

**Tetrahedron Letters Vol. 49, No. 41, 2008**

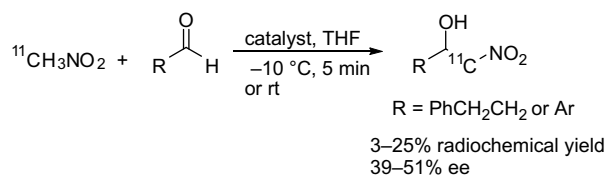
**Contents**

**COMMUNICATIONS**

**Asymmetric nitroaldol reaction using nitromethane labeled with  $^{11}\text{C}$**

pp 5837–5839

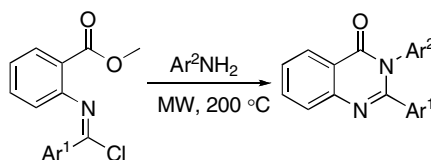
Koichi Kato \*, Sven Åke Gustavsson, Bengt Långström \*



**An efficient synthesis of 2,3-diaryl (3H)-quinazolin-4-ones via imidoyl chlorides**

pp 5840–5842

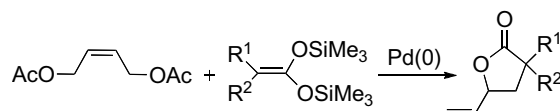
Andrew Kalusa, Nicola Chessum, Keith Jones \*



**Expeditious formation of  $\gamma$ -lactones upon palladium-catalyzed double nucleophilic addition of bis(TMS)ketene acetals to vicinal allylacetates**

pp 5843–5846

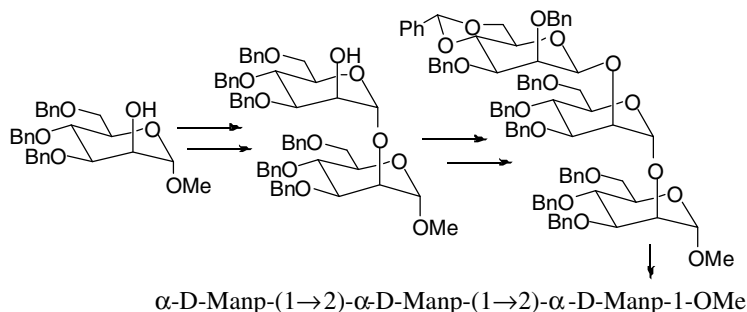
Cesar Sandoval Chavez, Henri Rudler \*, Andrée Parlier, Patrick Herson



**Synthesis of the repeating trisaccharide unit of the cell wall lipopolysaccharide of *Escherichia coli* type 8**

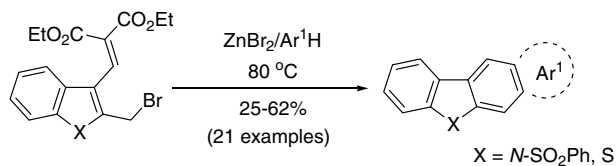
pp 5847–5849

Sajal K. Maity, Swarupananda Maity, Amarendra Patra, Rina Ghosh \*


**A one pot synthesis of annulated carbazole analogs**

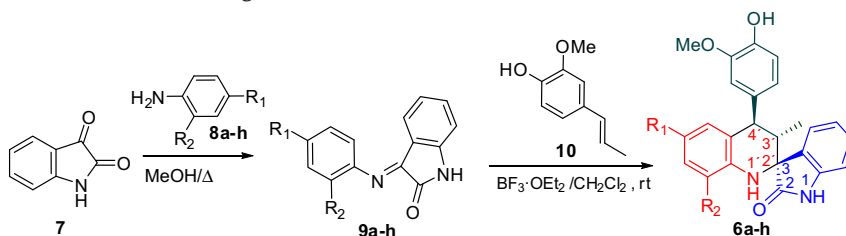
pp 5850–5854

Arasambattu K. Mohanakrishnan \*, Vasudevan Dhayalan, J. Arul Clement, Ramalingam Balamurugan Radhakrishnan Sureshbabu, Natarajan Senthil Kumar


**A simple entry to novel spiro dihydroquinoline-oxindoles using Povarov reaction between 3-N-aryliminoisatins and isoeugenol**

pp 5855–5857

Vladimir V. Kouznetsov \*, Josué S. Bello Forero, Diego F. Amado Torres

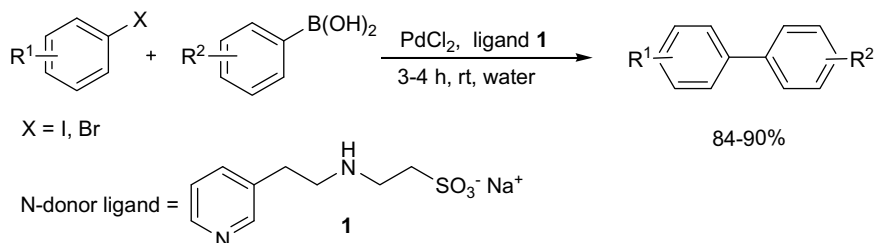


An easy, fast, and cheap way for the synthesis of the new 4'-(4-hydroxy-3-methoxyphenyl)-3'-methyl-3',4'-dihydro-1'H-spiro[indoline-3,2'-quinolin]-2-ones **6a-h** using BF<sub>3</sub>·OEt<sub>2</sub>-promoted imino Diels–Alder cycloaddition between ketimine-isatin derivatives **9a-h** and *trans*-isoeugenol **10**.


**Sodium 2-(2-pyridin-3-ylethylamino)ethyl sulfonate: an efficient ligand and base for palladium-catalyzed Suzuki reaction in aqueous media**

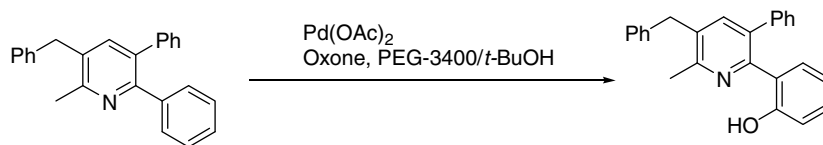
pp 5858–5862

Shivaji S. Pawar, Lavkumar S. Uppalla, Murlidhar S. Shingare, Shivaji N. Thore \*

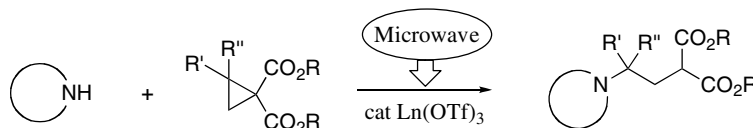


**Regioselective *ortho*-hydroxylation of aryl moiety of 2-arylpyridines using Pd(OAc)<sub>2</sub>/Oxone in PEG-3400/*tert*-BuOH** pp 5863–5866

Sung Hwan Kim, Hyun Seung Lee, Se Hee Kim, Jae Nyoung Kim \*

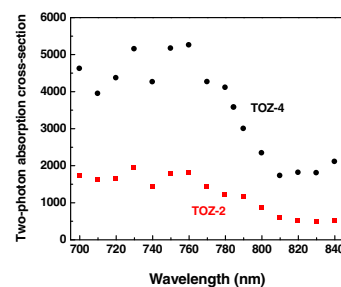
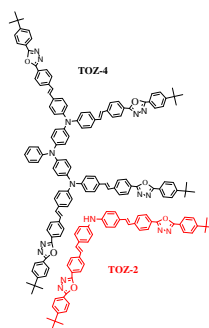
**Microwave-assisted and Ln(OTf)<sub>3</sub>-catalyzed homo-conjugate addition of N-heteroaromatics to activated cyclopropane derivatives** pp 5867–5870

Md. Imam Uddin, Akiko Mimoto, Keiji Nakano, Yoshiyasu Ichikawa, Hiyoshizo Kotsuki \*

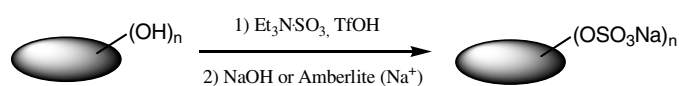
**Enhanced two-photon absorption of novel four-branched chromophore via vibronic coupling** pp 5871–5876

Deqiang Wang, Xiaomei Wang \*, Qingguo He \*, Maoyi Zhou, Wenwen Rui, Xutang Tao, Fenglian Bai, Minhua Jiang

A novel four-branched chromophore **TOZ-4** with starburst linker was synthesized and showed two-photon absorption cross-section ( $\delta$ ) as large as 5254 GM, which was principally resulted from vibronic coupling enhancement.

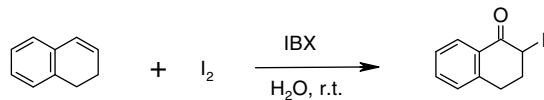
**Efficient acid-promoted per-O-sulfation of organic polyols** pp 5877–5879

Vadim B. Krylov, Nadezhda E. Ustyuzhanina, Alexey A. Grachev, Nikolay E. Nifantiev \*

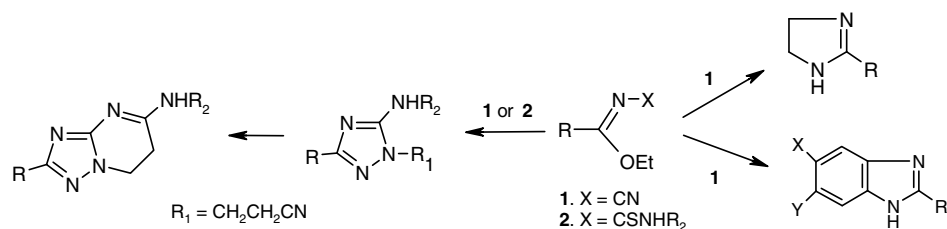


**IBX/I<sub>2</sub>-mediated oxidation of alkenes and alkynes in water: a facile synthesis of  $\alpha$ -iodoketones**

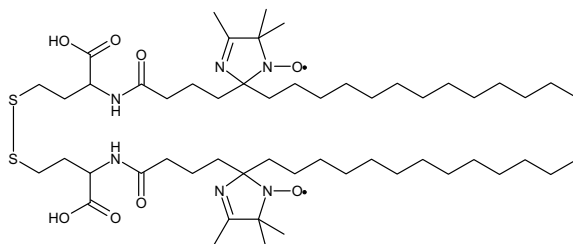
pp 5880–5882

Jhillu S. Yadav <sup>\*</sup>, Basi V. Subba Reddy, Ashutosh P. Singh, Ashok K. Basak**Easy access to triazoles, triazolopyrimidines, benzimidazoles and imidazoles from imidates**

pp 5883–5886

A. Zarguil <sup>\*</sup>, S. Boukhris, M. L. El Efrif, A. Souizi, E. M. Essassi**Amphiphilic spin probes based on disulfide-bridged bisnitroxides**

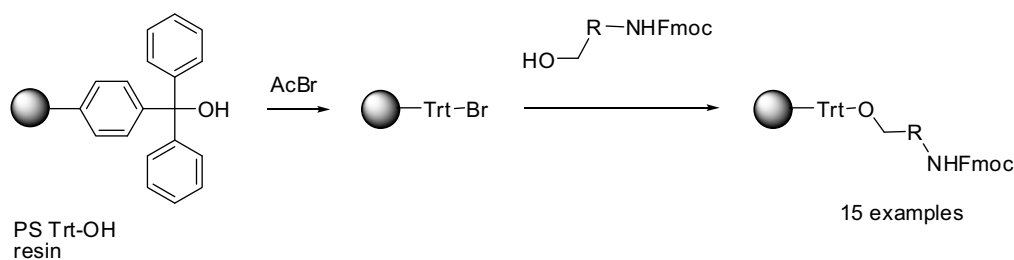
pp 5887–5889

Riccardo Garzelli, Vadim K. Khlestkin, Nicholas H. Williams, Victor Chechik <sup>\*</sup>

Several bisnitroxide amphiphiles connected by a disulfide bridge have been prepared. These compounds can be used to monitor thiol-disulfide exchange in colloidal assemblies.

**Efficient loading of primary alcohols onto a solid phase using a trityl bromide linker**

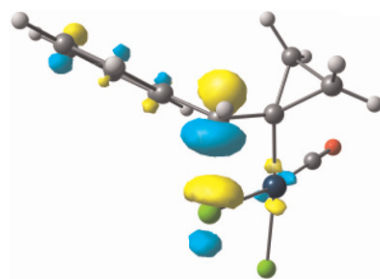
pp 5890–5893

François Crestey, Lars K. Ottesen, Jerzy W. Jaroszewski, Henrik Franzyk <sup>\*</sup>

**A unique and novel cyclopropylmethyl cation intermediate: a DFT study**

pp 5894–5898

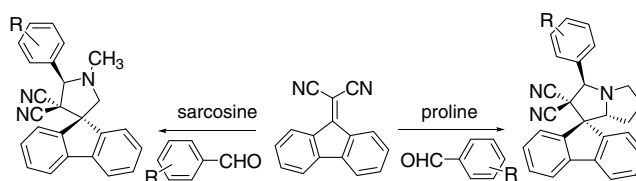
Tareq Irshaidat



Electrophilicity index = 2.94

**Cycloaddition reactions of azomethine ylides with a 9-fluorenone-malononitrile Knöevenagel adduct**

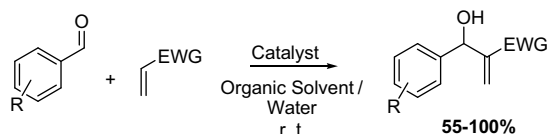
pp 5899–5901

Mehdi Ghandi <sup>\*</sup>, Seyed Jamal Tabatabaei Rezaei, Ahmad Yari, Abuzar Taheri

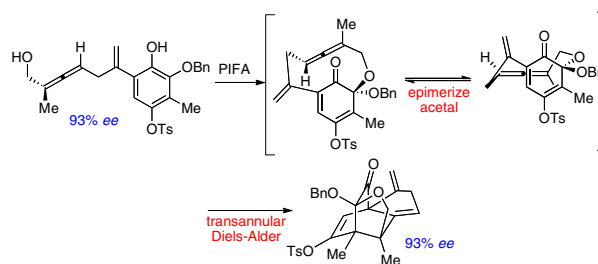
R: (a) 4-Me; (b) 4-OMe; (c) 4-Cl; (d) 4-Br; (e) 4-H;  
 (f) 3,4-OMe; (g) 3,4,5-OMe; (h) 4-NO<sub>2</sub>

**The Morita–Baylis–Hillman reaction in aqueous–organic solvent system**

pp 5902–5905

Rodrigo O. M. A. de Souza <sup>\*</sup>, Vera L. P. Pereira, Pierre M. Esteves, Mario L. A. A. Vasconcelos**Multiple chirality transfers in the enantioselective synthesis of 11-O-debenzoyltashironin. Chiroptical analysis of the key cascade**

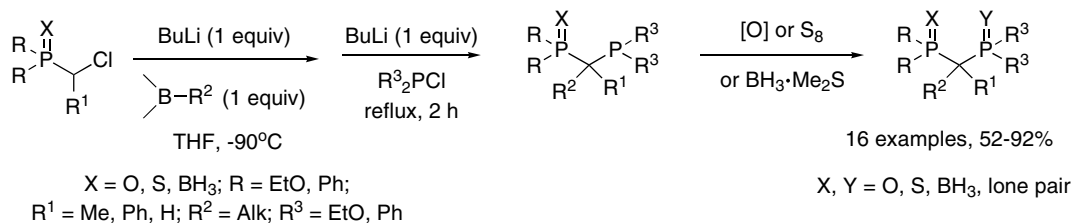
pp 5906–5908

Alessandra Polara, Silas P. Cook, Samuel J. Danishefsky <sup>\*</sup>

### Synthesis of 1,1-bis-phosphorus compounds from organoboranes

pp 5909–5913

Monika I. Antczak, Jean-Luc Montchamp \*



The facile synthesis of various P–C–P compounds is described, based on the reaction of phosphorus carbenoids with organoboranes, followed by reaction with phosphorus electrophiles. Using this approach, symmetrically and differentially substituted 1,1-bisphosphorus compounds can be obtained in good yields. A number of novel P–C–P motifs are described for the first time.

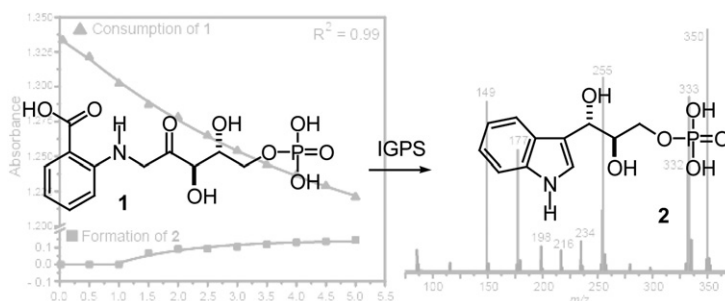


### The catalytic mechanism of indole-3-glycerol phosphate synthase (IGPS) investigated by electrospray ionization (tandem) mass spectrometry

pp 5914–5917

Clarissa M. Czekster, Alexandre A. M. Lapis \*, Gustavo H. M. F. Souza, Marcos N. Eberlin, Luiz A. Basso, Diógenes S. Santos, Jaírton Dupont, Brenno A. D. Neto \*

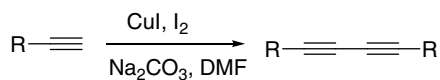
The catalytic mechanism indole ring closure promoted by IGPS enzyme was studied by ESI mass spectrometry.



### CuI/iodine-mediated homocoupling reaction of terminal alkynes to 1,3-diynes

pp 5918–5919

Dafeng Li, Kun Yin, Jian Li, Xueshun Jia \*

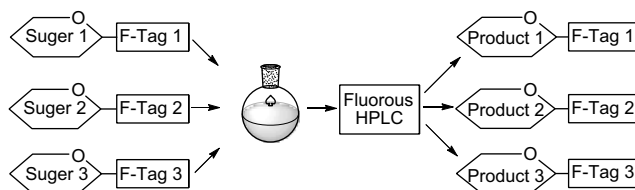


A facile and efficient pathway for CuI/iodine-mediated homocoupling reaction of terminal alkynes to symmetrical 1,4-disubstituted 1,3-diynes in good to excellent yields was reported.

### Towards oligosaccharide library synthesis by fluorous mixture method

pp 5920–5923

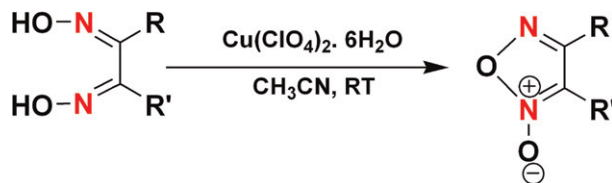
Mami Tojino, Mamoru Mizuno \*



**Copper(II)-mediated oxidation of 1,2-dioxime to furoxan**

pp 5924–5927

Oindrila Das, Sayantan Paria, Tapan Kanti Paine \*

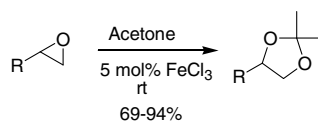


1,2-Dioximes can be oxidized efficiently to furoxans by copper(II) in acetonitrile under ambient conditions.

**Fe(III) chloride catalyzed conversion of epoxides to acetone**

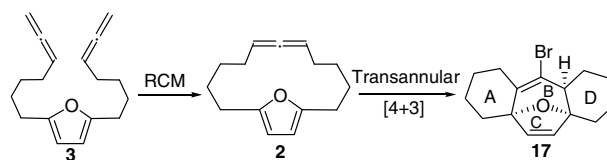
pp 5928–5930

Sumit Saha, Samir Kumar Mandal, Subhas Chandra Roy \*

**The first transannular [4+3] cycloaddition reaction: synthesis of the ABCD ring structure of cortistatins**

pp 5931–5934

Derek T. Craft, Benjamin W. Gung \*

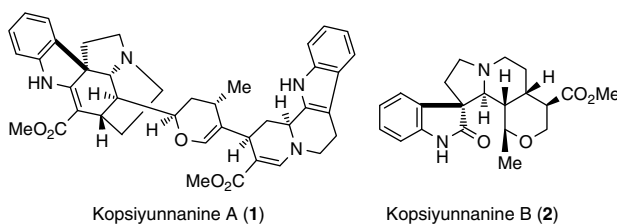


A 14-membered macrocycle with an allene and a furan is synthesized using an allene ring closing metathesis reaction. Upon treatment of the macrocycle with a catalytic amount of Pd(OAc)<sub>2</sub>, the first transannular [4+3] cycloaddition occurred to yield 37% of a tetracyclic compound containing the ABCD ring structure of the natural products cortistatins.

**Two novel indole alkaloids, Kopsiyunnanines A and B, from a Yunnan *Kopsia***

pp 5935–5938

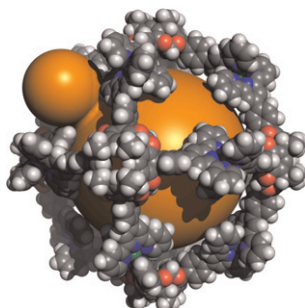
Yuqiu Wu, Mariko Kitajima, Noriyuki Kogure, Rongping Zhang, Hiromitsu Takayama \*



**A self-assembling metallosupramolecular cage based on cavitand–terpyridine subunits**

pp 5939–5942

Tobias Schröder, Ralf Brodbeck, Matthias C. Letzel, Andreas Mix, Björn Schnatwinkel, Markus Tonigold, Dirk Volkmer\*, Jochen Mattay\*

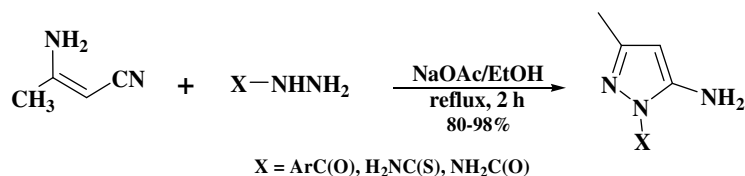


Metal-directed self-assembly of a terpyridyl-functionalized cavitand yields a large hexameric coordination cage.

**Synthesis of novel 5-amino-1-arylpyrazoles**

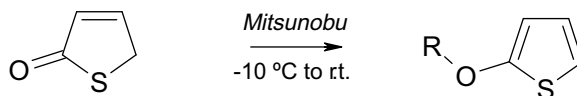
pp 5943–5945

Jairo Quiroga\*, Jaime Portilla, Rodrigo Abonía, Braulio Insuasty, Manuel Noguerras, Justo Cobo

**Facile preparation of thiophene C2-ethers using the Mitsunobu reaction**

pp 5946–5949

Craig S. Harris\*, Hervé Germain, Georges Pasquet

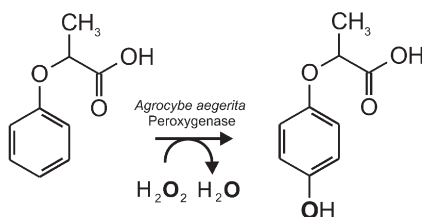


The preparation of thiophene ethers generally requires forcing conditions thus limiting the choice of alkyl substituent. Herein, we report the first successful generally applicable conditions for the selective O-alkylation of 2(5H)-thiophenone.

**Regioselective preparation of (R)-2-(4-hydroxyphenoxy)propionic acid with a fungal peroxygenase**

pp 5950–5953

Matthias Kinne\*, René Ullrich, Kenneth E. Hammel, Katrin Scheibner, Martin Hofrichter

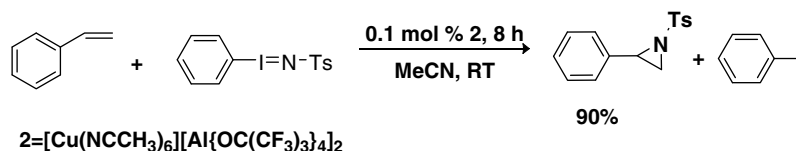




### Syntheses of acetonitrile ligated copper complexes with perfluoroalkoxy aluminate as counter anion and their catalytic application for olefin aziridination

pp 5954–5956

Yang Li, Bernd Diebl, Alexander Raith, Fritz E. Kühn \*



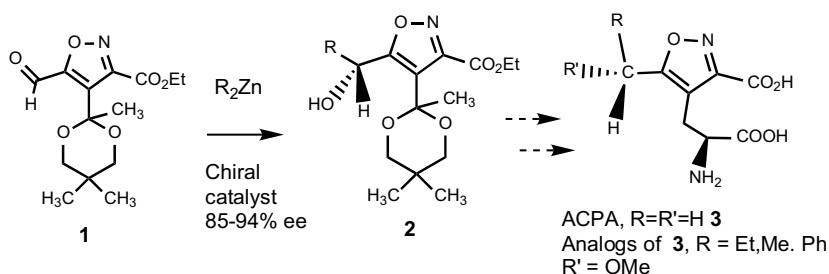
Complex  $[\text{Cu}(\text{NCCH}_3)_6][\text{Al}\{\text{OC}(\text{CF}_3)_3\}_4]_2$  has been successfully synthesized and applied as catalyst in olefin aziridination, which affords good to excellent yield (up to 96%) as well as very high TOF (higher than  $5000 \text{ h}^{-1}$ ).



### The catalytic asymmetric addition of alkyl- and aryl-zinc reagents to an isoxazole aldehyde

pp 5957–5960

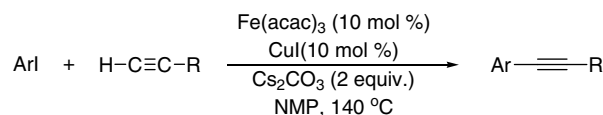
Jared K. Nelson, Brendan Twamley, Trinidad J. Villalobos, Nicholas R. Natale \*



### Iron/copper-catalyzed C–C cross-coupling of aryl iodides with terminal alkynes

pp 5961–5964

Chandra M. Rao Volla, Pierre Vogel \*

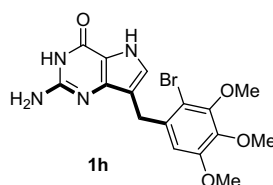


$\text{Fe}(\text{acac})_3$  accelerates the CuI-promoted Sonogashira–Hagihara cross-coupling of aryl iodides with terminal alkynes, without requiring special ligands, in *N*-methylpyrrolidone as solvent.

### Preparation of a set of 4,5-dihydro-3H-pyrrolo[3,2-d]pyrimidin-4-ones as potential Hsp90 ligands

pp 5965–5967

Teresa Semeraro, Claudia Mugnaini \*, Federico Corelli \*

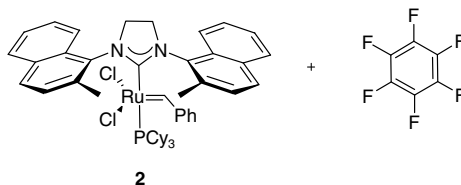


A synthetic route for the preparation of 4,5-dihydro-3H-pyrrolo[3,2-d]pyrimidin-4-ones characterized by a decorated benzyl moiety at different positions of the five-membered ring has been developed, and the new compounds have been tested as Hsp90 ligands. One of them displayed  $\text{IC}_{50} = 50 \text{ }\mu\text{M}$  representing an interesting starting point for further investigation.

**A hexafluorobenzene promoted ring-closing metathesis to form tetrasubstituted olefins**

pp 5968–5971

Daniel Rost, Marta Porta, Simon Gessler, Siegfried Blechert \*

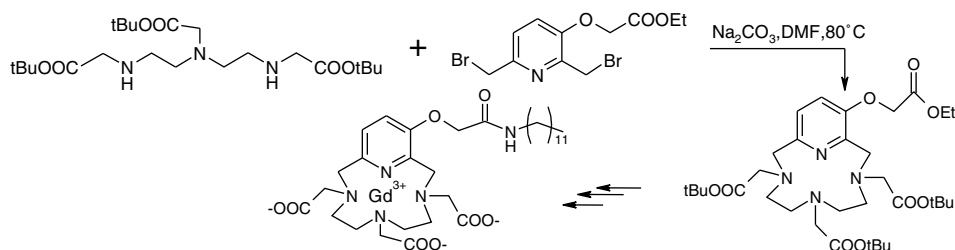


Ring-closing metathesis (RCM) using catalyst **2** in presence of hexafluorobenzene led to tetrasubstituted olefins in high yields and very short reaction times.

**Synthesis of a novel amphiphilic GdPCTA-[12] derivative as a potential micellar MRI contrast agent**

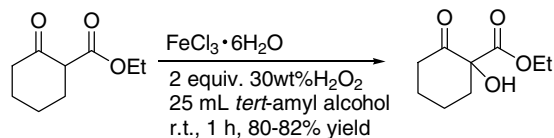
pp 5972–5975

Clotilde Ferroud \*, H el ene Borderies, Elizabeth Lasri, Alain Guy, Marc Port

**Iron-catalyzed hydroxylation of  $\beta$ -ketoesters with hydrogen peroxide as oxidant**

pp 5976–5979

Dongmei Li, Kristin Schr oder, Bianca Bitterlich, Man Kin Tse, Matthias Beller \*

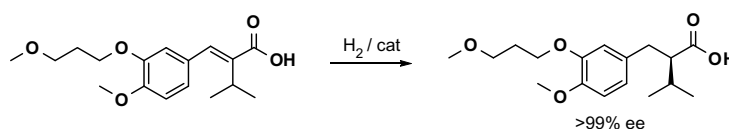


The selective hydroxylation of  $\beta$ -ketoesters was realized using hydrogen peroxide as oxidant catalyzed by iron(III) chloride. 75–90% yield could be achieved for the hydroxylation of cyclic ketoesters.

**Synthesis of enantiopure (R)-2-(4-methoxy-3-(3-methoxypropoxy)-benzyl)-3-methylbutanoic acid—a key intermediate for the preparation of Aliskiren**

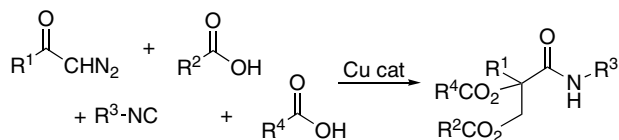
pp 5980–5982

Natalia Andrushko \*, Vasyly Andrushko, Thomas Thyran, Gerd K onig, Armin B orner \*

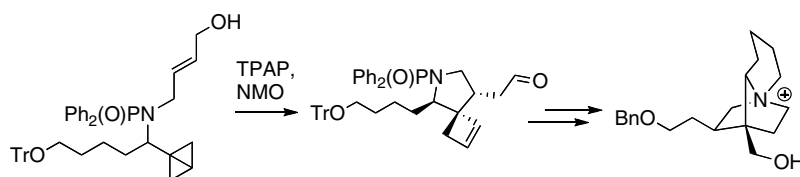


**Multicomponent reaction design: a one-pot route to substituted di-O-acylglyceric acid amides from  $\alpha$ -diazoketones** pp 5983–5985

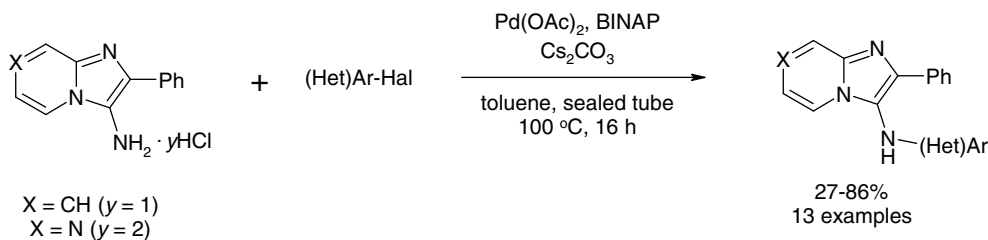
Lijun Fan, Ashley M. Adams, Bruce Ganem \*

**Formal Alder-ene reaction of a bicyclo[1.1.0]butane in the synthesis of the tricyclic quaternary ammonium core of daphniglaucins** pp 5986–5989

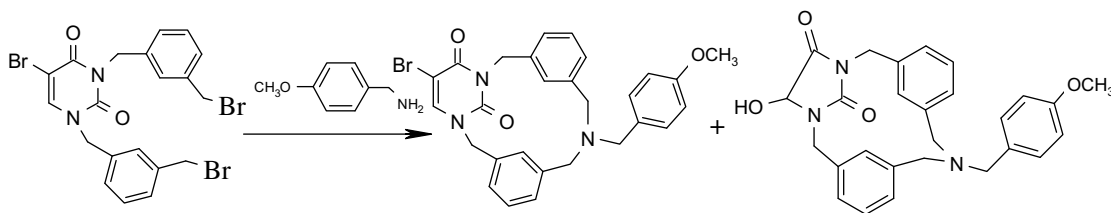
Masafumi Ueda, Maciej A. A. Walczak, Peter Wipf \*

**Greater variety in Groebke–Blackburn type 3-arylaminoimidazo[1,2-a]azines accessed via Pd-catalyzed arylation of a primary amine precursor** pp 5990–5993

Yuri Sandulenko, Alexander Komarov, Konstantin Rufanov, Mikhail Krasavin \*

**Macrocyclic 5-bromouracil derivatives: synthesis and transformation of a uracil ring** pp 5994–5997

Anton E. Nikolaev, Vyacheslav E. Semenov \*, Dilyara R. Sharafutdinova, Yurii Ya. Efremov, Vladimir S. Reznik

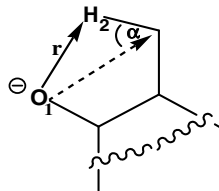


**Analysis of Menger's 'spatiotemporal hypothesis'**

pp 5998–6002

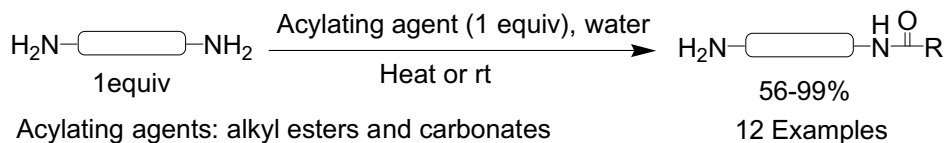
Rafik Karaman

Strain versus Proximity  
Strain = f (angle of attack/distance)

**Mono-acylation of symmetric diamines in the presence of water**

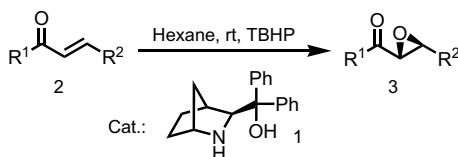
pp 6003–6006

Wei Tang, Shiyue Fang \*

**Enantioselective epoxidation of  $\alpha,\beta$ -enones promoted by (1*R*,3*S*,4*S*)-2-azanorbornyl-3-methanol as an organocatalyst**

pp 6007–6008

Jun Lu, Yun-He Xu, Feng Liu, Teck-Peng Loh \*

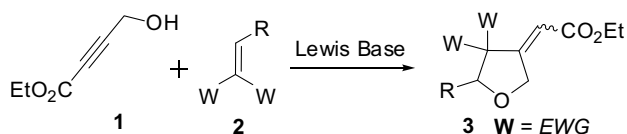


(1*R*,3*S*,4*S*)-2-Azanorbornyl-3-methanol was synthesized from (*R*)-1-phenylethylamine and used as a catalyst for the enantioselective epoxidation of  $\alpha,\beta$ -enones to afford the corresponding epoxides in good yields and high enantioselectivities at room temperature.

**One-pot synthesis of highly substituted tetrahydrofurans from activated propargyl alcohols using  $\text{Bu}_3\text{P}$** 

pp 6009–6012

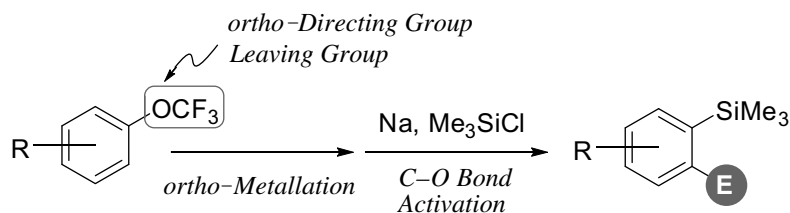
Yakambram Pedduri, John S. Williamson \*



**Selective aromatic carbon–oxygen bond cleavage of trifluoromethoxyarenes: a trifluoromethoxy group as a convertible directing group**

pp 6013–6015

Akinori Iijima, Hideki Amii \*



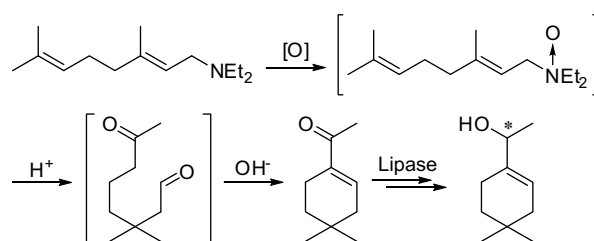
New transformations involving selective cleavage of aromatic C–O bonds in trifluoromethoxyarenes is described.



**Cyclization of *N,N*-diethylgeranylamine N-oxide in one-pot operation: preparation of cyclic terpenoid-aroma chemicals**

pp 6016–6018

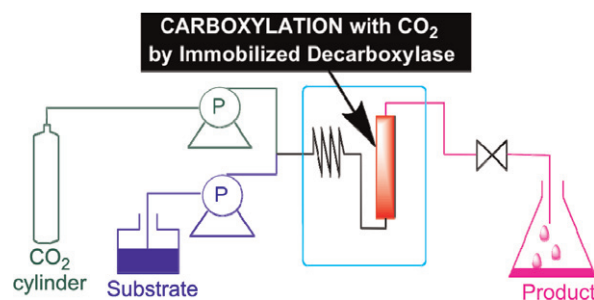
Kunihiko Takabe \*, Takashi Yamada, Takenori Miyamoto, Nobuyuki Mase



**Novel continuous carboxylation using pressurized carbon dioxide by immobilized decarboxylase**

pp 6019–6020

Tomoko Matsuda \*, Ryo Marukado, Shinichi Koguchi, Toru Nagasawa, Masaharu Mukoyama, Tadao Harada, Kaoru Nakamura



**OTHER CONTENTS****Corrigendum****p 6021****Calendar****p I**

\*Corresponding author

+ Supplementary data available via ScienceDirect

---

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

 **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**

ISSN 0040-4039