

Tetrahedron Letters Vol. 45, No. 22, 2004

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Enantioselective radical cyclization of α , β -unsaturated sulfonyl compounds	pp 4213–4216
Hideki Sugimoto, Makoto Kobayashi, Shuichi Nakamura and Takeshi Toru*	

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Studies toward a synthesis of trilobatin B, a lignan from the liverwort *Bazzania trilobata*: asymmetric construction of the tetrahydrofuran segment Hidemi Yoda,* Yuka Nakaseko and Kunihiko Takabe pp 4217-4220



Asymmetric synthesis of a new simplified dynemicin analogue equipped with a handlepp 4221–4223Luca Banfi,* Andrea Basso, Valentina Gandolfo, Giuseppe Guanti and Renata Riva*Phi 4221–4223



The new simplified Dynemicin analogue $\mathbf{2}$, equipped with a side arm containing a protected primary alcoholic function ('handle'), was prepared enantio- and diastereoselectively in 17 steps starting from monoacetate (S) $\mathbf{1}$.

Synthesis and structure of polyhydroxyl rigid triangular nano-macrocyclic imine having multiple hydrogen-bonding sites

Shigehisa Akine, Daisuke Hashimoto, Toshiyuki Saiki and Tatsuya Nabeshima*

Stereoselective nitrenium ion cyclizations: asymmetric synthesis of the (+)-Kishi lactam and an intermediate for the preparation of fasicularin

PBr₃

pyridine

Br

Duncan J. Wardrop,* Wenming Zhang and Chad L. Landrie

Synthesis of (+)-agelasine D from (+)-manool Bibigul T. Utenova and Lise-Lotte Gundersen*

(+)-Manool

HO

Synthesis of a branched chain aza-C-disaccharide via the cycloaddition of a chiral nitrone to an pp 4237–4240 alkene, both sugar derivatives

E:Z=85:15

Nikolaos G. Argyropoulos* and Vassiliki C. Sarli





4198





pp 4229-4231

Me (+)-Agelasine D

 cl^{\ominus}

NH₂

Æ

2 steps

pp 4241-4243 A new application of diphenylphosphorylazide (DPPA) reagent: convenient transformations of quinolin-4-one, pyridin-4-one and quinazolin-4-one derivatives into the 4-azido and 4-amino counterparts Alexander Aizikovich, Vladimir Kuznetsov, Sofia Gorohovsky, Amalia Levy, Simha Meir, Gerardo Byk and Garry Gellerman*



 $\sum_{N,H}^{N} \overset{Pn}{\underset{2.) \text{ RCHO}}{\longrightarrow}} \underbrace{\sum_{N,H}^{N} \overset{Pn}{\underset{2.0 \text{ RCHO}}{\longrightarrow}}} \underbrace{\sum_{N,H}^{N} \overset{O}{\underset{R^*}{\longrightarrow}} \overset{O}{\underset{R^*}{\overset{O}{\underset{R^*}{\longrightarrow}}} \overset{O}{\underset{R^*}{\overset{O}{\underset{R^*}{\longrightarrow}}} \overset{O}{\underset{R^*}{\overset{O}{\underset{R^*}{\longrightarrow}}} \overset{O}{\underset{R^*}{\overset{O}{\underset{R^*}{\overset{O}{}}{\overset{O}{\underset{R^*}{\overset{O}{}}} \overset{O}{\underset{R^*}{\overset{O}{\underset{R^*}{\overset{O}{}}} \overset{$

We describe a transformation of the oxo-function of a series of quinolin/pyridin/quinazolin-4-ones into 4-azido and thence into 4-amino derivatives in moderate yields by a very short and convenient new procedure using DPPA as reagent.

Diastereoselective carbonyl phosphonylation using chiral N,N'-bis-[(S)- α -phenylethyl]-bicyclic phosphorous acid diamides

Gloria E. Moreno, Leticia Quintero, Sylvain Bernès and Cecilia Anaya de Parrodi*



Gianluca Pozzi,* Marco Cavazzini, Orsolya Holczknecht, Silvio Quici and Ian Shepperson

to carbonyl compounds in conventional organic solvents.

Titanium(II)-mediated cyclization of (silyloxy)enynes: a synthesis of the C9-C19 subunit of dictyostatin-1

Gregory W. O'Neil and Andrew J. Phillips*



A readily prepared fluorous-tagged radical is an efficient, metal-free recyclable catalyst for the chemoselective oxidation of alcohols

pp 4253-4256





pp 4245-4248

An efficient copper-catalyzed coupling reaction of pyridin-2-ones with aryl and heterocyclic halides based on Buchwald's protocol

Chun Sing Li^* and Darryl D. Dixon



Palladium-catalysed arylation of acetoacetate esters to yield 2-arylacetic acid esters Jacob G. Zeevaart, Christopher J. Parkinson* and Charles B. de Koning pp 4261-4264

pp 4257-4260



The synthesis of a number of 2-arylacetic acid esters using a palladium-catalysed enolate arylation reaction is described.

One-pot synthesis of 5-(substituted-amino)pyrazoles

Dharmpal S. Dodd* and Rogelio L. Martinez



 $\downarrow^{R_4} \longrightarrow$

R₂N

New approach to preparation of N-acylphosphoramido(thio)(seleno)atespp 42Janina Baraniak,* Renata Kaczmarek, Ewa Wasilewska, Dariusz Korczyński and Wojciech J. Stec

$$R^{1}-C-NH_{2} + \underbrace{\begin{pmatrix} S \\ O \end{pmatrix}}_{O}P-CI \xrightarrow{X} R^{1}-C-NH-P \\ X = S, Se, [O] \\ \hline R^{2}OH \\ DBU \xrightarrow{R^{2}OH} R^{1}-C-NH-P -OR^{2}$$

pp 4265-4267

pp 4269-4272

Thiourea-isothiouronium conjugate for strong and selective binding of very hydrophilic $H_2PO_4^-$ anion at the 1,2-dichloroethane-water interface

Ryo Kato, Ying-Yu Cui, Seiichi Nishizawa, Tomoyuki Yokobori and Norio Teramae*

Stereoselective synthesis of novel conformationally restricted β - and γ -amino acids

Frieder Gnad, Marko Poleschak and Oliver Reiser*



Bromamine-T/RuCl₃ as an efficient system for the oxidation of tertiary amines to *N***-oxides** Vishal B. Sharma, Suman L. Jain and Bir Sain*

$$\begin{array}{c} R \\ R \\ R \\ R \end{array} \qquad \begin{array}{c} RuCl_3 / Bromamine-T \\ Acetonitrile/water (1:1), 80 \ ^{\circ}C \\ pH (8.4) \end{array} \qquad \begin{array}{c} R \\ R \\ R \\ \end{array} \qquad \begin{array}{c} R \\ R \\ R \\ R \end{array}$$

Synthesis of orthogonal end functionalized oligoethylene glycols of defined lengths Suri S. Iyer, Aaron S. Anderson, Scott Reed, Basil Swanson and Jürgen G. Schmidt*



pp 4273-4276

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pp 4281-4283

pp 4285-4288

$\label{eq:polymer-support} Polymer-supported N-benzyl- and N-benzhydryl-2-nitrobenzenesulfonamides as alternative to aldehyde linkers$

Viktor Krchňák* and Greg A. Slough



N-Alkylation of polymer-supported 2-nitrobenzenesulfonamide linkers represents an alternative route to reductive amination of aldehyde linkers.

но

Rostratone

CO₂Me

exo - Z - syn

Palladium mediated C–H activation in the field of terpenoids: synthesis of rostratone José Justicia, J. Enrique Oltra and Juan M. Cuerva*

We present results, which indicate that Pd-mediated C–H bond activation can be used under mild conditions for the remote functionalization of C-4 methyl groups of molecules with different terpenoid-like skeletons containing six- or seven-membered A rings. This strategy has proved to be useful for the synthesis of the natural labdane rostratone.

Stereoselective synthesis of 3a,7a-dihydro-3*H*,4*H*-furo[3,4-*c*]pyran-1-ones via intramolecular hetero-Diels–Alder reaction

Farnesylacetone

Cyril Fuhrer, Roland Messer and Robert Häner*

endo - E - syn



Konrad Misiura, Daria Szymanowicz, Magdalena Olesiak and Wojciech J. Stec*

 $\boldsymbol{\Psi}$

pp 4293-4296

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Incorporation of the bioactive moiety of leinamycin into thymidine

Ákos Szilágyi, István F. Pelyvás, Orsolya Majercsik and Pál Herczegh*



A new cyclooxygenase (COX) inhibitory pterocarpan from *Indigofera aspalathoides*: structure elucidation and determination of binding orientations in the active sites of the enzyme by molecular docking

C. Selvam, Sanjay M. Jachak,* R. Gnana Oli, Ramasamy Thilagavathi, Asit. K. Chakraborti and K. K. Bhutani

A new cyclooxygenase inhibitory pterocarpan was isolated from *Indigofera aspalathoides* and molecular docking studies were performed to find out its binding orientations in the active sites of COX-1 and COX-2.

Highly diastereoselective alkylation of vicinal dianions of chiral succinic acid derivatives: a new general strategy to (R)- β -arylmethyl- γ -butyrolactones

Manat Pohmakotr,* Darunee Soorukram, Patoomratana Tuchinda, Samran Prabpai, Palangpon Kongsaeree and Vichai Reutrakul



Sequosempervirin A, a novel spirocyclic compound from *Sequoia sempervirens* Yu-Mei Zhang, Ning-Hua Tan,* Min He, Yang Lu, Su-Qin Shang and Qi-Tai Zheng

A novel spirocyclic compound (4R)-4-(4-hydroxy-benzyl) spiro [4,5] dec-1-en-8-ol (sequosempervirin A) was isolated from the branches and leaves of *Sequoia sempervirens*. Its structure and relative stereochemistry were mainly determined by MS, 2D NMR and X-ray means, which is the first naturally occurring norlignan containing one spirocycle with C6 (cyclohexane)–C2–C3–C6 skeleton.





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Synthesis of 8-substituted bicyclo[3.2.1]octane-6-carboxylic acids and anti-convulsant properties of the corresponding amides

J. A. Miller,* J. Harris, A. A. Miller, G. M. Ullah and G. M. Welsh



[3+2]Cycloaddition provides a convenient route to substituted bicyclo[3.2.1]octane-6-carboxylic acids, some of the amides of which are anti-convulsants.



Hajime Nagano* and Saori Hara



GaCl₃-Catalyzed ortho-ethynylation reaction of N-benzylanilines

Ryo Amemiya, Akiko Fujii and Masahiko Yamaguchi*



A copper- and amine-free Sonogashira coupling reaction promoted by a ferrocene-based phosphinimine-phosphine ligand at low catalyst loading Antonio Arques,* David Auñon and Pedro Molina*



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pp 4345-4348

A novel imido-transfer reaction of aldehydes with $Ph_3P=NTs$ using $RuCl_2(PPh_3)_3$ as catalyst Suman L. Jain, Vishal B. Sharma and Bir Sain*

$$\begin{array}{c} R \\ H \end{array} \rightarrow \begin{array}{c} Ph_{3}P=NTs \\ H \end{array} \xrightarrow{RuCl_{2}(Ph_{3}P)_{3}} \\ \hline Dichloromethane, r.t \\ H \end{array} \xrightarrow{RuCl_{2}(Ph_{3}P)_{3}} \\ \hline Ph_{3}P=O \\ \hline Ph_$$

Addition of amine derivatives to phosphorylated 1,2-diaza-1,3-butadienes. Synthesis of α-aminophosphonates Francisco Palacios,* Domitila Aparicio, Yago López and Jesús M. de los Santos



An unusual twist conformation of 2-O-methyl-1,3,4,5-tetrakis-O-tert-butyldiphenylsilyl-myo-inositolpp 4349–4351Hidetoshi Yamada,* Kotaro Okajima, Hiroshi Imagawa, Yusuke Nagata and Mugio Nishizawapp 4349–4351



Application of high pressure, induced by water freezing, to the direct asymmetric aldol reaction Yujiro Hayashi,* Wataru Tsuboi, Mitsuru Shoji and Noriyuki Suzuki pp 4353-4356



higher enantiomeric excess than the reaction at 0.1 MPa and 23 °C

An imino-Diels-Alder route to meso-2,6-disubstituted-4-piperidones

Ana-Belén García, Carlos Valdés and María-Paz Cabal*



Stereoselective synthesis of meso-2,6-disubstituted-4-piperidones by imino-Diels-Alder reaction of 2-amino-1,3-butadienes with imines in the presence of $Cu(TfO)_2$ as Lewis acid catalyst.

Synthesis of morpholine nucleoside triphosphates

Tatiana V. Abramova,* Pavel A. Bakharev, Svetlana V. Vasilyeva and Vladimir N. Silnikov



Versatile use of bis-cyclic thionocarbonates of polyols as bis-electrophilic intermediates. Synthesis of pp 4365-4369 polyhydroxylated thioanhydropentitols with D,L-arabino, L-ribo and L-xylo, and thioanhydroaldoses with D-lyxo, L-ribo, D-xylo, D-allo, D-gulo and D-altro configurations

Alain Danquigny, Mohammed Benazza,* Sylvain Protois and Gilles Demailly



pp 4371-4374 Acid catalysed methanolysis of 2,5-diazabicyclo[2.2.2]octane-3,6-diones: scope and limitations Bie M. P. Verbist, Wim J. Smets, Wim M. De Borggraeve, Frans Compernolle and Georges J. Hoornaert*



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Friedel–Crafts reactions in ionic liquids: the counter-ion effect on the dealkylation and acylation pp 4375–4377 of methyl dehydroabietate

Carlos Baleizão, Natércia Pires, Bárbara Gigante* and Maria João Marcelo Curto







Identification of new catalysts for the asymmetric reduction of imines into chiral amines with polymethylhydrosiloxane using high-throughput screening

Tania Ireland,* François Fontanet and Guen-Gnanh Tchao



Easily characterized systems of C_{60} grafted on SiO₂

Evangelos Ntararas, Haralambos Matralis* and Gerasimos M. Tsivgoulis*

cleavable connection Hot Hot Hot In Solution



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The first total synthesis and absolute stereochemistry of plakortone G from the Jamaican sponge *Plakortis* sp. Satomi Kowashi, Takahisa Ogamino, Junichi Kamei, Yuichi Ishikawa and Shigeru Nishiyama*



Synthesis of (+)-anatoxin-a using enyne metathesis

Miwako Mori,* Tomohiro Tomita, Yoichi Kita and Tsuyoshi Kitamura



Synthesis of N-tosylanatoxin-a was achieved by metathesis of enyne in cis-substituents on a pyrrolidine derivatives.

Highly regioselective Wittig reactions of cyclic ketones with a stabilized phosphorus ylide under controlled microwave heating

Jinlong Wu, Huafeng Wu, Shaoyong Wei and Wei-Min Dai*



Radical-chain functionalisation at C-H centres using an *O***-oxiranylcarbinyl** *O***-silyl ketene acetal** Yudong Cai, Hai-Shan Dang and Brian P. Roberts^{*}

pp 4405-4409

Conditions: Bu^tON=NOBu^t initiator, ca. 85 °C

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Stereoselective synthesis of the *cis*-275B decahydroquinoline ring system Edith J. Banner, Edwin D. Stevens and Mark L. Trudell*



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*Corresponding author ()⁺ Supplementary data available via ScienceDirect

COVER

The cover figure shows plakortone G, a cytotoxic metabolite from the Jamaica Sponge which was found to possess the (4R, 8R)-configuration. This was unambiguously determined by its total synthesis. Details can be found in *Tetrahedron Letters* **2004**, 45, 4393–4396.

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