



Tetrahedron Vol. 65, No. 45, 2009

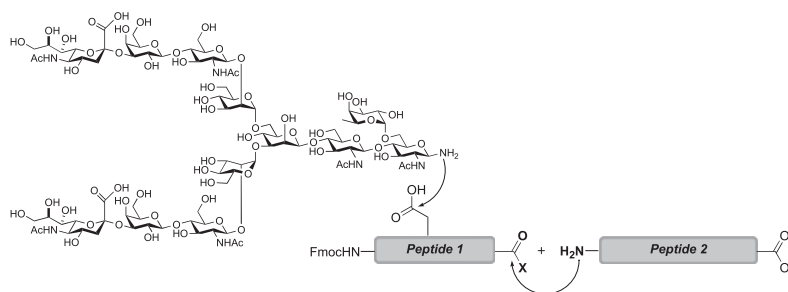
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Cindy Kan, Samuel J. Danishefsky*

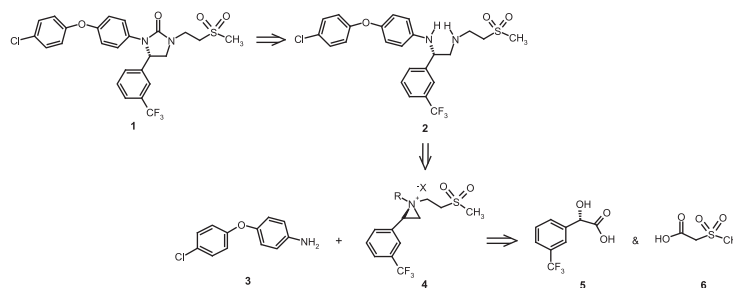


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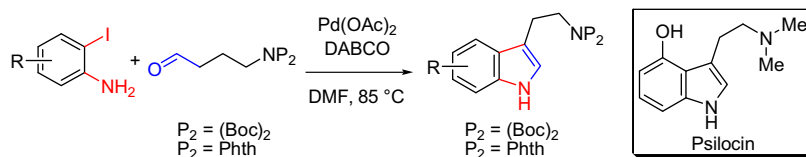
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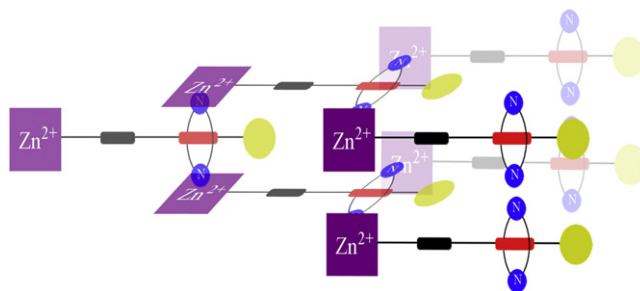
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Chunmei Hu, Hua Qin, Yuxin Cui*, Yanxing Jia*

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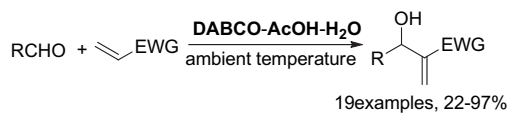
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Feng-Yuan Ji, Liang-Liang Zhu, Dong Zhang, Zhao-Fei Chen, He Tian*

**Baylis–Hillman reaction promoted by a recyclable protic-ionic-liquid solvent–catalyst system: DABCO–AcOH–H₂O**

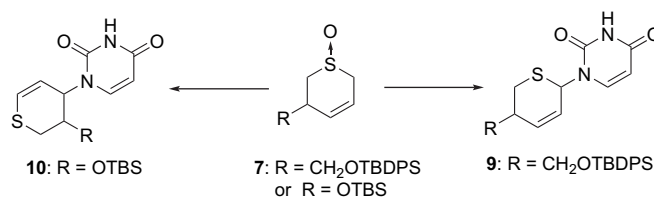
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Ying Song, Haihua Ke, Nan Wang, Limin Wang, Gang Zou*

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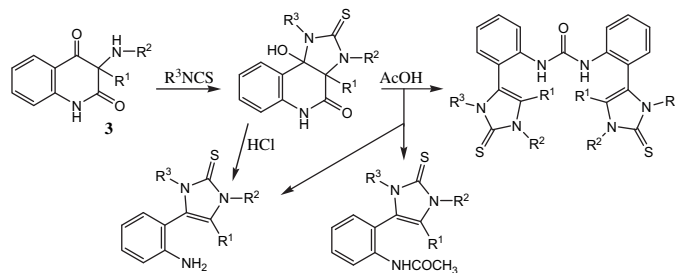
Yuichi Yoshimura*, Yoshiko Yamazaki, Yukako Saito, Hiroki Takahata*



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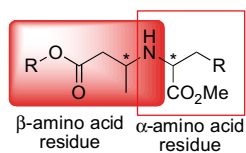
Zdenka Prucková, Antonín Klásek*, Antonín Lyčka, Ivan Mikšík, Aleš Růžicka



New chiral building blocks of β -peptoid analogs

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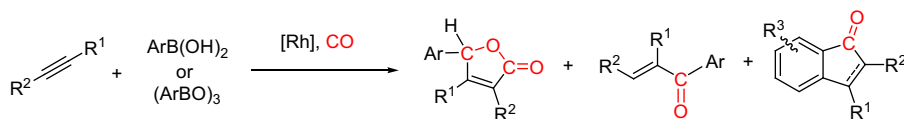
Ana Lúcia Cardoso, Susana M.M. Lopes, Ana Matos Beja, Manuela Ramos Silva, Jesús M. de los Santos, Teresa M.V.D. Pinho e Melo*, Francisco Palacios



Rhodium catalyzed reaction of internal alkynes with organoborons under CO atmosphere: a product tunable reaction

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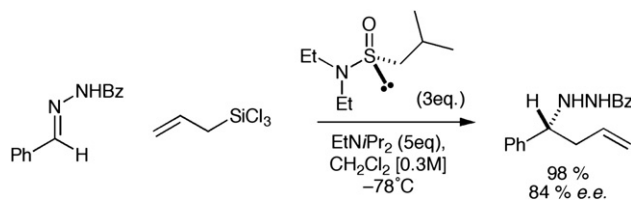
Levent Artok*, Melih Kuş, Özge Aksın-Artok, Fatma Nurcan Dege, Fatma Yelda Özkılınc



The sulfinyl moiety in Lewis base-promoted allylations

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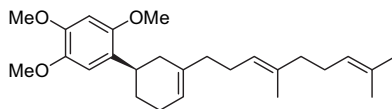
J. Robin Fulton, Lamin M. Kamara, Simon C. Morton, Gareth J. Rowlands*



First synthesis and absolute configuration of a β -farnesene-trimethoxystyrene conjugate isolated from *Pachypodanthium confine*

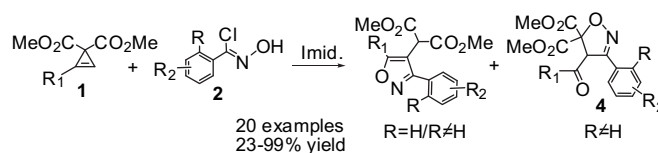
pp 9142–9145

Masatsugu Koso, Takuya Tashiro, Mitsuru Sasaki, Hirosato Takikawa*


A highly regioselective tandem 1,3-dipolar cycloaddition of cyclopropene 1,1-diester and nitrile oxides: synthesis of highly functionalized isoxazoles

pp 9146–9151

Shaojin Chen, Jun Ren, Zhongwen Wang*

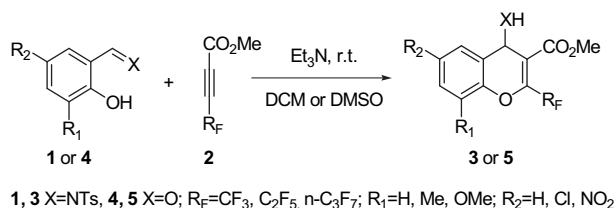


A highly regioselective tandem 1,3-dipolar cycloaddition of cyclopropene 1,1-diester with nitrile oxides was described. This reaction supplied a new method for synthesis of isoxazole derivatives in moderate to excellent yields under mild conditions.


A simple and convenient synthesis of 2-(perfluoroalkyl)-4H-chromenes from salicyl *N*-tosylimines or salicylaldehydes and methyl 2-perfluoroalkynoates

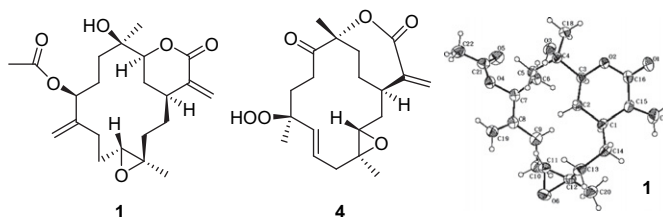
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Lei Lu, Jiamei Wei, Jie Chen, Jiaping Zhang, Hongmei Deng, Min Shao, Hui Zhang*, Weiguo Cao*


Cembrane diterpenoids from the Taiwanese soft coral *Simularia flexibilis*

pp 9157–9164

Yun-Sheng Lin, Chung-Hsiung Chen, Chia-Ching Liaw, Yu-Chen Chen, Yao-Haur Kuo, Ya-Ching Shen*

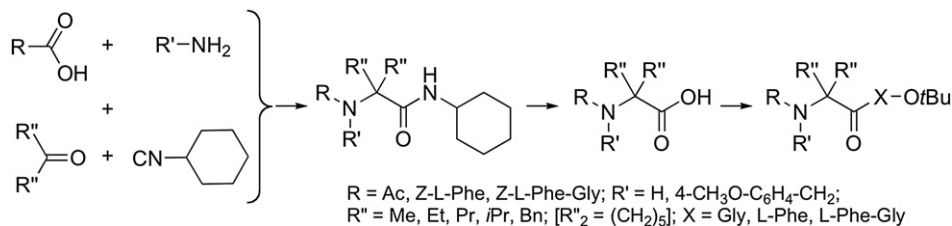


Chemical investigation of the soft coral *Simularia flexibilis* led to the isolation of 10 new flexilarins A–J (1–10). Compound 1 was confirmed by X-ray crystallographic analysis. Compound 4 showed potent cytotoxicity against Hep2 tumor cells.

Straightforward, racemization-free synthesis of peptides with fairly to very bulky di- and trisubstituted glycines

pp 9165–9179

Filipa C.S.C. Pinto, Sílvia M.M.A. Pereira-Lima, Hernâni L.S. Maia*

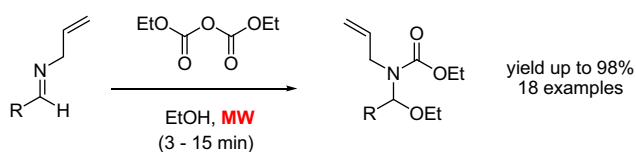


Tri and pentapeptides incorporating a central α,α -dialkylglycine or N,α,α -trialkylglycine residue by oxazolone, DCC/HOBT or HBTU couplings of the peptide acids obtained by total or partial acidolysis of Ugi–Passerini adducts.

Microwave-assisted synthesis of α -ethoxycarbamates

pp 9180–9187

Alexandre Lumbroso, Floris Chevallier, Isabelle Beaudet, Jean-Paul Quintard, Thierry Besson*, Erwan Le Grogne*

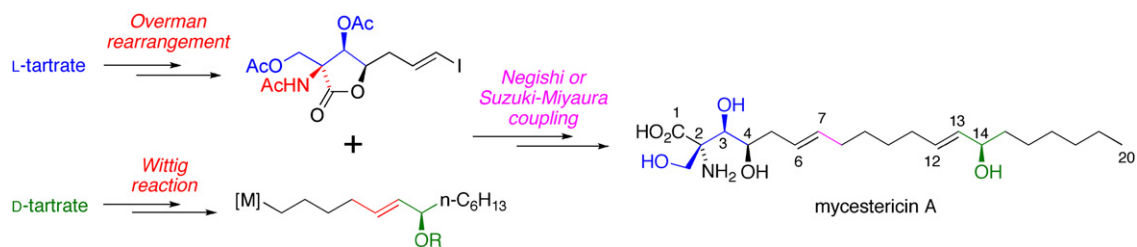


An efficient and reproducible synthesis of various α -ethoxycarbamates is described via a microwave heating mode.

Total synthesis of mycestericin A and its 14-epimer

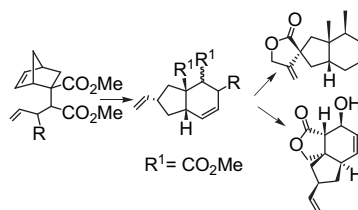
pp 9188–9201

Hiroyoshi Yamanaka, Kazuya Sato, Hideyuki Sato, Masatoshi Iida, Takeshi Oishi, Noritaka Chida*

**A direct route to angularly substituted hydrindanes. Formal synthesis of bakkenolide-A and synthesis of an advanced intermediate to umbellactal**

pp 9202–9210

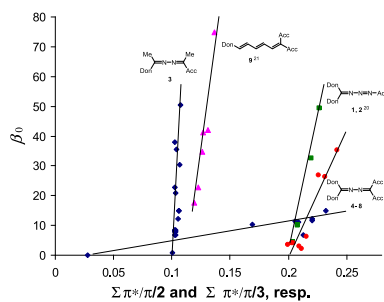
Soumitra Maity, Subrata Ghosh*



Hyperpolarizability of donor–acceptor azines subject to push–pull character and steric hindrance

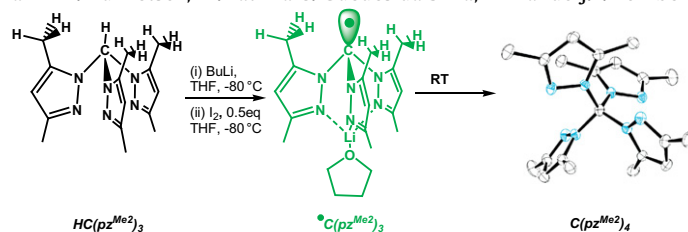
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Erich Kleinpeter*, Bistra A. Stamboliyska

**Towards the functionalization of the methine carbon of a sterically hindered tris(pyrazolyl)methane: is a radical pathway envisageable? Synthesis and structure of tetrakis(3,5-dimethylpyrazolyl)methane**

pp 9218–9223

Laurent Benisvy, Riccardo Wanke, Maxim L. Kuznetsov, M. Fátima C. Guedes da Silva, Armando J.L. Pombeiro*

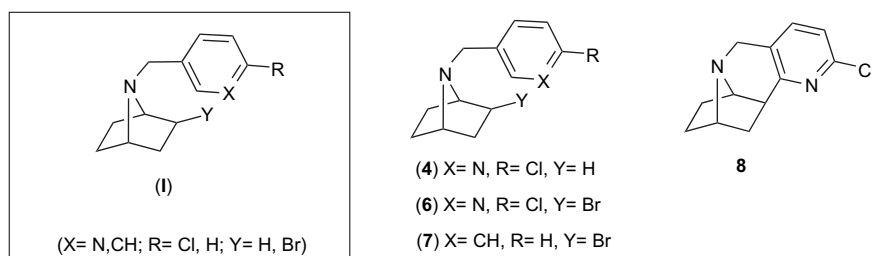


Iodine oxidation, at $-80\text{ }^{\circ}\text{C}$, of the stable carbanion $\text{C}(\text{pz}^{\text{Me}_2})_3$ yields the green C-centred radical $\text{C}(\text{pz}^{\text{Me}_2})_3$ which, upon warming to room temperature, yields the unprecedented tetrakis(3,5-dimethylpyrazolyl)methane, $\text{C}(\text{pz}^{\text{Me}_2})_4$, which is stabilized by intramolecular C–H $\cdots\pi$ interactions.

**N-Arylmethyl-7-azabicyclo[2.2.1]heptane derivatives: synthesis and reaction mechanisms**

pp 9224–9232

Elena Gómez, José Marco-Contelles*, Elena Soriano*, María L. Jimeno

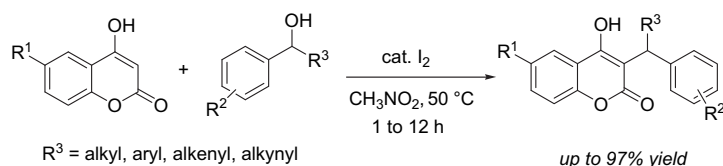


In this manuscript we have reported two new methods for the synthesis of epibatidine analogues bearing the *N*-arylalkyl and the *N*-aryl-7-azabicyclo[2.2.1]heptane skeleton. Furthermore, DFT studies have been carried out on the reaction mechanisms to account for the results.

**Molecular iodine-catalyzed C3-alkylation of 4-hydroxycoumarins with secondary benzyl alcohols**

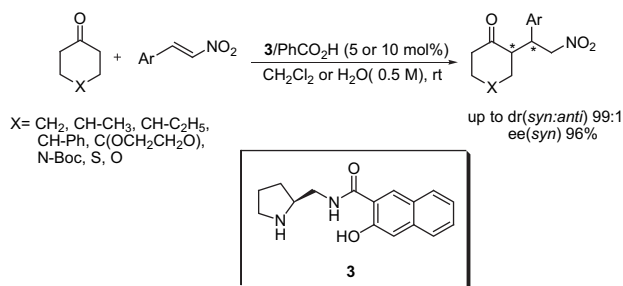
pp 9233–9237

Xufeng Lin*, Xixiang Dai, Zhenjun Mao, Yanguang Wang

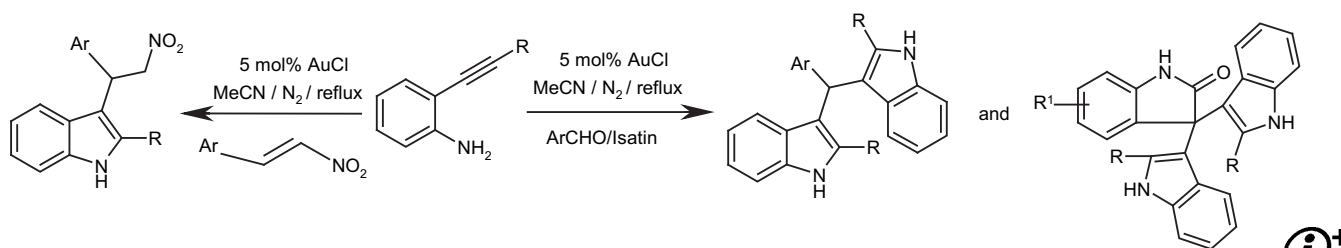


Highly enantioselective desymmetrization of *meso*- and prochiral cyclic ketones via organocatalytic Michael reaction pp 9238–9243

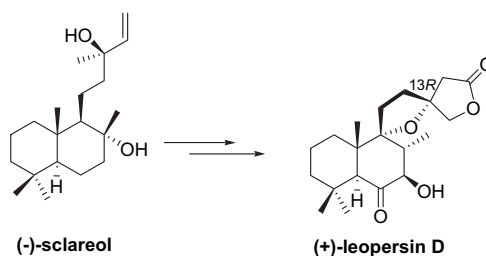
Jia-Rong Chen, Yuan-Yuan Lai, Hai-Hua Lu, Xu-Fan Wang, Wen-Jing Xiao*

**Efficient synthesis of 3-substituted indoles through a domino gold(I) chloride catalyzed cycloisomerization/C3-functionalization of 2-(alkynyl)anilines** pp 9244–9255

C. Praveen, K. Karthikeyan, P.T. Perumal*

**Synthesis of (+)-leopersin D** pp 9256–9263

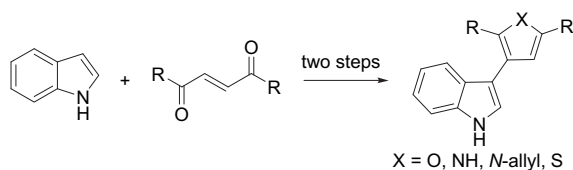
I.S. Marcos*, L. Castañeda, P. Basabe, D. Díez, J.G. Urones



The spiroabdanolide (+)-leopersin D has been synthesized from (-)-sclareol. The absolute configuration of the natural product has been established.

Indirect regioselective heteroarylation of indoles through a Friedel–Crafts reaction with (*E*)-1,4-diaryl-2-buten-1,4-diones pp 9264–9270

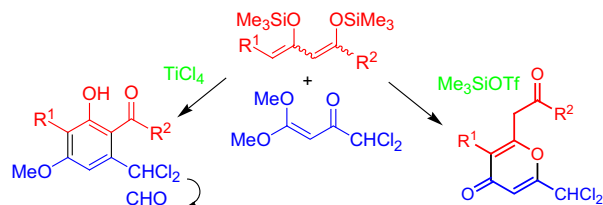
Gonzalo Blay, Isabel Fernández, Alicia Monleón, José R. Pedro*, Carlos Vila



Synthesis of dichloromethyl-substituted salicylates and pyran-4-ones by cyclocondensation of 1,3-bis(silyloxy)-1,3-butadienes with 1,1-dimethoxy-4,4-dichlorobut-1-en-3-one: control of the C,C- and C,O-regioselectivity by the choice of Lewis acid

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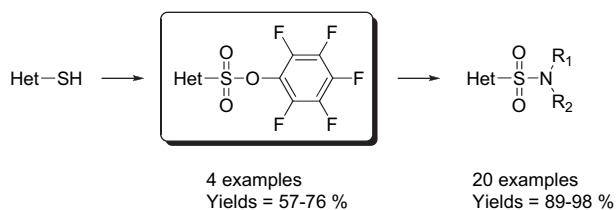
Vahuni Karapetyan, Satenik Mkrtchyan, Gagik Ghazaryan, Alexander Villinger, Christine Fischer, Peter Langer*



Heterocyclic pentafluorophenyl sulfonate esters as shelf stable alternatives to sulfonyl chlorides

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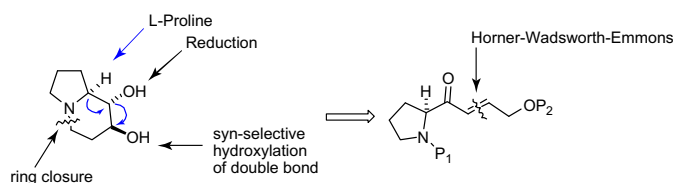
Jan Bornholdt, Karianne Wilhelms Fjære, Jakob Felding, Jesper Langgaard Kristensen*



Polyhydroxylated indolizidine alkaloids—synthesis of dideoxycastanospermine

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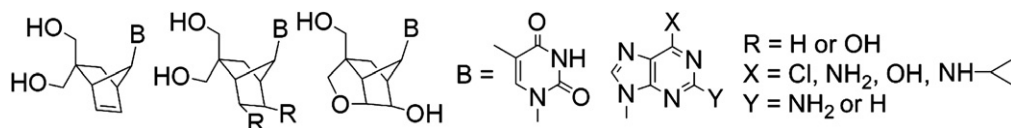
Ari M.P. Koskinen*, Oili A. Kallatsa, Maija Nissinen



Norbornane as the novel pseudoglycone moiety in nucleosides

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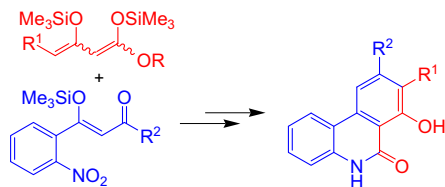
Michal Šála*, Hubert Hřebabeký, Martin Dračinský, Milena Masojídková, Armando M. De Palma, Johan Neyts, Antonín Holý



Regioselective synthesis of amino- and nitroarenes based on [3 + 3] cyclocondensations of 1,3-bis(silyloxy)-1,3-butadienes

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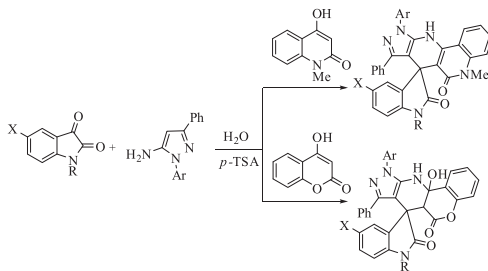
Abdolmajid Riahi, Mohanad Shkoor, Olumide Fatunsin, Mirza A. Yawer, Ibrar Hussain, Christine Fischer, Peter Langer*



Synthesis of spiro[benzopyrazolonaphthyridine-indoline]-diones and spiro[chromenopyrazolopyridine-indoline]-diones by one-pot, three-component methods in water

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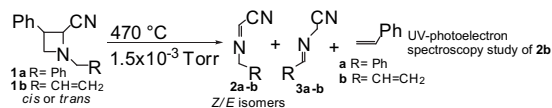
Somayeh Ahadi, Ramin Ghahremanzadeh, Peiman Mirzaei, Ayoob Bazgir*



Flash vacuum thermolysis generation and a UV-photoelectron spectroscopy study of the *N*-substituted iminoacetone nitriles

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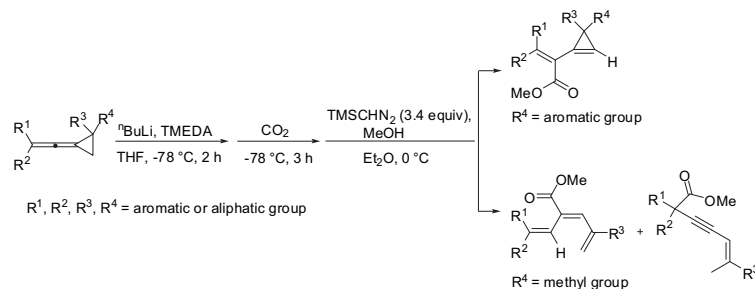
Anna Chrostowska*, Alain Dargelos, Alain Graciaa, Saïd Khayar, Stanisław Leśniak*, Ryszard B. Nazarski, Thi Xuan Mai Nguyen, Małgorzata Maciejczyk, Michał Rachwalski



Butyl lithium (^tBuLi)-mediated carboxylation of vinylidenecyclopropanes with CO₂

pp 9328–9335

Bei-Li Lu, Jian-Mei Lu, Min Shi*



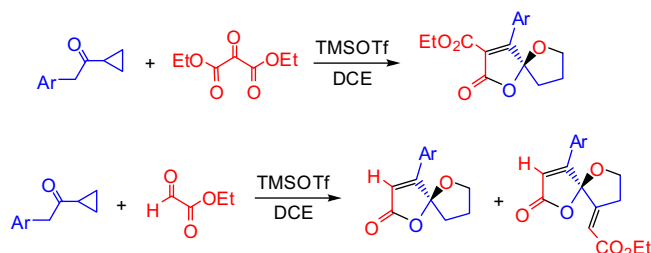
^tBuLi-mediated carboxylation of vinylidenecyclopropanes with CO_2 followed by the further transformation was realized to give the corresponding adducts in moderate to good yields.



Lewis acid-mediated reactions of 1-cyclopropyl-2-arylethanone derivatives with diethyl 2-oxomalonate and ethyl 2-oxoacetate

pp 9336–9343

Xiang-Ying Tang, Min Shi*

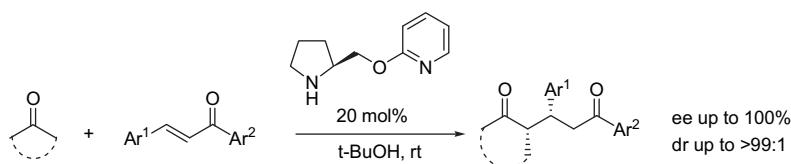


Lewis acid-mediated reactions of 1-cyclopropyl-2-arylethanone derivatives with diethyl 2-oxomalonate and ethyl 2-oxoacetate have been investigated and the corresponding functionalized 1,6-dioxo-spiro[4.4]non-3-en-2-one derivatives were formed in moderate to excellent yields via a tandem reaction process.


Pyrrolidine–pyridine base catalysts for the enantioselective Michael addition of ketones to chalcones

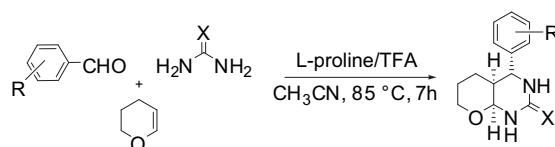
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Da-Zhen Xu, Sen Shi, Yingjun Liu, Yongmei Wang*


L-Proline catalyzed multicomponent reaction of 3,4-dihydro-(2H)-pyran, urea/thiourea, and aldehydes: diastereoselective synthesis of hexahydropyrano pyrimidinones (thiones)

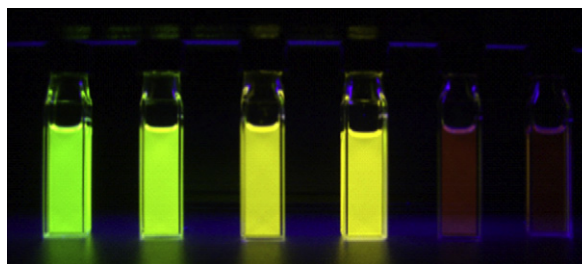
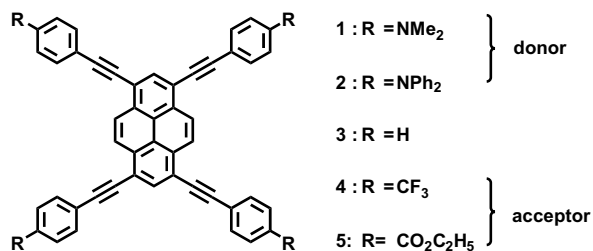
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Jyoti Pandey, Namrata Anand, Rama P. Tripathi*


Photophysical properties of 1,3,6,8-tetrakis(arylethynyl)pyrenes with donor or acceptor substituents: their fluorescence solvatochromism and lightfastness

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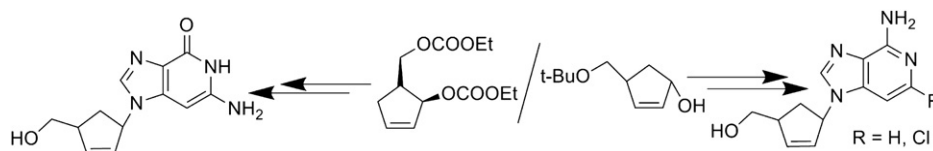
Kazuhiisa Fujimoto*, Hisao Shimizu, Masaru Furusyo, Seiji Akiyama, Mio Ishida, Utako Furukawa, Toshiaki Yokoo, Masahiko Inouye*



Regioselective synthesis of 3-deazacarbvir and its 3-deaza-adenosine analogues

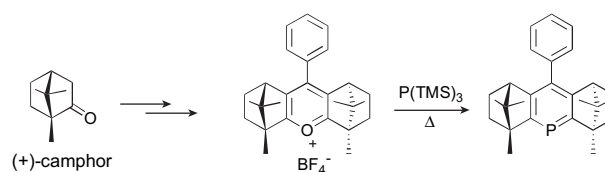
pp 9362–9367

Ashok K. Jha, Ashoke Sharon, Ramu Rondla, Chung K. Chu*

**Synthesis of the first C₂-asymmetric phosphinine and its pyrylium precursor**

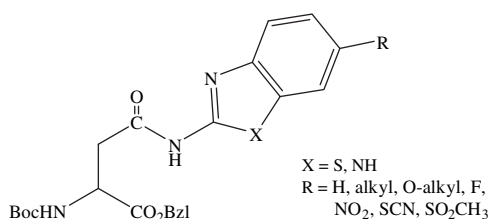
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Jason R. Bell, Andreas Franken, Charles M. Garner*

**Unnatural benz-X-azolyl asparagine derivatives as novel fluorescent amino acids: synthesis and photophysical characterization**

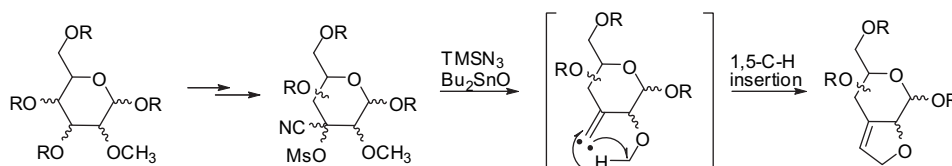
pp 9373–9377

Cátia I.C. Esteves, Ana M.F. Silva, M. Manuela M. Raposo, Susana P.G. Costa*

**Highly functionalized, enantiomerically pure furo[x,y-c]pyrans via alkylidenecarbenes derived from sugar templates: synthesis and mechanism study via computational chemistry**

pp 9378–9394

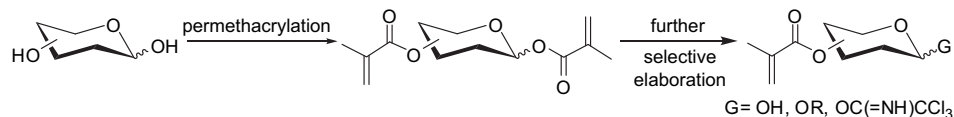
Albert Nguyen Van Nhien*, Romaric Cordonnier, Marie-Delphine Le Bas, Sébastien Delacroix, Elena Soriano, José Marco-Contelles, Denis Postel*



Permethylacrylated carbohydrates: synthesis and reactivity in glycosidation reaction

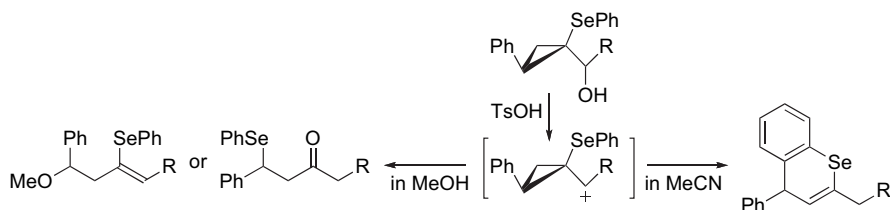
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Christelle Zandanel, Charles Mioskowski, Rachid Baati*, Alain Wagner

**Reaction behavior of cyclopropylmethyl cations derived 1-phenylselenocyclopropylmethanols with acids**

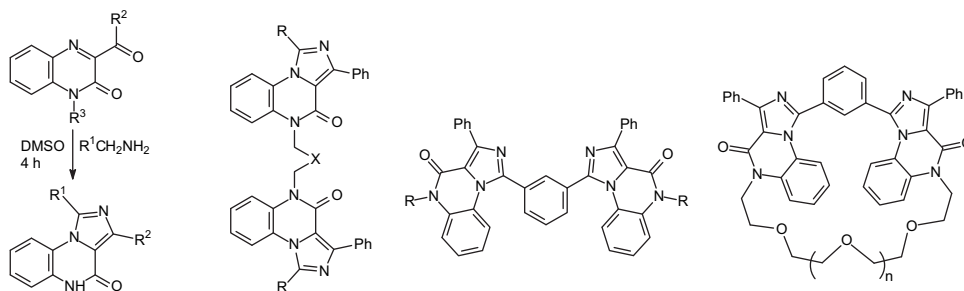
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Mitsunori Honda*, Toshiaki Nishizawa, Yuko Nishii, Shuhei Fujinami, Masahito Segi

**An efficient method for the synthesis of imidazo[1,5-a]quinoxalines from 3-acylquinoxalinones and benzylamines via a novel imidazoannulation**

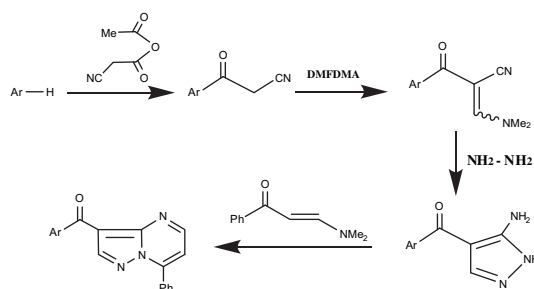
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Vakhid A. Mamedov*, Aleksey A. Kalinin, Alsu A. Balandina, Il'dar Kh. Rizvanov, Shamil K. Latypov

**Studies with enaminones and enaminonitriles: synthesis of 3-aroil and 3-heteroaroil-pyrazolo-[1,5-a]pyrimidines**

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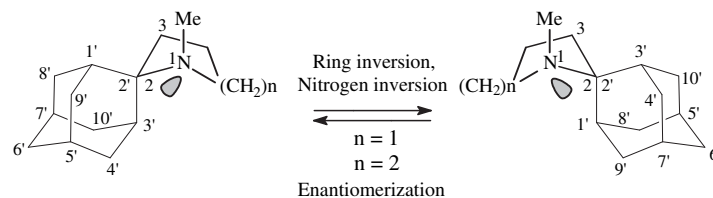
Khaled D. Khalil, Hamad M. Al-Matar*, Doa'a M. Al-Dorri, Mohamed H. Elnagdi



The effect of spiroadamantane substitution on the conformational preferences of *N*-Me pyrrolidine and *N*-Me piperidine: a description based on dynamic NMR spectroscopy and ab initio correlated calculations

Antonios Kolocouris

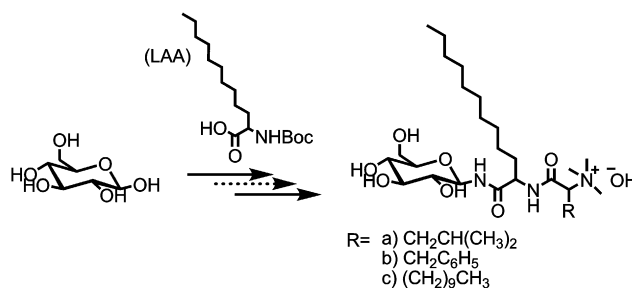
pp 9428–9435



Design and synthesis of a series of novel, cationic liposaccharide derivatives as potential penetration enhancers for oral drug delivery

Adel S. Abdelrahim, Zyta M. Ziora, Julie A. Bergeon, Anne R. Moss, Istvan Toth*

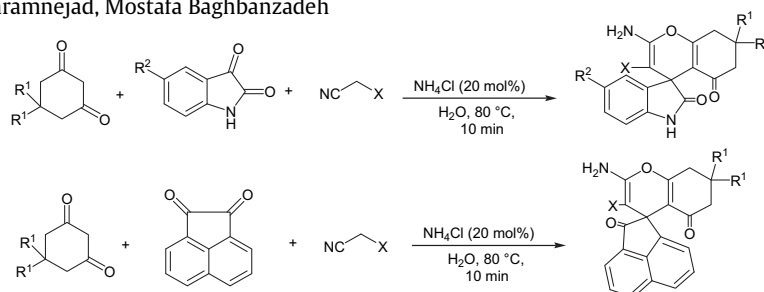
pp 9436–9442



Ammonium salt catalyzed multicomponent transformation: simple route to functionalized spirochromenes and spiroacridines

Minoo Dabiri*, Mahboobeh Bahramnejad, Mostafa Baghbanzadeh

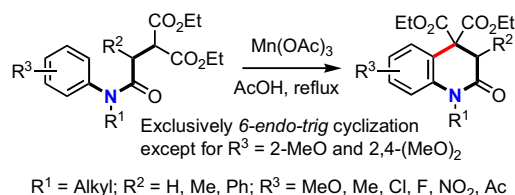
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Manganese(III)-mediated facile synthesis of 3,4-dihydro-2(1H)-quinolinones: selectivity of the 6-endo and 5-exo cyclization

Takuma Tsubusaki, Hiroshi Nishino*

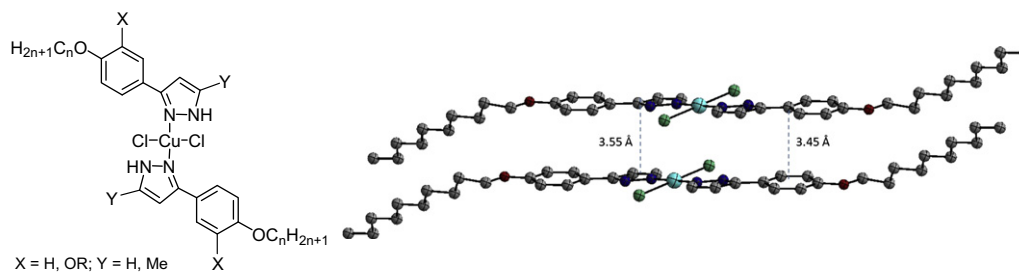
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Calamitic metallomesogens derived from unsymmetric pyrazoles

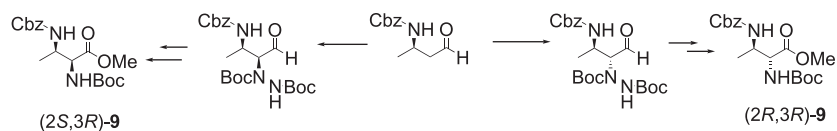
pp 9460–9467

Min-Chou Chen, Shih-Chieh Lee, Chia-Chung Ho, Tarng-Shiang Hu, Gene-Hsiang Lee, Chung K. Lai*

**Reagent-controlled diastereoselective synthesis of (2*S*,3*R*)- and (2*R*,3*R*)-2,3-diaminobutanoic acid derivatives using proline-catalyzed α -hydrazination reaction**

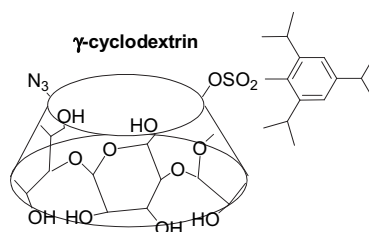
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Kazuishi Makino, Sayaka Kubota, Sousuke Hara, Masaru Sakaguchi, Akinari Hamajima, Yasumasa Hamada*

 **γ -Cyclodextrins possessing an azido group and a triisopropylbenzenesulfonyl group as useful synthetic and authentic intermediates for unsymmetrically functionalized derivatives**

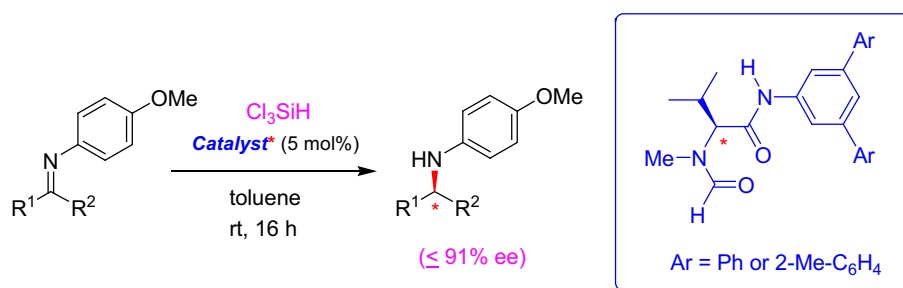
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Yoshihide Himeno, Atsushi Miyagawa, Masao Kawai, Hatsuo Yamamura*

**New organocatalysts for the asymmetric reduction of imines with trichlorosilane**

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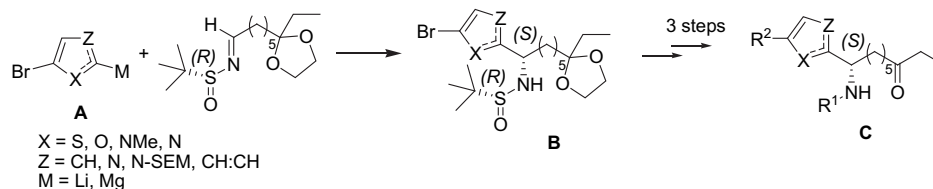
Andrei V. Malkov*, Kvetoslava Vranková, Ralph C. Sigerson, Sigita Stoncius, Pavel Kočovský*



A general approach to homochiral α -amino substituted bromo-heteroaromatics suitable for two-dimensional rapid analogue synthesis

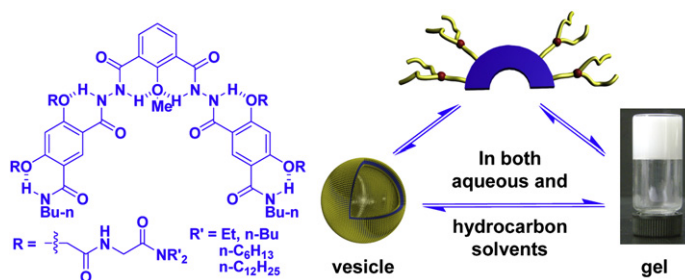
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Carsten Schultz-Fademrecht, Olaf Kinzel*, István E. Markó, Tomas Pospisil, Silvia Pesci, Michael Rowley, Philip Jones

**Hydrogen bonded aromatic hydrazide foldamers for the self-assembly of vesicles and gels**

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Li-Yan You, Gui-Tao Wang, Xi-Kui Jiang, Zhan-Ting Li*

**OTHER CONTENT****Corrigendum**

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*Corresponding author

Supplementary data available via ScienceDirect

COVER

The cover image shows the glycoprotein hormone erythropoietin set against a backdrop of red blood cells. Oligosaccharide and peptide building blocks are assembled through chemical synthesis to provide advanced glycopolypeptide structures for our studies towards the synthesis of homogeneous erythropoietin.

The cover figure was designed by Tony J. Riley of MSKCC.

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