

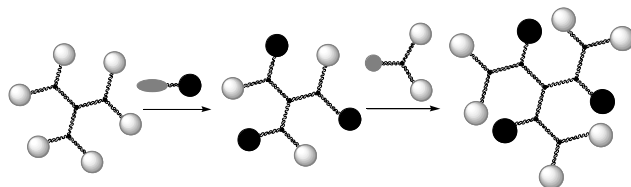
Contents

COMMUNICATIONS

A new way for the internal functionalization of dendrimers

pp 3019–3022

Marjorie Séverac, Julien Leclaire, Pierre Sutra, Anne-Marie Caminade* and Jean-Pierre Majoral*

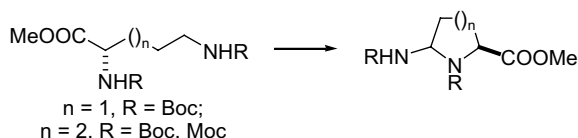


The selective reaction of one on two of each end group of a small dendrimer is the starting point of a new way for the internal functionalization of dendrimers. The unreacted functions are used later, for growing the dendrimers by applying a classical method of synthesis.

A selective catalytic side chain oxidation of lysine and ornithine derivatives

pp 3023–3025

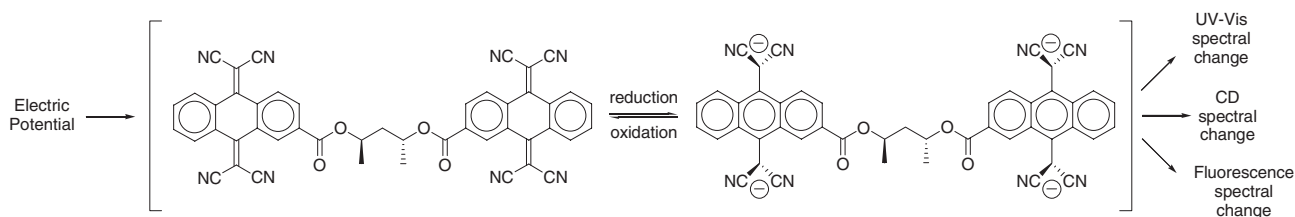
Kai Rossen,* Andrej Kolarovič, Denys Baskakov and Michael Kiesel



Three-way-output response system by electric potential: UV-vis, CD, and fluorescence spectral changes upon electrolysis of the chiral ester of tetracyanoanthraquinodimethane

pp 3027–3030

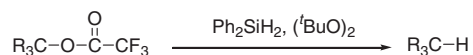
Hiroki Higuchi, Koji Ichioka, Hidetoshi Kawai, Kenshu Fujiwara, Masakazu Ohkita, Takashi Tsuji and Takanori Suzuki*



Radical deoxygenation of tertiary alcohols via trifluoroacetates

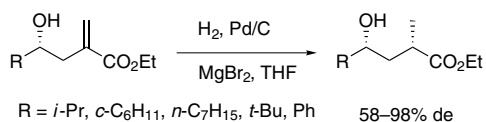
pp 3031–3033

Joong-Gon Kim, Dae Hyan Cho and Doo Ok Jang*

**Chelation-controlled highly diastereoselective catalytic hydrogenation of γ -hydroxy- α -methylene carboxylic acid esters**

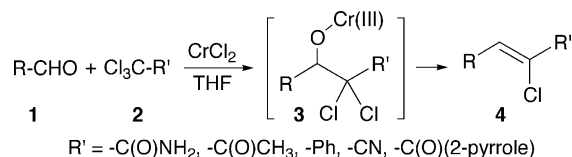
pp 3035–3037

Hajime Nagano,* Misaki Yokota and Yukiko Iwazaki

**Stereoselective CrCl₂-mediated condensation of aldehydes with functionalized 1,1,1-trichlorides: synthesis of trisubstituted (*Z*)-chloroolefins**

pp 3039–3042

J. R. Falck,* Anish Bandyopadhyay, D. K. Barma, Dong-Soo Shin, Abhijit Kundu and R. V. Krishna Kishore

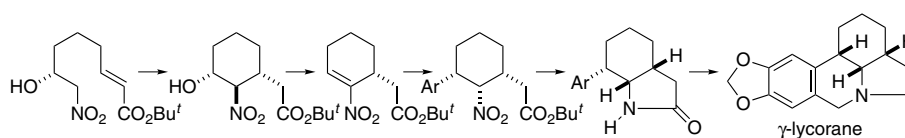


CrCl₂-mediated condensations of aldehydes with 1,1,1-trichlorides **2** afford trisubstituted chloroolefins **4** in excellent yields and generally high *Z*-stereoselectivity. The intermediate dichlorohydrins **3** can be isolated in good yields using limited reagent and reduced temperature.

Efficient synthesis of (\pm)- γ -lycorane employing stereoselective conjugate addition to nitroolefin

pp 3043–3045

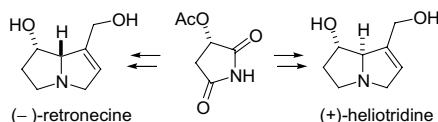
Tomohisa Yasuhara, Emi Osafune, Katsumi Nishimura, Mitsuaki Yamashita, Ken-ichi Yamada, Osamu Muraoka and Kiyoshi Tomioka*



Stereoselective construction of the pyrrolizidine bridgehead stereochemistry by the adjacent hydroxyl group in the synthesis of (+)-heliotridine and (-)-retronecine

pp 3047–3050

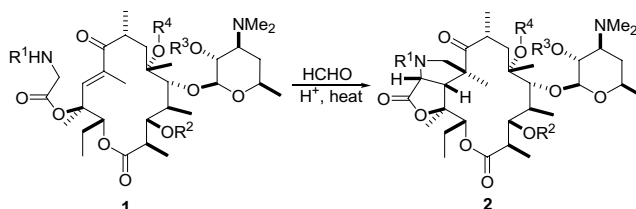
Jie-Ming Huang, Sea-Chuan Hong, Kun-Liang Wu and Yeun-Min Tsai*



The stereoselective synthesis of novel macrolide antibacterial agents via an intramolecular 1,3-dipolar cycloaddition of azomethine ylide

pp 3051–3053

Yu Gui Gu,* Xiaolin Zhang, Richard F. Clark, Stevan W. Djuric and Zhenkun Ma

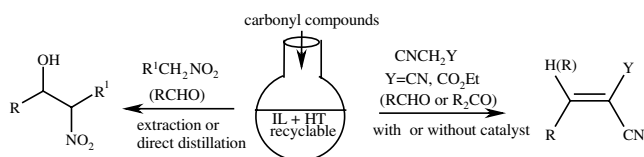


An intramolecular 1,3-dipolar cycloaddition of azomethine ylide, generated in situ via the reaction of **1** with formaldehyde, provided a novel tricyclic macrolide **2**. The high stereoselectivity of this [2+3] reaction was achieved by introducing a suitable directing group R^4 at C-6 position of macrolide.

Hydrotalcite catalysis in ionic liquid medium: a recyclable reaction system for heterogeneous Knoevenagel and nitroaldol condensation

pp 3055–3058

Faiz Ahmed Khan,* Jyotirmayee Dash, Rashmirekha Satapathy and Sarasij K. Upadhyay

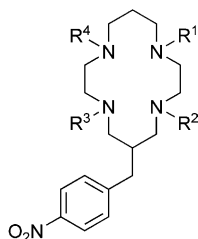


Knoevenagel condensation proceeds efficiently in recyclable [bmim]PF₆ and [bmim]BF₄ without any catalyst, and hydrotalcites in ionic liquid serve as a safe and recyclable reaction system for both Knoevenagel as well as nitroaldol condensations.

Efficient N- and C-functionalisation of cyclam macrocycles utilising bisaminal methodology

pp 3059–3062

Elizabeth A. Lewis, Cheryll C. Allan, Ross W. Boyle and Stephen J. Archibald*

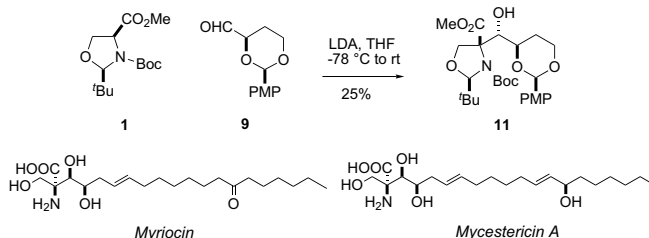


An efficient synthesis of C-functionalised cyclam macrocycles that employs bisaminal intermediates and allows subsequent N-substitution to be controlled is reported.

Highly diastereoselective aldol additions to five-ring *N,O*-acetals

pp 3063–3065

Martin Brunner and Ari M. P. Koskinen*

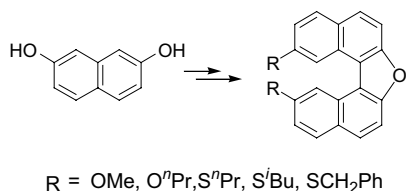


Highly diastereoselective aldol additions of pure (2*R*,4*S*)-2-*tert*-butyloxazolidinone-3,4-dicarboxylic acid 3-*tert*-butyl ester 4-methyl ester **1** are reported. While achiral carbonyl compounds lead to mixtures of diastereomers, the double stereodifferentiation of chiral aldehydes gave a single product isomer.

A concise synthesis of functionalized 7-oxa-[5]-helicenes

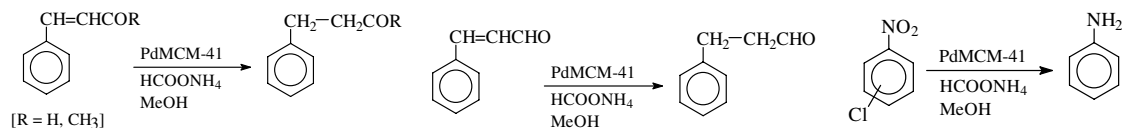
pp 3067–3070

Jetsuda Areephong, Nopporn Ruangsupapichart and Tienthong Thongpanchang*

**Selective reduction of alkenes, α,β -unsaturated carbonyl compounds, nitroarenes, nitroso compounds, N,N-hydrogenolysis of azo and hydrazo functions as well as simultaneous hydrodehalogenation and reduction of substituted aryl halides over PdMCM-41 catalyst under transfer hydrogen conditions**

pp 3071–3075

Parasuraman Selvam,* Sachin U. Sonavane, Susanta K. Mohapatra and Radha V. Jayaram

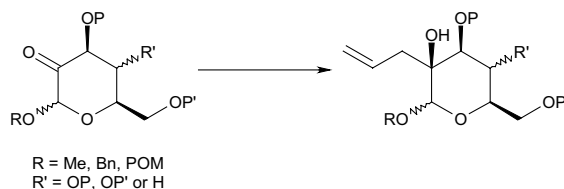


Palladium-incorporated mesoporous silicate (PdMCM-41) molecular sieves were found to be a highly efficient solid acid catalyst under transfer hydrogen conditions.

Grignard additions to 2-uloses: synthesis of stereochemically pure tertiary alcohols

pp 3077–3080

Ed Cleator, Catherine F. McCusker, Frank Steltzer and Steven V. Ley*

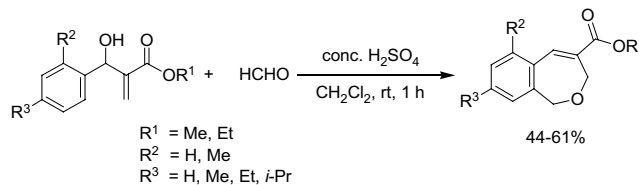


The addition of Grignard reagents to a number of 2-uloses has been investigated. Despite initial low diastereoselectivities it was found that tuning the ketone starting materials allowed formation of a single alcohol product.

A facile tandem construction of C–O and C–C bonds: a novel one-pot transformation of Baylis–Hillman adducts into 2-benzoxepines

pp 3081–3083

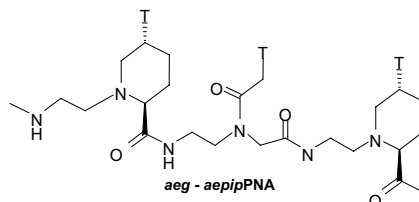
Deevi Basavaiah,* Duddu S. Sharada and Ainelly Veerendhar



Chimeric peptide nucleic acids incorporating (2*S*,5*R*)-aminoethyl pipercolyl units: synthesis and DNA binding studies

pp 3085–3088

Pravin S. Shirude, Vijayanti A. Kumar* and Krishna N. Ganesh



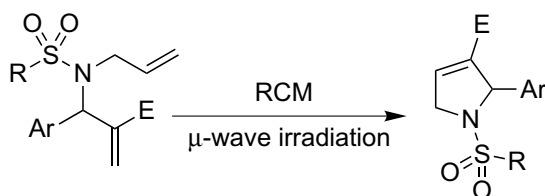
The six-membered pipercolic acid based *aecipPNA* is a higher homologue of aminoethylprolyl PNA. The synthesis of the thyminyl-2*S*,5*R*-*aecipPNA* monomer is reported. The preliminary results of the synthesis, characterization, and DNA binding properties of the triplex forming chimeric *aegPNA*–*aecipPNA* oligomers are described.



Efficient microwave-assisted formation of functionalized 2,5-dihydropyrroles using ruthenium-catalyzed ring-closing metathesis

pp 3089–3092

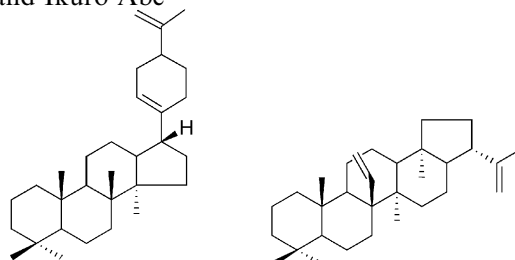
Daniela Balan and Hans Adolfsson*



Enzymatic cyclization of 26- and 27-methylidenesqualene to novel unnatural C₃₁ polyprenoids by squalene:hopene cyclase

pp 3093–3096

Hideya Tanaka, Hiroshi Noguchi and Ikuro Abe*



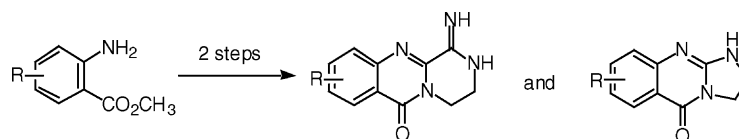
Squalene cyclase from *Alicyclobacillus acidocaldarius* accepted 26- and 27-methylidenesqualene as a substrate and converted to novel unnatural C₃₁ polyprenoids.



A rapid and convenient synthesis of novel 1-imino-2,3-dihydro-1*H*-pyrazino[2,1-*b*]quinazolin-5-ones

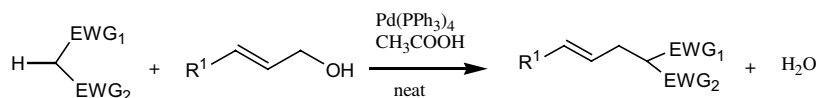
pp 3097–3099

Maria de Fatima Pereira, François René Alexandre, Valérie Thiéry and Thierry Besson*

A rapid and original synthesis of novel pyrazino[2,1-*b*]quinazolines and imidazo[2,1-*b*]quinazolin-5-ones is described.**Direct allylic substitution of allyl alcohols by carbon pronucleophiles in the presence of a palladium/carboxylic acid catalyst under neat conditions**

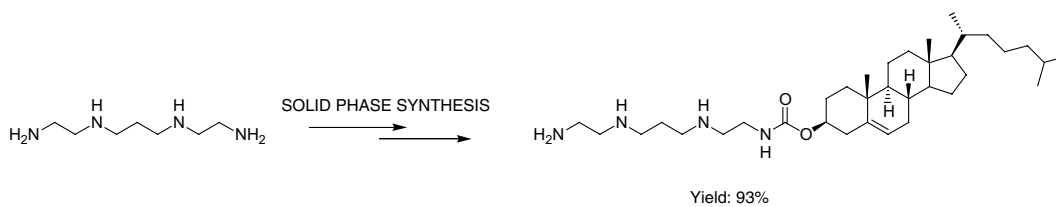
pp 3101–3103

Nitin T. Patil and Yoshinori Yamamoto*

**The facile solid-phase synthesis of cholesterol-based polyamine lipids**

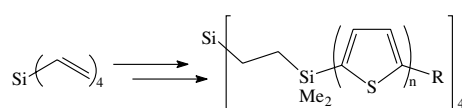
pp 3105–3107

Morag Oliver, Michael R. Jorgensen* and Andrew Miller*

**Novel radial oligothieryl silanes**

pp 3109–3111

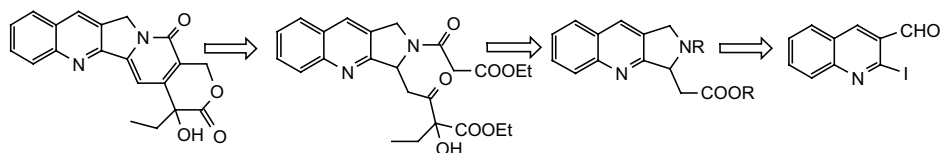
Pavel Arsenyan,* Olga Pudova, Juris Popelis and Edmunds Lukevics



A synthesis of camptothecin

Subhash P. Chavan* and Rasapalli Sivappa

pp 3113–3115

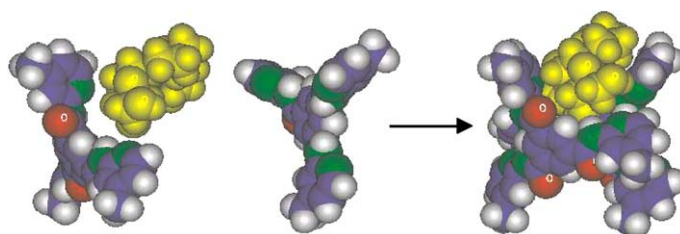


A total synthesis of camptothecin has been carried out. Central to our synthesis is the intramolecular condensation of a suitably designed ketol, which in turn was obtained from a tricyclic ABC ring synthon. A tandem reductive amination and Michael addition sequence on an unsaturated quinoline ester was employed for the assembly of the ABC skeleton.

Pyridine-based receptors with high affinity for carbohydrates. Influence of the degree of steric hindrance at pyridine nitrogen on the binding mode

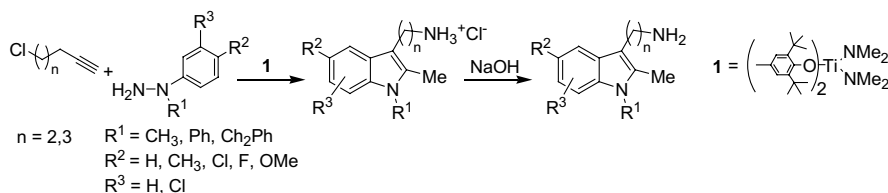
Monika Mazik* and Willi Sicking

pp 3117–3121

**Efficient one-pot synthesis of tryptamines and tryptamine homologues by amination of chloroalkynes**

Vivek Khedkar, Annegret Tillack, Manfred Michalik and Matthias Beller*

pp 3123–3126

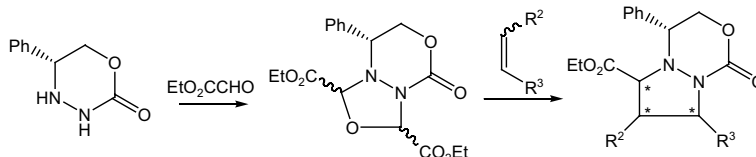


The first general method is presented for the direct synthesis of tryptamine derivatives from commercially available aryl hydrazines and chloroalkynes.

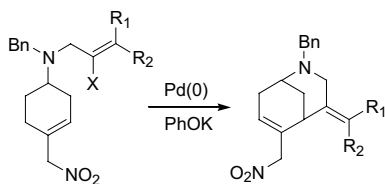
Asymmetric 1,3-dipolar cycloadditions of a chiral nonracemic glyoxylic azomethine imine

Florence Chung, Ariane Chauveau, Mohamed Seltki, Martine Bonin* and Laurent Micouin*

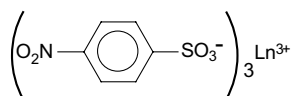
pp 3127–3130



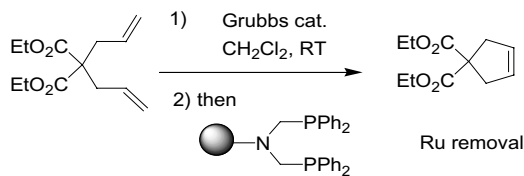
Palladium-catalysed intramolecular coupling of vinyl or aryl halides and β,γ -unsaturated nitronates pp 3131–3135
 Daniel Solé,* Xavier Urbaneja and Josep Bonjoch



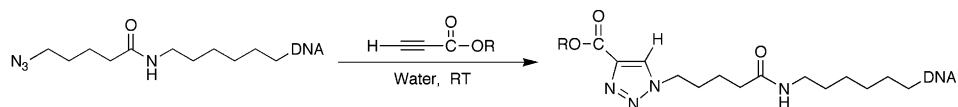
Lanthanide(III) nosylates as new nitration catalysts pp 3137–3139
 Tatjana N. Parac-Vogt and Koen Binnemans*



An efficient and inexpensive scavenger resin for Grubbs' catalyst pp 3141–3142
 Markus Westhus, Elisabeth Gonthier, Dirk Brohm and Rolf Breinbauer*



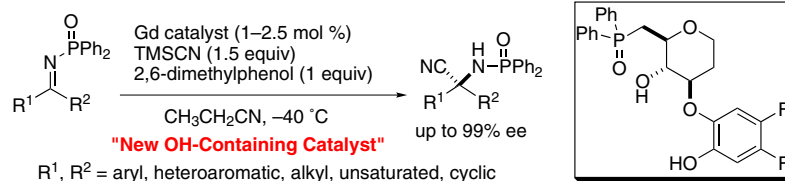
1,3-Dipolar cycloaddition of azides with electron-deficient alkynes under mild condition in water pp 3143–3146
 Zengmin Li, Tae Seok Seo and Jingyue Ju*



General and practical catalytic enantioselective Strecker reaction of ketoimines: significant improvement through catalyst tuning by protic additives

pp 3147–3151

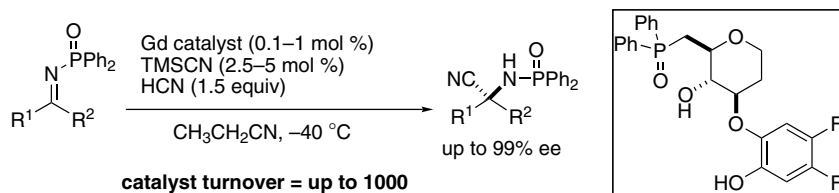
Nobuki Kato, Masato Suzuki, Motomu Kanai* and Masakatsu Shibasaki*



Catalytic enantioselective Strecker reaction of ketoimines using catalytic amount of TMSCN and stoichiometric amount of HCN

pp 3153–3155

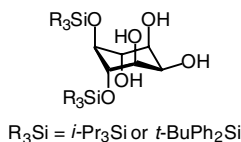
Nobuki Kato, Masato Suzuki, Motomu Kanai* and Masakatsu Shibasaki*



Stable axial-rich chair conformer of *myo*-inositol derivatives due to introduction of two adjacent bulky silyl protections

pp 3157–3160

Hidetoshi Yamada,* Kotaro Okajima, Hiroshi Imagawa, Tatsuya Mukae, Yoshiaki Kawamura and Mugio Nishizawa

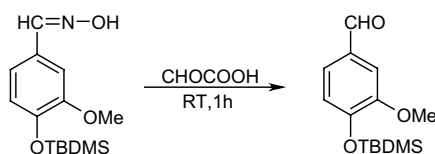


Introduction of two bulky silyloxy groups can flip multifunctionalized cyclohexane rings into the axial-rich chair conformation.

A facile deprotection of oximes using glyoxylic acid in an aqueous medium

pp 3161–3162

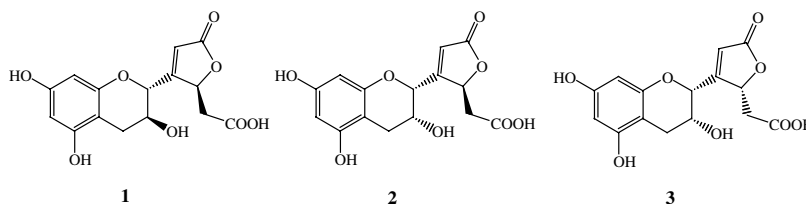
Subhash P. Chavan* and Priti Soni



Novel flavanol derivatives from grape seeds

pp 3163–3166

Peihong Fan, Hongxiang Lou,* Wentao Yu, Dongmei Ren, Bin Ma and Mei Ji



Three novel flavanol oxidative derivatives named viniferone A, B and C having structures 1, 2 and 3, respectively, were isolated from grape (*Vitis vinifera* L.) seeds.

OTHER CONTENTS

Calendar
Contributors to this issue
Instruction to contributors

pp I–X
 p XI
 p XIII–XV

*Corresponding author

+ Supplementary data available via ScienceDirect

COVER

Catalytic enantioselective Strecker reaction of ketoimines with broad substrate generality was achieved using a chiral gadolinium catalyst and protic additives. Mechanistic consideration based on the catalyst structure led to the development of more advanced reaction conditions, using the combination of a catalytic amount of TMSCN and a stoichiometric amount of HCN. Catalyst turnover number reached up to 1000 while maintaining an excellent enantioselectivity. See *Tetrahedron Letters* **2004**, *45*, 3153–3155. © 2004 M. Shibasaki. Published by Elsevier Ltd.



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CONTENTS
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