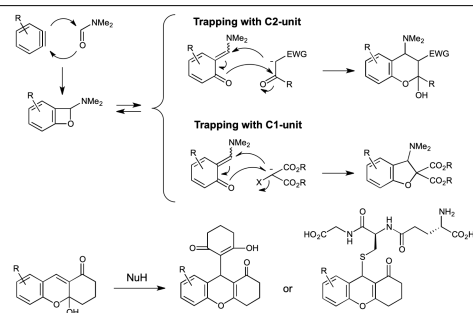


■ ANNOUNCEMENT

- 1 **Heterocycles Award**  
HETEROCYCLES Announcement

■ REVIEW

- 3 **Aryne-Mediated Synthesis of Oxygen Heterocycles and Application to Cysteine-Selective Trapping**  
Hideto Miyabe\*

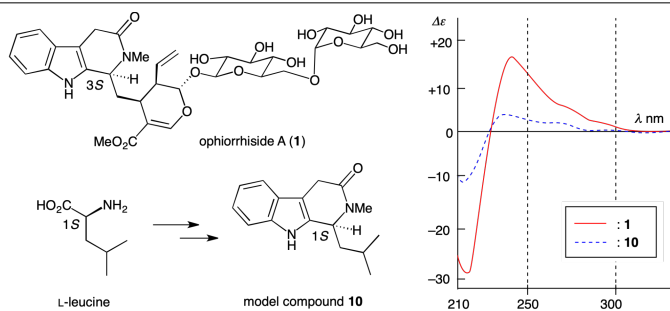


Aryne    Amide    Oxygen Heterocycle    Domino Reaction    Cysteine

■ PAPERS

- 35 **Elucidation of Absolute Configuration of Ophiorrhiside A by Comparison of ECD Spectra with That of Model Chiral Compound Having a 1,2,3,4-Tetrahydro- $\beta$ -carbolin-3-one Skeleton**

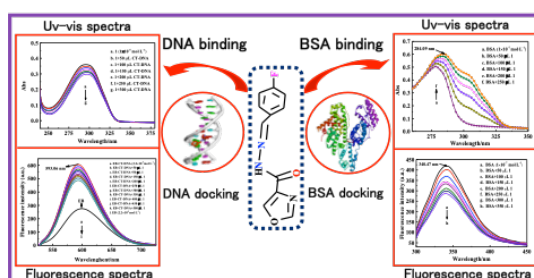
Tadayoshi Onozawa, Noriyuki Kogure, Hiromitsu Takayama, and Mariko Kitajima\*



Indole Alkaloid    Ophiorrhiside A    Absolute Configuration    Asymmetric Synthesis    ECD

**44 Synthesis, Structures, and Interactions with CT-DNA/BSA of Three New Acylhydrazones Containing Oxazole Ring**

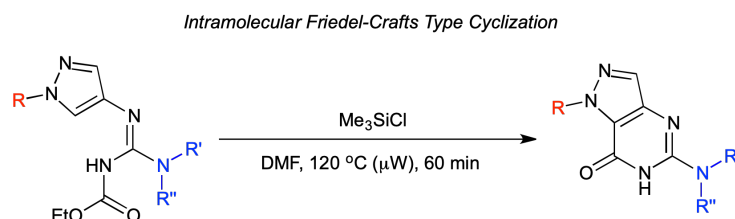
Lingling Chang, Xiangrong Liu,\* Zaiwen Yang, Shunsheng Zhao, Xinjuan Chen, and Bosen Dai



Oxazole Acylhydrazone Single Crystal CT-DNA Binding BSA Binding

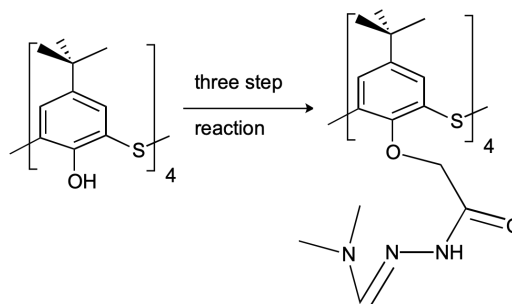
**69 Practical Synthesis of 1-Substituted 5-Aminopyrazolo[4,3-*d*]pyrimidin-7-ones Using Intramolecular Friedel–Crafts Type Cyclization and Its Application to the Synthesis of Pharmaceutically Active Compounds**

Takashi Goi,\* Tetsuji Matsudaira, and Koichi Fukase\*


 5-Aminopyrazolo[4,3-*d*]pyrimidin-7-one Intramolecular Friedel–Crafts Type Cyclization Bicyclic Pyrimidone

**81 Probing the Reaction of *N,N*-Dimethylformamide Dimethyl Acetal with *p*-*tert*-Butylthiacalix[4]arene Tetrahydrazides: A Facile Approach for the Synthesis and Application of Novel Metal Receptors**

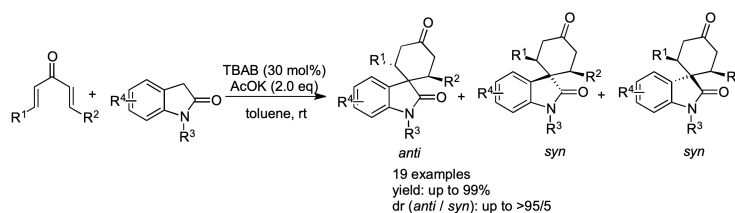
Omran A. Omran and Ayman Nafady\*



*p*-*tert*-Butylthiacalix[4]arene Extraction Metal Ion Picrate *N,N*-Dimethylformamide Dimethyl Acetal

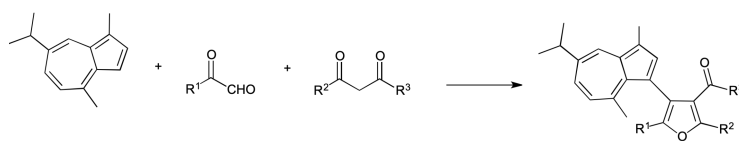
**SHORT PAPERS**
**93 Double Michael Addition of Oxindoles to Dienones Catalyzed by TBAB: An Efficient Route to Spirocyclic Oxindoles**

Haiyong Cao, Yan Lin, Pingnan Wan, Wenqin Liu, Jinxiang Zeng,\* and Hanfeng Cui\*



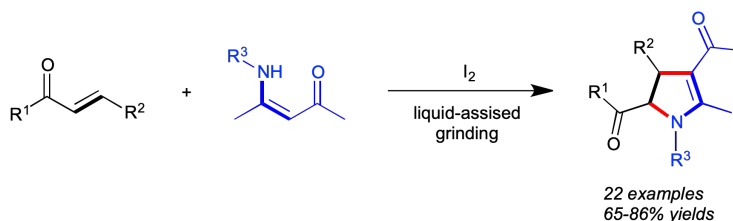
Spirocyclic Oxindole Double Michael Reaction Phase-Transfer Catalysis Dienone

- 105 A Simple Route for Synthesis and Evaluation of Antioxidant Activity of (Guaiazulen-1-yl)furans**  
 Si-Tong Guo, Jiao Xu, Xiao-Liang Zhang, Xin-Shuang Xiong, Lu Zhang, Dao-Lin Wang,\* and Shu-Quan Zhang\*



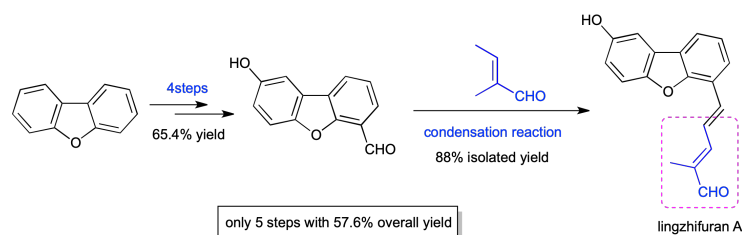
Heteroarylazulene    Guaiazulene    (Guaiazulen-1-yl)furan    Synthesis    Antioxidant Activity

- 114 Liquid-Assisted Mechanochemistry of *trans*-2,3-Dihydropyrroles from Chalcones and Enaminones**  
 Ming-Yue Weng, Hui Xu,\* Hong Chen, and Ze Zhang\*



Ball-Milling    Liquid-Assisted Grinding    2,3-Dihydropyrrole

- 122 Improved Synthesis of a Smad3 Phosphorylation Inhibitor Lingzhifuran A via Condensation Reaction**  
 Weiming Chen, Xiaoling Xu, Mingfeng Sun, Xuelong Huang, Weiping Ma,\* and Feng Jiang\*



Lingzhifuran A    *Ganoderma lucidum*    Synthesis Strategy    Condensation Reaction

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 129 Polyketides  
 133 Aromatics  
 139 Terpenes  
 144 Alkaloids  
 161 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

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165 Brush Up Your Heterocycles

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## Contributors To This Issue

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44 Chen, Xinjuan  
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