

Tetrahedron Letters Vol. 51, No. 39, 2010

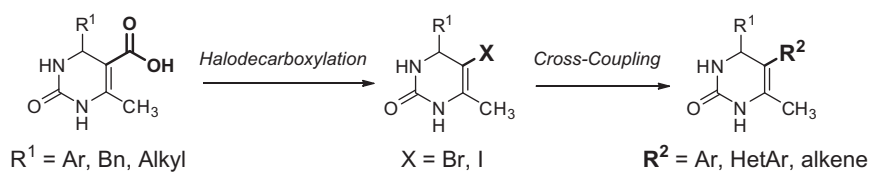
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COMMUNICATIONS

Synthesis and Suzuki–Miyaura reactions of 5-halo-3,4-dihydropyrimidin-2(1H)-ones

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Andrew J. Zych*, Hong-Jun Wang, Samuel A. Sakwa

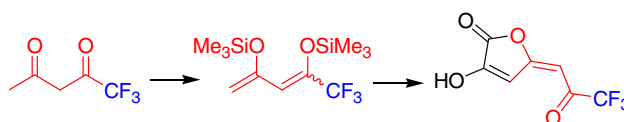


A novel synthesis of 6-methyl-4-phenyl-5-substituted-3,4-dihydropyrimidin-2(1H)-ones from 6-methyl-4-phenyl-5-halo-3,4-dihydropyrimidin-2(1H)-ones via the Suzuki–Miyaura reaction is reported. These previously unknown heterocyclic halides are easily prepared using the Biginelli multicomponent reaction followed by halodecarboxylation. The effect of varied substitution at the C-4 position on the cross-coupling reaction is also examined.

Synthesis and reactions of the first fluoroalkylated 1,3-bis(trimethylsilyloxy)-1,3-butadienes

pp 5106–5108

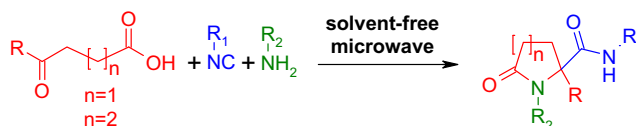
Stefan Büttner, Franziska Bendrath, Peter Langer*



Synthesis of five- and six-membered lactams via solvent-free microwave Ugi reaction

pp 5109–5111

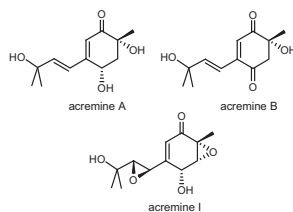
Mouhamad Jida, Sandra Malaquin, Rebecca Depez-Poulain*, Guillaume Laconde, Benoit Depez*



Total syntheses of the fungal metabolites (±)-acremine A, B and I

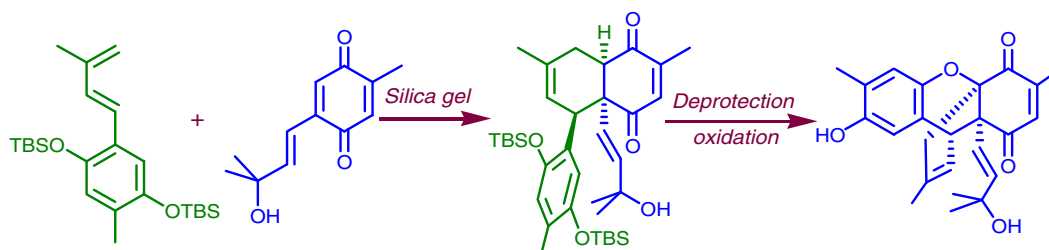
pp 5112–5115

Goverdhan Mehta*, Y. C. Sunil Kumar, Tabrez Babu Khan

**Total synthesis of the fungal metabolite (±)-acremine G: acceleration of a biomimetic Diels–Alder reaction on silica gel**

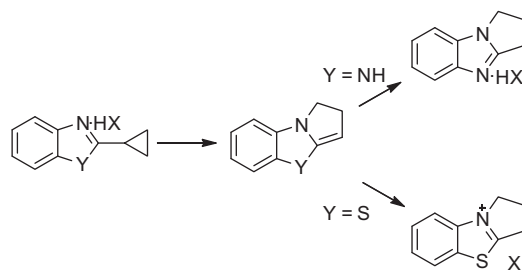
pp 5116–5119

Goverdhan Mehta*, Tabrez Babu Khan, Y. C. Sunil Kumar

**Synthesis of condensed heterocycles via cyclopropylimine rearrangement of cyclopropylazoles**

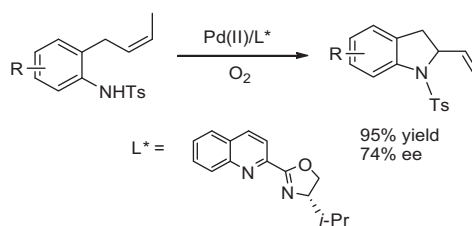
pp 5120–5123

Yury V. Tomilov*, Dmitry N. Platonov, Aleksandr E. Frumkin, Dmitry L. Lipilin, Rinat F. Salikov

**Pd-catalyzed asymmetric aza-Wacker-type cyclization reaction of olefinic tosylamides**

pp 5124–5126

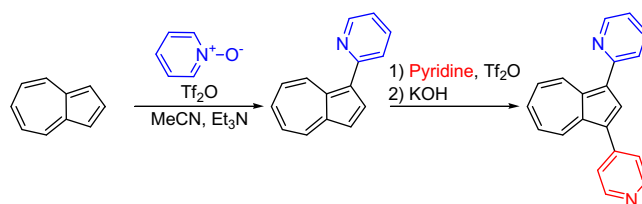
Feng Jiang, Zhengxing Wu, Wanbin Zhang*



Synthesis of 1-(pyridyl, quinolyl, and isoquinolyl)azulenes by Reissert–Henze type reaction

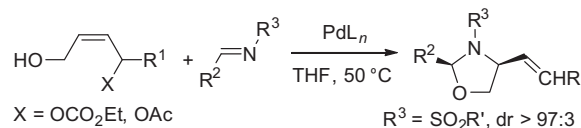
pp 5127–5130

Taku Shoji*, Kazuyuki Okada, Shunji Ito, Kozo Toyota, Noboru Morita

**Highly efficient and diastereoselective synthesis of 1,3-oxazolidines featuring a palladium-catalyzed cyclization reaction of 2-butene-1,4-diol derivatives and imines**

pp 5131–5133

Dongxu Chen, Xiaoyi Chen, Taiping Du, Lichun Kong, Renwei Zhen, Shaocheng Zhen, Yihang Wen, Gangguo Zhu*

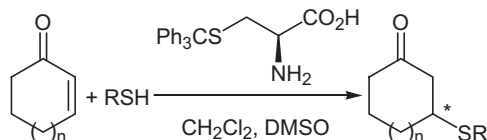


A highly diastereoselective palladium-catalyzed synthesis of 1,3-oxazolidines using the readily available 2-butene-1,4-diol derivatives and imines as substrates has been reported.

**Organocatalytic asymmetric thio-Michael addition of arylmethyl mercaptans to cyclic enones by a primary amino acid**

pp 5134–5136

Masanori Yoshida*, Yasunobu Ohno, Shoji Hara

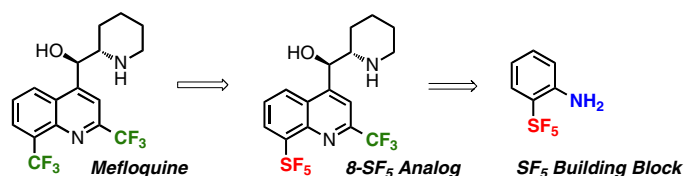


A simple primary amino acid was found to be an efficient catalyst for thio-Michael addition of benzyl mercaptan to cyclic enones.

**Synthesis of an 8-pentafluorosulfanyl analog of the antimalarial agent mefloquine**

pp 5137–5140

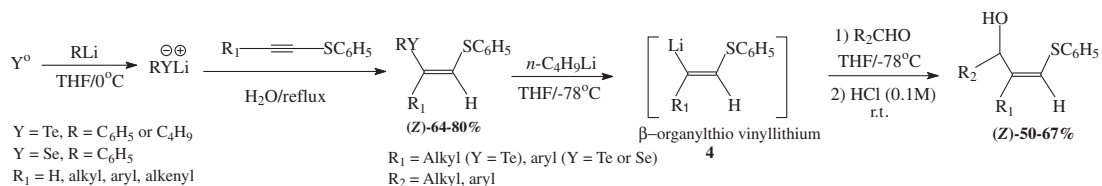
Tingting Mo, Xueling Mi, Erin E. Milner, Geoffrey S. Dow, Peter Wipf*



One-pot synthesis of mixed (Z)-1,2-bis(organylchalcogene)-1-alkenes precursors of the novel β -organylthio vinylolithium intermediates

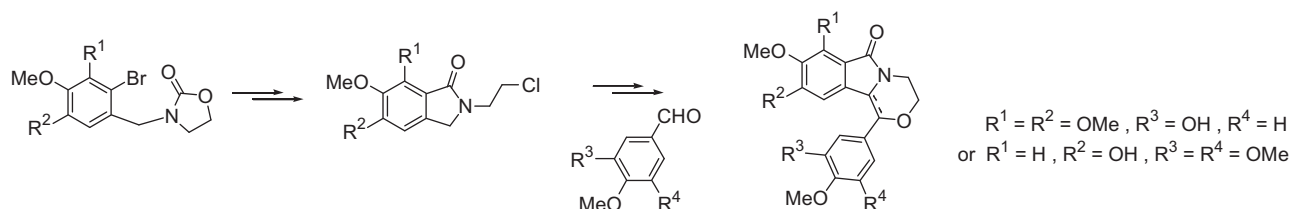
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Miguel J. Dabdoub*, Vânia B. Dabdoub, Marco A. Pereira, Adriano C. M. Baroni, Francisco A. Marques, Paulo R. de Oliveira, Palimécio G. Guerrero Jr.*


Synthesis and cytotoxic evaluation of cis-locked and constrained analogues of combretastatin and combretastatin A4

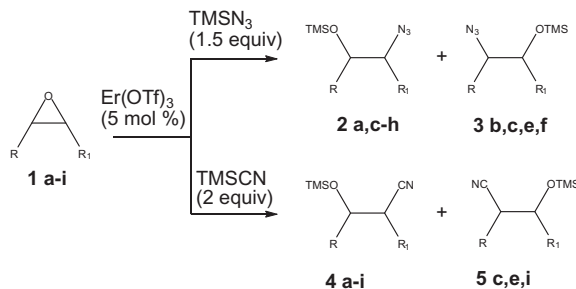
pp 5146–5149

Magali Lorion, Vangelis Agouridas, Axel Couture*, Eric Deniau, Pierre Grandclaudon


Efficient ring opening of epoxides with trimethylsilyl azide and cyanide catalyzed by erbium(III) triflate

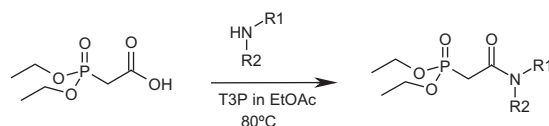
pp 5150–5153

Antonio Procopio*, Paola Costanzo, Renato Dalpozzo, Loredana Maiuolo, Monica Nardi, Manuela Oliverio


Efficient method to prepare diethylphosphonacetamides

pp 5154–5156

Federico Scaravelli*, Sergio Bacchi, Luca Massari, Ornella Curcuruto, Pieter Westerduin, William Maton



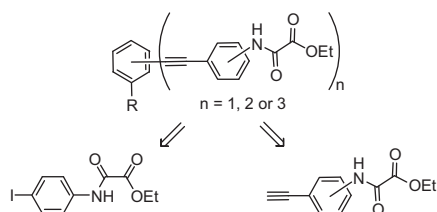
An efficient and versatile synthetic method is described to synthesize diethylphosphonacetamides in a single step.



Synthesis and characterization of new mono-, bis-, and tris-oxamato proligands

pp 5157–5159

Christophe Stroh*, Alexandrina Stuparu

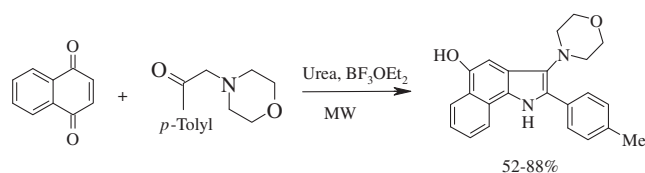


Up to three *N*-phenyl-oxalamic acid ethyl esters are combined via Sonogashira-type cross-coupling reactions. The short synthetic pathways lead easily to valuable molecules with overall interesting yields.

**Lewis acid catalyzed rapid synthesis of 5-hydroxy-benzo[g]indole scaffolds by a modified Nenitzescu reaction**

pp 5160–5163

Moyurima Borthakur, Shyamalee Gogoi, Junali Gogoi, Romesh C. Boruah*

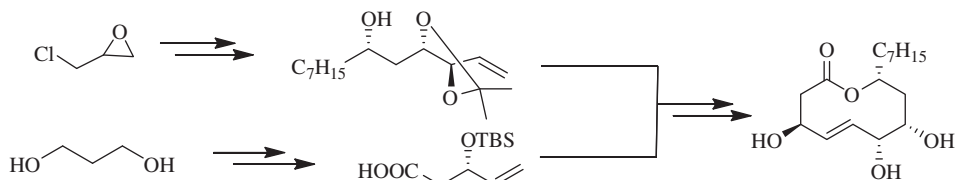


A fast solvent-less synthesis of 5-hydroxy-benzo[g]indoles has been accomplished by Lewis acid-catalyzed one-pot reaction of naphthoquinone, ω -morpholinoacetophenone, and urea under microwave irradiation.

First total synthesis of achaetolide

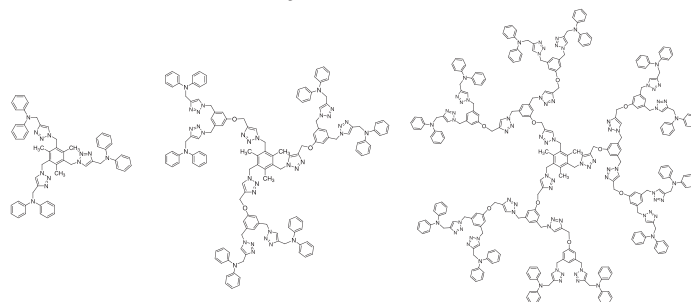
pp 5164–5166

S. Chandrasekhar*, S. V. Balaji, G. Rajesh

**Synthesis, optical, electrochemical, and thermal studies on triazole-based dendrimers with diphenylamine as surface group**

pp 5167–5172

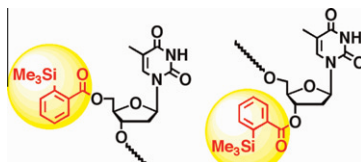
Perumal Rajakumar*, Chinnadurai Satheeshkumar, Sebastian Raja



Synthesis and biochemical properties of oligodeoxynucleotides acylated by the chemically stable 2-(trimethylsilyl)benzoyl (TMSBz) group at the 5' or 3' terminus

pp 5173–5176

Ken Yamada, Haruhiko Taguchi, Akihiro Ohkubo, Kohji Seio, Mitsuo Sekine*



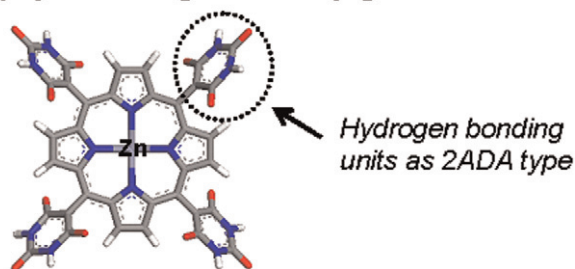
Oligonucleotides acylated by the chemically stable TMSBz group at their 5' or 3' terminus were synthesized. This modification enhanced not only their resistance to exonucleases but also hybridization affinity for the complementary DNA oligomers.

Synthesis and self-assembling behavior of a porphyrin bearing multiple *meso*-conjugated barbiturates

pp 5177–5180

Satoshi Arai, Toshiya Okamura, Shinji Takeoka*

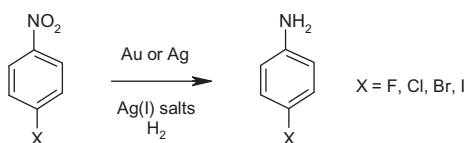
Porphyrin Bearing *meso*-Conjugated Barbiturates



Enhanced reactivity of silver- and gold-catalysed hydrogenations using silver(I) salts

pp 5181–5184

Robert Crook, John Deering, Steven J. Fussell*, Alan M. Happe, Seán Mulvihill



A novel application of silver(I) salt promoters in silver- and gold-catalysed hydrogenations was applied to the chemoselective reduction of halonitrobenzenes resulting in excellent conversions and selectivities. This reactivity, coupled with the low cost of silver relative to more expensive precious metal counterparts, demonstrates this catalytic system as an attractive alternative for challenging chemoselective transformations.

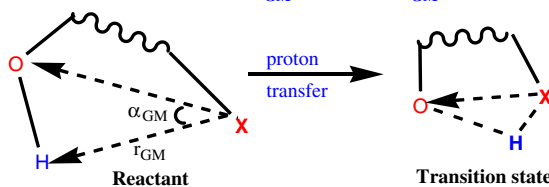
A general equation correlating intramolecular rates with 'attack' parameters: distance and angle

pp 5185–5190

Rafik Karaman

Representation of the dependence of intramolecular proton transfer rate on geometrical parameters

$$\Delta H^\ddagger \text{ or } \Delta G^\ddagger = r_{GM}^2 \times \sin(180 - \alpha_{GM})$$



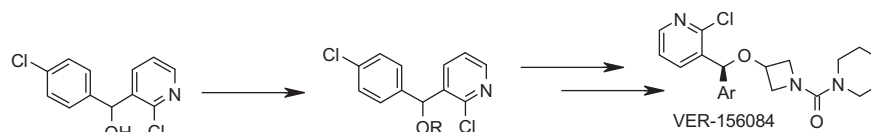
X is O, N or C; α_{GM} is the hydrogen bonding angle; r_{GM} is the distance between the two reactive centers; ΔG^\ddagger and ΔH^\ddagger are the free activation and enthalpic activation energies, respectively.



Fatty acid amide hydrolase inhibitors. 2. Novel synthesis of sterically hindered azabenzhydryl ethers and an improved synthesis of VER-156084

pp 5191–5194

Stephen D. Roughley*, Terance Hart

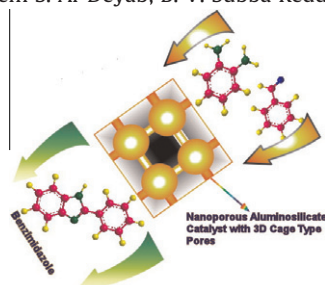


We report a novel etherification of hindered ethers and its application in an improved synthesis of the FAAH inhibitor VER-156084. We show the conditions reported to be of broad applicability to the synthesis of hindered ethers.

Nanoporous aluminosilicate catalyst with 3D cage-type porous structure as an efficient catalyst for the synthesis of benzimidazole derivatives

pp 5195–5199

Murugulla A. Chari, D. Shobha, El-Refaie Kenawy, Salem S. Al-Deyab, B. V. Subba Reddy, Ajayan Vinu*

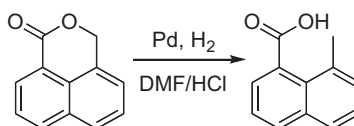


Synthesis of benzimidazoles via the coupling of aldehydes with *o*-phenylenediamine using the highly acidic AIKIT-5 catalyst is demonstrated.

HCl/DMF for enhanced chemoselectivity in catalytic hydrogenolysis reactions

pp 5200–5202

Agata Ochocimska, Anna Siegbahn, Ulf Ellervik*



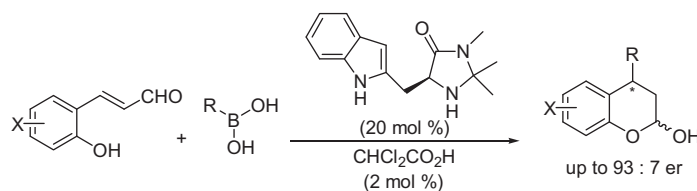
An improved, chemoselective hydrogenolysis method has been developed to favor debenzoylation and simultaneously minimize saturation of aromatic residues as well as acid-mediated bond cleavage.



Asymmetric organocatalytic reactions of *o*-hydroxycinnamaldehydes with organoboronic acids: a facile enantioselective access to chromanes and dihydrobenzopyranes

pp 5203–5206

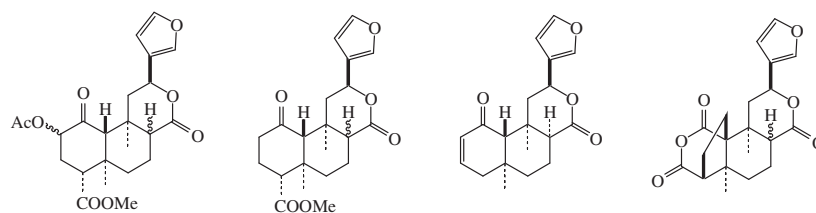
Kwang-Su Choi, Sung-Gon Kim*



Novel neoclerodane diterpene derivatives from the smoke of salvinorin A

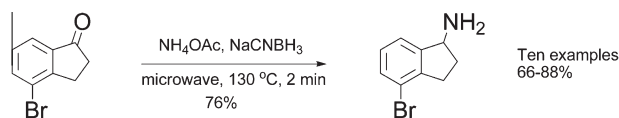
pp 5207–5209

Zhongze Ma, Gang Deng, David Y. W. Lee*

**Microwave-accelerated reductive amination between ketones and ammonium acetate**

pp 5210–5212

Li Dong*, Saadat Aleem, Cynthia A. Fink



*Corresponding author

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®



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ISSN 0040-4039