \\ \mathsf{NBn}_2 \end{array} \\ \begin{array}{c} \mathsf{NF} \\ \mathsf{F} \\ \mathsf{H} \\ \mathsf{R} \\ \end{array}$$



New Heck coupling strategies for the arylation of secondary and tertiary amides via palladium-catalyzed intramolecular cyclization

pp 1609-1612

K. C. Majumdar *, Buddhadeb Chattopadhyay, Sanjay Nath

A concise synthesis of monoazaporphyrin from 1,19-dideoxybiladiene-ac

pp 1613-1615

Saburo Neya *, Takuya Sato, Tyuji Hoshino

A novel and concise route from 1,19-dideoxybiladiene-ac to monoazaporphyrin was developed.

A novel synthesis of γ -lactones by tandem epoxide opening-cyclization reaction mediated by samarium(II) pp 1616–1618 diiodide

Heui Sul Park, Doo Won Kwon, Kieseung Lee, Yong Hae Kim *

First total synthesis of sterenins A, C and D

pp 1619-1622

Tsuyoshi Shinozuka *, Yuko Yamamoto, Toru Hasegawa, Keiji Saito, Satoru Naito



Asymmetric organocatalytic nitroaldol reaction of α -ketoesters: stereoselective construction of chiral tertiary pp 1623–1626 alcohols at subzero temperature

Keisuke Takada, Nobuko Takemura, Kaori Cho, Yoshihiro Sohtome *, Kazuo Nagasawa *



A novel transformation of 1-exo-substituted 2a-aroyl-1,2,2a,8b-tetrahydro-3H-benzo[b]cyclobuta[d]pyran-3- pp 1627–1630 ones with sulfoxonium ylide to highly strained 2a-(1-arylethenyl)-1,2,2a,7b-tetrahydrocyclobuta[b]benzofurans

Navnath Dnyanoba Yadav, Masayuki Yamashita *, Masaki Nagahama, Tomoki Inaba, Takeshi Sawaki, Ikuo Kawasaki, Ai Kurume, Shunsaku Ohta

Highly chemo- and diastereoselective synthesis of substituted tetrahydropyran-4-ones via organocatalytic oxa-Diels-Alder reactions of acyclic α , β -unsaturated ketones with aldehydes

pp 1631-1635

Liang-Qiu Lu, Xiao-Ning Xing, Xu-Fan Wang, Zhi-Hui Ming, Hong-Mei Wang, Wen-Jing Xiao *

(i)+

Metal-free synthesis of alkynyl imines using an oxophosphonium-mediated approach at ambient temperatures pp 1636–1640 Qing-Li Dong, Guan-Sai Liu, Hai-Bin Zhou, Lin Chen *, Zhu-Jun Yao *



A novel facile synthesis of carbamoylmethylphosphine oxides in ionic liquids

pp 1641-1644

Elena V. Sharova, Oleg I. Artyushin, Alexander S. Shaplov, Galina V. Myasoedova, Irina L. Odinets *

Ph₂P(O)CH₂COOH + RR'NH
$$\frac{\text{Ionic liquid/(PhO)}_{3}P}{100-110 \text{ °C, } 40 \text{ min - 2.5 h}} Ph_{2}P(O)CH_{2}CONRR'$$

$$R,R' = H, Alk, Ar, CH2Ar$$

Efficient transesterification of ethyl acetoacetate with higher alcohols without catalysts

pp 1645-1647

L. I. Koval *, V. I. Dzyuba, O. L. Ilnitska, V. I. Pekhnyo

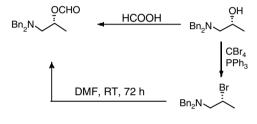
$$R = \begin{pmatrix} CH_{2}CH_{3} + ROH & & & & & \\ \hline CH_{2}CH_{3} + ROH & & & & \\ \hline CH_{3}CH_{3} & & & \\ \hline CH_{3} & & & \\ CH_{3} & & & \\ \hline CH_{3} & & & \\$$

Formate ester synthesis via reaction of 2-bromoethylamines with dimethylformamide

pp 1648-1651

Marianna Dakanali, George K. Tsikalas, Harald Krautscheid, Haralambos E. Katerinopoulos *

2-Bromoethylamines are converted to the corresponding formate esters in the presence of DMF. Both primary and secondary bromides are smoothly transformed to the esters in satisfactory yields. Participation of the β-amino group appears to control not only the regioselectivity but also the stereoselectivity of the reaction. Application of the reaction conditions to chiral substrates indicated that nonrearranged products are formed with retention of configuration at the reacting center.





Synthesis of new chiral ionic liquids based on (-)-menthol and (-)-borneol Ricardo Alexandre F. Matos, Carlos Kleber Z. Andrade *

pp 1652-1655

New chiral ionic liquids (CILs) based on (-)-menthol and (-)-borneol were designed and synthesized in very good yields using a simple and efficient 3-step strategy. The properties and characterization of these compounds are discussed.

$$X = CI, BF_4 \text{ or } PF_6$$

DCC-Celite hybrid immobilized solid support as a new, highly efficient reagent for the synthesis of O-alkyl hydrogen alkylphosphonates under solvent-free conditions

A. K. Gupta, Rajesh Kumar, H. K. Gupta, Vijay Tak, D. K. Dubey *

An efficient and solvent-free synthesis of O-alkyl hydrogen alkyl phosphonates is described.

Synthesis of non-symmetrical 3,5-diamidobenzyl amines, ethers and sulfides

David Barker *, Anna L. Lehmann, Anna Mai, Gul S. Khan, Eric Ng

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Bis-p-xylyl[26]crown-6/pyridinium ion recognition: one-pot synthesis of molecular shuttles

pp 1665-1669

Yi-Lin Huang, Chi-Feng Lin, Pin-Nan Cheng, Chien-Chen Lai, Yi-Hung Liu, Shie-Ming Peng, Sheng-Hsien Chiu *

Pd-mediated synthesis of 2-arylquinolines and tetrahydropyridines from modified Baylis-Hillman adducts Saravanan Gowrisankar, Hyun Seung Lee, Jeong Mi Kim, Jae Nyoung Kim *

pp 1670-1673

Stereoselective addition of allylmagnesium chloride to the C=N bond of [4.3.0] boron heterobicycles Heraclio López-Ruiz *, Iván Mera-Moreno, Susana Rojas-Lima, Rosa Santillán, Norberto Farfán

pp 1674-1677



Highly diastereoselective synthesis of tetrahydrobenzofuranones by palladium-catalyzed reaction of propargylic carbonates with 2-substituted cyclohexane-1,3-diones

pp 1678-1681

Masahiro Yoshida *, Mariko Higuchi, Kozo Shishido

$$= \begin{array}{c} OCO_2Me \\ R^1 \end{array} + \begin{array}{c} O \\ O \\ O \end{array} \begin{array}{c} Cat. \ Pd(0) \\ O \\ O \end{array} \begin{array}{c} O \\ R^2 \\ O \end{array} \begin{array}{c} Pd^+ \\ R^1 \end{array} \end{array}$$

Effective protection of the N-sulfate of glucosamine derivatives with the 2,2,2-trichloroethyl group Jianfang Chen, Biao Yu *

pp 1682-1685

Tf-based sulfamide-amine alcohol-catalyzed enantioselective alkynylation of aldehydes Hongwang Li, Yongbo Huang, Wei Jin, Feng Xue, Boshun Wan *

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One-pot synthesis of partially fluorinated naphthalene, anthracene, and chrysene derivatives Shuhong Li, Junfeng Xiang, Xuening Mei, Caihong Xu *

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Hydrazine sulphate: a cheap and efficient catalyst for the regioselective ring-opening of epoxides. A metal-free procedure for the preparation of β -alkoxy alcohols

pp 1694-1697

Alcino J. L. Leitão, Jorge A. R. Salvador *, Rui M. A. Pinto, M. Luísa Sá e Melo

$$\begin{array}{c} O \\ AcO \\ \hline \\ O \\ \hline \\ AcO \\ \hline \\ ROH \\ \end{array} \begin{array}{c} NH_2NH_2\cdot H_2SO_4 \\ (10 \text{ mol }\%) \\ ROH \\ \end{array} \begin{array}{c} NH_2NH_2\cdot H_2SO_4 \\ (10 \text{ mol }\%) \\ ROH \\ \end{array}$$

regio- and stereoselectivity

Regioselective Suzuki cross-coupling reactions of 2,3,4,5-tetrabromo-1-methylpyrrole

pp 1698-1700

Tung T. Dang, Rasheed Ahmad, Tuan T. Dang, Helmut Reinke, Peter Langer *

The triazine ring as a scaffold for the synthesis of new organogelators

pp 1701-1705

Stefano Cicchi *, Giacomo Ghini, Sara Fallani, Alberto Brandi, Debora Berti *, Francesca Betti, Piero Baglioni

New compounds based on a triazine ring are synthesized and studied as efficient organogelators.

New 2-(2-pyridyl)piperidines: synthesis, complexation of palladium and catalytic activity in Suzuki reaction pp 1706–1709 Bertrand Puget, Jean-Philippe Roblin, Damien Prim *, Yves Troin *

Novels 2-(2-pyridyl)-6-isopropyl piperidines Pd(II) complexes are described and their catalytic activity estimated through Suzuki coupling reaction.

Photoinduced radical reactions of α -alkylated ethyl 2-oxo-1-cyclopentanecarboxylate derivatives: α -cleavage and cyclization to the skeleton of linear cyclohexano diquinanes

pp 1710-1713

Nikolay T. Tzvetkov, Prashant A. Waske, Beate Neumann, Hans-Georg Stammler, Jochen Mattay *

O PET HO H HO H
$$CO_2Et$$
 EtO_2C H EtO_2C H

OTHER CONTENT

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** Supplementary data available via ScienceDirect

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