

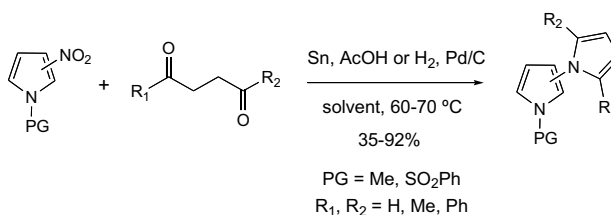
Contents

COMMUNICATIONS

Synthesis of 1,2'- and 1,3'-bipyrroles from 2- and 3-nitropyrroles

pp 3545–3548

Liangfeng Fu, Gordon W. Gribble \*

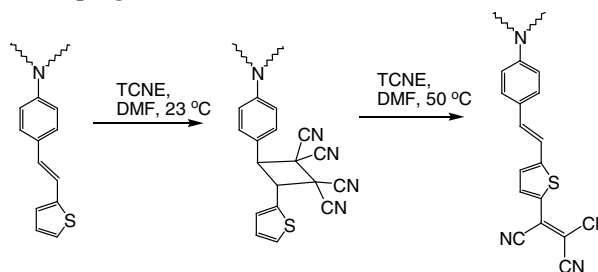


1,2'- and 1,3'-Bipyrroles, which are attractive precursors for the synthesis of bipyrrole-based natural products, are synthesized in one-pot from 2- and 3-nitropyrroles by a sequential nitro group eduction—Paal–Knorr pyrrole synthesis.

NMR studies of the reaction between amino-phenylene vinylene thiophene and tetracyanoethylene

pp 3549–3553

Jianfu Ding \*, Gilles P. Robertson, Jianping Lu

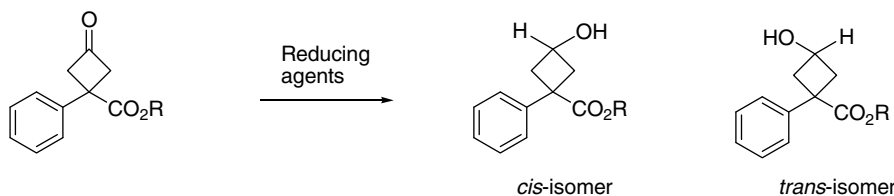


PVT groups in polymers and in a model compound react with TCNE quickly in DMF at room temperature to form [2+2] cycloaddition products, which convert to substitution products at 50 °C.

Stereoselective synthesis of *cis*- and *trans*-3-fluoro-1-phenylcyclobutyl amine

pp 3554–3557

Pengcheng P. Shao \*, Feng Ye



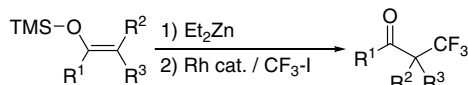
R = Me,  
reducing agent: NaBH<sub>4</sub>,      *cis:trans* = 1:16  
L-selectride                      *cis:trans* = 1:2

R = H,  
reducing agent: NaBH<sub>4</sub>,      *cis:trans* = 1:1  
L-selectride                      *cis:trans* = 15:1

**Zn-mediated rhodium-catalyzed  $\alpha$ -trifluoromethylation of ketones via silyl enol ethers**

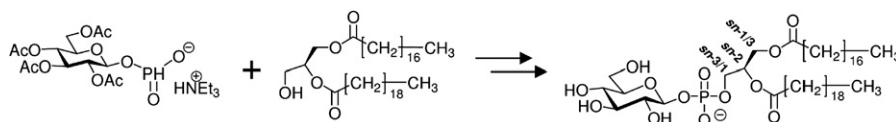
pp 3558–3561

Kazuyuki Sato, Takashi Yuki, Atsushi Tarui, Masaaki Omote, Itsumaro Kumadaki, Akira Ando \*

**First synthesis of natural phosphatidyl- $\beta$ -D-glucoside**

pp 3562–3566

Peter Greimel, Yukishige Ito \*

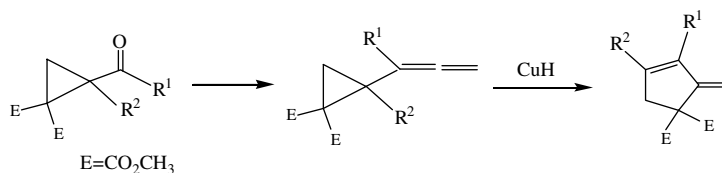


Chemical syntheses of phosphatidylglucoside (PtdGlc) and its derivatives were achieved via an H-phosphonate intermediate. The proposed structure of natural PtdGlc was confirmed. The suggested presence of *sn*-2-epimer in natural sample was validated.

**Novel copper hydride-promoted 1,3-rearrangement of  $\alpha$ -allenylcyclopropane systems to methylenecyclopentenes**

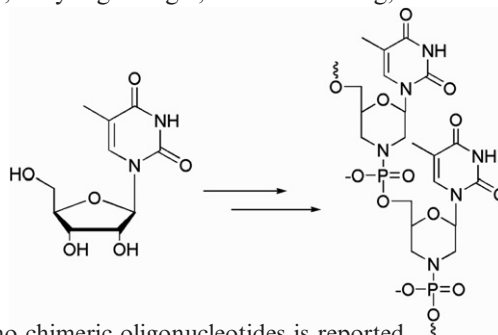
pp 3567–3569

Kunio Hiroi \*, Fumiko Kato, Takamasa Oguchi, Shinya Saito, Takanori Sone

**Synthesis and properties of morpholino chimeric oligonucleotides**

pp 3570–3573

Nan Zhang, Chunyan Tan, Puqin Cai, Yuyang Jiang \*, Peizhuo Zhang, Yufen Zhao



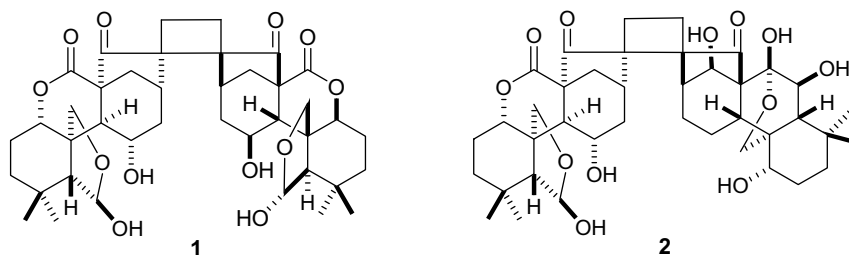
The synthesis and properties of morpholino chimeric oligonucleotides is reported.



**Symmetric and asymmetric *ent*-kaurane dimers isolated from *Isodon japonicus***

pp 3574–3577

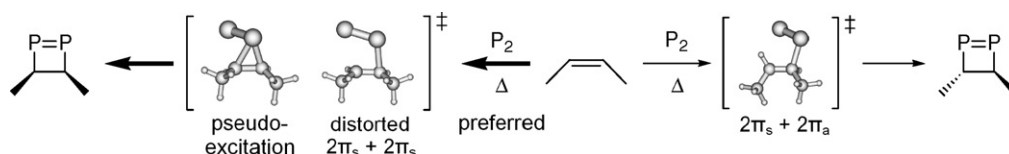
Li-Bin Yang, Jing Yang, Li-Mei Li, Chun Lei, Yong Zhao, Sheng-Xiong Huang, Wei-Lie Xiao, Quan-Bin Han, Jian-Xin Pu \*, Han-Dong Sun \*



**Stereospecific [2+2] cycloaddition reactions of diphosphorus with alkenes**

pp 3578–3581

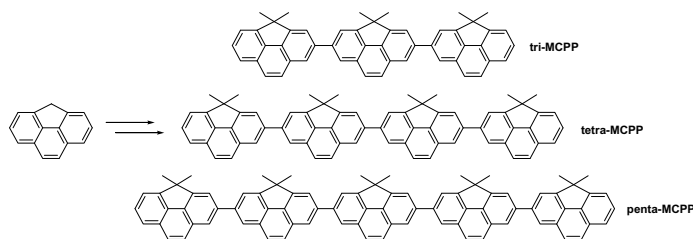
Shota Nagasaki, Satoshi Inagaki \*



**Novel cyclopenta[def]phenanthrene based blue emitting oligomers for OLEDs**

pp 3582–3587

Suhee Song, Youngeup Jin, Kwanghyun Kim, Sun Hee Kim, Yoon Bo Shim, Kwanghee Lee, Hongsuk Suh \*

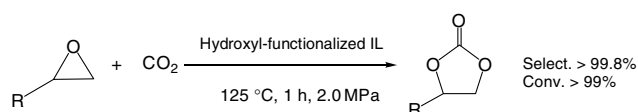


The synthesis of oligo-MCPPs (tri-MCPP, tetra-MCPP, and penta-MCPP) by Suzuki coupling and Yamamoto coupling for OLEDs.

**Hydroxyl-functionalized ionic liquid: a novel efficient catalyst for chemical fixation of CO<sub>2</sub> to cyclic carbonate**

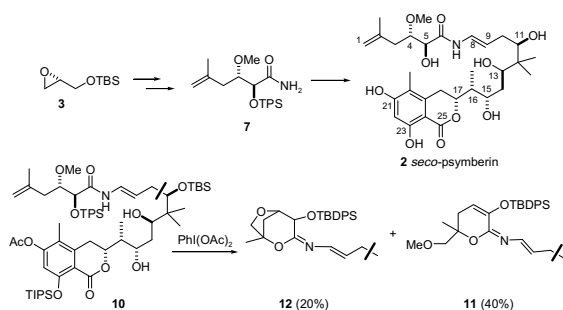
pp 3588–3591

Jian Sun, Suojiang Zhang \*, Weiguo Cheng, Junyi Ren

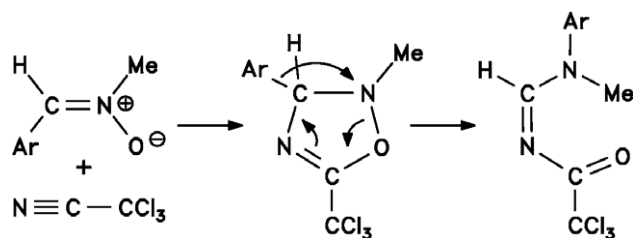


**Synthesis of *seco*-psymberin/irciniastatin A: the discovery of a novel  $\text{PhI}(\text{OAc})_2$  mediated cascade cyclization** pp 3592–3595

Xianhai Huang \*, Ning Shao, Anandan Palani, Robert Aslanian, Alexei Buevich, Cynthia Seidel-Dugan, Robert Huryk

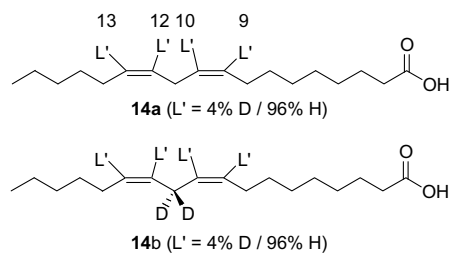

**Synthesis of 5-trichloromethyl- $\Delta^4$ -1,2,4-oxadiazolines and their rearrangement into formamidine derivatives** pp 3596–3599

Gabriele Wagner \*, Tim Garland

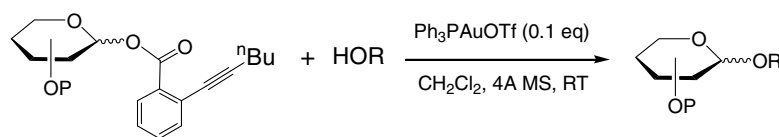

**Synthesis of linoleic acids combinatorially labeled at the vinylic positions as substrates for lipoxygenases** pp 3600–3603

Matthew P. Meyer \*, Judith P. Klinman \*

Mammalian lipoxygenases have been implicated in a number of inflammation-related human diseases. Soybean lipoxygenase-1 is the archetypical example of known lipoxygenases. Here we report the synthesis of linoleic acid and (11,11)-d<sub>2</sub>-linoleic acid which are combinatorially labeled at the vinylic positions (9, 10, 12, and 13). Combinatorial labeling schemes provide substrates for the simultaneous determination of KIEs in enzymatic reactions using NMR.


**An efficient glycosylation protocol with glycosyl *ortho*-alkynylbenzoates as donors under the catalysis of  $\text{Ph}_3\text{PAuOTf}$**  pp 3604–3608

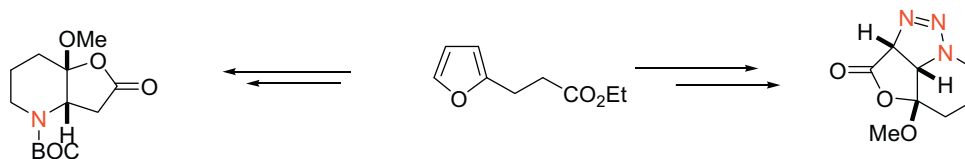
Yao Li, You Yang, Biao Yu \*



**The furan approach to azacyclic compounds**

pp 3609–3612

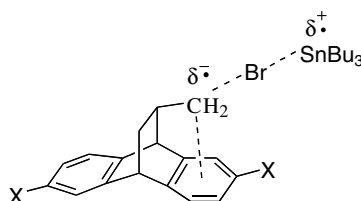
Isela García, Manuel Pérez, Zoila Gándara, Generosa Gómez \*, Yagamare Fall \*



**Remote aromatic stabilization in radical reactions**

pp 3613–3615

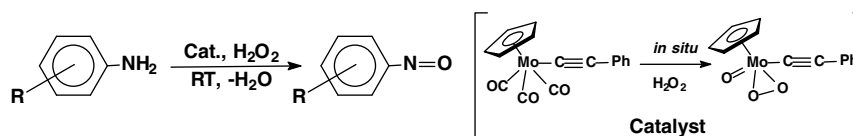
Alfonso Garcia Cabellero, Anna K. Croft \*, Stefano M. Nalli



**Selective N-oxidation of aromatic amines to nitroso derivatives using a molybdenum acetylide oxo-peroxo complex as catalyst**

pp 3616–3619

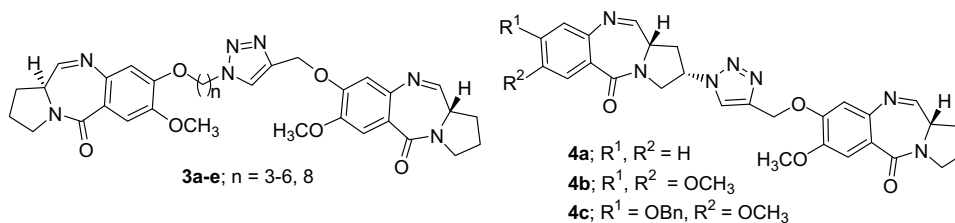
Ankush V. Biradar, Trupti V. Kotbagi, Mohan K. Dongare, Shubhangi B. Umbarkar \*



**Synthesis of C8–C8/C2–C8-linked triazolo pyrrolobenzodiazepine dimers by employing ‘click’ chemistry and their DNA-binding affinity**

pp 3620–3624

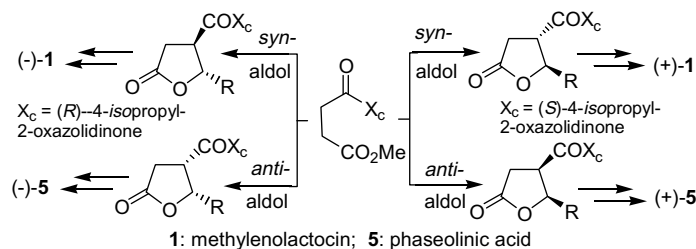
Ahmed Kamal \*, S. Prabhakar, N. Shankaraiah, Ch. Ratna Reddy, P. Venkat Reddy



**Concise syntheses of (+)- and (–)-methylenolactocins and phaseolinic acids**

pp 3625–3627

Saumen Hajra \*, Ananta Karmakar, Aswini Kumar Giri, Sunit Hazra

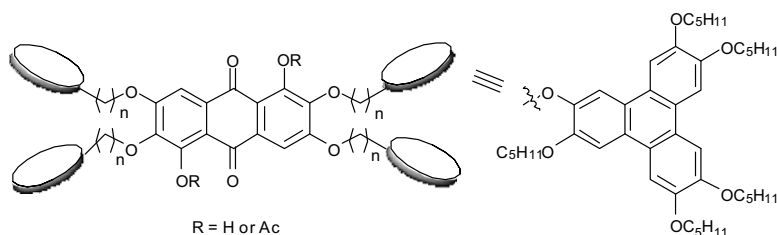


(+)- and (–)-Methylenolactocins and phaseolinic acids are synthesized in four steps via asymmetric *syn*- and *anti*-aldol reactions of chiral *N*-succinyl-2-oxazolidinones using the same set of reagents.

**First examples of monodisperse discotic liquid crystal pentamers: synthesis and mesomorphism**

pp 3628–3631

Hari Krishna Bisoyi, Sandeep Kumar \*

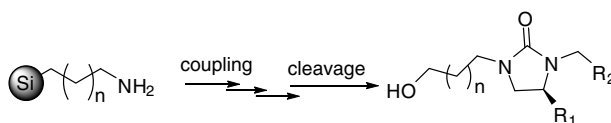


Monodisperse discotic liquid crystalline pentamers have been synthesized for the first time and their mesophase behavior has been investigated by polarized light microscopy, differential scanning calorimetry and X-diffraction studies.


**High-throughput parallel synthesis of 3,4-disubstituted 1-(ω-hydroxyalkyl) imidazolin-2-ones on 'volatilizable' supports**

pp 3632–3633

Yangmei Li, Yongping Yu, Marc Giulianotti, Richard A. Houghten \*

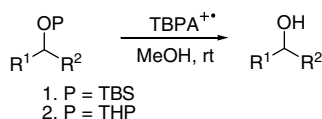


A solid-phase synthesis of 3,4-disubstituted 1-(ω-hydroxyalkyl) imidazolin-2-ones on the 'volatilizable' aminoalkyl functionalized silica gel is reported. The desired products were cleaved by a two-step procedure in good purity and yield.

**A mild and efficient cleavage of *tert*-butyldimethylsilyl (TBS) and tetrahydropyranyl (THP) ethers using a catalytic amount of TBPA<sup>+</sup>SbCl<sub>6</sub><sup>-</sup>**

pp 3634–3637

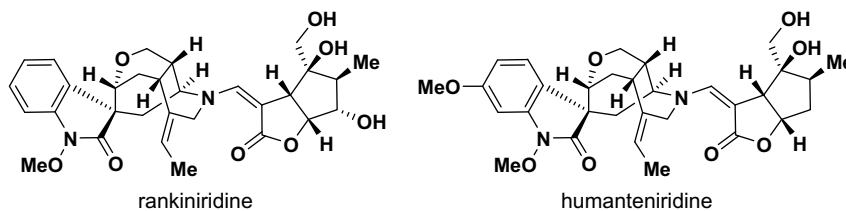
Yanfen Xu, Shouchu Tang, Junjie Han, Xuegong She \*, Xinfu Pan



**New humantenine-type indole alkaloids with iridoid unit from *Gelsemium* species**

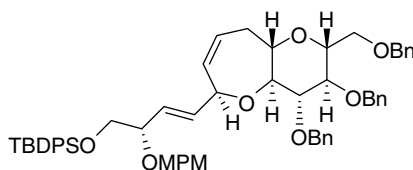
pp 3638–3642

Noriyuki Kogure, Hiromi Kobayashi, Naoko Ishii, Mariko Kitajima, Sumphan Wongseripipatana, Hiromitsu Takayama \*

**A cross-metathesis approach to the stereocontrolled synthesis of the AB ring segment of ciguatoxin**

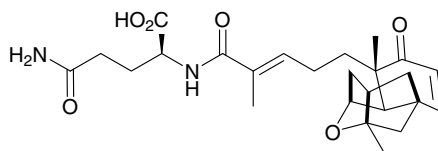
pp 3643–3647

Isao Kadota \*, Takashi Abe, Miyuki Uni, Hiroyoshi Takamura, Yoshinori Yamamoto

**Structure of homoplatensimide A: a potential key biosynthetic intermediate of platensimycin isolated from *Streptomyces platensis***

pp 3648–3651

Hiranthi Jayasuriya, Kithsiri B. Herath, John G. Ondeyka, Deborah L. Zink, Bruce Burgess, Jun Wang, Sheo B. Singh \*

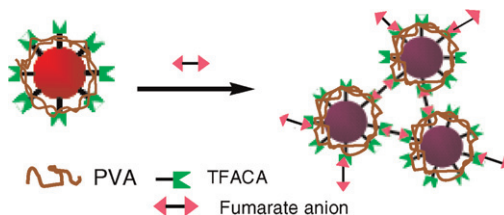


The isolation, structure, biological activity of homoplatensimide A, a new congener of platensimycin has been described. Discovery of homoplatensimide A provides a critical link of the biosynthesis of platensimycin.

**Selective recognition of fumarate from maleate with a gold nanoparticle-based colorimetric sensing system**

pp 3652–3655

Kyung-Seog Youk, Kyung Mi Kim, Amrita Chatterjee, Kyo Han Ahn \*

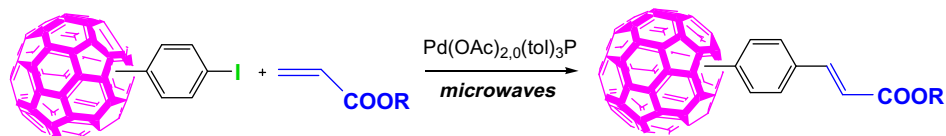


Gold nanoparticles functionalized with *o*-(trifluoroacetyl)carboxanilides selectively sense a *trans*-dicarboxylate (fumarate) from its *cis*-isomer (maleate) and several dicarboxylates depending on substrate concentrations through inter-particle cross-linking, resulting in an apparent color change from red to purple.

**Heck reaction on fullerene derivatives**

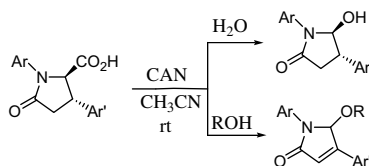
pp 3656–3658

María José Gómez-Escalonilla, Fernando Langa \*

**CAN mediated decarboxylative hydroxylation/alkoxylation of *N*-aryl- $\gamma$ -lactam-carboxylic acids at room temperature: an easy access to *N*-aryl- $\alpha$ -hydroxy/alkoxy- $\gamma$ -lactams**

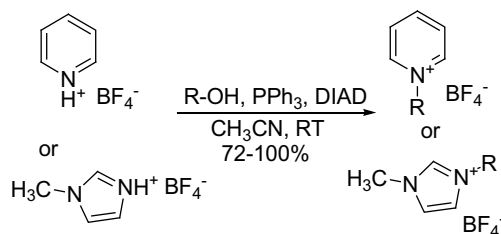
pp 3659–3662

Pranab Haldar, Jayanta K. Ray \*

**An efficient protocol for the preparation of pyridinium and imidazolium salts based on the Mitsunobu reaction**

pp 3663–3665

Sylvain Petit, Rabah Azzouz, Corinne Fruit, Laurent Bischoff \*, Francis Marsais

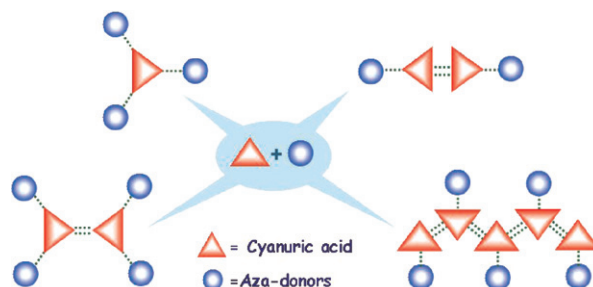


Alcohols can be used directly in an efficient N-alkylation process of nitrogen heterocycles using the Mitsunobu reaction. Various quaternary imidazolium and pyridinium salts were obtained.

**Molecules to supermolecules and self assembly: a study of some cocrystals of cyanuric acid**

pp 3666–3671

S. Marivel, E. Suresh, V. R. Pedireddi \*

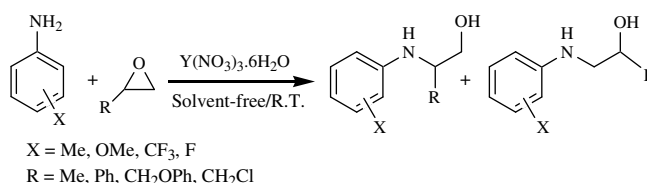




**$Y(NO_3)_3 \cdot 6H_2O$  catalyzed regioselective ring opening of epoxides with aliphatic, aromatic, and heteroaromatic amines**

pp 3672–3676

Mayur J. Bhanushali, Nitin S. Nandurkar, Malhari D. Bhor, Bhalchandra M. Bhanage \*

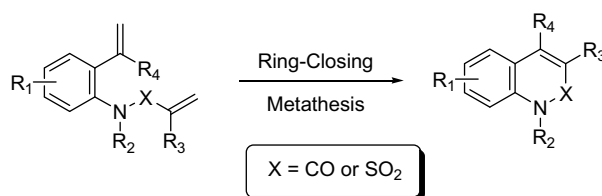


Yttrium nitrate hexahydrate [ $Y(NO_3)_3 \cdot 6H_2O$ ] was found to be an efficient catalyst for selective ring opening of epoxides with aliphatic, aromatic, and heteroaromatic amines at room temperature under solvent-free conditions.

**A general synthesis of quinolinones and benzothiazine 1,1-dioxides via ring closing metathesis**

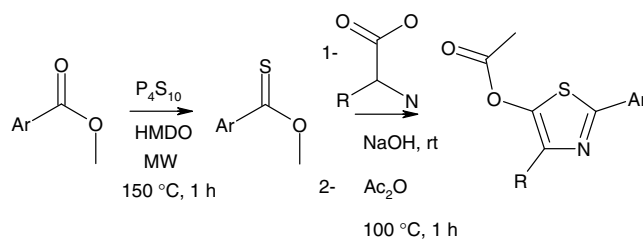
pp 3677–3681

Joannie Minville, Jason Poulin, Claude Dufresne, Claudio F. Sturino \*

**2,4-Disubstituted-5-acetoxythiazoles: useful intermediates for the synthesis of thiazolones and 2,4,5-trisubstituted thiazoles**

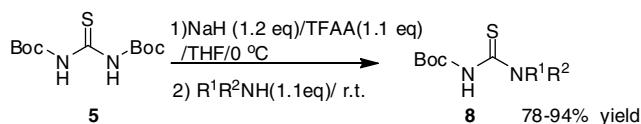
pp 3682–3686

Q. Qiao, R. Dominique \*, R. Goodnow Jr.

**An efficient method for the synthesis of disubstituted thioureas via the reaction of  $N,N'$ -di-Boc-substituted thiourea with alkyl and aryl amines under mild conditions**

pp 3687–3690

Biaolin Yin \*, Zhaogui Liu, Mingjun Yi, Jiancun Zhang \*

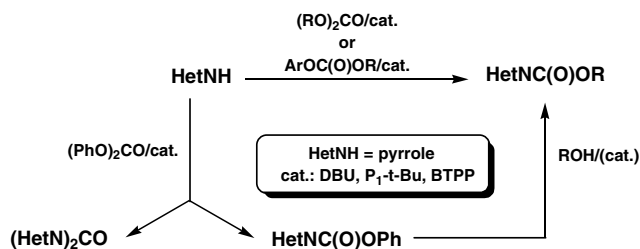


An efficient method for the synthesis of disubstituted thioureas via the reaction of  $N,N'$ -di-Boc-substituted thiourea with alkyl and aryl amines under mild conditions has been developed.

## Superbase-promoted direct N-carboxylation of pyrrole with carbonic acid diesters

pp 3691–3696

Marianna Carafa, Monica Distaso, Valentina Mele, Francesca Trani, Eugenio Quaranta \*

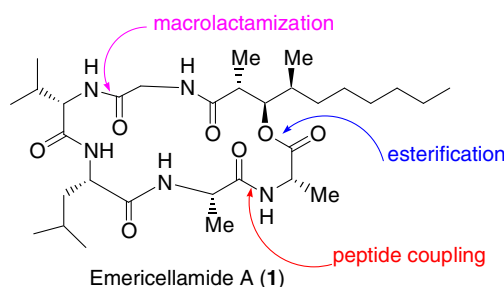


Organic carbonates have been studied as carbonylating agents in the direct reaction with pyrrole.

## The first total synthesis of emericellamide A

pp 3697–3700

Subhash Ghosh \*, Tapan Kumar Pradhan



\*Corresponding author

Supplementary data available via ScienceDirect

## COVER

Rankiniridine is a new type of oxindole alkaloid found in *Gelsemium rankinii* (Loganiaceae), which has a nitrogen–carbon linkage between a humantenine-type monoterpene indole alkaloid and a monoterpene unit having an iridoid skeleton. This natural product was prepared in flask by condensation of two units, that is, rankinidine and gelsemide, which were simultaneously isolated from the same plant.

*Tetrahedron Letters* **2008**, *49*, 3638–3642.

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