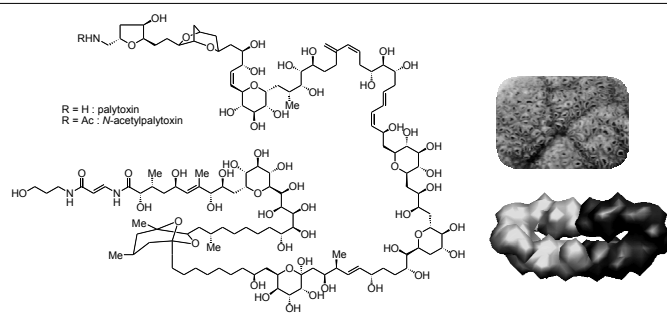


REVIEWS

1 **Biologically Active Marine Natural Products**

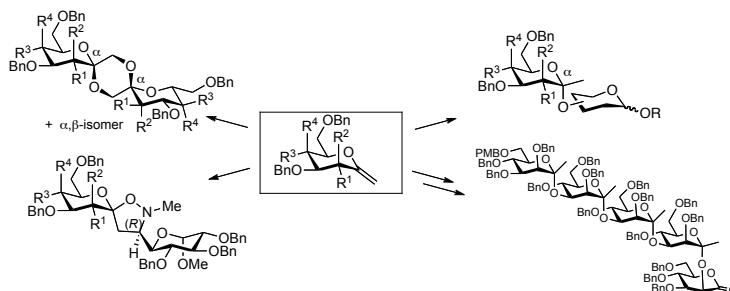
Kazuhiko Nakamura, Makoto Kitamura, and Daisuke Uemura*



Marine Natural Product Palytoxin Halichondrin B Pinnatoin Coral Larval Metamorphosis Symbioimine Symbiodinolide

19 **Chemistry of 1-Methylenesugars: Synthetic Utilizations to 1'-C-Methyl-saccharides and Related Carbohydrates**

Rie Namme and Shiro Ikegami*

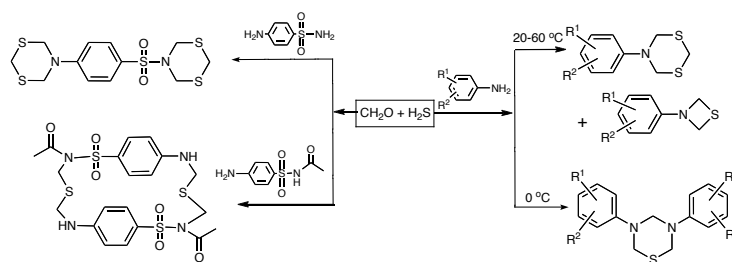


1-Methylenesugar α -Glycosidation 1-C-Methyltrehalose *spiro*-Ketodisaccharide 1,3-Dipolar Cycloaddition

PAPERS

45 **Cyclotiomethylation of Functional Substituted Anilines by CH₂O and H₂S**

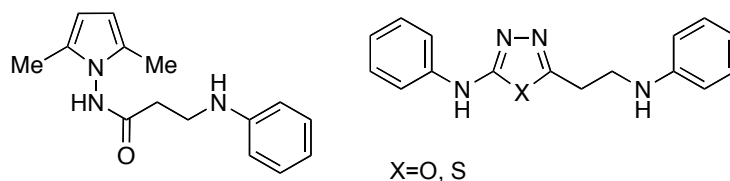
Vnira R. Akhmetova,* Guzel R. Nadyrgulova, Zalifa T. Niatshina, Regina R. Khairullina, Zoya A. Starikova, Alexandra O. Borisova, Michail Yu. Antipin, Raihana V. Kunakova, and Usein M. Dzhemilev



1,3,5-Dithiazinane 1,3,5-Thiadiazine Macroheterocycle Cyclotiomethylation Anomeric Effect

59 **Synthesis of Azole Derivatives from 3-Phenylaminopropanohydrazide and Evaluation of Their Antimicrobial Efficacy**

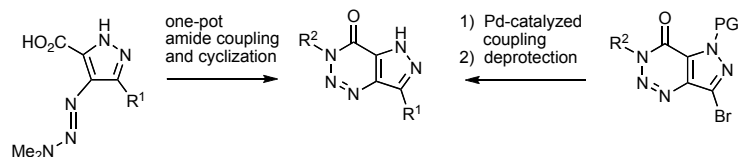
Ingrida Tumosiėnė, Kristina Kantminienė, Alvydas Pavilionis, Žaneta Mazėlienė, and Zigmuntas J. Beresnevičius*



Hydrazide Pyrazole Pyrrole 1,2,4-Triazole 1,3,4-Oxadiazole

71 Diversity-Oriented Synthesis of Substituted Pyrazolo[4,3-*d*][1,2,3]triazin-4-ones

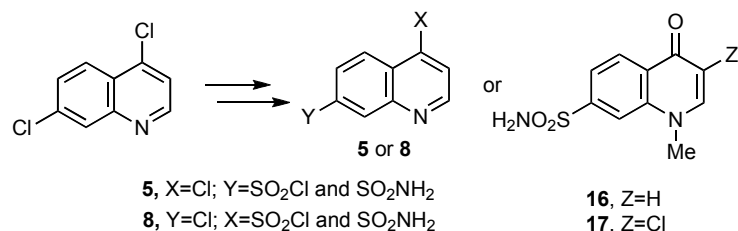
Daniel Meibom,* Marcus Bauser, Heinrich Meier, Dirk Schneider, Niels Svenstrup, and Dieter Haebich



Amidation-Cyclization Suzuki Coupling Sonogashira Coupling Methoxycarbonylation Parallel Synthesis

93 Synthesis of 4- and 7-Quinolinesulfonamides from 4,7-Dichloroquinoline

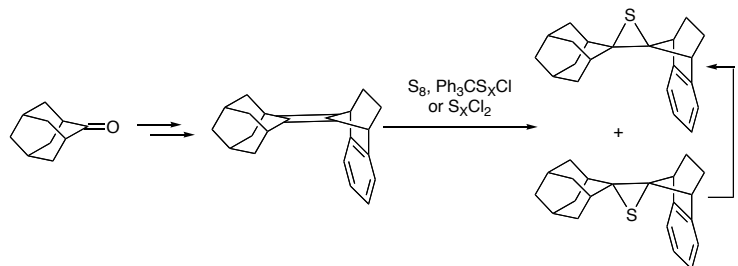
Krzysztof Marciniak and Andrzej Maślankiewicz*



Quinolinesulfonyl Chloride Quinolinesulfonamide Thioquinoline-Oxidative Chlorination 4-Quinolinone Nucleophilic Heteroaromatic Substitution

103 Synthesis and Sulfuration of 2'-Adamantylidene-9-benzonorborenylidene

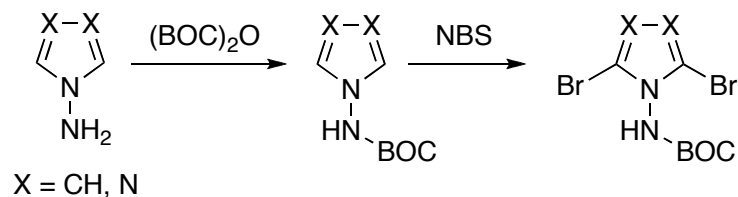
Yoshiaki Sugihara,* Ayumi Kobiki, and Juzo Nakayama*



Thiirane Alkene Sulfuration Elemental Sulfur Sulfur Chloride

117 Dibromides of BOC-Protected 1-Aminopyrrole and 4-Amino-1,2,4-triazole: Synthesis, X-Ray Molecular Structure, and NMR Behavior

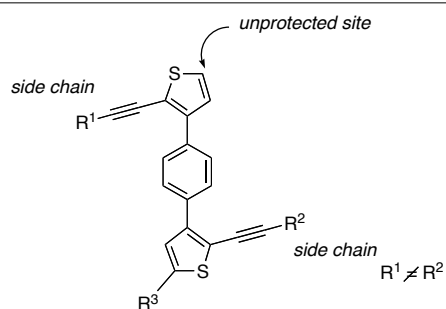
Takakazu Yamamoto,* Gentaro Tanaka, Hiroki Fukumoto, and Take-aki Koizumi



1-Aminopyrrole 4-Amino-1,2,4-triazole Bromination X-Ray Structure BOC

127 Preparation of Unsymmetrical 1,4-Bis[2-ethynyl]-3-thienyl]benzene Derivative

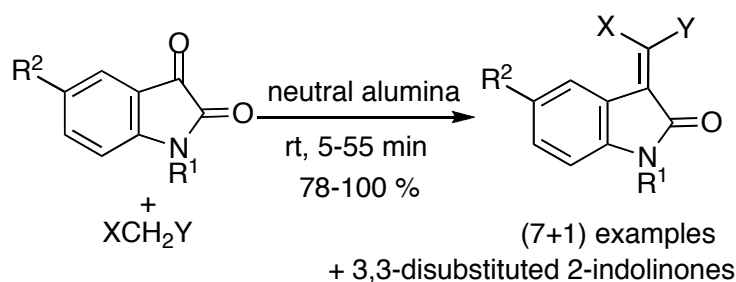
Kozo Toyota,* Yasutomo Tsuji, Kazuyuki Okada, and Noboru Morita



Oligoarene ETAr Spacer Conjugated π System Aromatic Compound

139 Reaction of Isatins with Active Methylene Compounds on Neutral Alumina: Formation of Knoevenagel Condensates and Other Interesting Products

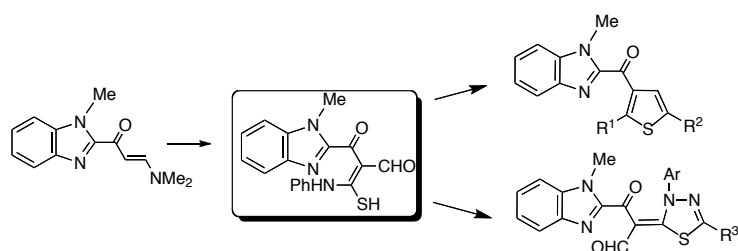
Manas Chakrabarty,* Ratna Mukherjee, Shiho Arima, and Yoshihiro Harigaya



Room Temperature Ylidenoindole Hydroxyindolenine Tandem Knoevenagel-Michael Addition Spiro-Compound

151 Synthesis and Antimicrobial Evaluation of New Thiophene and 1,3,4-Thiadiazole Derivatives

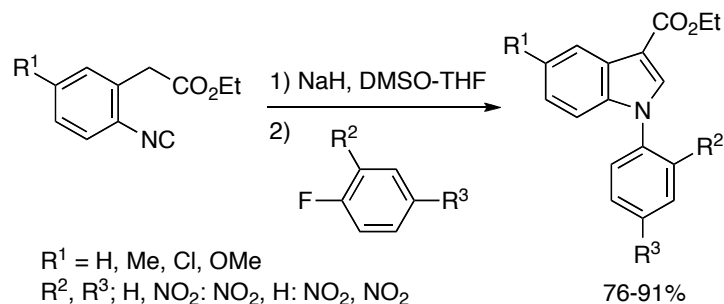
Mohamed R. Shaaban, Tamer S. Saleh, and Ahmad M. Farag*



Thiophene 1,3,4-Thiadiazole Enaminone Hydrazonoyl Halide Antimicrobial Activity

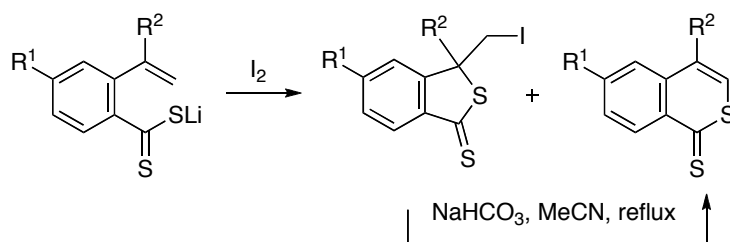
161 One-Pot Synthesis of 1-Arylindole-3-carboxylates from 2-(2-Isocyanophenyl)acetates

Shuhei Fukamachi, Hisatoshi Konishi, and Kazuhiro Kobayashi*


 Indole-3-carboxylate *o*-Tolyl Isocyanide Fluoronitrobenzene Benzyl Anion 1,1'-(1,3-Diphenylene)diindole

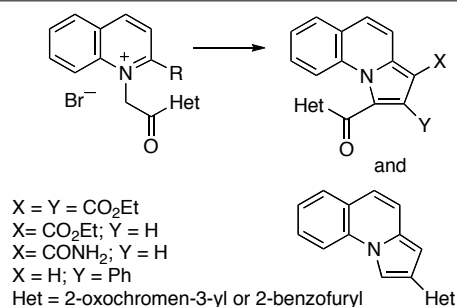
169 Synthesis of 2-Benzothiophene-1(3*H*)-thione and Isothiochromene-1-thione Derivatives by Iodine-Mediated Cyclization of Lithium 2-(Vinyl)dithiobenzoate Derivatives

Shuhei Fukamachi, Hisatoshi Konishi, and Kazuhiro Kobayashi*


 2-Benzothiophen-1(3*H*)-one Isothiochromene-1-thione Iodocyclization Lithium Dithiobenzoate 2-Lithiostyrene

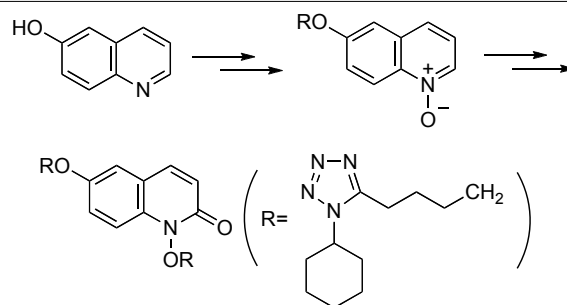
177 Synthesis and Some New Indolizine and Pyrrolo[1,2-*a*]quinoline Derivatives via Nitrogen Ylides

Nabila A. Kheder, Elham S. Darwish, and Kamal M. Dawood*


 Chromene Benzofuran Indolizine Pyrrolo[1,2-*a*]quinoline Cycloaddition

189 Synthesis of Related Substances of Cilostazol

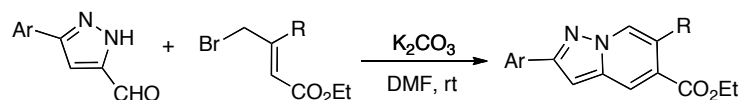
Jin Zheng, Zheng Liu, Yiru Dai, Qingjie Zhao, and Jingshan Shen*



Cilostazol Impurity Dehydrogenation Auto-oxidation Quinolin-2-one

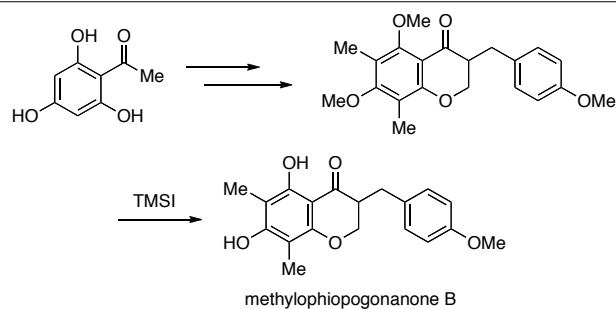
NOTES
197 A Novel and Efficient Approach to Pyrazolo[1,5-*a*]-pyridine Derivatives *via* One-Pot Tandem Reaction

Yan-Qing Ge, Jiong Jia, Yan Li, Ling Yin, and Jianwu Wang*


 α,β -Unsaturated Ester Pyrazole Mechanism Crystal Fluorescence

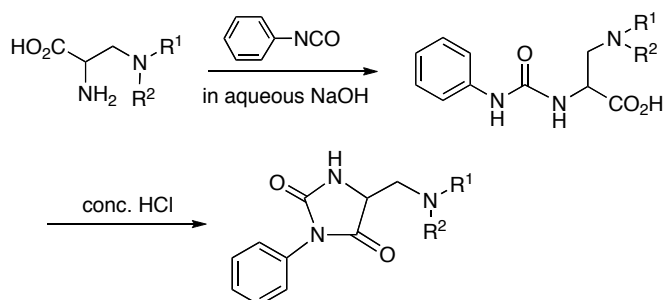
207 First Synthesis of Racemic Methylophiopogonanone B and Its Inhibitory Activity of Hypoxia-Inducible Factor-1 α

Mikio Fujii, Kiyoshi Egawa, Yasuaki Hirai, Masato Kondo, Hiroyuki Akita, Kiyoshi Nose, Kazuo Torizuka, and Yoshiteru Ida*


 Methylophiopogonanone B Homoisoflavone Ophiopogonis Tuber HIF-1 α Angiogenesis

213 A Synthetic Application of β -Aminoalanines to Some New 5-Dialkylaminomethyl-3-phenylhydantoin Derivatives

Fumiko Fujisaki, Kaori Shoji, and Kunihiro Sumoto*


 β -Aminoalanine Hydantoin Methylenehydantoin Deamination Urea

■ NEW HETEROCYCLIC NATURAL PRODUCTS

- 221 Polyketides
 - 226 Aromatics
 - 235 Terpenes
 - 250 Steroids
 - 251 Alkaloids
 - 258 Miscellaneous
-

■ TOTAL SYNTHESIS OF HETEROCYCLIC NATURAL PRODUCTS

- 261 Polyketides
 - 267 Aromatics
 - 270 Terpenes
 - 271 Alkaloids
 - 279 Miscellaneous
-

Contributors To This Issue

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