

Tetrahedron Letters Vol. 45, No. 32, 2004

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COMMUNICATIONS

Carboxy mediated stereoselective reduction of ketones with sodium triacetoxyborohydride: synthesis of novel 3,4-fused tetrahydropyran and tetrahydrofuran prolines

pp 6097-6100

Yi-Tsung Liu, Jesse K. Wong, Meng Tao, Rebecca Osterman, Mousumi Sannigrahi,* Viyyoor M. Girijavallabhan and Anil Saksena

(i)+

S-Trifluoromethyl esters of thiocarboxylic acids, RC(O)SCF₃

Mikhail M. Kremlev, Wieland Tyrra,* Dieter Naumann and Yurii L. Yagupolskii

pp 6101-6104

$$\begin{array}{c}
O \\
R
\end{array}
+ [NMe_4]SCF_3$$

$$\begin{array}{c}
O \\
R
\end{array}
+ [NMe_4]CI$$

R=4-NO₂C₆H₄, 2-furan, 2-thiophene, 2,6-dipicolinic, trans-cinnamic, Et₂N, CH₂=CH(CH₂)₈,C₆F₅.

Stereoselective synthesis of the *cis*-decalin subunit of vinigrol via three pericyclic reactions in cascade pp 6105–6107 Louis Morency and Louis Barriault*

Ugi multicomponent reaction with hydroxylamines: an efficient route to hydroxamic acid derivatives Andrea Basso, Luca Banfi, Giuseppe Guanti,* Renata Riva and Antonella Riu

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Supported ionic liquid asymmetric catalysis. A new method for chiral catalysts recycling. The case of proline-catalyzed aldol reaction

pp 6113-6116

Michelangelo Gruttadauria,* Serena Riela, Paolo Lo Meo, Francesca D'Anna and Renato Noto

Direct organocatalytic asymmetric α-hydroxymethylation of ketones and aldehydes Jesús Casas, Henrik Sundén and Armando Córdova*

pp 6117-6119

A new mild method for the one-pot synthesis of pyridines

pp 6121–6124

Xin Xiong, Mark C. Bagley* and Krishna Chapaneri

Pyridines are prepared in excellent yield by the three component reaction of an alkynone, 1,3-dicarbonyl compound and ammonia in alcoholic solvent with total regiocontrol.

An efficient and general synthesis of 3-substituted propional dehydes using the Suzuki-Miyaura coupling

pp 6125-6128

Cameron J. Cowden,* Deborah C. Hammond,* Brian C. Bishop, Karel M. J. Brands, Antony J. Davies, Ulf-H. Dolling and Sarah E. Brewer

Regiospecific solid-phase synthesis of substituted 1,2,3-triazoles

pp 6129-6132

Makam S. Raghavendra and Yulin Lam*

Enantiospecific photochemical carbon skeletal rearrangement of Morita-Baylis-Hillman products in water

pp 6133-6135

Koichi Mikami,* Satoshi Tanaka, Takayuki Tonoi and Shoji Matsumoto

Stereospecific carbon-carbon bond formation by the reaction of a chiral episelenonium ion with aromatic compounds

pp 6137-6139

Kazuki Okamoto, Yoshiaki Nishibayashi, Sakae Uemura and Akio Toshimitsu*

The stereospecific exchange of a hydroxyl group of chiral alcohols bearing a pyridylseleno group on the adjacent carbon atom with aromatic compounds occurred smoothly in the presence of Lewis acid.

Synthesis of methyl 9-phenyl-7*H*-benzocycloheptene-6-carboxylates from Baylis–Hillman adducts: use of intramolecular Friedel–Crafts alkenylation reaction

pp 6141-6146

Saravanan GowriSankar, Ka Young Lee, Chang Gon Lee and Jae Nyoung Kim*

Short, convergent, stereoselective syntheses of enantiopure 2-benzopyran-5,8-quinones related to the aphid insect pigments, the protoaphins

pp 6147-6150

Anthony A. Birkbeck, Zinka Brkic and Robin G. F. Giles*

$$\begin{array}{c} \text{MeO} \\ \text{O} \\ \text{HO} \\ \text{OH} \\ \end{array}$$

$$\begin{array}{c} \text{OEt} \\ \text{TsO} \\ \text{O} \\ \end{array}$$

$$\begin{array}{c} \text{O} \\ \text{O} \\ \text{O} \\ \end{array}$$

$$\begin{array}{c} \text{O} \\ \text{O} \\ \text{O} \\ \end{array}$$

As an example, the adduct 10, obtained by reaction of a titanium phenolate of 4-methoxyphenol and ethoxyethyl-protected (S)-lactaldehyde, is readily transformed into the enantiopure dioxolane 13 and thence into the quinone 16.

Carbenoid induced irreversible ring opening of naphthopyrans

pp 6151-6154

Christopher D. Gabbutt, B. Mark Heron,* David A. Thomas, Mark E. Light and Michael B. Hursthouse

MeO
$$N_2$$
 OEt N_2 OET

N-Allyl-1,3-oxazines via a facile keto-ene/cyclization tandem reaction

pp 6155-6158

Robert G. Brinson and Paul B. Jones*

(i)[†]

Oxidative rearrangements of arylalkenes with [hydroxy(tosyloxy)iodo]benzene in 95% methanol: a general, regiospecific synthesis of α-aryl ketones

pp 6159-6163

Michael W. Justik and Gerald F. Koser*

$$R^2$$
 Ar
 R^1
 $PhI(OH)OTs$
 Ar
 R^1
 $PhI(OH)OTs$
 R^2
 R^1
 R^1
 R^2
 R^1
 R^2
 R^1
 R^2
 R^2

The use of McMurry coupling for the synthesis of indolophanes and cis-stilbenophanes

pp 6165-6167

Perumal Rajakumar* and Merikapudi Gayatri Swaroop

$$\begin{bmatrix} \mathbf{E}^2 \\ \mathbf{E}^1 \end{bmatrix}$$

Rearrangements of N-alkyl-/aryl-nitrones derived from 4-oxo-4H-1-benzopyran-3-carboxaldehyde—a solvent-dependent process

pp 6169-6172

Tarun Ghosh and Chandrakanta Bandyopadhyay*

A water-soluble non-aggregating fluorescent octa-carboxylic acid derived from tetraphenylmethane: synthesis and optical properties

pp 6173-6177

Xue-Ming Liu, Chaobin He* and Junchao Huang

The synthesis and optical properties of the first eight-armed fluorescent compounds derived from tetraphenylmethane and bithiophene are reported.



Total synthesis of the marine cytotoxic caulibugulones A-D

David Alagille, Ronald M. Baldwin and Gilles D. Tamagnan*

pp 6179-6181

Lewis acid mediated diastereoselective allylation of camphorpyrazolidinone derived α -ketoamides Shy-Guey Wang, Huei Ru Tsai and Kwunmin Chen*

pp 6183-6185

(i)+

Synthesis of 1,2,4-dichalcogenazoles by the reaction of 6H-1,3,5-oxachalcogenazines with elemental chalcogen

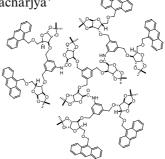
pp 6187-6190

Islam Md. Rafiqul, Kazuaki Shimada, Shigenobu Aoyagi, Yoriko Fujisawa and Yuji Takikawa*

A series of 1,2,4-dichalcogenazoles were synthesized by the reaction of 6H-1,3,5-oxachalcozenazines with elemental chalcogen.

The first examples of anthracene capped chiral carbohydrate derived dendrimers: synthesis, fluorescence pp 6191–6194 and chiroptical properties

Subir Ghorai, Debasish Bhattacharyya and Anup Bhattacharjya'



Effect of high pressure on Biginelli reactions. Steric hindrance and mechanistic considerations Gérard Jenner

pp 6195-6198

The pressure effect is enhanced when sterically hindered aldehydes or ureas are reacted. The study confirms an earlier mechanistic proposal.

A convenient and highly stereoselective synthesis of 14-substituted 8,13-diazaoestrone analogues by domino ring closures

pp 6199-6201

László Lázár, Henri Kivelä, Kalevi Pihlaja and Ferenc Fülöp*

Cobalt-catalyzed dimerization of alkenes

pp 6203-6206

Chun-Chih Wang, Pao-Shun Lin and Chien-Hong Cheng*

$$R + Zn + H_2O \xrightarrow{COI_2(PPh_3)_2 / PPh_3} R + ZnO$$
1a-1g
$$2a-2g$$

$$R \xrightarrow{U} \xrightarrow{CH_3CN / EtOH / 80^{\circ}C / 18 \text{ h}} R \xrightarrow{U} F$$
3a-3I

In the presence of $CoX_2(PPh_3)_2/3$ PPh₃ and zinc metal conjugated alkenes undergo reductive tail-to-tail dimerization to yield the corresponding saturated linear products, while vinylarenes undergo head-to-tail dimerization to give *trans*-1,3-diarylbut-1-ene in good to excellent yields.

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*Corresponding author

** Supplementary data available via ScienceDirect

COVER

During the past decades, thermal asymmetric syntheses have advanced to a great extent. In sharp contrast, only modest progress has been made for asymmetric photochemical syntheses. In this article highly enantiospecific photochemical carbon skeletal rearrangements of Morita–Baylis–Hillman products, α -hydroxymethylenones in γ -cyclodextrin as a chiral 'supercage', under photo-irradiation in water is reported, wherein the asymmetric induction mechanism is discussed. Details can be found in *Tetrahedron Letters* **2004**, *45*, 6133–6135.

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