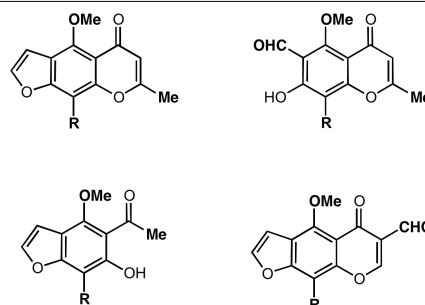


■ REVIEW

389 **Chemical Reactions of Furochromones, Visnagin and Khellin**

Magdy A. Ibrahim, Al Shimaa Badran,* Nasser M. El-Gohary, and Noura A. Abdel-fatah



Visnagin and Khellin

Heterocyclization

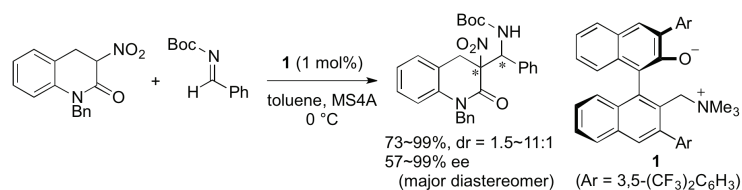
6-Formyl-7-hydroxy-2-methylchromone

6-Formylnorvisnagin and 6-Formylnorhellin

■ COMMUNICATION

441 **Stereoselective Aza-Henry Reaction of 3-Nitro-dihydro-2-(1*H*)-quinolones with *N*-Boc-Aldimines under the Catalysis of Chiral Ammonium Betaines**

Daisuke Uraguchi, Masahiro Torii, Kohsuke Kato, and Takashi Ooi*



Organocatalysis

Aza-Henry Reaction

Asymmetric Catalysis

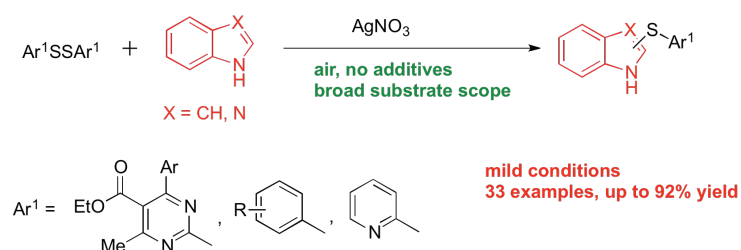
Ammonium Betaine

Quinolinone

■ PAPERS

449 **Silver-Mediated Sulfenylation of Indoles and Benzimidazoles with Di(hetero)aryl Disulfides**

Wen-Juan Wang and Xi-Cun Wang*



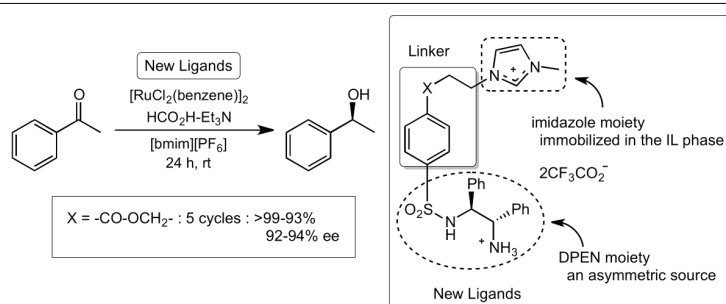
Silver Ion Mediated Sulfenylation

Di(pyrimidin-2-yl) Disulfide

C-S Coupling Reaction

465 Development of New Ligands for the Recyclable Catalytic Asymmetric Transfer Hydrogenation in Ionic Liquid

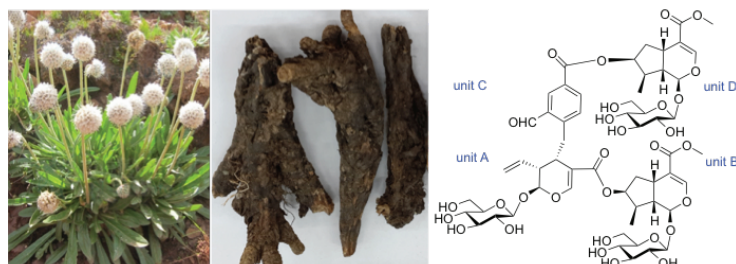
Hitomi Uchimoto, Miki Ikeda, Aoi Matsushita, Takashi Shigeta, Kenji Arimitsu, Hiroyuki Yasui, Tomoko Tsuji, Minoru Ozeki, Masayuki Yamashita, Kiyoharu Nishide, and Ikuo Kawasaki*



Ionic Ligand Catalytic Asymmetric Transfer Hydrogenation Recyclable Reaction Ionic Liquid

SHORT PAPERS
485 A Novel Tetrairidoid Glucoside from *Pterocephalus hookeri*

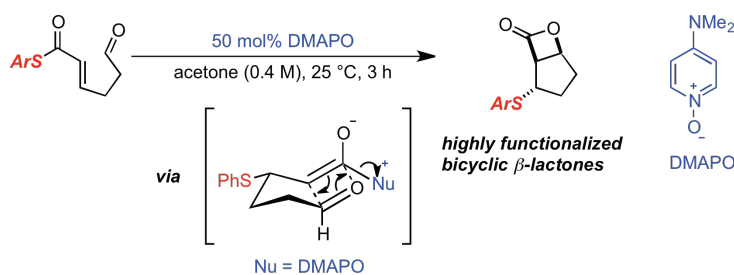
Shuai Huang, Jifa Zhang, Lianhai Shan, Yi Zhang,* and Xianli Zhou*



Pterocephalus hookeri Pterocphanoside Cytotoxicity

492 An Intramolecular Nucleophile-Catalyzed Aldol-Lactonization (NCAL) Reaction of *S*-Aryl-(*E*)-6-oxohex-2-enethioate with *N,N*-4-Dimethylaminopyridine *N*-Oxide

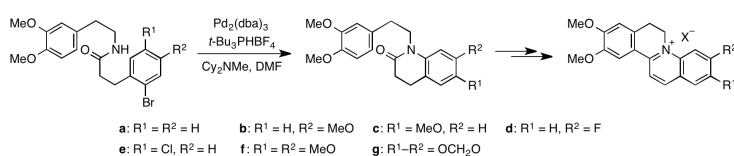
Hiroki Mandai,* Keita Shimowaki, Kohei Hongo, Koichi Mitsudo, and Seiji Suga*



beta-Lactone Nucleophile-Catalyzed Aldol-Lactonization (NCAL) *N,N*-4-Dimethylaminopyridine *N*-Oxide

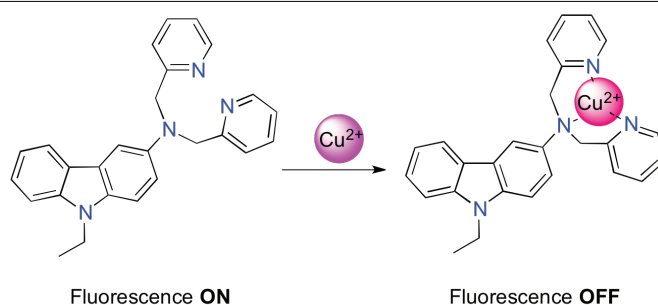
503 Synthesis of 6,7-Dihydro-9,10-dimethoxydibenzo[*a,f*]quinolinizinium Salt and Its D-Ring Substituted Derivatives

Kazuo Yamazaki, Mai Aritake, Shungo Takamoto, Midori Tabata, Sachiko Yanagihara, Keisuke Uji, Kazuaki Ohyama, Kei Ogiso, Takumi Sugahara, Ai Tatara, Tetsuji Hosono, Keitaro Suzuki, and Masashi Ohba*



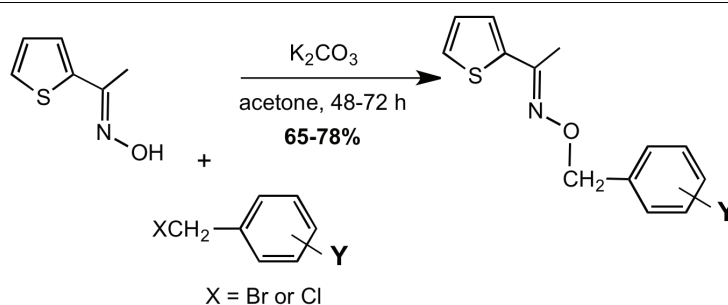
Dibenzo[*a,f*]quinolinizinium Salt Intramolecular Aryl Amidation Reaction Bischler–Napieralski Cyclization Reaction Topoisomerase Inhibitory Activity

- 515 **A New Carbazole-Based Fluorescence Sensor for High Selective Detection of Copper(II) in Aqueous Solutions**
 Zhao Fang, Hu Yang, Li Qiao, and Hu Shengli*



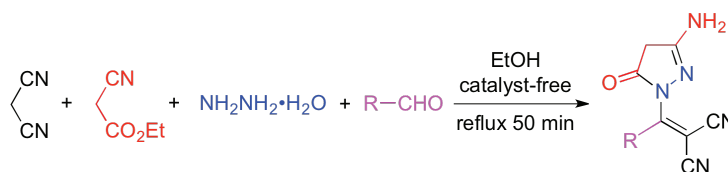
Carbazole Di-2-picolylamine Fluorescent Sensor Cu²⁺ Ion

- 523 **Novel O-Benzyl Oxime Ethers of 1-(Thiophen-2-yl)ethan-1-one – Synthesis, Structure and Antimicrobial Activity**
 Tomasz Kosmalski,* Jolanta Kutkowska, Izabela Dwojak, Renata Studzińska, Adam Sikora, Bożena Modzelewska-Banachiewicz, and Andrzej Gzella



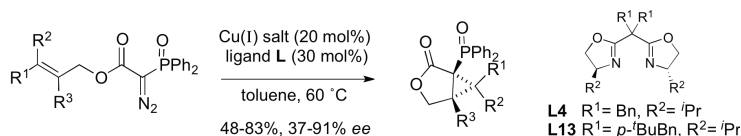
Oxime Ether Thiophene Antimicrobial Activity X-Ray Analysis

- 531 **An Efficient and Multi-Component Synthesis of Functionalized Pyrazole Derivatives**
 Juxian Wang, Juanjuan Zhang, Yue Zhao, Guoning Zhang, Yucheng Wang,* and Daqing Shi*



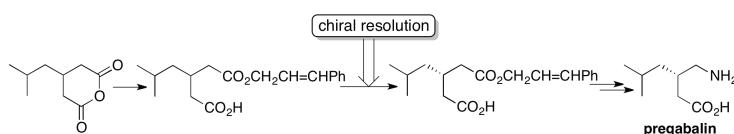
Pyrazole Derivative Multi-Component Reaction Group-Assisted-Purification Chemistry

- 541 **Catalytic Asymmetric Intramolecular Cyclopropanation of α -Diazo- α -phosphoryl Acetate**
 Saori Inoue, Kotaro Nagatani, Yunosuke Hoshino, Haruka Tezuka, and Masahisa Nakada*



Asymmetric Catalysis Cyclopropanation Intramolecular Reaction

- 554 **An Improved and Economical Process for Preparation of Pregabalin, an Anticonvulsant**
 Fei Xiong,* Bin Yang,* Wei-Xiang Wang, Yue-Feng Zhao, Qing-Gang Tan, Shang-Wu Gu, Jia-Min Huo, Yao Xie, Jun-Zhe Yan, Xi-Lin Feng, and Ju Li



Pregabalin Chiral Resolution

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 561 Polyketides
 - 563 Aromatics
 - 565 Terpenes
 - 568 Alkaloids
 - 577 Miscellaneous
-

■ BRUSH UP YOUR HETEROCYCLES

- 579 Brush Up Your Heterocycles
-

**Contributors
To This Issue**

- 389 Abdel-fatah, Noura A.
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