

Vol. 54 • Issue 52 • 25 December 2013 • ISSN 0040-4039

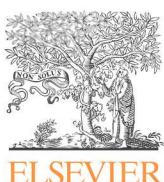


# Tetrahedron Letters

THE INTERNATIONAL JOURNAL FOR THE RAPID PUBLICATION OF ALL  
PRELIMINARY COMMUNICATIONS IN ORGANIC CHEMISTRY

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

**ScienceDirect**



Tetrahedron Letters Vol. 54, Issue 52, 2013

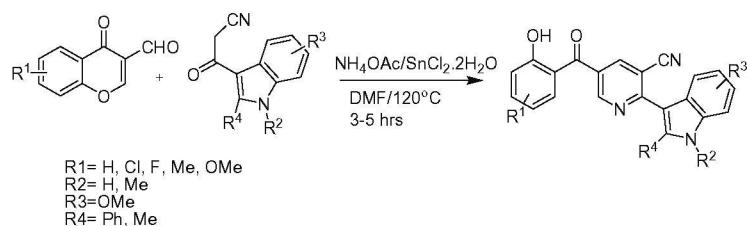
## Contents

## COMMUNICATIONS

**Stannous chloride mediated one pot synthesis of functionalized indole-3-yl pyridines using 3-cyanoacetylindoles and 3-formylchromones**

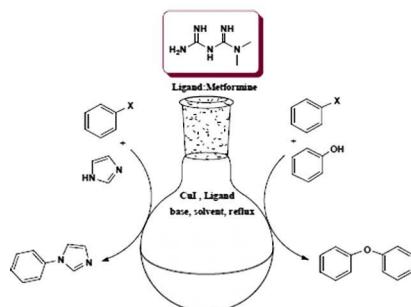
pp 7091–7094

Nataraj Poomathi, D. Muralidharan, Paramasivan T. Perumal\*

**An in situ generated CuI/metformin complex as a novel and efficient catalyst for C–N and C–O cross-coupling reactions**

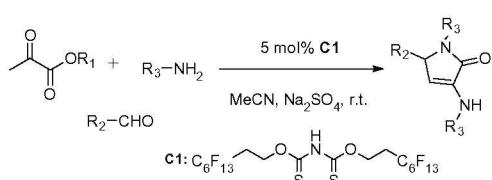
pp 7095–7099

Ramin Ghorbani-Vaghei\*, Saba Hemmati, Hojat Veisi

**Recyclable fluororous organocatalysts promoted three-component reactions of pyruvate, aldehyde and amine at room temperature**

pp 7100–7102

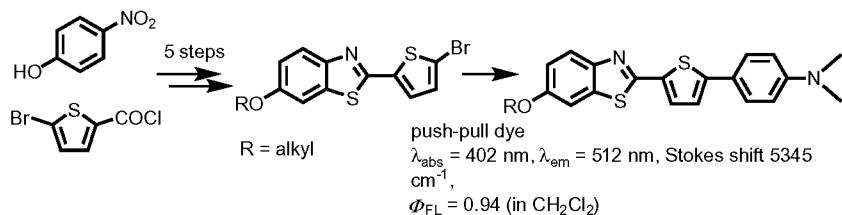
Jin-long Qian, Wen-bin Yi\*, Chun Cai



**Synthesis of highly soluble fluorescent  $\pi$ -extended 2-(2-thienyl)benzothiazole derivatives via oxidative cyclization of 2-thienylthioanilide as the key step**

pp 7103–7106

Sanghoon Ji, Masayuki Shigeta, Yosuke Niko, Junji Watanabe, Gen-ichi Konishi\*



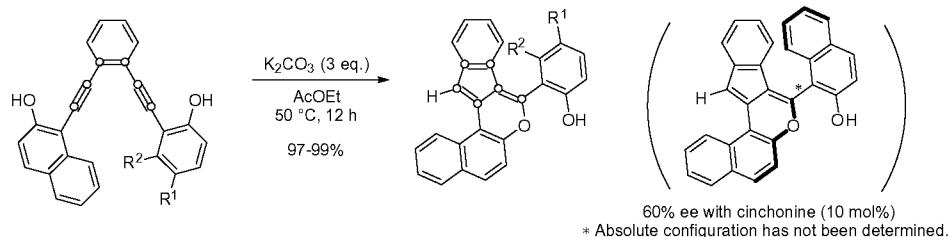
We report the synthesis of highly soluble push-pull type fluorescent 2-(2-thienyl)benzothiazole dyes and the evaluation of their photophysical properties. The key step is the synthesis of the 2-(5'-bromothien-2'-yl)-6-alkoxybenzothiazole via oxidative cyclization of 2-thienylcarbothioamide using  $\text{PhI}(\text{OAc})_2$  as an oxidant.



**Base-catalyzed Schmittel cycloisomerization of *o*-phenylenediyne-linked bis(arenol)s to indeno[1,2-*c*]chromenes**

pp 7107–7110

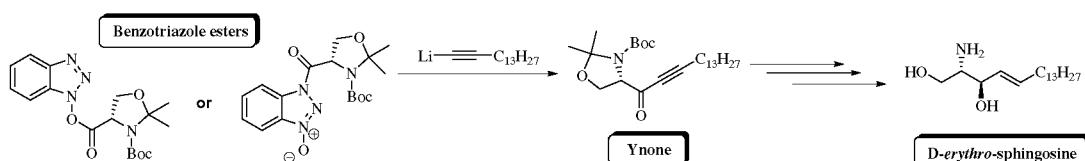
Masaki Furusawa, Kosuke Arita, Tatsushi Imaohori, Kazunobu Igawa, Katsuhiro Tomooka, Ryo Irie\*



**Facile and efficient addition of terminal alkynes to benzotriazole esters: synthesis of *D*-erythro-sphingosine using ynone as the key intermediate**

pp 7111–7114

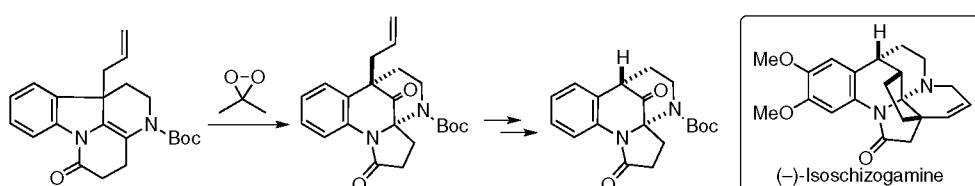
José Antonio Morales-Serna, Alejandro Sauza, Gabriela Padrón de Jesús, Rubén Gaviño, Gustavo García de la Mora, Jorge Cárdenas\*



**Synthetic studies on isoschizogamine: construction of [3.3.1] bicyclic aminal core by using oxidative skeletal rearrangement**

pp 7115–7118

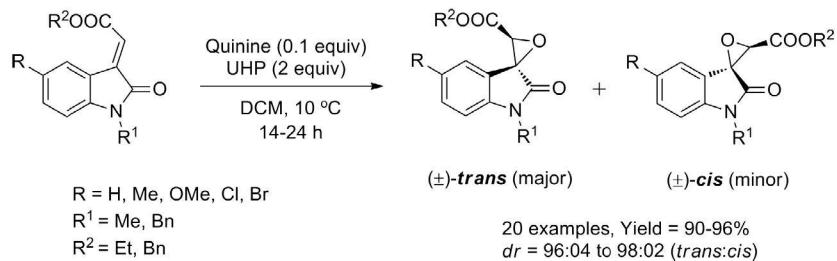
Hiroyumi Ueda, Akihiro Takada, Hidetoshi Tokuyama\*



**Quinine as an organocatalytic dual activator for the diastereoselective synthesis of spiro-epoxyoxindoles**

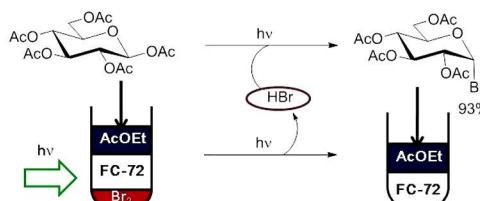
pp 7119–7123

Mangilal Chouhan, Anang Pal, Ratnesh Sharma, Vipin A. Nair\*

**Convenient synthesis of glycosyl bromide from 1-O-acetyl sugars by photo-irradiative phase-vanishing reaction of molecular bromine**

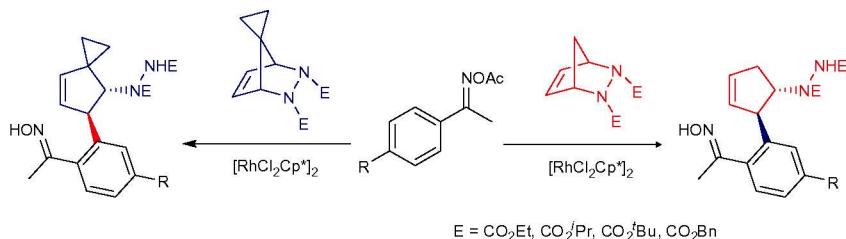
pp 7124–7126

Mami Tojino, Yuriko Hirose, Mamoru Mizuno\*

**Rhodium(III)-catalyzed ring-opening of strained olefins through C–H activation of *O*-acetyl ketoximes: an efficient synthesis of *trans*-functionalized cyclopentenes and spiro[2.4]heptenes**

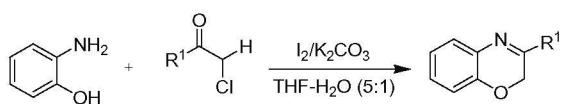
pp 7127–7131

E. Jiji, Praveen Prakash, M. Shimi, S. Saranya, P. Preethanuj, Petri M. Pihko, Sunil Varughese, K. V. Radhakrishnan\*

**First I2-K2CO3-promoted sequential C–N and C–O bond forming approach for one-pot synthesis of 1,4-benzoxazines**

pp 7132–7135

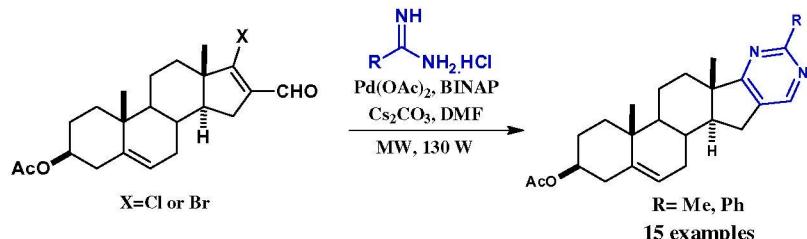
Sunil K. Singh\*, Anil K. Bajpai, Rajesh Saini



**Microwave-assisted Pd-catalyzed synthesis of fused steroidal and non-steroidal pyrimidines from  $\beta$ -halo- $\alpha,\beta$ -unsaturated aldehydes**

pp 7136–7139

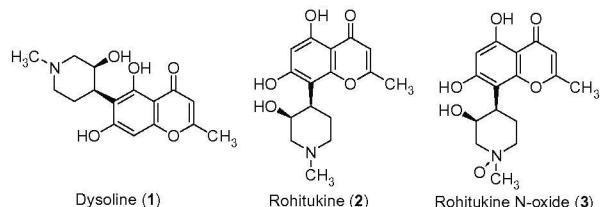
Junali Gogoi, Pranjal Gogoi\*, Pranjal Bezbaruah, Romesh C. Boruah\*



**Isolation and biological evaluation of chromone alkaloid dysoline, a new regioisomer of rohitukine from *Dysoxylum binectariferum***

pp 7140–7143

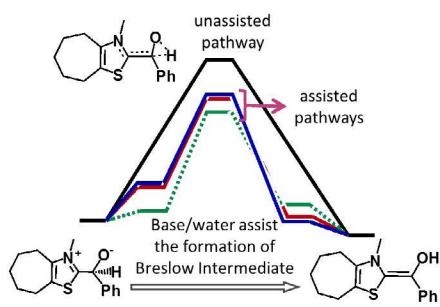
Shreyans K. Jain, Samdarshi Meena, Asif K. Qazi, Aashiq Hussain, Sunil K. Bhola, Rajendra Kshirsagar, Koteppa Pari, Anamika Khajuria, Abid Hamid, R. Uma Shaanker, Sandip B. Bharate\*, Ram A. Vishwakarma\*



**Role of base assisted proton transfer in *N*-heterocyclic carbene-catalyzed intermolecular Stetter reaction**

pp 7144–7146

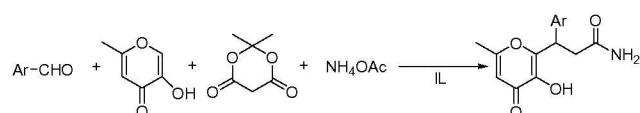
Manjaly J. Ajitha, Cherumuttathu H. Suresh\*



**A novel and green synthesis of kojic acid derivatives in ionic liquid [bmim]BF<sub>4</sub>**

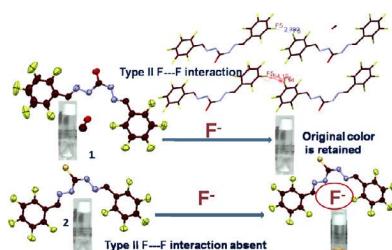
pp 7147–7150

Yuling Li\*, Qiushi Jiang, Kai Wang, Baixiang Du, Xiangshan Wang



**Synthesis and characterization of bispentafluorophenyl carbohydrazone/thiocarbohydrazone: selective recognition of F<sup>-</sup> ions** pp 7151–7155

Abhishek Rai, Niraj Kumari, Ashish Kumar Srivastava, Lallan Mishra\*



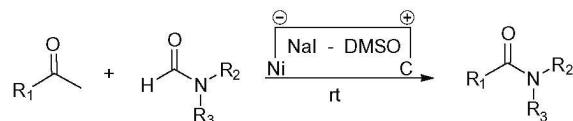
Bispentafluorophenylcarbohydrazone **1** and the corresponding thiocarbohydrazone **2** showed efficient intermolecular interactions with fluoride anions whereas only **2** binds F<sup>-</sup> ions selectively.



**Electrochemical synthesis of amides: direct transformation of methyl ketones with formamides**

pp 7156–7159

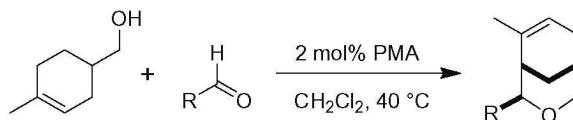
Haolai Huang, Gaoqing Yuan\*, Xianwei Li, Huanfeng Jiang



**Heteropoly acid catalyzed synthesis of 8-methyl-2-aryl/alkyl-3-oxabicyclo[3.3.1]non-7-ene derivatives through (3,5)-oxonium-ene reaction**

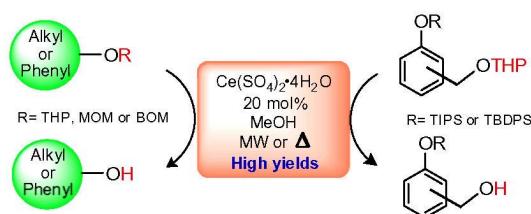
pp 7160–7163

R. Anjibabu, Samaresh Sau, B. Jagan Mohan Reddy, Rajkumar Banerjee, B. V. Subba Reddy\*



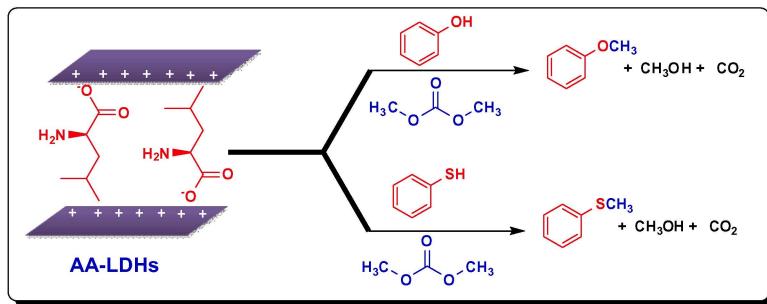
**Cerium(IV) sulfate tetrahydrate: a catalytic and highly chemoselective deprotection of THP, MOM, and BOM ethers** pp 7164–7166

Davir González-Calderón\*, Carlos A. González-González, Aydeé Fuentes-Benítez, Erick Cuevas-Yáñez, David Corona-Becerril, Carlos González-Romero\*



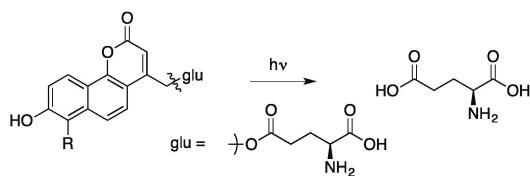
**Amino acid intercalated layered double hydroxide catalyzed chemoselective methylation of phenols and thiophenols pp 7167–7170**

Thirumeni Subramanian, Amarajothi Dhakshinamoorthy, Kasi Pitchumani\*



**Synthesis and photochemical reactivity of caged glutamates with a  $\pi$ -extended coumarin chromophore as a photolabile protecting group pp 7171–7174**

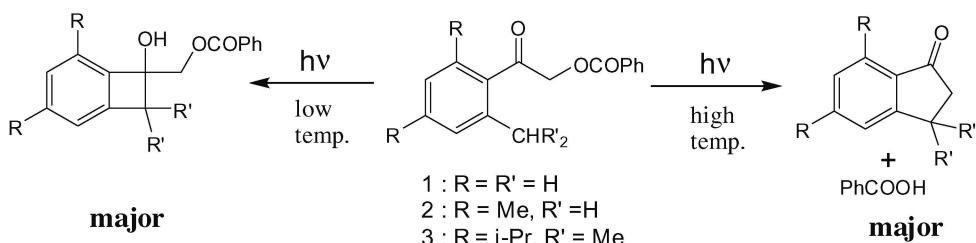
Yuya Sakamoto, Srikanth Boinapally, Claudine Katan, Manabu Abe\*



**Temperature dependent product distribution in photolysis of *o*-alkylphenacyl benzoates**

pp 7175–7179

Mi Jang, Bum Hee Lim, Hyuk Jun Ryu, Bong Ser Park\*

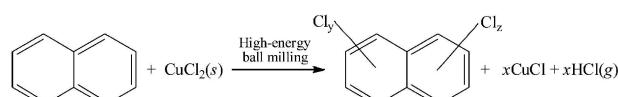


Photolysis of *o*-alkylphenacyl benzoates shows strong dependence on temperature in product distribution: ratios of benzocyclobutenols to indanones increase as temperature is lowered.

**Solvent-free mechanochemical chlorination of hydrocarbons with CuCl<sub>2</sub>**

pp 7180–7182

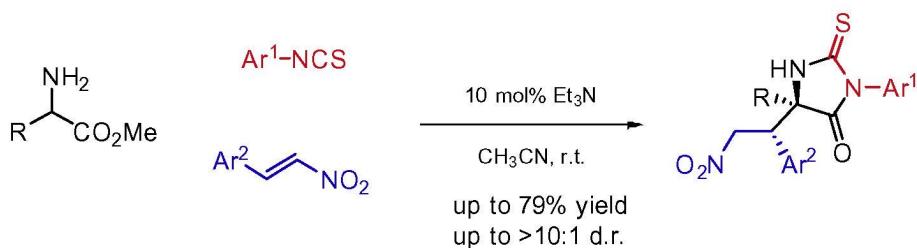
Jozef Višňovský, Peter Billik, Róbert Kubinec, Peter Podolec, Alexandra Hengerics Szabó, Martin Juriga, Radomír Čabala, Janka Kubincová, Jaroslav Blaško\*



**Three-component diastereoselective cascade synthesis of thiohydantoins**

pp 7183–7187

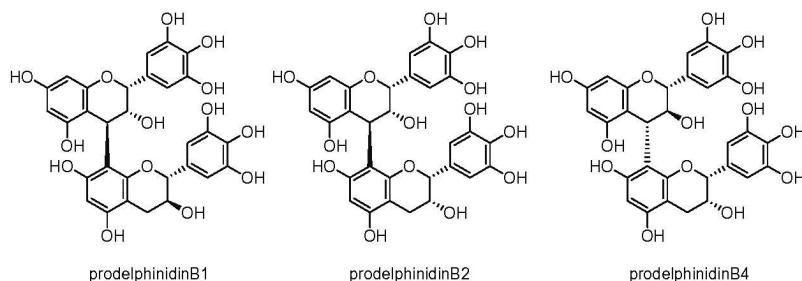
Victor Ceban, Kane Hands, Marta Meazza, Mark E. Light, Ramon Rios\*



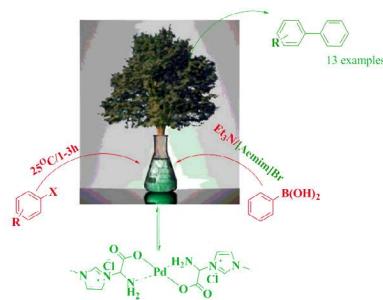
A new three-component cascade reaction for the synthesis of thiohydantoins is reported. The reaction between  $\alpha$ -amino esters, nitrostyrenes, and aromatic isothiocyanates is efficiently promoted by organic bases to afford highly substituted thiohydantoins in moderate to good yields and diastereoselectivities.

**Syntheses of prodelphinidin B1, B2, and B4 and their antitumor activities against human PC-3 prostate cancer cell lines** pp 7188–7192

Wataru Fujii, Kazuya Toda, Kiriko Matsumoto, Koichiro Kawaguchi, Sei-ichi Kawahara, Yasunao Hattori, Hiroshi Fujii\*, Hidefumi Makabe\*

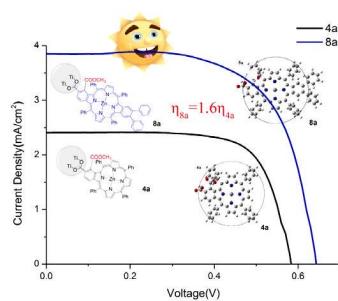
**Imidazolium supported palladium–chloroglycine complex: recyclable catalyst for Suzuki–Miyaura coupling reactions** pp 7193–7197

Parasuraman Karthikeyan\*, Arumugam Vanitha, Pachaiappan Radhika, Kannan Suresh, Arunachalam Sugumaran

**Synthesis of  $\beta,\beta'$ -edge fused,  $\pi$ -extended porphyrins and their applications in the dye-sensitized solar cells**

pp 7198–7201

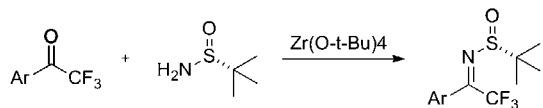
Jiaying Yan, Yaqing Feng, Xiao Peng, Yuanchao Li, Nuonuo Zhang, Xianggao Li, Bao Zhang\*



**Efficient preparation of Ellman's imines from trifluoromethyl ketones promoted by zirconium(IV) *tert*-butoxide**

pp 7202–7205

Toshio Kawanami\*, Alexander S. Karns, Christopher M. Adams, Michael Serrano-Wu



\*Corresponding author

(i) 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®. Full text available on ScienceDirect®

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

ISSN 0040-4039