

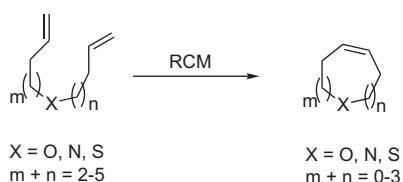
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## REPORT

**Formation of medium-ring heterocycles by diene and enyne metathesis**

Shital K. Chatopadhyay,\* Swastik Karmakar, Titas Biswas, K. C. Majumdar,\* H. Rahaman and B. Roy

pp 3919–3952



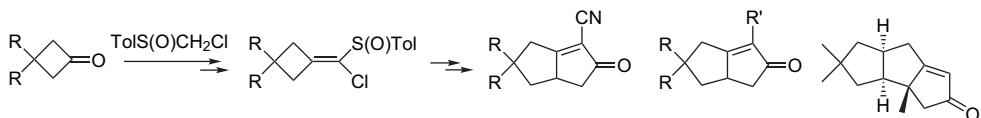
Formation of medium-ring heterocycles by catalytic diene and enyne metathesis reactions has been reviewed. The review contains 181 references.

## ARTICLES

**A method for synthesis of bicyclo[3.3.0]oct-1-en-3-ones from cyclobutanones with one-carbon ring expansion and its application to a formal synthesis of racemic 1-desoxyhypophilin**

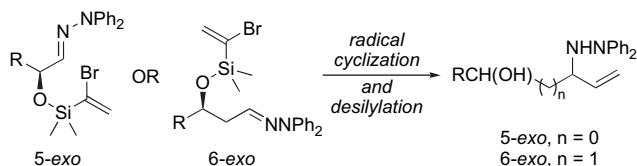
Hiroaki Kashima, Tadashi Kawashima, Daisuke Wakasugi and Tsuyoshi Satoh\*

pp 3953–3963

**Enhanced reactivity in radical cyclizations of hydrazones using the silicon-tethered 1-bromovinyl group**

Gregory K. Friestad,\* Tao Jiang and Alex K. Mathies

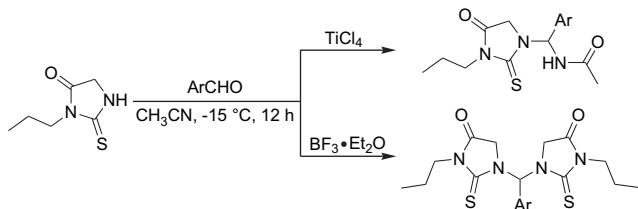
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Bromovinyl radical precursors offer enhanced reactivity in Si-tethered radical addition to hydrazones, enabling application via 6-*exo* cyclization modes.

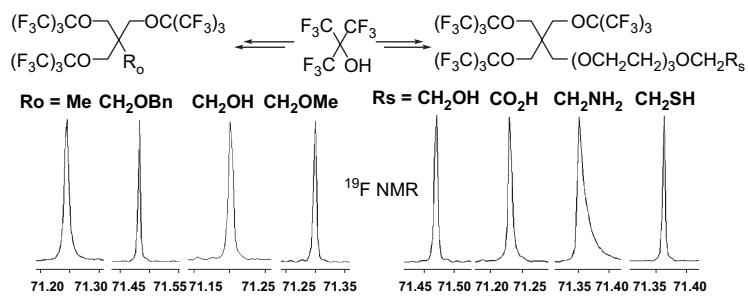
**Different N–C–N formation reactions of aromatic aldehydes and thiohydantoins controlled by Lewis acid promoters** pp 3973–3981

Feifei Gao, Guangliang Zhang, Suoqin Zhang, Yueming Cheng, Zhan Shi, Yaoxian Li\* and Junlong Gao



Two kinds of thiohydantoin derivatives were synthesized with different Lewis acids as promoters.

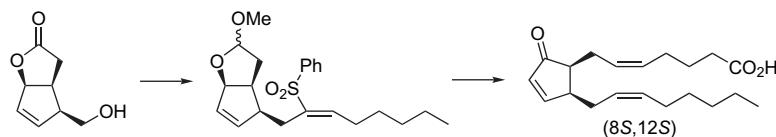
**The design and synthesis of highly branched and spherically symmetric fluorinated oils and amphiles** pp 3982–3988  
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**Enantioselective synthesis of preclavulone A and its methyl ester**

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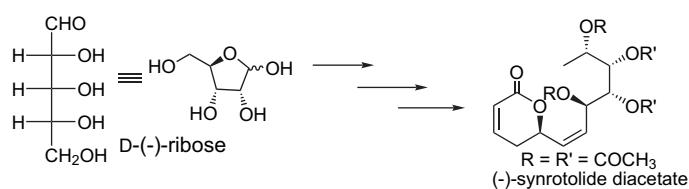
Alessio Porta, Savino Re, Giuseppe Zanoni and Giovanni Vidari\*



**Stereoselective total synthesis of (–)-synrotolide diacetate from D-ribose**

pp 3995–3999

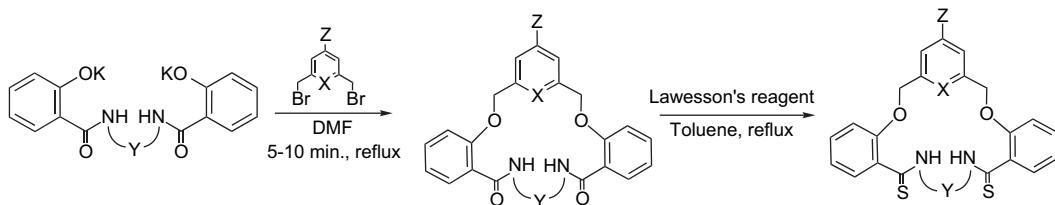
Palakodety Radha Krishna\* and P. Srinivas Reddy



A stereoselective total synthesis of (–)-synrotolide diacetate from D-ribose is reported.

**Synthesis and molecular orbital calculations of some benzo-substituted macrocyclic diamides and their corresponding macrocyclic dithiodiamides** pp 4000–4010

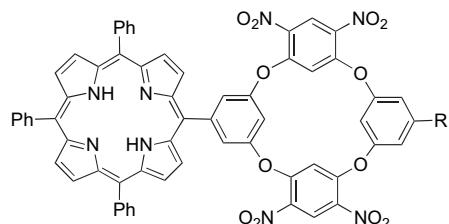
Adel A. Mohamed, Ghada S. Masaret and Ahmed H. M. Elwahy\*



**Syntheses and properties of functionalized oxacalix[4]arene porphyrins**

pp 4011–4017

Lijuan Jiao, Erhong Hao, Frank R. Fronczek, Kevin M. Smith and M. Graça H. Vicente\*

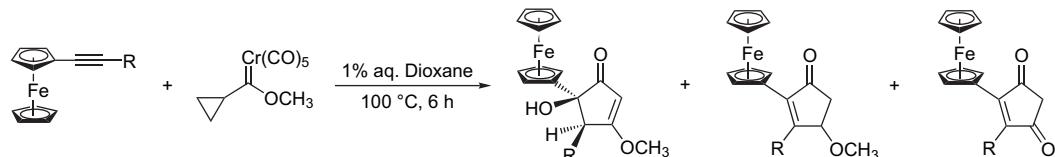


Functionalized oxacalix[4]arene porphyrins have been synthesized via a '3+1' condensation between a porphyrin and readily available fluorodinitrobenzene-containing trimers, and their photophysical properties evaluated. A porphyrin containing two oxacalix[4]arene moieties is also reported. Data suggest that these porphyrins adopt 1,3-alternating conformations.

**Coupling of cyclopropylcarbene–chromium complex with ferrocenyl alkynes: synthesis of 5-ferrocenyl-5-hydroxy-2-cyclopentenones and 4-ferrocenyl-4-cyclopentene-1,3-diones**

pp 4018–4026

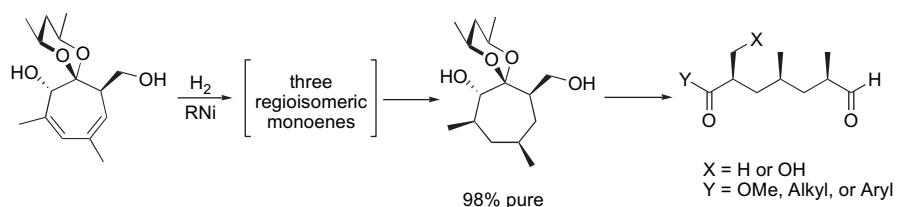
Metin Zora,\* Tülay Aslı Tumay and Orhan Büyükgüngör



The coupling of ferrocenyl alkynes with cyclopropylcarbene–chromium complex leads to ferrocenyl-substituted 2-cyclopentenones with or without a hydroxy substituent, 4-cyclopentene-1,3-diones, 2-cyclobutenones and  $\alpha,\beta$ -unsaturated aldehydes in varying amounts.

**Stereoselective hydrogenation of conjugate diene directed by hydroxy group and asymmetric synthesis of deoxypolypropionate units** pp 4027–4038

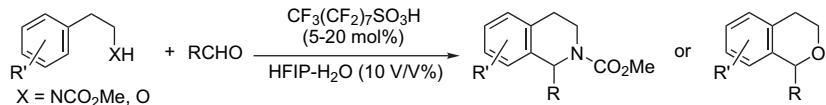
Takashi Sugimura,\* Chun Young Im, Yasuhiro Sato and Tadashi Okuyama



**Synthesis of tetrahydroisoquinolines and isochromans via Pictet–Spengler reactions catalyzed by Brønsted acid–surfactant-combined catalyst in aqueous media**

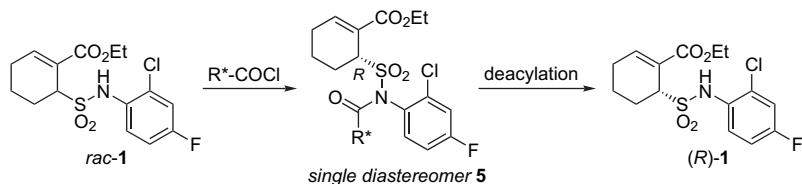
Akio Saito,\* Masaki Takayama, Aru Yamazaki, Junko Numaguchi and Yuji Hanzawa\*

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**Convenient synthesis of antisepsis agent TAK-242 by novel optical resolution through diastereomeric N-acylated sulfonamide derivative** pp 4048–4051

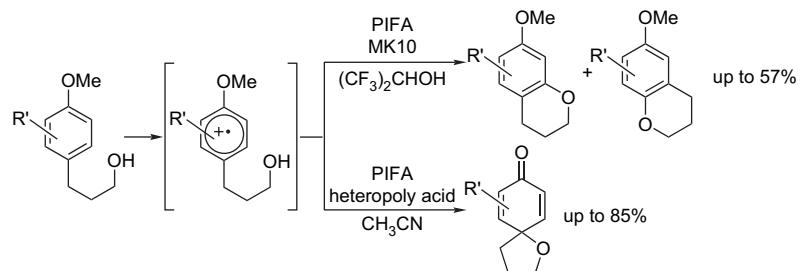
Atsuko Nishiguchi,\* Tomomi Ikemoto and Kiminori Tomimatsu



**Nucleophilic attack of intramolecular hydroxyl groups on electron-rich aromatics using hypervalent iodine(III) oxidation** pp 4052–4060

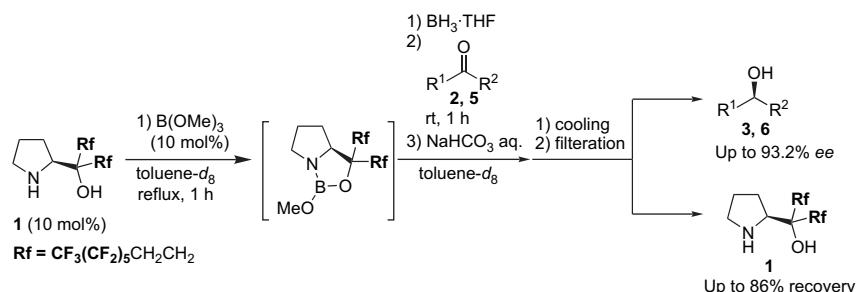
Kayoko Hata, Hiromi Hamamoto, Yukiko Shiozaki, Simon B. Cämmerer and Yasuyuki Kita\*

Phenyliodine(III) bis(trifluoroacetate) (PIFA)-mediated oxidative nucleophilic substitution of electron-rich aromatics involving aromatic cation radical intermediates was utilized in the direct aromatic carbon–oxygen bond formation leading to chroman or spirodienone derivatives.



**Novel fluororous prolinol as a pre-catalyst for catalytic asymmetric borane reduction of various ketones** pp 4061–4066

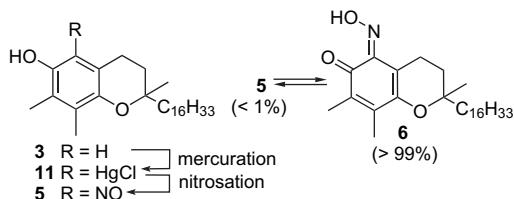
Sakiko Goushi, Kazumasa Funabiki,\* Masaya Ohta, Keisuke Hatano and Masaki Matsui



**Novel tocopheryl compounds XXIV. Studies into the nitrosation chemistry of  $\gamma$ -tocopherol: preparation of 5-nitroso- $\gamma$ -tocopherol via an organomercury derivative of vitamin E**

Anjan Patel, Falk Liebner, Kurt Mereiter, Thomas Netscher and Thomas Rosenau\*

pp 4067–4073



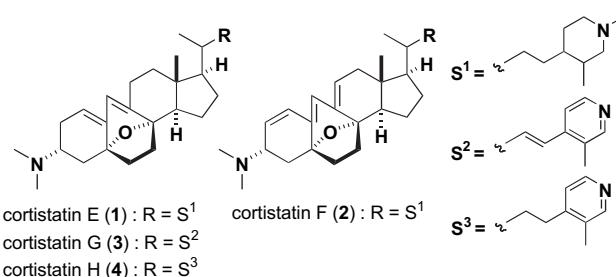
5-Nitroso- $\gamma$ -tocopherol (**5**) was synthesized from  $\gamma$ -tocopherol (**3**) by aprotic nitrosation of an organomercurial intermediate (**11**). Under protic conditions the tautomeric *ortho*-benzoquinone monoxime (**6**) dominated over nitrosophenol **5**.

**Cortistatins E, F, G, and H, four novel steroidal alkaloids from marine sponge *Corticium simplex***

Yasuo Watanabe, Shunji Aoki, Daiki Tanabe, Andi Setiawan and Motomasa Kobayashi\*

pp 4074–4079

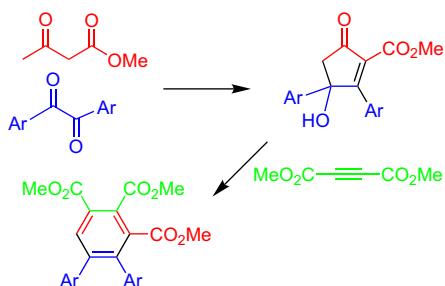
Four novel steroidal alkaloids, cortistatins E, F, G, and H were isolated from the marine sponge *Corticium simplex* and their chemical structures were elucidated by 2D-NMR analysis.



**Synthesis of 4,5-diaryl-1,2,3-benzenetricarboxylates by reaction of 4-hydroxycyclopent-2-en-1-one-2-carboxylates with dimethyl acetylenedicarboxylate**

Muhammad Sher, Christine Fischer, Helmut Reinke and Peter Langer\*

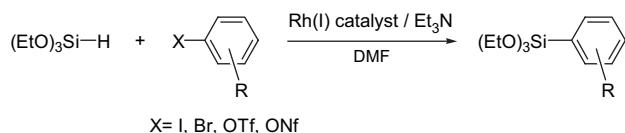
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**Synthesis of aryltriethoxysilanes via rhodium(I)-catalyzed cross-coupling of aryl electrophiles with triethoxysilane**

Miki Murata,\* Hiroyuki Yamasaki, Tsukasa Ueta, Masayuki Nagata, Masanori Ishikura, Shinji Watanabe and Yuzuru Masuda

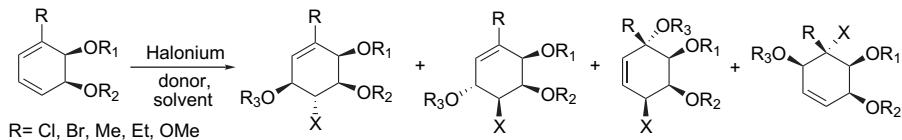
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X = I, Br, OTf, ONf

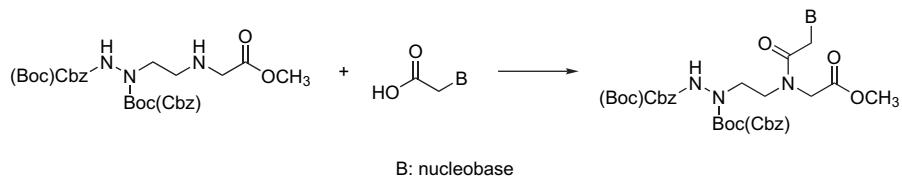
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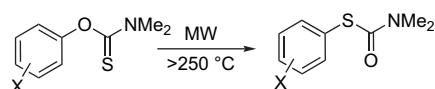
Paolangelo Cerea, Clelia Giannini, Sergio Dall'Angelo, Emanuela Licandro,\* Stefano Maiorana and Rosangela Marchelli



**A high temperature investigation using microwave synthesis for electronically and sterically disfavoured substrates of the Newman–Kwart rearrangement**

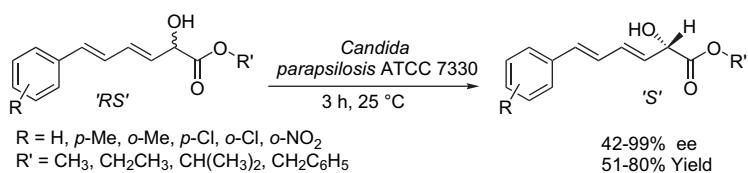
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Jonathan D. Moseley\* and Philip Lenden



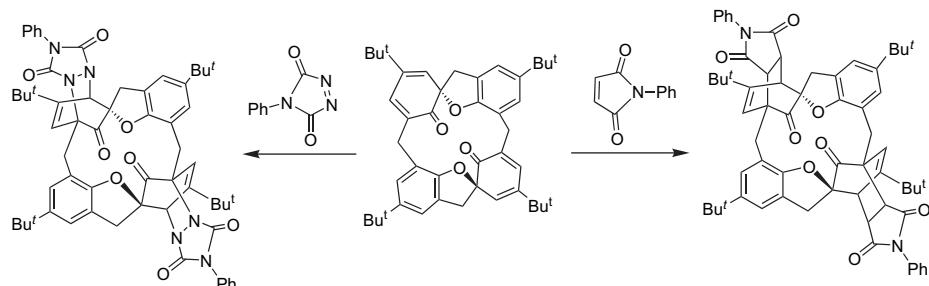
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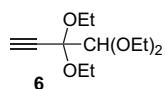
V. B. Ganga, T. Sreeja, E. Suresh and R. Luxmi Varma\*



## Synthesis and some chemical properties of 3,3,4,4-tetraethoxybut-1-yne

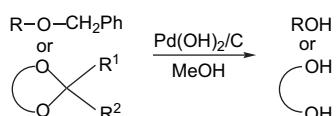
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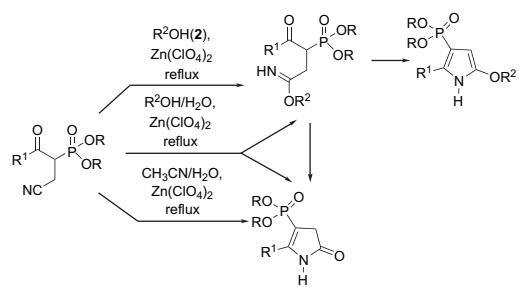


## Hydroxyl group deprotection reactions with Pd(OH)<sub>2</sub>/C: a convenient alternative to hydrogenolysis of benzyl ethers and acid hydrolysis of ketals pp 4149–4155

Benzyl ethers and acid hydrolysis of ketals



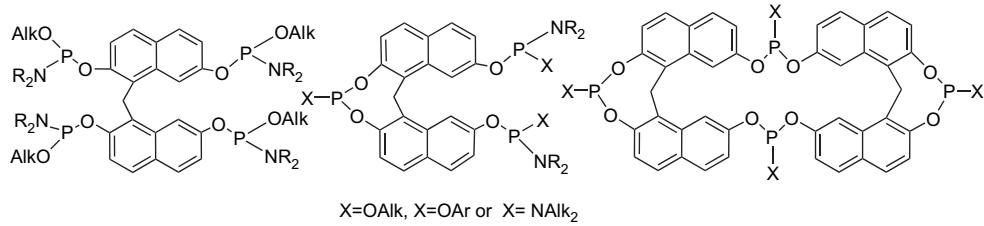
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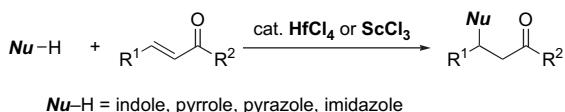
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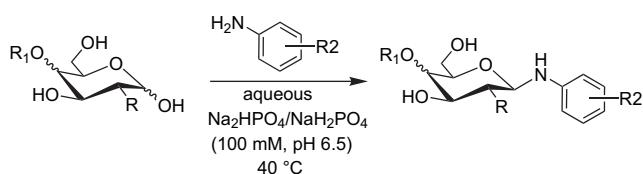
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**One-pot stereoselective synthesis of  $\beta$ -N-aryl-glycosides by N-glycosylation of aromatic amines: application to the synthesis of tumor-associated carbohydrate antigen building blocks**

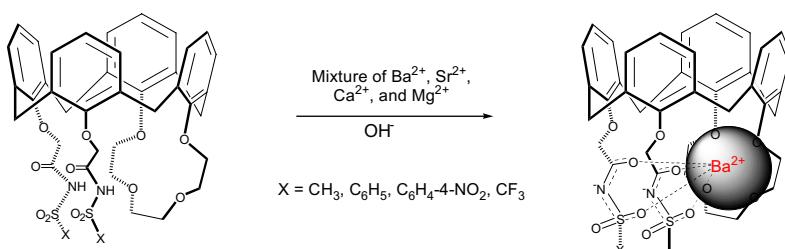
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Nicolas Bridiau, Moulay Benmansour, Marie Dominique Legoy and Thierry Maugard\*

**Efficient divalent metal cation extractions with di-ionizable calix[4]arene-1,2-crown-4 compounds**

pp 4184–4189

Chuqiao Tu, Kazimierz Surowiec and Richard A. Bartsch\*



Di-ionizable calix[4]arene-1,2-crown-4 ethers in the cone conformation exhibit high selectivity for  $Ba^{2+}$  in competitive solvent extraction of alkaline earth metal cations and high extraction ability for  $Pb^{2+}$  and  $Hg^{2+}$  in single species extraction.

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\*Corresponding author

(i)<sup>†</sup> Supplementary data available via ScienceDirect



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