■ FOREWORDS

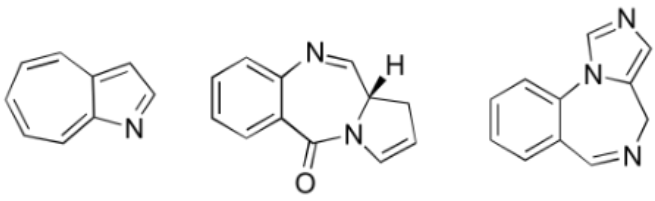
■ CURRICULUM VITAE

■ PUBLICATIONS

11 **Publication List by Kiyoshi Tomioka**
Kiyoshi Tomioka*

■ REVIEWS

43 **Recent Progress of the Chemistry of Azaazulenes and Related Compounds**
Noritaka Abe*



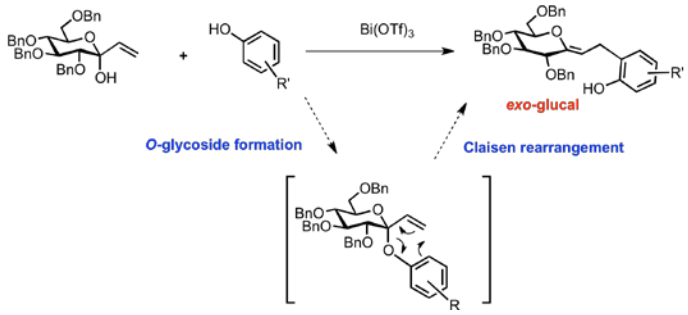
Azaazulene Pyrrolobenzazepine Natural Product Biological Activity Heterocycle

107 **Construction of Cyclic Ether-Fused Tricyclic Naphthoquinone Derivatives by Intramolecular Cyclization Reaction**
Tokutaro Ogata* and Tetsutaro Kimachi*

Naphthoquinone Synthetic Method Intramolecular Cyclization Natural Product

■ COMMUNICATIONS

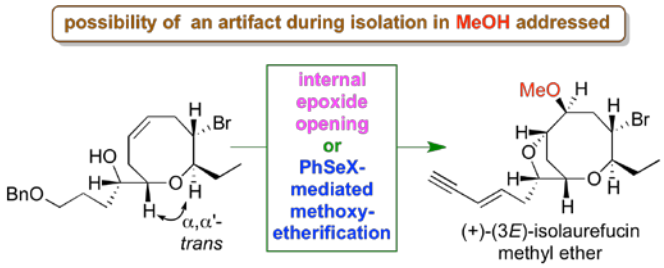
170 **A Synthetic Approach to Derive *exo*-Glucal Derivatives through the Reaction of a 1-*C*-Vinylated Glucopyranose Derivative with Phenols**
Takashi Yamanoi,* Sho Matsuda, Junki Nakgawa, Mikio Watanabe, Yoshiki Oda, and Akihiro Yoshida



exo-Glycal Spiro *O*-Glycoside *O*-Glycosylation Claisen Rearrangement 1-*C*-Vinylated Glucopyranose

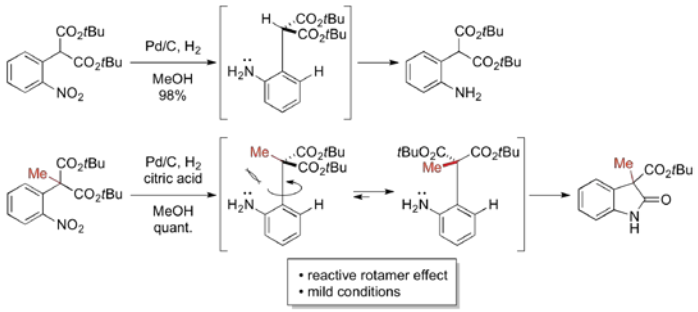
■ PAPERS

179 **Asymmetric Total Synthesis and Structure Confirmation of (+)-(3*E*)-Isolaurefucin Methyl Ether**
Te-ik Sohn, Byungsook Kim, Deukjoon Kim,* and Robert S. Paton



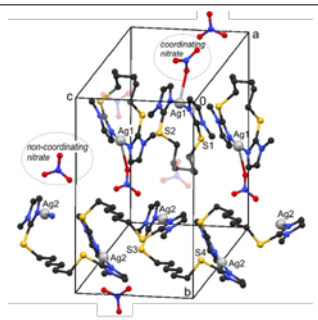
Natural Product Synthesis Computational Chemistry Biomimetic Synthesis Epoxidation Oxonium Ion Formation-Fragmentation

192 **Synthesis of Substituted *t*-Butyl 3-Alkyloxindole-3-carboxylates from Di-*t*-butyl (2-Nitrophenyl)malonates**
Yu-suke Yamai, Akio Tanaka, Tatsuo Yajima, Kyoji Ishida, Itaru Natsutani, Shinichi Uesato, Yasuo Nagaoka, and Takaaki Sumiyoshi*



3,3-Disubstituted Oxindole DFT Calculation X-Ray Crystal Analysis Process Chemistry Tandem Reduction-Cyclization Reaction

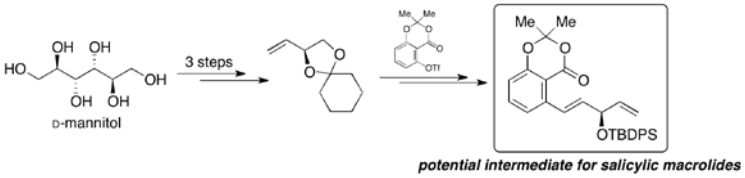
211 **Polymeric Silver(I) Complexes Based on Bidentate Imidazoline-2-thiones. Synthesis and Crystal Structures**
Barbara Rietzler, Gerhard Laus, Klaus Wurst, Thomas Gelbrich, Sven Nerdinger,* Erwin Schreiner, and Herwig Schottenberger



Imidazole Silver Complex Thione Crystal Structure Coordination

283 **Stereoselective Synthesis of a Pivotal Chiral Intermediate for Natural Salicylic Macrolides**

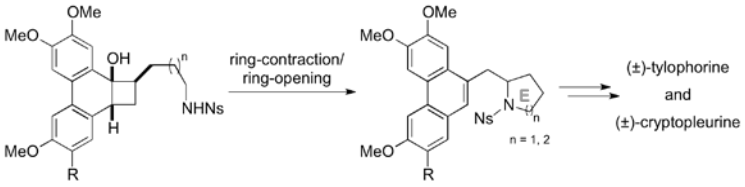
Yoshihito Oguma, Nozomi Yamamoto, Kenji Sugimoto, and Yuji Matsuya*



Salicylic Macrolide Heck Reaction

292 **Total Synthesis of Phenanthroquinolizidine Alkaloid Cryptopleurine and Phenanthroindolizidine Alkaloid Tylophorine**

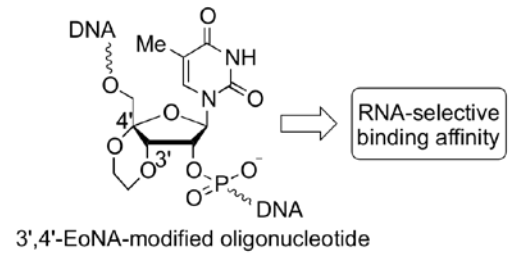
Yousuke Yamaoka,* Marie Taniguchi, Ken-ichi Yamada, and Kiyosei Takasu*



Alkaloid [2 + 2] Cycloaddition Ring Contraction Nosyl Strategy Total Synthesis

306 **Synthesis and Properties of Oligonucleotides Containing 3′-*O*,4′-*C*-Ethyleneoxy-Bridged 5-Methyluridines**

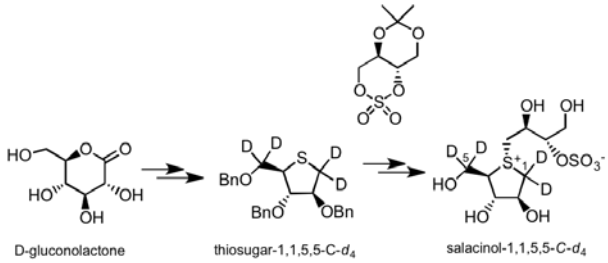
Takashi Osawa, Yuka Hitomi, Sawako Wakita, Han Kim, Masakazu Dohi, Masahiko Horiba, Yuta Ito, Satoshi Obika, and Yoshiyuki Hari*



3',4'-Bridged Nucleic Acid 2',5'-Phosphodiester Linkage Oligonucleotide RNA-Selectivity UV-Melting Experiment

314 **Synthesis of Salacinol-d_4 as an Internal Standard for Mass-Spectrometric Quantitation of Salacinol, a Potent α-Glucosidase Inhibitor Found in a Traditional Ayurvedic Medicine "*Salacia*"**

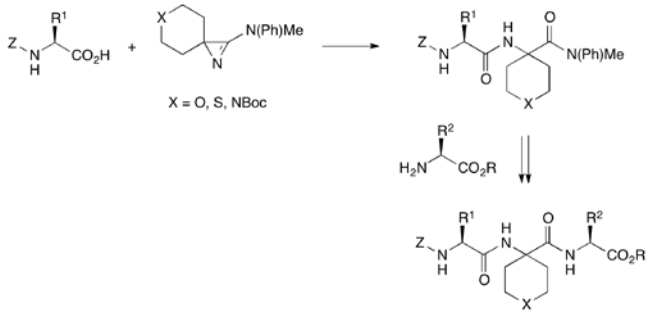
Genzoh Tanabe,* Sanami Teramae, Yousuke Kunikata, Shinsuke Marumoto, Shuhei Okugawa, Fumihiro Ishikawa, Weija Xie, Toshio Morikawa, and Osamu Muraoka



Salacinol Isotope-Labeled Stabled Salacinol Internal Standard for Quantitative Analysis α-Glucosidase Inhibitor *Salacia*

333 **Synthesis of Tripeptides Containing Heterocyclic *α*-Amino Acids by Using Heterospirocyclic 3-Amino-2*H*-azirines**

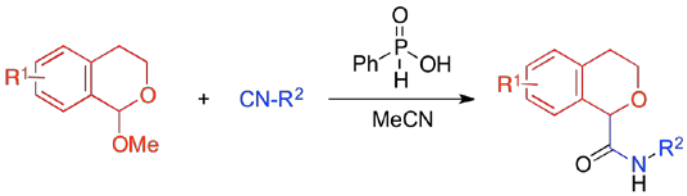
Christoph Strässler, Anthony Linden, and Heinz Heimgartner*



3-Amino-2*H*-azirine Spiroheterocycle Heterocyclic 4-Amino-4-carboxylic Acid Peptide Synthesis X-Ray Crystallography

355 **Phenylphosphinic Acid-Promoted Addition of Isocyanide to 1-Methoxyisochroman Derivatives**

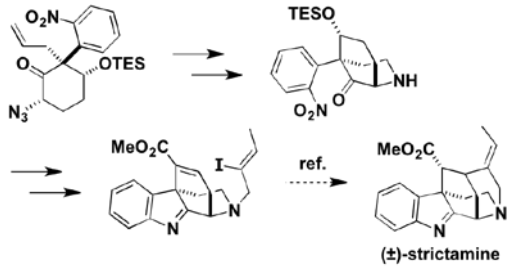
Takahiro Soeta,* Syunsuke Matsuzaki, and Yutaka Ukaji*



Isochroman-1-carboxylamide Isocyanide Phosphinic Acid

365 **Formal Total Synthesis of (±)-Strictamine**

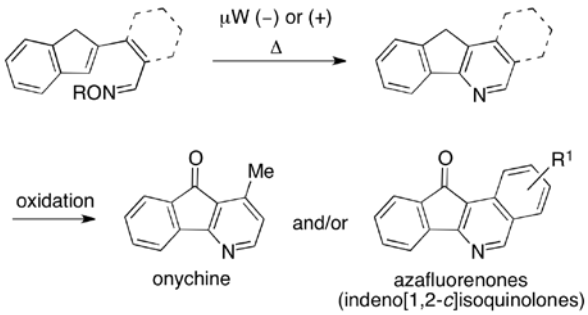
Keigo Sato, Noriyuki Takanashi, Noriyuki Kogure, Mariko Kitajima, and Hiromitsu Takayama*



Strictamine Akuammiline Indole Alkaloid Total Synthesis

383 **Concise Synthesis of Azafluorenone and Its Application to Indeno[1,2-*c*]isoquinolone**

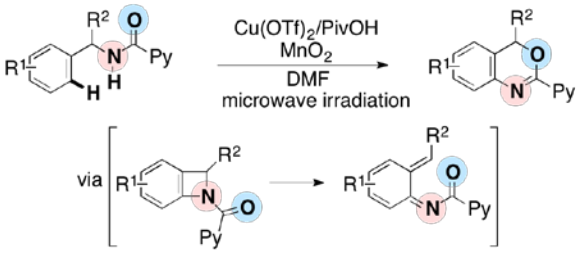
Takashi Nishiyama, Takaya Fujiwaki, Noriyuki Hatae, Emiko Uchiyama, Nao Takeuchi, Kazuhide Minami, Chika Yokoyama, Tomoya Kinoshita, Minoru Ishikura, Satoshi Hibino, and Tominari Choshi*



Onychine Azafluorenone Indeno[1,2-*c*]isoquinolone Thermal Electrocyclization

395 **Oxidative Rearrangement of Benzylamines to 4*H*-3,1-Benzoxazines via Cu/Mn-Promoted Intramolecular C–H Amination/Electrocyclic Reaction Cascade**

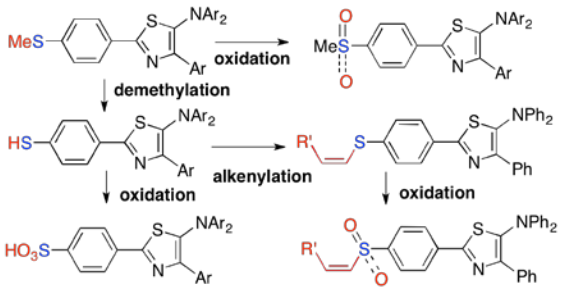
Chiaki Yamamoto, Kazutaka Takamatsu, Koji Hirano,* and Masahiro Miura*



Benzoxazine C-H Activation Copper Catalyst Amination Reaction Electrocyclic Reaction

409 **Synthesis and Photophysical Properties of 5-*N*-Arylaminothiazoles with Sulfur-Containing Groups on the Aromatic Ring at the 2-Position**

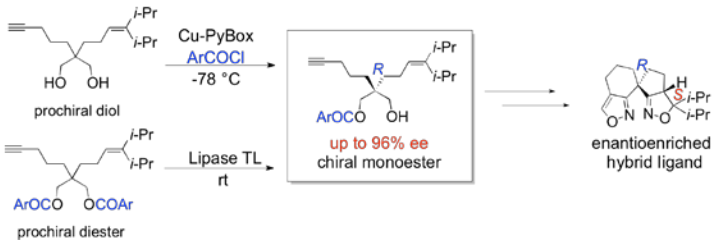
Toshiaki Murai,* Hidenori Furukawa, and Kirara Yamaguchi



5-Aminothiazole Sulfur-Containing Functional Group Fluorescence

493 **Enantioselective Synthesis of Spiro (Isoxazole-Isoxazoline) Hybrid Ligand**

Bijan Mohon Chaki, Kazuhiko Wakita, Shinobu Takizawa, Kazuhiro Takenaka, and Hiroaki Sasai*



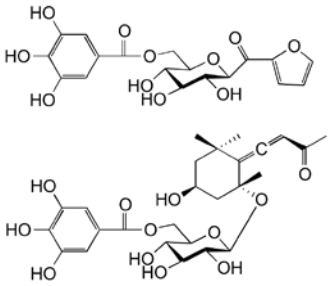
Spiro Compound Asymmetric Synthesis Desymmetrization Enzyme Copper Catalyst

■ SHORT PAPERS

507 **Two New Galloyl Glucosides from the Leaves of *Castanopsis fordii***

Yong-Lin Huang,* Zhang-Bin Liu, Ya-Feng Wang, Li Ge, Rui-Jie He, Jin-Lei Liu, Ke-Di Yang,* and Dian-Peng Li

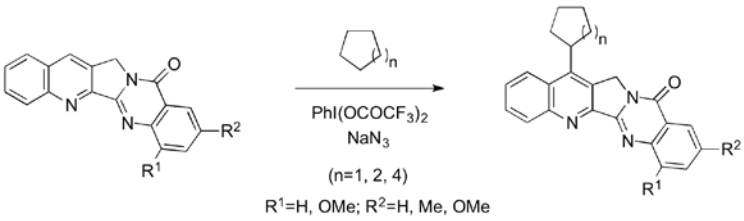
Castanopsis fordii



Castanopsis fordii Chemical Constituent Structure Identification

514 **Concise Approach to Mono- and Disubstituted Luotonin A Analogs and Their Cytotoxicity Test**

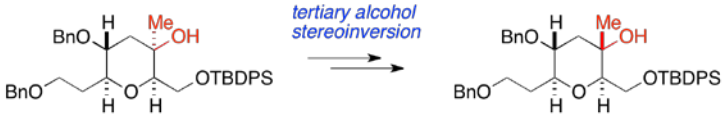
Natsuko Kagawa,* Kimiko Nishimura, Shinya Abe, Takashi Masuko, and Masahiro Toyota*



Luotonin A Analog Double Hetero Diels-Alder Reaction Oxidative Cross Coupling Reaction Antitumor Activity Alkaloid

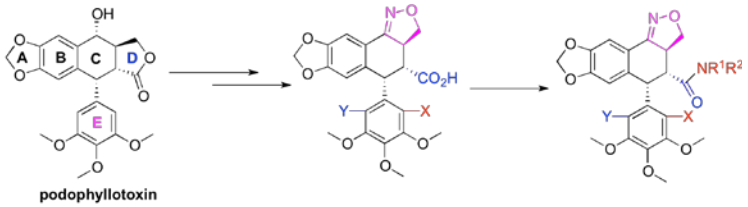
523 **Stereoinversion of a Tertiary Alcohol on a THP Ring: A Recovery Route to an Intermediate for Gymnocin-A**

Takeo Sakai, Kayo Aoyama, Rie Oshima, Kyoko Furukawa, and Yuji Mori*



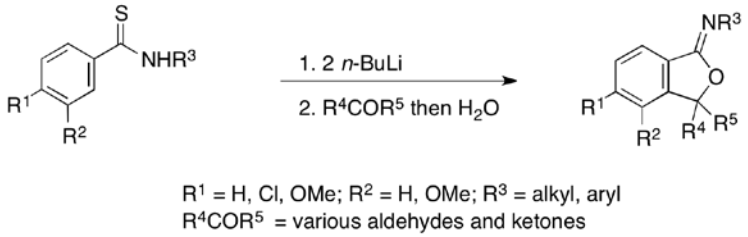
Tetrahydropyran Stereoinversion Tertiary Alcohol Gymnocin-A Polycyclic Ether

541 **Synthesis of 2′(2′,6′)-(Di)Halogenoisoxazolopodophyllic Acids-Based Amides Derived from a Naturally Occurring Lignan Podophyllotoxin and Their Acaricidal Activity**
Bingchuan Zhang, Mingqiao Yu, Min Lv,* and Hui Xu*



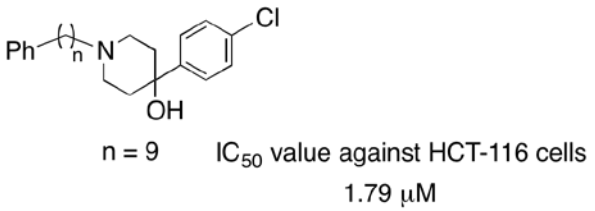
Podophyllotoxin Isoxazolopodophyllic Acid Amide Acaricidal Activity

550 **One-Pot Synthesis of (*Z*)-*N*-Substituted Isobenzofuran-1(3*H*)-imines from Secondary Benzothioamides and Carbonyl Compounds**
Kazuhiro Kobayashi* and Takashi Nogi



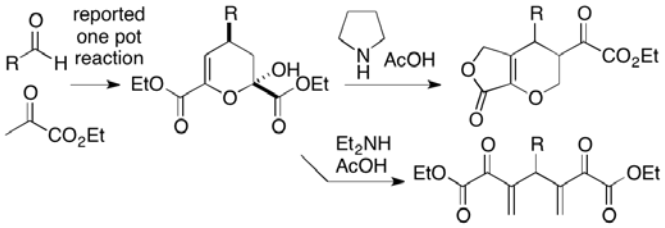
Isobenzofuran-1(3*H*)-imine 2,*N*-Dilithiobenzothioamide Lithiation Carbonyl Compound Ring Closure

560 **Synthesis of *N*-ω-Phenylalkyl-4-(*p*-chlorophenyl)-piperidin-4-ol Analogues with Potent Antiproliferative Activity Against HCT-116 Cells**
Noriyuki Hatae,* Eiko Kujime, Keigo Yano, Mami Kizuka, Rina Ashida, Tominari Choshi, Takashi Nishiyama, Chiaki Okada, Tatsunori Iwamura, and Teruki Yoshimura*



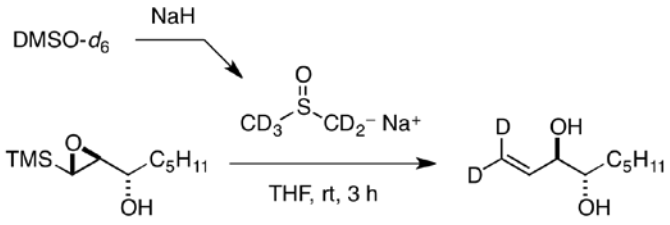
Antitumor Activity Opioid Piperidine

569 **Reactions of Pyruvate-Derived Dihydropyrans with Formaldehyde: Synthesis of Functionalized Furopyrans and Related Products**
Pandurang V. Chouthaiwale, Ravindra D. Aher, and Fujie Tanaka*



Synthetic Method Cascade Reaction One Pot Reaction Organocatalysis

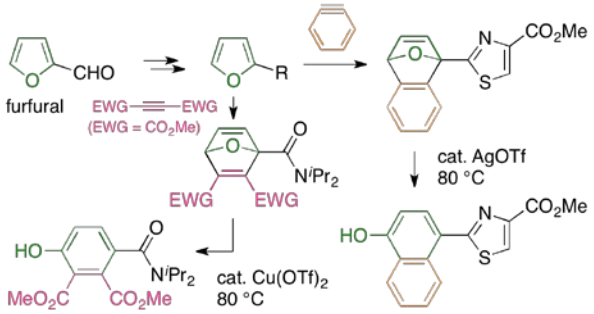
574 **A New Method of Deuterium Incorporation to TMS-Epoxyalcohol Using Sodium Methylsulfinylmethylide-d_5 (NaDMSO-d_5)**
Yutaro Nanba, Shuhei Tanabe, and Yuichi Kobayashi*



Deuteration DMSO-d_6 NaDMSO-d_5 TMS-Epoxyalcohol 1,2-Diol

580 **Synthesis of Phenol and Naphthol Derivatives from Furfural**

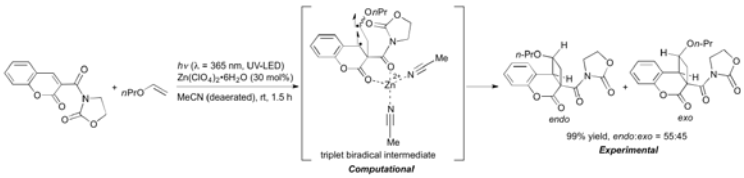
Kentaro Okano, Yuki Murase, Naoki Miyagawa, Kana Ashida, and Atsunori Mori*



Phenol Naphthol Furan Cycloaddition C–H Functionalization

591 **Lewis Acid Catalysis in Intermolecular [2+2] Photocycloaddition of Coumarin-3-carboxamide Bearing 2-Oxazolidinone Auxiliary with *n*-Propyl Vinyl Ether and Vinyl Pivalate**

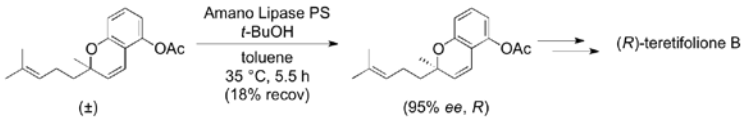
Kennosuke Itoh,* Junya Matsuura, Hideaki Kamiya, Ryuki Kudo, Yuki Takahashi, Yuta Hashimoto, Kenji Yoza, Ken Tokunaga,* Hideaki Fujii,* and Hiroyuki Suga*



[2+2] Photocycloaddition Coumarin-3-carboxamide Vinyl Ether Lewis Acid Stereoselective Reaction

604 **Preparation of Optically Active 2,2-Disubstituted 5-Hydroxychromenes by the Enzymatic Resolution of Racemic Esters**

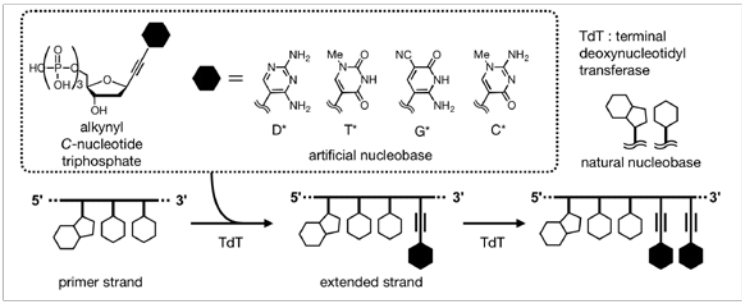
Mika Kainuma, Ai Yamada, Kazuaki Katakawa, and Takuya Kumamoto*



Chromene Enzymatic Resolution Transesterification Lipase

612 **Synthesis of Alkynyl *C*-Nucleotide Triphosphates toward Enzymatic Elongation of Artificial DNA**

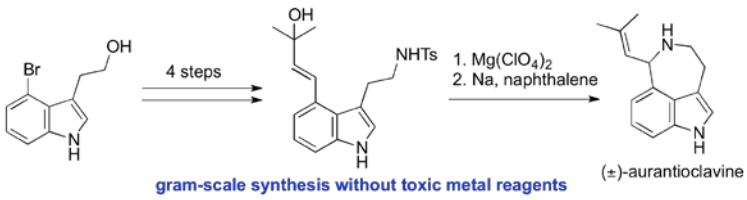
Yutaro Oda, Junya Chiba,* and Masahiko Inouye*



Alkynyl *C*-Nucleotide Triphosphate Artificial DNA Enzymatic Elongation

621 **Concise Synthesis of (±)-Aurantioclavine**

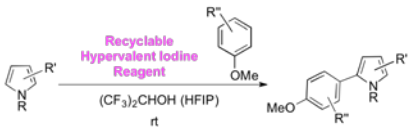
Hideo Ikota, Chihiro Tsukano,* and Yoshiji Takemoto*

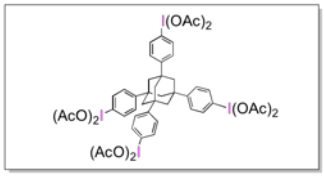


Total Synthesis Aurantioclavine Cyclization Reaction Azepane

632 **Metal-Free Oxidative Cross-Coupling of Pyrroles with Electron-Rich Arenes Using Recyclable Hypervalent Iodine(III) Reagent**

Koji Morimoto, Toru Kamitanaka, Toshifumi Dohi, and Yasuyuki Kita*





Hypervalent Iodine Recyclable Reagent Cross-Coupling Reaction Pyrrole Metal-Free Reaction

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