

Tetrahedron Letters Vol. 46, No. 32, 2005

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COMMUNICATIONS

Chromium mediated stereoselective synthesis of (Z)-1-fluoro-2-alkenyl alkyl and trialkylsilyl ethers from dibromofluoromethylcarbinyl ethers

pp 5257-5261

Muga Nakagawa, Akio Saito, Aiko Soga, Natsuko Yamamoto and Takeo Taguchi*

$$\overset{\mathsf{Br}}{\underset{\mathsf{F}}{\bigcap}} \mathsf{OR} \xrightarrow{ \overset{\mathsf{CrCl}_2, \, \mathsf{Mn},}{\underset{\mathsf{F}}{\bigcap}} \mathsf{Cat.} \, \, \mathsf{NiCl}_2(\mathsf{PPh}_3)_2} \overset{\mathsf{H}}{\underset{\mathsf{F}}{\bigcap}} \mathsf{OR} \qquad \overset{\mathsf{Br}}{\underset{\mathsf{F}}{\bigcap}} \mathsf{OSiR}^2_3 \xrightarrow{ \mathsf{CrCl}_2, \, \mathsf{Mn}} \overset{\mathsf{H}}{\underset{\mathsf{F}}{\bigcap}} \mathsf{OSiR}^2_3$$

A new total synthesis of an indolo[3,2-j]phenanthridine alkaloid calothrixin B

pp 5263-5264

Shigeo Tohyama, Tominari Choshi, Kohji Matsumoto, Akira Yamabuki, Kouichiro Ikegata, Junko Nobuhiro and Satoshi Hibino*

Fragmentation of carbohydrate anomeric alkoxyl radicals. Synthesis of highly functionalized chiral vinyl sulfones

pp 5265-5268

Carmen R. Alonso-Cruz, Elisa I. León, Francisco J. Ortiz-López, María S. Rodríguez and Ernesto Suárez*

DIB = (Diacetoxyiodo)benzene



Carexanes: prenyl stilbenoid derivatives from Carex distachya

pp 5269-5272

Brigida D'Abrosca, Antonio Fiorentino,* Annunziata Golino, Pietro Monaco, Palma Oriano and Severina Pacifico

Metabolites with a new molecular skeleton, named carexane, have been isolated from the leaves of *Carex distachya*. The structures have been determined on the basis of the spectroscopic characteristics of the compounds. NOESY experiments and MM+ molecular mechanics method have furnished important data useful for establishing the stereochemistry of the molecules.

Synthesis and photophysical properties of phenothiazine-labeled conjugated dendrimers

pp 5273–5276

Xiao-Hang Zhang, Suk-Ho Choi, Dong Hoon Choi and Kwang-Hyun Ahn*

Synthesis of 1,2,9,10-tetrakis(N-phenylamino)[2.2]metacyclophane by SmI_2 -mediated reductive coupling of diimine

pp 5277–5279

Takatoshi Kawaji,* Kikue Hayashi, Iwao Hashimoto, Taisuke Matsumoto, Thies Thiemann and Shuntaro Mataka

Synthetic studies toward the zoanthamine alkaloids: synthesis of the fully functionalized BC ring motif pp 5281–5284 Fatima Rivas, Subhash Ghosh and Emmanuel A. Theodorakis*

Our synthetic efforts are presented toward the construction of lactone 20, representing the fully functionalized BC ring system of the zoanthamine alkaloids. The successful strategy is based upon transformation of 11 to an α -bromo acetal that underwent intramolecular cyclization installing stereoselectively the quaternary C9 stereocenter of 20.

One-pot synthesis of ortho-hydroxycinnamate esters

pp 5285-5287

Hany F. Anwar, Lars Skattebøl, Jan Skramstad and Trond Vidar Hansen*

R= F, Cl, Br, I, Me, t-Bu, OPh

A cyclative cleavage approach to solid-phase synthesis of annulated pyrimidinones using Baylis-Hillman derivatives

pp 5289-5292

R. Pathak, A. K. Roy, S. Kanojiya and S. Batra*

Trichloroisocyanuric acid: an efficient reagent for the synthesis of dialkyl chlorophosphates from dialkyl phosphites

pp 5293-5295

J. Acharya, A. K. Gupta, P. D. Shakya and M. P. Kaushik*

The first asymmetric synthesis of (2S,3S,4R)-3-amino-2-hydroxymethyl-4-hydroxypyrrolidine Kim L. Curtis, John Fawcett and Sandeep Handa*

pp 5297-5300

$$HO_{N}$$
 $CO_{2}H$
 $H_{2}N$
 $H_{2}N$
 $H_{2}N$
 $H_{3}N$
 $H_{4}N$
 $H_{2}N$
 $H_{4}N$
 $H_{5}N$
 $H_{5}N$

Synthesis of N-phosphoryl amino acids using bis(9-fluorenylmethyl)phosphite

pp 5301-5303

Lisa Y. Wu and Clifford E. Berkman*

$$\begin{array}{c}
O \\
P \\
H
\end{array}$$

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

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

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

Bis(9-fluorenylmethyl)phosphite (BFMP) is an effective reagent for synthesis of N-phosphoryl amino acids.

A short synthetic route to the core structures of otteliones A and B

pp 5305-5307

Derrick L. J. Clive* and Dazhan Liu

Selective ring closing metathesis is used in a key step for the synthesis of the cis (A) and trans ring fused (B) core structures of the powerful anticancer agents ottelione A and ottelione B, respectively.

Synthesis of pyrrolidine analogues of solamin

pp 5309-5312

Meng Wang, Yufeng Chen, Liguang Lou, Weidong Tang, Xin Wang and Jingkang Shen*

A series of solamin analogues, which possessed a pyrrolidine ring in place of tetrahydrofuran ring, were synthesized in a facile route from 2,5-trans-bis(methoxycarbonyl)pyrrolidine. The stereochemistry of pyrrolidine core unit was determined by ¹H NMR spectroscopic analysis.

Pd-catalyzed couplings of (α-fluoro)vinyl tris(trimethylsilyl)germanes

pp 5313-5316

Zhizhong Wang, Aurelio Gonzalez and Stanislaw F. Wnuk*

 $R,R^1 = H$, alkyl or aryl, $R^1 = aryl$, alkenyl; X = I or Br

Efficient and mild benzoin condensation reaction catalyzed by simple 1-N-alkyl-3-methylimidazolium salts

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Li-Wen Xu,* Yang Gao, Jian-Jun Yin, Lyi Li and Chun-Gu Xia*

First enantiospecific synthesis of marine nor-sesquiterpene (+)-austrodoral from (-)-sclareol

pp 5321-5324

E. J. Alvarez-Manzaneda,* R. Chahboun, I. Barranco, E. Cabrera Torres, E. Alvarez and R. Alvarez-Manzaneda

A novel mesoionic ring system: unusual cyclization of thio- and amino-acid derivatives of 6-azauracil

pp 5325-5328

Frederick J. Lakner, Haiji Xia, Azra Pervin, Jeffrey R. Hammaker, Kathy G. Jahangiri, Michael K. Dalton, Alexander Khvat,* Alexander Kiselyov and Alexandre V. Ivachtchenko

Stereoselective synthesis of spiroannulated cyclopentenones by the Pauson-Khand reaction on carbohydrate derived enynes

pp 5329-5332

Srinivas Hotha,* Sushil K. Maurya and Mukund K. Gurjar



The Huisgen 1,4-dipolar cycloaddition involving isoquinoline, dimethyl butynedioate and activated styrenes: a facile synthesis of tetrahydrobenzoquinolizine derivatives

pp 5333-5335

Vijay Nair,* B. Rema Devi and Luxmi R. Varma

A three-component reaction involving isoquinoline, dimethyl butynedioate and electrophilic styrenes is described. The reaction proceeds through a Huisgen 1,4-dipolar cycloaddition pathway.

Convenient phosphorus tribromide induced syntheses of substituted 1-arylmethylnaphthalenes from 1-tetralone derivatives

pp 5337-5341

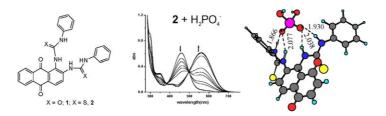
Shagufta, Resmi Raghunandan, Prakas R. Maulik and Gautam Panda*



Urea and thiourea based efficient colorimetric sensors for oxyanions

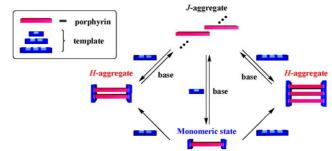
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D. Amilan Jose, D. Krishna Kumar, Bishwajit Ganguly* and Amitava Das*



Template-assisted control of porphyrin aggregation by ladder-type supramolecular assemblies Takahiro Sugimoto, Kazuki Sada,* Yuichi Tateishi, Takayuki Suzuki, Yoshihisa Sei, Kentaro Yamaguchi and Seiji Shinkai

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Synthesis and characterization of novel ionophores of double-armed penta-crown ethers Zhi Bin Huang and Seung Hyun Chang*

pp 5351-5355

Novel structures of penta-crown ethers.

$\beta\text{-Bromodifluoromethyl}$ $\beta\text{-enaminoketones:}$ versatile synthetic intermediates for synthesis of $CF_2\text{-containing compounds}$

pp 5357-5360

Yong-Ming Wu,* Ya Li and Juan Deng

$$\begin{array}{c|c} CI & & \\ BrF_2C & N & \\ \end{array} \\ R + R'COCH_3 \\ \hline \\ BrF_2C & \\ \end{array} \\ \begin{array}{c|c} R \\ \hline \\ BrF_2C & \\ \end{array} \\ \begin{array}{c|c} K_2CO_3 \ (1.2 \ equiv) \\ \hline \\ DMF, 100°C & \\ \end{array} \\ \begin{array}{c|c} R \\ \hline \\ P \\ \end{array}$$



Traceless solid-phase synthesis of 1,4-disubstituted-6-nitro-3,4-dihydro-1*H*-quinoline-2-ones

pp 5361-5364

Xiaobing Wang, Seth Dixon, Mark J. Kurth and Kit S. Lam*

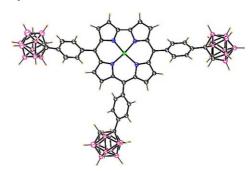
$$O_2N \xrightarrow{\mathsf{F}} \begin{matrix} \mathsf{NHAlloc} \\ \mathsf{H} \\ \mathsf{O} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{N}} \begin{matrix} \mathsf{R}_1 \\ \mathsf{H} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{H} \\ \mathsf{N} \\ \mathsf{O} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_1} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_1} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_1} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_1} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_1} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{N} \\ \mathsf{N} \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{R}_2 \end{matrix} \qquad O_2N \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{R}_2 \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{R}_2 \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \end{matrix} \qquad O_2N \end{matrix} \qquad O_2N \xrightarrow{\mathsf{R}_2} \begin{matrix} \mathsf{R}_2 \\ \mathsf{R$$

Carboranylcorroles

pp 5365-5368

Raymond J. Luguya, Frank R. Fronczek, Kevin M. Smith and M. Graça H. Vicente*

Syntheses of *closo*-carboranylcorroles are achieved in a one-pot procedure from the condensation of pyrrole and carboranylbenzaldehydes, without the concomitant formation of the corresponding tetraarylporphyrins.



Concise synthesis of multiply substituted stereodefined *cis*, *cis*-2,4-diene-1,6-dials, *cis*, *cis*-2,4-diene-1,6-diols and further applications

pp 5369-5372

Guoliang Mao, Congyang Wang, Jinglong Chen, Ayako Muramatsu and Zhenfeng Xi*

An asymmetric ent-kauranoid dimer from Isodon rubescens var. lushanensis

pp 5373-5375

Quan-Bin Han, Yang Lu, Li Wu, Zhen-Dan He, Chun-Feng Qiao, Hong-Xi Xu, Qi-Tai Zheng and Han-Dong Sun*

1

A novel asymmetric *ent*-kauranoid dimer, lushanrubescensin J (1), was isolated from *Isodon rubescens* var. *lushanensis*. Its structure was elucidated by the spectroscopic evidences. The stereochemistry was confirmed by the single crystal X-ray diffraction of its tetraacetate. Compound (1) exhibited potent inhibitory activity against K562 cells with $IC_{50} = 0.93 \mu g/mL$.

Enantio- and diastereoselective construction of vicinal quaternary and tertiary carbon centers by catalytic Michael reaction of α -substituted β -keto esters to cyclic enones

pp 5377-5381

Keisuke Majima, Shin-ya Tosaki, Takashi Ohshima and Masakatsu Shibasaki*



N-[Chloro(dimethylamino)methylene]-N-methylmethanaminium chloride (TMUCl Cl), the reagent of choice for the solid-phase synthesis of anilides

pp 5383-5386

Marc Vendrell, Rubén Ventura, Ariel Ewenson, Miriam Royo* and Fernando Albericio*

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

An effective solid-phase preparation of anilides from supported carboxylic acids is described by their activation as the corresponding acid chlorides with TMUCl Cl.

Facile synthesis of 2*H*-indazole derivatives starting from the Baylis–Hillman adducts of 2-cyclohexen-1-one

pp 5387-5391

Ka Young Lee, Saravanan Gowrisankar and Jae Nyoung Kim*

An iterative acetylene-epoxide coupling strategy for the total synthesis of longimicin C Yan-Tao He, Song Xue, Tai-Shan Hu and Zhu-Jun Yao*

pp 5393-5397

Formation of the unexpected 3-alkylated flavonoids in the alkylation of B-ring substituted 5,7-dihydroxy flavones

pp 5399-5402

Cai-Ling Wang, Xing Zheng, Wei-Dong Meng, Hong-Qi Li and Feng-Ling Qing*

HO OH O RX /
$$K_2CO_3$$
 RO OH OR O OR O

1

RY = CF_3 , OCF_2H , OCH_3

RX: CH_3I ; CH_3CH_2Br ; $CH_3CH_2CH_2Br$

Enantioselective intramolecular amidation of sulfamate esters catalyzed by chiral manganese(III) Schiff-base complexes

pp 5403-5408

Ji Zhang, Philip Wai Hong Chan and Chi-Ming Che*

One-step synthesis and photochromic properties of a stable triangle terthiophene Xiaochuan Li and He Tian*

pp 5409-5412

A new photochromic compound based on the hexatriene backbone was prepared by one-step coupling. The photophysical properties are presented.



New chiral ferrocenyl amidophosphine ligand for remarkable improvement of enantioselectivities in copper-catalyzed addition of diethylzinc to N-sulfonylimines

pp 5413-5416

Min-Can Wang,* Cui-Lian Xu, Yu-Xi Zou, Hong-Min Liu* and De-Kun Wang

A new method for the selective oxidation of allylic and benzylic alcohols

pp 5417-5419

Anthony J. Pearson* and Yoonhyun Kwak

OH
$$\frac{\text{CHDFe(CO)}_3 \text{ (0.3 equiv.)}}{\text{Me}_3 \text{NO (3 equiv.)}}$$
benzene, 10 h, r.t., 96% CHD = 1,3-cyclohexadiene

A cheap and efficient method for selective *para*-iodination of aniline derivatives Cyrille Monnereau, Errol Blart* and Fabrice Odobel*

pp 5421-5423

$$R_1$$
 I_2 I_2 I_2 I_2 I_3 I_4 I_4 I_5 I_5 I_6 I_7 I_8 I_8

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*Corresponding author

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