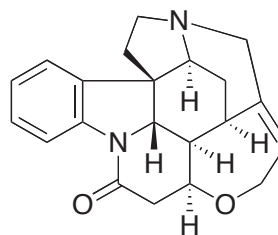


## ■ REVIEW

## 259 Total Synthesis of Strychnine

Miwako Mori\*



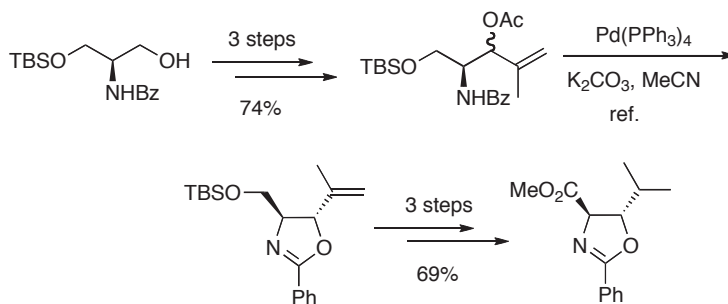
(-)-strychnine

Strychnine    Palladium Catalyzed Cyclization    Tubifoline    Asymmetric Allylic Substitution    Heck Reaction

## ■ PAPERS

 293 Stereoselective Intramolecular Cyclization of Isopentenyl Benzamide *via*  $\pi$ -Allylpalladium Complex Catalyzed by Pd(0)

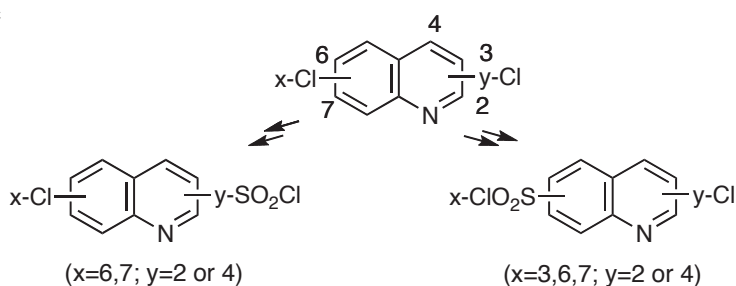
Jae-Eun Joo, Yu Mu, Yiu-Suk Lee, Yong-Shou Tian, Gyu-Jin Lee, and Won-Hun Ham\*



Stereoselective Synthesis    Chiral Oxazoline    Palladium    Catalysis    Lactacystin

## 305 From 2,3-, 2,6-, 3,4- and 4,6-Dichloroquinolines to Isomeric Chloroquinolinesulfonyl Chlorides

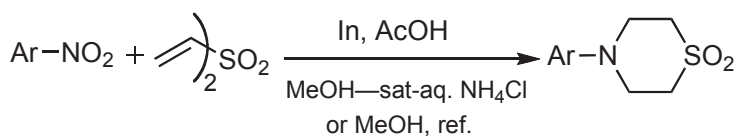
Krzysztof Marciniak\* and Andrzej Maślankiewicz



Sulfonamide    Sulfonyl Chloride    Quinoline    Oxidative Chlorination of Quinoliny Sulfoxide    Nucleophilic Heteroaromatic Substitution

 317 One-Pot Aryl-1,4-thiomorpholine 1,1-Dioxide Synthesis *via* Double 1,4-Addition of *in situ* Reduced Nitroarenes to Divinyl Sulfones

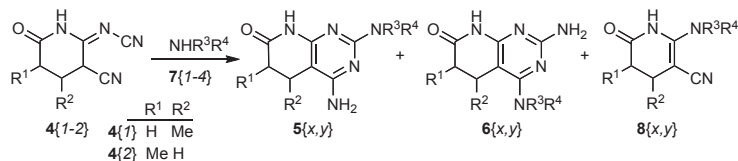
Joon Hee Han, Jaehwan Choi, Young Moo Jun, Byung Min Lee, and Byeong Hyo Kim\*



Heterocyclization    Indium    Divinyl Sulfone    Nitroarene    Aza-Michael Type Addition

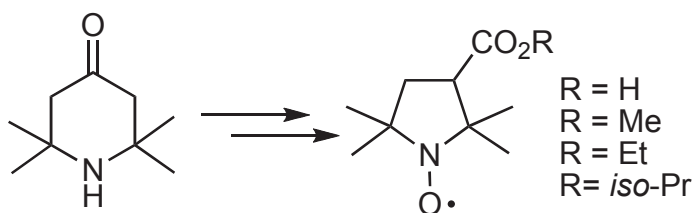
**329 Cyclization of 5-Cyano-6-cyanoimino-3,4-dihydropyridin-2(1*H*)-ones with Amines**

Núria Mont, Francisco Carrión, José I. Borrell,\* and Jordi Teixidó


 1,5-Dinitrile Cyclization Amine Pyrido[2,3-*d*]pyrimidine Mechanism

**349 Facile Synthesis of 3-Methoxycarbonyl-2,2,5,5-tetramethylpyrrolidine-1-oxyl and Derivatives**

Bunpei Hatano,\* Hiroki Araya, Yutaka Yoshimura, Haruna Sato, Tomohiro Ito, Tateaki Ogata, and Tatsuro Kijima

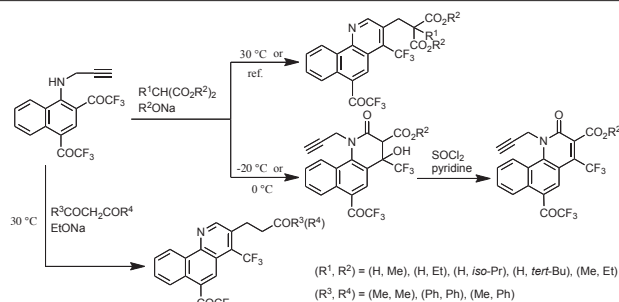


total 54 - 65% yields (4 or 5 steps)

3-Methoxycarbonyl- and 3-Carbonyl-2,2,5,5-tetramethylpyrrolidine-1-oxyls Favorskii Rearrangement Spine Probe Nitroxyl Radical

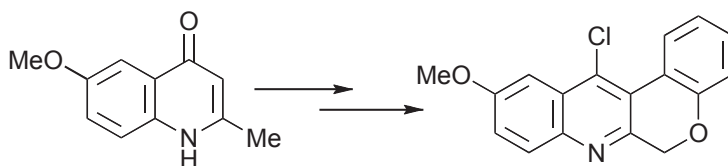
**357 A Concise Synthesis of Fluorine-Containing Benzo[*h*]quinolines and Benzo[*h*]quinolones by Selective Pyridine and Pyridinone Rings Formation Reactions of *N*-Propargyl-2,4-bis(trifluoroacetyl)-1-naphthylamine with Various Active Methylene Compounds**

Etsuji Okada,\* Dai Shibata, Norikado Tsukushi, Masato Dohura, Norio Ota, Satoru Adachi, and Maurice Médebielle


 Benzo[*h*]quinoline 1*H*-Benzo[*h*]quinolin-2-one Fluorine Compound *N*-Propargyl-1-naphthylamine Active Methylene Compound

**371 Synthesis of a 6*H*-Chromeno[3,4-*b*]quinoline and a 6*a*,12*a*-Dehydro-7-azarotenoid**

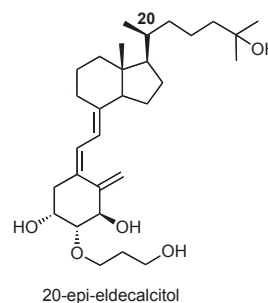
Andrew L. C. Morris and Yvette A. Jackson\*



Palladium-Mediated Reaction Heck Reaction Rotenoid Aza Derivative

**381 Synthesis of 20-Epi-eldecalsitol [20-Epi-1 $\alpha$ ,25-dihydroxy-2 $\beta$ -(3-hydroxypropoxy)vitamin D<sub>3</sub>: 20-Epi-ED-71]**

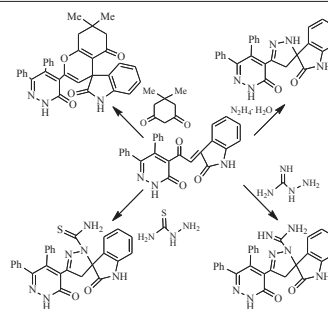
Madoka Yoshino, Kohei Eto, Keisuke Takahashi, Jun Ishihara, Susumi Hatakeyama, Yoshiyuki Ono, Hitoshi Saito, and Noboru Kubodera\*



Calcitriol Eldecalsitriol 20-Epi-Calcitriol 20-Epi-Eldecalsitol Trost Coupling Reaction

## ■ NOTES

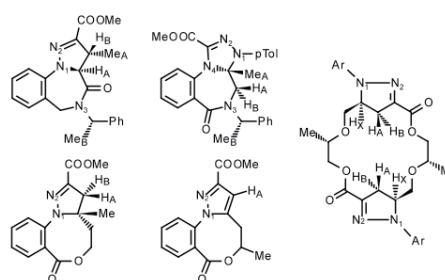
**395 Synthesis of Some New Pyridazinylspiroheterarylindoles and Hetarylpyridazine Derivatives**

 Yassin Gabr,\* Mohamed Abdel-Megid,  
 Mohamed Abdel-Hamid Awas, and  
 Naser Mohamed Abdel-Fatah


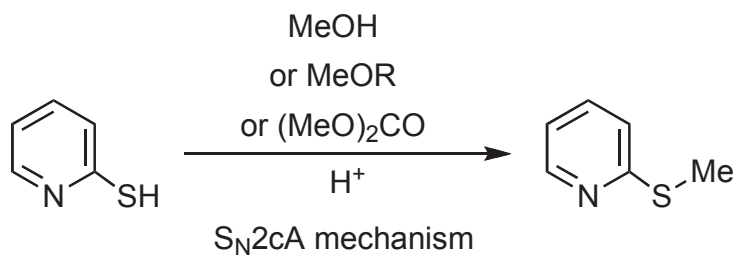
Pyridazinyl Spiroheterarylindole    Hetarylpyridazine    Substituted Thiazine

**407 <sup>15</sup>N NMR Spectroscopy of Annulated  $\Delta^2$ -Pyrazolines and  $\Delta^2$ -1,2,4-Triazolines**

Teresa Recca, Lara De Benassuti, and Giorgio Molteni\*

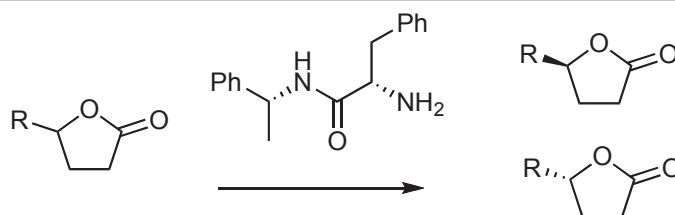

 Annulated  $\Delta^2$ -Pyrazoline    Annulated  $\Delta^2$ -1,2,4-Triazoline    <sup>15</sup>N Chemical Shift    INEPT Experiment    HMBC Experiment

**413 S-Methylation of N-Containing Heterocyclic Thiols with Conjugated Acids of Methoxy Groups**

 Masao Shimizu,\* Teruaki Shimazaki, Yoshihiro Kon,  
 and Takeo Konakahara

 S-Alkylation    Pyridinethiol    Alcohol    Conjugated Acid     $S_N2cA$  Reaction

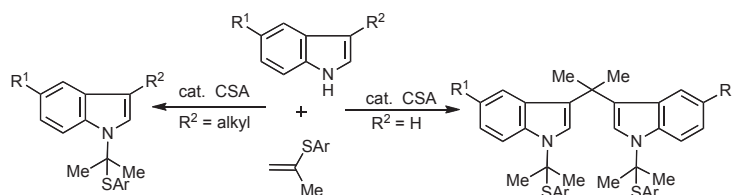
**421 Synthesis of Optically Active  $\gamma$ -Valerolactone and  $\gamma$ -Nonanolactone via Optical Resolution Using Chiral Amine Derived from Amino Acid**

Kenichi Yumoto, Morifumi Hasegawa, and Hiroaki Toshima\*


 1) ring opening amidation of  $\gamma$ -lactones; 2) optical resolution by fractional crystallization; 3) hydrolysis

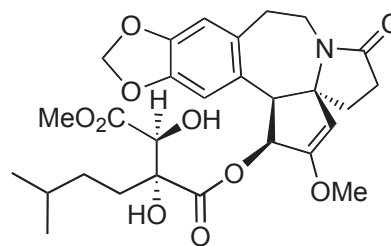
 $\gamma$ -Lactone    Optical Resolution    Amino Acid Derivative    Chiral Amine    L-Phenylalanine

**433 Synthesis of 1-(1-Arylsulfanylalkyl)indoles and 2,2-Bis[1-(1-arylsulfanylalkyl)indol-3-yl]propanes by Acid-Catalyzed Reactions of Indoles with Aryl Vinyl Sulfides**

 Kazuhiro Kobayashi,\* Yuu Shirai, Shuhei Fukamachi,  
 and Hisatoshi Konishi

 Indole    Bis(indol-3-yl)methane    Acid-Catalyzed Reaction    Vinyl Sulfide    ( $\pm$ )-Camphor-10-sulfonic Acid

441 **Cephastigiamide A, and Antiplasmodial Activity of *Cephalotaxus* Alkaloids from *Cephalotaxus harringtonia* forma *fastigiata***

Hiroshi Morita,\* Yuta Nagakura, Takahiro Hosoya,  
Wiwied Ekasari, Aty Widyawaruyanti,  
Kanami Mori-Yasumoto, Setsuko Sekita, and  
Yusuke Hirasawa



cephastigiamide A (1)

Cephastigiamide A    Alkaloid    *Cephalotaxus harringtonia* forma *fastigiata*    Antiplasmodial Activity

■ NEW HETEROCYCLIC NATURAL PRODUCTS

- 451 Polyketides
- 453 Aromatics
- 463 Terpenes
- 481 Steroids
- 487 Alkaloids
- 493 Miscellaneous

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 495 Polyketides
- 501 Aromatics
- 505 Terpenes
- 507 Alkaloids

**Contributors  
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