

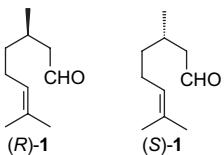
## Contents

## **REPORT**

## Citronellal as key compound in organic synthesis

Eder J. Lenardão,<sup>\*</sup> Giancarlo V. Botteselle, Francisco de Azambuja, Gelson Perin and Raquel G. Jacob<sup>\*</sup>

pp 6671–6712

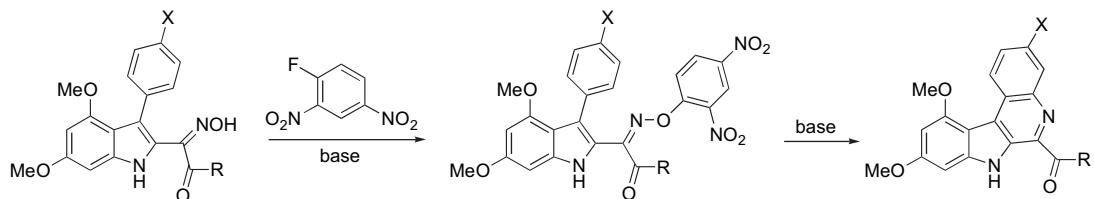


ARTICLES

## Synthesis of indolo[2,3-*c*]quinolines from 3-arylindole-2-ketoximes

Tutik Dwi Wahyuningsih, Naresh Kumar and David StC Black\*

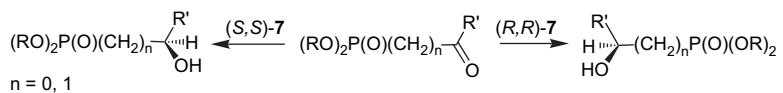
pp 6713–6719



## Efficient method for the asymmetric reduction of $\alpha$ - and $\beta$ -ketophosphonates

V. V. Nesterov and O. I. Kolodiazhnyi\*

pp 6720–6731



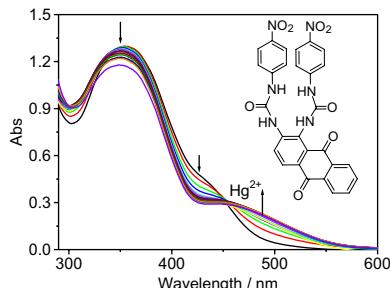
An efficient and versatile method for the asymmetric reduction of  $\alpha$ - and  $\beta$ -ketophosphonates using chiral reactant **7** derived from sodium borohydride and D-(–)- or L-(+)-tartaric acid is developed. The methodology was applied for the preparation of bioactive products: 2,3-epoxyphosphonates, 2,3-aziridinophosphonates, phospho-GABOB, phospho-carnitine, etc.

**A highly selective ratiometric chemosensor for  $Hg^{2+}$  based on the anthraquinone derivative with urea groups**

pp 6732–6736

Hong Yang, Zhi-Guo Zhou, Jia Xu, Fu-You Li,\* Tao Yi and Chun-Hui Huang\*

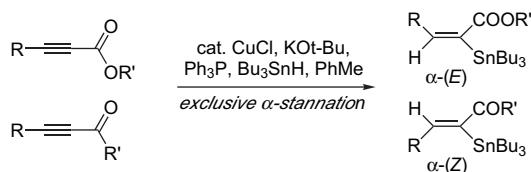
The anthraquinone derivative with electron-withdrawing group ( $-NO_2$ ) showed a high selectivity for  $Hg^{2+}$ .



**Regioselective hydrostannation of activated alkynes catalyzed by in situ generated copper hydride**

pp 6737–6740

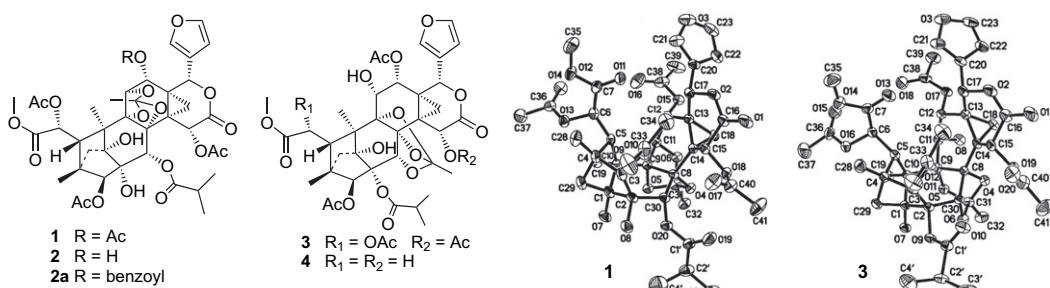
Ru Miao, Shuoliang Li and Pauline Chiu\*



**Tabularisins A–D, phragmalin *ortho* esters with new skeleton isolated from the seeds of *Chukrasia tabularis***

pp 6741–6747

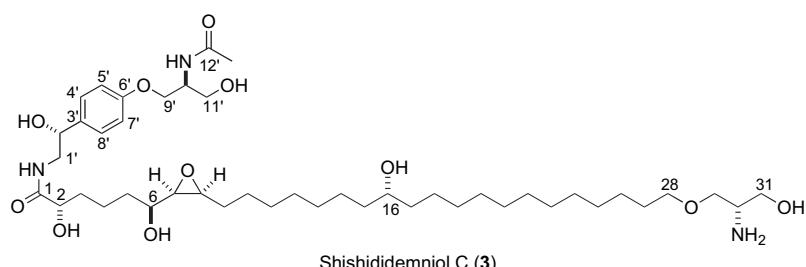
Cheng-Qi Fan, Xiao-Ning Wang, Sheng Yin, Chuan-Rui Zhang, Fang-Dao Wang and Jian-Min Yue\*



**The structures of three new shishididegniols from a tunicate of the family Didemnidae**

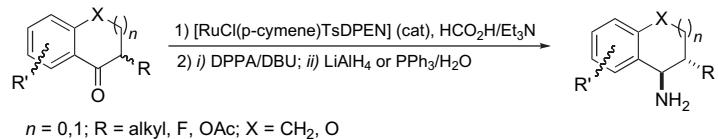
pp 6748–6754

Hirotugu Kobayashi, Yoshinari Miyata, Kohtaro Okada, Tsuyoshi Fujita, Takashi Iwashita, Yoichi Nakao, Nobuhiro Fusetani and Shigeki Matsunaga\*



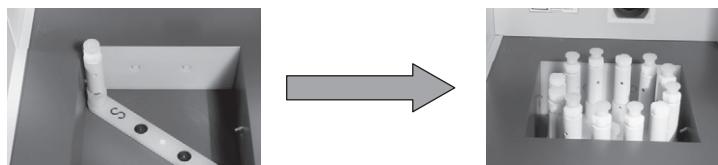
**Enantioselective synthesis of *cis*- $\alpha$ -substituted cycloalkanols and *trans*-cycloalkyl amines thereof**  
Rosario Fernández,\* Abel Ros, Antonio Magriz, Hansjörg Dietrich and José M. Lassaletta\*

pp 6755–6763



**Use of a scientific microwave apparatus for rapid optimization of reaction conditions in a monomode function and then substrate screening in a multimode function** pp 6764–6773

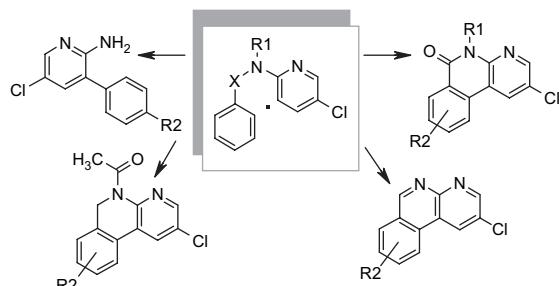
Nicholas E. Leadbeater\* and Jason R. Schmink



**Pyridinium N-2'-pyridylaminide: radical cyclization for the synthesis of benzonaphthyridine derivatives**

pp 6774–6783

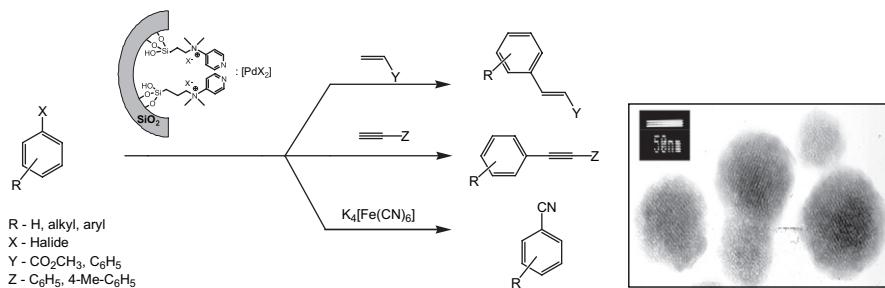
Araceli Núñez, Aránzazu Sánchez, Carolina Burgos\* and Julio Alvarez-Builla\*



**Palladium containing nanostructured silica functionalized with pyridine sites: a versatile heterogeneous catalyst for Heck, Sonogashira, and cyanation reactions**

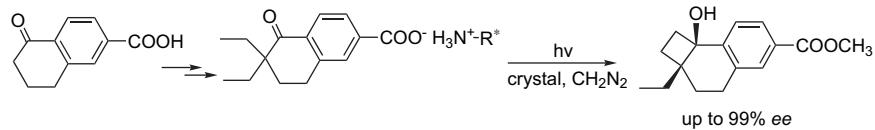
pp 6784–6790

Vivek Polshettiwar, Peter Hesemann\* and Joël J. E. Moreau\*



**Asymmetric synthesis of tricyclic tetralin derivatives via an intramolecular photoreaction**  
Chao Yang, Wu Jiong Xia\* and John R. Scheffer\*

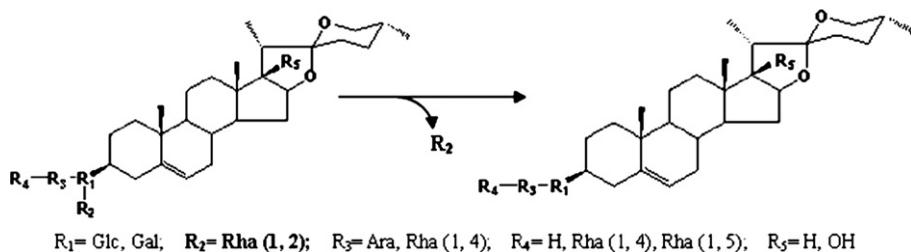
pp 6791–6795



**The substrate specificity of a glucoamylase with steroid saponin-rhamnosidase activity from *Curvularia lunata***

pp 6796–6812

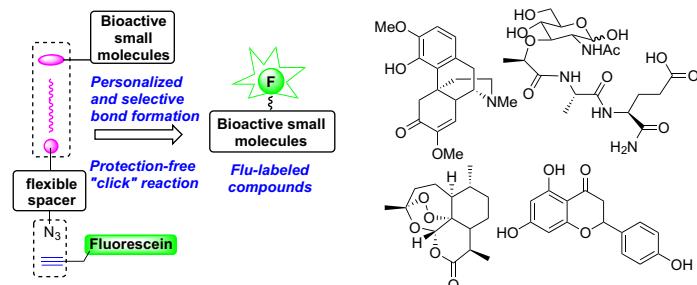
Bing Feng, Li-ping Kang, Bai-ping Ma,\* Bo Quan, Wen-bin Zhou, Yong-ze Wang, Yu Zhao, Yi-xun Liu and Sheng-qi Wang\*



**An inexpensive fluorescent labeling protocol for bioactive natural products utilizing Cu(I)-catalyzed Huisgen reaction**

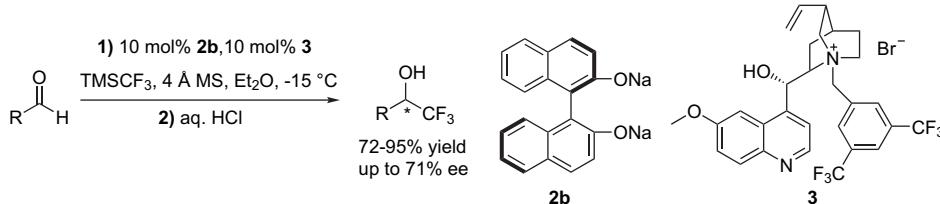
pp 6813–6821

Yan-Hong Zhang, Zheng-Xi Gao, Chun-Long Zhong, Hai-Bin Zhou, Lei Chen, Wen-Min Wu, Xin-Jun Peng and Zhu-Jun Yao\*



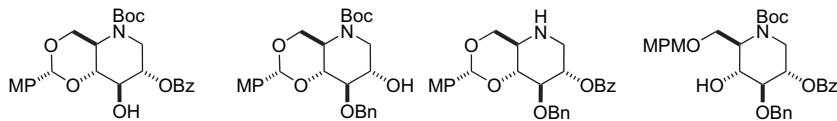
**Enantioselective trifluoromethylation of aromatic aldehydes catalyzed by combinatorial catalysts**  
Haitao Zhao, Bo Qin, Xiaohua Liu and Xiaoming Feng\*

pp 6822–6826



**Selective protecting group manipulations on the 1-deoxynojirimycin scaffold**  
Elisa Danieli, Jérôme Lalot and Paul V. Murphy\*

pp 6827–6834



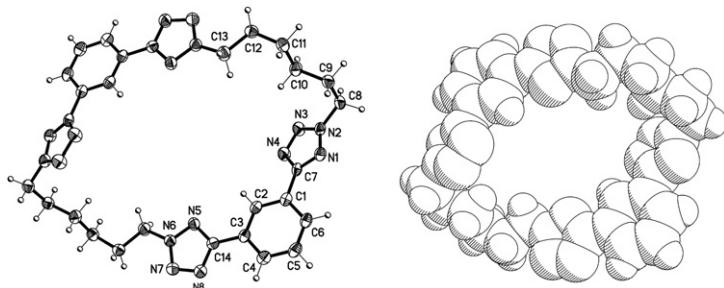
The synthesis of intermediates with the potential for preparation of bioactive compounds based on 1-deoxynojirimycin is described. MP=4-methoxyphenyl; MPM=methoxyphenylmethyl.



**Synthesis and characterisation of tetra-tetrazole macrocycles**

Andrew D. Bond, Adrienne Fleming, Fintan Kelleher, John McGinley,\* Vipa Prajapati and Signe Skovsgaard

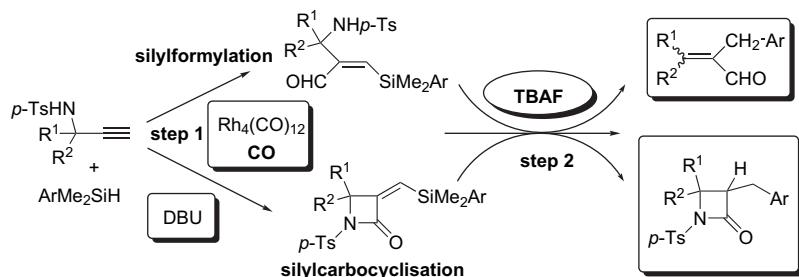
pp 6835–6842



**Silylation–desilylation of propargyl amides: rapid synthesis of functionalised aldehydes and  $\beta$ -lactams**

Laura Antonella Aronica, Giulia Valentini, Anna Maria Caporusso and Piero Salvadori\*

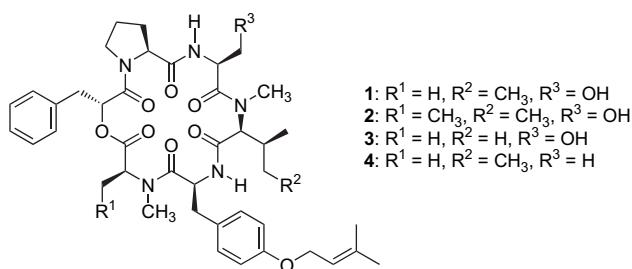
pp 6843–6854



**Antiplasmoidal and antiviral cyclohexadepsipeptides from the endophytic fungus *Pullularia* sp. BCC 8613**

Masahiko Isaka,\* Pitchapa Berkaew, Kamolphan Intereya, Somjit Komwijit and Thiptiwa Sathitkunanon

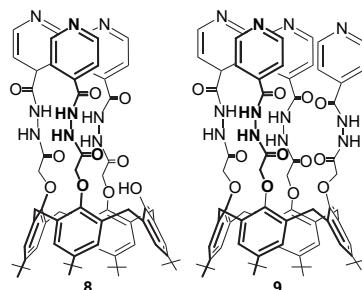
pp 6855–6860



**Synthesis and extraction properties of new ‘proton-switchable’ tri- and tetra-substituted calix[4]arene derivatives bearing pyridinium units pp 6861–6865**

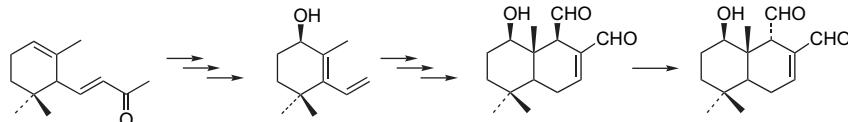
Mustafa Tabakci,\* Shahabuddin Memon and Mustafa Yilmaz

The article describes the synthesis and evaluation of alkali/transition metal cations and dichromate anion extraction abilities of new ‘proton-switchable’ tri- and tetra-substituted *p*-*tert*-butyl-calix[4]arene amides (**8** and **9**) bearing pyridinium moieties.



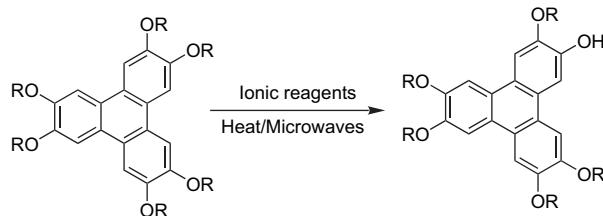
**Enantioselective synthesis of 1-(*R*)-hydroxypolygodial and its 9α epimer, 1-(*R*)-hydroxyisotadeonal pp 6866–6873**

Carmela Della Monica, Giorgio Della Sala, Irene Izzo, Luciano De Petrocellis, Vincenzo di Marzo and Aldo Spinella\*



**Synthesis of monohydroxy-functionalized triphenylene discotics: green chemistry approach pp 6874–6878**

Santanu Kumar Pal, Hari Krishna Bisoyi and Sandeep Kumar\*

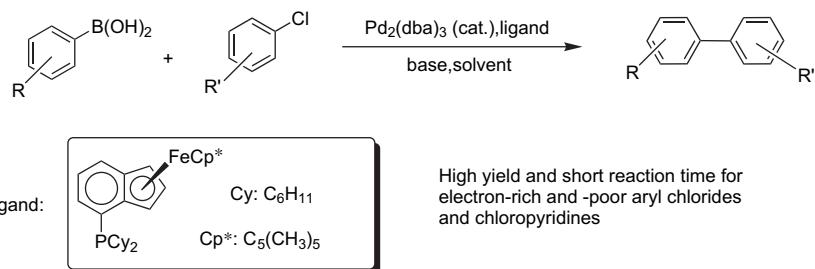


Ionic reagents are used to prepare monohydroxypentaalkoxytriphenylenes, valuable precursors for the synthesis of a variety of discotic liquid crystals, using thermal as well as microwave heating in good yield.



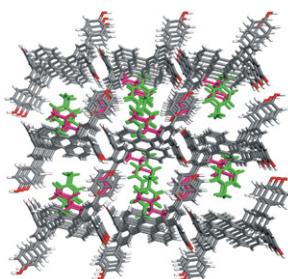
**Efficient palladium-catalyzed Suzuki–Miyaura coupling of aryl chlorides with arylboronic acids using benzoferrocenyl phosphines as supporting ligands pp 6879–6886**

Muralidhara Thimmaiah and Shiyue Fang\*



**Ladder type supramolecular assembly and gas adsorption profile under reduced pressure based on hydrogen bonded *m*-tetraphenyl derivative of anthracene** pp 6887–6894

Kazuhiko Akimoto, Hideo Suzuki, Yoshihiko Kondo, Ken Endo, Uichi Akiba, Yasuhiro Aoyama and Fumio Hamada\*



**Dimethyl carbonate: an environmentally friendly solvent for hydrogen peroxide ( $\text{H}_2\text{O}_2$ )/methyltrioxorhenium ( $\text{CH}_3\text{ReO}_3$ , MTO) catalytic oxidations**

pp 6895–6900

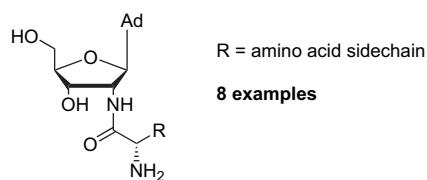
Roberta Bernini,\* Enrico Mincione, Maurizio Barontini, Fernanda Crisante, Giancarlo Fabrizi and Augusto Gambacorta

Some oxidations of organic compounds with the hydrogen peroxide ( $\text{H}_2\text{O}_2$ )/methyltrioxorhenium ( $\text{CH}_3\text{ReO}_3$ , MTO) catalytic system have been performed in dimethyl carbonate, an environmentally friendly solvent. Reactions proceeded in good conversions and yields.

**A practical synthesis of 2'-aminoacylamino-2'-deoxyadenosines**

pp 6901–6908

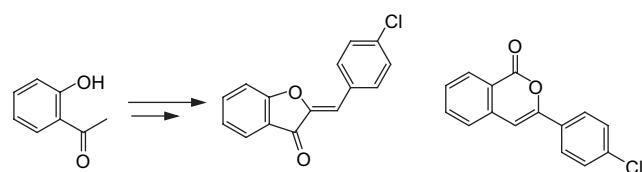
Gavin O'Mahony, Andreas Sundgren, Sara Svensson and Morten Grøth\*



**Synthesis, structural revision, and biological activities of 4'-chloroaurone, a metabolite of marine brown alga *Spatoglossum variabile***

pp 6909–6914

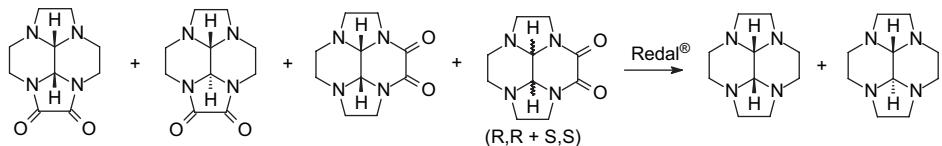
Somepalli Venkateswarlu, Gopala K. Panchagnula, Aditya L. Gottumukkala and Gottumukkala V. Subbaraju\*



**Synthesis and NMR characterization of *cis* and *trans* decahydro-2*a*,4*a*,6*a*,8*a*-tetraazacyclopent[*fg*]acenaphthylene. Solid state structure of the *trans* stereoisomer. Modelling studies**

pp 6915–6923

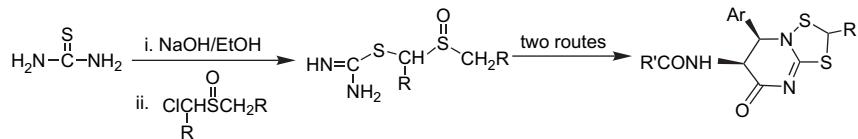
Maria Argese,\* Marino Brocchetta, Mario De Miranda, Andrea Ferraris, Paolo Dapporto, Paola Paoli and Patrizia Rossi



**Thiourea to bicyclic scaffolds: highly regio- and stereoselective routes to dithiazolopyrimidines**

pp 6924–6931

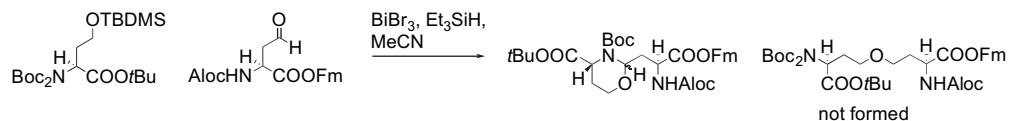
Lal Dhar S. Yadav\* and Vijai K. Rai



**An unexpected product from attempted reductive etherification of a silyl alcohol with an aldehyde**

pp 6932–6937

Christopher G. H. White and Alethea B. Tabor\*



**OTHER CONTENT****Corrigendum****p 6938****\*Corresponding author****(i)<sup>+</sup>** Supplementary data available via ScienceDirect**COVER**

Palladium containing nanostructured hybrid silica bearing pyridine binding sites appeared as a versatile heterogeneous catalyst for Heck, Sonogashira and cyanation reactions. In Heck and Sonogashira cross-coupling reactions, unchanged catalytic activity was observed in at least five reaction cycles. *Tetrahedron* **2007**, *63*, 6784–6790.

© 2007 P. Hesemann. Published by Elsevier Ltd.



Full text of this journal is available, on-line from **ScienceDirect**. Visit [www.sciencedirect.com](http://www.sciencedirect.com) for more information.

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®



ISSN 0040-4020