

Tetrahedron Letters Vol. 46, No. 16, 2005

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COMMUNICATIONS

The synthesis of (9S)-9-alkyl-9-hydroxyerythromycin A derivatives and their ketolides

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Eugene B. Grant,* Jesse M. Weiss, Shawn Branum, Stuart Hayden, Sigmond Johnson, Deodialsingh Guiadeen, William V. Murray and Mark J. Macielag

A short, concise synthesis of novel (9S)-9-alkyl-9- HO hydroxyerythromycin A derivatives and their corresponding ketolides, from clarithromycin (1) is described.

Catalytic asymmetric Simmons-Smith cyclopropanation of unfunctionalized olefins

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New low-molecular weight gelators based on L-valine and L-isoleucine with various terminal groups Masahiro Suzuki,* Teruaki Sato, Akio Kurose, Hirofusa Shirai and Kenji Hanabusa

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X= N₃, CN

A new heteroditopic receptor and sensor highly selective for bromide in the presence of a bound cation pp 2765–2769 Chomchai Suksai, Punnee Leeladee, Disyaphong Jainuknan, Thawatchai Tuntulani,* Nongnuch Muangsin, Orawon Chailapakul, Palangpol Kongsaeree and Chavang Pakavatchai

Reaction of a 5α -bromo- 6β ,19-epoxysteroid with BF3·Et2O/Ac2O. An evidence of a cyclic bromonium cation

pp 2771-2774

Martín A. Iglesias-Arteaga,* Fanny L. Ledesma-Rodríguez, José M. Méndez-Stivalet and Marcos Flores-Alamo

$$AcO$$
 Br_3
 Br_2
 Reg_2
 Reg_2
 Reg_3
 Reg_4
 Reg_4
 Reg_5
 Reg_4
 Reg_5
 Reg_6
 Reg_7
 Reg_7

Reaction of 3β -acetoxy-5-bromo- 6β ,19-epoxy- 5α -androstan-17-one with Ac_2O and BF_3 ·Et₂O afforded the rearranged 3β ,19-diacetoxy- 6α -bromo-5-hydroxy- 5β -androst-17-one in high yield.

Catalytic aromatization of Hantzsch 1,4-dihydropyridines by ferric perchlorate in acetic acid Majid M. Heravi,* Farahnaz K. Behbahani, Hossien A. Oskooie and Rahim Hekmat Shoar

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Synthesis and biological evaluation of unnatural canthine alkaloids

pp 2779-2782

Craig W. Lindsley,* Michael J. Bogusky, William H. Leister, Ray T. McClain, Ronald G. Robinson, Stanley F. Barnett, Deborah Defeo-Jones, Charles W. Ross, III and George D. Hartman

Solvent dependent selective alkylation of a bis(sulfonamide) for the synthesis of a DNA-binding chiral polyamine

pp 2783-2787

Carmen Peña, Ignacio Alfonso, Nicolas H. Voelcker and Vicente Gotor*

Studies on the Diels-Alder reaction of annulated furans: application to the synthesis of substituted phenanthrenes

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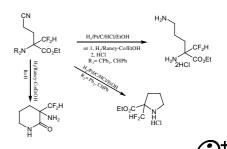
Jeffrey B. Sperry, Jasmine R. Constanzo, Jerry Jasinski, Ray J. Butcher and Dennis L. Wright*

Catalytic hydrogenation of ethyl 2-amino-2-difluoromethyl-4-cyanobutanoate and its Schiff base reaction modes

pp 2795–2797

Jingyang Zhu,* Benjamin A. Price, Jonathan Walker and Shannon X. Zhao

Under heterogeneous catalysis, ethyl 2-amino-2-difluoromethyl-4-cyanobutanoate or its Schiff base could be selectively reduced in good yield by hydrogenation to give a diamine, or to form a five-membered ring or a six-membered ring heterocycles. This selectivity is highly dependent on the type of catalysts used.



Asymmetric synthesis of a potent azepanone-based inhibitor of the cysteine protease cathepsin K Robert E. Lee Trout and Robert W. Marquis*

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A synthetic approach to the plakoridines modeled on a biogenetic theory

pp 2803-2807

Laura L. Etchells, Ali Sardarian and Roger C. Whitehead*

Synthesis of sterically hindered tris(4-imidazolyl)carbinol ligands and their copper(I) complexes related pp 2809–2812 to metalloenzymes

Masato Kujime and Hiroshi Fujii*

3 R
$$\stackrel{|}{N}$$
 $\stackrel{|}{\sim}$ $\stackrel{|}{\sim}$

Polyisoprenylated benzophenone derivatives from Clusia obdeltifolia

pp 2813-2816

Josanaide Sant'Ana Ribeiro Teixeira and Frederico Guaré Cruz*

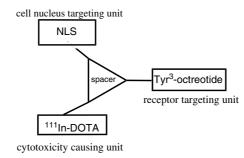
Two new polyisoprenylated benzophenones, 1 and 2, along with the known compound 28,29-Epoxyplukenetione A were isolated from the hexane extract of Clusia obdeltifolia. Their structures were established by careful spectroscopic analysis.

A rapid microwave-assisted esterification utilizing the Mukaiyama supported reagent

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Donato Donati, Costanza Morelli and Maurizio Taddei*

Synthesis of trifunctional somatostatin based derivatives for improved cellular and subcellular uptake pp 2821–2824 Mihaela Ginj and Helmut R. Maecke*



Synthesis of 5',9-anhydro-3-(β-D-ribofuranosyl)xanthine, and 3,5'-anhydro-xanthosine as potential anti-hepatitis C virus agents

pp 2825–2827

Byoung-Kwon Chun,* Peiyuan Wang, Abdalla Hassan, Jinfa Du, Phillip M. Tharnish, Lieven J. Stuyver, Michael J. Otto, Raymond F. Schinazi and Kyoichi A. Watanabe

(i)+

Montmorillonite K-10 as a mild acid for the Nicholas reaction

pp 2829-2832

Fernando R. Pinacho Crisóstomo, Romen Carrillo, Tomás Martín and Víctor S. Martín*

OR Montmorillonite K-10 R Nu
$$CO(CO)_3$$
 + Nu $CO(CO)_3$ + Nu $CO(CO)_3$ CO $CO(CO)_3$ (OC) $_3$ CO $CO(CO)_3$ Toluene, 60 °C

Nu = alcohol, epoxide or alkene

Synthesis and oligodeoxynucleotide binding properties of pyrrolidinyl peptide nucleic acids bearing prolyl-2-aminocyclopentanecarboxylic acid (ACPC) backbones

pp 2833-2837

Chaturong Suparpprom, Choladda Srisuwannaket, Polkit Sangvanich and Tirayut Vilaivan*

A series of novel conformationally rigid pyrrolidinyl peptide nucleic acids (PNA) based on p-prolyl-2-aminocyclopentanecarboxylic acid (ACPC) backbones was synthesized and the DNA binding properties of these PNAs studied. The PNA containing (1*S*,2*S*)-ACPC can form a very stable 1:1 complex with complementary DNA in a sequence-specific manner.

Amino acid-catalyzed direct enantioselective synthesis of β -amino- α -oxyaldehydes Ismail Ibrahem and Armando Córdova*

pp 2839-2843

R = CH₂OP, CO₂Et, Ar; P = protective group

up to 97% yield, 19:1 dr and >99%ee

Cymodienol and cymodiene: new cytotoxic diarylheptanoids from the sea grass Cymodocea nodosa Ioanna Kontiza, Constantinos Vagias, Jasmin Jakupovic, Dimitri Moreau, Christos Roussakis and Vassilios Roussis*

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A novel and efficient route to diarylmethanes catalyzed by nickel(II) ion on nanoporous carbon Sun Young Park, Min Kang, Jae Eui Yie, Ji Man Kim and Ik-Mo Lee*

pp 2849-2852

R'MgX, Ni/nano C
THF,
$$\triangle$$



Synthesis of a spirocyclic amine related to the marine natural products halichlorine and pinnaic acid Derrick L. J. Clive,* Jian Wang and Maolin Yu

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Highly regioselective Diels-Alder reactions of 9-substituted anthracenes and 2-acetamidoacrylate: synthesis of conformationally constrained α -amino acids

pp 2857-2860

Bingwei V. Yang* and Lidia M. Doweyko

R = CH₃, CI, NO₂, Br, CH₂OCH₃ etc. up to >99/1 meta/ortho ratio

Carbonyl allylations by allylic chlorides utilizing a reduction of tin(IV) iodide to triiodostannate(II) species with iodide sources

pp 2861-2863

Yoshiro Masuyama,* Kaori Takeuchi and Yasuhiko Kurusu

An expedient, regioselective synthesis of 2-alkylamino- and 2-alkylthiothiazolo[5,4-e]indoles

pp 2865-2868

Manas Chakrabarty,* Taraknath Kundu, Shiho Arima and Yoshihiro Harigaya

R = NHMe, NHEt, NHBn; SMe, SEt, S-*n*-Pr, S-*n*-Bu, S-*i*-Bu

Synthesis of highly substituted ureas and thioureas through 1,3-diaza-Claisen rearrangements Amy M. Bowser and José S. Madalengoitia*

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Microwave assisted solid-phase synthesis of trisubstituted 2-(2,6-purin-9-yl)acetamides

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Richard E. Austin, Christian Waldraff and Fahad Al-Obeidi*

Use of [hydroxy(tosyloxy)iodo]benzene in a novel and facile synthesis of 1,4-diaryl-2-(arylamino)but-2-ene-1,4-diones

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Om Prakash,* Anita Batra, Vishwas Chaudhri and Richa Prakash

Evidence for the importance of conformational equilibria in Rh-diphosphine complexes for the enantioselection in Rh-catalyzed asymmetric hydrogenation

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Hideyuki Tsuruta, Tsuneo Imamoto,* Kentaro Yamaguchi and Ilya D. Gridnev*



Facile generation method for conjugated allenyl esters based on retro-Dieckmann-type ring-opening reactions

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Shigeki Sano, Hisashi Shimizu and Yoshimitsu Nagao*

Trimethylaluminium-induced diastereoselective methylation onto ethyl 2-oxocyclopentane-1-carboxylate and isomerization between the dimethylaluminium-alkoxide products

pp 2887-2891

Shigeki Sano, Hisashi Shimizu and Yoshimitsu Nagao*

$$\begin{array}{c} O \\ O \\ CO_2Et \\ \hline \\ Ar \\ \hline \end{array}$$

Metalloporphyrin Cr(TPP)Cl-catalyzed Claisen rearrangement of simple aliphatic allyl vinyl ethers and its unique stereoselectivity

pp 2893–2896

Toshikatsu Takanami, Mikiko Hayashi and Kohji Suda*

Cr(TPP)Cl significantly enhances reversal of E-Z selectivity in the thermal Claisen rearrangement of allyl vinyl ethers, especially, 4,5- and 4,6-disubstituted derivatives, at low catalyst loading.



Efficient parallel resolution of an active ester of 2-phenylpropionic acid using quasi-enantiomeric Evans' oxazolidinones

pp 2897-2902

Gregory S. Coumbarides, Marco Dingjan, Jason Eames,* Anthony Flinn, Julian Northen and Yonas Yohannes

Asymmetric reduction of ortho-multisubstituted benzophenones catalyzed by diamine-Zn-diol complexes pp 2903-2906

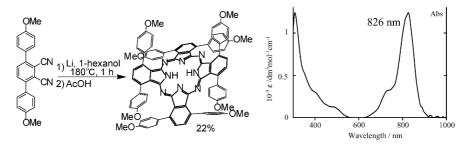
Hiroyuki Ushio and Koichi Mikami*

The asymmetric reduction of benzophenones multisubstituted at the *ortho*-positions was achieved via hydrosilylation catalyzed by in situ generated chiral diamine–Zn–diol complexes under mild conditions, wherein polymethylhydrosiloxane (PMHS) served as a safe and inexpensive source of hydride.

Non-planar phthalocyanines with Q-bands beyond 800 nm

pp 2907-2909

Takamitsu Fukuda, Terumi Ishiguro and Nagao Kobayashi*



Regioselective synthesis of [1,2,3]-triazoles catalyzed by Cu(I) generated in situ from Cu(0) nanosize activated powder and amine hydrochloride salts

pp 2911-2914

Hernán A. Orgueira,* Demosthenes Fokas, Yuko Isome, Philip C.-M. Chan and Carmen M. Baldino

R₁, R₂ = Alkyl, Benzyl, Aryl

Regioselective N- and C2-electrophilic substitution of 3-substituted indoles

pp 2915-2918

Sarah Leitch,* Jennifer Addison-Jones and Adam McCluskey*

59-100% combined isolated yield

Tosylation/mesylation of 4-hydroxy-3-nitro-2-pyridinones as an activation step in the construction of dihydropyrido[3,4-b]benzo[f][1,4]thiazepin-1-one based anti-HIV agents

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Pierre Storck, Anne-Marie Aubertin and David S. Grierson*



Pillared salicylaldehyde derivatives as building blocks for the design of cofacial salen-type ligands Laurent Sabater, Regis Guillot and Ally Aukauloo*

pp 2923-2926

Cofacial salicylaldehyde derivatives have been synthesized for the design of face to face multimetallic complexes.



Palladium-catalyzed cross-coupling reaction of alkynylzincs with benzylic electrophiles Mingxing Qian and Ei-ichi Negishi*

pp 2927-2930

$$R^{1}C = CZnBr + ArCH_{2}Br(or Cl) \xrightarrow{THF, 23 \ ^{\circ}C, \ 10 \ h} R^{1}C = CCH_{2}Ar$$

$$R^{1}C = CZnBr + ArCH_{2}Br(or Cl) \xrightarrow{THF, 23 \ ^{\circ}C, \ 10 \ h} R^{1}C = CCH_{2}Ar$$

$$R^{1}C = CCH_{2}Ar$$

Superacid-promoted reactions of pyrazolecarboxaldehydes and the role of dicationic electrophiles Douglas A. Klumpp,* Patrick J. Kindelin and Ang Li

pp 2931-2935

Stereoselective synthesis of farnesylphosphoryl β-D-arabinofuranose

pp 2937-2939

Avraham Liav* and Patrick J. Brennan

The title product was synthesized by coupling the trichloroacetimidate derivative of *trans*, *trans*-farnesol to a suitably protected β - \mathbf{p} -arabinofuranosyl phosphate.

A rapid and efficient method for migration-free acylation of lysophospholipids: synthesis of phosphatidylcholines with *sn*-2-chain-terminal reporter groups

pp 2941-2944

Renato Rosseto and Joseph Hajdu*

$$\begin{array}{c} O \\ CH_2OC(CH_2)_{14}CH_3 \\ HO-C-H \quad O \\ CH_2O-P-OCH_2CH_2N(CH_3)_3 \\ O \\ CH_2O-P-OCH_2CH_2N$$

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*Corresponding author

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