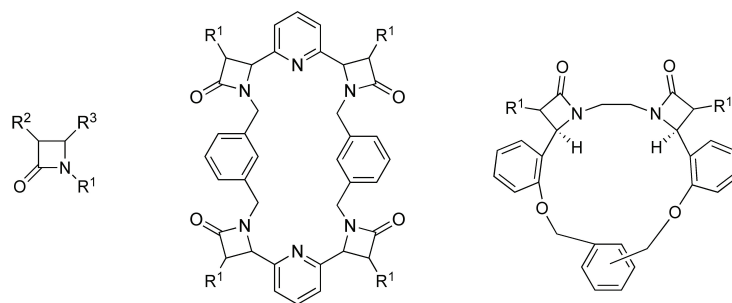


■ REVIEW

701 **Chemistry of Macrocyclic  $\beta$ -Lactam: An Overview**

Vijaya Bhaskar Vangala, Mahagundappa Rachappa Maddani, Rama Mohan Hindupur, and Hari Narayan Pati\*

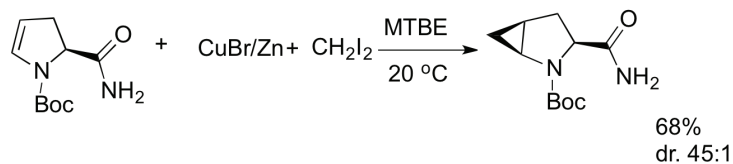


$\beta$ -Lactam Macrocycle

■ PAPERS

719 **An Cost-Effective and Safe Process of L-cis-4,5-Methanoproline Amide, the Key Synthetic Intermediate of Saxagliptin, via an Improved Simmons-Smith Reaction**

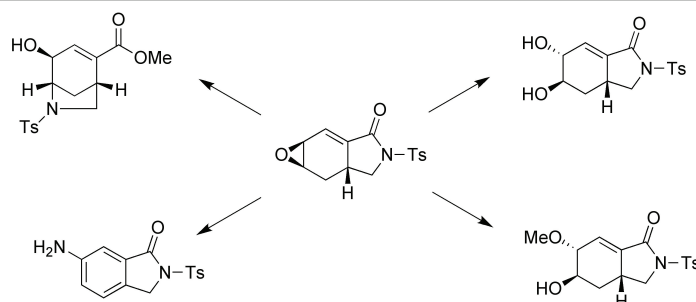
Ding ding, Xianhua Pan, Wansheng Yu, Xiaojun Li, Suke Chen, and Feng Liu\*



Cyclopropanation Reaction    Stereoselective Synthesis

726 **Synthesis and Applications of a New Epoxy-isoindolinone**

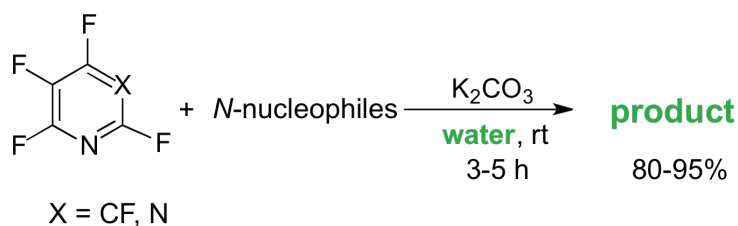
Shang-Shing P. Chou\* and Sung-Lin Hsu



Epoxy-isoindolinone    6-Azabicyclo[3.2.1]octane    Aza-Diels-Alder Reaction

738 **Environmental Friendly Synthesis of Bis-Perfluoropyridine and Pyrimidine in Water**

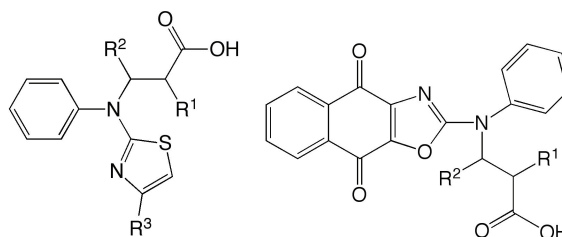
Reza Ranjbar-Karimi\* and Aliyeh Khaje-Khezri



Green Synthesis    Water    Pentafluoropyridine    Tetrafluoropyrimidine    Bridged Compound

**747 Synthesis and Antibacterial Activity of Novel N-Carboxyalkyl-N-phenyl-2-aminothia(oxa)zole Derivatives**

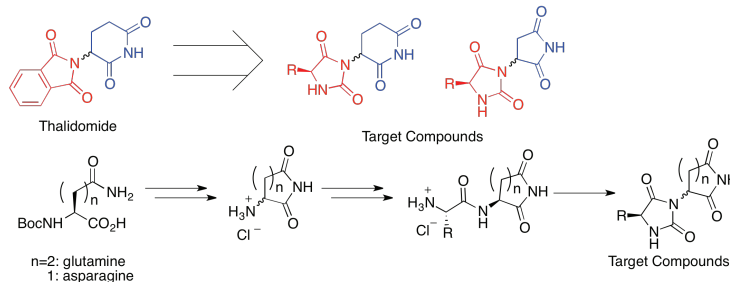
Rita Vaickelioniene, Kristina Mickeviciene, Kazimieras Anusevicius, Jurate Siugzdaite, Kristina Kantminiene, and Vytautas Mickevicius\*



N-Phenyl-N-thiocarbamoyl-β-alanine    Aminooxazole    Aminothiazole    Antibacterial Activity

**764 Synthesis of New Hydantoins Bearing Glutarimide or Succinimide Moiety and Their Evaluation for Cell Differentiation-inducing and Anti-angiogenic Activities**

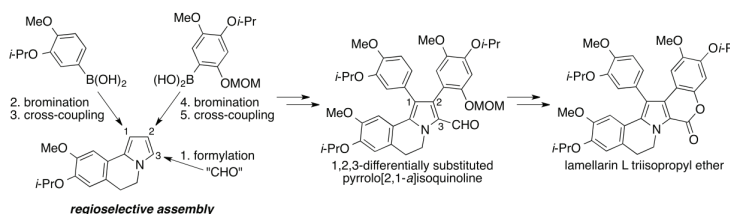
Jun-ichi Yamaguchi,\* Tomomi Noguchi-Yachide, Yuka Sakaguchi, Chiaki Shibata, Shinnosuke Kanuma, Akiko Yoshizaki, Yuka Takizawa, and Yuichi Hashimoto



Hydantoin    Thalidomide    Glutarimide    Succinimide    Biological Activity

**782 A Synthesis of Lamellarins via Regioselective Assembly of 1,2,3-Differentially Substituted 5,6-Dihydropyrrolo[2,1-a]isoquinoline Core**

Tsutomu Fukuda, Daichi Sato, and Masatomo Iwao\*



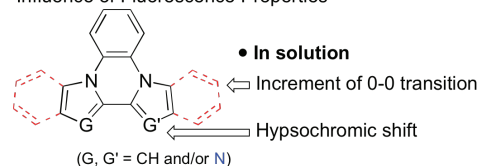
Lamellarin    Modular Synthesis    5,6-Dihydropyrrolo[2,1-a]isoquinoline    Regioselective Bromination-Cross Coupling    Oxidative Lactonization

**795 Systematic Investigation of Fluorescence Properties of Symmetric and Asymmetric Diazo[1,2-a:2',1'-c]-quinoxaline Derivatives**

Shoji Matsumoto,\* Keisuke Sakamoto, and Motohiro Akazome

**Symmetric and Asymmetric Structures**

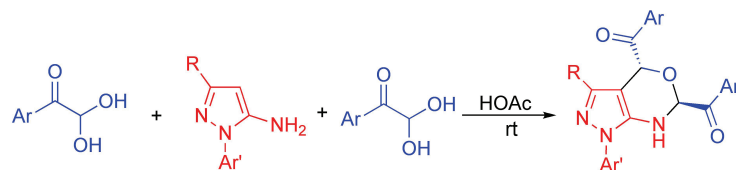
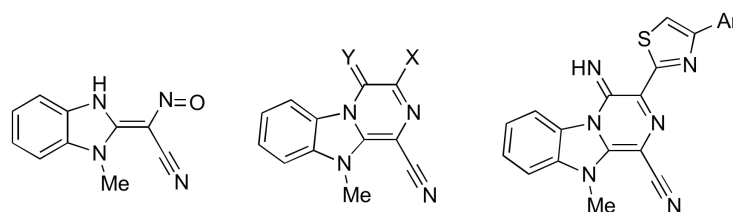
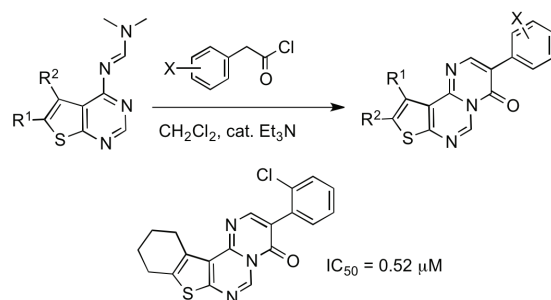
Influence of Fluorescence Properties



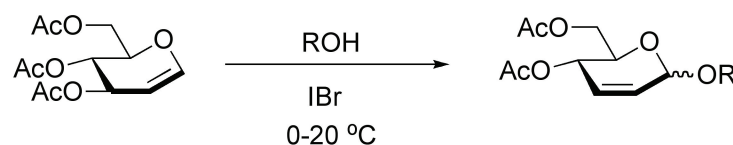
• In the solid state  
Various fluorescence  
based on diversity of the packing structure

Quinoxaline    Coupling Reaction    Fluorescence    Fine Structure    Crystal Structure

## ■ SHORT PAPERS

815 **Domino [3+2+1] Heteroannulation for Stereoselective Synthesis of *Anti*-Pyrazolo[3,4-*d*][1,3]oxazines**Yi Ning, Wei Fan, Wen-Juan Hao, Mu-Yan Sun, Bo Jiang,\*  
Shu-Jiang Tu,\* and Guigen Li\*Domino Reaction    Heteroannulation    Pyrazolo[3,4-*d*][1,3]oxazine824 **Reactivity of 2-(1-Methyl-1*H*-benzo[*d*]imidazol-2-yl)-2-nitrosoacetonitrile: A Facile One-Pot Synthesis of Benzimidazo[1,2-*a*]piperazine Derivatives**Samia M. Sayed, Mohamed A. Khalil, and  
Mohamed A. Raslan\*Nitrosoacetonitrile    Benzimidazo[1,2-*a*]piperazine    Thiazole835 **Convenient Synthesis of Novel Phenylpyrimido[1,2-*c*]thienopyrimidinones as IL-6/STAT3 Inhibitors**Jae Hoo Park, So Young Hong, Jungah Kim, Hyuck Joo Lee,  
Hyun Ho Lee, Ka Young Kim, Seung Woong Lee,  
Hyun-Mee Oh, Mun-Chul Rho, Beom-Gyu Lee, and  
Yang-Heon Song\*Pyrimido[1,2-*c*]thienopyrimidinone    IL-6/STAT3 Inhibitor849 **I<sub>2</sub>-Catalyzed *O*-Glycosylation of D-Glucals: Facile Synthesis of 2,3-Unsaturated-*O*-glycosides**

Rungnapha Saeeng, Onanong Siripru, and Uthaiwan Sirion\*

Glycosylation Reaction    Iodine Monobromide    2,3-Unsaturated-*O*-glycoside    D-Glucal    Ferrier Reaction

■ NEW HETEROCYCLIC NATURAL PRODUCTS

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- 863 Polyketides
  - 865 Aromatics
  - 874 Terpenes
  - 885 Steroids
  - 889 Alkaloids
  - 900 Miscellaneous
- 

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

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- 903 Polyketides
  - 905 Aromatics
  - 907 Terpenes
  - 909 Steroids
  - 910 Alkaloids
  - 918 Miscellaneous
- 

■ BRUSH UP YOUR HETEROCYCLES

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- 919 Brush Up Your Heterocycles
-

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