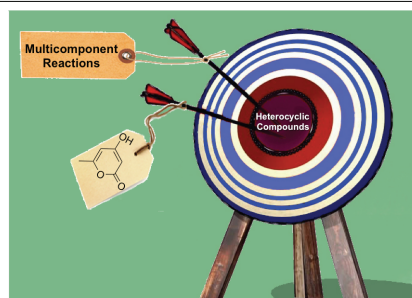


## ■ REVIEW

**381 4-Hydroxy-6-methyl-2-pyrone: A Versatile Synthon in the Synthesis of Heterocyclic Scaffolds via Multicomponent Reactions**

Ghodsi Mohammadi Ziarani,\* Razieh Moradi, Marziyeh Zandiyeh, and Negar Lashgari\*

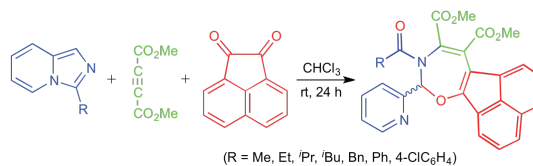


4-Hydroxy-6-methyl-2-pyrone    Multicomponent Reaction    Heterocyclic Compound

## ■ PAPERS

**425 Novel One-Pot Synthesis of Dihydroacenaphtho-[1,2-f][1,3]oxazepines via 1,4-Dipolar Cycloaddition Reaction**

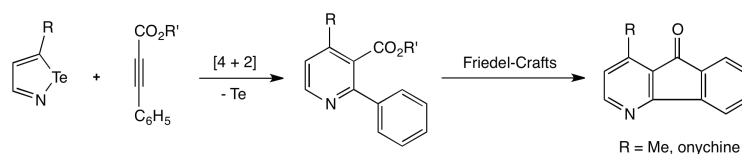
Mervat S. Sammor, Mustafa M. El-Abadelah,\* Ahmad Q. Hussein, and Firas F. Awwadi



3-Alkylimidazo[1,5-a]pyridine    1,2-Acenaphthoquinone    1,4-Dipolar Cycloaddition Reaction    Acenaphtho[1,2-f][1,3]oxazepine

**440 A Short-Step Synthesis of Onychine and the Related 4-Azafluorenones via Hetero Diels-Alder Reaction of 5-Substituted Isotellurazoles**

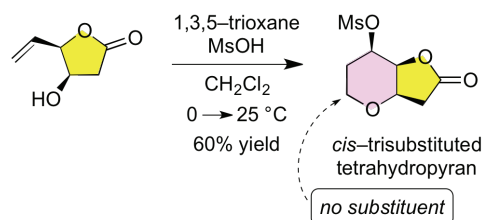
Yusuke Taneichi, Kazuaki Shimada,\* and Toshinobu Korenaga



Onychine    Isotellurazole    Hetero Diels-Alder Reaction    4-Azafluorenone

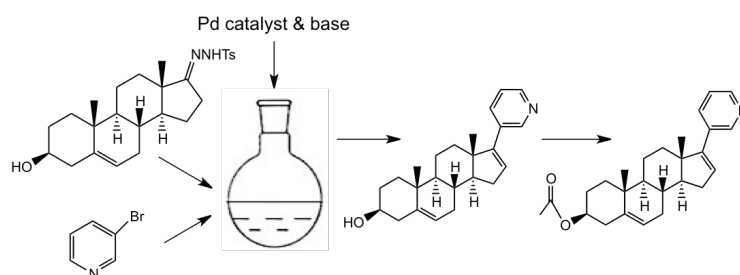
## ■ SHORT PAPERS

- 453 Prins Reaction Using Trioxane for Trisubstituted, *cis*-Fused Hexahydro-2*H*-furo[3,2-*b*]pyran Derivative**  
 Oriël Hlokoane, Hiyori Itagaki, Manami Chiba, Taiki Noda, Yuichi Takasaki, Kei Miyako, Ryuichi Sakai, Yuichi Ishikawa,\* and Masato Oikawa\*



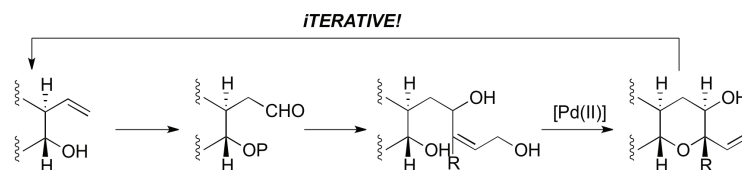
Prins Reaction    Tetrahydropyran

- 461 Synthesis of the Anti-Prostate Cancer Drug Abiraterone Acetate**  
 Siyue Ma, Jianheng Li,\* Huayang Tang, and Feng Xu



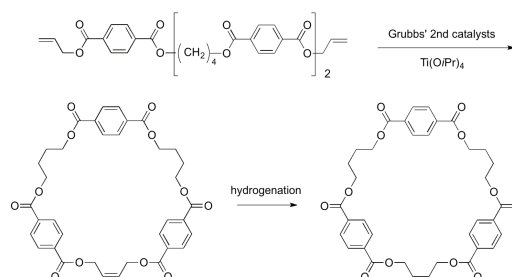
Abiraterone Acetate    Cross-Coupling Reaction    Drug Synthesis

- 470 Synthetic Studies of Yessotoxin: Stereoselective Annulation of the CD and JK Ring Fragments by Using Pd(II)-Catalyzed Cyclization**  
 Hajime Yokoyama,\* Genki Moriyama, Kazuki Nishida, Yasuhiro Kusumoto, Kiyoshi Tsuge, Masahiro Miyazawa, and Yoshiro Hirai



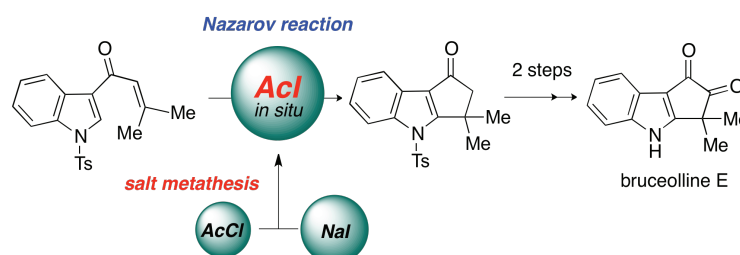
Palladium Catalyst    Cyclization    Yessotoxin    Stereoselective Synthesis

- 483 A Practical Synthesis of the Cyclic Butylene Terephthalate Trimer**  
 Xiaolin Li, Pu Zhou, Wenxuan Wu, Li Zhan, Ting Liu, Fan Yang, Jie Tang, Shanbao Yu, Hui Li, and Yu Luo\*



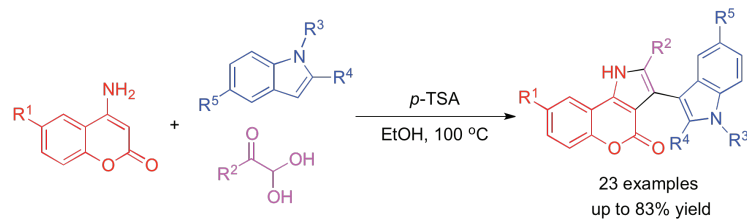
Polybutylene Terephthalate    Grubbs' Second-Generation Catalyst    Ring-Closing Metathesis    Synthesis

- 490 Nazarov Cyclization of an Indolyl Vinyl Ketone Promoted by Acetyl Chloride and Sodium Iodide: Formal Synthesis of Bruceolline E**  
 Takumi Abe\*


 Nazarov Cyclization    Acetyl Iodide    Indole Alkaloid    Acyl Finkelstein Reaction    Cyclopenta[*b*]indole

**501 Brønsted Acid-Promoted Multicomponent Reaction for the Construction of Pyrrolocoumarin Derivatives**

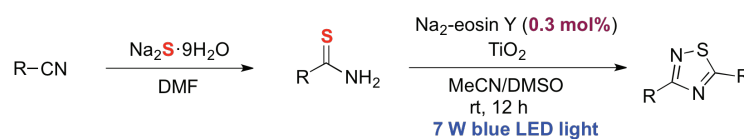
Zhiwei Chen,\* Sunjia Ye, and Xiongfei Zhang



Heterocycle Synthesis    Multicomponent Reaction    Pyrrolocoumarin Derivative    Indole    *p*-TSA

**509 A Simple Method for Synthesis of Thioamides and Application in Synthesis of 1,2,4-Thiadiazoles**

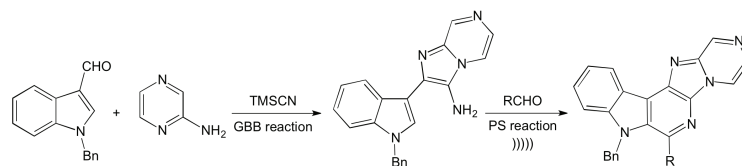
XianTing Cao, HuiYong Yang, Hui Zheng, and PengFei Zhang\*



1,2,4-Thiadiazole    Thioamide    Sodium Sulfide    Visible Light Irradiation

**518 A Facile Ultrasound Assisted for an Efficient Synthesis of Imidazo[1,2-*a*]pyrazine-fused  $\beta$ -Carbolines**

Yi-Xin Tang, Jiao Xu,\* Wei Ma, Dao-Lin Wang,\* and Liang Yan



1*H*-Indole-3-carbaldehyde    Groebke-Blackburn-Bienaymé Reaction    Pictet-Spengler Reaction    Pyrazino[2',1':2,3]imidazo[4,5-*c*]- $\beta$ -carboline

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 527 Polyketides
- 530 Aromatics
- 535 Terpenes
- 537 Alkaloids
- 542 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

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543 Brush Up Your Heterocycles

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## Contributors To This Issue

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