

**Volume:** 101  
**Issues:** 26  
**Articles:** 2138

**Most Cited Articles:**

**Systematic ab initio gradient calculation of molecular geometries, force constants, and dipole moment derivatives**

Peter Pulay , Geza Fogarasi , Frank Pang , James E. Boggs, 2550 - 2560. (1811 citations)

**Enhancement of nuclear magnetic resonance signals by polarization transfer**

Gareth A. Morris , Ray Freeman, 760 - 762. (1670 citations).

**Nobel Prize in Chemistry:** Herbert C. Brown (USA) and Georg Wittig (Germany)

"A few times in the history of chemistry have new synthetic methods been deemed so important that the originators have been awarded the Nobel Prize. This has once more happened, this year Brown and Wittig have been awarded the prize for chemistry for their development of boron and phosphorus compounds, respectively, into important reagents in organic synthesis."

**Other Notable Events:**

Queen releases "Don't Stop Me Now" (Jan. 5)

Filming begins for *Star Wars V: The Empire Strikes Back* (Mar. 5)

Three Mile Island partial nuclear meltdown (Mar. 28)

Sverdlovsk Anthrax Leak (Apr. 2)

Pittsburgh Pirates defeated Baltimore Orioles to win the World Series

(Oct. 10 - 17)

Iran-United States Hostage Crisis (Nov. 4)

Saddam Hussein becomes the President of Iraq (Jul. 16)

*Star Trek: The Motion Picture* is premiered at the Smithsonian Institution

(Dec. 6)

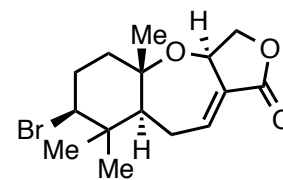
**Top Song:** My Sharona by The Knack

**Highest-grossing Movie:** Kramer vs. Kramer

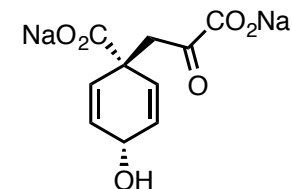
**Best-selling album:** 52<sup>nd</sup> Street by Billy Joel

**Popular TV Shows:** M\*A\*S\*H, The Dukes of Hazzard, Dallas

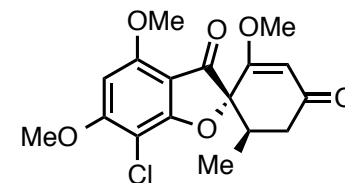
**Syntheses covered:**



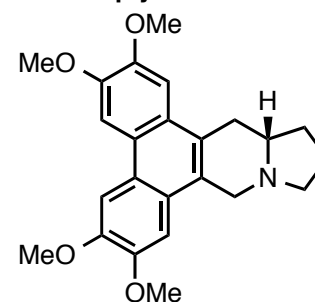
**aplysiastatin**



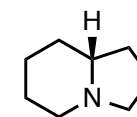
**prephenic acid**



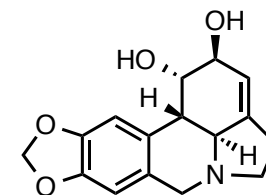
**griseofulvin**



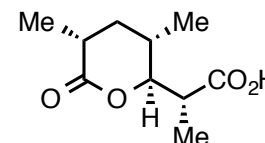
**tyloporine**



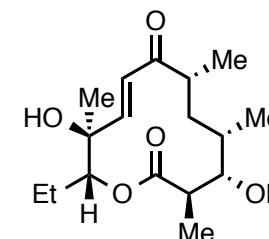
**δ-coniceine**



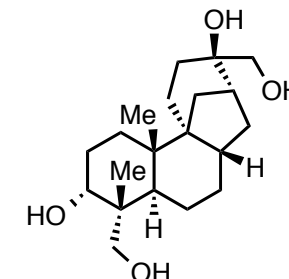
**lycorine**



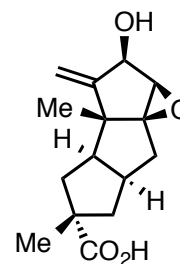
**Prelog-Djerassi Lactone**



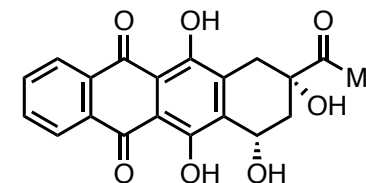
**methynolide**



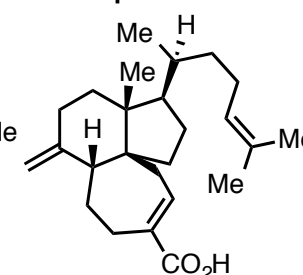
**aphidicolin**



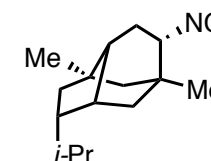
**hirsutic acid C**



**4-demethoxydaunomycinone**



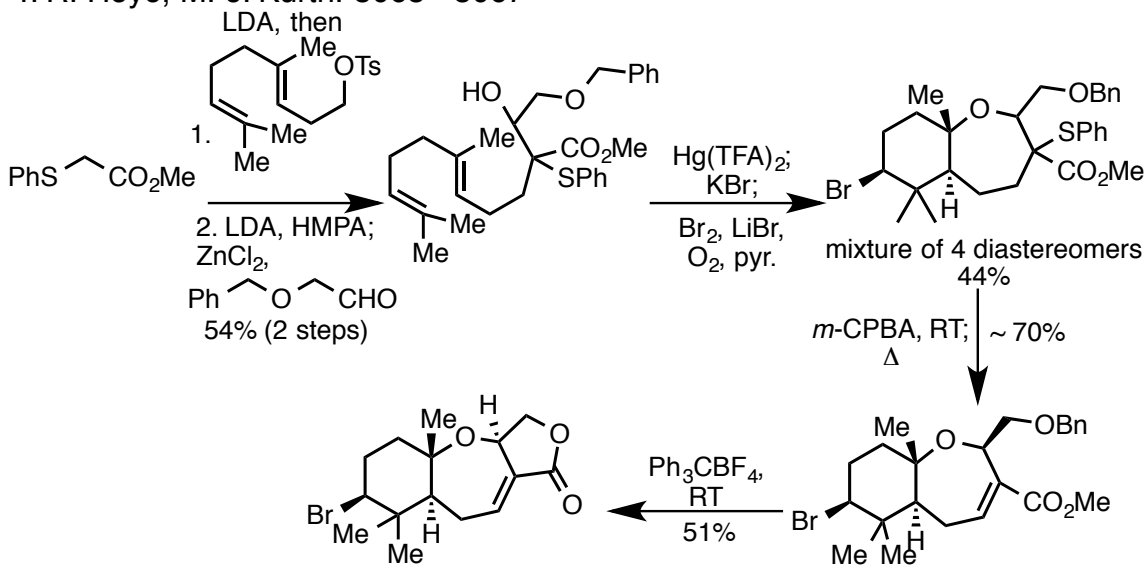
**gascardic acid**



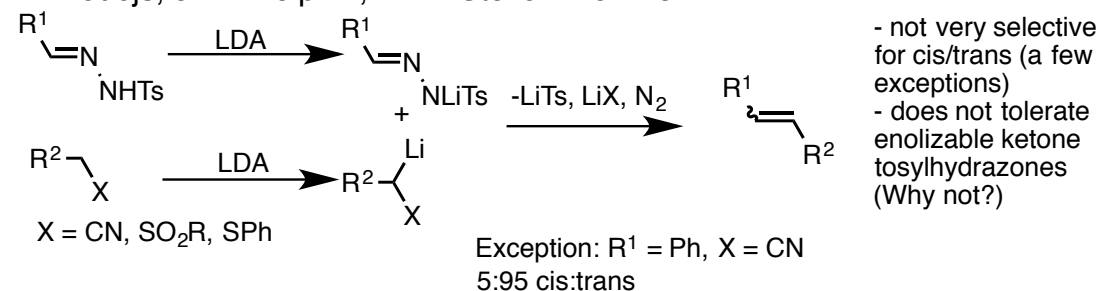
**9-isocyanopupukeanane**

**Total Synthesis of *dl*-Aplysistatin**

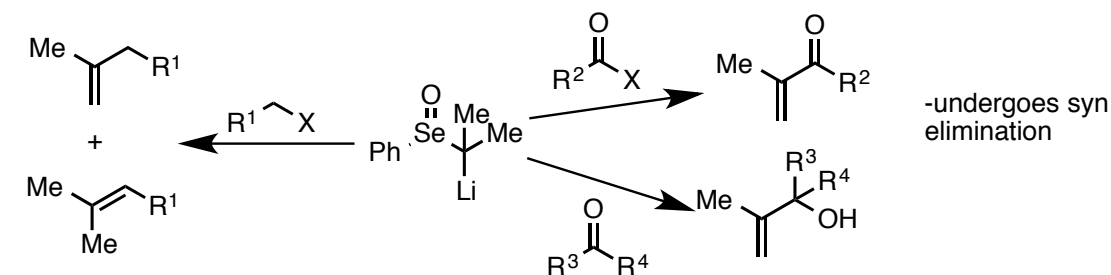
T. R. Hoye, M. J. Kurth. 5065 - 5067

**A new olefin synthesis: condensation of aldehyde tosylhydrazones with stabilized carbanions**

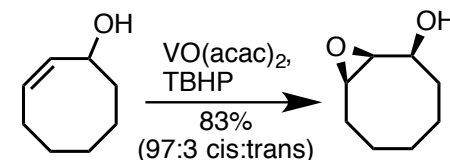
E. Vedejs, J. M. Dolphin, W. T. Stolle. 249 - 251.

**Selenium Stabilized Carbanions.  $\alpha$ -Lithio Selenoxides as Reagents for the Synthesis of Olefins, Allyl Alcohols, and Dienes**

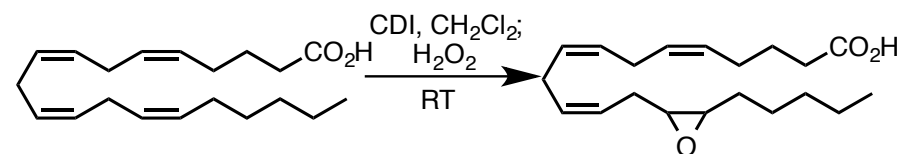
H. J. Reich, S. K. Shah, and F. Chow. 6648 - 6656.

**Vanadium-Catalyzed Epoxidation of Cyclic Allylic Alcohols.****Stereoselectivity and Stereocontrol Mechanism**

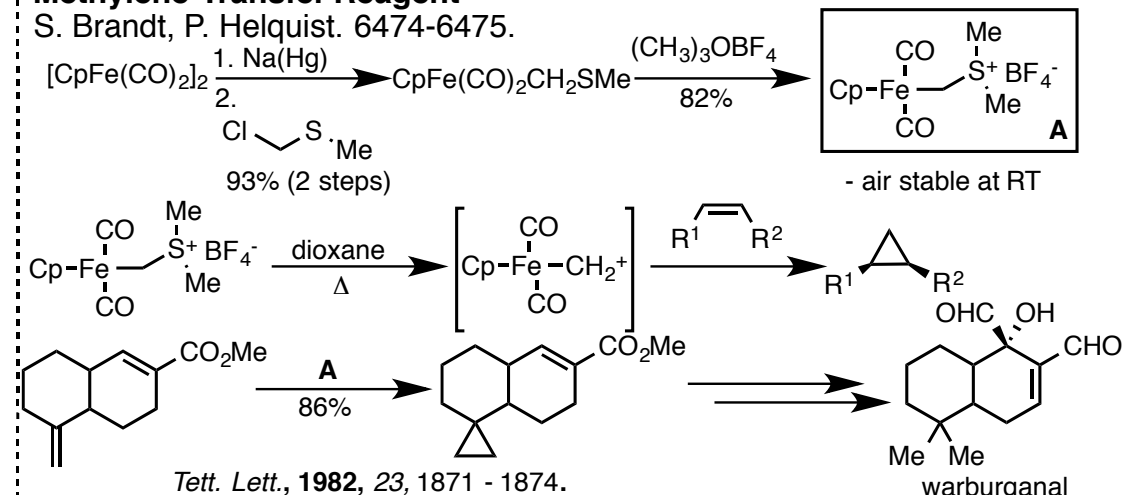
T. Itoh, K. Jitsukawa, K. Kaneda, S. Teranishi. 159 - 169.

**Selective epoxidation of eicosa-cis-5,8,11,14-tetraenoic (arachidonic) acid and eicosa-cis-8,11,14-trienoic acid.**

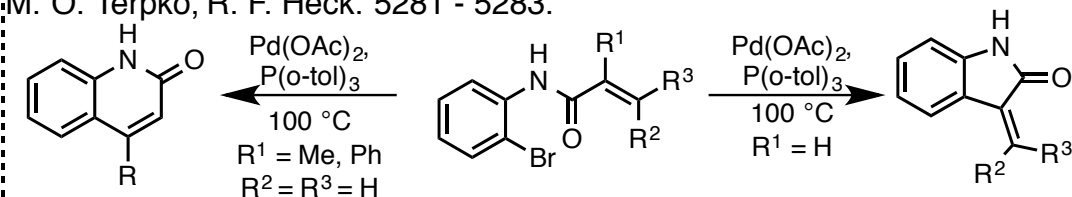
E. J. Corey, Haruki Niwa, J. R. Falck. 1586 - 1587.

**Cyclopropanation of Olefins with a Stable, Iron-Containing Methylene Transfer Reagent**

S. Brandt, P. Helquist. 6474-6475.

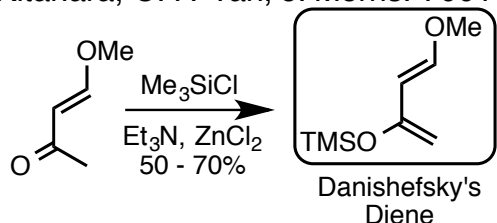
**Rearrangement in the palladium-catalyzed cyclization of  $\alpha$ -substituted *N*-acryloyl-*o*-bromoanilines**

M. O. Terpko, R. F. Heck. 5281 - 5283.

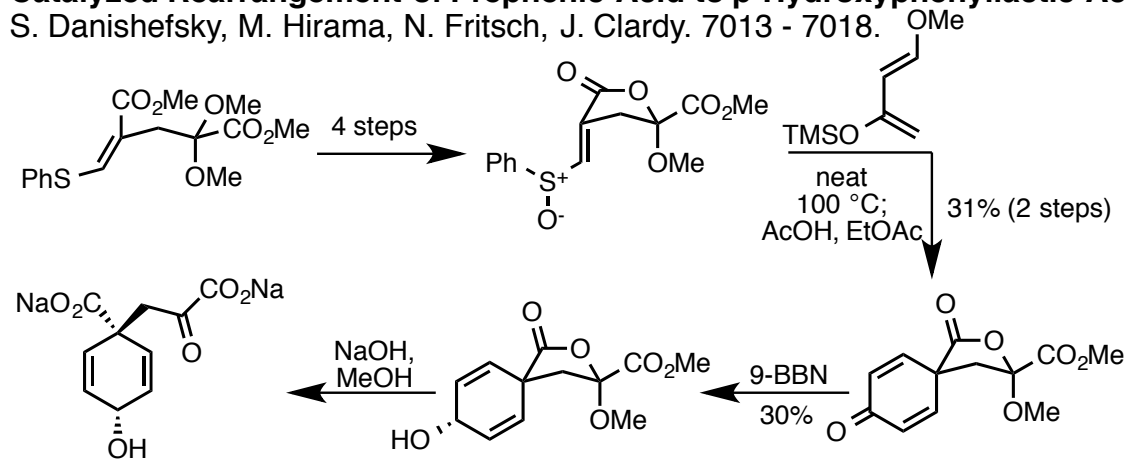


**Diels-Alder reactions of trans-1-methoxy-3-trimethylsilyloxy-1,3-butadiene**

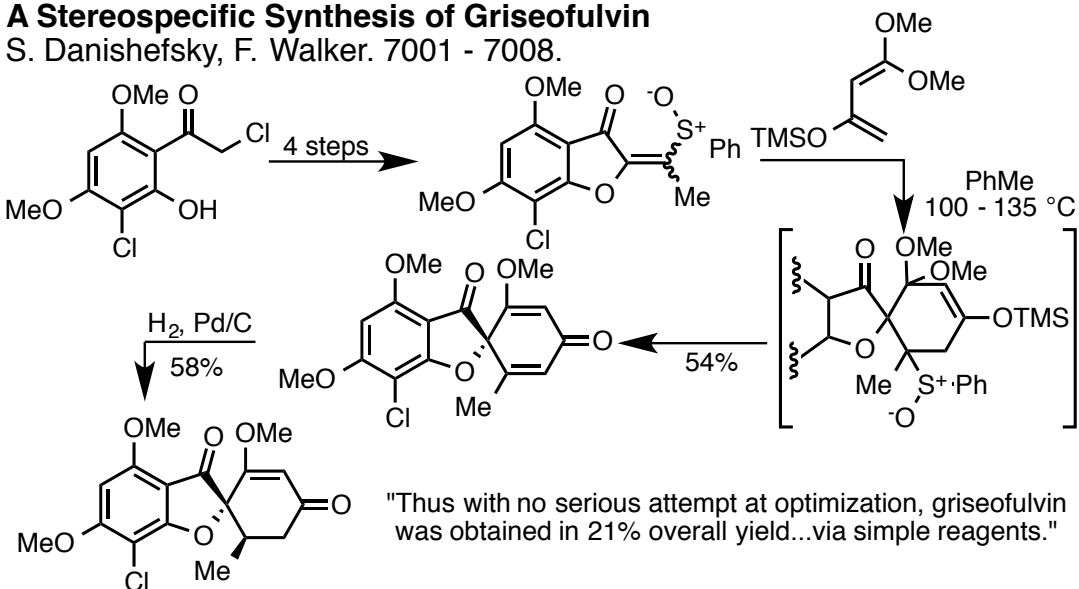
S. Danishefsky, T. Kitahara, C. F. Yan, J. Morris. 7001 - 7008.

**Synthesis of Disodium Prephenate and Disodium Epiprephenate. Stereochemistry of Prephenic Acid and an Observation on the Base-Catalyzed Rearrangement of Prephenic Acid to p-Hydroxyphenyllactic Acid**

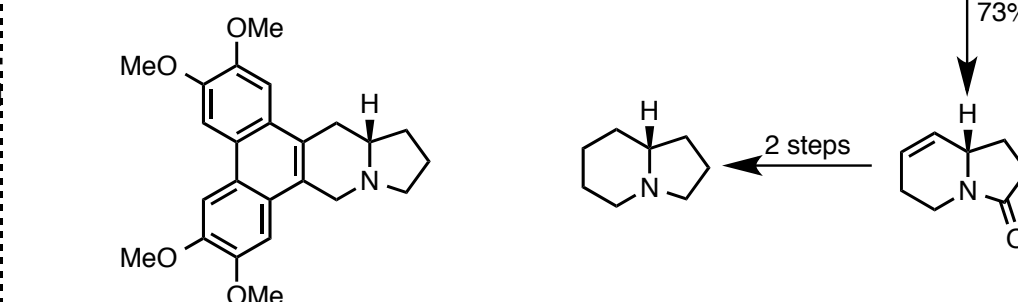
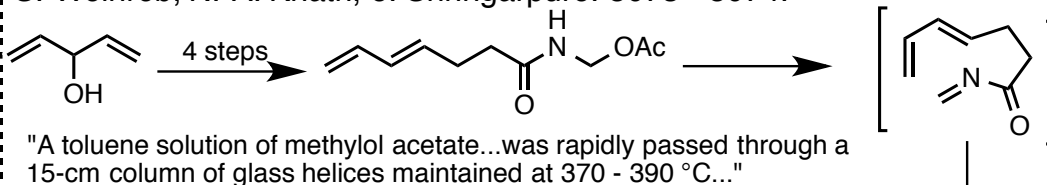
S. Danishefsky, M. Hirama, N. Fritsch, J. Clardy. 7013 - 7018.

**A Stereospecific Synthesis of Griseofulvin**

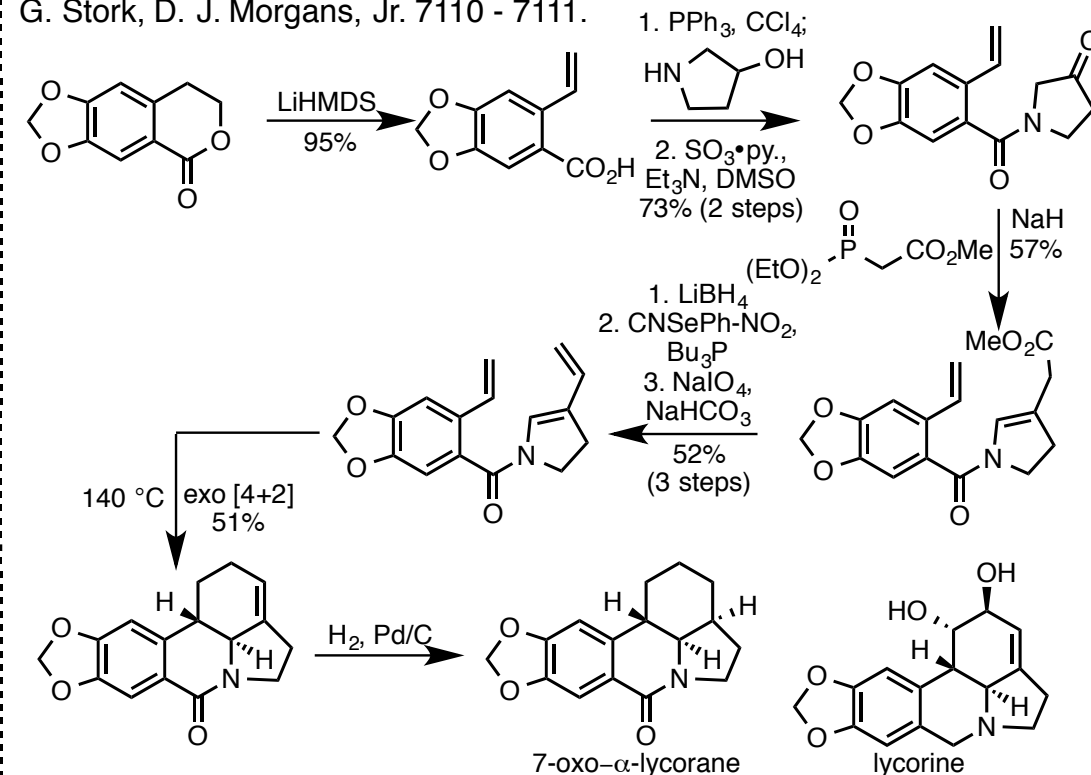
S. Danishefsky, F. Walker. 7001 - 7008.

**Alkaloid Synthesis by the Intramolecular Imino Diels-Alder Reaction.** **$\delta$ -Coniceine and Tylophorine**

S. Weinreb, N. A. Khatri, J. Shringarpure. 5073 - 5074.

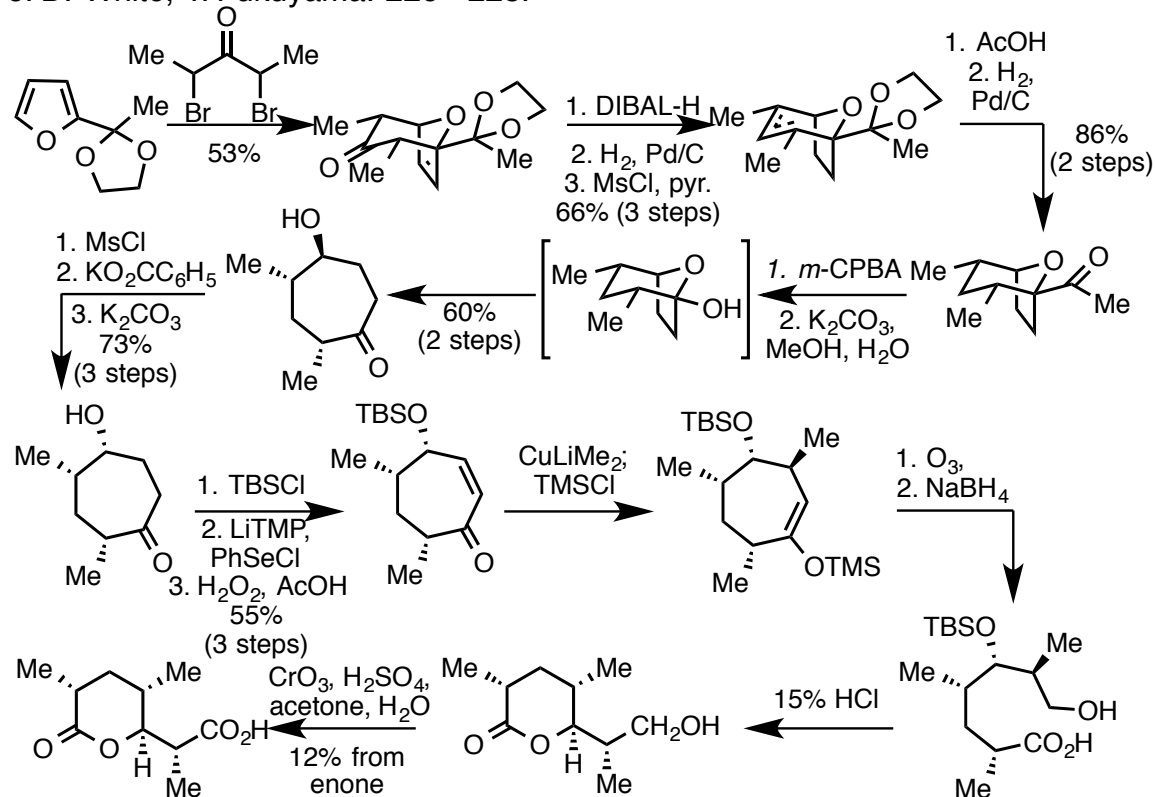
**A Simple, Stereospecific Synthesis of the Skeleton of the Lycorine Alkaloids**

G. Stork, D. J. Morgans, Jr. 7110 - 7111.

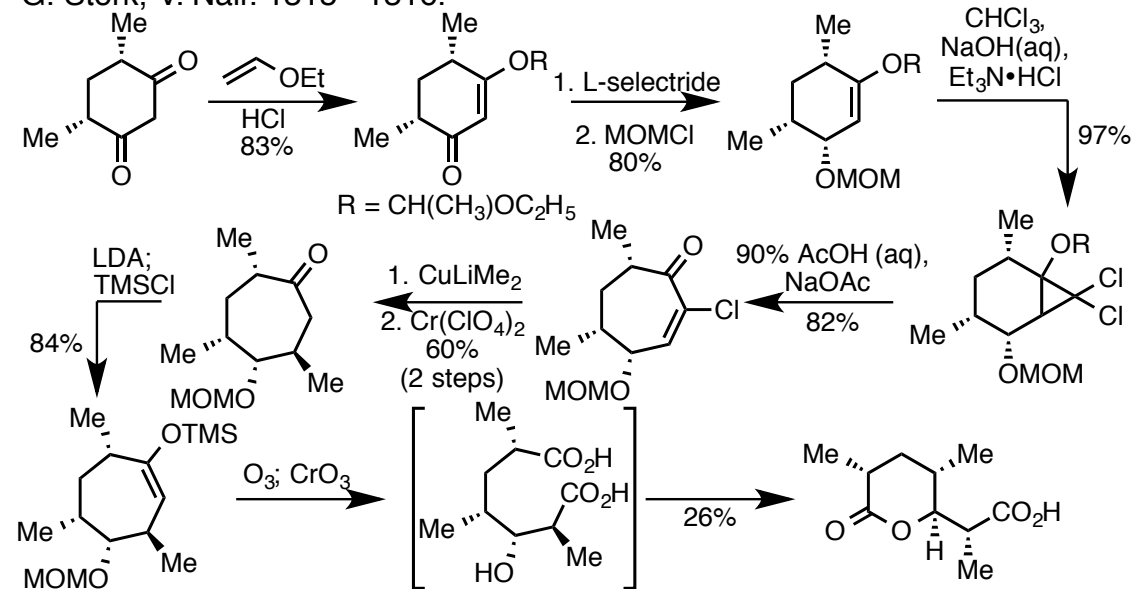


**Stereocontrolled Synthesis of the Prelog-Djerassi Lactone**

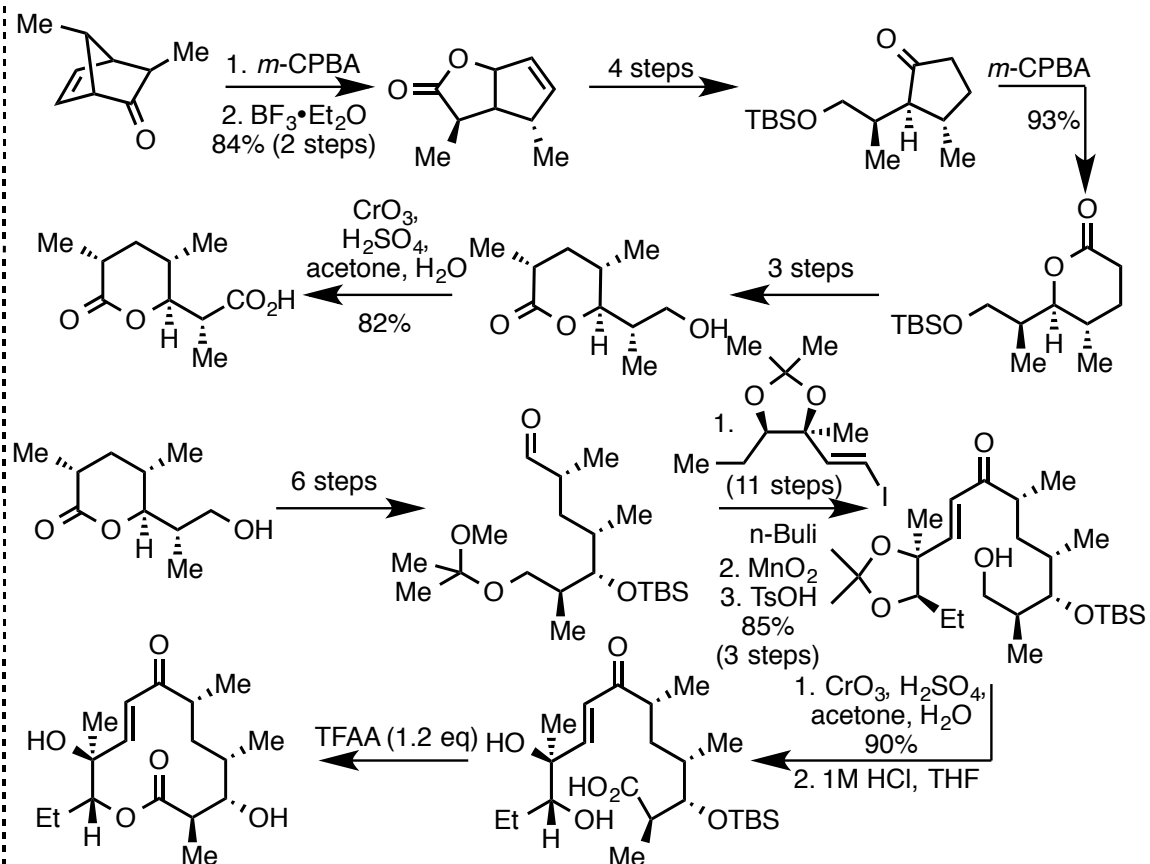
J. D. White, Y. Fukuyama. 226 - 228.

**A Stereocontrolled Synthesis of the (±) Djerassi-Prelog Lactonic Acid**

G. Stork, V. Nair. 1315 - 1316.

**Macrolide Antibiotics. 1. Total Synthesis of the Prelog-Djerassi Lactone and Methynolide**

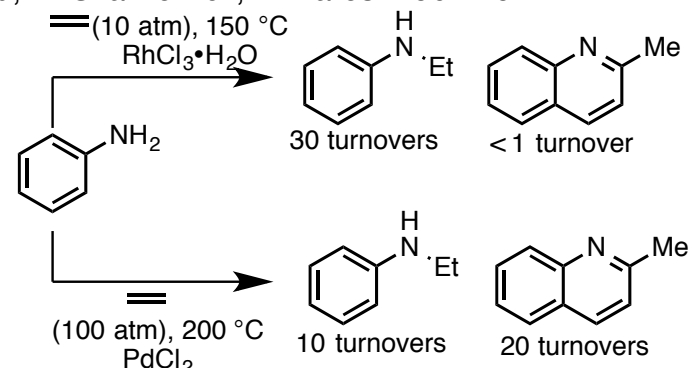
P. A. Grieco, Y. Ohfuné, Y. Yokoyama, W. Owens. 4749 - 4752.



J. Am. Chem. Soc. 1975, 97, 3513 - 3515.

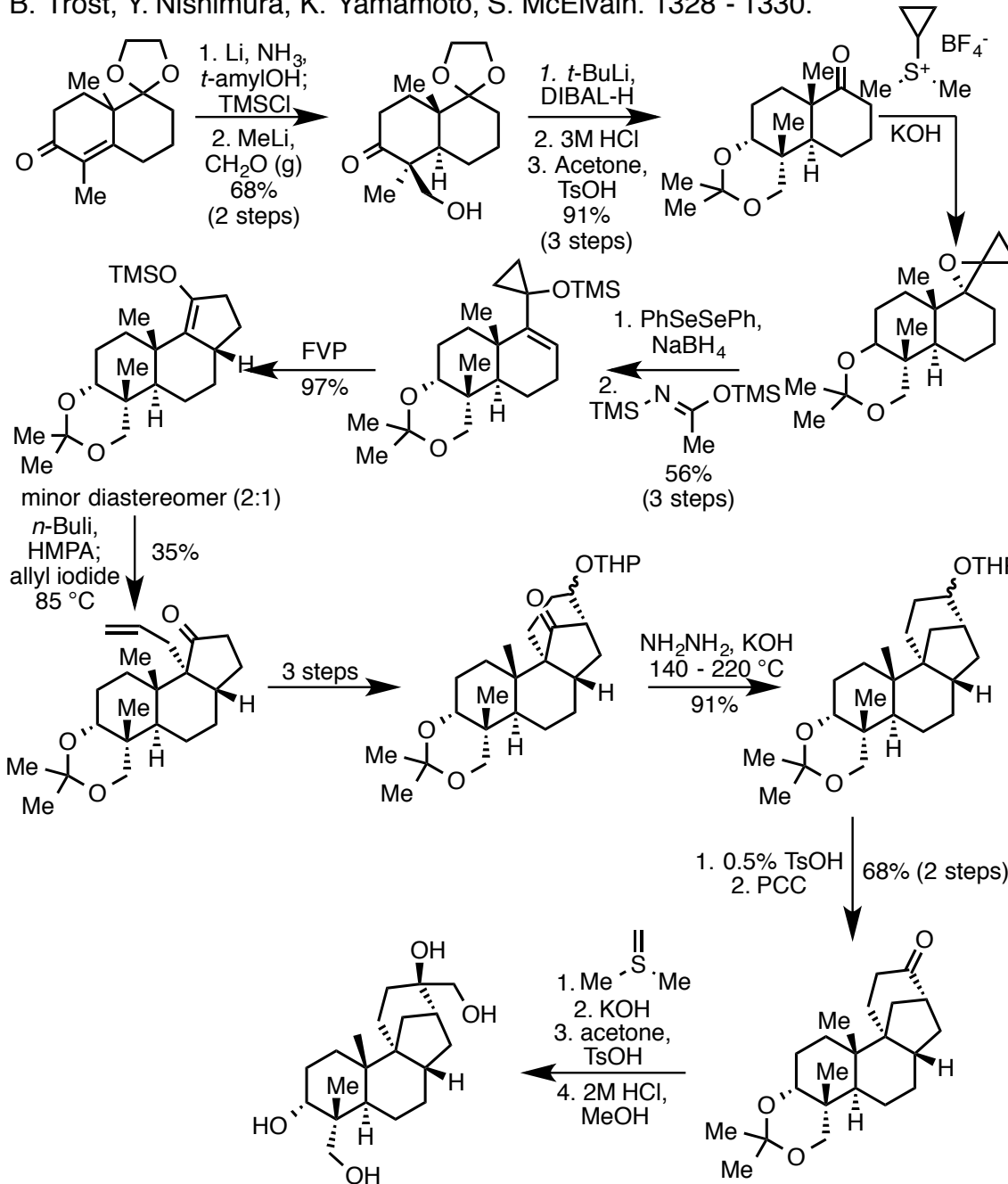
**Reactions of Aniline with Olefins Catalyzed by Group 8 Metal Complexes: N-Alkylation and Heterocycle Formation**

S. Diamond, A. Szalkiewicz, F. Mares. 490 - 491.

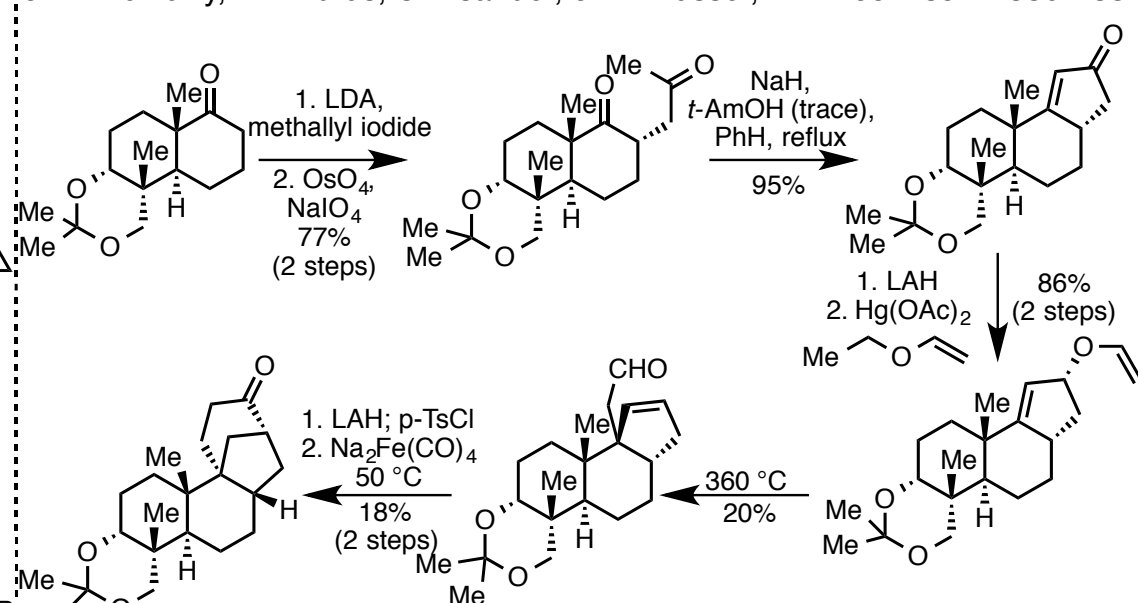


**A Total Synthesis of Aphidicolin**

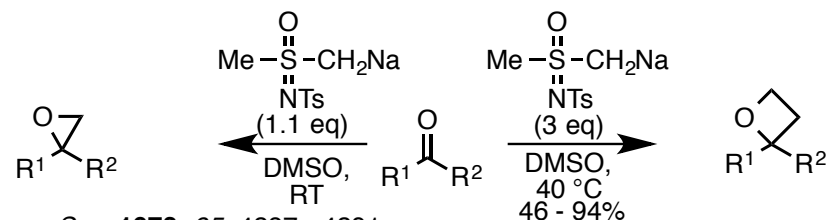
B. Trost, Y. Nishimura, K. Yamamoto, S. McElvain. 1328 - 1330.

Dalziel, W.; Hesp, B.; Stevenson, K. M.; and Jarvis, J. A. *J. Chem. Soc., Perkin Trans.* **1973**, *1*, 2841.**Stereospecific Total Synthesis of Aphidicolin**

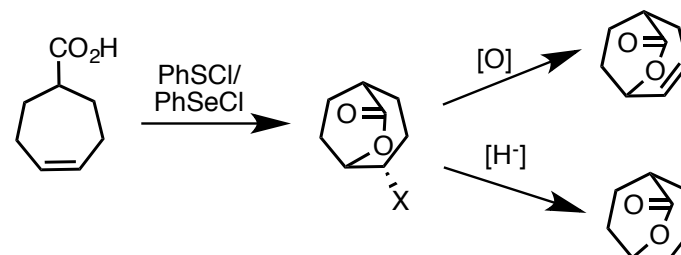
J. E. McMurry, A. Andrus, G. Ksander, J. H. Musser, M. A. Johnson. 1330-1332.

**A Convenient One-Step Synthesis of 2,2-Disubstituted Oxetanes from Ketones**

S. C. Welch, A. S. C. P. Rao. 6135 - 6136.

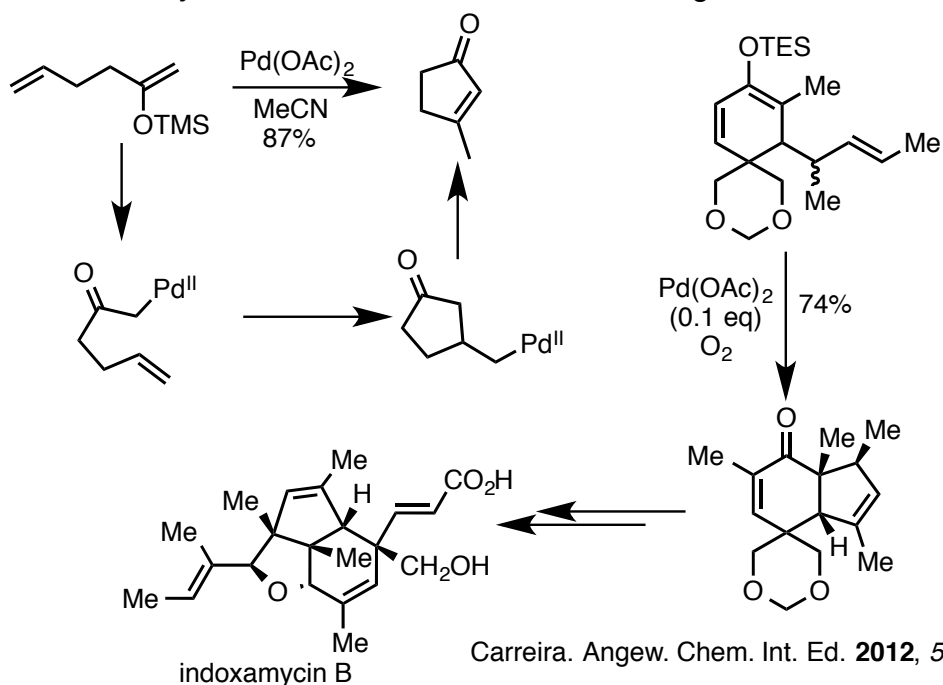
*J. Am. Chem. Soc.* **1973**, *95*, 4287 - 4291.**Phenylseleno- and phenylsulfenolactonizations. Two highly efficient and synthetically useful cyclization procedures**

K. C. Nicolaou, S. P. Seitz, W. J. Sipio, J. F. Blount. 3884 - 3893.

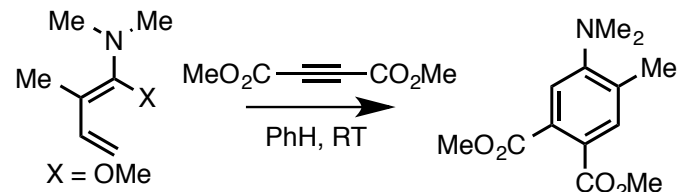
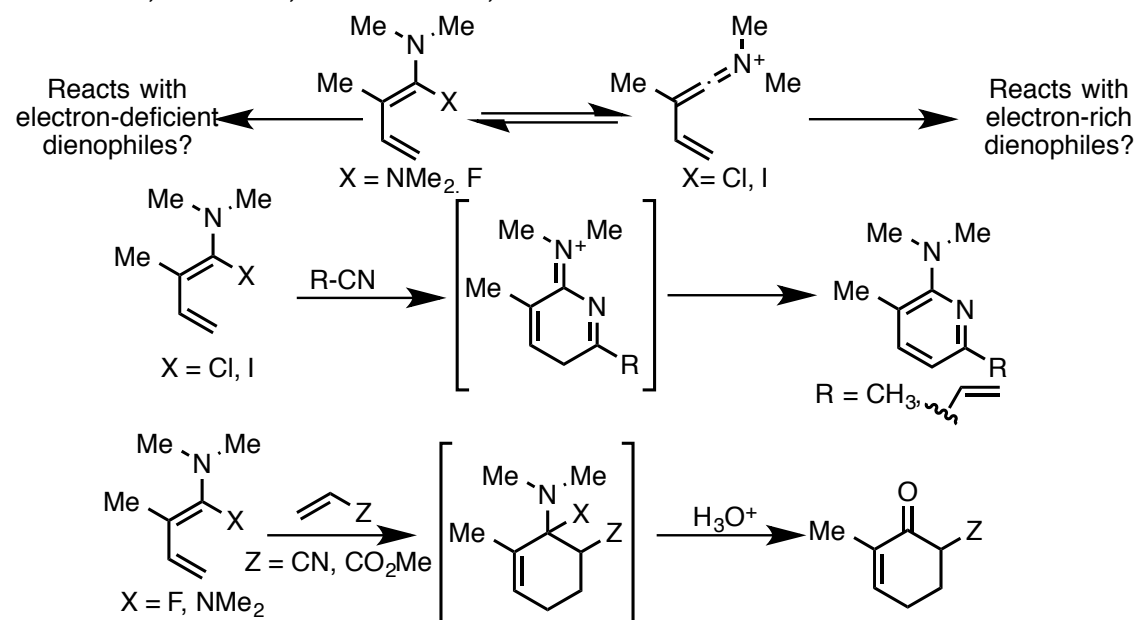


**Cyclization Reactions via Oxo- $\pi$ -allylpalladium(II) Intermediates**

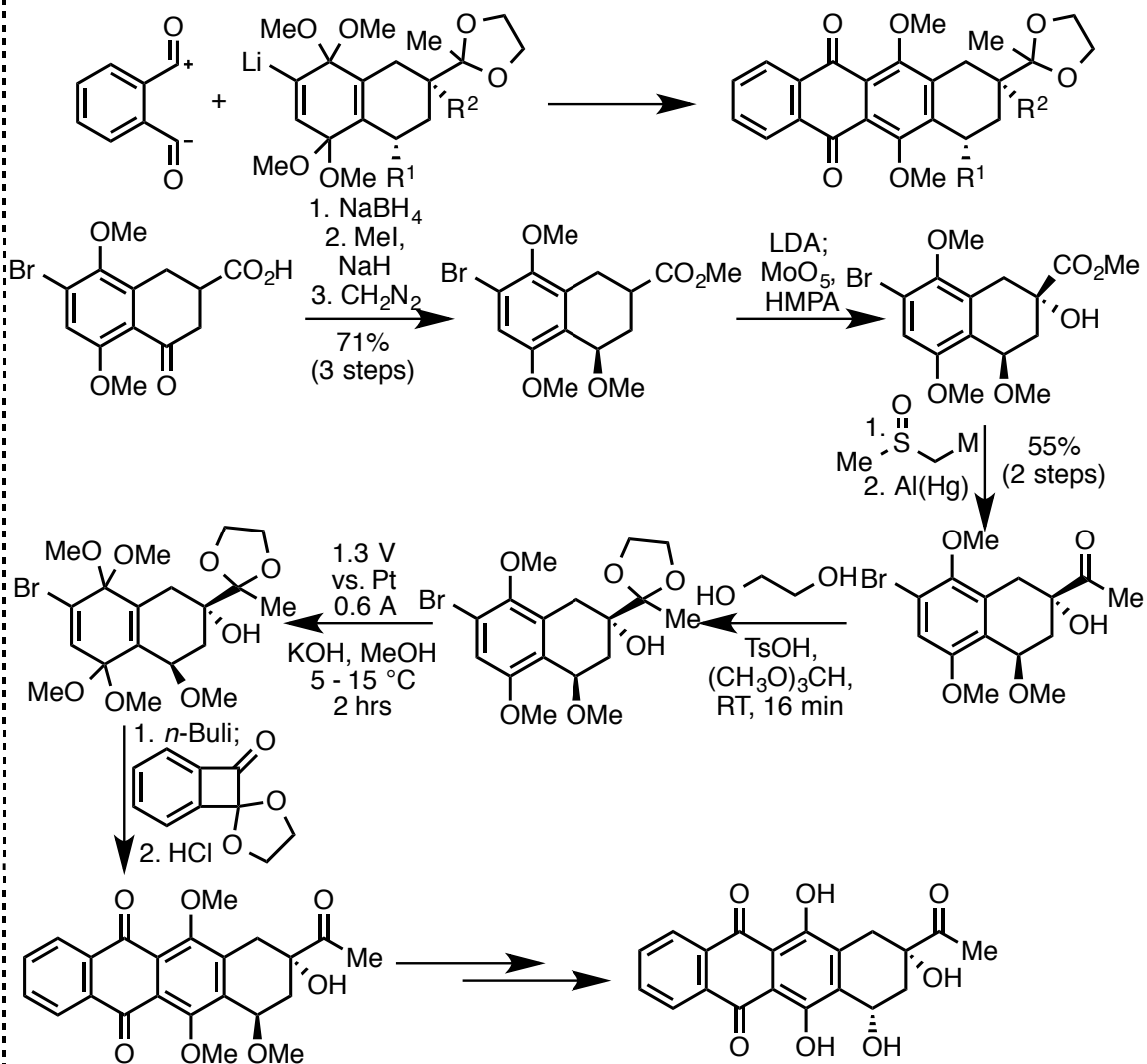
Y. Ito, H. Aoyama, T. Hirao, A. Mochizuki, T. Saegusa. 494 - 496.

**Diels-Alder Reactions of "Pull-Push" Activated Isoprenes**

M. Gillard, C. T'Kint, E. Sonveaux, L. Ghosez. 5837 - 5839.

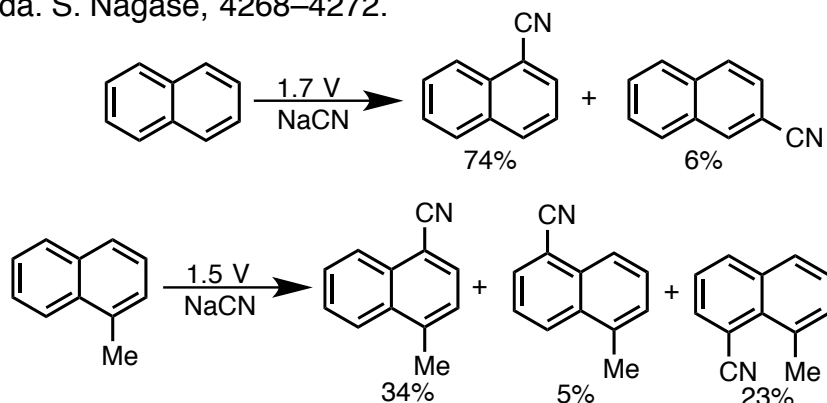
**Benzocyclobutenedione monoketal. A 1,4-dipole equivalent for anthracyclinone synthesis. Synthesis of ( $\pm$ )-4-demethoxydaunomycinone**

D. K. Jackson, L. Narasimhan, J. S. Swenton. 3989 - 3990.

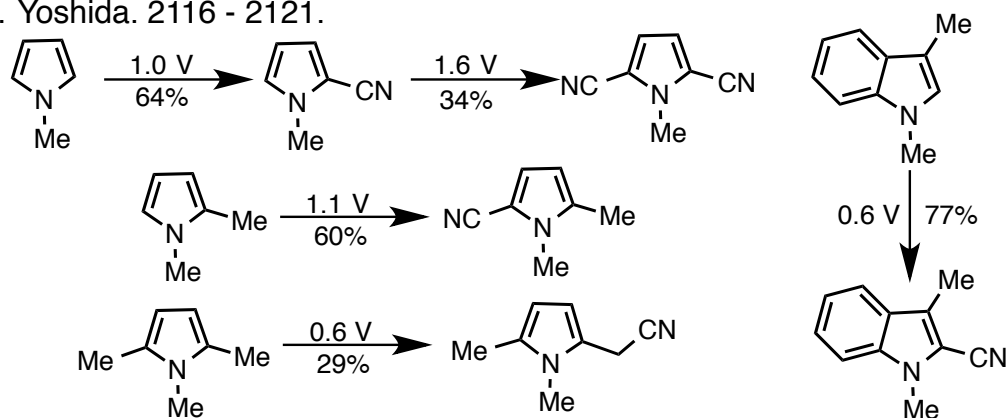


**Anodic cyanation. Aromatic nucleophilic substitution of monomethyl- and dimethylnaphthalenes**

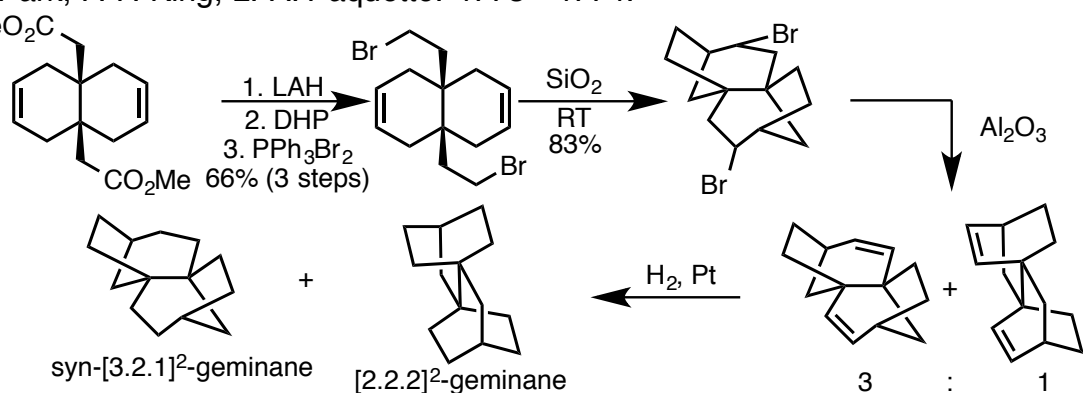
K. Yoshida. S. Nagase, 4268–4272.

**Regiocontrolled Anodic Cyanation of Nitrogen Heterocycles. Pyrroles and Indoles**

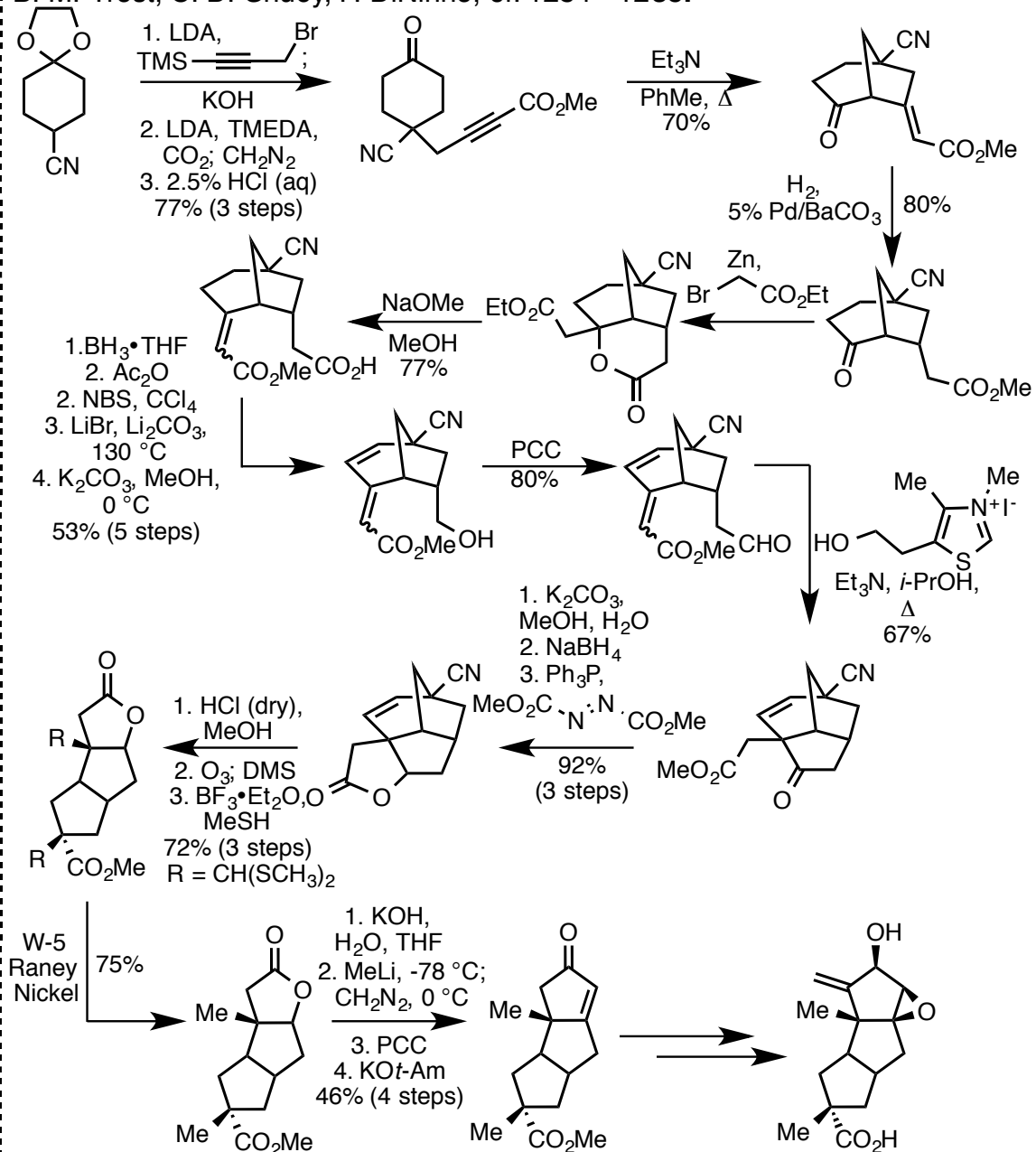
K. Yoshida. 2116 - 2121.

**Twofold cation-olefin cyclization. Synthesis of syn-[3.2.1]<sup>2</sup>- and [2.2.2]<sup>2</sup> geminane**

H. Park, P. F. King, L. A. Paquette. 4773 - 4774.

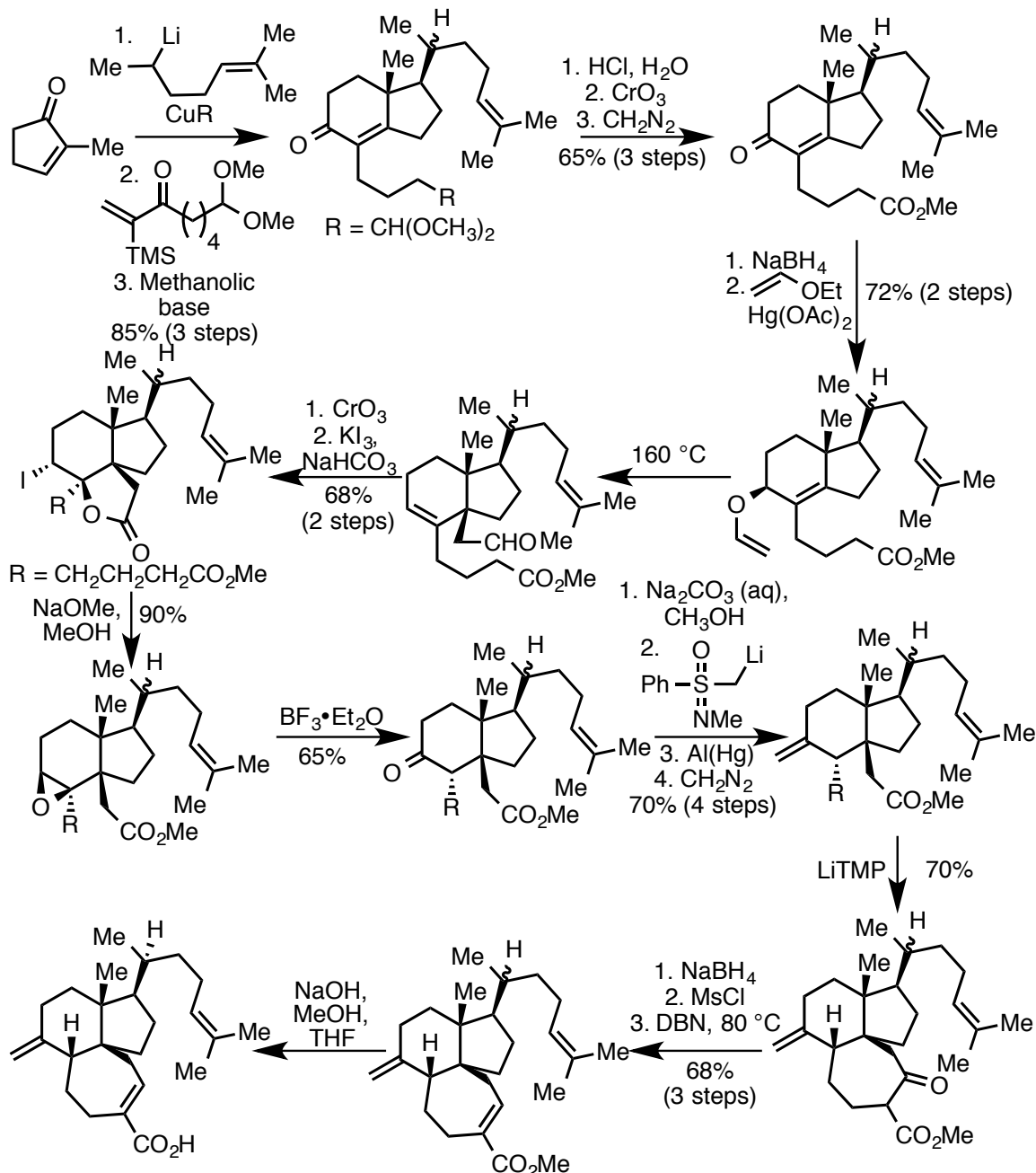
**A stereocontrolled total synthesis of (±)-hirsutic acid C**

B. M. Trost, C. D. Shuey, F. DiNinno, Jr. 1284 - 1285.

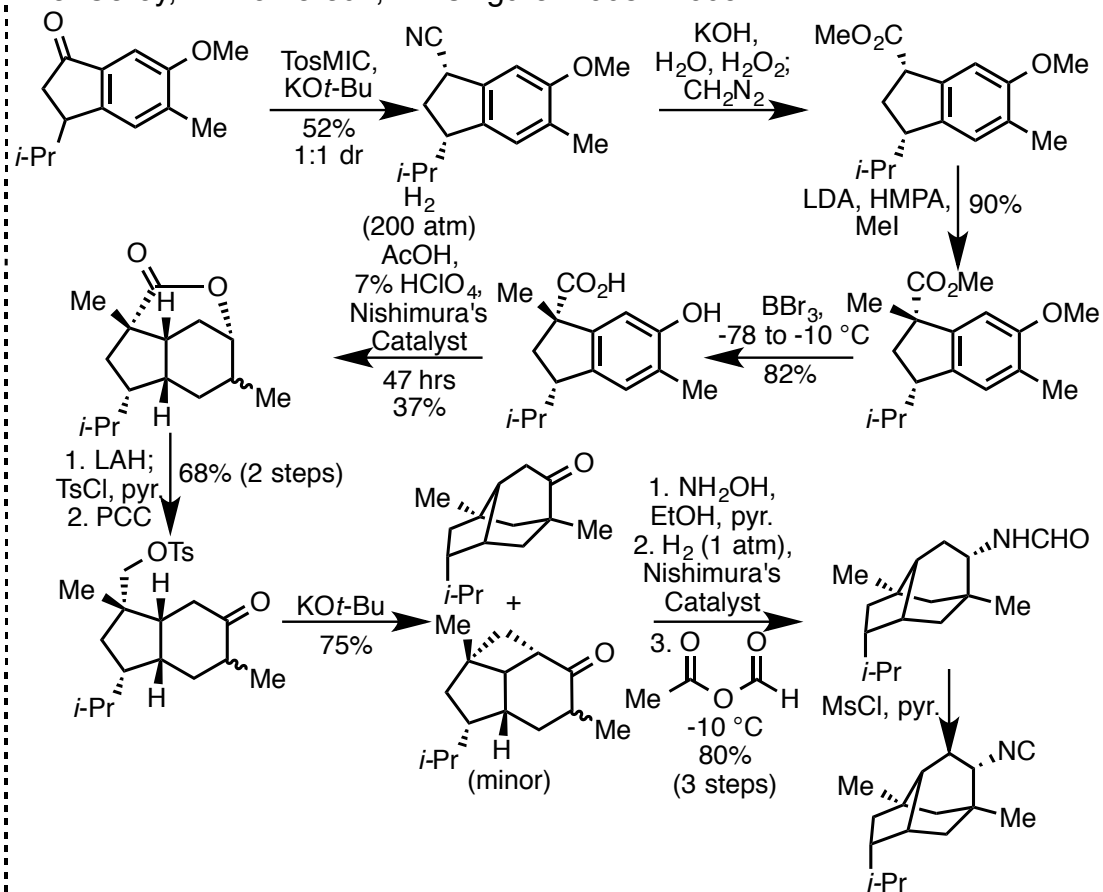
Tett. Lett., 1971, 40, 3703 - 3706.  
Tett. Lett., 1974, 43, 3745 - 3748.

**A Total Synthesis of Gascardic Acid**

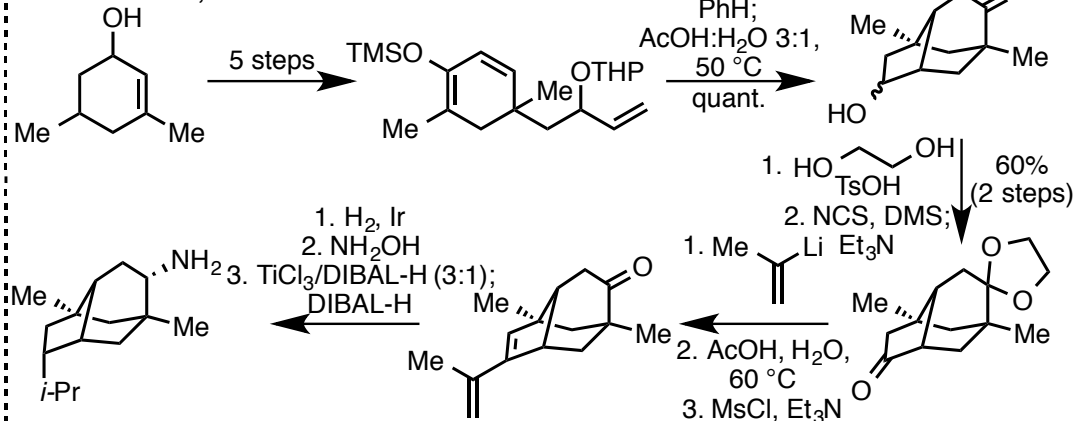
R. K. Boeckman, Jr. D. M. Blum. S. D. Arthur. 5060 - 5062.

**Total Synthesis of the Racemate of the Sesquiterpenoid Marine Allomone 9-Isocyanopupukeanane**

E. J. Corey, M. Behforouz, M. Ishiguro. 1608 - 1609.

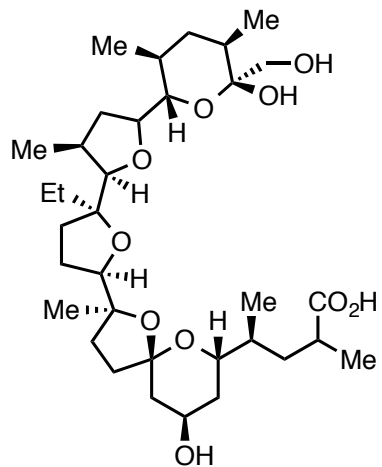
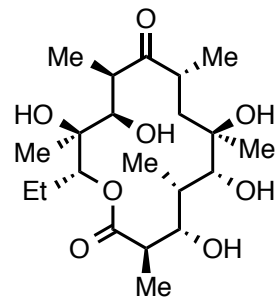
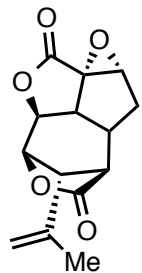
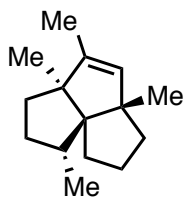
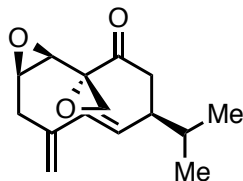
**Total Synthesis of ( $\pm$ ) 9-Isocyanopupukeanane**

H Yamamoto, H. L. Sham. 1609 - 1611.





## Syntheses not covered:

monensin  
(Kishi)erythronolide A  
(Corey)picrotoxinin  
(Corey)isocomene  
(Pirrung)periplanone B  
(Still)