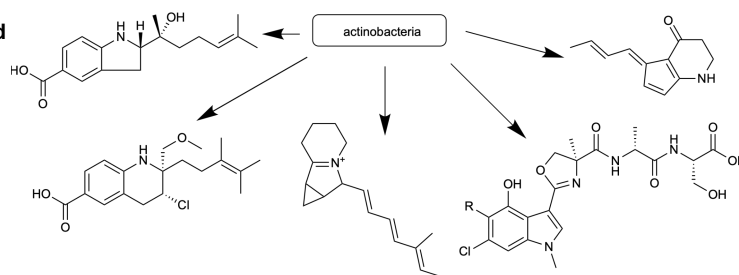


■ REVIEW

- 2101 **Understanding the Diversity and Molecular Basis of Biosynthesis of Heterocycles in Natural Products Produced by Actinobacteria**
Yohei Katsuyama*



Biosynthesis Actinobacteria Piperidine Alkaloid Oxazoline Cytochrome P450

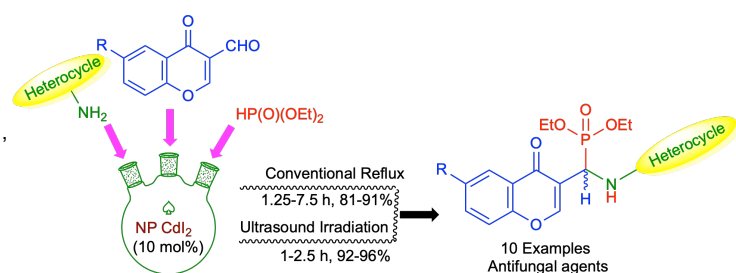
■ PAPERS

- 2123 **An Efficient Catalyst-Free Synthesis of Vinyl Sulfides in Aqueous-Phase**
Jiewei Rong and Haiying Wang*



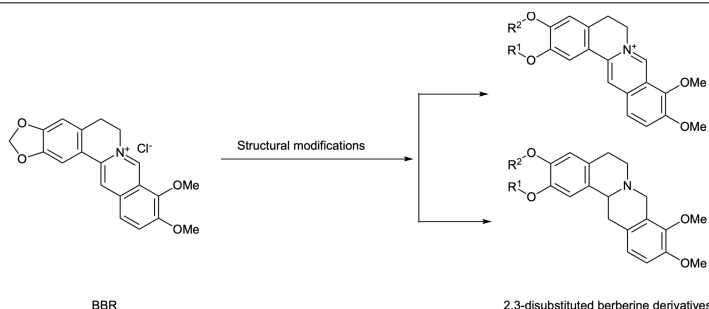
Vinyl Sulfide Catalyst-Free Michael Addition Aqueous-Phase

- 2132 **Ultrasound-Promoted Kabachnik–Fields Synthesis of Novel Chromonyl α -Aminophosphonate Derivatives Incorporating Nitrogen Heterocycles Using Cd_2 Nanoparticles as an Efficient Catalyst: Evaluation of Their Antifungal Properties**
Mohamed Hussien, Tarik E. Ali,* Ibrahim El-Tantawy El Sayed, Abdelaleem Hassan Abdelaleem, and H. M. Torkey



Ultrasound Chromone Aminophosphonate Cd_2 Nanoparticle Antifungal Activity

- 2153 **Synthesis and *in vitro* Triglyceride-Lowering Activity of 2,3-Disubstituted Berberine Derivatives**
Hualin Zhang, Yue Wang, Weicong Zhang, Zhixiong Li, and Weina Han*

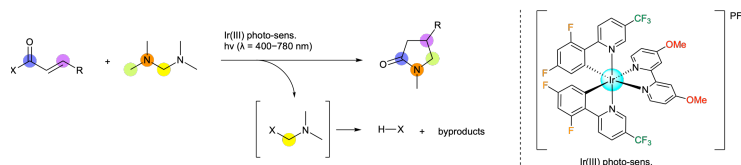


Synthesis Triglyceride-Lowering Activity Berberine

2,3-disubstituted berberine derivatives

2169 Visible-Light-Induced Formal [3+2] Cycloaddition of α,β -Unsaturated Imides or Amide with N,N,N',N' -Tetramethyldiaminomethane for the Synthesis of 4-Alkyl- and 4-Aryl-1-methyl-2-pyrrolidinones

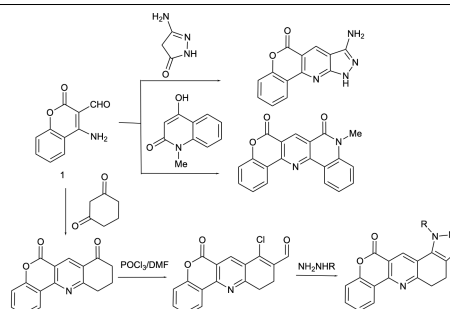
Kennosuke Itoh,* Sho Ito, Shun-ichi Nagao, Ken Tokunaga, Takaaki Mizuguchi, Fumika Karaki, Shigeto Hirayama, Yoshio Shibagaki, Masashi Hashimoto, and Hideaki Fujii*



Nitrogen Heterocycle Cycloaddition Photo-Reaction Radical Reaction Domino Reaction

2179 4-Amino-3-formylcoumarin as Building Block for Construction of Novel Heteroannulated Coumarins: Synthesis, Characterization and Antimicrobial Evaluation

Najla A. Alshaye and Magdy A. Ibrahim*

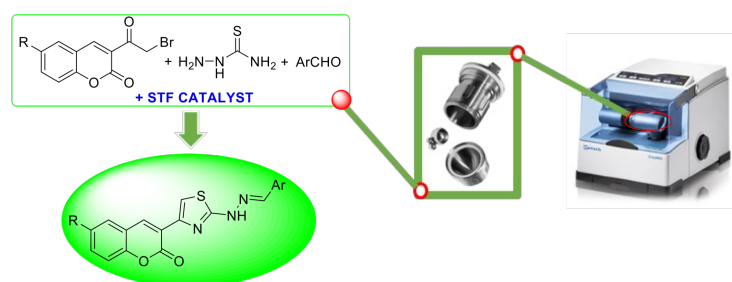


4-Amino-3-formylcoumarin Chromeno[3,4-*b*]pyrazolo[3,4-*f*]quinoline Chromeno[3',4':5,6]pyrido[2,3-*h*]quinazoline

■ SHORT PAPERS

2195 Mechanochemical Rapid Synthesis of Novel Thiazoles Linked to 2*H*-Chromen-2-one Moiety

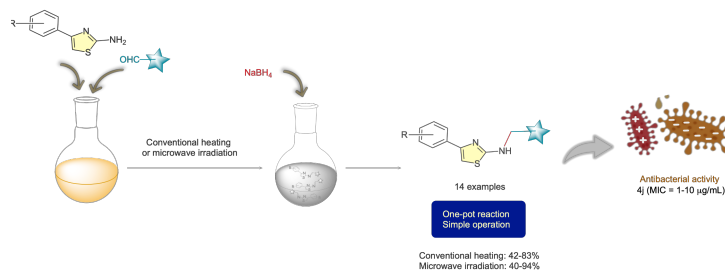
Tamer S. Saleh,* Abdullah S. Al-Bogami, Faisal M. Aqlan, and Omar A. Almaghrabi



Mechanochemistry 1,3-Thiazole Green Chemistry Silica Triflate Ball Mill

2204 One-Pot Synthesis of *N*-Substituted 2-Aminothiazole Derivatives and *in vitro* Antibacterial Activity

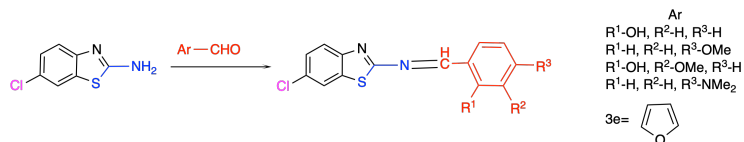
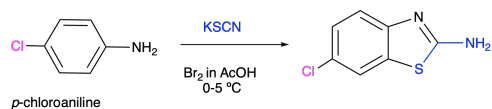
Nga Hang Thi Phan,* Van-Hieu Mai, and Xuan Minh Thi Nguyen



2-Aminothiazole One-Pot Synthesis Microwave Irradiation Antibacterial Activity

2219 Synthesis and Characterization of 6-Chloro-N-(substituted benzylidene)benzothiazol-2-amine by Microwave Irradiation

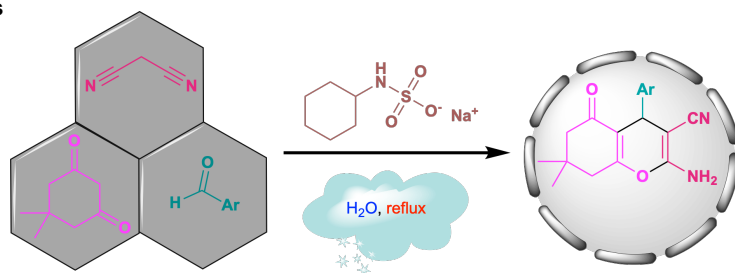
Archana Ratnakar Baraskar and Ratnamala P. Sonawane*



KSCN *p*-Chloroaniline Schiff Base 2-Amino-6-chlorobenzothiazole Microwave

2226 Three-Component Synthesis of Tetrahydrobenzo[*b*]pyrans Catalyzed by Sodium Cyclamate

Fatemeh Baghaie and Hamzeh Kiyani*



Tetrahydrobenzo[*b*]pyran Sodium Cyclamate Green Synthesis Dimedone Water

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 2239 Polyketides
- 2243 Aromatics
- 2245 Terpenes
- 2248 Alkaloids
- 2266 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

2267 Brush Up Your Heterocycles

Contributors To This Issue

2132 Abdelaleem, Abdelaleem Hassan
2195 Al-Bogami, Abdullah S.
2132 Ali, Tarik E.
2195 Almaghrabi, Omar A.
2179 Alshaye, Najla A.
2195 Aqlan, Faisel M.
2226 Baghaie, Fatemeh
2219 Baraskar, Archana Ratnakar
2132 El Sayed, Ibrahim El-Tantawy
2169 Fujii, Hideaki
2153 Han, Weina
2169 Hashimoto, Masashi
2169 Hirayama, Shigeto
2132 Hussien, Mohamed
2179 Ibrahim, Magdy A.
2169 Ito, Sho
2169 Itoh, Kennosuke
2169 Karaki, Fumika
2101 Katsuyama, Yohei
2226 Kiyani, Hamzeh
2153 Li, Zhixiong
2204 Mai, Van-Hieu
2169 Mizuguchi, Takaaki
2169 Nagao, Shun-ichi
2204 Nguyen, Xuan Minh Thi
2204 Phan, Nga Hang Thi
2123 Rong, Jiewei
2195 Saleh, Tamer S.
2169 Shibagaki, Yoshio
2219 Sonawane, Ratnamala P.
2169 Tokunaga, Ken
2132 Torkey, H. M.
2123 Wang, Haiying
2153 Wang, Yue
2153 Zhang, Hualin
2153 Zhang, Weicon