



Tetrahedron Vol. 64, No. 28, 2008

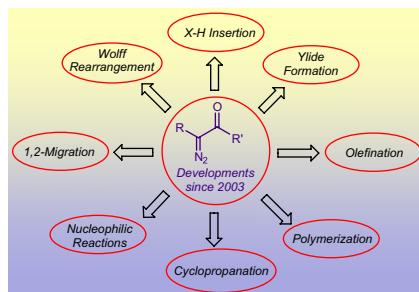
## Contents

## REPORT

Recent studies on the reactions of  $\alpha$ -diazocarbonyl compounds

Zhenhua Zhang, Jianbo Wang\*

pp 6577–6605



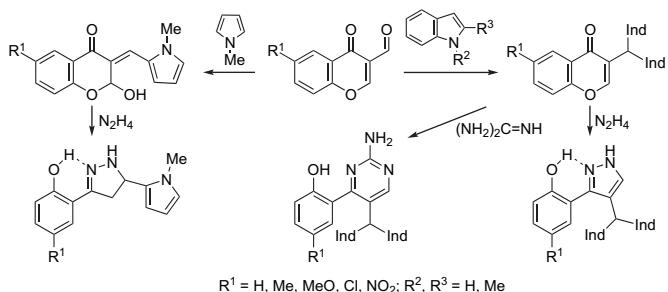
New developments of various reactions of  $\alpha$ -diazocarbonyl compounds have been reviewed in this report, which primarily focuses on the literatures published since 2003.

## ARTICLES

Uncatalyzed addition of indoles and *N*-methylpyrrole to 3-formylchromones: synthesis and some reactions of (chromon-3-yl)bis(indol-3-yl)methanes and *E*-2-hydroxy-3-(1-methylpyrrol-2-ylmethylene)chroman-4-ones

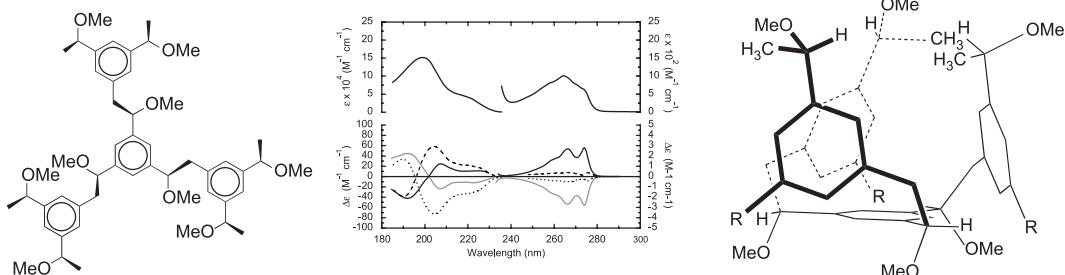
Vyacheslav Ya. Sosnovskikh\*, Roman A. Irgashev, Anna A. Levchenko

pp 6607–6614



**Synthesis and CD spectroscopy of polyethers with homochiral and heterochiral layers of stereocentres**  
Alice R. E. Brewer, Alex F. Drake, Susan E. Gibson\*, Jacob T. Rendell

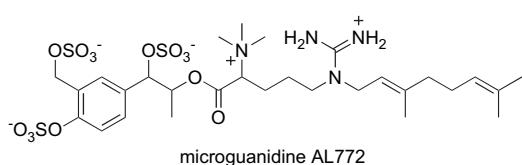
pp 6615–6627



The synthesis of eight polyethers with three to nine stereocentres is described. Homochiral isomers such as the one depicted gave significantly different CD spectra to their heterochiral counterparts.

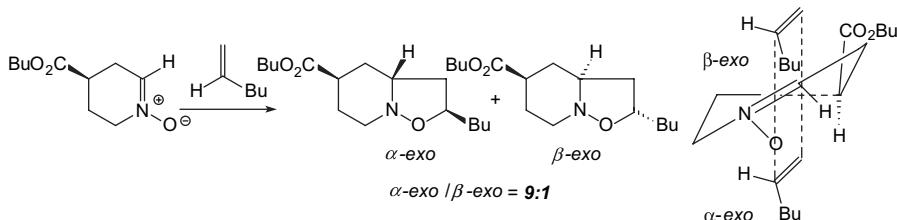
**Three novel metabolites from a bloom of the cyanobacterium *Microcystis* sp.**  
Shiri Gesner-Apter, Shmuel Carmeli\*

pp 6628–6634



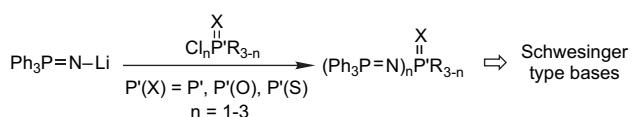
**The face selectivity of 1,3-dipolar cycloaddition reactions of 4-butyloxycarbonyl-3,4,5,6-tetrahydropyridine 1-oxide**  
Alaaeddin Alsbaiee, Shaikh A. Ali\*

pp 6635–6644



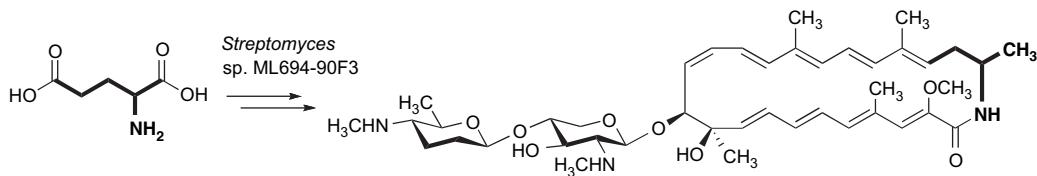
**Reactivity of  $\text{Ph}_3\text{PNLi}$  towards  $\text{P}^{\text{III}}$  and  $\text{P}^{\text{V}}$  electrophiles**  
Nicolas J. Rahier\*, Jean-Noël Volle, Marie Agnès Lacour, Marc Taillefer\*

pp 6645–6650



**Biosynthetic pathway of 24-membered macrolactam glycoside incednine**  
Makoto Takaishi, Fumitaka Kudo, Tadashi Eguchi\*

pp 6651–6656

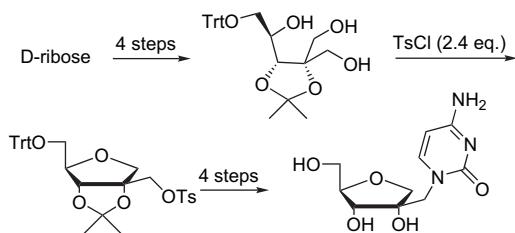


The unique 3-aminobutyrate starter unit of incednine is derived from glutamate.

**Synthesis of 2'-C-methyl-branched isonucleosides**

Tony Bouisset, Gilles Gosselin, Ludovic Griffe, Jean-Christophe Meillon\*, Richard Storer

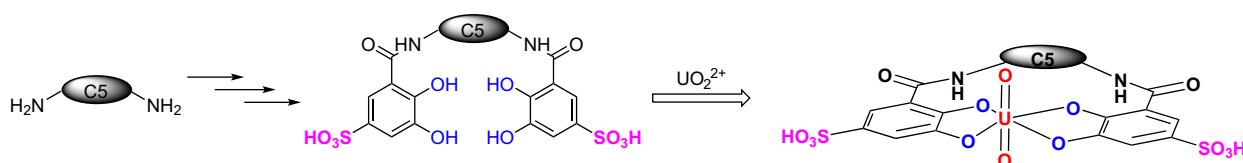
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**Sequestering agent for uranyl chelation: a new family of CAMS ligands**

Antoine Leydier, Delphine Lecerclé, Stéphane Pellet-Rostaing\*, Alain Favre-Reguillon, Frédéric Taran, Marc Lemaire

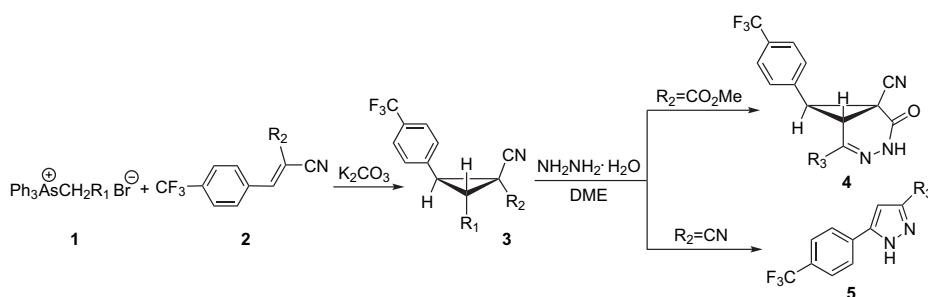
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**A facile preparation of *trans*-1,2-cyclopropanes containing *p*-trifluoromethylphenyl group and its application to the construction of pyrazole and cyclopropane ring fused pyridazinone derivatives**

Weiguo Cao\*, Hui Zhang\*, Jie Chen, Hongmei Deng, Min Shao, Lu Lei, Jiaxian Qian, Yuan Zhu

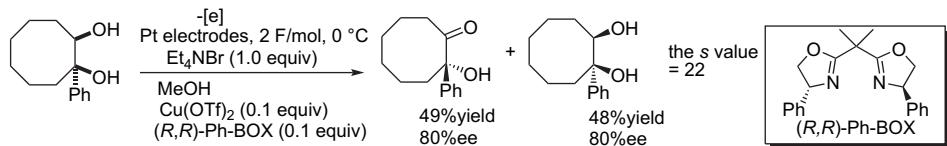
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**Asymmetric electrochemical oxidation of 1,2-diols, aminoalcohols, and aminoaldehydes in the presence of chiral copper catalyst**

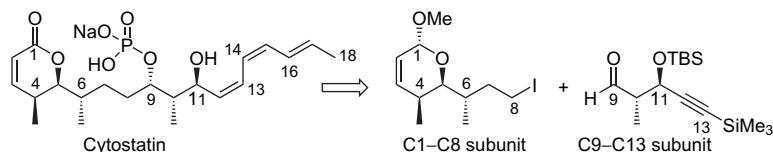
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Daishiro Minato, Hitomi Arimoto, Yoko Nagasue, Yosuke Demizu, Osamu Onomura\*


**Synthetic studies toward cytostatin, a natural product inhibitor of protein phosphatase 2A**

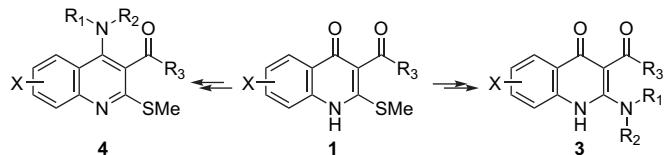
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Anne-Frédérique Salit, Christophe Meyer\*, Janine Cossy\*, Bénédicte Delouvré, Laurent Hennequin


**A methodology for the synthesis of highly functionalized 2- and 4-aminoquinoline derivatives**

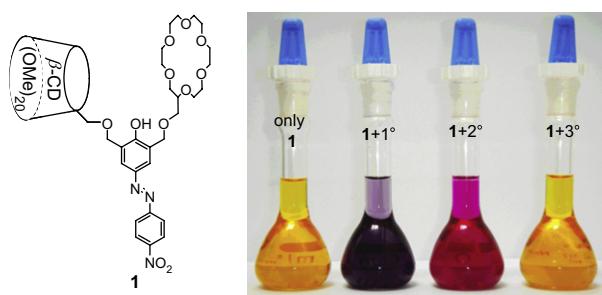
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Bo Hyun Hwang, Sung Hee Park, Eun Bok Choi, Chwang Siek Pak, Hyeon Kyu Lee\*


**A color version of the Hinsberg test: permethylated cyclodextrin and crown-appended azophenol for highly selective sensing of amines**

pp 6705–6710

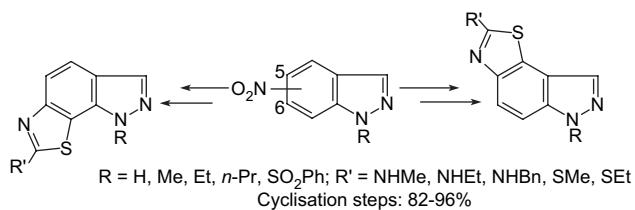
Jong Hwa Jung\*, Hye Young Lee, Sung Ho Jung, Soo Jin Lee, Yoshiteru Sakata, Takahiro Kaneda\*



**An expedient, regioselective synthesis of novel 2-alkylamino- and 2-alkylthiothiazolo[5,4-e]- and -[4,5-g]indazoles and their anticancer potential**

pp 6711–6723

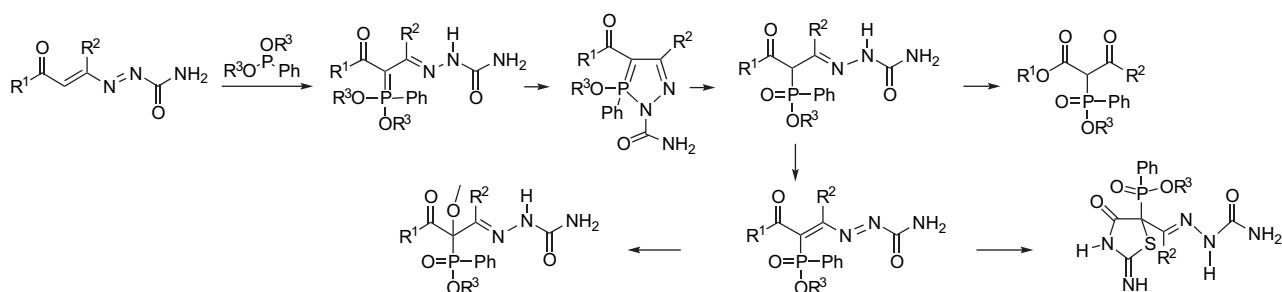
Manas Chakrabarty\*, Taraknath Kundu, Shiho Arima, Yoshihiro Harigaya



**Carbon–phosphorus bond formation and transformation in the reaction of 1,2-diaza-1,3-butadienes with alkyl phenylphosphonites**

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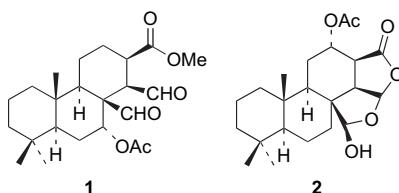
Orazio A. Attanasi\*, Graziano Baccolini, Carla Boga, Lucia De Crescentini\*, Paolino Filippone, Fabio Mantellini



**New oxygenated diterpenes from an Australian nudibranch of the genus *Chromodoris***

pp 6733–6738

Ken W. L. Yong, Angela A. Salim, Mary J. Garson\*

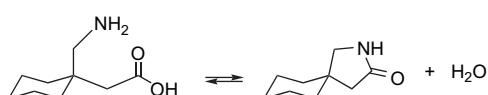


The structure and stereochemistry of some new diterpenes, including **1** and **2**, have been deduced by 2D NMR spectroscopy. NMR studies revealed the rapid formation of lactone-hemiacetal products from dialdehyde **1**.

**Mechanistic investigation on 2-aza-spiro[4,5]decan-3-one formation from 1-(aminomethyl)cyclohexylacetic acid ( gabapentin )**

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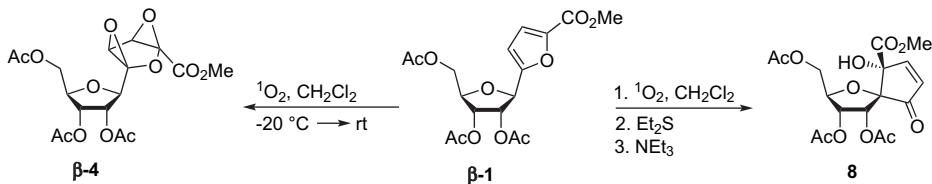
Elena Zambon, Roberto Giovanetti, Livius Cotarca\*, Lucia Pasquato\*



**Dye-sensitized photooxygenation of sugar furans: novel bis-epoxide and spirocyclic C-nucleosides**

Anna Astarita, Flavio Cermola\*, M. Rosaria Iesce, Lucio Previtera

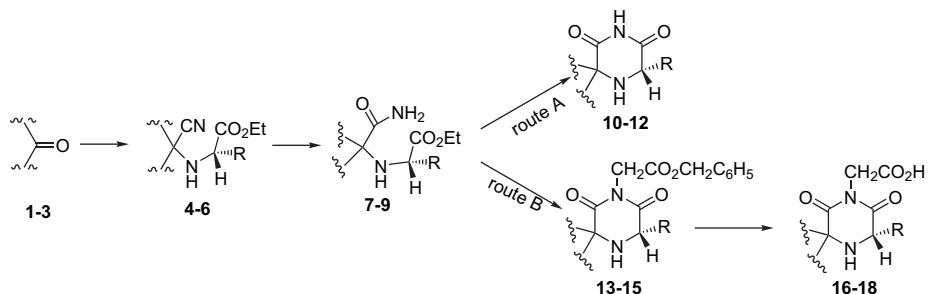
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**A facile and effective synthesis of lipophilic 2,6-diketopiperazine analogues**

Christos Fytas, Grigoris Zoidis, George Fytas\*

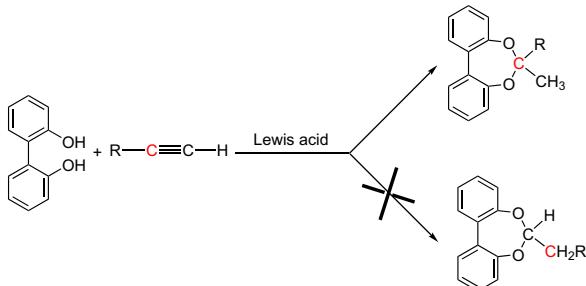
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Adamantane and cyclooctane lipophilic 2,6-diketopiperazines (2,6-DKPs) have been prepared by a simple and effective method, including the synthesis of the corresponding iminodiacetic amido-ester derivatives **7–9** and their transformation either into 1-unsubstituted 2,6-DKPs **10–12**, by a novel base-induced cyclization protocol in a quantitative yield of isolated products (route A), or into the respective 1-functionalized 2,6-DKPs **13–15** (route B), in one pot and in excellent yields.

**InCl<sub>3</sub> and ZrCl<sub>4</sub> catalyzed regioselective reaction of 2,2'-dihydroxybiphenyl with terminal alkynes: synthesis of new dibenzo[d,f][1,3]dioxepines**

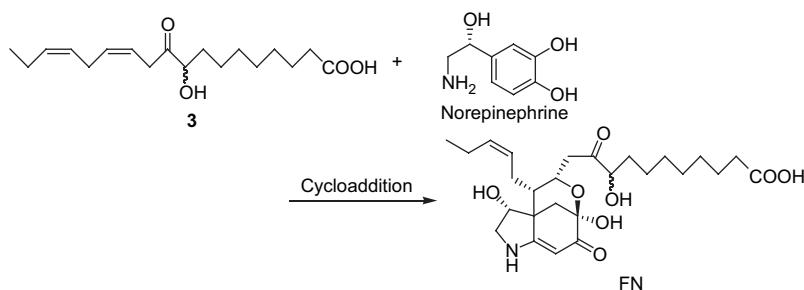
Graziella Tocco\*, Michela Begala, Gabriele Meli, Gianni Podda

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**Structure-activity relationship study of flowering-inducer FN against *Lemna paucicostata***

Kenji Kai, Jun Takeuchi, Taichi Kataoka, Mineyuki Yokoyama, Naoharu Watanabe\*

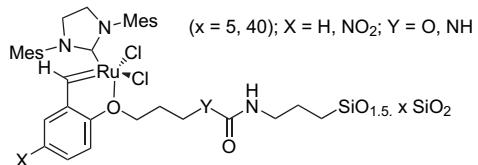
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**Hybrid silica materials derived from Hoveyda–Grubbs ruthenium carbenes. Electronic effects of the nitro group on the activity and recyclability as diene and enyne metathesis catalysts**

Xavier Elias, Roser Pleixats\*, Michel Wong Chi Man

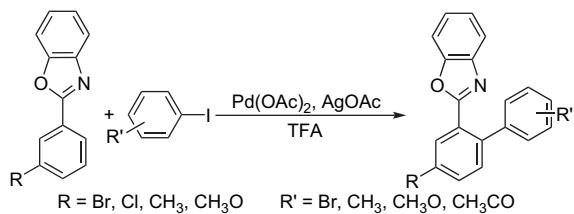
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**Direct *ortho*-arylation of 2-arylbenzoxazoles via C–H activation**

Fan Yang, Yangjie Wu\*, Zhiwu Zhu, Junli Zhang, Yanan Li

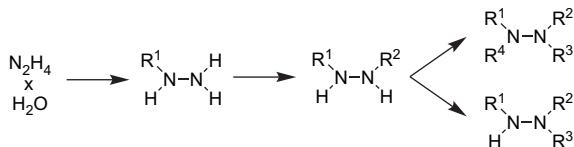
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**Effective strategy for the systematic synthesis of hydrazine derivatives**

Aleksei Bredikhin, Uno Mäeorg\*

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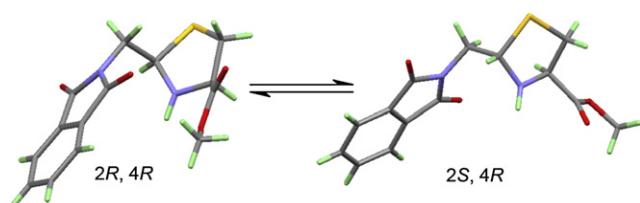


i+

**The synthesis, N-alkylation and epimerisation study of a phthaloyl derived thiazolididine**

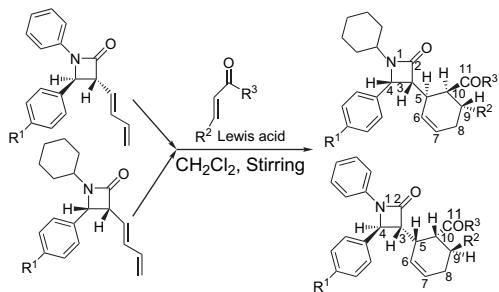
Emma B. Veale\*, John E. O'Brien, Thomas McCabe, Thorfinnur Gunnlaugsson\*

pp 6794–6800



**Regio- and  $\pi$ -facial selective Lewis acid interceded Diels–Alder reactions of  $\alpha$ -dienyl- $\beta$ -lactams: an indepth analysis**  
 Gaurav Bhargava, Amit Anand, Mohinder P. Mahajan\*, Takao Saito, Ken Sakai, Chitrani Medhi

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\*Corresponding author

(i) Supplementary data available via ScienceDirect

**COVER**

New dipodal bis-catecholamide ligands were synthesised as potential chelates for *in vivo* uranium removal. Their binding abilities were determined in aqueous media by UV spectrophotometry under various pH conditions and further studied by  $^1\text{H-NMR}$  analysis of the resonance signal of both aromatics protons of the sulfocatecholamides groups. *Tetrahedron* **2008**, *64*, 6662–6669.

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