

Tetrahedron Letters Vol. 51, No. 40, 2010

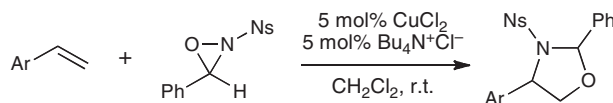
Contents

COMMUNICATIONS

***N*-Nosyl oxaziridines as terminal oxidants in copper(II)-catalyzed olefin oxyaminations**

pp 5223–5225

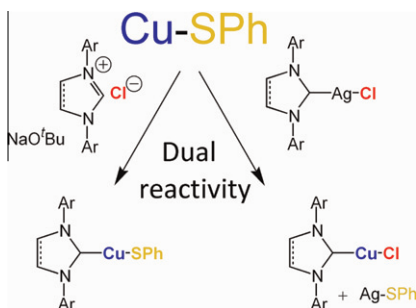
Sandra M. DePorter, Ashley C. Jacobsen, Katherine M. Partridge, Kevin S. Williamson, Tehshik P. Yoon*



Copper(I) thiophenolate in copper *N*-heterocyclic carbene preparation

pp 5226–5229

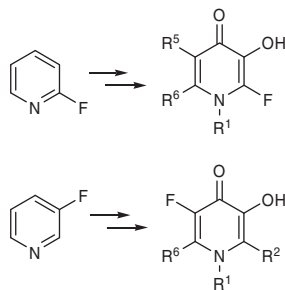
Federico Cisnetti, Pascale Lemoine, Malika El-Ghozzi, Daniel Avignant, Arnaud Gautier*



Design and synthesis of fluorine-substituted 3-hydroxypyridin-4-ones

pp 5230–5233

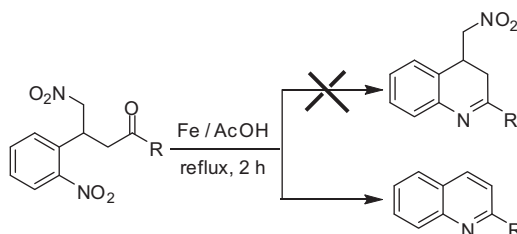
Yong Min Ma, Robert C. Hider*



Iron/acetic acid-mediated carbon degradation: a facile route for the synthesis of quinoline derivatives

pp 5234–5237

Chintakunta Ramesh, Veerababurao Kavala, Chun-Wei Kuo, Ching-Fa Yao*

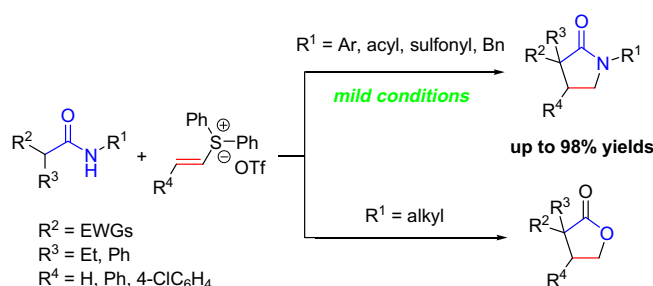


A new carbon degradation protocol which results in the formation of quinoline derivatives is described. The reactions involved the use of mild reaction conditions and an inexpensive reducing reagent (Fe/AcOH).

**Synthesis of pyrrolidin-2-ones via tandem reactions of vinyl sulfonium salts under mild conditions**

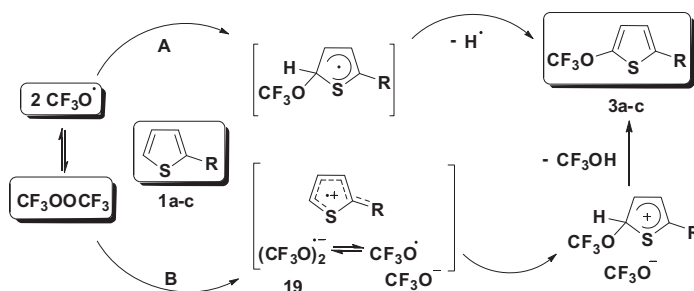
pp 5238–5241

Chunsong Xie, Deyu Han, Yue Hu, Jinhua Liu*, Tian Xie*

**Co-thermolysis: a one-pot synthetic method for novel 2-substituted-5-(trifluoromethoxy)thiophenes**

pp 5242–5245

W. J. Peláez, G. A. Argüello*



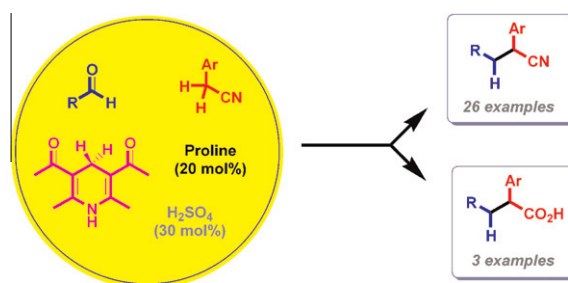
A new 'green' process to obtain trifluoromethoxylated compounds by a gas-phase method has been accomplished. Though the reaction occurs in the gas-phase and radicals are involved, an electron transfer mechanism is also postulated.

**Direct amino acid-catalyzed cascade reductive alkylation of arylacetonitriles: high-yielding synthesis of ibuprofen analogs**

pp 5246–5251

Dhevalapally B. Ramachary*, M. Shiva Prasad

A novel approach for a one-pot, three-component reductive alkylation (TCRA) reaction of arylacetonitriles-containing electron-withdrawing groups with aldehydes/ketones and 1,4-dihydropyridine via iminium-catalysis has been developed. Many TCRA reaction products have direct applications in agricultural and pharmaceutical chemistry.



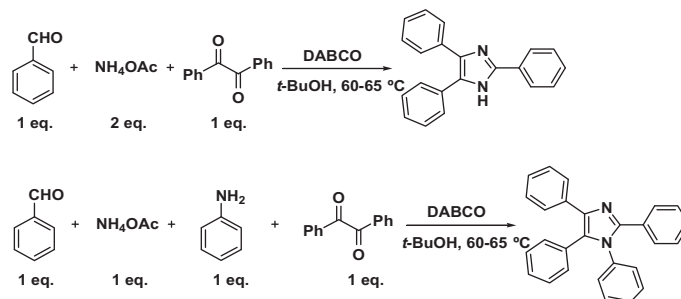
Useful Intermediates for the NSAIDs



DABCO as a mild and efficient catalytic system for the synthesis of highly substituted imidazoles via multi-component condensation strategy

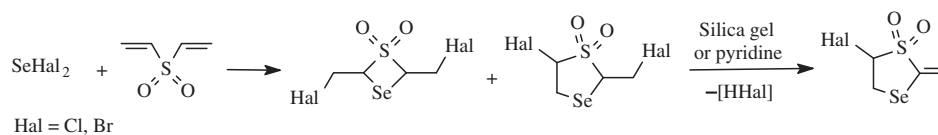
pp 5252–5257

S. Narayana Murthy, B. Madhav, Y. V. D. Nageswar*

**Reactions of selenium dichloride and dibromide with divinyl sulfone: synthesis of novel four- and five-membered selenium heterocycles**

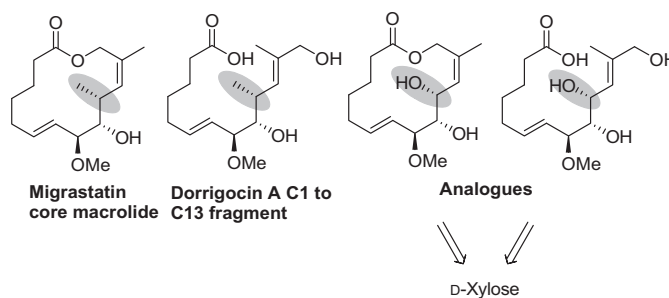
pp 5258–5261

Vladimir A. Potapov*, Evgeny O. Kurkutov, Maxim V. Musalov, Svetlana V. Amosova

**Synthesis of congeners of migrastatin and dorrigocin A from D-xylose**

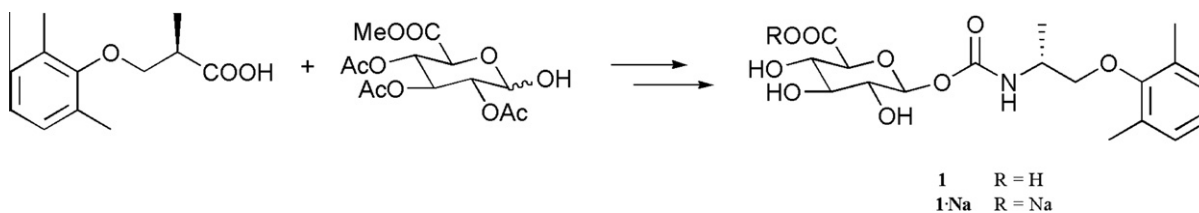
pp 5262–5264

Ying Zhou, Paul V. Murphy*

**First synthesis and full characterization of mexiletine N-carboxyloxy β-D-glucuronide**

pp 5265–5268

Maria Maddalena Cavalluzzi, Giovanni Lentini*, Angelo Lovece, Claudio Bruno, Alessia Catalano, Alessia Carocci, Carlo Franchini

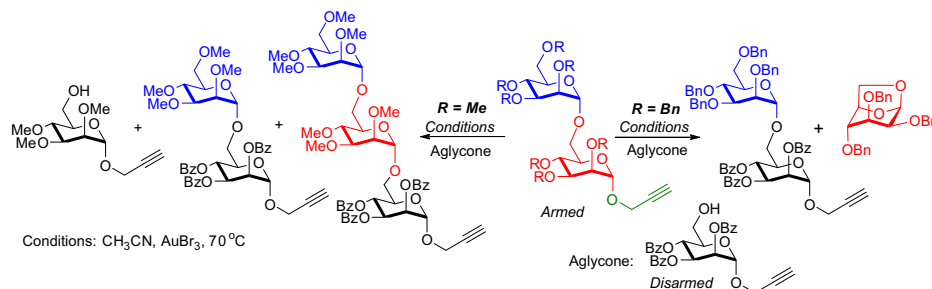


A facile convergent synthesis of (*R*)-mexiletine *N*-carboxyloxy β-D-glucuronide (**1**) as its sodium salt (**1:Na**) has been developed. The compound is now available as an authentic reference standard for analytical studies, enabling more detailed investigation on the metabolism of mexiletine.

Gold-catalyzed glycosidations: unusual cleavage of the interglycosidic bond while studying the armed/disarmed effect of propargyl glycosides

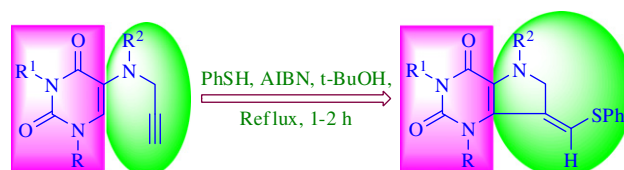
pp 5269–5272

Abhijeet K. Kayastha, Srinivas Hotha*


Thiophenol mediated radical cyclization: an expedient approach to 2H-pyrrolo[3,2-d]pyrimidines (9-deazaxanthine analogs)

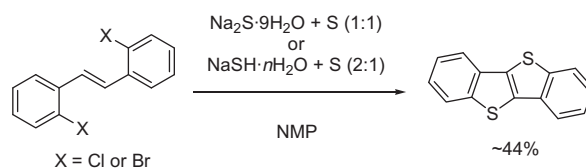
pp 5273–5276

K. C. Majumdar*, Shovan Mondal, Debankan Ghosh


Facile synthesis of [1]benzothieno[3,2-b]benzothiophene from o-dihalostilbenes

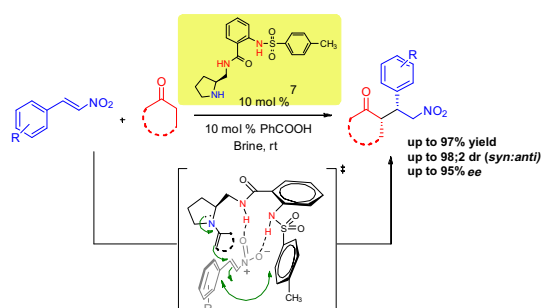
pp 5277–5280

Masahiko Saito, Tatsuya Yamamoto, Itaru Osaka, Eigo Miyazaki, Kazuo Takimiya*, Hirokazu Kuwabara, Masaaki Ikeda


Functionalized proline with double hydrogen bonding potential: highly enantioselective Michael addition of carbonyl compounds to β -nitrostyrenes in brine

pp 5281–5286

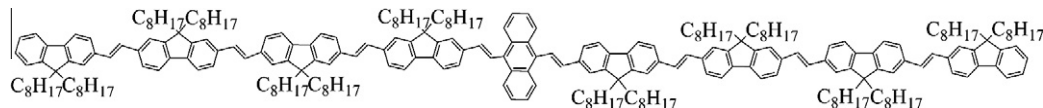
Satyajit Saha, Saona Seth, Jarugu Narasimha Moorthy*



Synthesis and photophysical properties of monodisperse oligo(9,9-di-*n*-octylfluorene-2,7-vinylene)s functionalized anthracenes

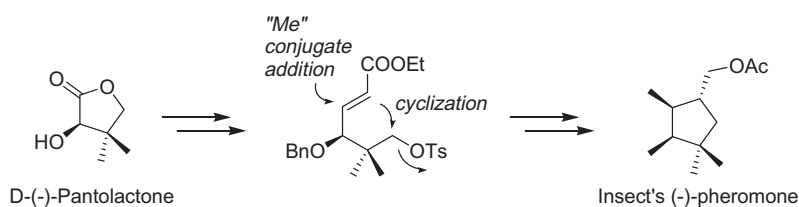
pp 5287–5290

Huipeng Zhou, Ran Lu*, Xin Zhao, Xianping Qiu, Pengchong Xue, Xingliang Liu, Xiaofei Zhang

**Enantiospecific synthesis of sex pheromone of the obscure mealybug from pantolactone via tandem conjugate addition/cyclization**

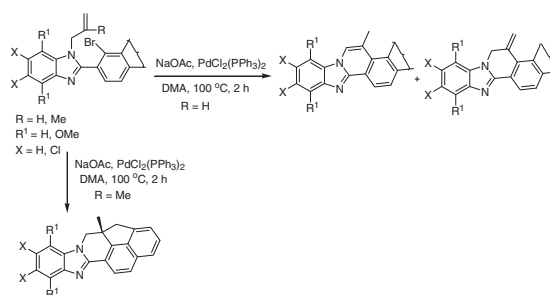
pp 5291–5293

Atul K. Hajare, Laxmikant S. Datrange, Samir Vyas, Debnath Bhuniya, D. Srinivasa Reddy*

**Synthesis of substituted benzimidazo[2,1-*a*]isoquinolines and its condensed analogues using Pd(0)-catalyzed cyclization/C–H activation**

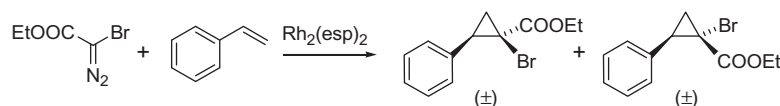
pp 5294–5297

Sukla Nandi, Shubhankar Samanta, Susovan Jana, Jayanta K. Ray*

**Computational comparison of Rh₂(esp)₂ and Rh₂(O₂CH)₄ as catalysts in a carbenoid reaction**

pp 5298–5301

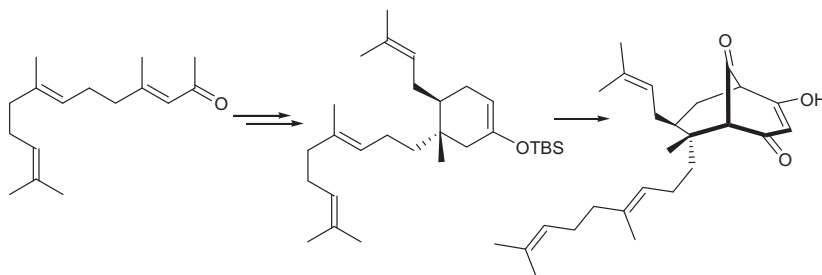
Hanne Therese Bonge, Tore Hansen*



Synthetic studies toward the PPAP natural products, prolifenones A and B and hyperforin: an Effenbergler cyclization approach

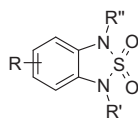
pp 5302–5305

Goverdhan Mehta*, Thangavel Dhanbal, Mrinal K. Bera


A general synthetic strategy for 1,3-dihydro-2,1,3-benzothiadiazole 2,2-dioxides (benzosulfamides)

pp 5306–5308

Dawn E. Colyer, Andrew Nortcliffe, Simon Wheeler*

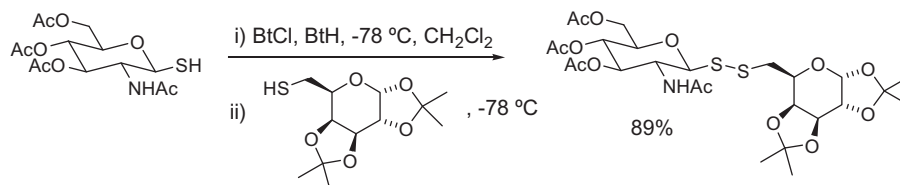


A general route to benzosulfamides is presented allowing for flexible installation of substituents.

A high-yielding, one-pot preparation of unsymmetrical glycosyl disulfides using 1-chlorobenzotriazole as an in situ trapping/oxidizing agent

pp 5309–5312

Nashia Stellenboom, Roger Hunter*, Mino R. Caira, László Szilágyi

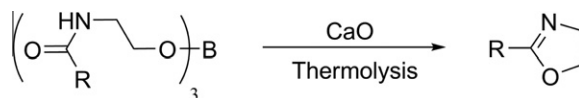


A series of glycosyl disulfides have been efficiently prepared in a one-pot reaction using 1-chlorobenzotriazole (BtCl) as the oxidant.

Synthesis of 2-oxazolines via boron esters of *N*-(2-hydroxyethyl) amides

pp 5313–5315

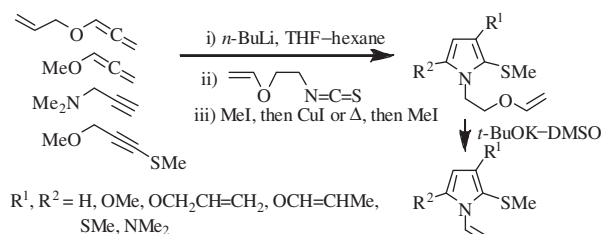
Baris Ilkgul, Deniz Gunes, Okan Sirkecioglu*, Niyazi Bicak*

A new, convenient, one-pot process is presented for the synthesis of 2-oxazolines in high yields (78–92%) via boron esters of *N*-(2-hydroxyethyl) amides.

A one-pot synthesis and mild cleavage of 2-[2- or 5-(alkylsulfanyl)pyrrol-1-yl]ethyl vinyl ethers by *t*-BuOK/DMSO: a novel and facile approach to *N*-vinylpyrroles

pp 5316–5318

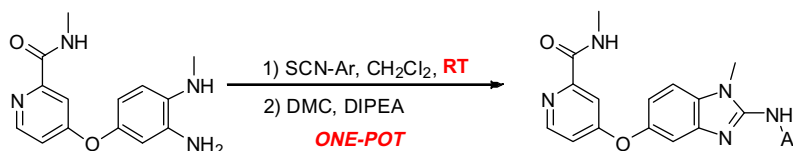
Nina A. Nedolya*, Ol'ga A. Tarasova, Alexander I. Albanov, Boris A. Trofimov



One-pot synthesis of 2-aminobenzimidazoles using 2-chloro-1,3-dimethylimidazolinium chloride (DMC)

pp 5319–5321

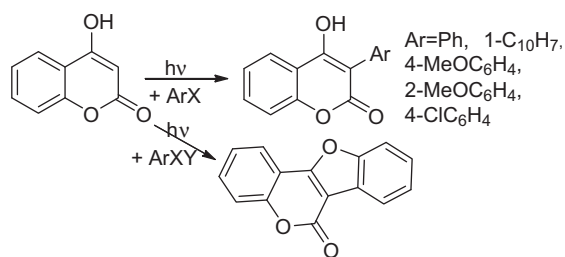
Gerald D. Artman III, Catherine F. Solovay, Christopher M. Adams, Brian Diaz, Martin Dimitroff, Takeru Ehara, Danlin Gu, Fupeng Ma, Donglei Liu, Bridget R. Miller, Teresa E. Pick, Daniel J. Poon, David Ryckman, David A. Siesel, Brady S. Stillwell, Tyson Swiftney, Jonathan P. van Dyck, Chun Zhang, Nan Ji*



A different route to 3-aryl-4-hydroxycoumarins

pp 5322–5324

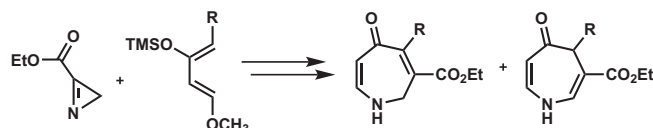
Sergio A. Rodríguez, Maria T. Baumgartner*



On the preparation of azepinones

pp 5325–5327

Galyna G. Dubinina, Wesley Y. Yoshida, William J. Chain*



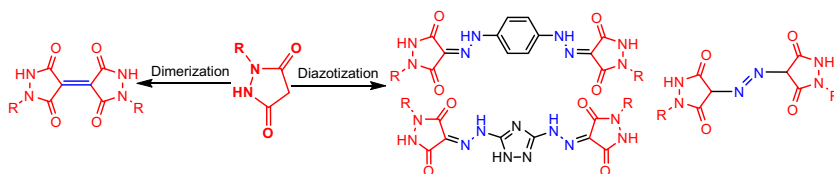
We report here a simple and efficient preparation of 1*H*-azepin-5(2*H*)-ones and their unexpectedly facile isomerization to 1*H*-azepin-5(4*H*)-ones under mildly basic reaction conditions.



Simple route to a novel class of pyrazolidine-3,5-dione based azo dyes

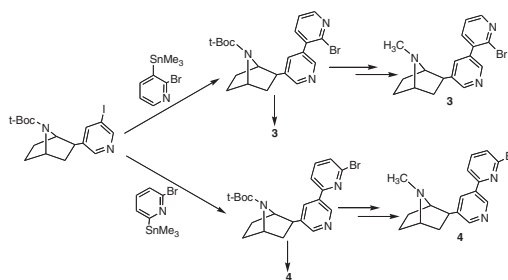
pp 5328–5332

Jalal Isaad*, Anne Perwuelz

Improved syntheses of precursors for PET radioligands [¹⁸F]XTRA and [¹⁸F]AZAN

pp 5333–5335

Yongjun Gao*, Haofan Wang, Ronnie C. Mease, Martin G. Pomper, Andrew G. Horti

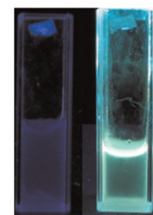
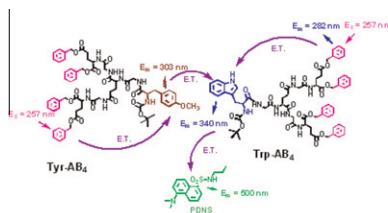


Continuous intra- and intermolecular energy transfer in light-harvesting gels from natural amino acids-based dendrons

pp 5336–5340

Wu-Song Li, Ming-Jun Teng, Xin-Ru Jia*, Yen Wei

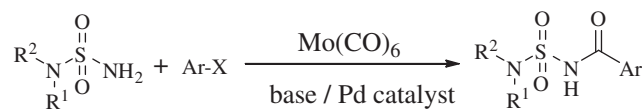
The gels and co-gels from glycine (**Gly**) and glutamic acid (**Glu**)-based dendrons with either tyrosine (**Tyr**) or tryptophan (**Trp**), two of the luminescent amino acid residues in natural proteins, at the focal point were reported. Such gels showed efficient light-harvesting and energy transfer properties. Specially, a high efficient energy transfer (ET) process and a light-harvesting in the co-gel system were achieved. Moreover, luminescent gels with tunable emission ranging from blue to green were also observed owing to the cascade intra- and intermolecular ET from dendritic gelators to the guest molecules (PDNS) in the host-guest gel system (co-gel with PDNS as the guest molecule), which mimicked the natural light-harvesting systems.



Microwave-assisted palladium-catalysed carbonylations of aryl and heteroaryl halides with sulfamide nucleophiles utilising a solid CO source

pp 5341–5343

David Liptrot, Lilian Alcaraz, Bryan Roberts*



X = I, Br

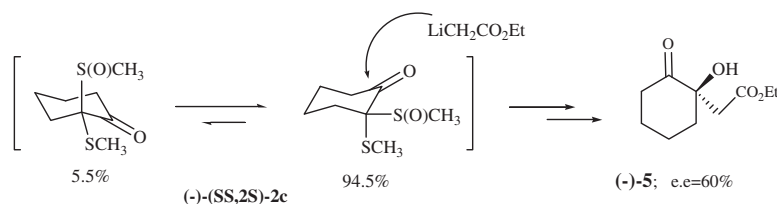
Ar = Aryl, Heteroaryl



Asymmetric phase-transfer catalytic sulfanylation of some 2-methylsulfinyl cyclanones. Modeling of the stereochemical course of the aldol reaction of (SS,2S)-2-methylsulfinyl-2-methylsulfonylcyclohexanone

pp 5344–5348

Alessandro Rodrigues, Blanka Wladislaw*, Claudio Di Vitta, José Eduardo Pandini Cardoso Filho, Liliana Marzorati, Mauro Alves Bueno, Paulo Roberto Olivato



Based on IR data and DFT calculations, (-)-(SS,2S)-2c showed to be a mixture of two main conformers and that the axial SCH₃ group hinders the attack of LiCH₂CO₂Et to the *si* face of the carbonyl group, affording, after hydrolysis, enantiomerically enriched (-)-5.



*Corresponding author

Supplementary data available via ScienceDirect

COVER

N-p-Nosyl 3-phenyloxaziridine is an air-stable, crystalline solid that can be synthesized on multi-gram scale. It can be used as the terminal oxidant in the copper(II) catalyzed oxyamination of styrenes, and the resulting 1,3-oxazolidines bear protecting groups that can be easily removed under mild conditions and in high yields.

Tetrahedron Letters **2010**, 51, 5223–5225.

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