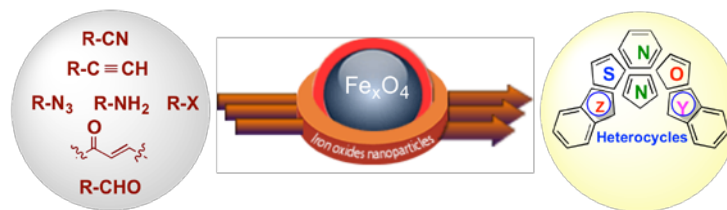


## ■ REVIEW

 595 **Synthesis of Heterocycles Catalyzed by Iron Oxide Nanoparticles**

Ahmed H. M. Elwahy\* and Mohamed R. Shaaban

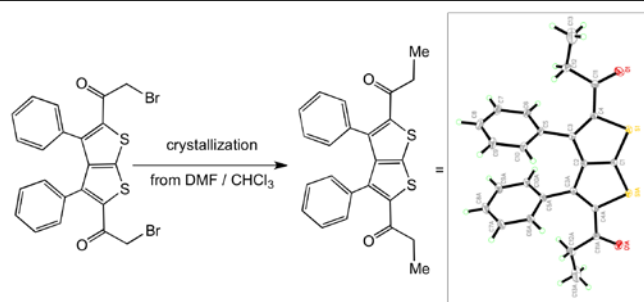


Synthesis    Heterocycle    Nanoparticle    Iron Oxide

## ■ PAPERS

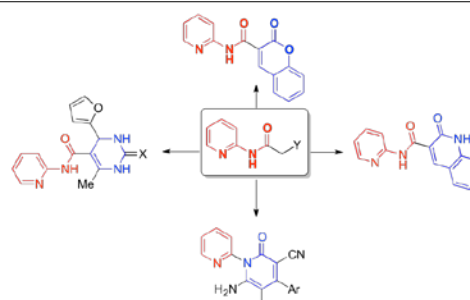
 657 **Spontaneous  $\alpha$ -Methylation of an  $\alpha$ -Bromoketone from DMF: Synthesis and Crystalline Structure of 1,1'-(3,4-Diphenylthieno[2,3-*b*]thiophene-2,5-diyl)bis(propan-1-one)**

Yahia N. Mabkhot,\* Salim S. Al-Showiman, Saied M. Soliman, Hazem A. Ghabbour, Taibi Ben Hadda, Ismail Warad, and Ahmed Boshala


 Thiophene    1,1'-(3,4-Diphenylthieno[2,3-*b*]thiophene-2,5-diyl)bis(propan-1-one)    X-Ray Diffraction    NMR Spectrum    DFT

 665 **Synthesis and Antibacterial Activities of Some New Heterocycles Attached to Pyridinecarboxamide Moiety of Potential Biological Activity**

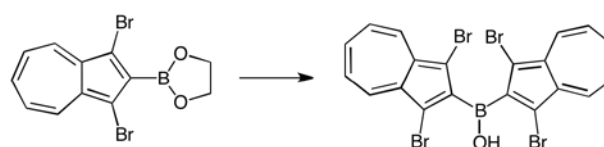
Nabila A. Kheder,\* Dalia R. Emam, and Hissana Ather



Pyridine    Quinoline    Coumarin    Pyrimidine    Antibacterial Evaluation

 676 **Synthesis and Structural Characterization of Diazulenylborinic Acid**

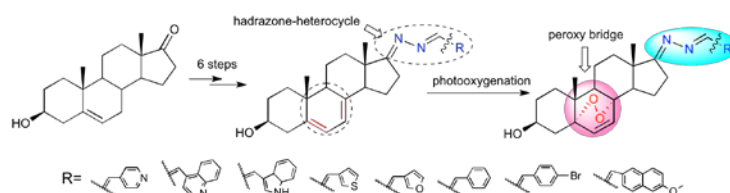
Toshihiro Murafuji,\* Kohhei Shintaku, Kouhei Nagao, Yuji Mikata, Katsuya Ishiguro, and Shin Kamijo



Azulene    Borinic Acid    Protodeboronation    Intramolecular Coordination

**691 Synthesis and Antitumor Activities of Steroidal 5 $\alpha$ ,8 $\alpha$ -Endoperoxide Derivatives with Side Chain of 17-Hydrazone Aromatic Heterocycle**

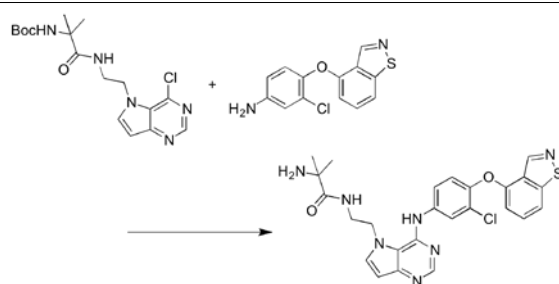
Ming Bu, Yujie Wang, Tingting Cao, Hongxia Li, Mingzhou Guo, Yue Zhou, Na Zhang, Chengchu Zeng, and Liming Hu\*



Steroidal Endoperoxide    Dehydroepiandrosterone    Hydrazone    Aromatic Heterocycle    Antiproliferative Activity

**702 A Convergent Scale-up Synthesis of A HER2/EGFR Dual Kinase Inhibitor**

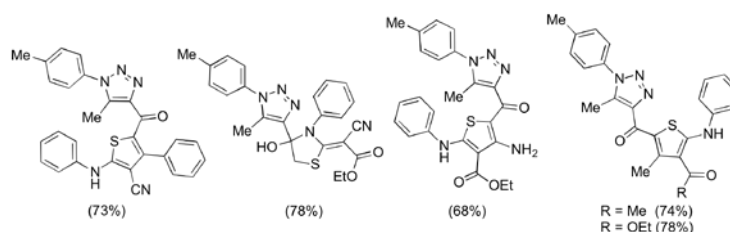
Osamu Yabe,\* Akihiro Suzuki, and Tomomi Ikemoto



Benzisothiazole    Pyrrolo[3,2-d]pyrimidine    Convergent Synthesis    HER2/EGFR Dual Kinase Inhibitor

**716 Synthesis of Some Novel Thiophene and Thiazole Derivatives and Their Antimicrobial Evaluation**

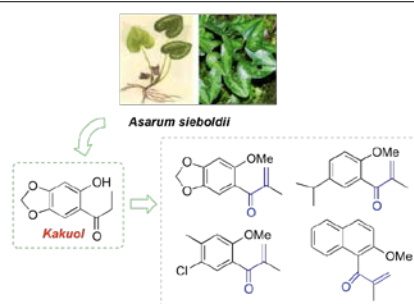
Hanan A. Mohamed, Bakr F. Abdel-Wahab, and Gamal A. El-Hiti\*



Phenyl Isothiocyanate    Thiazole    Thiophene    1,2,3-Triazole    Antimicrobial Activity

**727 Synthesis and *in vitro* Antifungal Activities of  $\alpha$ ,  $\beta$ -Unsaturated Ketones as Analogues of Kakuol**

Guoqing Sui, Jianjun Sun, Li Yang, Wen Zhang, Kun Zhou, Bingyu Zhang, Yulin Li, Guangci Liu, and Wenming Zhou\*

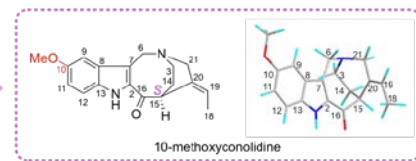


Kakuol     $\alpha,\beta$ -Unsaturated Ketone    Antifungal Activity    Thiabendazole

## ■ SHORT PAPERS

**743 Structurally Diverse Indole Alkaloids from *Ochrosia elliptica***

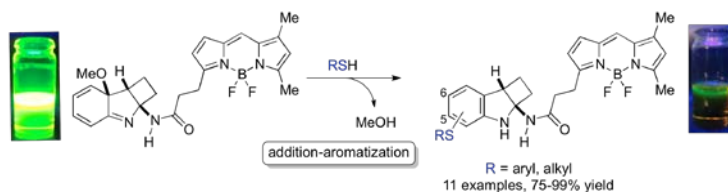
A-Hong Chen, Yan-Ping Liu, Zhi-Xin Wang, Yan-Lei Ma, Zhi-Hua Jiang, Liang Lai, Ru-Ru Guo, Jin-Tao Long, Shao-Xia Lin, Wei Xu,\* and Yan-Hui Fu\*



*Ochrosia elliptica* Alkaloid 10-Methoxyconolidine Cytotoxicity Anti-inflammatory Activity

**750 Fluorescence Quenching Induced by Sequential Addition-Aromatization of A BODIPY-Containing Dienylimine with Thiols**

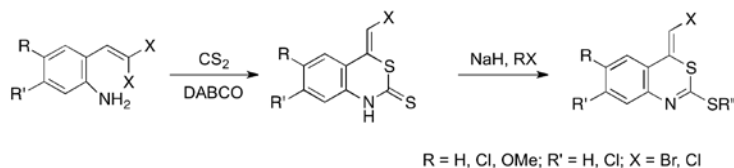
Norihiko Takeda, Masafumi Ueda, Nagisa Mori, Tetsuya Miyoshi, Manami Shimoda, Yumina Uno, Hiroshi Kitagawa, Noriaki Emoto, Takahiro Mukai, and Okiko Miyata\*



Dienylimine BODIPY Fluorescence Quenching Thiol Addition-Aromatization Reaction

**763 Synthesis of 4-(Z)-(Halomethylidene)-1,4-dihydro-2H-3,1-benzothiazine-2-thiones and Their S-Alkylated Derivatives Based on the Reaction of 2-(2,2-Dihaloethenyl)benzenamines with Carbon Disulfide**

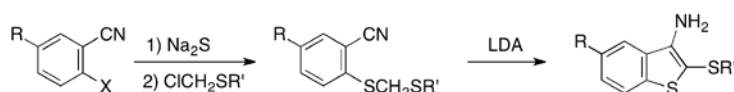
Kazuhiro Kobayashi,\* Takashi Nogi, and Miyuki Tanmatsu



1,4-Dihydro-2H-3,1-benzothiazine-2-thione 4H-3,1-Benzothiazine 2-(2,2-Dihaloethenyl)benzenamine Carbon Disulfide DABCO

**772 Synthesis of 2-(Alkyl(or Aryl)sulfanyl)benzo[b]thiophen-3-amines by LDA-Mediated Cyclization of 2-[(Alkyl(or Aryl)sulfanyl)methyl]sulfanyl]benzonitriles**

Kazuhiro Kobayashi\* and Keita Yamashita



Benzo[b]thiophen-3-amine Disodium Sulfide Chloromethyl Sulfide Cyclization Reaction Sulfur-Stabilized Carbanion

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

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- 781 Polyketides
  - 785 Aromatics
  - 788 Terpenes
  - 791 Alkaloids
  - 806 Miscellaneous
- 

■ BRUSH UP YOUR HETEROCYCLES

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- 809 Brush Up Your Heterocycles
-

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- |          |                       |     |                  |
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| 750      | Emoto, Noriaki        | 727 | Zhou, Kun        |
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| 676      | Murafuji, Toshihiro   |     |                  |
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