



## Tetrahedron Vol. 69, Issue 17, 2013

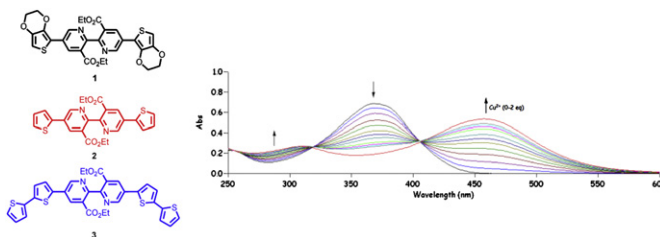
## Contents

## ARTICLES

## Novel donor–acceptor type thiophene pyridine conjugates: synthesis and ion recognition features

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Fatih Algi



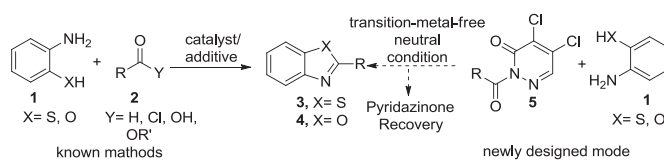
In order to reveal the effect of the donor units on the structure–property relationship, three novel directly linked donor–acceptor type systems, **1–3**, which are based on thiophene and pyridine conjugates, are designed, synthesized and characterized by spectroscopic methods.



## Eco-friendly atom-economical synthesis of 2-substituted-benzo[d]thiazoles and 2-substituted-benzo[d]oxazoles using 2-acylpyridazin-3(2H)-ones

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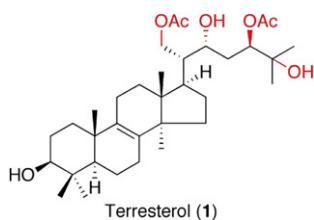
Gi Hyeon Sung, In-Hye Lee, Bo Ram Kim, Dong-Soo Shin, Jeum-Jong Kim, Sang-Gyeong Lee, Yong-Jin Yoon\*



**Terresterol, a polyoxygenated lanostanoid, isolated from the oomycete *Saprolegnia terrestris*, and its innate immune-promoting activity**

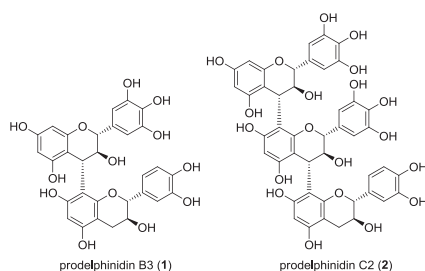
pp 3536–3542

Haruhisa Kikuchi\*, Yuichi Sato, Shoichiro Kurata, Yasuhiro Katou, Yoshiteru Oshima

**Syntheses of prodelphinidin B3 and C2, and their antitumor activities through cell cycle arrest and caspase-3 activation**

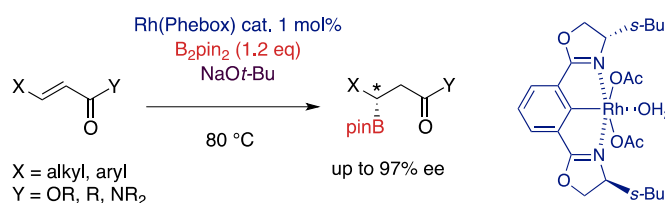
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Wataru Fujii, Kazuya Toda, Koichiro Kawaguchi, Sei-ichi Kawahara, Miyuki Katoh, Yasunao Hattori, Hiroshi Fujii\*, Hidefumi Makabe\*

**Asymmetric  $\beta$ -boration of  $\alpha,\beta$ -unsaturated carbonyl compounds with chiral Rh[bis(oxazolinyl)phenyl] catalysts**

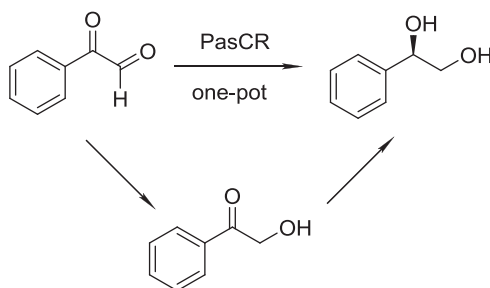
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Kenji Toribatake, Li Zhou, Ayae Tsuruta, Hisao Nishiyama\*

**Highly enantioselective double reduction of phenylglyoxal to (R)-1-phenyl-1,2-ethanediol by one NADPH-dependent yeast carbonyl reductase with a broad substrate profile**

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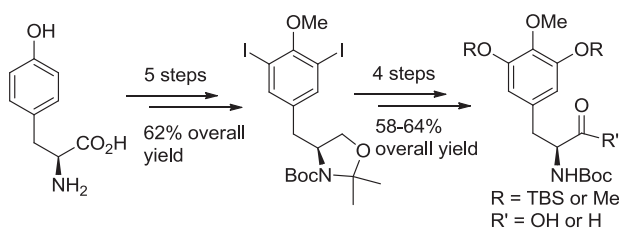
Zhe Li, Weidong Liu, Xi Chen, Shiru Jia, Qiaqiang Wu\*, Dunming Zhu\*, Yanhe Ma



**An efficient synthesis of 1-3,4,5-trioxygenated phenylalanine compounds from L-tyrosine**

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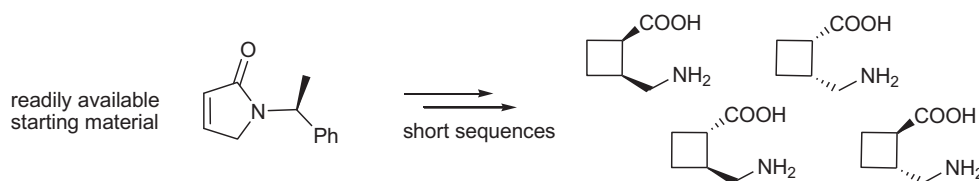
Ruijiao Chen, Hao Liu, Xiubing Liu, Xiaochuan Chen\*



**A unified synthesis of all stereoisomers of 2-(aminomethyl)cyclobutane-1-carboxylic acid**

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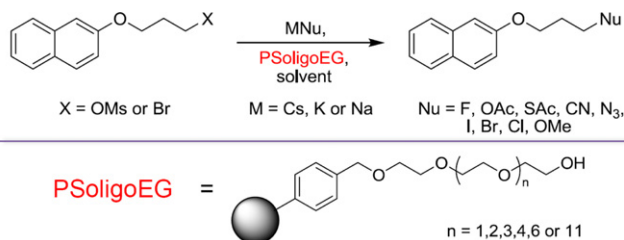
Virginie André, Marjolaine Gras, Hawraà Awada, Régis Guillot, Sylvie Robin, David J. Aitken\*



**Polymer-supported oligoethylene glycols as heterogeneous multifunctional catalysts for nucleophilic substitution**

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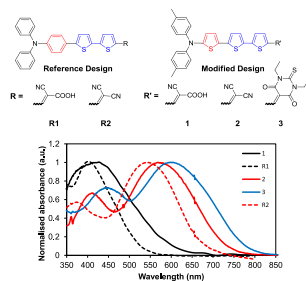
Vinod H. Jadhav, Hwan-Jeong Jeong, Seok Tae Lim, Myung-Hee Sohn, Choong Eui Song\*, Dong Wook Kim\*



**The effect of direct amine substituted push–pull oligothiophene chromophores on dye-sensitized and bulk heterojunction solar cells performance**

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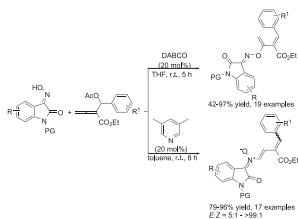
Akhil Gupta, Vanessa Armel, Wanchun Xiang, Giovanni Fanchini, Scott E. Watkins\*, Douglas R. MacFarlane, Udo Bach, Richard A. Evans\*



## Nitrogen-containing Lewis bases catalyzed highly regio- and stereoselective reactions of allenyl acetates with isatin-derived oximes

pp 3593–3607

Yuan-Liang Yang, Yin Wei, Qin Xu\*, Min Shi\*



Different nitrogen-containing Lewis bases catalyzed reactions of highly reactive allenyl acetates with isatin derived oximes afforded the corresponding oxime ethers or nitrone derivatives in good to high yields with high regio- and stereoselectivities.



\*Corresponding author

Supplementary data available via SciVerse ScienceDirect

### COVER

A divergent synthetic route has been established to provide expedient access to any of the four stereoisomers of 2-(aminomethyl)cyclobutane-1-carboxylic acid in enantiomerically pure form. Starting from a readily available chiral lactam, the strategy features a photochemical [2+2] cycloaddition to create the four-membered ring and an efficient *cis*-to-*trans* epimerization protocol. © 2013 V. André, M. Gras, H. Awada, R. Guillot, S. Robin, D. J. Aitken.

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