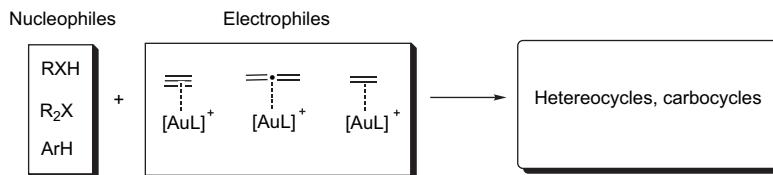


## Contents

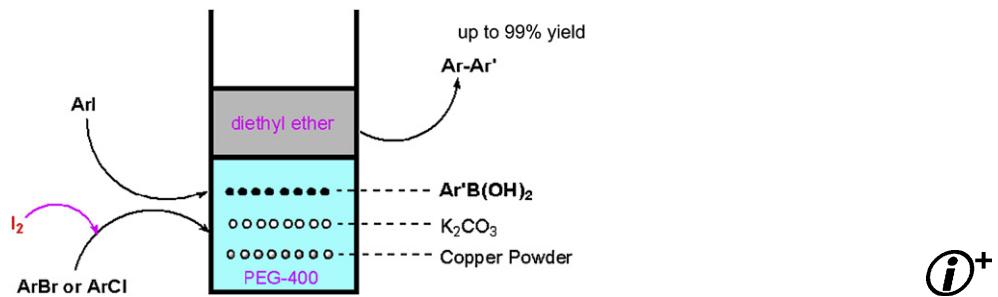
### REPORT

**Recent advances in syntheses of heterocycles and carbocycles via homogeneous gold catalysis. Part 1: Heteroatom addition and hydroarylation reactions of alkynes, alenes, and alkenes** Hong C. Shen pp 3885–3903



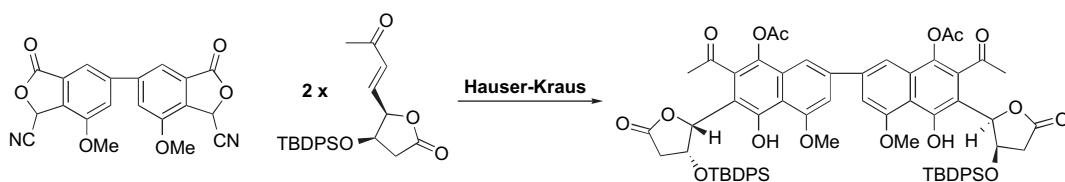
### ARTICLES

**Highly efficient copper(0)-catalyzed Suzuki–Miyaura cross-coupling reactions in reusable PEG-400** Jincheng Mao\*, Jun Guo, Fubing Fang, Shun-Jun Ji\* pp 3905–3911



**An approach to an enantioselective synthesis of crisamicin A via a novel double Hauser–Kraus annulation strategy** Olivier Andrey, Jonathan Sperry, Uffe S. Larsen, Margaret A. Brimble\* pp 3912–3927

Olivier Andrey, Jonathan Sperry, Uffe S. Larsen, Margaret A. Brimble\*

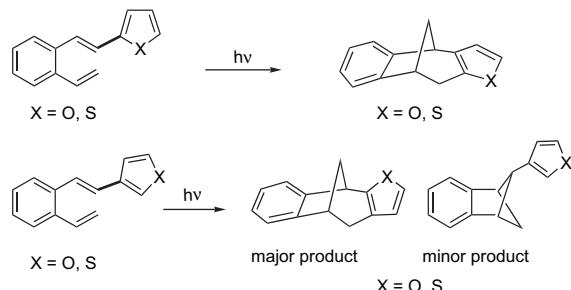


**Photobehaviour of 2- and 3-heteroaryl substituted *o*-divinylbenzenes; formation of fused 2,3- and 3,2-heteroareno-benzobicyclo[3.2.1]octadienes and 3-heteroaryl benzobicyclo[2.1.1]hexenes**

Dragana Vidaković, Irena Škorić, Margareta Horvat, Željko Marinić, Marija Sindler-Kulyk\*

pp 3928–3934

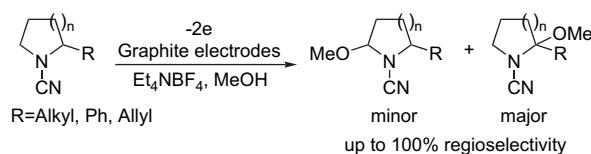
Contrary to 2-furyl- and 2-thienyl-*o*-divinylbenzenes, which show only the 1,6-ring closure, the 3-thienyl- and 3-furyl-derivatives show 1,6- and 1,4-ring closure producing bicyclo[3.2.1]octadiene and bicyclo[2.1.1]hexene derivatives, respectively.



**High regioselectivity in electrochemical  $\alpha$ -methoxylation of *N*-protected cyclic amines**

Samuel S. Libendi, Yosuke Demizu, Yoshihiro Matsumura, Osamu Onomura\*

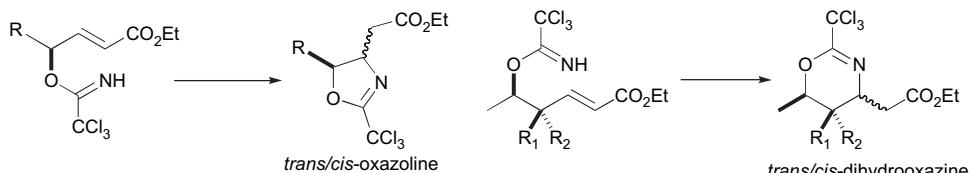
pp 3935–3942



**Intramolecular conjugate addition of  $\gamma$ - and  $\delta$ -trichloroacetimidoyloxy- $\alpha,\beta$ -unsaturated esters in an acyclic system**

Yoshitaka Matsushima\*, Jun Kino

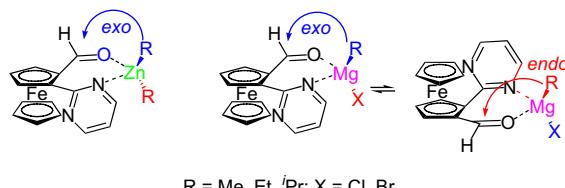
pp 3943–3952



**Diastereoselective addition of organozinc and organomagnesium reagents to 2-(2'-pyrimidyl)ferrocenecarbaldehyde**

Marta Omedes, Pilar Gómez-Sal, Julien Andriès, Albert Moyano\*

pp 3953–3959



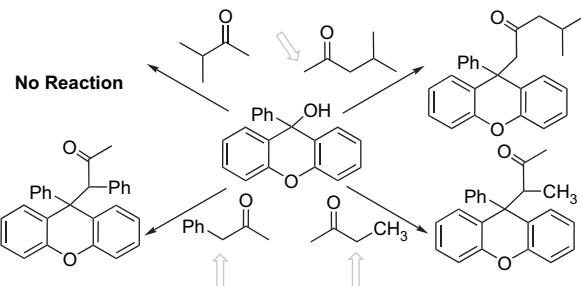
R = Me, Et, iPr; X = Cl, Br

Addition of diisopropylzinc, diethylzinc, and isopropylmagnesium chloride to 2-(2'-pyrimidyl)ferrocenecarbaldehyde, readily available either in racemic form or with high enantiomeric purity, takes place with high diastereoselectivity to afford the  $\alpha$ -ferrocenyl alcohol of ( $R^*,pR^*$ ) configuration.

**Syntheses and regiochemistry of enol addition to 9-phenyl-9H-xanthen-9-ol**  
Veeraburao Kavala, Siva Murru, Gopal Das, Bhisma K. Patel\*

pp 3960–3965

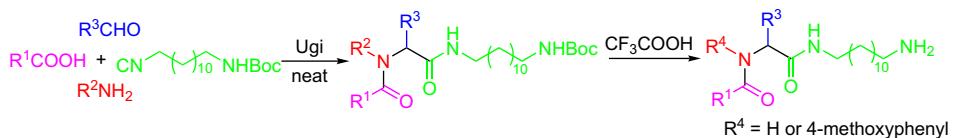
Although thermodynamically stable enol attack is normally observed but when steric factors dominates either kinetically controlled enol addition or no reaction is observed.



**Solvent-free Ugi four-component condensation: application to synthesis of philanthotoxins-12 analogues**

pp 3966–3974

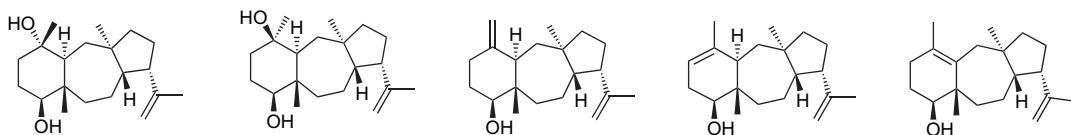
Nianjin Liu, Song Cao\*, Jingjing Wu, Jinlong Yu, Li Shen, Xin Feng, Xuhong Qian\*



**Dolastanes from the brown alga *Dilophus spiralis*: absolute stereochemistry and evaluation of cytotoxicity**

pp 3975–3979

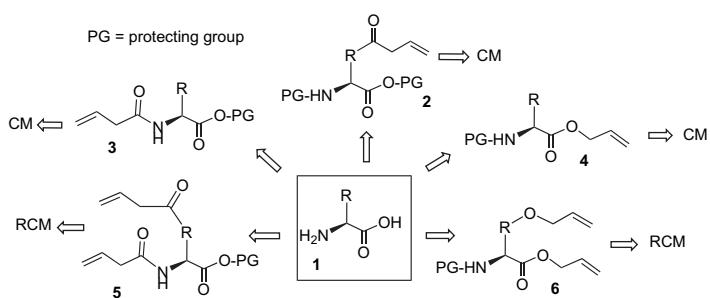
Efstathia Ioannou, Antonio Quesada, Constantinos Vagias, Vassiliou Roussis\*



**Cross-metathesis and ring-closing metathesis reactions of amino acid-based substrates**

pp 3980–3997

Andrea J. Vernall, Steven Ballet, Andrew D. Abell\*



**Facile synthesis of 6*a*-carba- $\beta$ -D-fructopyranose through an RCM approach**  
Sotirios M. Totokotsopoulos, Alexandros E. Koumbis, John K. Gallos\*

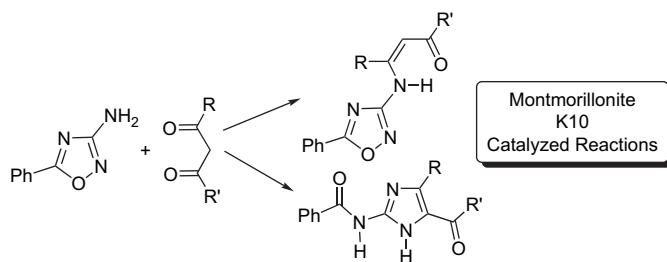
pp 3998–4003



**Synthesis of trifluoromethylated 2-benzoyl- and 2-aminoimidazoles from ring rearrangement of 1,2,4-oxadiazole derivatives**

pp 4004–4010

Antonio Palumbo Piccionello, Andrea Pace, Silvestre Buscemi\*, Nicolò Vivona, Marcella Pani



**New pinene-derived pyridines as bidentate chiral ligands**

pp 4011–4025

Andrei V. Malkov\*, Angus J. P. Stewart-Liddon, Filip Teplý, Lukáš Kobr, Kenneth W. Muir, David Haigh, Pavel Kočovský\*

The reaction scheme shows the synthesis of pinene-derived pyridine ligands. It starts with a pinene-derived pyridine triflate, which undergoes a 1-step reaction to form a methyl ester. This is followed by a 3-step sequence involving a diamine and a phosphorus nucleophile to yield the final ligand. An alternative 2-step route is also shown.

**Facile synthesis of seven to nine-membered-fused tricyclic quinolones and quinolinium salts under phase transfer catalyzed conditions**

pp 4026–4036

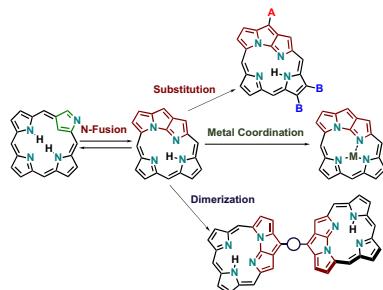
Priyankar Paira, Abhijit Hazra, Krishnendu B. Sahu, Sukdeb Banerjee, Nirup B. Mondal\*, Niranjan P. Sahu, Manuela Weber, Peter Luger

The reaction scheme shows the synthesis of fused tricyclic quinolones and quinolinium salts. It starts with an 8-hydroxy quinoline derivative, which undergoes a multi-step transformation to form a complex fused tricyclic system.

The synthesis of novel fused oxazepino, oxazocino, and oxazonino quinolinium cations and their corresponding quinolones from the reactions of 8-hydroxy quinoline derivatives in a one-pot sequence is described.

**Substitution, dimerization, metalation, and ring-opening reactions of *N*-fused porphyrins**  
 Tomoya Ishizuka, Shinya Ikeda, Motoki Togano, Ichiro Yoshida, Yuichi Ishikawa, Atsuhiro Osuka,  
 Hiroyuki Furuta\*

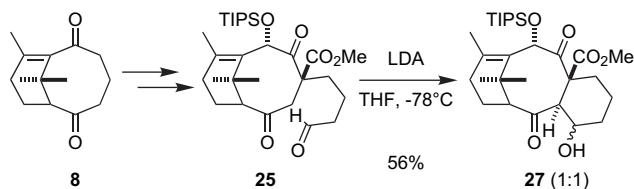
pp 4037–4050



**A novel route for the construction of Taxol ABC-ring framework: skeletal rearrangement approach to AB-ring and intramolecular aldol approach to C-ring**

pp 4051–4059

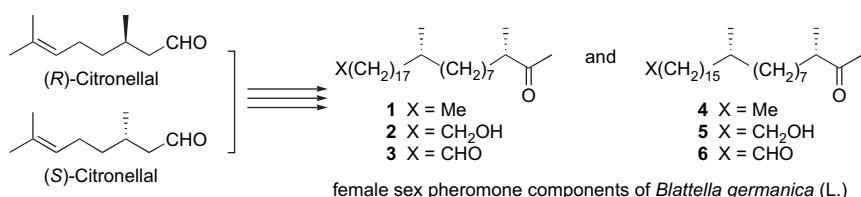
Terumichi Enomoto, Tsumoru Morimoto, Mifuyu Ueno, Takanori Matsukubo, Yumi Shimada, Ken Tsutsumi,  
 Ryuichi Shirai, Kiyomi Kakiuchi\*



**Synthesis of all the six components of the female-produced contact sex pheromone of the German cockroach, *Blattella germanica* (L.)**

pp 4060–4071

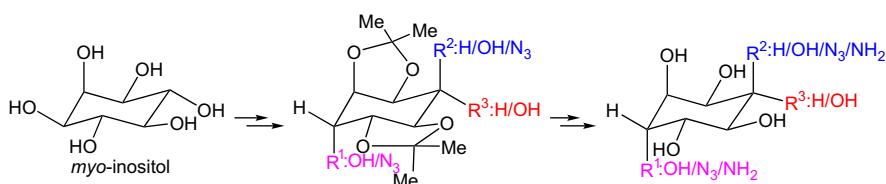
Kenji Mori



**Efficient syntheses of optically pure *chiro-*- and *allo*-inositol derivatives, azidocyclitols and aminocyclitols from *myo*-inositol**

pp 4072–4080

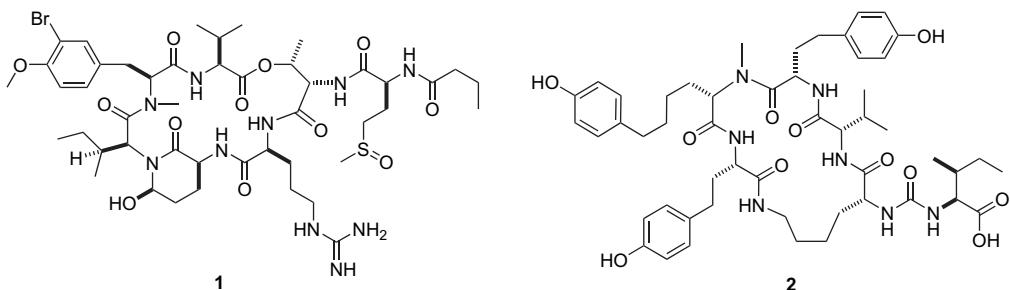
Kana M. Sureshan\*, Kyoko Ikeda, Naoki Asano, Yutaka Watanabe\*



**Pompanopeptins A and B, new cyclic peptides from the marine cyanobacterium *Lyngbya confervoides***

Susan Matthew, Cliff Ross, Valerie J. Paul, Hendrik Luesch\*

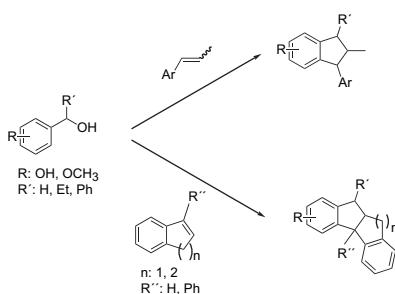
pp 4081–4089



**Scope of the formal [3 + 2] cycloaddition for the synthesis of substituted 3-arylindanes and related compounds**

Beatriz Lantaño, José Manuel Aguirre, Esteban Ariel Ugliarolo, María Laura Benegas, Graciela Yolanda Moltrasio\*

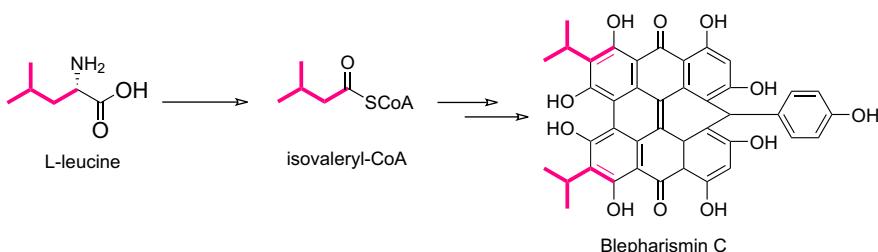
pp 4090–4102



**Starter units of the biosynthesis of blepharismins: self-defense pigments of *Blepharisma japonicum***

Koichi Yoshioka, Sohei Tominaga, Yoshiyuki Uruma, Yoshinosuke Usuki, Hideo Iio\*

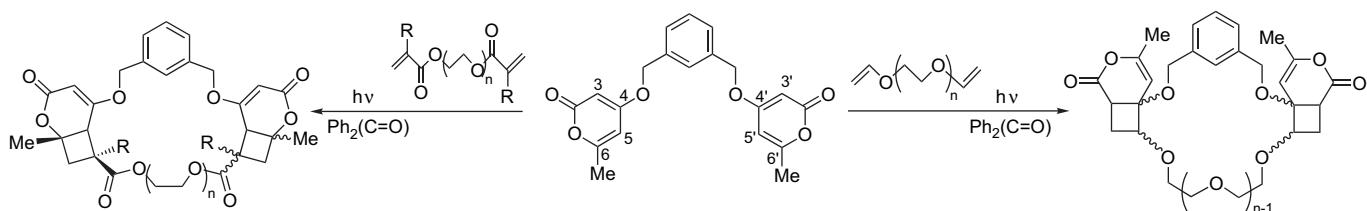
pp 4103–4107



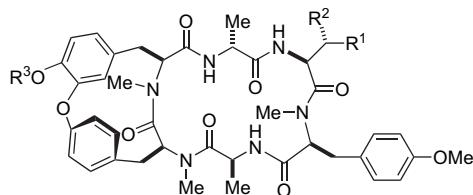
**One-pot synthesis of macrocyclic compounds possessing two cyclobutane rings by sequential inter- and intramolecular [2 + 2] photocycloaddition reactions**

Hideki Miyauchi, Chie Ikematsu, Toshiaki Shimazaki, Shinichiro Kato, Teruo Shinmyozu, Tetsuro Shimo\*, Kenichi Somekawa

pp 4108–4116

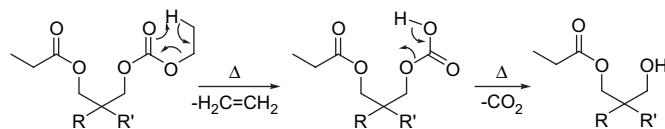


**Structures of cytotoxic bicyclic hexapeptides, RA-XIX, -XX, -XXI, and -XXII, from *Rubia cordifolia* L.** pp 4117–4125  
 Ji-Ean Lee, Yukio Hitotsuyanagi, Koichi Takeya\*

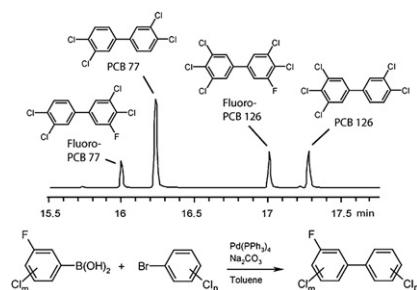


RA-XIX: R<sup>1</sup> = i-Pr, R<sup>2</sup> = H, R<sup>3</sup> = Me  
 RA-XX: R<sup>1</sup> = Me, R<sup>2</sup> = H, R<sup>3</sup> = Me  
 RA-XXI: R<sup>1</sup> = Me, R<sup>2</sup> = H, R<sup>3</sup> = H  
 RA-XXII: R<sup>1</sup> = Me, R<sup>2</sup> = OH, R<sup>3</sup> = H

**Selective pyrolysis of bifunctional compounds: gas-phase elimination of carbonate–ester functionalities** pp 4126–4134  
 Talal F. Al-Azemi\*, Hicham H. Dib, Nouria A. Al-Awadi, Osman M. E. El-Dusouqui



**Synthesis of dioxin-like monofluorinated PCBs: for the use as internal standards for PCB analysis** pp 4135–4142  
 Richard Sott, Christine Hawner, Jon E. Johansen\*



\*Corresponding author

†Supplementary data available via ScienceDirect



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