

## ■ PAPERS

**1191 Synthesis and Optical Properties of Substituted 5,6,7,8-Tetraaza-azuleno[1,8-b,c]fluorenes, Small Organic Molecules of Unusual Topology Designed for Circularly Polarized Luminescence**

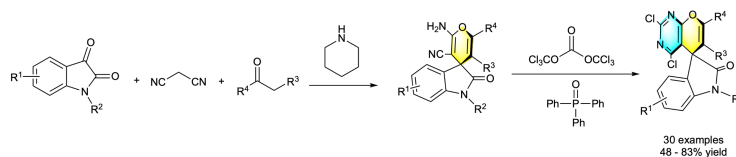
Tadeusz Lemek,\* Krzysztof Danel, Oskar Michalski, and Wojciech Nitek



Tetraza-azulenofluorene    Helical Chirality    Circularly Polarized Luminescence

**1212 Efficient Synthesis of Novel Spiro[indoline-3,5'-pyrano[2,3-d]pyrimidin]-2-one Derivatives and Antitumor Activity Evaluation**

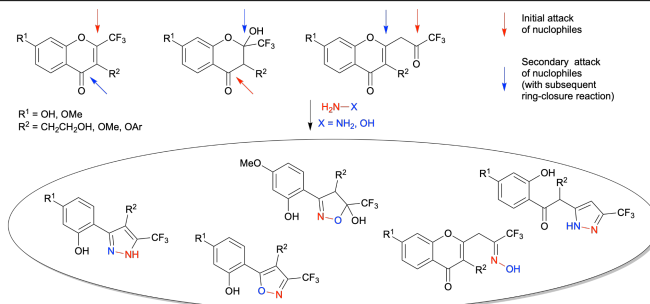
Zhenhua Li,\* Guoqing Huang, Dayou Rong, Yingyan Cao, and Ronghui Hu



Pyrano[2,3-d]pyrimidine    Spirooxindole    Bis(trichloromethyl) Carbonate    Triphenylphosphine Oxide    Antitumor Activity

**1229 Synthesis of 2-Trifluoroacetyl-3-alkyl/alkoxychromones and Their Reactions with 1,2-Bidentate Nucleophiles**

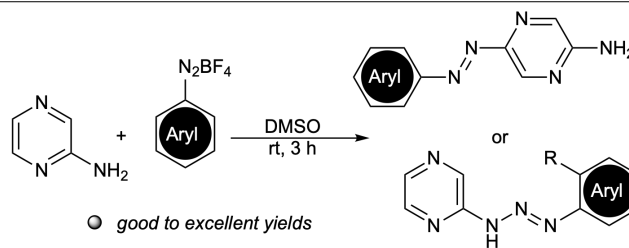
Iryna M. Biletska, Galyna P. Mrug, Yaroslav O. Prostota, Kostyantyn M. Kondratyuk, Svitlana P. Bondarenko, and Mykhaylo S. Frasinuk\*



Trifluoroacetylation    Chromone    Pyrazole    Isoxazole    Ring-Closure Reaction

**1245 Facile Synthesis of Fully Conjugated Aminopyrazine Based Diazobenzenes and Diazoaminobenzenes with Aryldiazonium Salts**

Idris Karakaya\*

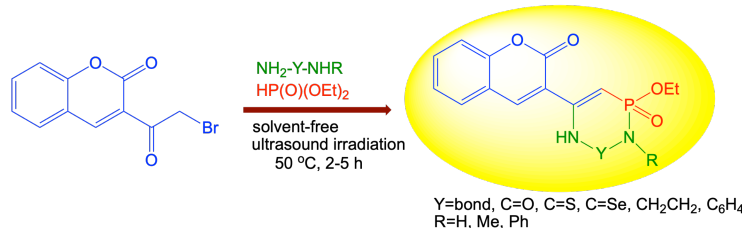


- good to excellent yields
- high absorbance ability
- diazo/diazoamino selectivity

Aminopyrazine    Aryldiazonium Salt    Diazoaminobenzene    Diazobenzene    Diazotization

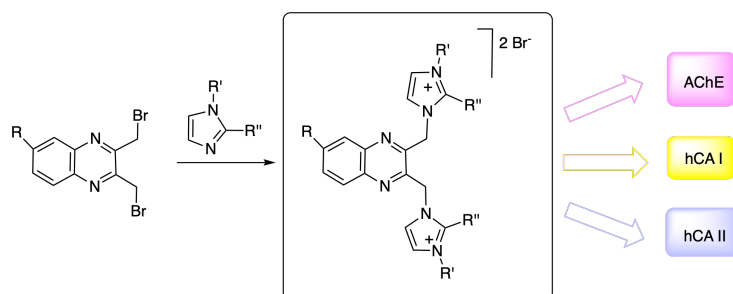
**1259 Ultrasound Assisted One Pot, Three-Component Reaction for Facile Design of Novel 1,2,3-Diazaphosphole, 1,5,2-Diazaphosphinine and 1,5,2-Diazaphosphepine Compounds Containing Coumarin Ring**

Tarik E. Ali,\* Mohammed A. Assiri, Abdullah Y. Alzahrani, and Mohamed A. Salem


 Y=bond, C=O, C=S, C=Se, CH<sub>2</sub>CH<sub>2</sub>, C<sub>6</sub>H<sub>4</sub>  
 R=H, Me, Ph

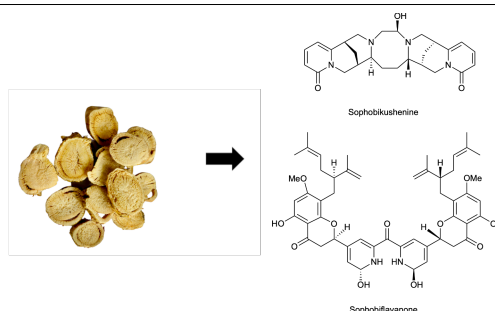
1,2,3-Diazaphosphole    1,5,2-Diazaphosphinine    1,5,2-Diazaphosphepine    Coumarin    Ultrasound Irradiation

- 1268 Synthesis and Enzyme Inhibitory Properties of Quinoxaline Bridged Bis(imidazolium) Salts**  
Murat Yiğit,\* Yeliz Demir, Ali Arınç, Beyhan Yiğit, Murat Koca, İsmail Özdemir, and İlhami Gülçin



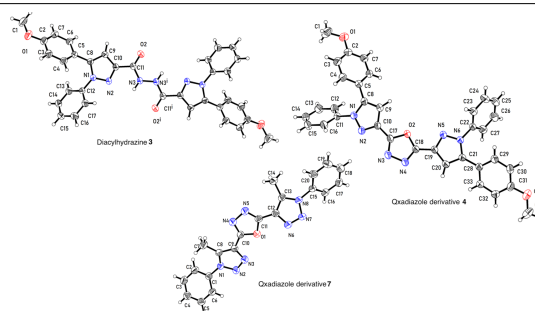
Acetylcholinesterase    Imidazole    Carbonic Anhydrase    Quinoxaline    N-Heterocyclic Carbene

- 1280 New Dimeric Cytisine-Type Alkaloid and Lavandulyl Biflavonoid from *Sophora flavescens* Ait. and Their Inhibitory Effect on Cancer Cells**  
Shengxue Chen, Yan Liu, Chenting Meng, Min Li, Chungping Yuan, and Xiaoying Yin\*



*Sophora flavescens* Ait.    Dimeric Alkaloid    Lavandulyl Biflavonoid    Anti-Proliferative Activity    Cell Migration

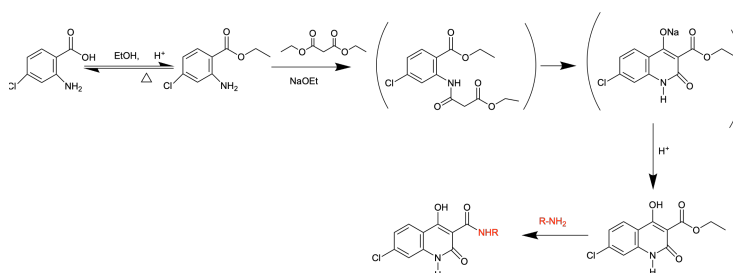
- 1293 Synthesis and Antimicrobial Activity of 2,5-Bis(pyrazol-3-yl or triazol-4-yl)-1,3,4-oxadiazoles**  
Hanan A. Mohamed, Bakr F. Abdel-Wahab, Eman Sabry, Benson M. Kariuki, and Gamal A. El-Hiti\*



Pyrazole    Carbohydrazide    1,2,3-Triazole    *N,N*-Diacylhydrazine    1,3,4-Oxadiazole

■ SHORT PAPERS

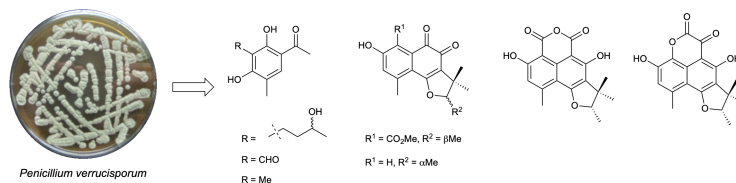
- 1303 Synthesis, Characterization and Biological Screening of New *N*-Substituted-7-chloro-4-hydroxy-2-quinolone-3-carboxamides as Promising Anticancer Agents**  
Aya Mohammed kheir Al-Zuheiri, Kamal Sweidan,\* Mohammed Kamal Harb, Sanaa K. Bardaweel, Mahmoud Sunjuk, and Dima A. Sabbah



2-Quinolone-3-carboxamide    Heterocycle    Synthesis    2D NMR    Anticancer

**1315 Antimicrobial Acetophenone and Phenalenone Derivatives from a Soil-Derived Fungus *Penicillium verrucosporum* JX1**

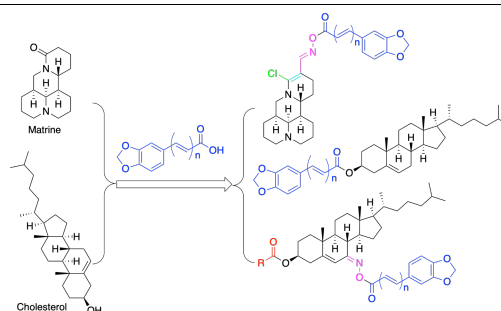
Huiping Hu, Yuting Tang, Hengyi Lin, Zheng Ma, Penglai Fan, Xiachang Wang, Yongyong Zhang,\* and Jiarong Pan\*



*Penicillium verrucosporum*    Acetophenone Derivative    Phenalenone Derivative    Antimicrobial Activity

**1323 Semisynthesis of Conjugates from Matrine/Cholesterol with Piperic Acid/Piperic Acids-Like as Insecticidal and Aphicidal Agents**

Linlin Jiang, Hailong Wang, Meng Hao, Zhen Wang, and Min Lv\*



Matrine    Cholesterol    Structural Modification    Pesticidal Activity    Piperic Acid

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 1335 Polyketides
- 1336 Aromatics
- 1343 Terpenes
- 1347 Steroids
- 1348 Alkaloids
- 1356 Miscellaneous

■ BRUSH UP YOUR HETEROCYCLES

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1359 Brush Up Your Heterocycles

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