

Tetrahedron Letters Vol. 49, No. 42, 2008

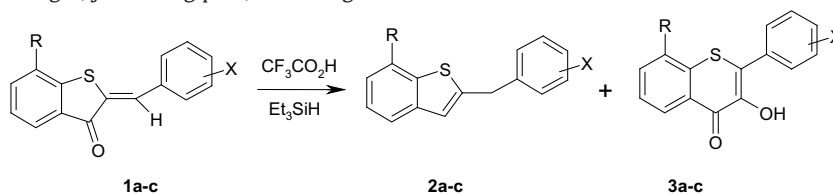
Contents

COMMUNICATIONS

An unexpected triethylsilane-triggered rearrangement of thioaurones to thioflavonols under SPPS conditions

pp 6033–6035

Miranda Varedian, Vratislav Langer, Jonas Bergquist, Adolf Gogoll *



a, R = COOH, X = H; b, R = COOH, X = *p*-CH₂NHBoc;
c, R = CO-Ala, X = *p*-CH₂NH-Val-OAc

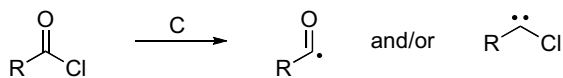
Thioaurones are converted to a mixture of thiaindenes and thioflavonols when exposed to reaction conditions employed in SPPS, that is, treatment with trifluoroacetic acid in the presence of triethylsilane.



Reactions of atomic carbon with acyl chlorides

pp 6036–6038

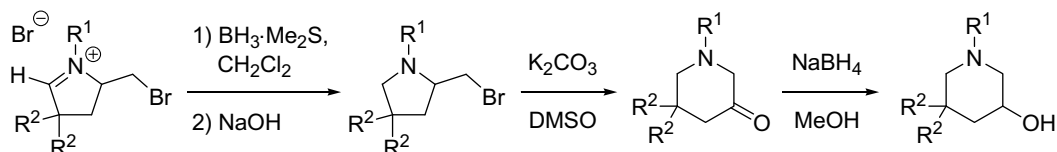
Daniel B. Herrick, Dasan M. Thamattoor *, Philip B. Shevlin *



Reduction of 5-(bromomethyl)-1-pyrrolinium bromides to 2-(bromomethyl)pyrrolidines and their transformation into piperidin-3-ones through an unprecedented ring expansion-oxidation protocol

pp 6039–6042

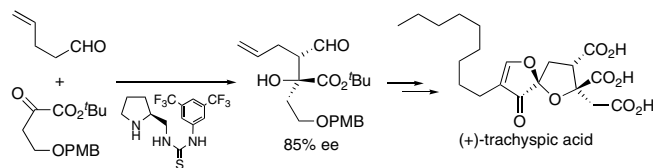
Matthias D'hooghe, Jan Baele, Jan Contreras, Mark Boelens, Norbert De Kimpe *



Asymmetric synthesis of (+)-trachyspic acid

pp 6043–6045

Kenji Morokuma, Yuko Taira, Yumiko Uehara, Setsuya Shibahara, Keisuke Takahashi, Jun Ishihara, Susumi Hatakeyama *

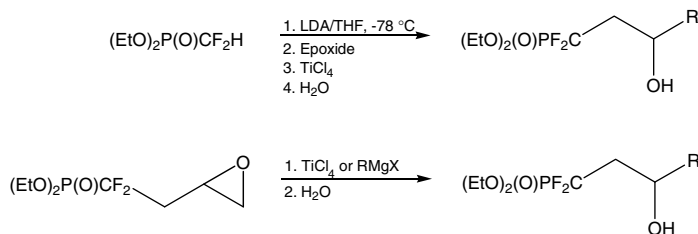


A total synthesis of (+)-trachyspic acid, a tumor cell heparanase, was accomplished starting with enantioselective organocatalytic aldol reaction of di-tert-butyl 4-(4-methoxybenzyloxy)-2-oxobutanoate with pent-4-enal.

TiCl₄ and Grignard reagent-promoted ring-opening reactions of various epoxides: synthesis of γ -hydroxy- α,α -difluoromethylenephosphonates

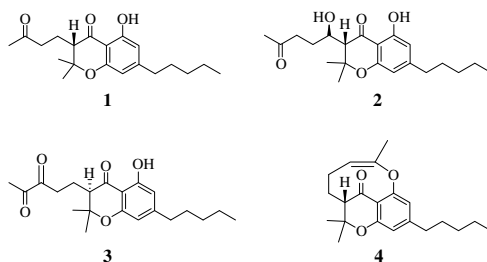
pp 6046–6049

Romana Pajkert, Alexander A. Kolomeitsev, Magdalena Milewska, Gerd-Volker Röschenthaler *, Henryk Koroniak *

**Structure determination and absolute configuration of cannabichromane derivatives from high potency *Cannabis sativa***

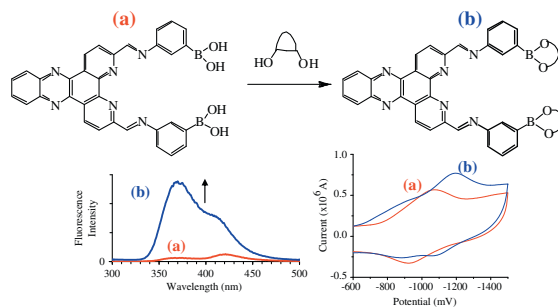
pp 6050–6053

Safwat A. Ahmed, Samir A. Ross *, Desmond Slade, Mohamed M. Radwan, Ikhlas A. Khan, Mahmoud A. ElSohly *

**Dual optical and electrochemical saccharide detection based on a dipyrido[3,2-a:2'3'-c]phenazine (DPPZ) ligand**

pp 6054–6057

Daniel S. Beaudoin, Sherine O. Obare *

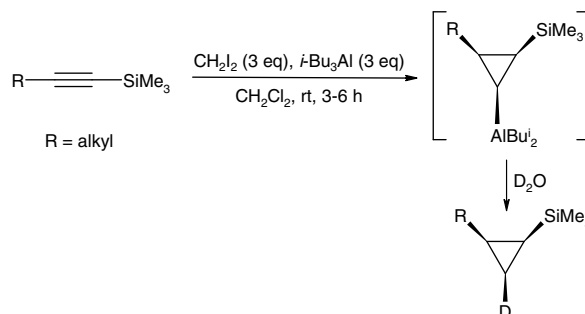


Diastereoselective conversion of alkynyl(trimethyl)silanes into substituted cyclopropanes affected by the *i*-Bu₃Al–CH₂I₂ reagent

pp 6058–6060

Ilfir R. Ramazanov ^{*}, Leisan K. Dil'mukhametova, Leonard M. Khalilov, Usein M. Dzhemilev, Oleg M. Nefedov

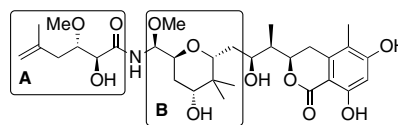
A highly convenient and diastereoselective method for the synthesis of cyclopropylaluminums has been described.

**Synthetic studies toward the pyran core and the amide side chain of psymberin**

pp 6061–6064

Hugo Lachance, Olivier Marion, Dennis G. Hall ^{*}

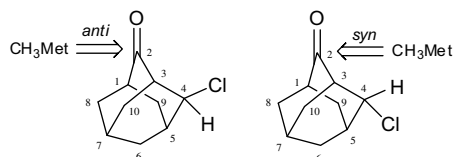
Doubly diastereocontrolled *Sc*(OTf)₃ catalyzed methallylboration



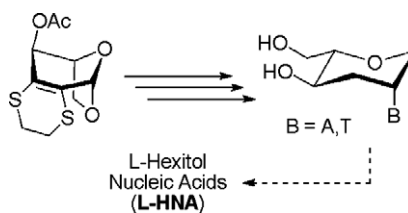
Cr(III)^{*} catalyzed oxa[4+2] cycloaddition / allylboration three-component reaction

Substituent stereochemistry effects on diastereoselective methylation reaction of 4-chloroadamantan-2-ones

pp 6065–6067

Luciano Barboni, Antonello Filippi ^{*}, Caterina Frascchetti, Sandra Giuli, Mauro Marcolini, Enrico Marcantoni ^{*}**De novo approach to L-anhydrohexitol nucleosides as building blocks for the synthesis of L-hexitol nucleic acids (L-HNA)**

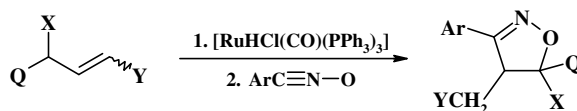
pp 6068–6070

Daniele D'Alonzo, Annalisa Guaragna ^{*}, Arthur Van Aerschot, Piet Herdewijn, Giovanni Palumbo

Convenient synthesis of isoxazolines via tandem isomerization of allyl compounds to vinylic derivatives and 1,3-dipolar cycloaddition of nitrile oxides to the vinylic compounds

pp 6071–6074

Stanisław Krompiec*, Piotr Bujak, Wojciech Szczepankiewicz



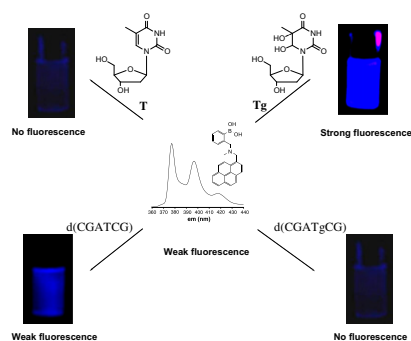
Q = RO, RS, R₂N and others (R = alkyl and aryl); X, Y = H, R, RO; Ar = 2,6-dichlorophenyl, 2,4,6-trimethylphenyl, 2,4,6-trimethoxyphenyl, 4-chlorophenyl.



Boronic acid-based fluorescent receptors for selective recognition of thymine glycol

pp 6075–6078

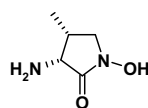
Delphine Luvino, Didier Gasparutto, Sandra Reynaud, Michael Smietana*, Jean-Jacques Vasseur*



A short and efficient synthesis of the NMDA glycine site antagonist: (3R,4R)-3-amino-1-hydroxy-4-methylpyrrolidin-2-one (L-687,414)

pp 6079–6080

Emmanuel Pinard*, Serge Burner, Philippe Cueni, François Montavon, Daniel Zimmerli

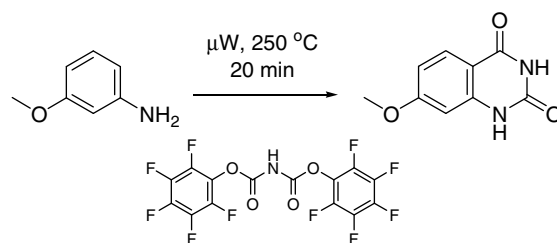


L-687,414

A novel strategy for the synthesis of uracil derivatives using bis(pentafluorophenyl)imidodicarbonate

pp 6081–6083

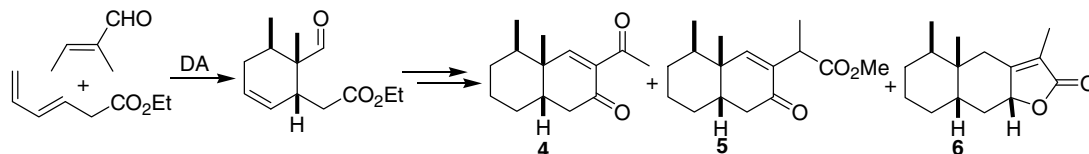
Stephanie M. Chichetti, Sean P. Ahearn, Alexey Rivkin*



A new route to eremophilanes: synthesis of (±)-eremophilenolide, (±)-eremophiledinone, and (±)-deoxyeremopetasidione

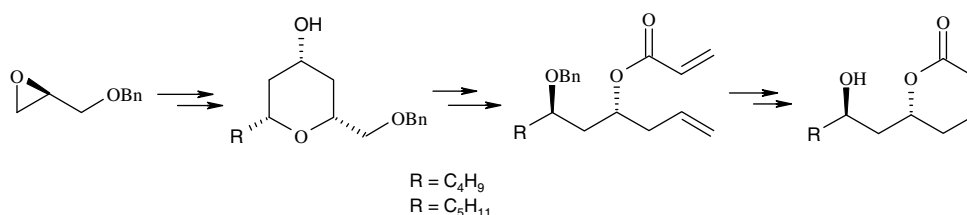
pp 6084–6086

P. Srinivas, D. Srinivasa Reddy, K. Shiva Kumar, P. K. Dubey, Javed Iqbal, Parthasarathi Das *


Prins and RCM protocols for the synthesis of the pheromones of the giant white butterfly *Idea leuconoe*

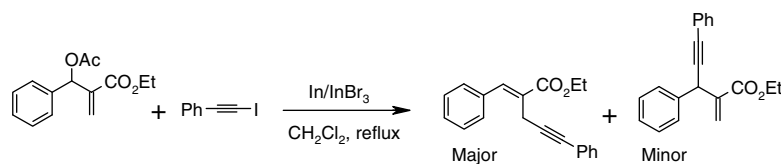
pp 6087–6089

Gowravaram Sabitha *, Narjis Fatima, E. Venkata Reddy, J. S. Yadav


Indium-mediated alkylation of Baylis–Hillman acetates: a novel route to 1,4-enynes

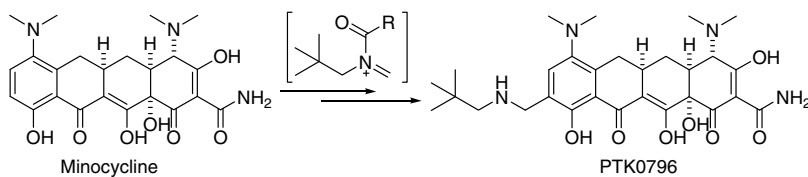
pp 6090–6094

Jhillu S. Yadav *, Basi V. Subba Reddy, Nagendra Nath Yadav, Ashutosh Pratap Singh, Madavi Choudhary, Ajit C. Kunwar


Synthesis development of an aminomethylcycline antibiotic via an electronically tuned acyliminium Friedel–Crafts reaction

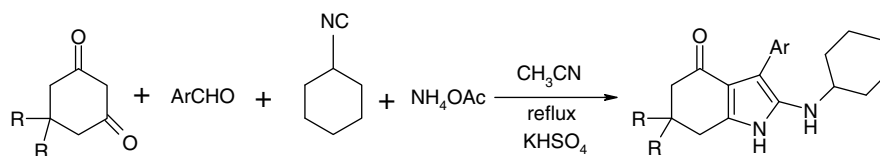
pp 6095–6100

John Y. L. Chung *, Frederick W. Hartner, Raymond J. Cvetovich



A novel and facile synthesis of 2-(cyclohexylamino)-6,7-dihydro-3-aryl-1H-indole-4(5H)-ones via a one-pot multi-component reaction

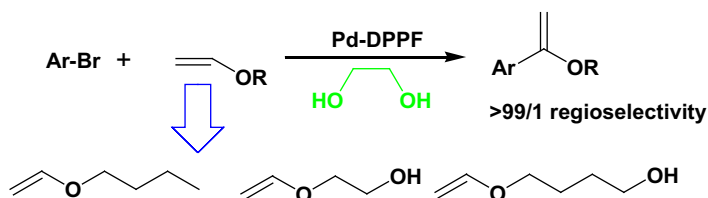
pp 6101–6103

Majid M. Heravi ^{*}, Bita Baghernejad, Hossein A. Oskooie, Rahim. Hekmatshoar

A highly efficient procedure for the synthesis of 2-(cyclohexylamino)-6,7-dihydro-3-aryl-1H-indole-4(5H)-ones via a one-pot multi-component reaction of cyclohexylisocyanide, an aldehyde, a 1,3-dicarbonyl compound, and ammonium acetate using a catalytic amount of KHSO₄ in good yields is described.

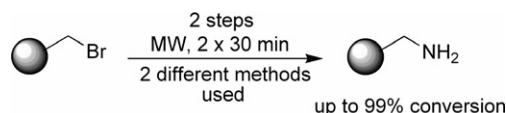
Palladium-catalyzed regiocontrolled internal heteroarylation of electron-rich olefins with heteroaryl halides

pp 6104–6107

Dan Xu, Zhihua Liu, Weijun Tang, Lijin Xu ^{*}, Zeynab Hyder, Jianliang Xiao ^{*}

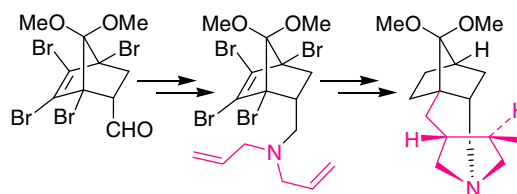
Rapid microwave-assisted preparation of amino-functionalized polymers

pp 6108–6110

Natalie Ljungdahl ^{*}, Laura Martikainen, Nina Kann ^{*}

A stereoselective C⁷ⁿC^{5x} free-radical cascade route to optically pure and potentially useful tetracyclic amines

pp 6111–6114

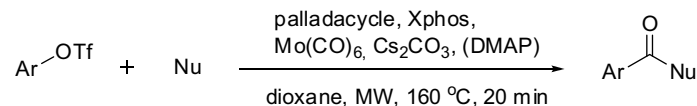
Faiz Ahmed Khan ^{*}, Sarasij K. Upadhyay

Racemic and optically pure nucleophilic amines have been synthesized utilizing C⁷ⁿC^{5x} free-radical cascade reaction using a bis-allyl amine starting material. Bis-allyl amide under similar radical reaction condition resulted in C⁷ⁿ cyclized product.

Microwave-promoted aminocarbonylation of aryl triflates using Mo(CO)₆ as a solid CO source

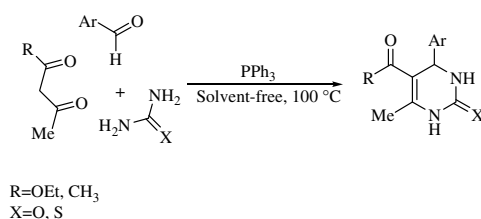
pp 6115–6118

Luke R. Odell, Jonas Sävmarker, Mats Larhed *

**A one-pot Biginelli synthesis of 3,4-dihydropyrimidin-2-(1H)-ones/thiones catalyzed by triphenylphosphine as Lewis base**

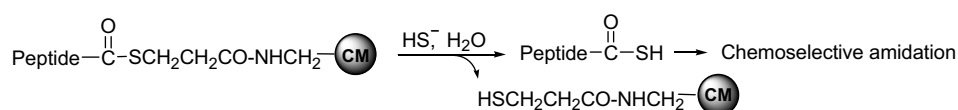
pp 6119–6121

Abdelmadjid Debache *, Mouna Amimour, Ali Belfaitah, Salah Rhouati, Bertrand Carboni

**Solid-phase synthesis of peptide thioacids through hydrothiolysis of resin-bound peptide thioesters**

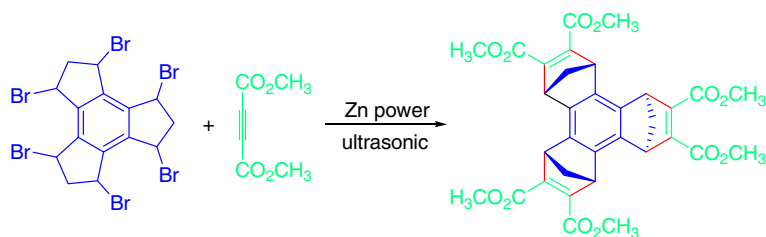
pp 6122–6125

Xiaohong Zhang, Xiao-Wei Lu, Chuan-Fa Liu *

**A Diels–Alder approach to *trans*-trisbicyclo[2.2.1]heptabenzene derivative**

pp 6126–6128

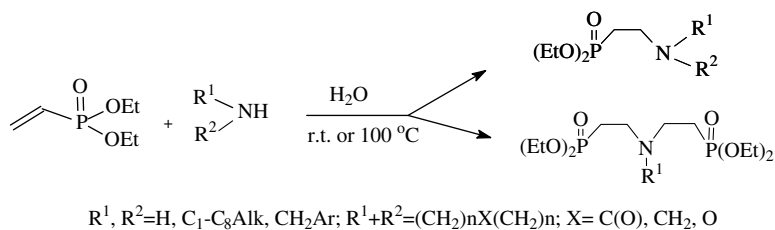
Zhong-Qiang Gao, Jun-Fa Wei *, Xian-Ying Shi, Jun Yu



Efficient synthesis of racemic β -aminophosphonates via aza-Michael reaction in water

pp 6129–6133

Ekaterina V. Matveeva, Pavel V. Petrovskii, Irina L. Odinets *

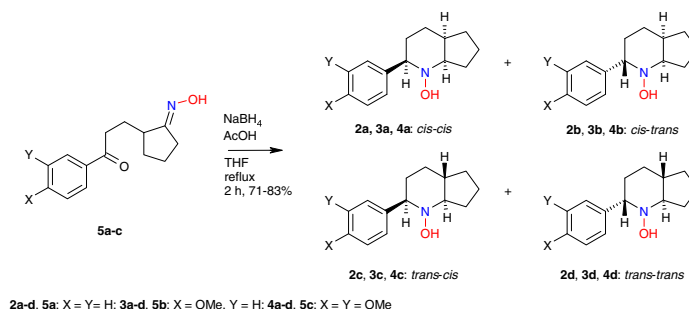


Remarkable rate acceleration is reported for the aza-Michael reaction of diethyl vinylphosphonate with amines in water to yield β -aminophosphonates in quantitative yields.

Synthesis and stereochemistry of 2-arylperhydrocyclopenta[b]pyridin-1-ols, 8-azaestrone fragments

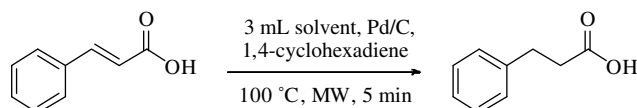
pp 6134–6136

H. Surya Prakash Rao *, Shaik Rafi

**1,4-Cyclohexadiene with Pd/C as a rapid, safe transfer hydrogenation system with microwave heating**

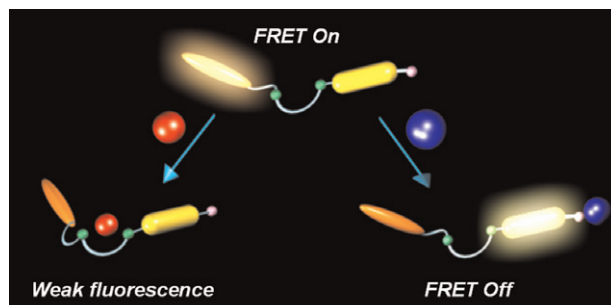
pp 6137–6140

John F. Quinn *, Dana A. Razzano, Kathryn C. Golden, Brian T. Gregg

**Metal ion-induced FRET modulation in a bifluorophore system**

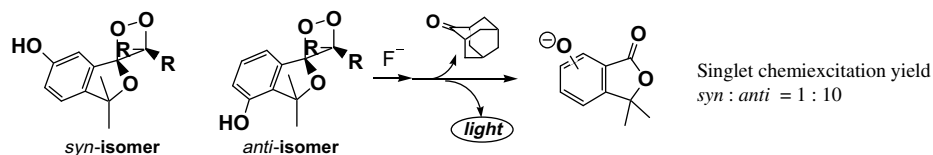
pp 6141–6144

Su Yeon Lee, Hyun Jung Kim, Jia-Sheng Wu, Kwanghyun No *, Jong Seung Kim *



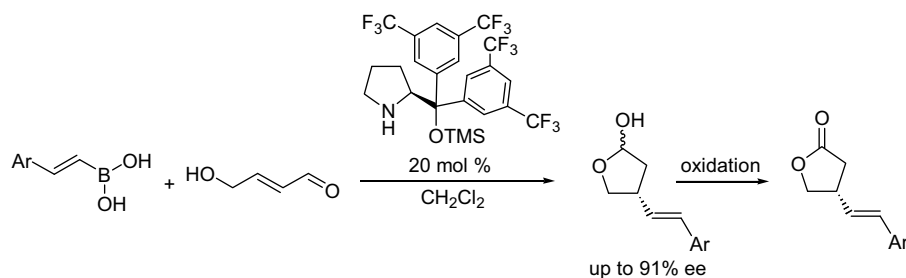
Marked difference in singlet-chemiexcitation efficiency between *syn-anti* isomers of spiro[1,2-dioxetane-3,1'-dihydroisobenzofuran] for intramolecular charge-transfer-induced decomposition

pp 6145–6147

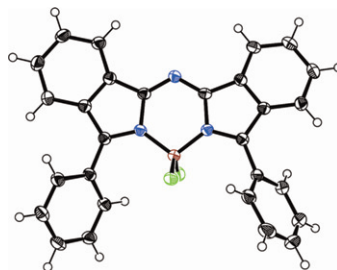
Masakatsu Matsumoto^{*}, Yuka Takamido, Kana Nomura, Tamaki Shiono, Nobuko Watanabe, Hisako K. Ijuin**Organocatalytic asymmetric 1,4-addition of organoboronic acids to γ -hydroxy α,β -unsaturated aldehyde: facile synthesis of chiral β -substituted γ -lactones**

pp 6148–6151

Sung-Gon Kim

**Synthesis of *N,N*-difluoroboryl complexes of 3,3'-diarylazadiisoindolymethenes**

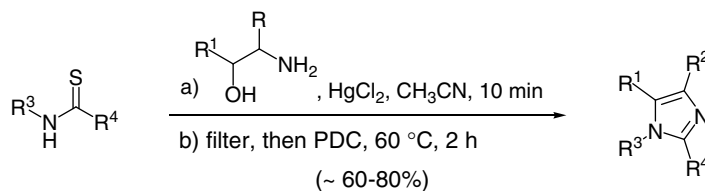
pp 6152–6154

Valentina F. Donyagina, Soji Shimizu, Nagao Kobayashi^{*}, Evgeny A. Lukyanets^{*}

N,N-Difluoroboryl complexes of 3,3'-diarylazadiisoindolymethenes were synthesized by the reaction of $\text{BF}_3\cdot\text{OEt}_2$ and 3,3'-diarylazadiisoindolymethenes, which were easily prepared from a reaction between phthalonitrile and aryl Grignard reagents. These novel dyes exhibit strong absorption in the visible region and intense fluorescence in the vis/NIR region. Their synthesis, characterization, and optical properties are reported in this Letter.

Synthesis of tri- and tetrasubstituted imidazoles

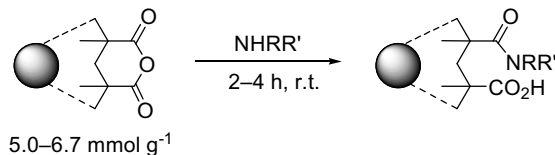
pp 6155–6159

Daniel V. Paone^{*}, Anthony W. Shaw

A macroporous polymer-supported cyclic anhydride for efficient sequestration of amines

pp 6160–6162

Monica Sanna, Peter D. White, Weng C. Chan *



*Corresponding author

i* Supplementary data available via ScienceDirect

COVER

An asymmetric total synthesis of (+)-trachyspic acid, a tumor cell heparanase inhibitor, has been accomplished via organocatalytic aldol reaction of a α -keto ester with an aldehyde to construct the alkyl citrate core and Nozaki-Hiyama-Kishi coupling to install the long chain moiety.

Tetrahedron Letters **2008**, 49, 6043–6045.

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Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®



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ISSN 0040-4039