Graphical abstracts

Chiral P,N-ligands with pyridine-nitrogen and phosphorus donor atoms. Syntheses and applications in asymmetric catalysis

Tetrahedron 59 (2003) 9471

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This account is intended to focus on recent developments in the syntheses and metal-catalysed asymmetric reactions of not only chiral pyridine-phosphines, but also of other chiral P,N-ligands in which the pyridine framework is part of more complex heterocycles, such as quinolines, isoquinolines, phenanthridines, etc. and the phosphorus atom belongs not only to simple phosphine functionalities, but also to other groups, such as phosphites, phosphoramides, etc.

Efficient production of raspberry ketone via 'green' biocatalytic oxidation

Tetrahedron 59 (2003) 9517

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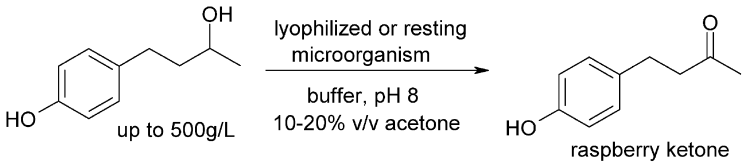
An efficient biocatalytic oxidation process for natural raspberry ketone is described.



Synthetic studies on the preparation of oxygenated spongiane diterpenes from carvone

Tetrahedron 59 (2003) 9523

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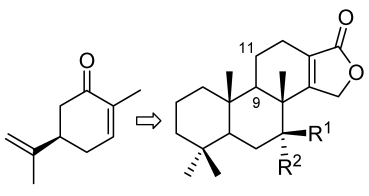
[b]*Instituto de Ciencia Molecular, Universidad de Valencia, Dr. Moliner 50, 46100-Burjassot, Valencia, Spain*

A stereoselective approach to oxygenated spongiane diterpenes from carvone is described.



(*R*)-Carvone

27: R^1=H; R^2=OAc; $\Delta^{9,11}$

28: R^1=H; R^2=OH; $\Delta^{9,11}$

29: R^1, R^2=O; $\Delta^{9,11}$

30: R^1=OH; R^2=H; D9, 11

31: R^1=H; R^2=OAc; 9α,11α-epoxy

32: R^1=H; R^2=OAc; 9β,11β-epoxy

On the regioselectivity for the Michael addition of thiols to unsymmetrical fumaric derivatives

Tetrahedron 59 (2003) 9537

Akio Kamimura,[a,*] Norikazu Murakami,[a] Fukiko Kawahara,[a] Kakuteru Yokota,[a] Yoji Omata,[a] Kenji Matsuura,[a] Yusuke Oishi,[a] Rie Morita,[a] Hiromasa Mitsudera,[a] Hiroyuki Suzukawa,[a] Akikazu Kakehi,[b] Masashi Shirai[c] and Hiroaki Okamoto[d]

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[c]*Ube Laboratory, Ube Industries Ltd., Ube 755-8633, Japan*
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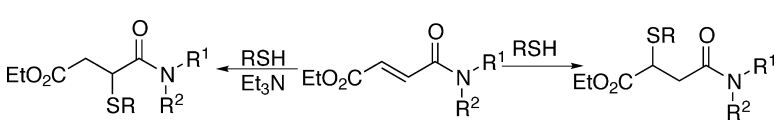

4-Cyanomethyl-*ortho*-quinone tautomerism and the structure of the dienophile in Gates' morphine synthesis

Tetrahedron 59 (2003) 9547

Edward J. Land,[a] Christopher A. Ramsden,[a,*] Patrick A. Riley[b] and Gnanamoly Yoganathan[a]

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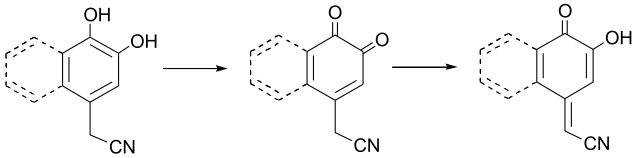

Simulation of 2D ^{1}H homo- and $^{1}H-^{13}C$ heteronuclear NMR spectra of organic molecules by DFT calculations of spin–spin coupling constants and ^{1}H and ^{13}C-chemical shifts

Tetrahedron 59 (2003) 9555

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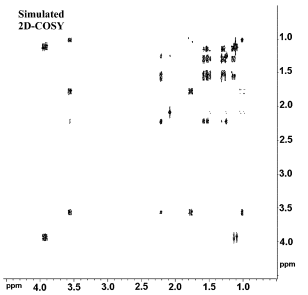

Palladium catalyzed reaction in aqueous DMF: synthesis of 3-alkynyl substituted flavones in the presence of prolinol

Tetrahedron 59 (2003) 9563

Manojit Pal,* Venkataraman Subramanian, Karuppasamy Parasuraman and Koteswar Rao Yeleswarapu*

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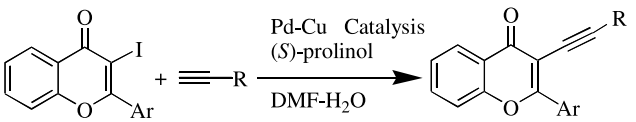

A facile and efficient $ZrCl_4$ catalyzed conversion of aldehydes to geminal-diacetates and dipivalates and their cleavage

Tetrahedron 59 (2003) 9571

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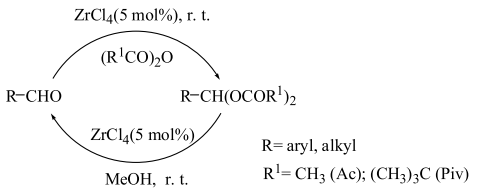

Tetrahedron 59 (2003) 9577

Synthesis of *NH*-3-phenylsulfanyl- and *NH*-3-benzylsulfanyl-azetidinones from 1-phenylsulfanyl- or 1-benzylsulfanyl-3-aza-1,3-dienes

Mauro Panunzio,[a,*] Alessandro Bongini,[a] Emiliano Tamanini,[a] Eileen Campana,[b] Giorgio Martelli,[b] Paola Vicennati[b] and Ilaria Zanardi[b]

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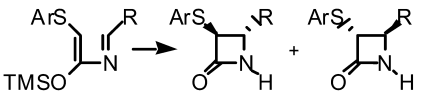

Tetrahedron 59 (2003) 9583

Chiral ditopic receptors. Application to palladium-catalyzed allylic alkylation

Jean Bourguignon,[a] Ulf Bremberg,[b] Georges Dupas,[a] Kristina Hallman,[b] Lars Hagberg,[b] Laurent Hortala,[a] Vincent Levacher,[a] Serghey Lutsenko,[b] Emmanuel Macedo,[b] Christina Moberg,[b,*] Guy Quéguiner[a] and Fredrik Rahm[b]

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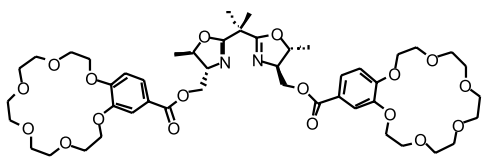

Tetrahedron 59 (2003) 9591

Poly(amidoamine) dendrimers peripherally modified with 4-ethylamino-1,8-naphthalimide. Synthesis and photophysical properties

Ivo Grabchev,[a,*] Jean-Marc Chovelon,[b] Vladimir Bojinov[c] and Galya Ivanova[d]

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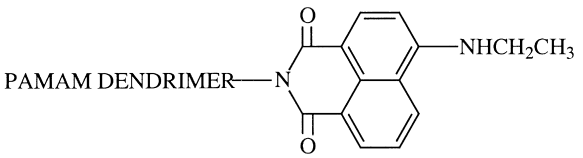

Tetrahedron 59 (2003) 9599

A new synthesis, including asymmetric synthesis, of spiro[4.*n*]alkenones from three components: cyclic ketones, chloromethyl *p*-tolyl sulfoxide, and acetonitrile; and a formal total synthesis of racemic acorone

Tsuyoshi Satoh,[a,*] Tadashi Kawashima,[a] Satoru Takahashi[b] and Ken Sakai[b]

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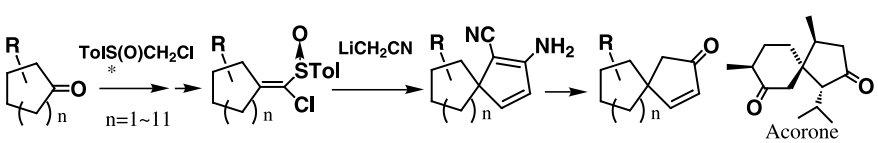

A practical semi-synthesis of tautomycin using a hydrolysate of natural tautomycin

Tetrahedron 59 (2003) 9609

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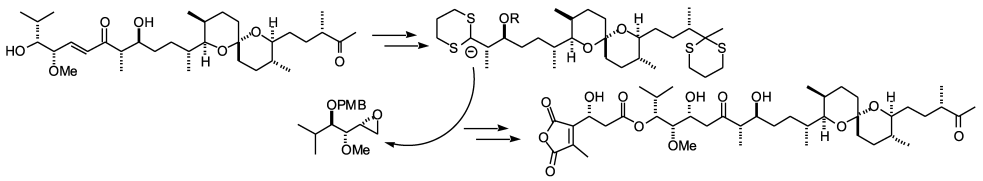

Exploring reversible reactions between CO_2 and amines

Tetrahedron 59 (2003) 9619

Erin M. Hampe and Dmitry M. Rudkevich*

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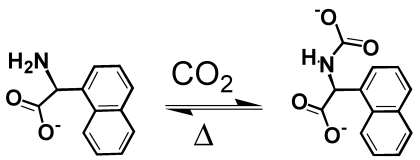

Synthesis of 5-substituted 2-(4- or 3-methoxyphenyl)-4(1*H*)-quinolones

Tetrahedron 59 (2003) 9627

Christophe Pain,[a] Sylvain Célanire,[a] Gérald Guillaumet[a] and Benoît Joseph[a,b,*]

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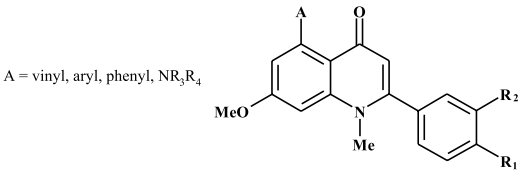

Synthesis of new acyclonucleosides comprising unexpected regioisomers in the case of purines

Tetrahedron 59 (2003) 9635

Stéphane Guillarme,[a] Stéphanie Legoupy,[a] Nathalie Bourgougnon,[b] Anne-Marie Aubertin[c] and François Huet[a,*]

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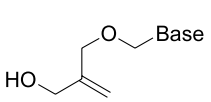

An efficient preparation of *N*-per- (or poly)fluorophenyl pyrroles and *N*-fluoroalkanesulfonyl pyrroles

Tetrahedron 59 (2003) 9669

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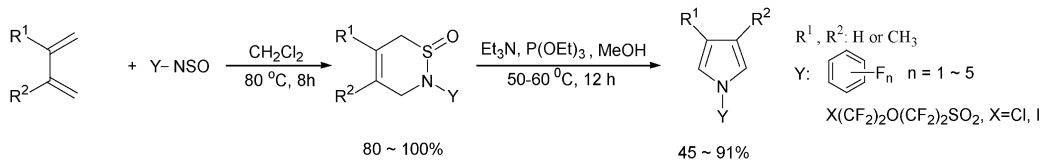

Electronic control of product formation in the rearrangement of 1,3-dithian-2-yl-arylmethanols

Tetrahedron 59 (2003) 9677

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Kaohsiung 804, Taiwan, ROC

1,3-Dithian-2-yl-phenylmethanol shows a remarkable variation in product formation that is dictated by the substituent in the benzene ring.