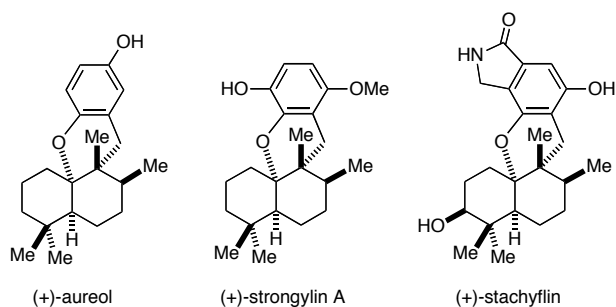


■ REVIEWS

- 2199 **Total Synthesis of Decahydrobenzo[*d*]xanthene Sesquiterpenoids Aureol, Strongylin A, and Stachyflin: Development of a New Strategy for the Construction of a Common Tetracyclic Core Structure**

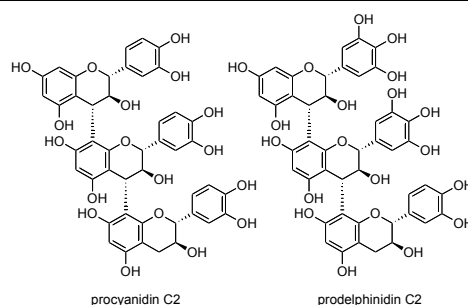
Tadashi Katoh*



Aureol Strongylin A Stachyflin Natural Product Total Synthesis

- 2225 **Recent Syntheses of Proanthocyanidins**

Hidefumi Makabe*

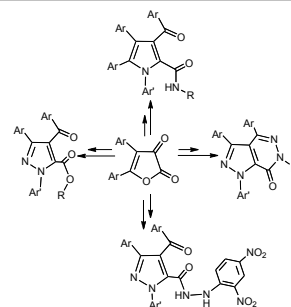


Polyphenol Proanthocyanidin Synthesis Natural Product Antitumor Activity

■ PAPERS

- 2249 **A Novel Synthetic Approach towards 1*H*-Pyrazole-5-carboxylic Acid Derivatives Using 4-(4-Methylbenzoyl)-5-(4-methylphenyl)furan-2,3-dione**

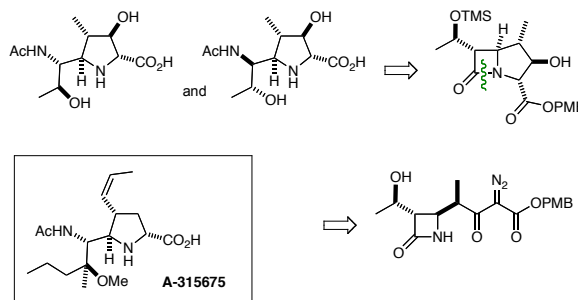
Elif Korkusuz,* Ismail Yıldırım, and Ertan Şahin



Pyrazole-5-carboxylic Acid Furan-2,3-dione 2,4-Dinitrophenylhydrazine

- 2267 **Synthesis of Tetrasubstituted Pyrrolidine Derivatives Employing β -Lactam as a Chiral Building Block**

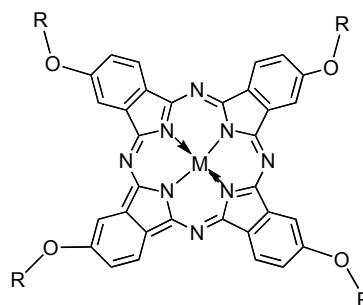
Genta Tadano, Koji Ishikura, and Keiji Tanino*



Pyrrolidine Neuraminidase Inhibitor

2283 Synthesis of Novel Antibacterial Metal Free and Metallophthalocyanines Appending with Four Peripheral Coumarin Derivatives and Their Separation of Structural Isomers

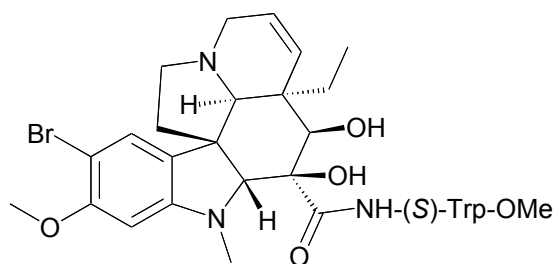
Rawdha Medyouni, Naceur Hamdi,* Anis Ben Hsouna, Abdullah Sulaiman Al-Ayed, Hussain Ali Soleiman, Fethi Zaghrouba, and Christian Bruneau



MIC Phthalocyanine

2299 Synthesis and *in vitro* Antitumor Effect of New Vindoline Derivatives Coupled with Amino Acid Esters

Péter Keglevich, László Hazai, Álmos Gorka-Kereskényi, Lilla Péter, Judit Gyenese, Zsófia Lengyel, György Kalas, Zsófia Dubrovay, Miklós Dékány, Erika Orbán, Ildikó Szabó, Zoltán Bánóczy, Csaba Szántay, Jr., and Csaba Szántay*

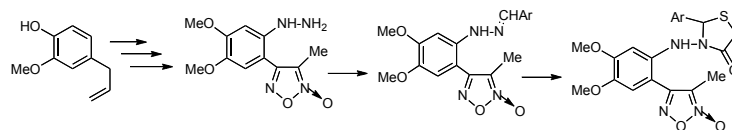


Vindoline Derivative Tryptophan Methyl Ester Azide Coupling Method Cyclopropane Derivative HL-60 Human Leukemia Cell

■ SHORT PAPERS

2319 Hydrazones and 1,3-Thiazolidin-4-ones Incorporating Furoxan Moiety Synthesized from Eugenol, the Main Constituent of *Ocimum sanctum* L. Oil

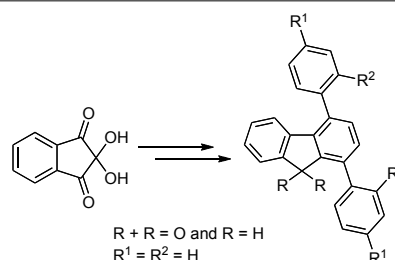
Nguyen Huu Dinh,* Trinh Thi Huan, Hoang Thi Tuyet Lan, and Sang-Bae Han



Hydrazone Thiazolidinone Eugenol Furoxan

2333 Synthesis of 1,4-Diarylfuorenones and 1,4-Diarylfluorenes

Yanmei Wang, Qiancai Liu,* Xiaoli Xiong, Shiming Deng, Jun Zhang, Min Zhu, and Hangmin Ge

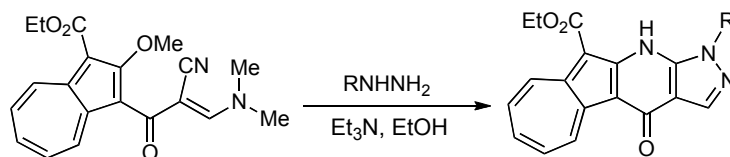


R + R = O and R = H
 R¹ = R² = H
 R¹ = Br or 2-thienyl, R² = H
 R¹ = H, R² = Br or 2-thienyl

1,4-Diarylfuorene 1,4-Diarylfuorenone Retro-Diels-Alder Reaction Synthesis Reduction

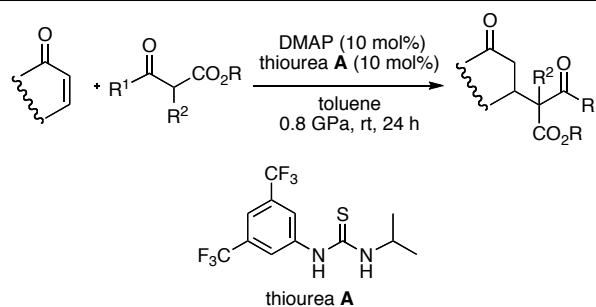
2343 Synthesis of Some Pyrazole-Fused Pyrido[3,2-*a*]azulenes

Dao-Lin Wang,* Zhe Dong, Qing-Tao Cui, Fei-Fei Yang, and Wei Zhao


 Azulene Pyrazolo[3',4':6,5]pyrido[3,2-*b*]azulene 1-Cyanoacetyl-2-methoxyazulene-3-carboxylate Hydrazine Domino Reaction

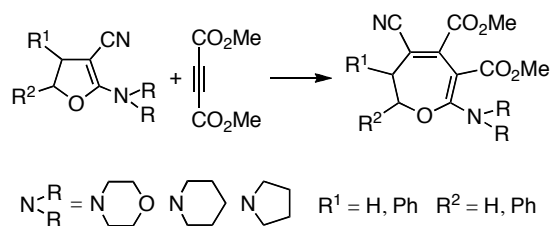
2351 Efficient Organocatalytic Michael Addition Reaction of β -Ketoesters under High Pressure

Maya Moritaka, Keiji Nakano, Yoshiyasu Ichikawa, and Hiyoshizo Kotsuki*


 Michael Addition Reaction β -Ketoester Organocatalytic Reaction DMAP High-Pressure Reaction

2361 Synthesis of Dihydrooxepins by the Cycloaddition of 2-Amino-4,5-dihydro-3-furancarbonitriles with Dimethyl Acetylenedicarboxylate

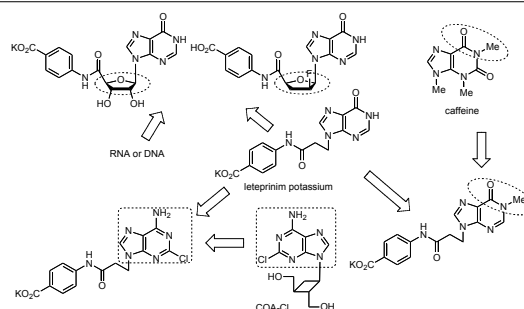
Fumi Okabe, Hiroshi Maruoka,* Eiichi Masumoto, Toshihiro Fujioka, and Kenji Yamagata



Dihydrofuran Dihydrooxepin Cycloaddition Reaction Ring Expansion Reaction Dimethyl Acetylenedicarboxylate

2369 A New Method for Synthesis and Angiogenic Evaluation of Leteprinin Potassium and Its Novel Analogs

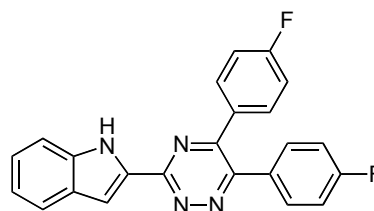
Norikazu Sakakibara, Ikuko Tsukamoto, Yohei Isono, Maki Takata, Ryoji Konishi, Yoshihisa Kato, and Tokumi Maruyama*



Nucleoside Derivative 2-Chlorocarboxylic Oxetanocin-A Leteprinin Potassium Tube Formation Activity HUVEC

2385 Design and Synthesis of New Hybrid Triazine-Indole Derivatives as Potential Antimicrobial Agents against Hospital Resistant Strains

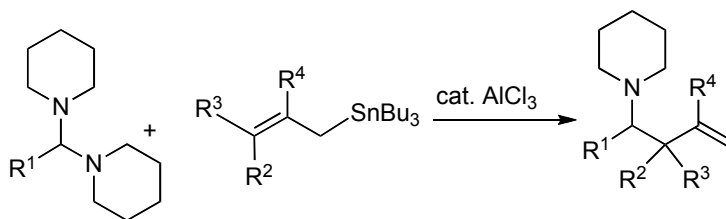
Raed Al-Qawasmeh,* Monther A. Khanfar, Mohamad H. Semreen, Raed Abu Odeh, and Taleb H. Al-Tel


 MIC 1.85 - 7.5 $\mu\text{g/mL}$
 against nine different strains

Triazinylindole Indole Microwave Irradiation Antibacterial Agent Hospital Resistant Strain

2395 Alkylation of *N,N*-Acetal Derivatives Using Allyl Tin Reagent in the Presence of Aluminum Chloride

Xiaonan Sun, Takanori Obu, Tatsuro Kijima,
Satoshi Murakami, Shigeru Matsuba,
Miho Kusakari, and Bunpei Hatano*



Alkylation *N,N*-Acetal Allyl Tin Reagent Lewis Acid Homoallylamine

NEW HETEROCYCLIC NATURAL PRODUCTS

- 2403 Polyketides
- 2405 Aromatics
- 2415 Terpenes
- 2428 Steroids
- 2432 Alkaloids
- 2437 Miscellaneous

TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 2441 Polyketides
- 2444 Aromatics
- 2447 Terpenes
- 2448 Alkaloids
- 2457 Miscellaneous

Contributors To This Issue

- | | | | |
|------|----------------------------|------|-----------------------|
| 2283 | Al-Ayed, Abdullah Sulaiman | 2283 | Soleiman, Hussain Ali |
| 2385 | Al-Qawasmeh, Raed | 2395 | Sun, Xiaonan |
| 2385 | Al-Tel, Taleb H. | 2299 | Szabó, Ildikó |
| 2299 | Bánóczy, Zoltán | 2299 | Szántay, Csaba |
| 2283 | Bruneau, Christian | 2299 | Szántay, Jr., Csaba |
| 2343 | Cui, Qing-Tao | 2267 | Tadano, Genta |
| 2299 | Dékány, Miklós | 2369 | Takata, Maki |
| 2333 | Deng, Shiming | 2267 | Tanino, Keiji |
| 2319 | Dinh, Nguyen Huu | 2369 | Tsukamoto, Ikuko |
| 2343 | Dong, Zhe | 2343 | Wang, Dao-Lin |
| 2299 | Dubrovay, Zsófia | 2333 | Wang, Yanmei |
| 2361 | Fujioka, Toshihiro | 2333 | Xiong, Xiaoli |
| 2333 | Ge, Hangmin | 2361 | Yamagata, Kenji |
| 2299 | Gorka-Kereskényi, Álmos | 2343 | Yang, Fei-Fei |
| 2299 | Gyenesé, Judit | 2249 | Yıldırım, İsmail |
| 2283 | Hamdi, Naceur | 2283 | Zaghrouba, Fethi |
| 2319 | Han, Sang-Bae | 2333 | Zhang, Jun |
| 2395 | Hatano, Bunpei | 2343 | Zhao, Wei |
| 2299 | Hazai, László | 2333 | Zhu, Min |
| 2283 | Hsouna, Anis Ben | | |
| 2319 | Huan, Trinh Thi | | |
| 2351 | Ichikawa, Yoshiyasu | | |
| 2267 | Ishikura, Koji | | |
| 2369 | Isono, Yohei | | |
| 2299 | Kalaus, György | | |
| 2369 | Kato, Yoshihisa | | |
| 2199 | Katoh, Tadashi | | |
| 2299 | Keglevich, Péter | | |
| 2385 | Khanfar, Monther A. | | |
| 2395 | Kijima, Tatsuro | | |
| 2369 | Konishi, Ryoji | | |
| 2249 | Korkusuz, Elif | | |
| 2351 | Kotsuki, Hiyoshizo | | |
| 2395 | Kusakari, Miho | | |
| 2319 | Lan, Hoang Thi Tuyet | | |
| 2299 | Lengyel, Zsófia | | |
| 2333 | Liu, Qiancai | | |
| 2225 | Makabe, Hidefumi | | |
| 2361 | Maruoka, Hiroshi | | |
| 2369 | Maruyama, Tokumi | | |
| 2361 | Masumoto, Eiichi | | |
| 2395 | Matsuba, Shigeru | | |
| 2283 | Medyouni, Rawdha | | |
| 2351 | Moritaka, Maya | | |
| 2395 | Murakami, Satoshi | | |
| 2351 | Nakano, Keiji | | |
| 2395 | Obu, Takanori | | |
| 2385 | Odeh, Raed Abu | | |
| 2361 | Okabe, Fumi | | |
| 2299 | Orbán, Erika | | |
| 2299 | Péter, Lilla | | |
| 2249 | Şahin, Ertan | | |
| 2369 | Sakakibara, Norikazu | | |
| 2385 | Semreen, Mohamad H. | | |