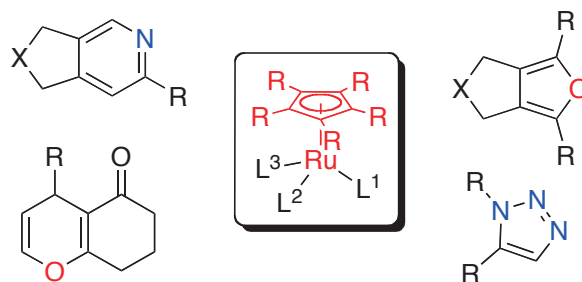


■ REVIEW

2459 Syntheses of Heterocycles via Alkyne Cycloadditions Catalyzed by Cyclopentadienylruthenium-Type Complexes

Yoshihiko Yamamoto*

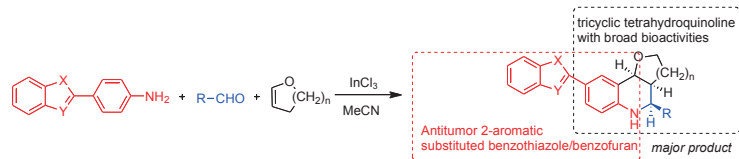


Ruthenium Catalyst Alkyne Cycloaddition Reaction Multicomponent Reaction

■ COMMUNICATION

 2495 Synthesis of *cis* or *trans* 4-Heteroaromatic Substituted Furano and Pyrano[3,2-*c*]tetrahydroquinolines by One-Pot Imino Diels-Alder Reactions

Rui Zhou, Wei Huang, Wen Ren, Li Guo,* Shi Zeng, Pan Liu, Liang Ouyang, Xiangrong Song, Cheng Peng, and Gu He*

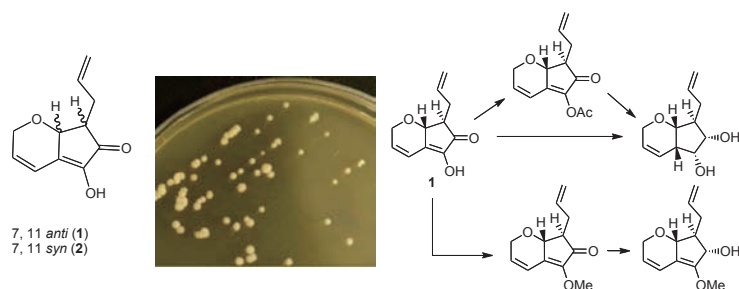


Imino Diels-Alder Reaction Furanoquinoline Pyranoquinoline Lewis Acid

■ PAPERS

 2501 Diospentenols A and B, Two New Cyclopentapyrans Isolated from Abandoned Mine Bacterium *Streptomyces* sp. KMA-001

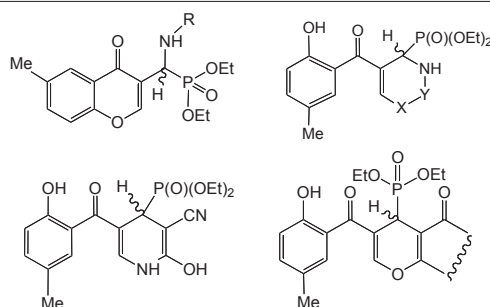
Jin-Soo Park, Jin Wook Cha, Seong-Hwan Kim, Dong-Chan Oh, and Hak Cheol Kwon*



Cyclopentapyran Microbial Secondary Metabolite Actinomycete Stereochemistry Chiral HPLC

2513 Synthesis and Biological Evaluations of a Series of Novel Azolyl, Azinyl, Pyranyl, Chromonyl and Azepinyl Phosphonates

Tarik E. Ali,* Salah A. Abdel-Aziz, Somaya M. El-Edfawy, El-Hossain A. Mohamed, and Somaia M. Abdel-Kariem


 α -Aminophosphonate Ester

Phosphonate Ester

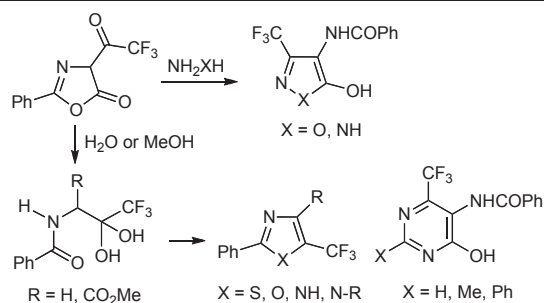
Chromone

Ring Opening and Ring Closure Reactions

Antimicrobial Activity

2533 4-Trifluoroacetyl-2-phenyloxazol-5-one: Versatile Template for Synthesis of Trifluoromethyl-Substituted Heterocycles

Ryosuke Saijo, Ken-ichi Kurihara, and Masami Kawase*



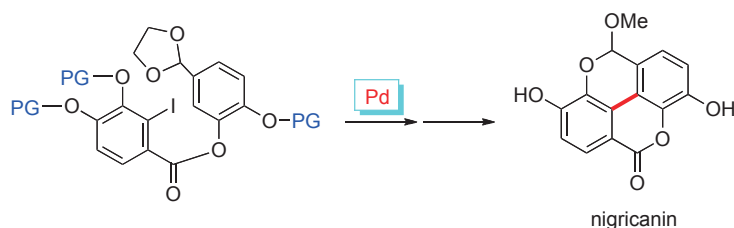
Trifluoromethylazole

Azlactone

Trifluoromethylimidazole

2555 Synthesis of Nigricanin via Intramolecular Biaryl Coupling Reaction of Functionalized Phenol Benzoate

Takuya Matsukihira, Tatsuya Kida, Kei Hidaka, Shumpei Saga, Mami Takemura, Atsuro Yonoki, Tsuyoshi Nishimori, Yoshikazu Horino, Takashi Harayama, Yasuo Takeuchi, and Hitoshi Abe*



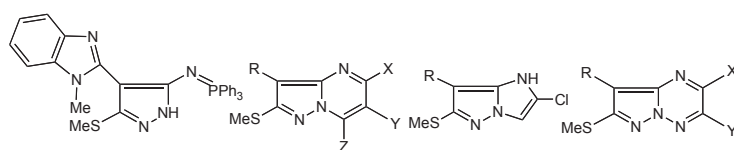
Ellagic Acid

Biaryl Coupling Reaction

Palladium Catalyst

2567 Iminophosphoranes in Heterocyclic Synthesis: Synthesis of Pyrazolo[1,5-*a*]pyrimidine, Imidazo-[1,2-*b*]pyrazole and Pyrazolo[1,5-*b*][1,2,4]triazine Derivatives via Intermolecular Aza-Wittig Reactions

Mohamed Raslan, Mohamed Khalil, and Samia Mohamed Sayed*



Aminopyrazole

Pyrazolopyrimidine

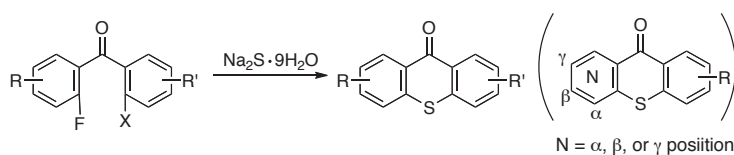
Triphenylphosphine

Imidazopyrazole

Hydrazonyl Halide

2577 A Convenient Synthesis of 9*H*-Thioxanthen-9-ones and Their Aza-Analogues

Kazuhiro Kobayashi,* Toshihide Komatsu, Kazuhiro Nakagawa, Erika Hara, and Shohei Yuba


 9*H*-Thioxanthen-9-one

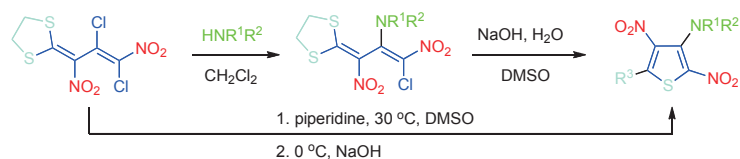
 5*H*-[1]Benzothiopyrano[2,3-*b*]-(and -[2,3-*c*])pyridin-5-one

 10*H*-[1]Benzothiopyrano[3,2-*c*]pyridin-10-one

Sodium Sulfide

2589 Synthetic Exploitation of Halogenated Alkenes Containing Electron-Withdrawing Group (EWG): Access to Valuable 2,4-Dinitrothiophenes via Ring-Closing and Ring-Opening/Ring-Closing Protocols

Amac Fatih Tuyun*

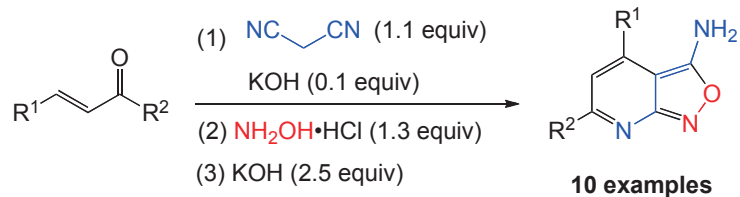


Thiophene Nitrothiophene Dithiolane Buta-1,3-diene Nitrobutadienyl Block

■ SHORT PAPERS

2599 A Mild and Convenient One-Pot Synthesis of 4,6-Diaryl-3-aminoisoxazolo[3,4-*b*]pyridines

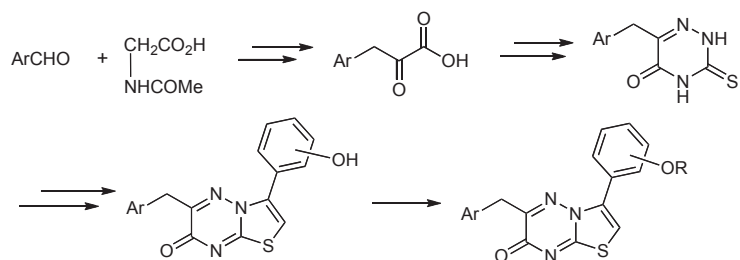
Chun-Bao Miao,* Yan-Hong Wang, Chun-Ping Dong, Hai-Tao Yang, Qi Meng, and Xiao-Qiang Sun



Isoxazolo[3,4-*b*]pyridine One-Pot Synthesis Chalcone Malononitrile Hydroxylamine

2607 Design, Synthesis, and Biological Evaluation of 7*H*-Thiazolo[3,2-*b*]-1,2,4-triazin-7-one Derivatives as Dual Binding Site Acetylcholinesterase Inhibitors

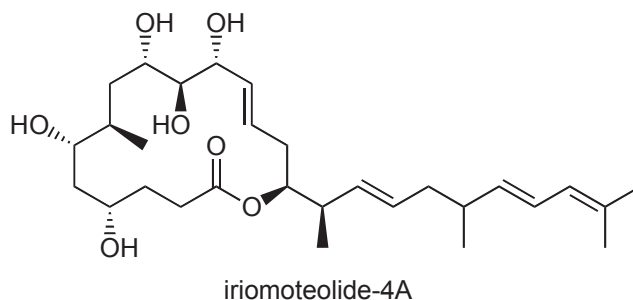
Si-Jie Liu, Li-Bo Cui, Hui-Lan Xu, Tie-Ying Wang, Chun Hu,* Shuo Li, Huang-Quan Lin, and David Chicheong Wan



7*H*-Thiazolo[3,2-*b*]-1,2,4-triazin-7-one Acetylcholinesterase Inhibitor Bioactivity

2615 Iriomoteolides-4A and -5A, Hydrophilic Macrolides from Marine Dinoflagellate *Amphidinium* species

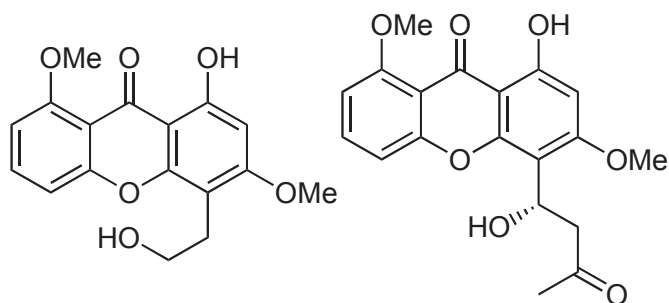
Keiko Kumagai,* Masashi Tsuda,* Eri Fukushi, and Jun Kawabata



Macrolide Dinoflagellate Cytotoxicity

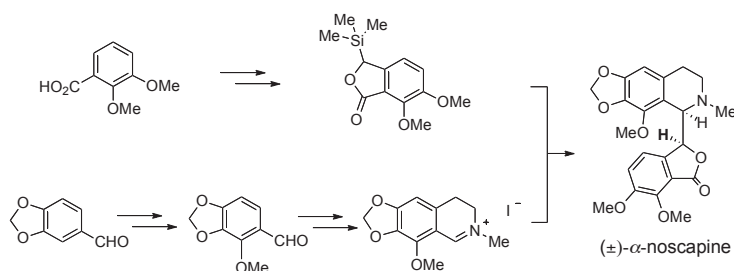
2625 Cytotoxic Xanthenes from *Hypericum chinense*

Yinke Li, Yong Xu, Jia Wu, Sujuan Wang, Yanlin Meng, Yanqing Ye, Haiyin Yang, Xuemei Gao, and Qiufen Hu*


Hypericum chinense Xanthone Cytotoxicity Structure Elucidation

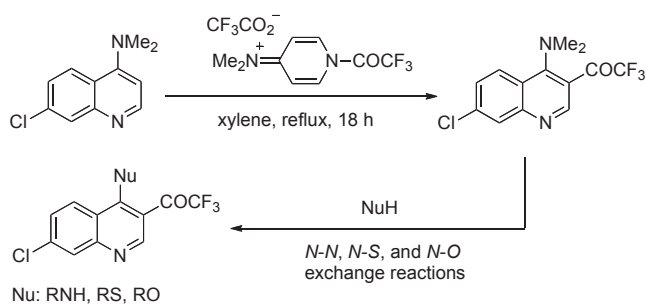
2633 A New Total Synthesis of (±)- α -Noscapine

Yongjun Mao, Shuai Song, Dongmei Zhao,* and Maosheng Cheng


 (±)- α -Noscapine Total Synthesis

2641 A Versatile Method for the Synthesis of Fluorine-Containing Chloroquine Analogues Starting from 7-Chloro-4-(*N,N*-dimethylamino)quinoline Using Nucleophilic *N-N*, *N-S*, and *N-O* Exchange Reactions

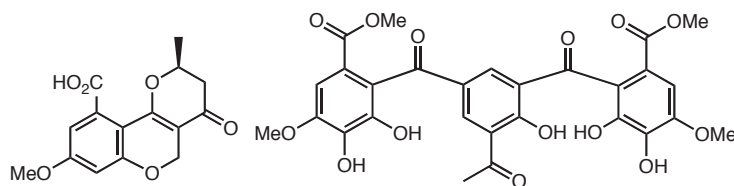
Norio Ota, Mizuki Hatakenaka, Takuro Ashida, and Etsuji Okada*



Chloroquine Analogue 7-Chloro-4-dimethylaminoquinoline Antimalarial Activity Nucleophilic Substitution Trifluoroacetylation

2651 3,4-Dihydro-2*H*,5*H*-pyrano[3,2-*c*]chromene and Benzophenone Derivatives from Cultured Lichen Mycobionts of Vietnamese *Graphis* sp.

Yukiko Takenaka,* Shota Taguchi, Duy Hoang Le, Nobuo Hamada, and Takao Tanahashi


Graphis Lichen Isolated Mycobiont 3,4-Dihydro-2*H*,5*H*-pyrano[3,2-*c*]chromene Benzophenone

■ NEW HETEROCYCLIC NATURAL PRODUCTS

- 2659 Polyketides
 - 2661 Aromatics
 - 2672 Terpenes
 - 2684 Steroids
 - 2687 Alkaloids
 - 2698 Miscellaneous
-

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 2701 Polyketides
 - 2704 Aromatics
 - 2710 Terpenes
 - 2713 Alkaloids
 - 2720 Miscellaneous
-

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**Contributors
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