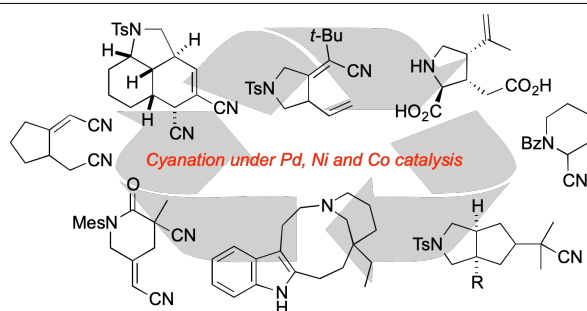


■ REVIEW

1949 Synthesis of Nitrogen Heterocycles through Cyanative Cyclization and Cycloaddition Reactions under Transition Metal Catalysis

Shigeru Arai* and Atsushi Nishida

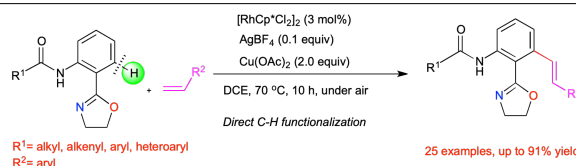


Palladium Nickel Cobalt Cyanation Heterocycle

■ COMMUNICATION

 1979 Rhodium-Catalyzed Oxidative Olefination of *N*-(2-(4,5-Dihydrooxazol-2-yl)phenyl)amides with Arylethenes via Extraordinary *N*-Aryl C-H Bond Functionalization

Hao Yan,* Fang-Peng Hu, Xiao-Qiang Zhou, Zhi Li, and Guosheng Huang*


 R¹= alkyl, alkenyl, aryl, heteroaryl
 R²= aryl

25 examples, up to 91% yield

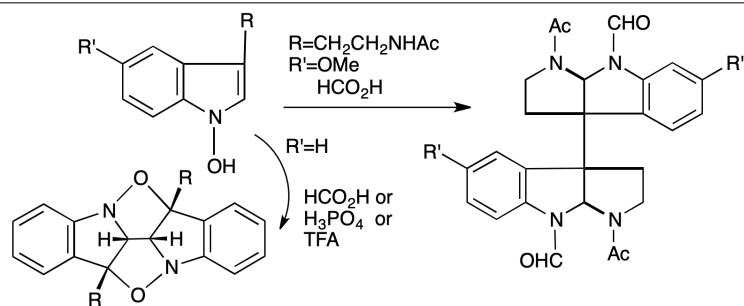
 extraordinary *N*-aryl oxidative olefination
 high regioselectivity
 functional groups are well tolerated
 good yields
 air atmosphere

 Transition-Metal Catalyst *N*-(2-(4,5-Dihydrooxazol-2-yl)phenyl)amide Oxidative Olefination

■ PAPERS

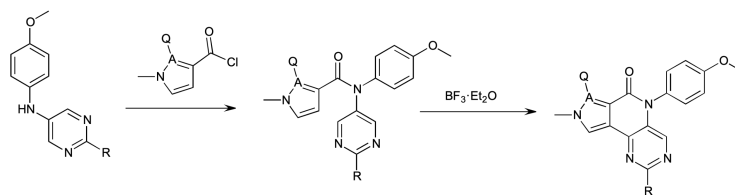
 1987 1-Hydroxyindoles: Production of Feruloylserotonin, an Alkaloid of Safflower Seed, Novel Ring System Compound, 1,10-Diaza-9,20-dioxokabutanones, 2,2'-Bisindoles, and (*d,l*)-3a, 3a'-Bispyrrolo[2,3-*b*]indoles

Mutsuko Tabata, Naoki Oshikiri, Masakazu Hasegawa, Keiichi Satoh, Yoshikazu Fukui, Yoshiyuki Nagahama, Harunobu Morikawa, Fumio Yamada, and Masanori Somei*


 1-Hydroxyindole Kabutane 3a,3a'-Bispyrrolo[2,3-*b*]indole Dimerization Reaction toward Acid

2033 Synthesis of Pyrrolo[2,3]pyrido[2,4-d]pyrimidin-6-ones and Related New Heterocycles

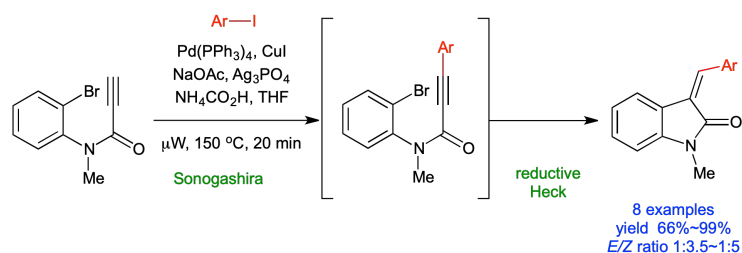
Tamás Zelenyák, Imre Fejes, Jérôme-Benoît Starck, and Nyerges Miklós*



Heterocycle Synthesis Pyrimidine Pyrrole Cyclisation

2050 Stereoselective Synthesis of (Z)-3-Arylidene-2-oxindoles via a Palladium-Catalyzed Tandem Reaction

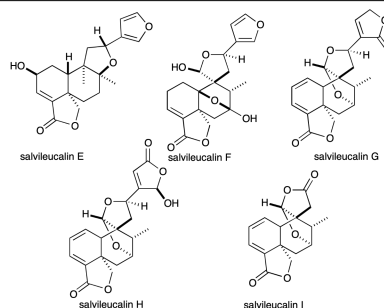
Sunhwa Park, Kye Jung Shin, and Jae Hong Seo*



3-Arylideneoxindole Tandem Reaction Palladium-Catalyzed Reaction Microwave Stereoselective Synthesis

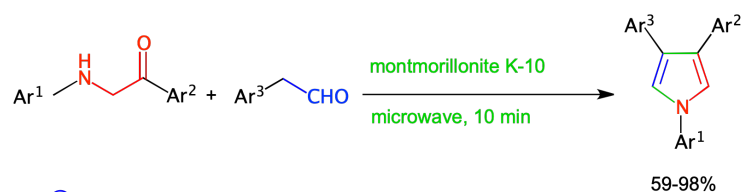
2061 Five New Highly Oxidized Neoclerodane Diterpenes, Salvileucalins E-I from *Salvia leucantha*

Yutaka Aoyagi,* Yutaka Nakazato, Akira Yamazaki, Haruna Kondo, Ayana Ninomiya, Mari Tokuda, Haruhiko Fukaya, Reiko Yano, Koichi Takeya, and Yukio Hitotsuyanagi*


Salvia leucantha Neoclerodane Diterpene Highly Oxidized Diterpene Structure Elucidation

2072 Montmorillonite K-10 Catalyzed Microwave-Assisted Synthesis of Pyrroles in Solvent Free Conditions

Chaowei Ma* and Guosheng Huang



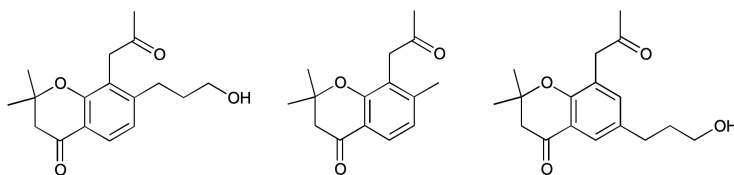
- The reaction finished within minutes
- C-C and C-N bond formation in a one-pot manner
- Commercially recyclable catalyst

Pyrrole Montmorillonite K-10 Microwave Heating

■ SHORT PAPERS

2083 **Chromone Derivatives from the Twigs of *Cassia agnes* and Their Anti-Rotavirus Activity**

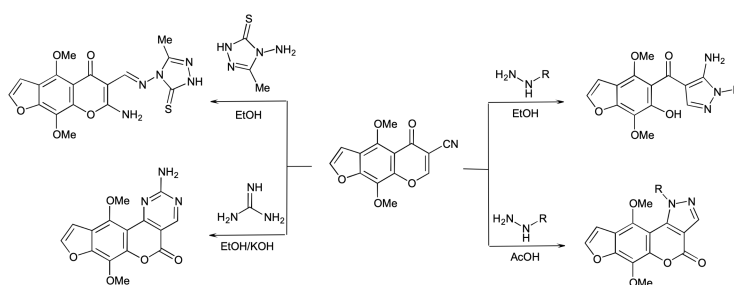
Guang-Hui Kong, Zhen-Yuan Xia, Fan Wu, Ya-Ning Zhu, Jing Li, Wei-Song Kong, Min Zhou, Guang-Yu Yang, Qiu-Fen Hu,* and Yu-Ping Wu*



Chromone Derivative *Cassia agnes* Anti-Rotavirus Activity

2091 **Reactivity of 4,9-Dimethoxy-5-oxo-5H-furo[3,2-g]-chromene-6-carbonitrile towards Some Nitrogen Nucleophilic Reagents**

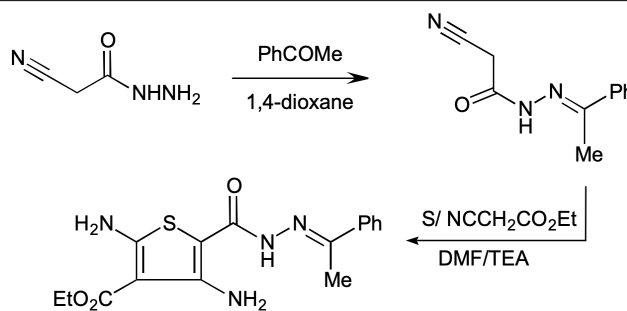
Magdy A. Ibrahim* and Esam S. Allehyani



Khellin-6-carbonitrile Furo[3,2-g]chromene Furochromenopyrimidine Furochromenopyrazole Pyrazole

2108 **Synthesis of Novel Thienopyrimidines and Thienodiazepines from Ethyl 2,4-Diamino-5-[(2E)-2-(1-phenylethylidene)hydrazino]carbonyl]thiophene-3-carboxylate**

Osama Farouk and Kamelia M. El-mahdy*



Gewald Reaction Thienopyrimidine Nucleophilic Reaction Diazepine Cyclocondensation

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 2121 Polyketides
- 2123 Aromatics
- 2127 Terpenes
- 2130 Steroids
- 2131 Alkaloids
- 2138 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

2139 Brush Up Your Heterocycles

Contributors To This Issue

2091 Allehyani, Esam S.
 2061 Aoyagi, Yutaka
 1949 Arai, Shigeru
 2108 El-mahdy, Kamelia M.
 2108 Farouk, Osama
 2033 Fejes, Imre
 2061 Fukaya, Haruhiko
 1987 Fukui, Yoshikazu
 1987 Hasegawa, Masakazu
 2061 Hitotsuyanagi, Yukio
 1979 Hu, Fang-Peng
 2083 Hu, Qiu-Fen
 1979, 2072 Huang, Guosheng
 2091 Ibrahim, Magdy A.
 2061 Kondo, Haruna
 2083 Kong, Guang-Hui
 2083 Kong, Wei-Song
 2083 Li, Jing
 1979 Li, Zhi
 2072 Ma, Chaowei
 2033 Miklós, Nyerges
 1987 Morikawa, Harunobu
 1987 Nagahama, Yoshiyuki
 2061 Nakazato, Yutaka
 2061 Ninomiya, Ayana
 1949 Nishida, Atsushi
 1987 Oshikiri, Naoki
 2050 Park, Sunhwa
 1987 Satoh, Keiichi
 2050 Seo, Jae Hong
 2050 Shin, Kye Jung
 1987 Somei, Masanori
 2033 Starck, Jérôme-Benoît
 1987 Tabata, Mutsuko
 2061 Takeya, Koichi
 2061 Tokuda, Mari
 2083 Wu, Fan
 2083 Wu, Yu-Ping
 2083 Xia, Zhen-Yuan
 1987 Yamada, Fumio
 2061 Yamazaki, Akira
 1979 Yan, Hao
 2083 Yang, Guang-Yu
 2061 Yano, Reiko
 2033 Zelenyák, Tamás
 2083 Zhou, Min
 1979 Zhou, Xiao-Qiang
 2083 Zhu, Ya-Ning