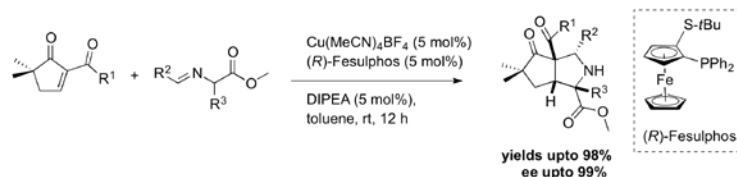


## ■ COMMUNICATIONS

**465 Natural Product Inspired Enantioselective Synthesis of Hexahydro-aza-pentalenones**

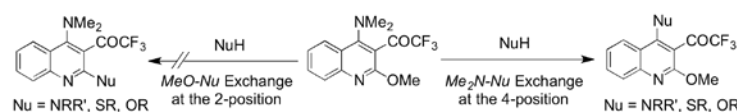
Pierre-Yves Dakas, Herbert Waldmann, and Kamal Kumar\*



Azomethine Ylide    Asymmetric Synthesis    Dipolar Cycloaddition Reaction    Pentalenone    Natural Product

**474 Unexpected Highly Chemoselective Nucleophilic Substitution Reaction of 4-Dimethylamino-2-methoxy-3-trifluoroacetylquinoline with Various Nucleophiles**

Etsuji Okada,\* Mizuki Hatakenaka, Yoshinori Takezawa, and Keisuke Iwakuni

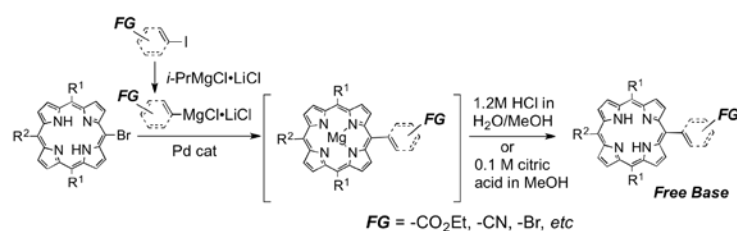


4-Aminoquinoline    Trifluoroacetyl Group    Chemoselectivity    Regioselectivity    Aromatic Nucleophilic Substitution Reaction

## ■ PAPERS

**483 Palladium-Catalyzed Cross-Coupling Reactions of Brominated Porphyrins with Functionalized Organomagnesium Reagents: Direct Preparation of Functional-Group-Bearing Free Base Porphyrins**

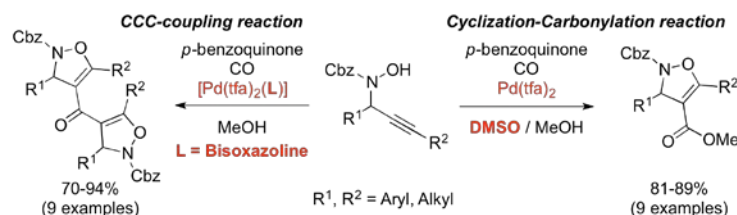
Noriaki Sugita, Ikumi Tsuchiya, and Toshikatsu Takanami\*



Free Base Porphyrin    Palladium-Catalyzed Cross-Coupling    Functionalized Organomagnesium Reagent    Turbo Grignard Reagent    Demetallation

**512 Pd(II)-Catalyzed Ligand-Controlled Synthesis of 2,3-Dihydroisoxazole-4-carboxylates and Bis(2,3-dihydroisoxazol-4-yl)methanones**

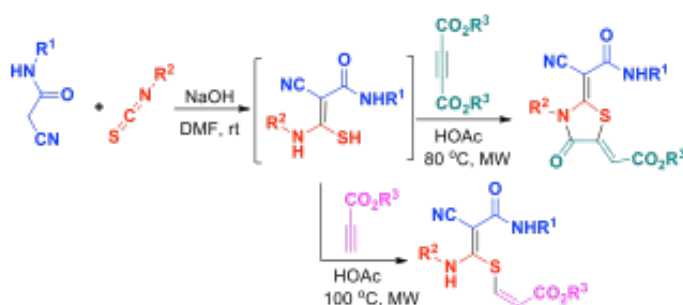
Tomohiro Ariyama, Taichi Kusakabe,\* Keita Sato, Mifuyu Funatogawa, Dong Lee, Keisuke Takahashi, and Keisuke Kato\*



Palladium Catalyst    Bisoxazoline    Carbonylation Reaction    Isoxazole    Dimerization

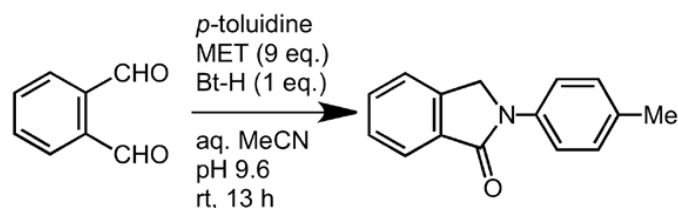
**529 One-Pot Synthesis of Densely Functionalized Thiazoles and *syn*-3-Thioacrylates**

Yi-Jing Dang, Mu-Yan Sun, Xiao-Yan Meng, Fu-Jie Zhao, Wen-Juan Hao, Bo Jiang, Shu-Jiang Tu, and Guigen Li\*


 Polysubstituted Thiazole    *syn*-3-Thioacrylate    Microwave Heating    Domino Reaction

**545 Mechanistic Aspects of the Mild-Condition Phthalimidine Synthesis with Use of 1,2,3-*H*-Benzotriazole and 2-Mercaptoethanol as Dual Synthetic Auxiliaries**

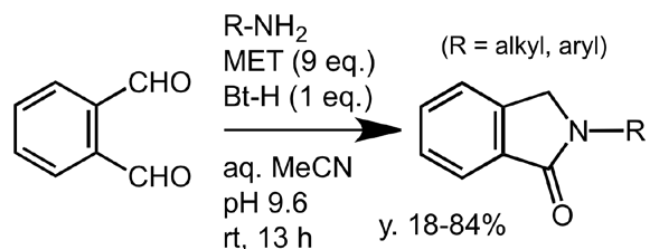
Ichiro Takahashi,\* Teruki Kawakami, Hidehiko Kitajima, Kimio Isa, and Shinzo Hosoi



Phthalimidine    Isoindole    Mannich Type Condensation Reaction    Synthetic Auxiliary    Benzotriazole

**557 Application of the Mild-Condition Phthalimidine Synthesis with Use of 1,2,3-*H*-Benzotriazole and 2-Mercaptoethanol as Dual Synthetic Auxiliaries. Effective Synthesis of Phthalimidines Possessing a Variety of Substituents at 2-Position**

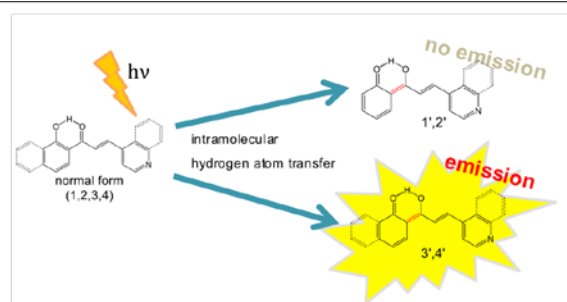
Ichiro Takahashi,\* Teruki Kawakami, Etsushi Hirano, Mako Kimino, Shigeki Kamimura, Takayuki Miwa, Takanori Tamura, Ryo Tazaki, Hidehiko Kitajima, Minoru Hatanaka, Kimio Isa, and Shinzo Hosoi



Phthalimidine    Mannich Type Condensation Reaction    Synthetic Auxiliary    Benzotriazole    Indoprofen

**572 Photochemical Behavior of 2'-Hydroxychalcone Derivatives Having Pyridyl and Quinolyf Groups**

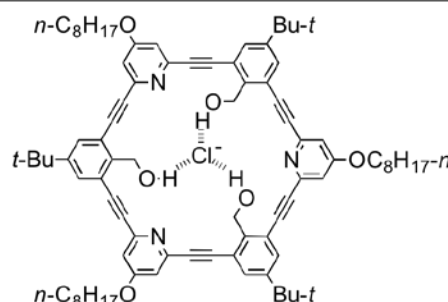
Fumiya Aizawa, Yukino Shinozaki, Yuka Ishida, and Tatsuo Arai\*



Hydrogen Atom Transfer    Tautomer    Fluorescence    Hydrogen Bonding    Excited State

**580 A  $D_{3h}$ -Symmetric Macrocyclic Alternatingly Composed of Pyridine and Benzyl Alcohol Units Linked with Acetylene Bonds**

Hajime Abe,\* Ryuta Yumoto, and Masahiko Inouye



Shape-Persistent Macrocyclic    Pyridine    Benzyl Alcohol    Sonogashira Reaction    Halide Anion Recognition

**593 Regioselective Synthesis of 2,4-Differentially Arylated Pyrroles and Its Application to the Synthesis of Lamellarins**

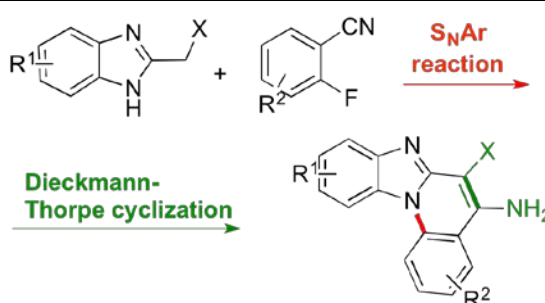
Tsutomu Fukuda, Mizuho Anzai, and Masatomo Iwao\*



2,4-Arylated Pyrrole    Stepwise Suzuki–Miyaura Cross-Coupling Reaction    Lamellarin U Diisopropyl Ether

**613 Synthesis of 5-Aminobenzoimidazo[1,2-a]quinoline Derivatives through One-Pot Two-Step Cascade Reaction**

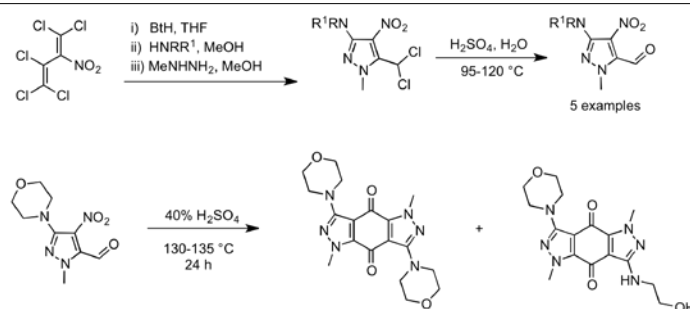
Jun-ya Kato, Yutaro Ito, Ryosuke Ijuin, Hiroshi Aoyama, and Tsutomu Yokomatsu\*



Cascade Reaction    Benzimidazo[1,2-a]quinoline    Aromatic Nucleophilic Substitution Reaction    Dieckmann-Thorpe Cyclization Reaction

**628 Chemistry of Polyhalogenated Nitrobutadienes, 15: Synthesis of Novel 4-Nitro-3-amino-1H-pyrazole-5-carbaldehydes and Pyrazolo[3,4-f]indazole-4,8-diones**

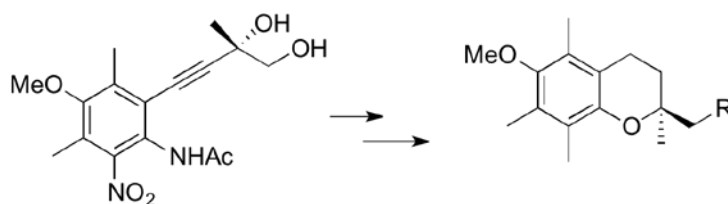
Viktor A. Zapol'skii, Jan C. Namyslo, MIMOZA Gjikaj, and Dieter E. Kaufmann\*



Persubstituted Pyrazole    Cyclization Mechanism    Benzotriazole    Tricyclic Benzoquinone    X-Ray Analysis

**647 A New Tactic for Tocopherol Synthesis Using Intramolecular Benzyne Trapping by an Alcohol**

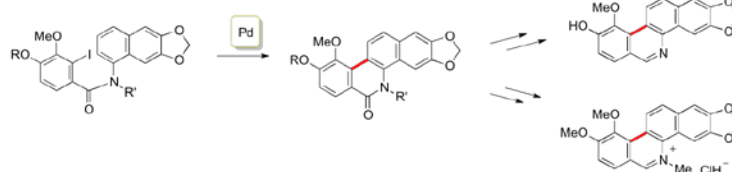
David W. Knight\* and Qing Xu



Tocopherol    Synthesis    Benzyne    Trapping Reaction    Alcohol

**673 Synthesis of 2,3,9,10-Tetraoxygenated Benzo[c]-phenanthridine Derivatives via Palladium-Mediated Aryl-Aryl Coupling Reaction**

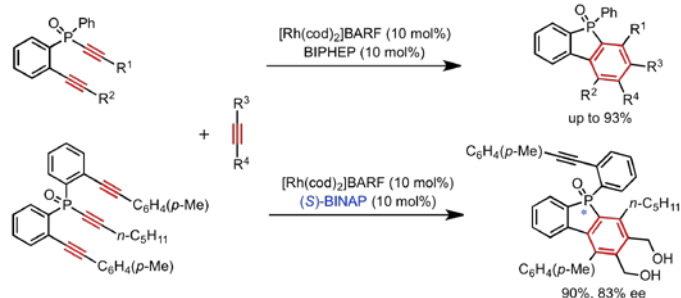
Hitoshi Abe,\* Naoko Kobayashi, Yutaka Kadoshima, Yasuo Takeuchi, Takashi Harayama, and Yoshikazu Horino



Palladium Catalyst    Phenanthridine Alkaloid    Cross Coupling Reaction

**685 Multi-Substituted Dibenzophosphole Oxide Synthesis by the Catalytic [2+2+2] Cycloaddition of Phosphorylbenzene-Tethered Diynes with Various Alkynes**

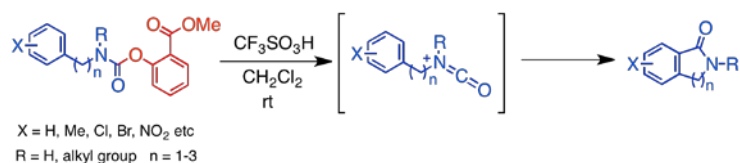
Yu-ki Tahara, Tatsuki Sato, Riku Matsubara, Kyalo Stephen Kanyiva, and Takanori Shibata\*



Cycloaddition Reaction    Dibenzophosphole Oxide    Rhodium Catalyst    Diyne    Alkyne

**705 Facile Synthesis of 5- to 7-Membered Benzolactam Compounds via Strongly Facilitated Electrophilic Aromatic Substitution Reaction<sup>†</sup>**

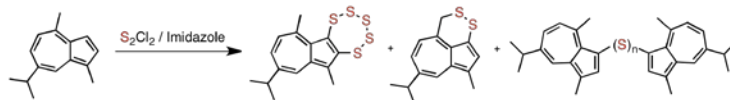
Hiroaki Kurouchi, Yuko Otani, and Tomohiko Ohwada\*



Benzolactam    Amidation Reaction    Carbamate    Cyclization Reaction

**714 Guaiazulenopentathiepin and Related Compounds: Reactions of Guaiazulene with Reactive Sulfuration Reagents**

Ohki Sato,\* Takahito Saito, Mana Iwase, and Atsushi Sakai



Guaiazulene    Pentathiepin    Sulfur Chloride    Imidazole    1,2-Dithiin

**723 Alkoxide-Directed Hydride Addition to  $\alpha,\beta$ -Unsaturated Sultones**

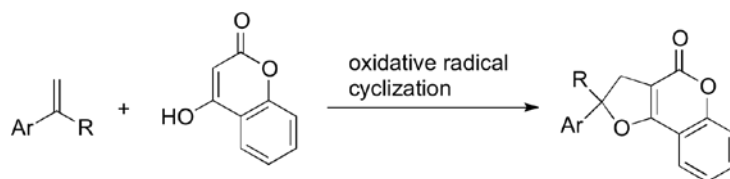
Kamal M. Dawood, Andrea Bramborg, Ahmed F. Darweesh, Katrin Spinde, Victor Rogachev, Anne Jäger, and Peter Metz\*



Sultone    Metathesis    Epoxidation    Conjugate Addition Reaction    Domino Reaction

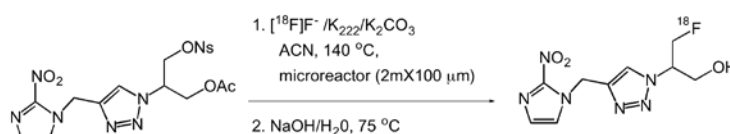
## ■ SHORT PAPERS

- 737 **Synthesis of 2,3-Dihydro-4*H*-furo[3,2-*c*]chromen-4-one Derivatives by Oxidative Radical Cyclization of 4-Hydroxy-2*H*-chromen-2-one with Alkenes**  
 Masahiro Yoshida,\* Asuka Kobayashi, and Kosuke Namba



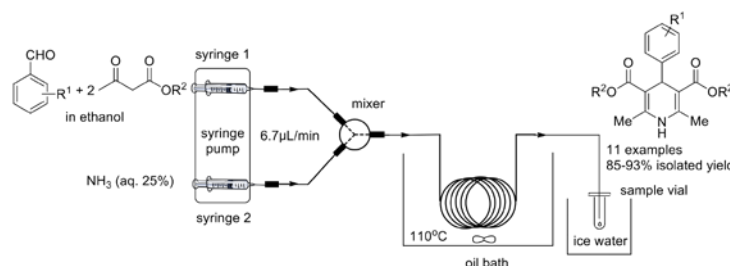
Radical Cyclization Reaction    Oxidant    Alkene    Chromenone

- 745 **Continuous Flow Microfluidic Chemistry: Synthesis of [<sup>18</sup>F]-3-Fluoro-2-(4-((2-nitro-1*H*-imidazol-1-yl)methyl)-1*H*-1,2,3-triazol-1-yl)propan-1-ol, [<sup>18</sup>F]F-HX4, a Potent Hypoxia Agent**  
 Murthy Akula, David Blevins, and George W. Kabalka\*



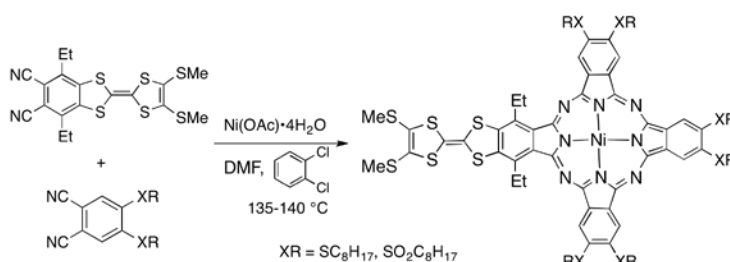
Microfluidic Reaction    Synthesis    Radiolabeling    Fluorine-18

- 755 **Synthesis of Hantzsch 1,4-Dihydropyridines in a Continuous Flow Microreactor**  
 Peiyuan Gao, Xuan Sun, Ming Lei,\* and Hong Zhang



Hantzsch Reaction    1,4-Dihydropyridine    Continuous Flow Reaction    Microreactor

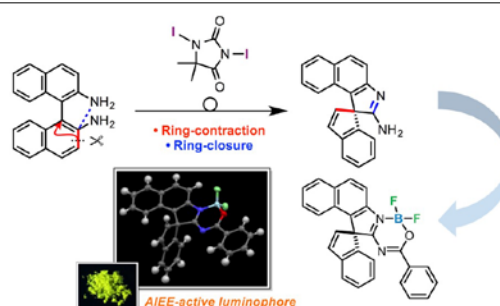
- 762 **Unsymmetrical Phthalocyanines with One TTF Unit and Octylthio or Octylsulfonyl Groups: Their Optical and Electrochemical Properties**  
 Takeshi Kimura,\* Jasmin Kang, and Shidsuko Nakajo



Phthalocyanine    TTF    UV-vis Spectroscopy    Redox

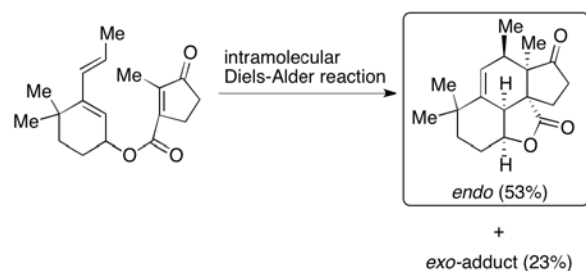
- 770 **Ring-Contractive and -Closing Skeletal Rearrangement of 1,1'-Binaphthalene-2,2'-diamines (BINAMs) Induced by an Iodine-Containing Oxidant: Synthesis of Spiro[benzo[*e*]indole-1,1'-inden]-2-amines and Application to an AIEE-Active BF<sub>2</sub> Complex**

Masato Okazaki, Kosuke Takahashi, Youhei Takeda, and Satoshi Minakata\*


 Spiro Heterocycle    Rearrangement    Amidine    BF<sub>2</sub> Complex    Aggregation-Induced Emission Enhancement (AIEE)

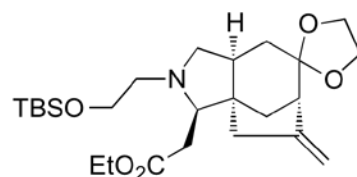
**783 Construction of *cis*-Fused Hydrindane Skeleton with a Lactone Tether Utilizing Intramolecular Diels-Alder Reaction**

Shuqiang Yin, Kenji Takai, Daishiro Minato, Kenji Sugimoto, Hideki Ohtsu, Kiyoshi Tsuge, and Yuji Matsuya\*


*cis*-Fused Hydrindane    Intramolecular Diels-Alder Reaction

**792 Synthetic Studies toward Concavine: Synthesis of the BCD Ring System**

Yosuke Komori, Akitoshi Kozen, and Masahiro Toyota\*

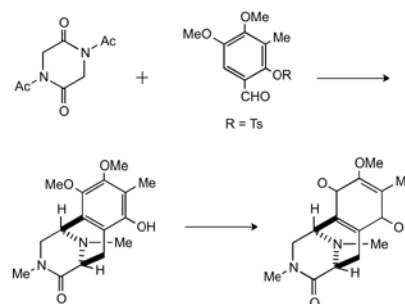


*potential intermediate of concavine*

Concavine    Diterpene Alkaloid    Catalytic Cycloalkenylation Reaction    aza-Michael Reaction    1,4-Oxazepine

**802 Practical Synthesis of Tricyclic Lactam Model of Antitumor Renieramycin-Saframycin Natural Products**

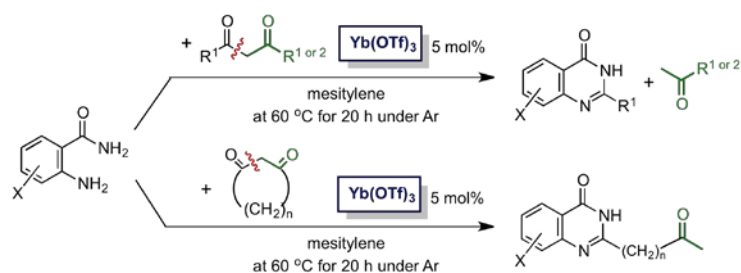
Masashi Yokoya, Akiya Fujino, Ayako Yaguchi, Miku Yamazaki, and Naoki Saito\*



Practical Synthesis    Isoquinoline    Tosyl Protecting Group    Saframycin    Renieramycin

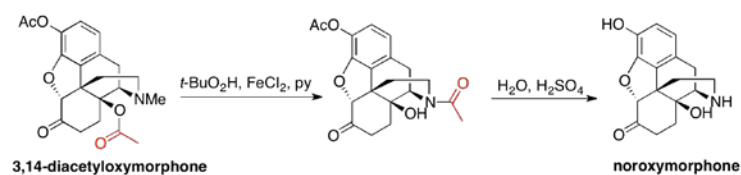
**816 Yb(OTf)<sub>3</sub>-Catalyzed Synthesis of 2-Substituted 4(3*H*)-Quinazolinones via Cleavage of a Carbon-Carbon Bond**

Tsutomu Yoshimura, Shun-ichi Naito, Di Yuanjun, Aoi Son, Yu Kimura, Akio Toshimitsu, and Teruyuki Kondo\*


 Ytterbium Triflate Catalyst    4(3*H*)-Quinazolinone    2-Aminobenzamide    1,3-Diketone    C-C Bond Cleavage

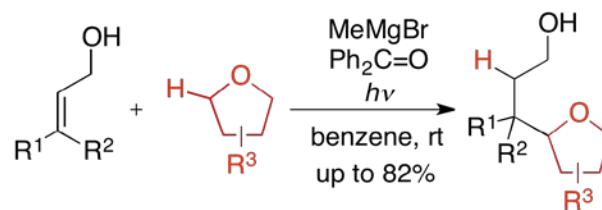
**824 Synthesis of Noroxymorphone by *N*-Demethylation/Intramolecular Acylation of Oxymorphone Catalyzed by Iron(II) Chloride**

Mary Ann A. Endoma-Arias, Ales Machara, D. Phillip Cox, and Tomas Hudlicky\*


 Oxymorphone    Noroxymorphone    *N*-Demethylation    Acyl Migration

**833 Magnesium-Alkoxide Directed Photoaddition of Tetrahydrofurans to  $\gamma,\gamma$ -Disubstituted Allylic Alcohols**

Yasutaka Watanabe, Takahiro Sakai, Hajime Maeda, Masahito Segi, Takahiro Soeta, and Yutaka Ukaji\*



Metal-Directed Photoreaction

Photoaddition Reaction

Tetrahydrofuran

Allylic Alcohol

Regioselective Reaction

## Contributors To This Issue

- |          |                           |          |                      |
|----------|---------------------------|----------|----------------------|
| 580      | Abe, Hajime               | 673      | Kobayashi, Naoko     |
| 673      | Abe, Hitoshi              | 792      | Komori, Yosuke       |
| 572      | Aizawa, Fumiya            | 816      | Kondo, Teruyuki      |
| 745      | Akula, Murthy             | 792      | Kozen, Akitoshi      |
| 593      | Anzai, Mizuho             | 465      | Kumar, Kamal         |
| 613      | Aoyama, Hiroshi           | 705      | Kurouchi, Hiroaki    |
| 572      | Arai, Tatsuo              | 512      | Kusakabe, Taichi     |
| 512      | Ariyama, Tomohiro         | 512      | Lee, Dong            |
| 745      | Blevins, David            | 755      | Lei, Ming            |
| 723      | Bramborg, Andrea          | 529      | Li, Guigen           |
| 824      | Cox, D. Phillip           | 824      | Machara, Ales        |
| 465      | Dakas, Pierre-Yves        | 833      | Maeda, Hajime        |
| 529      | Dang, Yi-Jing             | 685      | Matsubara, Riku      |
| 723      | Darweesh, Ahmed F.        | 783      | Matsuya, Yuji        |
| 723      | Dawood, Kamal M.          | 529      | Meng, Xiao-Yan       |
| 824      | Endoma-Arias, Mary Ann A. | 723      | Metz, Peter          |
| 802      | Fujino, Akiya             | 770      | Minakata, Satoshi    |
| 593      | Fukuda, Tsutomu           | 783      | Minato, Daishiro     |
| 512      | Funatogawa, Mifuyu        | 557      | Miwa, Takayuki       |
| 755      | Gao, Peiyuan              | 816      | Naito, Shun-ichi     |
| 628      | Gjikaj, Mimoza            | 762      | Nakajo, Shidsuko     |
| 529      | Hao, Wen-Juan             | 737      | Namba, Kosuke        |
| 673      | Harayama, Takashi         | 628      | Namyslo, Jan C.      |
| 474      | Hatakenaka, Mizuki        | 783      | Ohtsu, Hideki        |
| 557      | Hatanaka, Minoru          | 705      | Ohwada, Tomohiko     |
| 557      | Hirano, Etsushi           | 474      | Okada, Etsuji        |
| 673      | Horino, Yoshikazu         | 770      | Okazaki, Masato      |
| 545, 557 | Hosoi, Shinzo             | 705      | Otani, Yuko          |
| 824      | Hudlicky, Tomas           | 723      | Rogachev, Victor     |
| 613      | Ijuin, Ryosuke            | 802      | Saito, Naoki         |
| 580      | Inouye, Masahiko          | 714      | Saito, Takahito      |
| 545, 557 | Isa, Kimio                | 714      | Sakai, Atsushi       |
| 572      | Ishida, Yuka              | 833      | Sakai, Takahiro      |
| 613      | Ito, Yutaro               | 512      | Sato, Keita          |
| 474      | Iwakuni, Keisuke          | 714      | Sato, Ohki           |
| 593      | Iwao, Masatomo            | 685      | Sato, Tatsuki        |
| 714      | Iwase, Mana               | 833      | Segi, Masahito       |
| 723      | Jäger, Anne               | 685      | Shibata, Takanori    |
| 529      | Jiang, Bo                 | 572      | Shinozaki, Yukino    |
| 745      | Kabalka, George W.        | 833      | Soeta, Takahiro      |
| 673      | Kadoshima, Yutaka         | 816      | Son, Aoi             |
| 557      | Kamimura, Shigeki         | 723      | Spinde, Katrin       |
| 762      | Kang, Jasmin              | 783      | Sugimoto, Kenji      |
| 685      | Kanyiva, Kyalo Stephen    | 483      | Sugita, Noriaki      |
| 613      | Kato, Jun-ya              | 529      | Sun, Mu-Yan          |
| 512      | Kato, Keisuke             | 755      | Sun, Xuan            |
| 628      | Kaufmann, Dieter E.       | 685      | Tahara, Yu-ki        |
| 545, 557 | Kawakami, Teruki          | 545, 557 | Takahashi, Ichiro    |
| 557      | Kimino, Mako              | 512      | Takahashi, Keisuke   |
| 762      | Kimura, Takeshi           | 770      | Takahashi, Kosuke    |
| 816      | Kimura, Yu                | 783      | Takai, Kenji         |
| 545, 557 | Kitajima, Hidehiko        | 483      | Takanami, Toshikatsu |
| 647      | Knight, David W.          | 770      | Takeda, Youhei       |
| 737      | Kobayashi, Asuka          | 673      | Takeuchi, Yasuo      |

- 474 Takezawa, Yoshinori
- 557 Tamura, Takanori
- 557 Tazaki, Ryo
- 816 Toshimitsu, Akio
- 792 Toyota, Masahiro
- 483 Tsuchiya, Ikumi
- 783 Tsuge, Kiyoshi
- 529 Tu, Shu-Jiang
- 833 Ukaji, Yutaka
- 465 Waldmann, Herbert
- 833 Watanabe, Yasutaka
- 647 Xu, Qing
- 802 Yaguchi, Ayako
- 802 Yamazaki, Miku
- 783 Yin, Shuqiang
- 613 Yokomatsu, Tsutomu
- 802 Yokoya, Masashi
- 737 Yoshida, Masahiro
- 816 Yoshimura, Tsutomu
- 816 Yuanjun, Di
- 580 Yumoto, Ryuta
- 628 Zapol'skii, Viktor A.
- 755 Zhang, Hong
- 529 Zhao, Fu-Jie