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## Tetrahedron Letters Vol. 51, No. 29, 2010

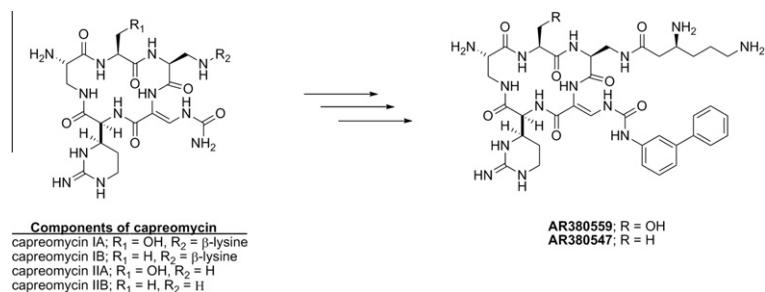
## Contents

## COMMUNICATIONS

## Preparation and separation of antimicrobial agents derived from capreomycin

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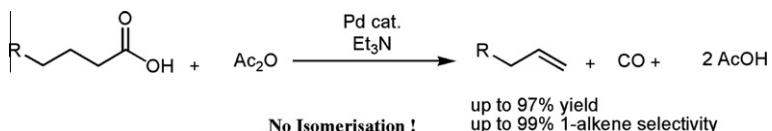
D. David Hennings\*, Daniel J. Watson, Joe P. Lyssikatos, Andrew Allen

AR380559; R = OH  
AR380547; R = H

## Selective preparation of terminal alkenes from aliphatic carboxylic acids by a palladium-catalysed decarbonylation–elimination reaction

pp 3712–3715

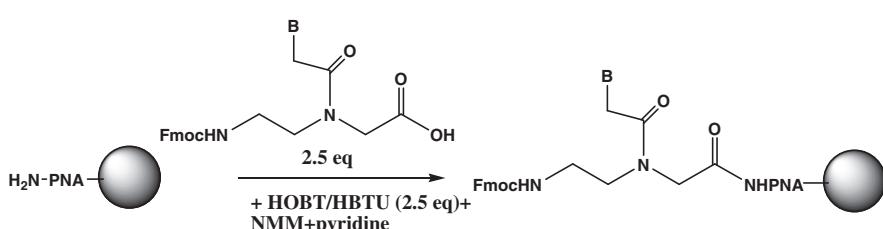
Jérôme Le Nôtre, Elinor L. Scott\*, Maurice C. R. Franssen, Johan P. M. Sanders



## Development of an efficient and low-cost protocol for the manual PNA synthesis by Fmoc chemistry

pp 3716–3718

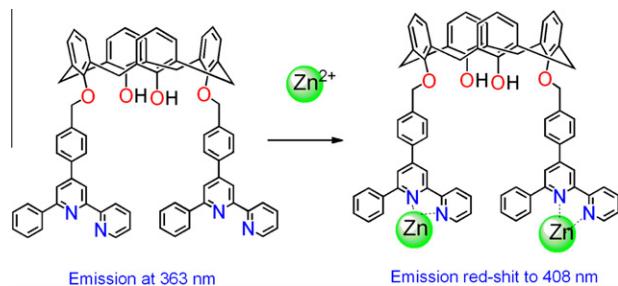
Concetta Avitabile, Loredana Moggio, Luca D. D'Andrea, Carlo Pedone, Alessandra Romanelli\*



**Novel 2,2'-bipyridine-modified calix[4]arenes: ratiometric fluorescent chemosensors for Zn<sup>2+</sup> ion**

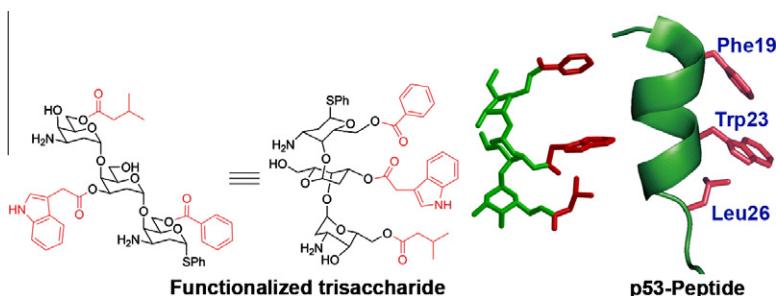
pp 3719–3723

Jun Feng Zhang, Sankarprasad Bhuniya, Young Hoon Lee, Changwan Bae, Joung Hae Lee\*, Jong Seung Kim\*

**Design and synthesis of functionalized trisaccharides as p53-peptide mimics**

pp 3724–3727

Kaori Sakurai, Daniel Kahne\*

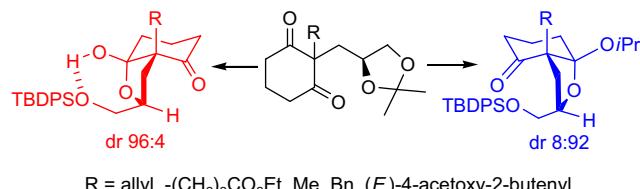


We report here the design and synthesis of functionalized trisaccharides modeled after an  $\alpha$ -helical 15-mer peptide region of p53 which binds to its cellular regulator MDM2.

**Facile synthesis of asymmetric quaternary centers based on diastereoselective protection of the carbonyl group at the symmetrical position**

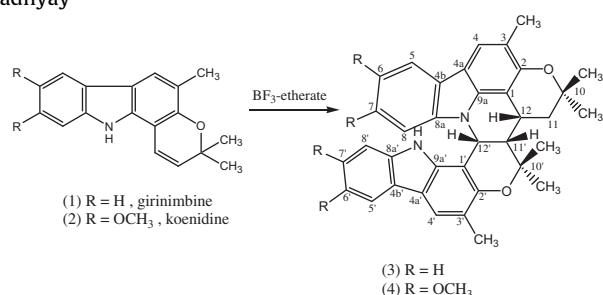
pp 3728–3731

Kou Hiroya\*, Yusuke Ichihashi, Yoshihiro Suwa, Tetsuro Ikai, Kiyofumi Inamoto, Takayuki Doi

**One-pot synthesis of the naturally occurring dimeric carbazole alkaloid murranimbine and its analogue**

pp 3732–3735

Mumu Chakraborty, Sibabrata Mukhopadhyay\*



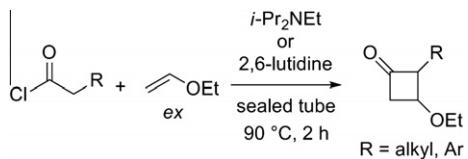
One-pot synthesis of murranimbine, a naturally occurring dimeric carbazole alkaloid and a new dimer of koenidine was described.



**An efficient procedure for preparation of 2-monoalkyl or 2-monoaryl-3-ethoxycyclobutanones**

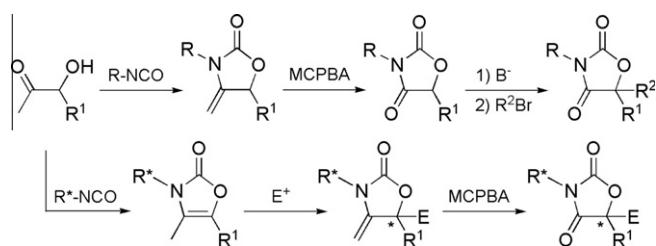
pp 3736–3737

Jun-ichi Matsuo\*, Ryosuke Okuno, Kosuke Takeuchi, Mizuki Kawano, Hiroyuki Ishibashi

**Versatile synthesis of quaternary 1,3-oxazolidine-2,4-diones and their use in the preparation of  $\alpha$ -hydroxyamides**

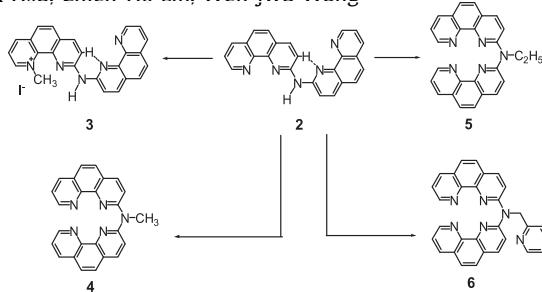
pp 3738–3742

Omar Merino, Blanca M. Santoyo, Luisa E. Montiel, Hugo A. Jiménez-Vázquez, L. Gerardo Zepeda, Joaquín Tamariz\*

**Aza-bridged bis-1,10-phenanthroline acyclic derivatives: synthesis, structure, and regioselective alkylation**

pp 3743–3747

Hsien-Chang Kao, Chia-Jung Hsu, Che-Wei Hsu, Chien-Ho Lin, Wen-Jwu Wang\*

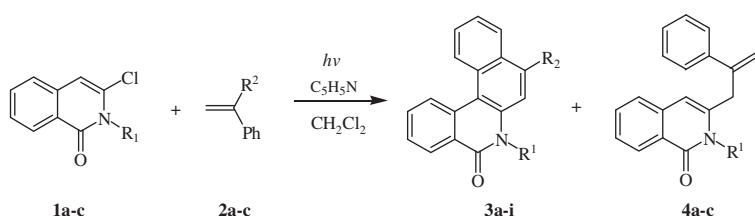


An efficient and regioselective method was developed to prepare the amino-substituted bis-1,10-phenanthroline derivatives and 1,10-phenanthroline-N-alkylated compounds. X-ray and NMR investigations reveal the *transoid* structure for **2**, where the unusual intramolecular CH...N hydrogen bond was shown.

**One-pot synthesis of benzo[*a*]phenanthridin-5-ones by photoinduced cycloaddition of 3-chloroisouquinolin-1-ones with styrenes**

pp 3748–3751

Bing Li, Bing Han, Zong-jun Shi, Yu-wei Ren, Shen-ci Lu, Wei Zhang\*

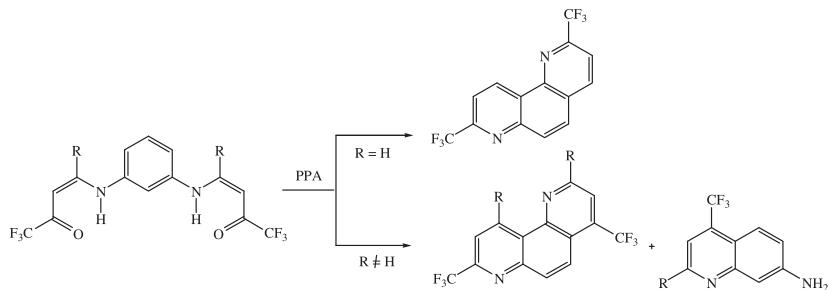


One-pot synthesis of benzo[*a*]phenanthridin-5-ones and benzo[*k*]phenanthridin-6-ones in fairly good yields was achieved by the photocycloaddition reactions of 3-chloroisouquinolin-1-ones and 3-chloroquinolin-2-ones with styrenes.



**The unexpected cyclization routes of *N,N*-bis(oxotrifluoroalkenyl)-1,3-phenylenediamines in polyphosphoric acid medium** pp 3752–3755

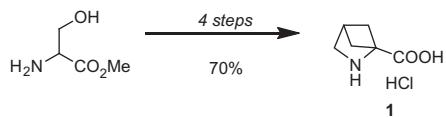
Helio G. Bonacorso\*, Rosália Andriguetto, Nilo Zanatta, Marcos A. P. Martins



**Efficient preparation of 2,4-methanoproline**

pp 3756–3758

Jeffrey G. Varnes\*, G. Scott Lehr, Gary L. Moore, James M. Hulsizer, Jeffrey S. Albert

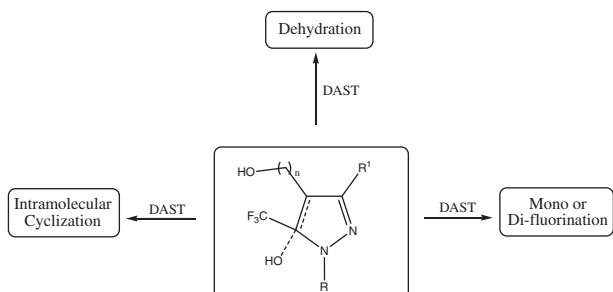


Using a modification of the route described by Clardy and Hughes et al., 2,4-methanoproline hydrochloride (**1**) was prepared in four steps and 70% overall yield from DL-serine methyl ester.

**General method for dehydration, intramolecular cyclization, and fluorination of trifluoromethyl-1*H*-pyrazoles using DAST**

pp 3759–3761

Helio G. Bonacorso\*, Liliane M. F. Porte, Gisele R. Paim, Fabio M. Luz, Marcos A. P. Martins, Nilo Zanatta

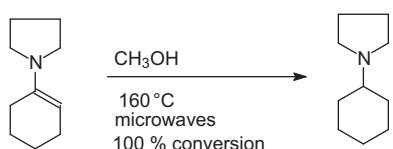


**Alcohol reduction of enamines**

pp 3762–3764

A. Gilbert Cook\*

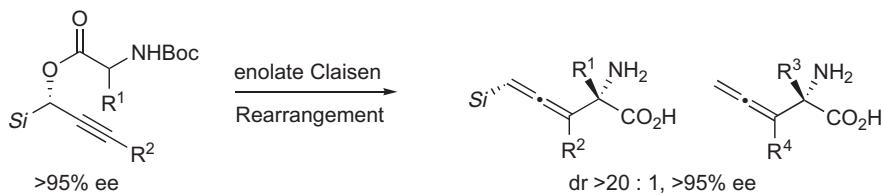
**Alcohol Reduction of Enamines**



**Synthesis of optically active  $\alpha$ -(allenyl)- and  $\alpha$ -substituted- $\alpha$ -(allenyl)glycines**

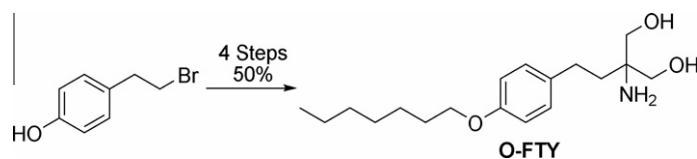
pp 3765–3768

Takuya Okada, Naoko Oda, Hiroyuki Suzuki, Kazuhiko Sakaguchi\*, Yasufumi Ohfune\*

 $Si = \text{TBS, Me}_2\text{PhSi, TMS}$  $R^1 = \text{H, alkyl, aryl} \quad R^2 = \text{alkyl, aryl, TMS} \quad R^3, R^4 = \text{H, Me}$ **Efficient chromatography-free synthesis of the oxy-analogue of fingolimod**

pp 3769–3771

Aleksandra Zivkovic, Holger Stark\*



A new highly efficient optimized multigram synthesis of the ether analogue of fingolimod (FTY720) is described in four steps and 50% overall yield without a single chromatographic purification step. The synthesis route is conveniently applicable to numerous structural variations.

**Synthesis of  $\beta$ -aminovinylphosphonates by organocatalytic nucleophilic displacement of acetate with amines**

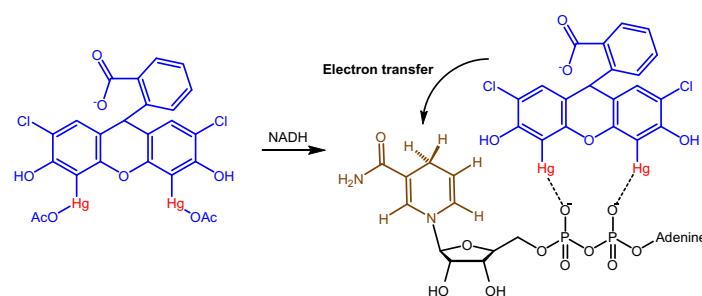
pp 3772–3774

Cécile Garzon, Mireille Attolini\*, Michel Maffei\*

**Fluorescein derivative-based, selective and sensitive chemosensor for NADH**

pp 3775–3778

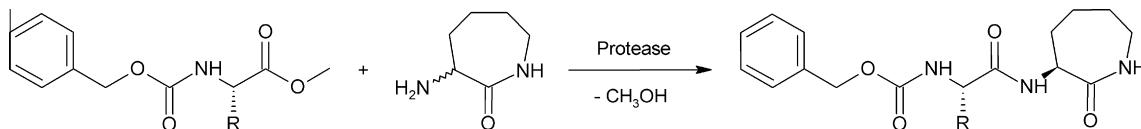
Sang Oh Jung, Ji Yeon Ahn, Sudeok Kim, Sujung Yi, Mi Hee Kim, Hyun Hye Jang, Seong Hyeok Seo, Min Sik Eom, Seung Kyung Kim, De Hun Ryu, Suk-Kyu Chang, Min Su Han\*



**Protease-catalysed synthesis of Z-L-aminoacyl-L-caprolactam amides from Z-protected amino acid esters and DL- $\alpha$ -amino- $\epsilon$ -caprolactam**

pp 3779–3781

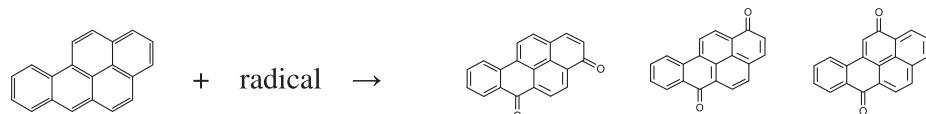
Alexander Lang\*, Peter Kuhl



**Prediction of radical reaction site(s) of polycyclic aromatic hydrocarbons by atomic charge distribution calculation using the DFT method**

pp 3782–3785

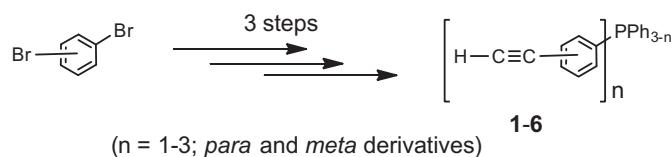
Min-Joo Lee, Byung-Dae Lee\*



**Synthesis of new triphenylphosphines with pending ethynyl substituents**

pp 3786–3788

Guillaume Grelaud, Gilles Argouarch, Frédéric Paul\*



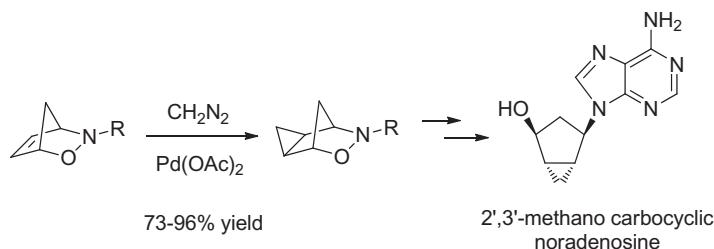
A new synthetic route toward the triphenylphosphine derivatives **1–6** possessing a pendent ethynyl substituent on peripheral aryl ring(s) is reported. All the new compounds were characterized by NMR and IR.



**Cyclopropanation of nitroso Diels–Alder cycloadducts and application to the synthesis of a 2',3'-methano carbocyclic nucleoside**

pp 3789–3791

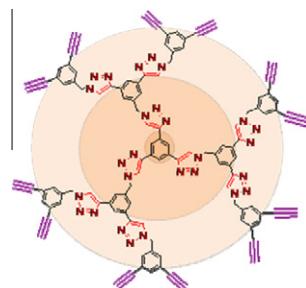
Cheng Ji, Marvin J. Miller\*



**Designing dendritic frameworks using versatile building blocks suitable for Cu<sup>I</sup>-catalyzed alkyne azide ‘click’ chemistry**

pp 3792–3795

Rami Hourani, Anjali Sharma, Ashok Kakkar\*



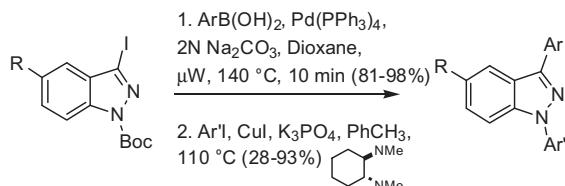
Versatile molecular building blocks for carrying out Cu<sup>I</sup>-catalyzed alkyne azide ‘click’ reaction provide an efficient divergent or convergent route to dendritic frameworks with varied number of terminal acetylene groups that can be easily functionalized with suitable end groups.



**Synthesis of 1,3-diarylsubstituted indazoles utilizing a Suzuki cross-coupling/deprotection/N-arylation sequence**

pp 3796–3799

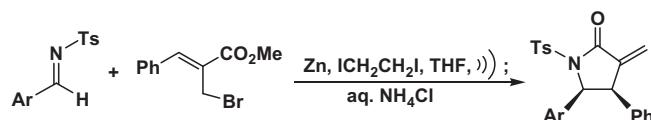
James M. Salovich, Craig W. Lindsley, Corey R. Hopkins\*



**Synthesis of *cis*-3,4-diaryl α-methylene-γ-butyrolactams via sonochemical Barbier-type reaction**

pp 3800–3802

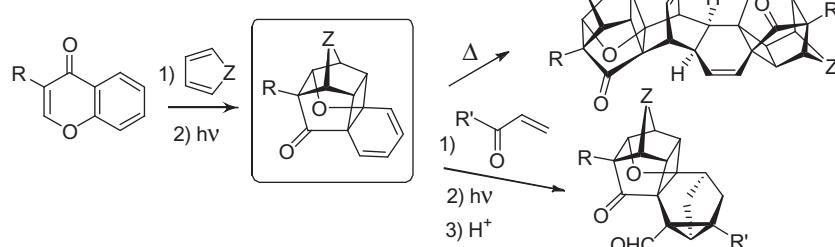
Adam Shih-Yuan Lee\*, Yu-Ting Chang



**First example of intramolecular [2<sub>n</sub> + 2<sub>n</sub>] alkene–arene photocyclization in the chromone series and its synthetic utility**

pp 3803–3806

Roman A. Valiulin, Andrei G. Kutateladze\*

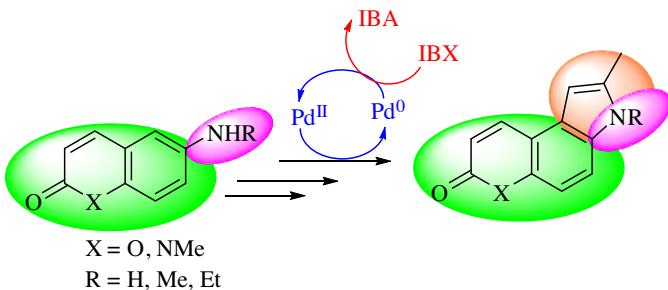


Diels–Alder adducts of chromones are shown to undergo an intramolecular [2<sub>n</sub> + 2<sub>n</sub>] alkene–arene photocyclization, leading to a versatile polycyclic diene which can dimerize or can be introduced into photoprotolytic oxametathesis.

**Palladium-catalyzed regioselective oxidative amination of alkenes: an efficient route to the synthesis of pyrrolocoumarin and pyrroloquinolone derivatives**

pp 3807–3810

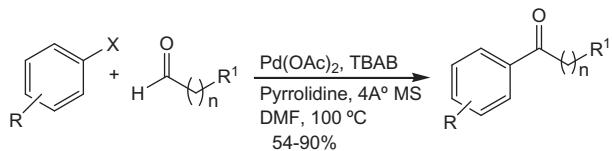
K. C. Majumdar\*, Srikanta Samanta, Raj Kumar Nandi, Buddhadeb Chattopadhyay



**Palladium(0) nanoparticle-catalyzed  $sp^2$  C–H activation: a convenient route to alkyl–aryl ketones by direct acylation of aryl bromides and iodides with aldehydes**

pp 3811–3814

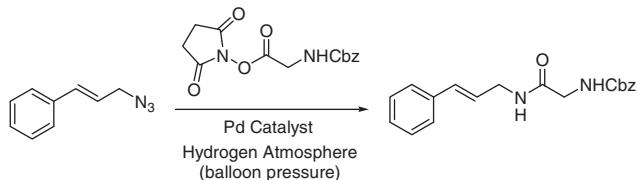
Laksmikanta Adak, Sukalyan Bhadra, Brindaban C. Ranu\*



Palladium(0) nanoparticles efficiently catalyze aldehyde C–H functionalization by aryl halides to produce alkyl–aryl ketones in good yields.

**Pd-catalyzed one-pot chemoselective hydrogenation protocol for the preparation of carboxamides directly from azides** pp 3815–3819

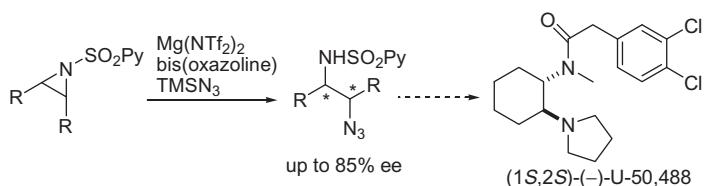
Sudhir N. Bavikar, Deepak B. Salunke, Braja G. Hazra\*, Vandana S. Pore, Josiane Thierry, Robert H. Dodd\*



**Enantioselective desymmetrization of meso-*N*-(heteroarenesulfonyl)aziridines with  $\text{TMN}_3$  catalyzed by chiral Lewis acids**

pp 3820–3823

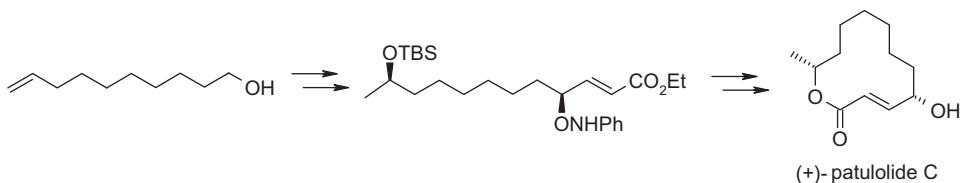
Shuichi Nakamura\*, Masashi Hayashi, Yasutoshi Kamada, Ryosuke Sasaki, Yuichi Hiramatsu, Norio Shibata, Takeshi Toru



**Enantioselective synthesis of (+)-patulolide C via proline-catalyzed sequential  $\alpha$ -aminoxylation and Horner–Wadsworth–Emmons olefination**

pp 3824–3826

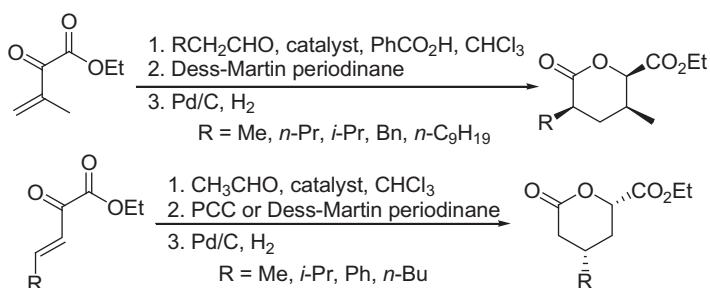
Gowravaram Sabitha\*, G. Chandrashekhar, K. Yadagiri, J. S. Yadav



**Organocatalytic approach to 3,5,6-trisubstituted and 4,6-disubstituted tetrahydropyran-2-ones**

pp 3827–3829

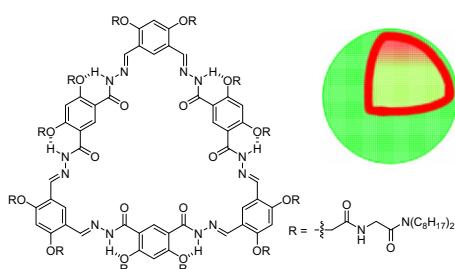
Danhua Xu, Yihua Zhang\*, Dawei Ma\*



**Hydrogen-bonded benzylidenebenzohydrazide macrocycles and oligomers: testing the robust capacity of an amide chain in promoting the formation of vesicles**

pp 3830–3835

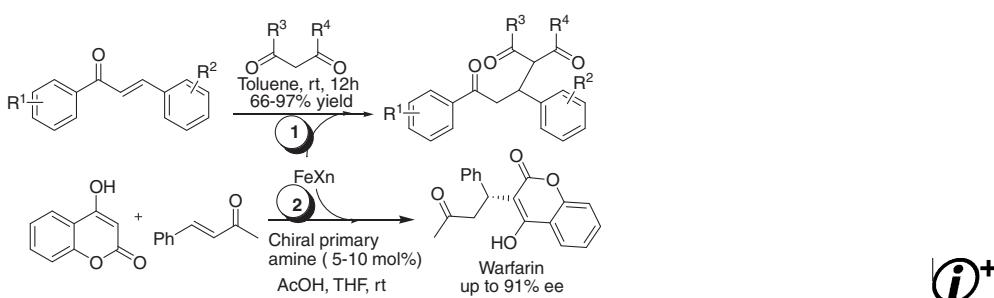
Ben-Ye Lu, Guang-Jun Sun, Jian-Bin Lin, Xi-Kui Jiang, Xin Zhao, Zhan-Ting Li\*



**Iron-catalyzed Michael reactions revisited: a synthetically useful process for the preparation of tri-carbonyl compounds and chiral warfarin**

pp 3836–3839

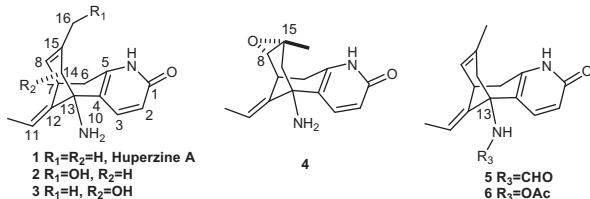
Hua-Meng Yang, Yue-Hua Gao, Li Li, Zhen-Yu Jiang, Guo-Qiao Lai\*, Chun-Gu Xia, Li-Wen Xu\*



**Microbial transformation of (-)-Huperzine A**

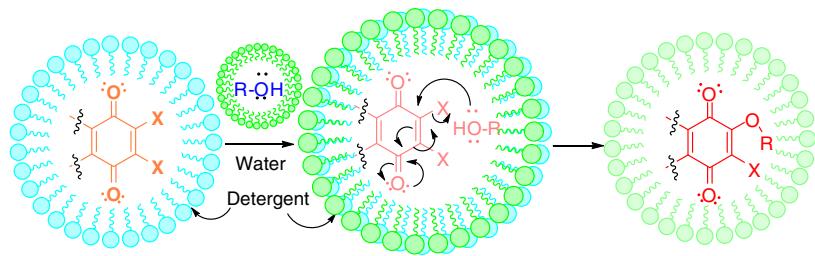
pp 3840–3842

Xinyuan Zhang, Jian-hua Zou, Jungui Dai\*

**Water-promoted unprecedented chemoselective nucleophilic substitution reactions of 1,4-quinones with oxygen nucleophiles in aqueous micelles**

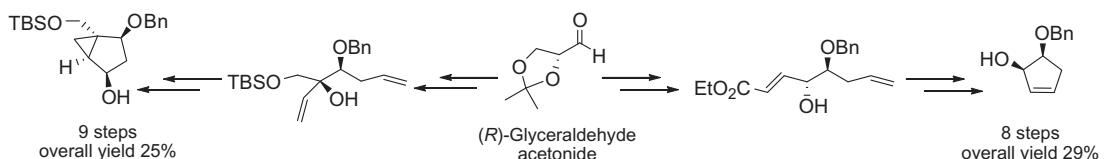
pp 3843–3847

Vishnu K. Tandon\*, Hardesh K. Maurya

**Concise synthesis of five-membered ring carbasugars based on key ring-closing metathesis**

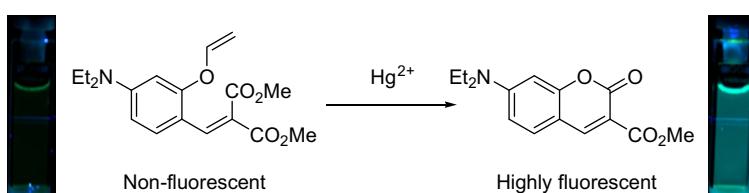
pp 3848–3851

Ya-Xi Yang, Zheng Li, Hui-Jin Feng, Guo-Rong Chen, Yuan-Chao Li\*

**A ‘turn-on’ fluorescent probe that selectively responds to inorganic mercury species**

pp 3852–3854

Yong-Suk Cho, Kyo Han Ahn\*

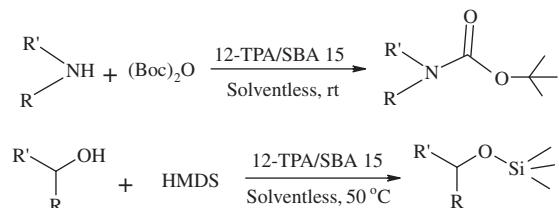


A fluorescent probe selectively senses inorganic mercury in the turn-on mode through a mercury ion-promoted hydrolysis reaction that leads to a coumarin, among various other metal species except Au(III).



**An expeditious, efficient green methodology for the Boc protection of amines and silyl protection of alcohols over tungstophosphoric acid-doped mesoporous silica** pp 3855–3858

Bikash Karmakar, Julie Banerji\*



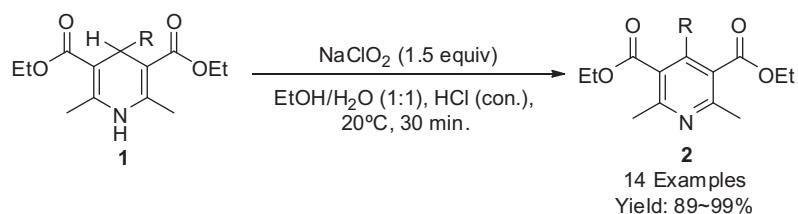
A green method has been adopted for the protection of amines as *N*-Boc and alcohols as silyl ether in the presence of tungstophosphoric acid-doped mesoporous silica (SBA15).



**Oxidative aromatization of Hantzsch 1,4-dihydropyridines by sodium chlorite**

pp 3859–3861

Xiali Liao, Wenbin Lin, Jun Lu, Chun Wang\*



\*Corresponding author

|i+ Supplementary data available via ScienceDirect

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