Graphical abstracts

Application of phenolic oxidation chemistry in synthesis: preparation of the BCE ring system of ryanodine

Tetrahedron 59 (2003) 8855

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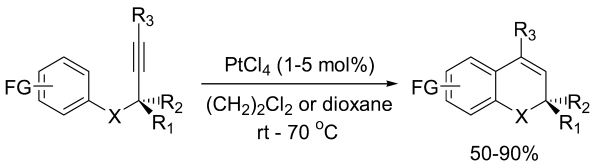
Pt(IV)-catalyzed cyclization of arene–alkyne substrates via C–H bond functionalization

Tetrahedron 59 (2003) 8859

Stefan J. Pastine, So Won Youn and Dalibor Sames*

Department of Chemistry, Columbia University, 3000 Broadway MC 3167, New York, NY 10027, USA

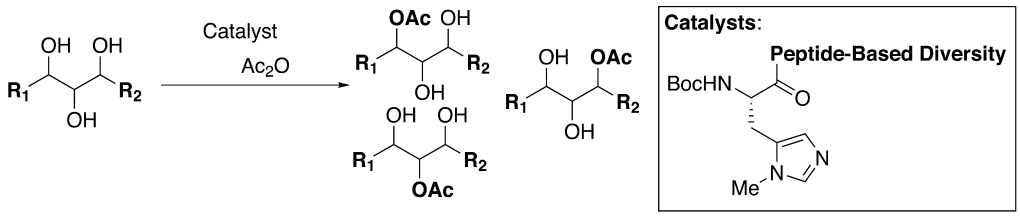


A peptide-based catalyst approach to regioselective functionalization of carbohydrates

Tetrahedron 59 (2003) 8869

Keith S. Griswold and Scott J. Miller*

Department of Chemistry, Merkert Chemistry Center, Boston College, Chestnut Hill, MA 02467-3860, USA



Free radical-mediated vinyl amination: a mild, general pyrrolidinyl enamine synthesis

Tetrahedron 59 (2003) 8877

Benjamin M. Nugent, Amie L. Williams, E. N. Prabhakaran and Jeffrey N. Johnston*

Department of Chemistry, Indiana University, Bloomington, IN 47405-7102, USA

Tandem silylformylation–allyl(crotyl)silylation: a new approach to polyketide synthesis

Tetrahedron 59 (2003) 8889

Michael J. Zacuto, Steven J. O'Malley and James L. Leighton*

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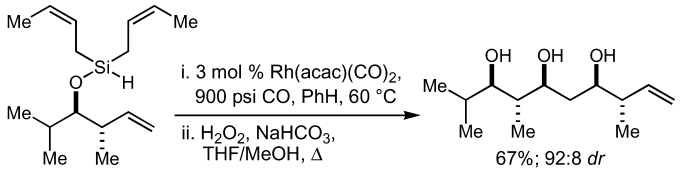
Tandem intramolecular silylformylation–allyl(crotyl)silylation reactions have been developed that allow the highly efficient synthesis of polyketide fragments.



New strategies to symmetric and unsymmetric cyclic sulfamide analogs of DMP 323: a 'sulfur linchpin'/RCM approach

Tetrahedron 59 (2003) 8901

Jung Ho Jun, Joseph M. Dougherty, María del Sol Jiménez and Paul R. Hanson*

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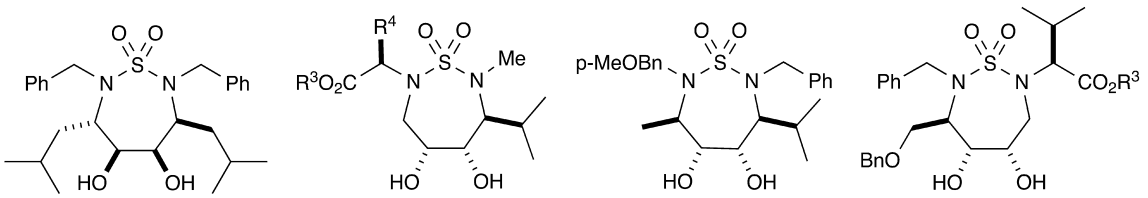

Synthesis of skipped enynes via phosphine-promoted couplings of propargylcopper reagents

Tetrahedron 59 (2003) 8913

Timothy P. Heffron, James D. Trenkle and Timothy F. Jamison*

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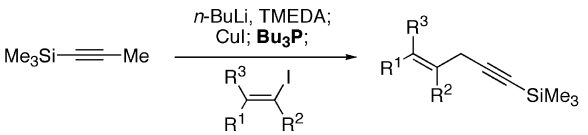
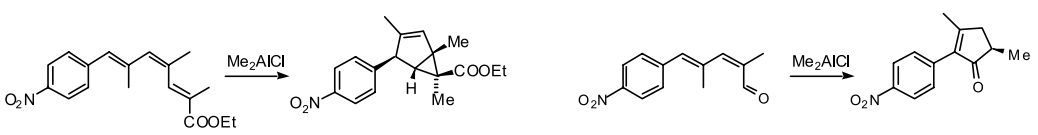


Development of novel Lewis acid catalyzed cycloisomerizations: synthesis of bicyclo[3.1.0]hexenes and cyclopentenones

Tetrahedron 59 (2003) 8919

Aubry K. Miller, Matthew R. Banghart, Christopher M. Beaudry, Judy M. Suh and Dirk Trauner*

Department of Chemistry, Center for New Directions in Organic Synthesis, University of California, 419 Latimer Hall, Berkeley, CA 94720, USA



Synthesis and cell cycle inhibition of the peptide enamide natural products terpeptin and the aspergillamides

Tetrahedron 59 (2003) 8931

Shun Su,[a] Hideaki Kakeya,[b] Hiroyuki Osada[b] and John A. Porco, Jr.[a,*]

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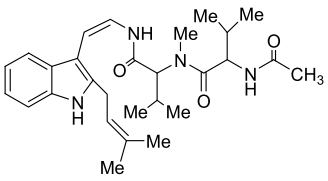
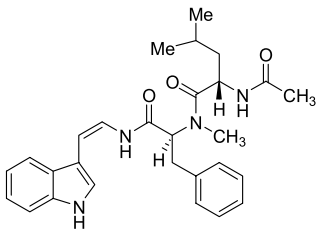
[b]*Antibiotics Laboratory, RIKEN Discovery Research Institute, RIKEN, 2-1 Hirosawa, Wako, Saitama 351-0198, Japan*



terpeptin



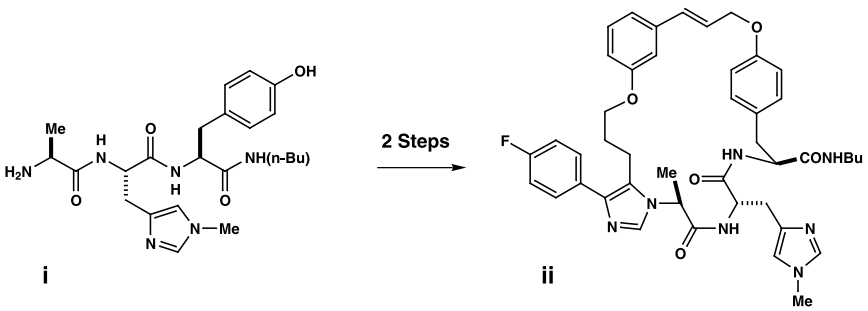
aspergillamide A

Methods to initiate synthetic re-structuring of peptides

Tetrahedron 59 (2003) 8947

Qi Wei, Susan Harran and Patrick G. Harran*

Department of Biochemistry, University of Texas Southwestern Medical Center at Dallas, 5323 Harry Hines Blvd, Dallas, TX 75390-9038, USA



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An intramolecular oxo Diels–Alder approach to 1-oxo-1,2,3,3a,4,7a-hexahydro-pyrano[3,4-*c*]pyrrole-4-carboxylic acid ethyl esters

Tetrahedron 59 (2003) 8955

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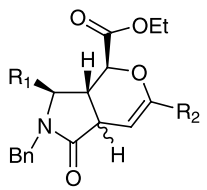
The diastereoselective synthesis of a series of 1-oxo-1,2,3,3a,4,7a-hexahydro-pyrano[3-4-*c*]pyrrole-4-carboxylic acid ethyl esters via an oxo Diels–Alder reaction is described. Ab initio calculations predicted the *exo* cycloaddition to yield the thermodynamic product and the *endo* addition to afford the kinetic product. The predictions were born out experimentally.

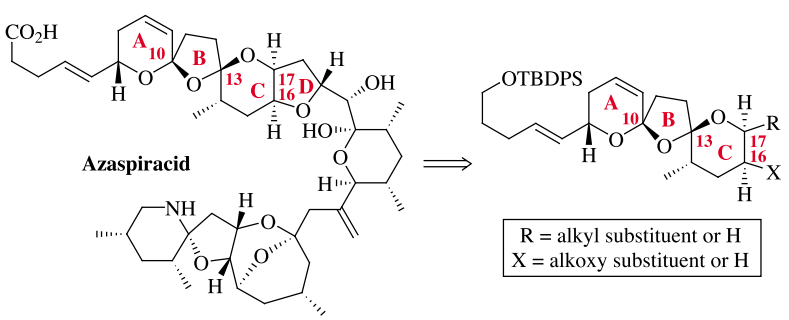


Controlling influences in bisspiroketal formation: synthesis of the ABC ring system of azaspiracid

Tetrahedron 59 (2003) 8963

Rich G. Carter,* T. Campbell Bourland, Xiao-Ti Zhou and Melissa A. Gronemeyer

Department of Chemistry, Oregon State University, Corvallis, OR 97331, USA



Synthesis of a model system for the preparation of phloroglucinol containing natural products

Tetrahedron 59 (2003) 8975

George A. Kraus,* Elena Dneprovskaia, Tuan H. Nguyen and Insik Jeon

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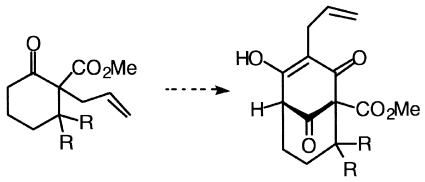
A model system for the synthesis of phloroglucinol containing natural products was synthesized. Key steps include a manganic acetate-mediated cyclization and the facile conversion of an alkene into a β-bromoenone.



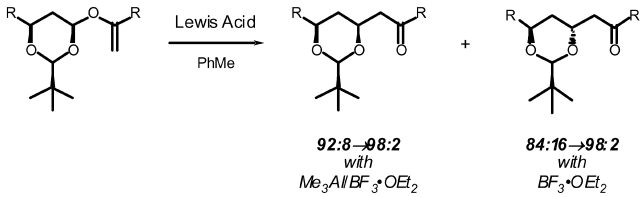
1,3-Polyol arrays via the stereoselective rearrangement of vinyl acetals

Tetrahedron 59 (2003) 8979

Yongda Zhang and Tomislav Rovis*

Department of Chemistry, Colorado State University, Fort Collins, CO 80523, USA

Rearrangement of 1,3-dioxanyl vinyl acetals affords either *syn*-($Me_3Al/BF_3{\cdot}OEt_2$) or *anti*-3,5-dihydroxyketones ($BF_3{\cdot}OEt_2$) with high selectivities.

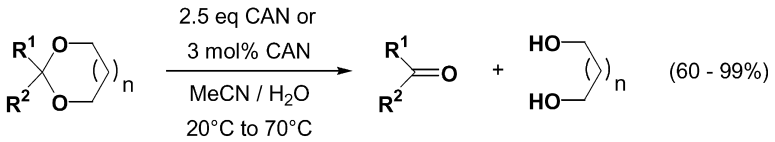


Mild and chemoselective catalytic deprotection of ketals and acetals using cerium(IV) ammonium nitrate

Tetrahedron 59 (2003) 8989

Ali Ates, Arnaud Gautier, Bernard Leroy, Jean-Marc Plancher, Yannick Quesnel, Jean-Christophe Vanherck and István E. Markó*

Université catholique de Louvain, Département de Chimie, Bâtiment Lavoisier, Place Louis Pasteur 1, B-1348 Louvain-la-Neuve, Belgium



Pyrazolo[1,5-*a*]pyridines: synthetic approaches to a novel class of antiherpetics

Tetrahedron 59 (2003) 9001

Brian A. Johns,* Kristjan S. Gudmundsson, Elizabeth M. Turner, Scott H. Allen, David K. Jung, Connie J. Sexton, F. Leslie Boyd, Jr. and Michael R. Peel

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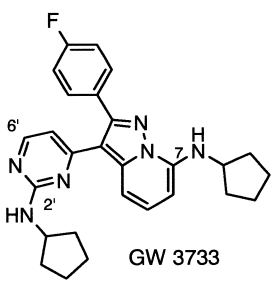

Radical cyclization studies directed toward the synthesis of BMS-200475 'entecavir': the carbocyclic core

Tetrahedron 59 (2003) 9013

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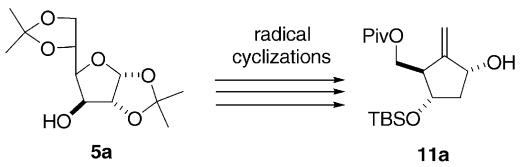

Use of *N*-trifluoroacetyl-protected amino acid chlorides in peptide coupling reactions with virtually complete preservation of stereochemistry

Tetrahedron 59 (2003) 9019

Paul A. Jass,[a] Victor W. Rosso,[a] Saibaba Racha,[b] Nachimuthu Soundararajan,[a] John J. Venit,[a] Andrew Rusowicz,[a] Shankar Swaminathan,[a] Julia Livshitz[a] and Edward J. Delaney[a,*]

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Both the use of trifluoroacetyl as an N-protecting group and the use of N-protected amino acid chlorides have long been avoided in peptide couplings because of racemization during activation and coupling. Control of temperature during activation and the use of specific controls during coupling allow for both techniques to be used in tandem, often with significant advantage over traditional methods.