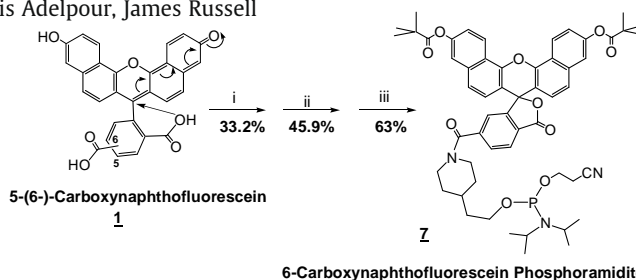


Tetrahedron Letters Vol. 50, No. 7, 2009

Contents

**The use of 6-carboxynaphthofluorescein phosphoramidite in the automated synthesis of quencher-dye oligonucleotide probes (QDOPs)** pp 737–740

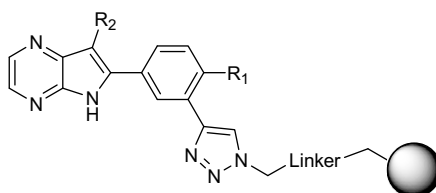
Huynh Vu \*, Mehrdad Majlessi, Dennis Adelpour, James Russell



Described here is the development of a scalable process for oligonucleotide labeling. This has been achieved for 6-carboxynaphthofluorescein by connecting it to a corresponding phosphoramidite.

**Synthesis of C-linked immobilized analogs of aloisine A by 'click' chemistry** pp 741–744

Rose Haddoub, David Gueyrard, Peter G. Goekjian \*

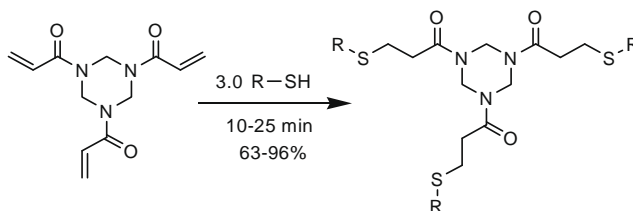


An efficient approach has been developed for the immobilization of a series of analogs of aloisine A, an in vitro inhibitor of protein kinases, to polymeric supports via a [3+2] cycloaddition reaction.



**Thiol-ene reactions of 1,3,5-triacryloylhexahydro-1,3,5-triazine (TAT): facile access to functional tripodal thioethers** pp 745–747

Chinwon Rim, Lauren J. Lahey, Vijita G. Patel, Hongming Zhang, David Y. Son \*

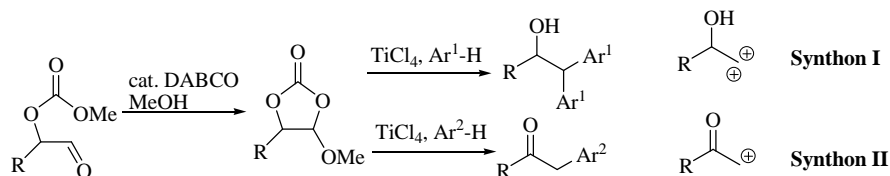


R =  $-\text{CH}_2\text{CH}_2\text{OH}$ ,  $-\text{CH}_2\text{CH}(\text{OH})\text{CH}_2(\text{OH})$ ,  $-\text{CH}_2\text{CO}_2\text{CH}_3$ ,  $-\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$ ,  
 $-\text{CH}_2\text{CH}_2\text{NH}_2$ ,  $-\text{CH}_2\text{CH}_2\text{CO}_2\text{H}$ ,  $-\text{CH}_2\text{CH}(\text{NH}_2)\text{CO}_2\text{H}$ ,  $-o\text{-C}_6\text{H}_4\text{NH}_2$ ,  $-o\text{-C}_6\text{H}_4\text{CO}_2\text{H}$

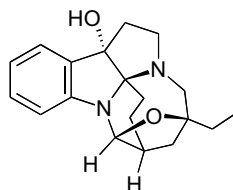


**DABCO-catalyzed formation of 4-methoxy-1,3-dioxolan-2-ones and their synthetic applications in the aromatic electrophilic substitution**

pp 748–751

Yung-Son Hon <sup>\*</sup>, Chen-Yi Kao
**Conolutinine, a hexacyclic indole alkaloid with a novel ring system incorporating a diazaspino center and fused oxadiazepine–tetrahydrofuran rings**

pp 752–754

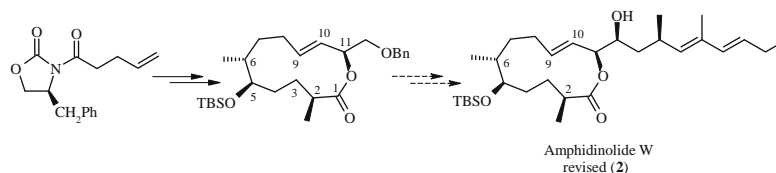
Kuan-Hon Lim, Tadahiro Etoh, Masahiko Hayashi, Kanki Komiyama, Toh-Seok Kam <sup>\*</sup>

conolutinine

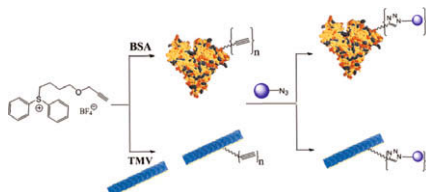
A hexacyclic indole alkaloid possessing an unprecedented ring system incorporating a diazaspino center and fused oxadiazepine–tetrahydrofuran rings has been isolated from the Malayan *Tabernaemontana corymbosa*. The structure was established by analysis of the spectroscopic data and a possible biogenetic pathway from a cleavamine-type precursor is presented.

**Highly stereoselective approach toward the synthesis of the macrolactone core of amphidinolide W**

pp 755–758

Debendra K. Mohapatra <sup>\*</sup>, Bhaskar Chatterjee, Mukund K. Gurjar
**Sulfonium alkylation followed by 'click' chemistry for facile surface modification of proteins and tobacco mosaic virus**

pp 759–762

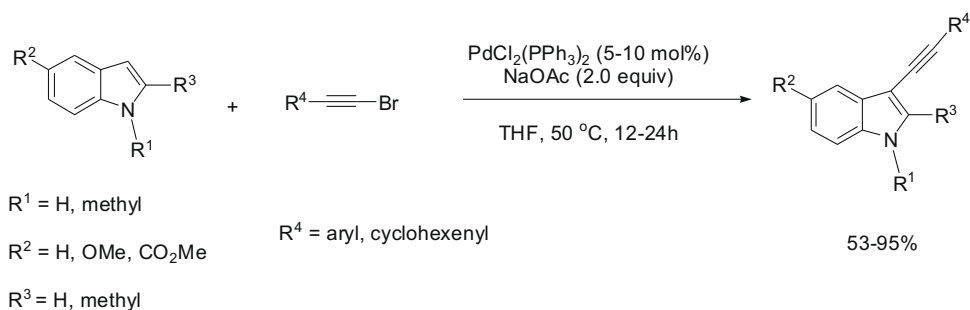
Long Yi, Jie Shi, Shuang Gao, Shibo Li, Congwei Niu, Zhen Xi <sup>\*</sup>

Tandem sulfonium alkylation and click chemistry provide a facile bioconjugation method for surface modification of protein and virus at room temperature.

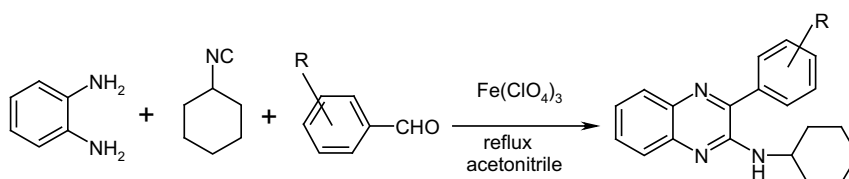


**Direct palladium-catalyzed C-3 alkylation of indoles**

pp 763–766

Yonghong Gu <sup>\*</sup>, Xue-min Wang**A novel three-component reaction for the synthesis of *N*-cyclohexyl-3-aryl-quinoxaline-2-amines**

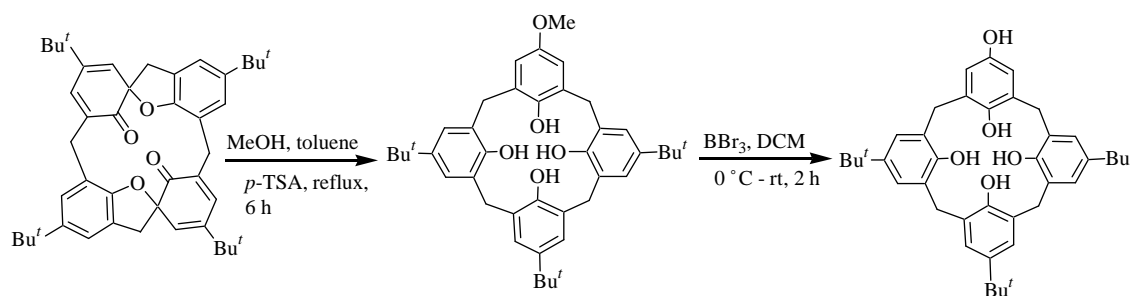
pp 767–769

Majid M. Heravi <sup>\*</sup>, Bita Baghernejad, Hossein A. Oskooie

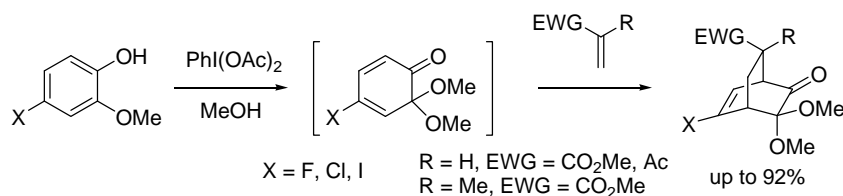
A simple and efficient synthesis of *N*-cyclohexyl-3-aryl-quinoxaline-2-amines in good yields via a three-component reaction between *o*-phenylenediamine, an aromatic aldehyde, and cyclohexyl isocyanide using ferric perchlorate as a catalyst is described.

**A novel method for the upper rim alkoxy-substitution of calix[4]arene via a bis(spirodienone) route**

pp 770–772

Sreeja Thulasi, Ganga V. Bhagavathy, Jijy Eliyan, Luxmi R. Varma <sup>\*</sup>**Diels–Alder reactions of halogenated masked *o*-benzoquinones: synthesis of halogen-substituted bicyclo[2.2.2]octenones**

pp 773–775

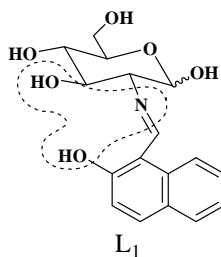
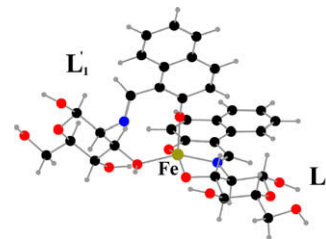
Seshi Reddy Surasani, Virendra Singh Rajora, Naganjaneyulu Bodipati, Rama Krishna Peddinti <sup>\*</sup>

**1-( $\beta$ -Glucopyranosyl-2'-deoxy-2'-iminomethyl)-2-hydroxynaphthalene as chemo-sensor for  $\text{Fe}^{3+}$  in aqueous HEPES buffer based on colour changes observable with the naked eye**

pp 776–780

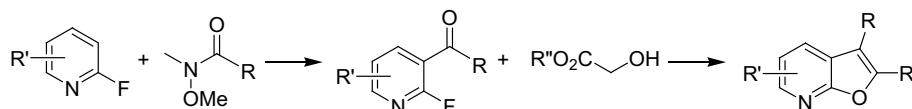
Atanu Mitra, Balaji Ramanujam, Chebrolu P. Rao \*

A new glucose-based C2-derivatized colorimetric chemo-sensor ( $L_1$ ) has been synthesized by a one-step condensation of glucosamine and 2-hydroxy-1-naphthaldehyde for the recognition of transition metal ions. Among the eleven metal ions studied, viz.,  $\text{Mg}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Mn}^{2+}$ ,  $\text{Fe}^{2+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Cu}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Cd}^{2+}$  and  $\text{Hg}^{2+}$ ,  $L_1$  results in visual colour change only in the presence of  $\text{Fe}^{2+}$ ,  $\text{Fe}^{3+}$  and  $\text{Cu}^{2+}$  in methanol. However, in aqueous HEPES buffer (pH 7.2), it is only the  $\text{Fe}^{3+}$  that gives a distinct visual colour change even in the presence other metal ions, up to a concentration of 280 ppb. The changes have been explained based on the complex formed, and the composition has been determined to be 2:1 between  $L_1$  and  $\text{Fe}^{3+}$  based on Job's plot as well as ESI MS. The structure of the proposed complex has been derived based on HF/6-31G calculations.

 $L_1$  ( $L_1 + \text{Fe}^{3+}$ )
**A facile synthesis of 2,3-disubstituted furo[2,3-b]pyridines**

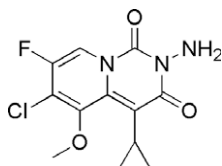
pp 781–784

Gregory L. Beutner \*, Jeffrey T. Kuethe, Nobuyoshi Yasuda


**Efficient synthesis of the 2-amino-6-chloro-4-cyclopropyl-7-fluoro-5-methoxy-pyrido[1,2-c]pyrimidine-1,3-dione core ring system**

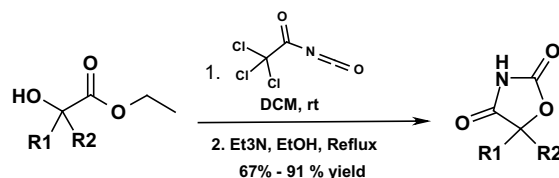
pp 785–789

Jonathan D. Rosen, Nadezhda German, Robert J. Kerns \*


**A facile one-pot synthesis of 3-unsubstituted-2,4-oxazolidinediones via in situ generation of carbamates from  $\alpha$ -hydroxyesters using trichloroacetyl isocyanate**

pp 790–792

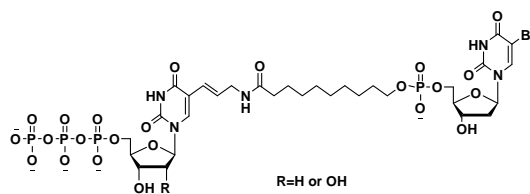
Yue H. Li \*, Li Zhang, Pei-San Tseng, Yongliang Zhang, Yu Jin, Jingkang Shen, Jian Jin



**Solid-phase synthesis of new ribo and deoxyribo BrdU probes for labeling and detection of nucleic acids**

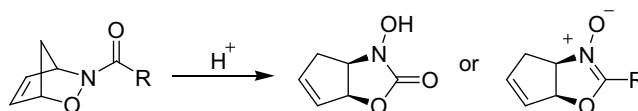
pp 793–795

Anilkumar R. Kore \*

**Brønsted acid-mediated opening of nitroso cycloadducts under anhydrous conditions**

pp 796–798

Brian S. Bodnar, Marvin J. Miller \*

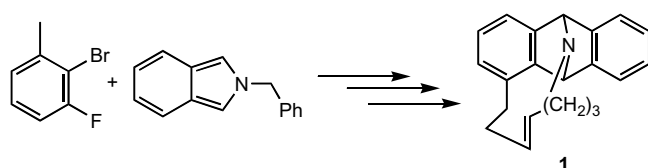


An unusual bicyclic hydroxamate resulted from C–O bond cleavage of acylnitroso hetero-Diels–Alder cycloadducts when treated with catalytic Brønsted acids under anhydrous conditions. Similarly, the formation of a nitronium was observed using one equivalent of triflic acid.

**Synthesis and isolation of a monoamine having a thermodynamically stabilized pseudo-chirotopic nitrogen**

pp 799–801

Yuka Kobayashi, Kentaro Sano, Kazuhiko Saigo \*

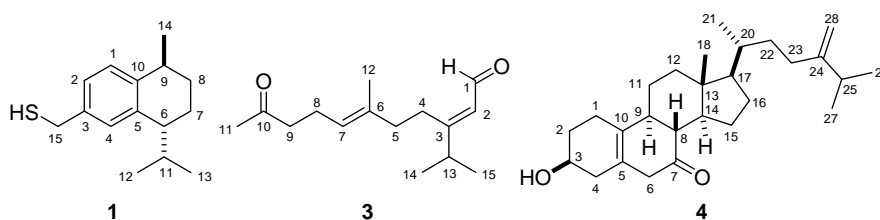


(1*S*,2*R*,7*R*):(1*S*,2*R*,7*S*) = 99.92:0.08 at rt  
= 99.68:0.32 at 120 °C  
Very slow nitrogen inversion

**Novel sesquiterpenes and noregosterol from the soft corals *Nephthea erecta* and *Nephthea chabroli***

pp 802–806

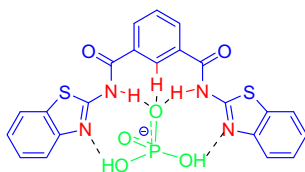
Shi-Yie Cheng, Ya-Chiang Huang, Zhi-Hong Wen, Shu-Fen Chiou, Shang-Kewi Wang, Chi-Hsin Hsu, Chang-Feng Dai, Chang-Yih Duh \*



**Selective anion recognition by retarding the cooperative polarization effect of amide linkages**

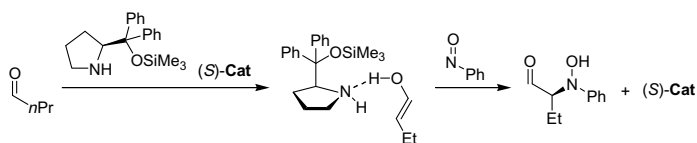
pp 807–810

Gang Woo Lee, Narinder Singh, Hee Jung Jung, Doo Ok Jang \*

**A theoretical investigation on the mechanism of the  $\alpha,\alpha$ -diphenylprolinol trimethylsilyl ether-catalyzed oxyamination reaction**

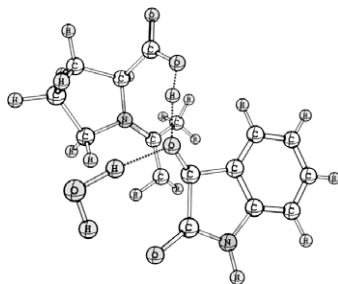
pp 811–813

Chiong Teck Wong \*

**Water influences the enantioselectivity in the proline or prolinamide-catalyzed aldol addition of acetone to isatins**

pp 814–817

Gaetano Angelici, Rodrigo J. Corrêa, Simon J. Garden \*, Claudia Tomasini \*

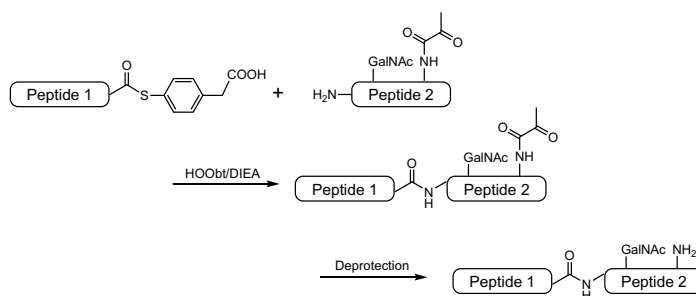


The addition of small quantities of water to the organo-catalyzed addition of acetone to isatin results in an increase in the ee of the reaction. DFT calculations with the inclusion of a water molecule in the aldol C–C TS reproduce the experimental ee.

**Pyruvoyl, a novel amino protecting group on the solid phase peptide synthesis and the peptide condensation reaction**

pp 818–821

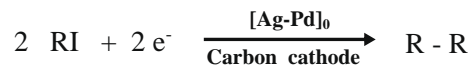
Hidekazu Katayama \*, Takumi Utsumi, Chinatsu Ozawa, Yuko Nakahara, Hironobu Hojo \*, Yoshiaki Nakahara



**Glassy carbon modified by a silver–palladium alloy: cheap and convenient cathodes for the selective reductive homocoupling of alkyl iodides**

pp 822–824

Philippe Poizot, Viatcheslav Jouikov, Jacques Simonet \*

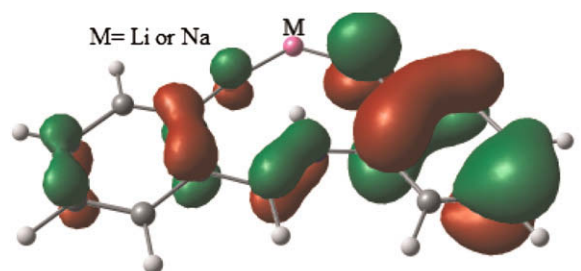


Micrometer-thick layers (<1 μm) of silver–palladium alloy deposited onto carbon cathodes allow the one-electron reductive coupling of primary iodides in high yield.

**A DFT study on the mono lithium and sodium salts of *N*-(2-hydroxyphenyl)salicylaldimine**

pp 825–830

Tareq Irshaidat \*

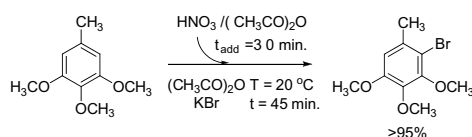


Metalla-hetero[10]annulenes. Stabilization up to 20 kcal/mol

**A novel simple and efficient bromination protocol for activated arenes**

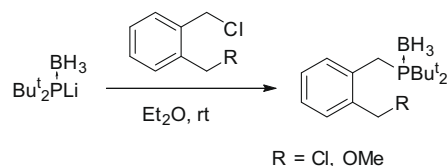
pp 831–833

Anna Tsoukala, Lucia Liguori, Giovanni Occhipinti, Hans-René Bjørsvik \*

**The synthesis and characterisation of novel *o*-substituted benzyldi-*t*-butylphosphine–boranes**

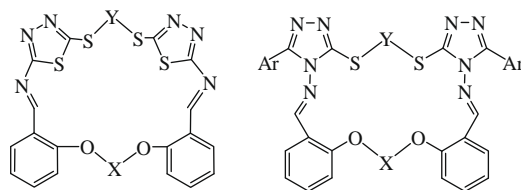
pp 834–835

Kathryn M. Allan, John L. Spencer \*



**Synthesis of a new class of azathia crown macrocycles containing two 1,2,4-triazole or two 1,3,4-thiadiazole rings as subunits** pp 836–839

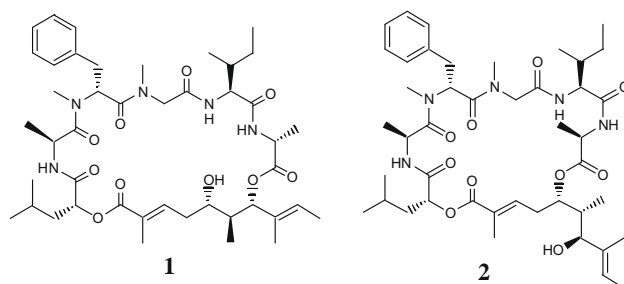
Naser Foroughifar<sup>\*</sup>, Akbar Mobinikhaledi, Sattar Ebrahimi, Hassan Moghanian, Mohammad Ali Bodaghi Fard, Mehdi Kalhor




**Intramolecular ester exchange of potent cytotoxic kulokekahlide-2**

pp 840–843

Masahiro Umehara, Yuuki Takada, Yoichi Nakao, Junji Kimura<sup>\*</sup>



<sup>\*</sup>Corresponding author

 Supplementary data available via ScienceDirect

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology 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<sup>®</sup>. Full text available on ScienceDirect<sup>®</sup>



ELSEVIER

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

 ScienceDirect

ISSN 0040-4039