



Tetrahedron Vol. 65, No. 8, 2009

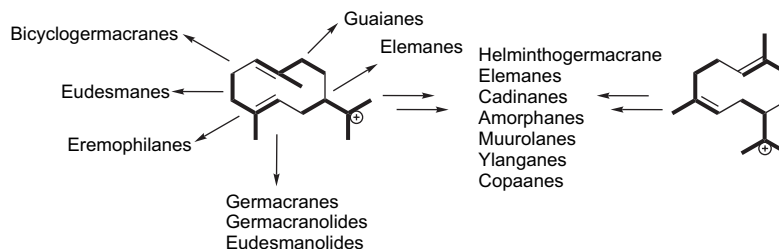
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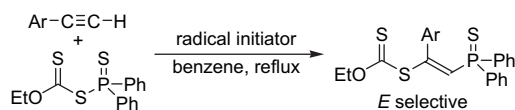


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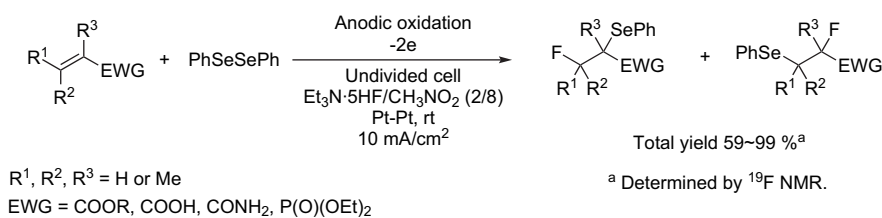
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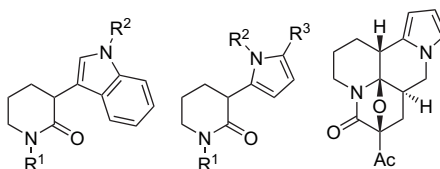
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Hirokatsu Nagura, Shinsuke Inagi, Toshio Fuchigami*

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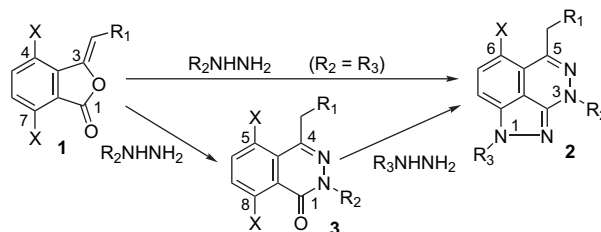
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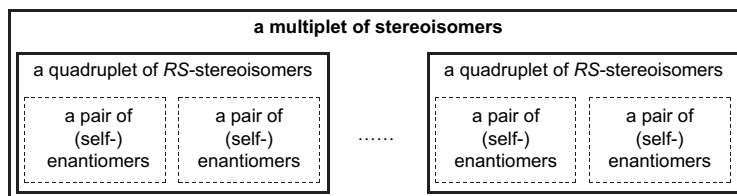
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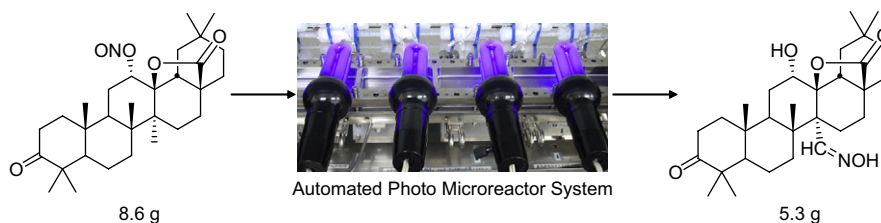
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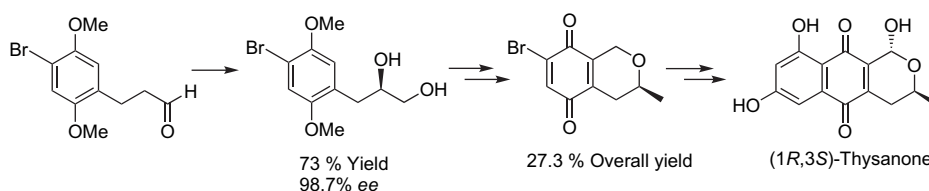
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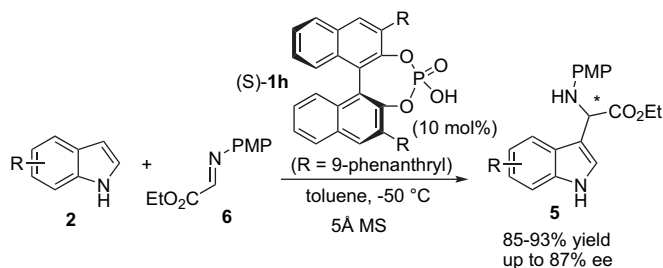
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Rajiv T. Sawant, Suresh B. Waghmode*

**Enantioselective synthesis of (3-indolyl)glycine derivatives via asymmetric Friedel–Crafts reaction between indoles and glyoxylate imines**

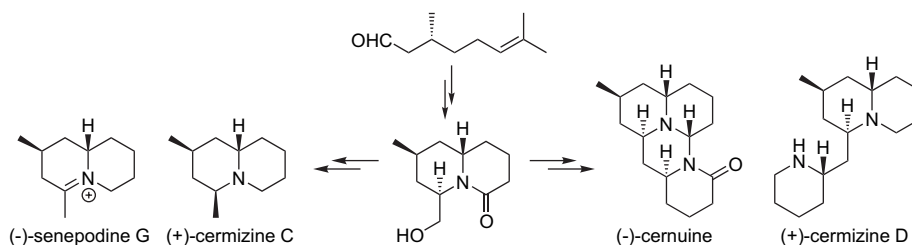
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Qiang Kang, Zhuo-An Zhao, Shu-Li You*

**A divergent approach for the total syntheses of cernuane-type and quinolizidine-type *Lycopodium* alkaloids**

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Yasuhiro Nishikawa, Mariko Kitajima, Noriyuki Kogure, Hiromitsu Takayama*

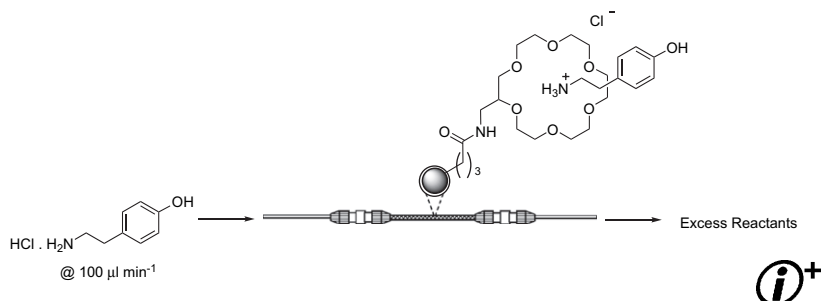


The use of immobilized crown ethers as in-situ N-protecting groups in organic synthesis and their application under continuous flow

pp 1618–1629

Gareth. P. Wild, Charlotte Wiles, Paul Watts*, Stephen J. Haswell

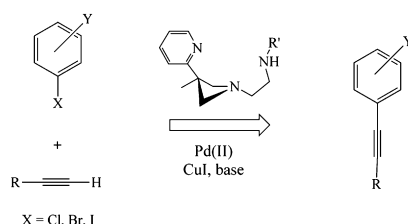
We report herein the successful immobilization of an 18-crown-6 ether derivative onto a solid support and discuss its incorporation into a continuous flow reactor whereby the sequestration of a series of primary amine salts is demonstrated. In addition, the material is subsequently employed as a non-covalent N-protecting group, providing a facile route to the O-acylation and O-alkylation of several amine derivatives without the need for formal protecting group chemistry.



Phosphine-free Sonogashira coupling: reactions of aryl halides catalysed by palladium(II) complexes of azetidine-derived polyamines under mild conditions

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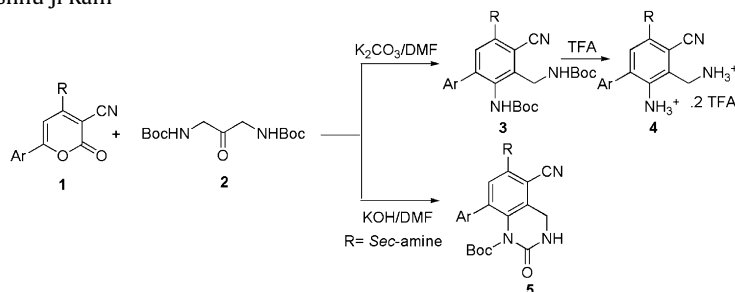
Dong-Hwan Lee, Young Hoon Lee, Jack M. Harrowfield, Ik-Mo Lee, Hong In Lee, Woo Taik Lim, Yang Kim*, Myung-Jong Jin*



Base dependent purported synthesis of congested 2-aminobenzylamines and tetrahydro-2-oxoquinazolines from 2-pyranones

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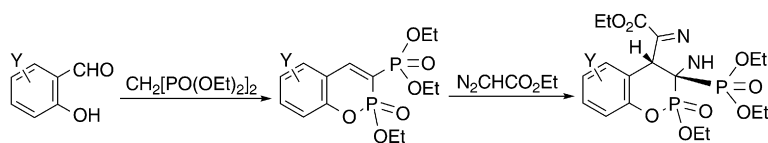
Farhanullah*, Farhana Samrin, Vishnu Ji Ram*



Synthesis of heterocyclic methylenebisphosphonates by 1,3-dipolar cycloaddition of ethyl diazoacetate to 1,2-benzoxaphosphorin-3-phosphonates

pp 1639–1647

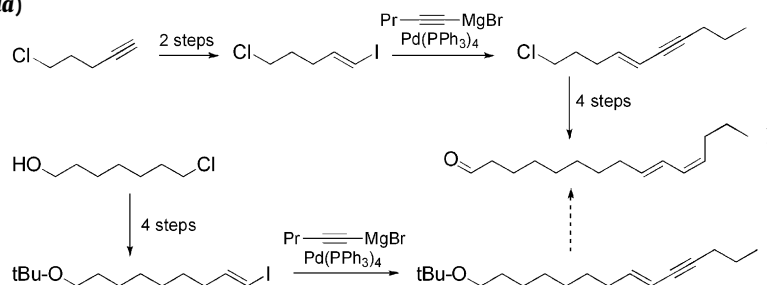
Nevena I. Petkova, Rositca D. Nikolova*, Anka G. Bojilova, Nestor A. Rodios*, Jurgen Kopf



An alternative synthesis of (8*E*,10*Z*)-tetradeca-8,10-dienal, sex pheromone of horse-chestnut leafminer (*Cameraria ohridella*)

pp 1648–1654

Jacek Grodner

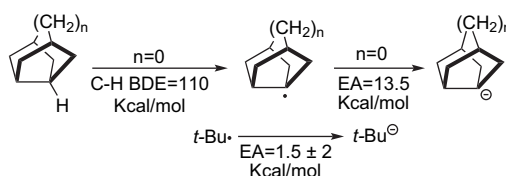


Synthesis of sex pheromone of horse-chestnut leafminer (**1**) has been achieved by the palladium-catalyzed cross-coupling reaction of 1-pentynylmagnesium bromide and suitable vinyl iodides as the key step to construct the conjugated diene moiety of the title compound.

Electron affinities of a homologous series of tertiary alkyl radicals and their C–H bond dissociation energies (BDEs)

pp 1655–1659

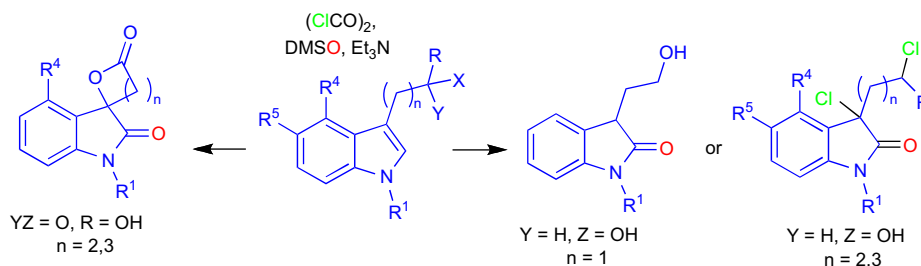
Panayiotis S. Petrou, Athanassios V. Nicolaides*



Efficient, one-pot transformation of indoles into functionalized oxindole and spirooxindole systems under Swern conditions

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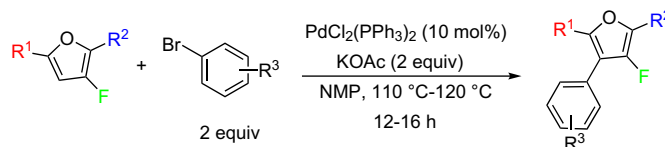
Pilar López-Alvarado, Judith Steinhoff, Sonia Miranda, Carmen Avendaño, J. Carlos Menéndez*



Pd-catalyzed direct arylation of 3-fluorofurans utilizing the neighboring effect of fluorine atom: facile synthesis of tetrasubstituted monofluoro furans

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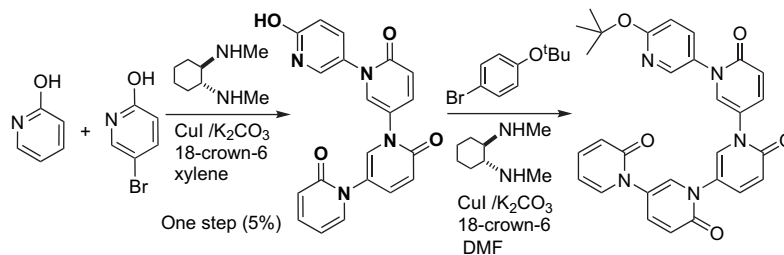
Peng Li, Zhuo Chai, Gang Zhao*, Shi-Zheng Zhu*



Oligopyridones: preparation and their folding behavior in polar aprotic solvents

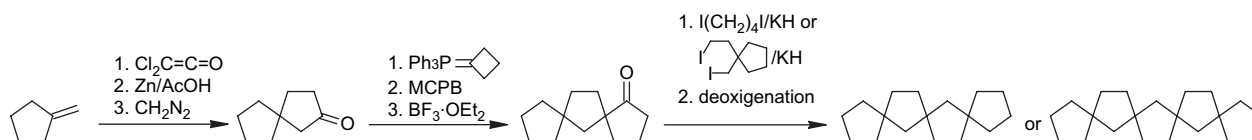
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Chih-Kai Liang, Po-Shih Wang, Man-kit Leung*

**Helical primary structures of 1,3-spiroannulated five-membered rings: (±)-trispiro[4.1.1.4.2.2]heptadecane and (±)-tetrspiro[4.1.1.4.2.2.2.2]heneicosane**

pp 1689–1696

Imelda Meyer-Wilmes, Ralf Gerke, Lutz Fitjer*

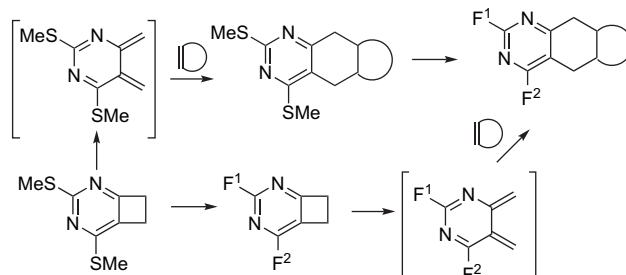


A combination of three spiroannellation methods forms the basis of a successful synthesis of the first helical hydrocarbons of 1,3-spiroannulated five-membered rings.

**2,4-Bis(methylsulfonyl)pyrimidine *o*-quinodimethane: a versatile building block for functionalized fused pyrimidines**

pp 1697–1703

Antonio Herrera, Roberto Martínez-Álvarez*,
 Nazario Martín,
 Mourad Chioua, Rachid Chioua,
 Ángel Sánchez-Vázquez,
 Dolores Molero, John Almy

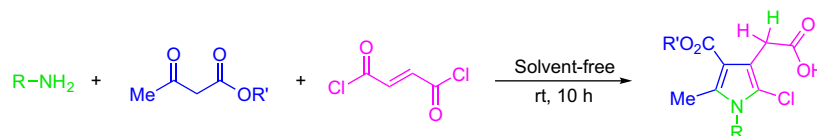


New alternative and complementary synthetic paths to prepare functionalized pyrimidine cycloadducts are reported. The choice of the synthetic route is determined by the electronic nature of functional groups on the pyrimidine *ortho*-quinodimethane.

**Solvent-free synthesis of penta-substituted pyrroles: one-pot reaction of amine, alkyl acetoacetate, and fumaryl chloride**

pp 1704–1707

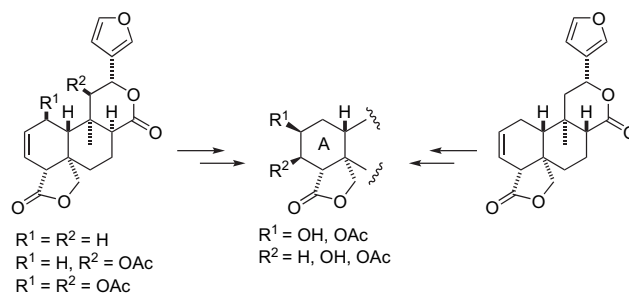
Abdolali Alizadeh*, Mohades Babaki, Nasrin Zohreh



Synthetic studies on neoclerodane diterpenes from *Salvia splendens*: oxidative modifications of ring A

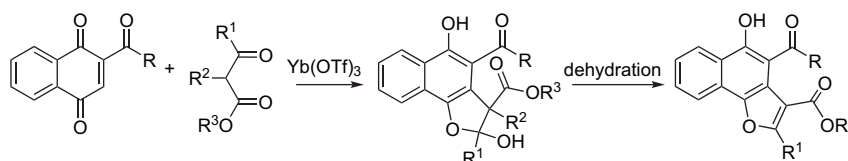
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Gianfranco Fontana, Giuseppe Savona*, Benjamín Rodríguez*, Christina M. Dersch, Richard B. Rothman, Thomas E. Prisinzano

**Ytterbium triflate-catalyzed conjugate addition of β -ketoesters to activated 1,4-naphthoquinones**

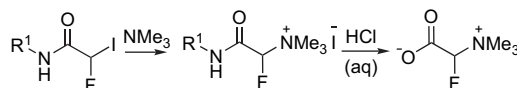
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Naga Venkata Sastry Mudiganti, Sven Claessens, Norbert De Kimpe*

**Synthesis and reactions of α -fluoro- α -amino amides**

pp 1724–1736

Patrick D. Bailey*, Andrew N. Boa*, Joanne Clayson

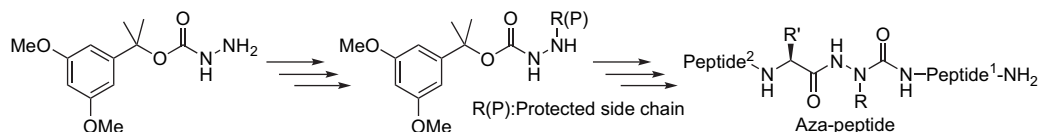


Halofluoroethanamides have been investigated as precursors to α -fluoro- α -amino amide derivatives by displacement of halide with a variety of nitrogen nucleophiles such as imides, azide and trimethylamine, with the latter leading to the synthesis of α -fluorobetaine as a first example of a fully unprotected α -fluoro-amino acid.

Synthesis of N' -substituted Ddz-protected hydrazines and their application in solid phase synthesis of aza-peptides

pp 1737–1745


Noam S. Freeman, Mattan Hurevich, Chaim Gilon*



Substituted hydrazines are precursors for many compounds of considerable scientific and industrial value. We describe the synthesis of N' -substituted 2-(3,5-dimethoxyphenyl)propan-2-yloxycarbonyl (Ddz) protected hydrazines. A general approach for solid phase synthesis of aza-peptides has been developed based on the in-situ activation of the N -Ddz, N' -substituted hydrazines with phosgene, followed by introduction to the N-terminus of resin-bound peptide. Ddz-protected hydrazines have wide applications in the synthesis of substituted hydrazines and in the synthesis of aza containing peptidomimetics.



*Corresponding author

 Supplementary data available via ScienceDirect

COVER

Three spiroannulation methods form the basis of a successful synthesis of the first two helical hydrocarbons of 1,3-spiroannulated five-membered rings. Details can be found in Tetrahedron, **2009**, 65, 1689–1696.

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