

Tetrahedron Letters Vol. 51, No. 31, 2010

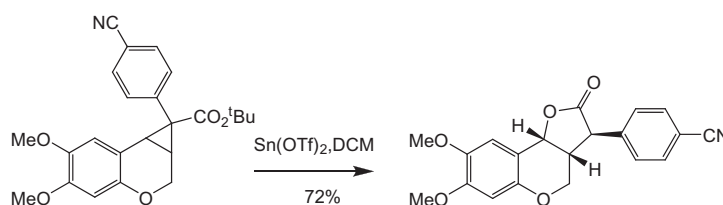
Contents

COMMUNICATIONS

γ -Lactonizations of 2H-chromenes via cyclopropanation

pp 4003–4006

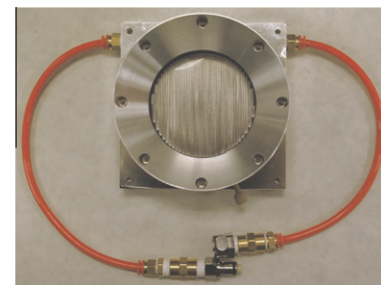
Sean Stokes, Ben Spears, Cameron Laseter, Bobby Barker, Keith T. Mead*



LOPHTOR: a convenient flow-based photochemical reactor

pp 4007–4009

Anil Vasudevan*, Clara Villamil, Jonathan Trumbull, Jeff Olson, David Sutherland, Jeff Pan, Stevan Djuric

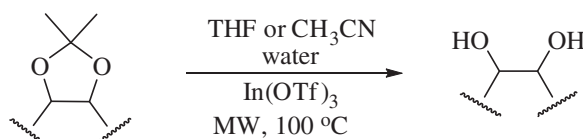


A flow-through photochemical reactor which enables facile control of irradiation time, temperature, and wavelength with minimal manual intervention is described. A series of intramolecular [2+2] enone cycloadditions were performed in this reactor in excellent yield and significantly shorter reaction time than conventional batch processes.

Mild, versatile, and chemoselective indium(III) triflate-catalyzed deprotection of acetonides under microwave heating conditions

pp 4010–4013

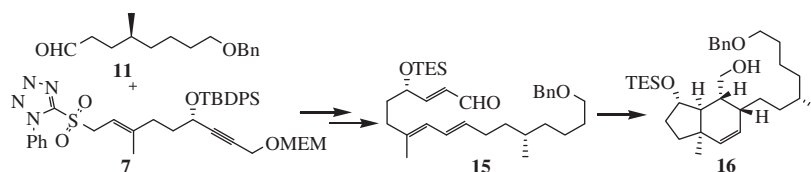
Kathryn C. Golden, Brian T. Gregg*, John F. Quinn



Progress towards the total synthesis of 2,3-dihydroxytrinervitanes

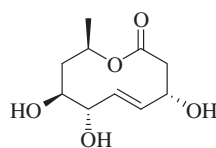
pp 4014–4016

Jhillu Singh Yadav*, Swapan Kumar Biswas, Sandip Sengupta

**First stereoselective total synthesis of decarestrictine O via RCM protocol**

pp 4017–4019

Palakodety Radha Krishna*, T. Jagannadha Rao

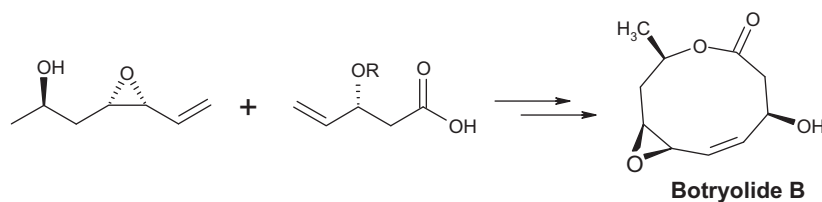
**Decarestrictine O**

Total synthesis of decarestrictine O is reported.

A concise stereoselective total synthesis of Botryolide B

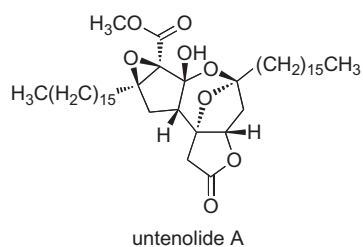
pp 4020–4022

B. Chennakesava Reddy, H. M. Meshram*

**Botryolide B****Untenolide A, a new polyketide from an Okinawan marine sponge *Plakortis* sp.**

pp 4023–4026

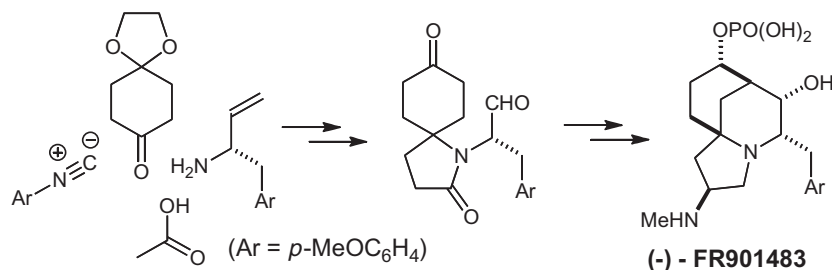
Yuichiro Ishiguro, Takaaki Kubota, Jane Fromont, Motoo Shiro, Jun'ichi Kobayashi*

**untenolide A**

Synthesis of the optically active key intermediate of FR901483

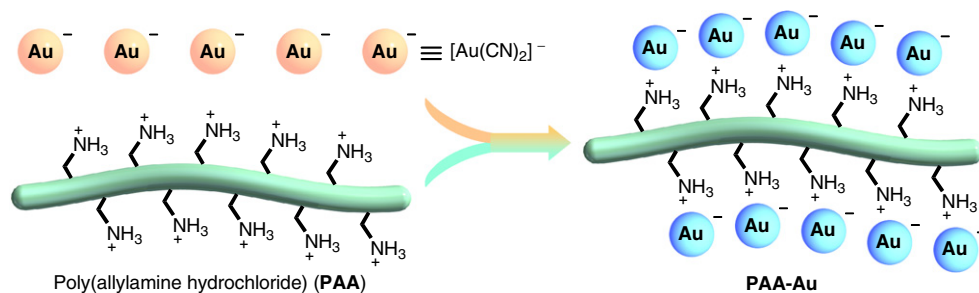
pp 4027–4029

Shigeru Ieda, Toshiyuki Kan, Tohru Fukuyama*

Efficient synthesis of the tricyclic key intermediate **2** for (-)-FR901483 **1** was accomplished using an intramolecular aldol reaction and an Ugi 4CC reaction.**Luminescent properties of dicyanoaurate(I) aggregates based on electrostatic assembly along poly(allylamine hydrochloride)**

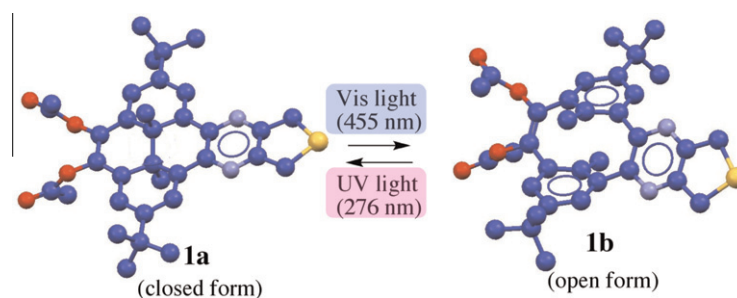
pp 4030–4032

Toshiyuki Moriuchi*, Kazuki Yoshii, Chiaki Katano, Toshikazu Hirao*

**Dihydropyrene annelated with dihydrothieno[3.4-*b*]pyrazine: synthesis and photoswitching property**

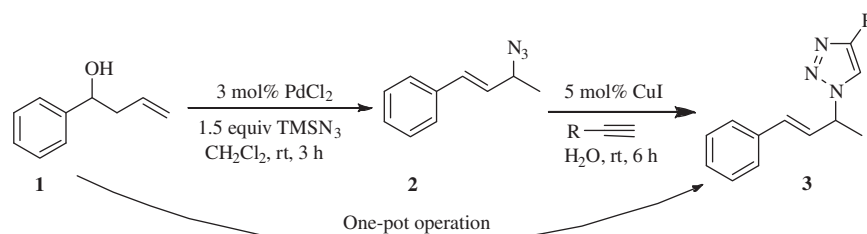
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Tsuayoshi Sawada*, Mizue Kuroki, Tomoya Ogawa, Kentaro Shimojo, Kazufumi Chifuku, Hiroataka Ihara

**Efficient synthesis of allylic azides and one-pot regioselective synthesis of 1,4-disubstituted 1,2,3-triazoles from homoallyl alcohols**

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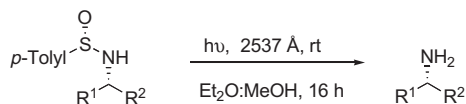
P. Surendra Reddy, V. Ravi, B. Sreedhar*



Photodesulfinylation of optically active *N*-sulfinyl amines

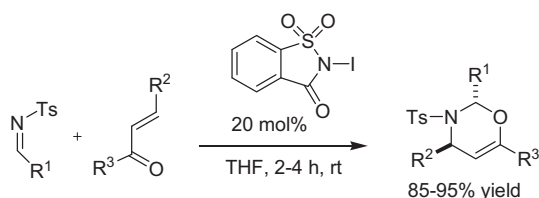
pp 4042–4044

Franklin A. Davis*, Tokala Ramachandar, Yanfeng Zhang, Jing Chai, Hui Qiu, Jianghe Deng, Venkata Velvadapu*

***N*-Iodosaccharin (NISac): a new reusable catalyst for formal [2+4] cycloaddition of imines and enones**

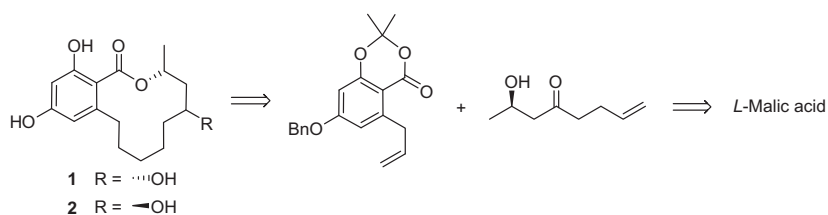
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Ankita Rai, Lal Dhar S. Yadav*

**The first stereo selective total synthesis of (3*R*),(5*R*)-5-hydroxy-de-*O*-methylsiasiodiplodin and its epimer via an RCM protocol**

pp 4050–4052

J. S. Yadav*, Saibal Das, J. Satyanarayana Reddy, N. Thrimurtulu, A. R. Prasad

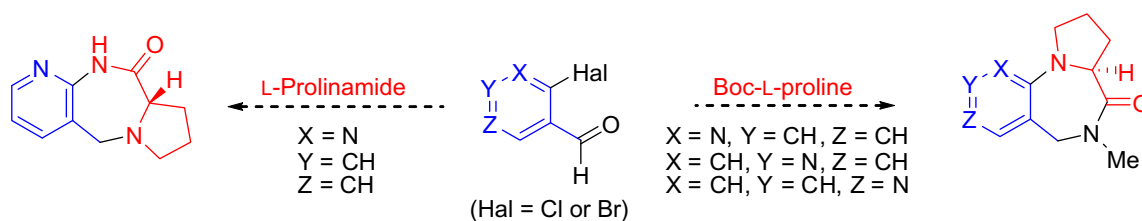


The first total synthesis of (3*R*),(5*R*)-5-hydroxy-de-*O*-methylsiasiodiplodin and its epimer is reported from malic acid. The adopted approach is highly convergent and stereoselective. The strategy utilizes *syn* selective reduction and ring-closing metathesis as the key steps.

Intramolecular *N*-arylation in heterocyclization: synthesis of new pyrido-fused pyrrolo[1,2-*a*][1,4]diazepinones

pp 4053–4057

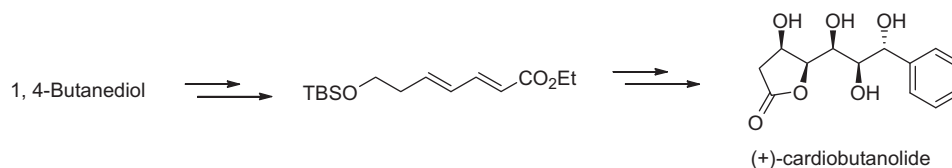
Loreto Legerén, Domingo Domínguez*



Asymmetric total synthesis of (+)-cardiobutanolide via an iterative asymmetric dihydroxylation in PEG

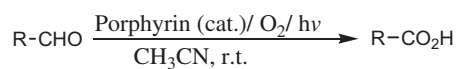
pp 4058–4060

S. Chandrasekhar*, N. Kiranmai

**A new and efficient aerobic oxidation of aldehydes to carboxylic acids with singlet oxygen in the presence of porphyrin sensitizers and visible light**

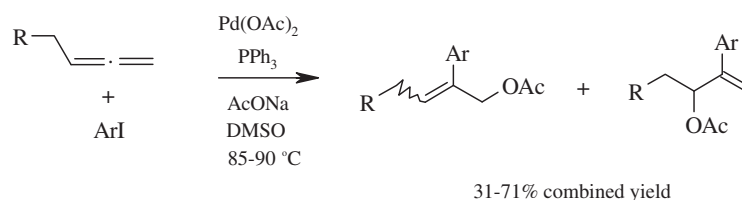
pp 4061–4065

Mahdi Hajimohammadi, Nasser Safari*, Hamid Mofakham, Ahmad Shaabani

**Palladium-catalysed synthesis of allyl acetates from allenes**

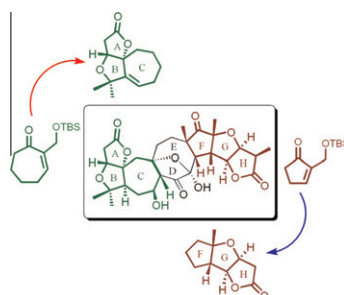
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Suren Husinec, Milka Jadranin, Rade Markovic, Milos Petkovic, Vladimir Savic*, Nina Todorovic

**Studies directed towards the synthesis of schisanartane and related complex nortriterpenoids: construction of models of the peripheral ABC and FGH segments of rubrifloradilactone C**

pp 4069–4072

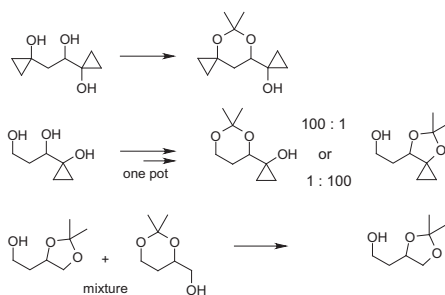
Goverdhan Mehta*, Bilal Ahmad Bhat, T. H. Suresha Kumara



Preparation of isopropylidene acetals from butane-1,2,4-triol and its cyclopropane congeners

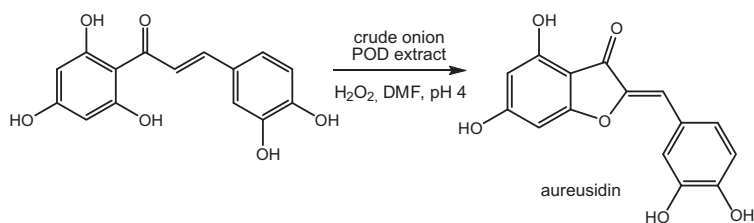
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Konstantin N. Prokhorevich, Andrei V. Bekish*

**Crude peroxidase from onion solid waste as a tool for organic synthesis. Part I: Cyclization of 2',3,4,4',6'-pentahydroxy-chalcone into aureusidin**

pp 4076–4078

Sonia Moussouni, Anastasia Detsi, Maja Majdalani, Dimitris P. Makris, Panagiotis Kefalas*

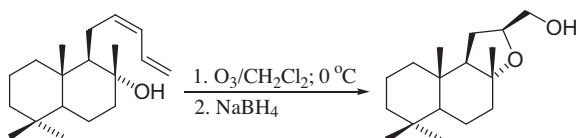


A crude peroxidase (POD) from onion solid waste acts efficiently as a biocatalyst and promotes the oxidative cyclization of 2',3,4,4',6'-pentahydroxy-chalcone (which is not a natural substrate of onion POD) into the natural aurone aureusidin.

Synthesis of a functionalized furan via ozonolysis—further confirmation of the Criegee mechanism

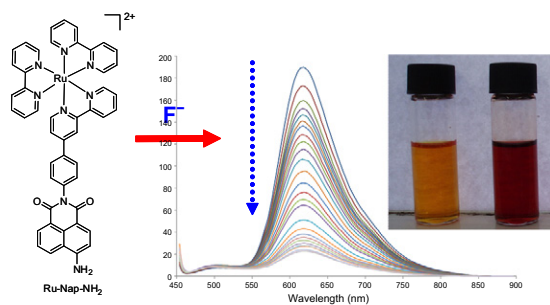
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Veaceslav Kulcički*, Andrea Bourdelais, Tomas Schuster, Daniel Baden

**Luminescence anion sensing via modulation of MLCT emission from a naphthalimide–Ru(II)–polypyridyl complex**

pp 4082–4087

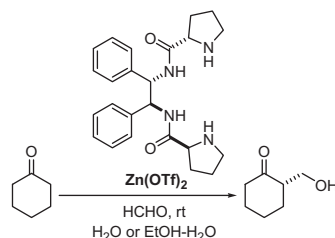
Robert B. P. Elmes, Thorfinnur Gunnlaugsson*



Direct asymmetric α -hydroxymethylation of ketones in homogeneous aqueous solvents

pp 4088–4090

Monika Pasternak, Joanna Paradowska, Maria Rogozińska, Jacek Mlynarski*

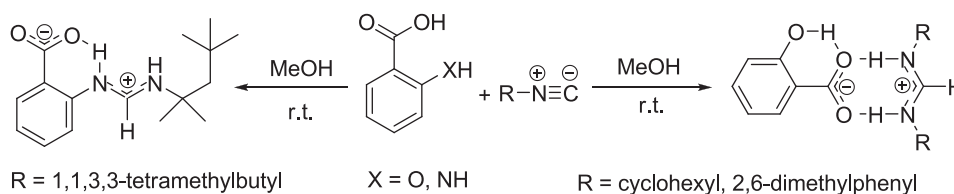


A chiral prolinamide-based zinc complex promotes the aldol reaction of ketones with aqueous formaldehyde, giving the corresponding adducts in good yields and high ees. The efficient direct aldol reaction of formaldehyde with ketones in homogeneous aqueous solution is presented for the first time.

An unexpected coupling reaction between isocyanides and carboxylic acids: a method for the synthesis of highly stable symmetrical and unsymmetrical alkylamidine and arylamidine carbocations

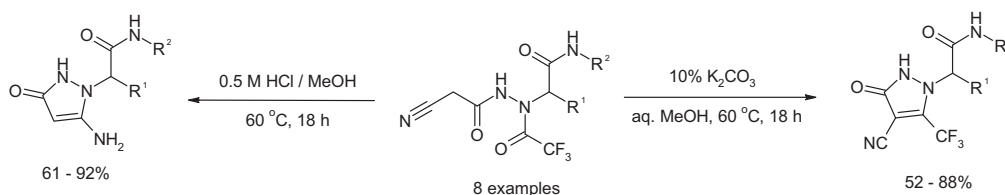
pp 4091–4094

Ahmad Shaabani*, Ali Hossein Rezayan, Afshin Sarvary, Sajjad Keshipour, Hamid Reza Khavasi

**Diversity-oriented pyrazol-3-one synthesis based on hydrazinodipeptide-like units prepared via the Ugi reaction**

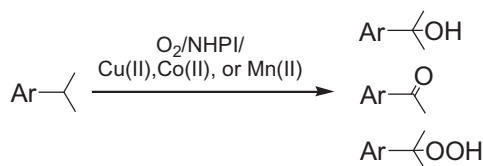
pp 4095–4099

Ekaterina Lakontseva, Mikhail Krasavin*

**N-Hydroxyphthalimide in combination with Cu(II), Co(II) or Mn(II) salts as catalytic systems for the oxidation of isopropyl-aromatic hydrocarbons with oxygen**

pp 4100–4102

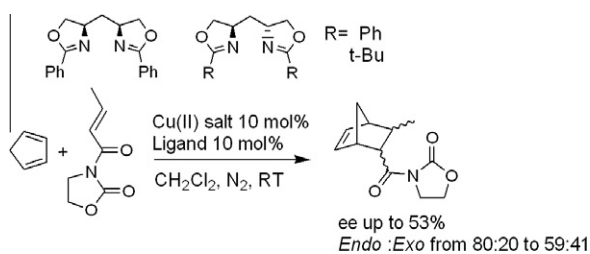
Beata Orlińska*



Preparation, structure and catalytic activity of copper(II) complexes of novel 4,4'-BOX ligands

pp 4103–4106

David Frain, Fiona Kirby, Patrick McArdle, Patrick O'Leary*

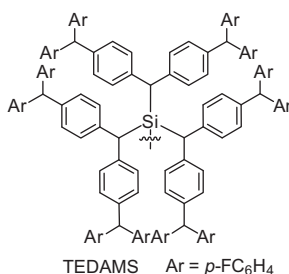


The synthesis of two new bisoxazoline (BOX) ligands is described. The copper(II) complex of one of the new ligands is structurally determined and the catalytic performance in the copper(II)-catalysed Diels–Alder reaction is reported.

A new highly sterically demanding silyl (TEDAMS) group. Synthesis by multiple substitution of tris(diphenylmethyl)silane with diarylcarbenium ions

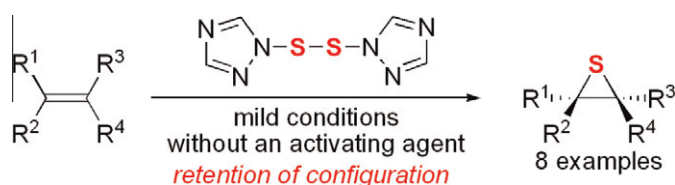
pp 4107–4109

Kimitada Terao, Takashi Watanabe, Takafumi Suehiro, Toshiki Nokami, Jun-ichi Yoshida*

**A novel method for thiiranium of alkenes with 1,1'-dithiobis(1H-1,2,4-triazole)**

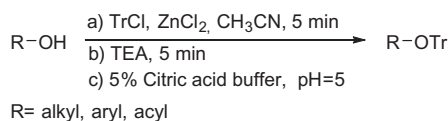
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Yoshiaki Sugihara*, Kaoru Onda, Miho Sato, Takahito Suzuki

**Friedel–Crafts catalysts as assistants in the tritylation of less reactive hydroxyls**

pp 4113–4116

Roberta Bernini, Maurizio Maltese*



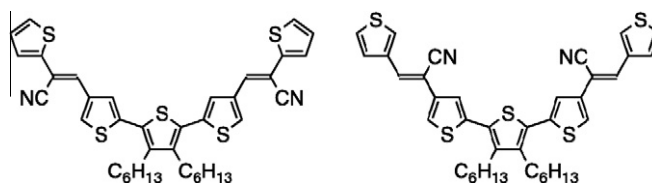
A new, mild, high rate and simple procedure for *O*-tritylation of less reactive hydroxyls in primary and secondary alcohols, phenols and carboxylic acids is described, based on the use of stoichiometric Friedel–Crafts catalysts. Results concerning the use of ZnCl₂ as assistant in acetonitrile are reported.



Synthesis and electronic properties of terthienyls β -substituted by (thienyl)cyanovinylene groups

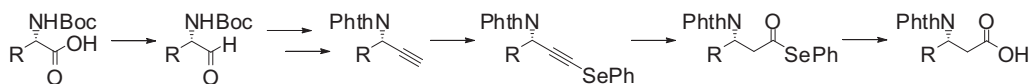
pp 4117–4120

Dora Demeter, Magali Allain, Philippe Leriche*, Ion Grosu, Jean Roncali*

**A reasonably stereospecific multistep conversion of Boc-protected α -amino acids to Phth-protected β^3 -amino acids**

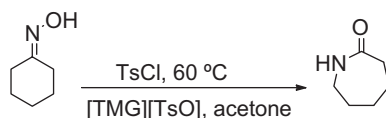
pp 4121–4124

Andrea Temperini*, Antonella Capperucci*, Alessandro Degl'Innocenti, Raffaella Terlizzi, Marcello Tiecco

A selenium-mediated protocol for the homologation of *N*-Boc α -amino acids into the corresponding *N*-phthaloyl β -amino acids has been developed.**A mild and efficient way to prepare ϵ -caprolactam by using a novel salt related with ionic liquids**

pp 4125–4128

Miguel Vilas, Emilia Tojo*

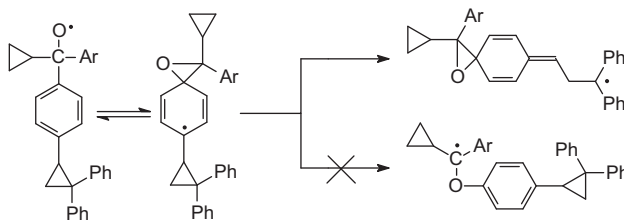


The Beckmann rearrangement of cyclohexanone oxime is carried out by treatment with TsCl using a new salt, [TMG][TsO], as the promoter. This procedure requires mild reaction conditions and affords excellent levels of conversion and selectivity to obtain pure ϵ -caprolactam in a high yield. The new salt is cheap, easy to prepare, not corrosive, and can be recovered and reused.

The *O*-neophyl rearrangement of 1,1-diaryllalkoxy radicals. Experimental evidence for the formation of an intermediate 1-oxaspiro[2,5]octadienyl radical

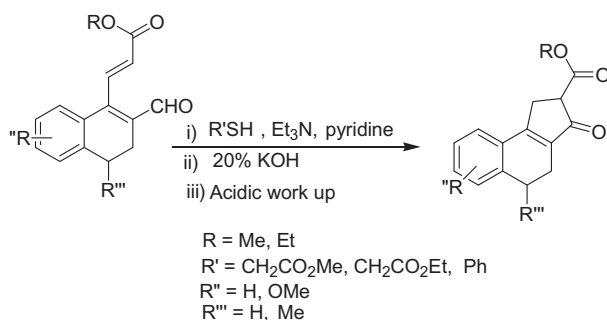
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Massimo Bietti*, Alessandra Calcagni, Daniel Oscar Cicero, Roberto Martella, Michela Salamone



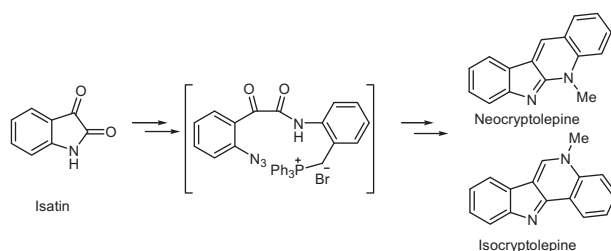
Thiol-mediated tandem Michael–aldol reaction: a convenient method for the synthesis of fused cyclopentenones pp 4132–4136

Shubhankar Samanta, Nasima Yasmin, Debasish Kundu, Jayanta K. Ray*

**A direct synthesis of neocryptolepine and isocryptolepine**

pp 4137–4139

George A. Kraus*, Haitao Guo

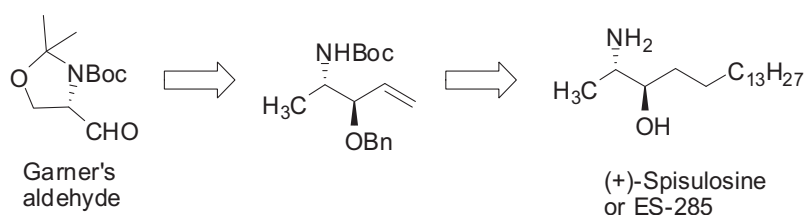


A formal synthesis of indolequinoline alkaloid neocryptolepine and isocryptolepine is described which employed a common intermediate and used an intramolecular Wittig reaction followed by regioselective methylation in excellent yield.

An efficient total synthesis of the anticancer agent (+)-spisulosine (ES-285) from Garner's aldehyde

pp 4140–4142

Partha Ghosal, Arun K. Shaw*

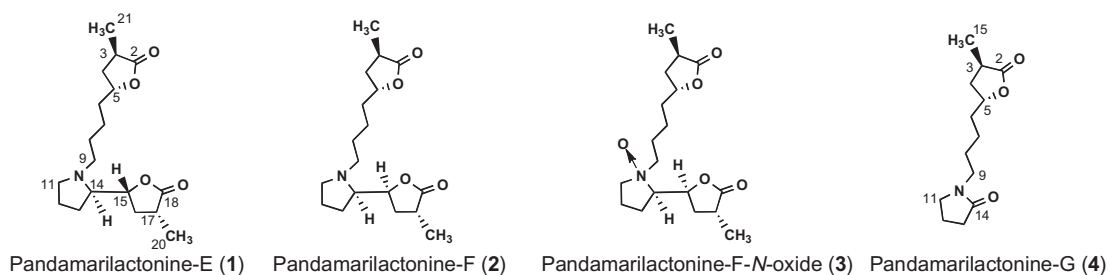


A new approach to the total synthesis of (+)-spisulosine (ES-285) from Garner's aldehyde by a highly diastereoselective Grignard reaction and olefin cross metathesis is described.

**New pyrrolidine alkaloids from the roots of *Pandanus amaryllifolius***

pp 4143–4146

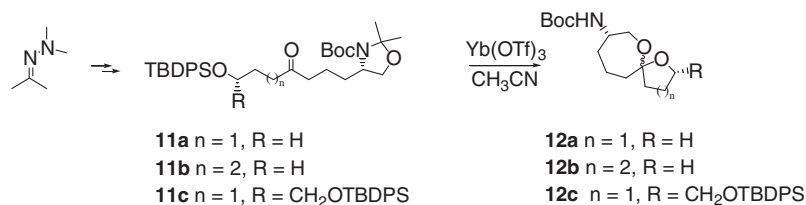
Mario A. Tan, Mariko Kitajima, Noriyuki Kogure, Maribel G. Nonato, Hiromitsu Takayama*



An entry to 1,6-dioxaspiro[4.6]undecanes and 1,7-dioxaspiro[5.6]dodecanes

pp 4147–4149

Anthony Ollivier, Marie-Eve Sinibaldi*, Loïc Toupet, Mounir Traïkia, Isabelle Canet*

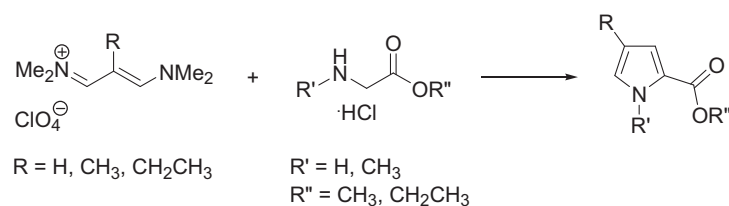


Ketones **11a–c** obtained from acetone *N,N*-dimethylhydrazone were quantitatively transformed under $Yb(OTf)_3$ treatment into 1,6-dioxaspiro[4.6]undecanes **12a,c** and 1,7-dioxaspiro[5.6]dodecanes **12b**.

Synthesis of alkylpyrroles by use of a vinamidinium salt

pp 4150–4152

Mathew T. Wright, David G. Carroll, Timothy M. Smith, Stanton Q. Smith*



*Corresponding author

Supplementary data available via ScienceDirect

COVER

The cover figures show the structure, X-ray crystal structure, and crystal lattice structure of untenolide A, a new polyketide isolated from an Okinawan marine sponge *Plakortis* species.

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