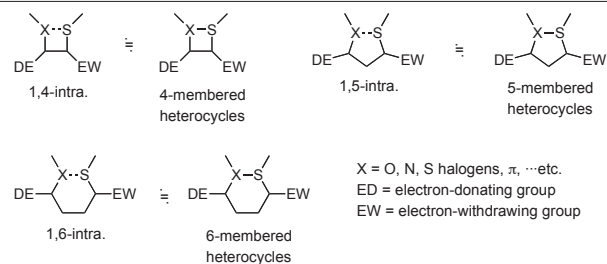


## ■ REVIEWS

## 1 Chemical Pharma-Sciences that Incorporate Non-Covalent Bonded Interactions

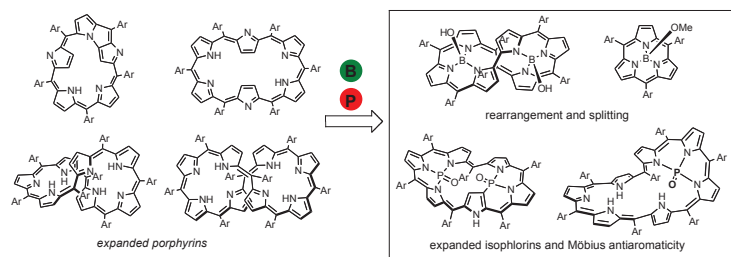
Yoshimitsu Nagao\*


 non-covalent bonded S...X interaction mode (acyclic system  $\equiv$  heterocyclic system)

Organosulfur Drug    Organosulfur Compound    X-Ray Analysis    Molecular Structure    Density Frequency Theory

## 31 Boron and Phosphorus Complexes of meso-Aryl Expanded Porphyrins

Tomohiro Higashino and Atsuhiko Osuka\*

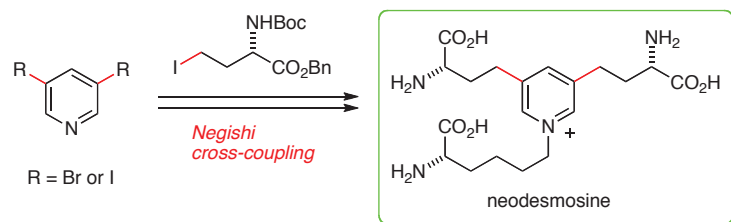


Porphyrin    Expanded Porphyrin    Boron    Phosphorus    Aromaticity

## ■ PAPERS

## 55 Synthesis of Neodesmosine, a Crosslinking Pyridinium Amino Acid of Elastin, via a Negishi Cross-Coupling

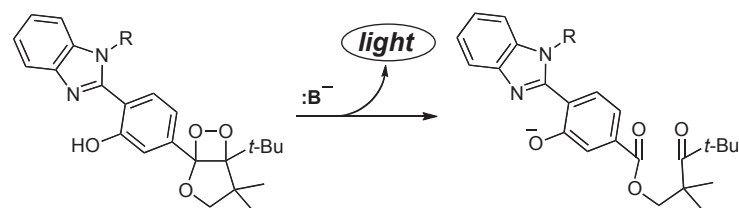
Hiroto Yanuma and Toyonobu Usuki\*



Neodesmosine    Elastin    Total Synthesis    Negishi Cross-Coupling Reaction    Crosslinking Amino Acid

## 65 Synthesis of Bicyclic Dioxetanes Bearing a 4-(Benzimidazol-2-yl)-3-hydroxyphenyl Group and Their Base-Induced Chemiluminescent Decomposition in an Aprotic Medium and in an Aqueous Medium

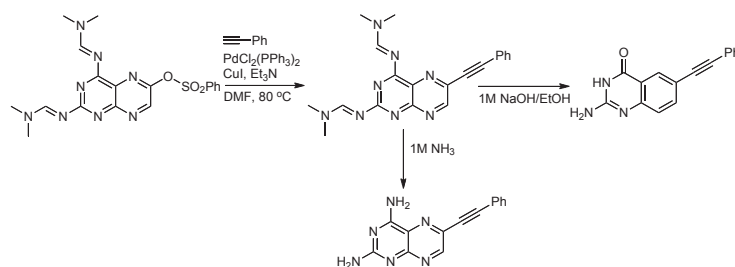
Hiromasa Hagiwara, Nobuko Watanabe, Hisako K. Ijuin, Masashi Yamada, and Masakatsu Matsumoto\*



Chemiluminescence    Dioxetane    Benzimidazolylphenol

79 Preparation of 6-Ethynylpteridine Derivatives by Sonogashira Coupling

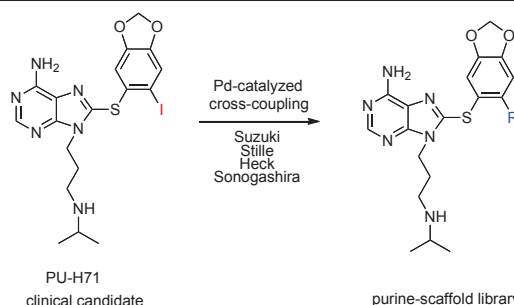
Winston Nxumalo\* and Andrew Dinsmore



Sonogashira Coupling Pteridine Pterin

91 Preparation of a Diverse Purine-Scaffold Library via One-Step Palladium Catalyzed Cross-Coupling

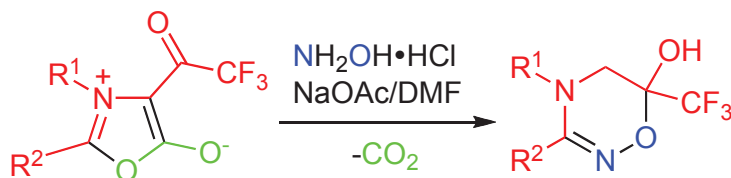
Tony Taldone,\* Danuta Zatorska, Hardik J. Patel, Weilin Sun, Maulik R. Patel, and Gabriela Chiosis



Cross-Coupling Suzuki Coupling Stille Coupling PU-H71 Purine

115 Cyclocondensation Reaction of Mesoionic 4-Trifluoroacetyl-1,3-oxazolium-5-olates with Hydroxylamine Affording 6-Trifluoromethyl-5,6-dihydro-4H-1,2,4-oxadiazin-6-ols

Ryosuke Saijo, Ken-ichi Kurihara, Kazuki Akira, and Masami Kawase\*

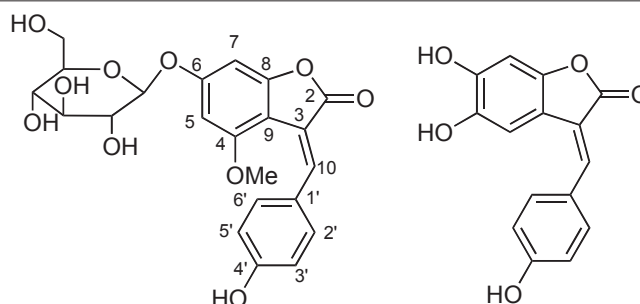


Trifluoromethyl Substituent 1,2,4-Oxadiazine Mesoionic Compound Hydroxylamine

SHORT PAPERS

125 Isoaurones from the Stem of *Cassia siamea* and Their Anti-Tobacco Mosaic Virus (Anti-TMV) Activity

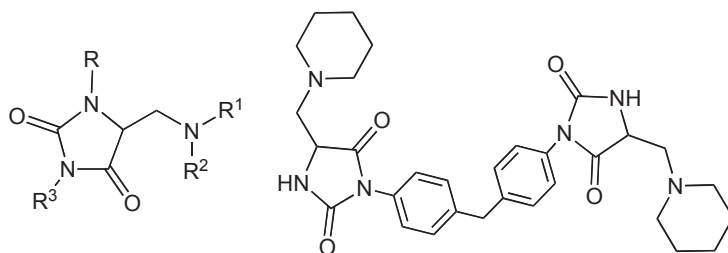
Xue-mei Gao, Li-dan Shu, Li-ying Yang, Yan-qiong Shen, Ming-zhu Cui, Xue-mei Li,\* and Qiu-fen Hu\*



Isoaurone *Cassia siamea* Isolation Anti-Tobacco Mosaic Virus (Anti-TMV) Activity

**133 Synthesis of Some New 5-Dialkylaminomethylhydantoin and Related Compounds**

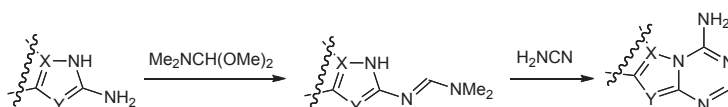
Fumiko Fujisaki, Mayu Egami, Keiko Toyofuku, and Kunihiro Sumoto\*



Hydantoin    Bioisosteric Replacement    C2-Symmetrical Molecule    Cyclization    Antibacterial Activity

**147 A New Synthesis of Amino Substituted Azolo[1,3,5]-triazines *via* Reaction of *N*<sup>1</sup>,*N*<sup>1</sup>-Dimethyl-*N*<sup>2</sup>-azolyformamidines with Cyanamide**

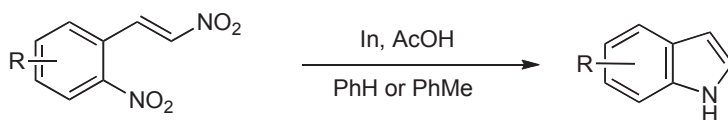
Dmitrii V. Kalinin, Svetlana A. Kalinina, and Anton V. Dolzhenko\*



Triazole    Pyrazole    Triazine    Formamidine    Benzimidazole

**155 Synthesis of Indoles from  $\alpha,\beta$ -Dinitrostyrenes via Indium/Acetic Acid-Mediated Reductive Heterocyclizations**

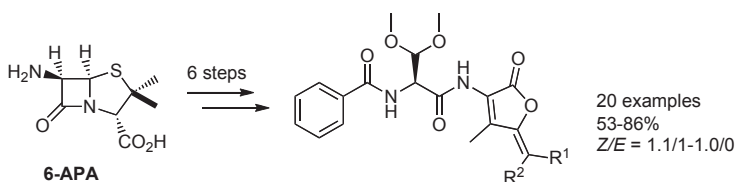
Geunsoo Lee, Jaehwan Choi, Byung Min Lee, and Byeong Hyo Kim\*



Indole    Indium    Heterocyclization    1-Nitro-2-(2-nitroaryl)ethene

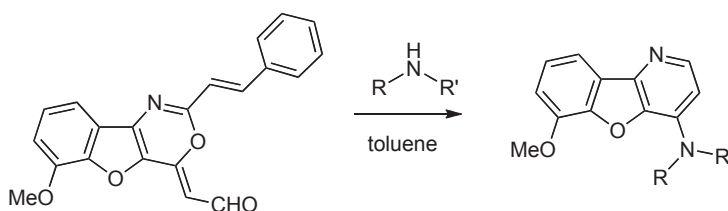
**163 The New Convenient Synthesis of Novel  $\gamma$ -Alkylidene-butenolides from 6-Aminopenicillanic Acid**

Bin Yu, En Zhang, Yuan Fang, Xiao-nan Sun, Jing-li Ren, De-quan Yu,\* and Hong-min Liu\*


 Butenolide     $\gamma$ -Alkylidenebutenolide    Furan-2(5*H*)-one    6-APA

**177 A Novel One-Step Synthesis of Benzo[*b*]furo[3,2-*b'*]pyridines Having an Amino Group at the 4-Position from Benzo[*b*]furo[3,2-*d*][1,3]oxazine**

Yukako Tabuchi, Yusa Kakumoto, Hitomi Uchimoto, Ikuo Kawasaki,\* Yoshitaka Ohishi, and Kiyoharu Nishide\*


 Benzo[*b*]furo[3,2-*b'*]pyridine    Benzo[*b*]furo[3,2-*d*][1,3]oxazine    4-Aminobenzo[*b*]furo[3,2-*b'*]pyridine    Benzo[*b*]furan    One-Step Conversion

■ NEW HETEROCYCLIC NATURAL PRODUCTS

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- 193 Polyketides
  - 195 Aromatics
  - 202 Terpenes
  - 218 Steroid
  - 219 Alkaloids
  - 230 Miscellaneous
- 

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

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- 231 Polyketides
  - 235 Aromatics
  - 237 Terpenes
  - 238 Alkaloids
-

## Contributors To This Issue

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91 Chiosis, Gabriela  
155 Choi, Jaehwan  
125 Cui, Ming-zhu  
79 Dinsmore, Andrew  
147 Dolzhenko, Anton V.  
133 Egami, Mayu  
163 Fang, Yuan  
133 Fujisaki, Fumiko  
125 Gao, Xue-mei  
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91 Patel, Maulik R.  
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133 Toyofuku, Keiko  
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55 Usuki, Toyonobu  
65 Watanabe, Nobuko  
65 Yamada, Masashi  
125 Yang, Li-ying  
55 Yanuma, Hiroto  
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91 Zatorska, Danuta  
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