

Tetrahedron Letters Vol. 51, No. 1, 2010

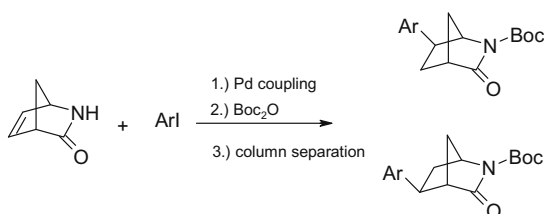
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COMMUNICATIONS

Hydroarylation of 2-azabicyclohept-5-en-3-one

pp 17–19

David W. Piotrowski ^{*}, Jana Polivkova

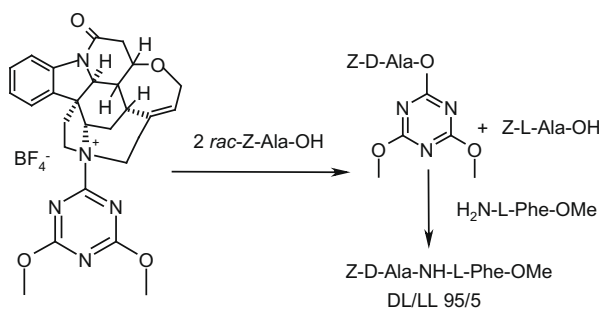


The hydroarylation of 2-azabicyclo[2.2.1]hept-5-en-3-one with a range of aryl iodides is presented.

The design, synthesis, and application of a chiral coupling reagent derived from strychnine for the enantioselective activation of a carboxylic group

pp 20–22

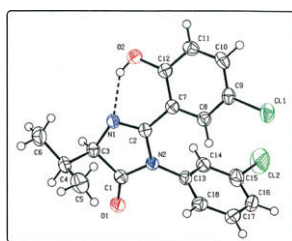
Beata Kolesińska ^{*}, Katarzyna Kasperowicz, Marek Sochacki, Adam Mazur, Stefan Jankowski, Zbigniew J. Kamiński



An unprecedented rearrangement of salicylanilide derivatives: imidazolinone intermediate formation

pp 23–26

Jarmila Vinšová ^{*}, Aleš Imramovský, Martin Krátký, Juana Monreal Ferriz, Karel Palát, Antonín Lyčka, Aleš Růžička

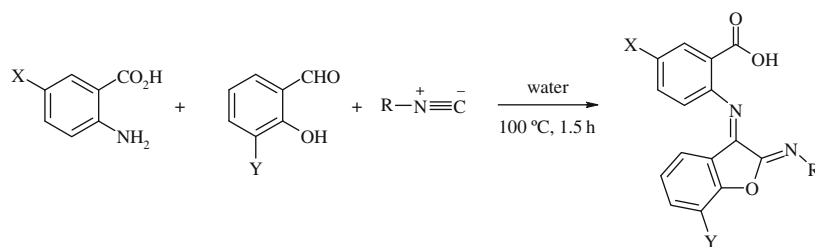


The ORTEP view of 2-(5-chloro-2-hydroxyphenyl)-3-(3-chlorophenyl)-5-isopropyl-3,5-dihydro-4H-imidazol-4-one, a dehydrated form of reaction intermediate.

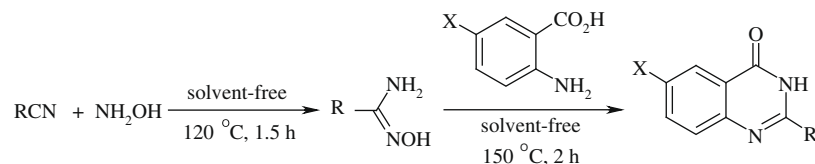


Reaction between anthranilic acids, salicylaldehydes and isocyanides in water: an efficient synthesis of 2-[[2-(alkylimino)-1-benzofuran-3-ylidene]amino]benzoic acids

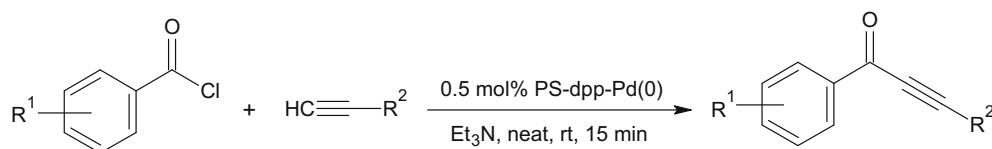
pp 27–29

Mehdi Adib ^{*}, Mohammad Mahdavi, Sharareh Bagherzadeh, Long-Guan Zhu, Mehdi Rahimi-Nasrabadi
A novel, one-pot, solvent-, and catalyst-free synthesis of 2-aryl/alkyl-4(3H)-quinazolinones

pp 30–32

Mehdi Adib ^{*}, Samira Ansari, Ali Mohammadi, Hamid Reza Bijanzadeh
A copper- and solvent-free coupling of acid chlorides with terminal alkynes catalyzed by a polystyrene-supported palladium(0) complex under aerobic conditions

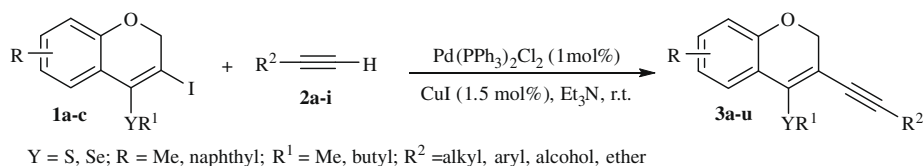
pp 33–35

Mohammad Bakherad ^{*}, Ali Keivanloo, Bahram Bahramian, Mahbobeh Rajaie

A polystyrene-supported palladium(0) complex [PS-dpp-Pd(0)] is an efficient catalyst for the copper- and solvent-free acylation of terminal alkynes with different acid chlorides in the presence of triethylamine as base, giving the corresponding ynones in good yields.

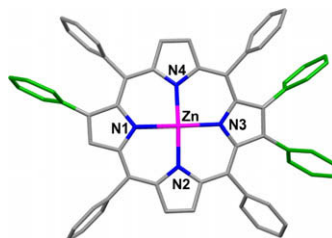
3-Iodo-4-chalcogen-2H-benzopyran as a convenient precursor for the sonogashira cross-coupling: synthesis of 3-alkynyl-4-chalcogen-2H-benzopyrans

pp 36–39

Adriane Sperança, Benhur Godoi, Ana C. G. Souza, Gilson Zeni ^{*}

Synthesis of β -di and tribromoporphyrins and the crystal structures of antipodal tri-substituted Zn(II)-porphyrins

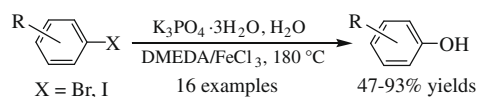
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P. Bhyrappa ^{*}, V. Velkannan

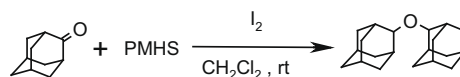
Syntheses of $H_2TPPBBr_n$ ($n = 2, 3$) derivatives and the Suzuki cross-coupled product of $H_2TPPBBr_3$ have been reported. Crystal structures of $ZnTPPBBr_3$ ($R = Br, Ph$) showed antipodal substitution at the β -pyrrole positions.

Iron-catalyzed conversion of unactivated aryl halides to phenols in water

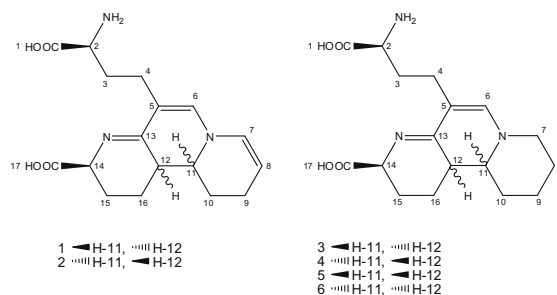
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Yunlai Ren, Lin Cheng, Xinzhe Tian, Shuang Zhao, Jianji Wang ^{*}, Chaodong Hou**The reductive etherification of carbonyl compounds using polymethylhydrosiloxane activated by molecular iodine**

pp 46–48

J. S. Yadav ^{*}, B. V. Subba Reddy, K. Shiva Shankar, T. Swamy**Oryzamutaic acids B–G, new alkaloids from an *Oryza sativa* mutant with yellow endosperm**

pp 49–53

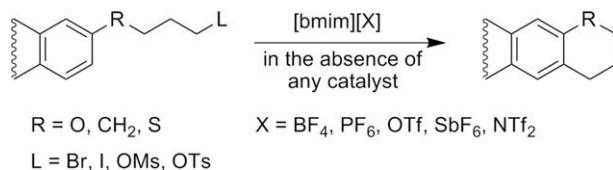
Hiroshi Nakano ^{*}, Seiji Kosemura, Mitsuru Yoshida, Toshisada Suzuki, Rika Iwaura, Ryota Kaji, Makoto Sakai, Katsutoshi Hirose

Oryzamutaic acids B–G (1–6), structurally unique nitrogen-containing heterocyclic alkaloids, were isolated from the endosperm (polished rice) of an *Oryza sativa* mutant.

Facile ring-closure cyclization of arenes by nucleophilic C-alkylation reaction in ionic liquid

pp 54–56

Dong Jin Hong, Dong Wook Kim*, Dae Yoon Chi*



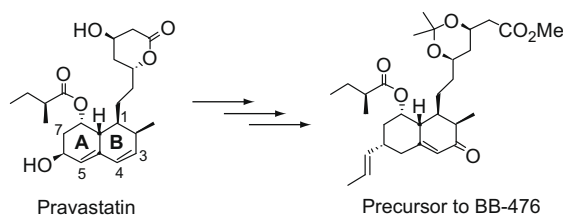
A novel synthetic method using an ionic liquid (IL) for a six-membered ring-closure cyclization is described. The ring-closure cyclization by nucleophilic C-alkylation was achieved with various halo- and alkanesulfonyloxyalkyl aromatic compounds in high yields with minimal byproducts using various ILs as the reaction media in the absence of any catalyst. For example, the cyclization of 2-(3-methanesulfonyloxy-propoxy)naphthalene (**1a**) to 2,3-dihydro-1H-naphtho[2,1-b]pyran (**2**) in IL [bmim][PF₆] proceeded selectively at 150 °C for 24 h in 85% yield.



Conversion of pravastatin into an advanced intermediate for the synthesis of the HMG-CoA reductase inhibitor BB-476

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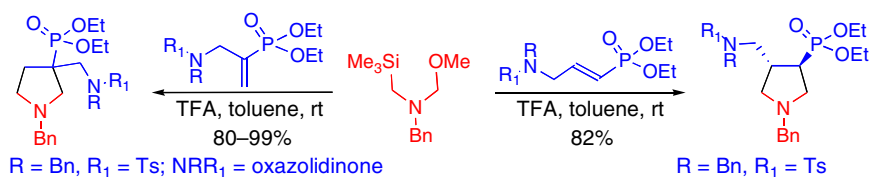
J. J. Cronje Grove, Pieter S. van Heerden, Daneel Ferreira, Barend C. B. Bezuidenhout*



Synthesis of new β- and γ-aminopyrrolidinephosphonates via 1,3-dipolar cycloaddition of substituted vinylphosphonates

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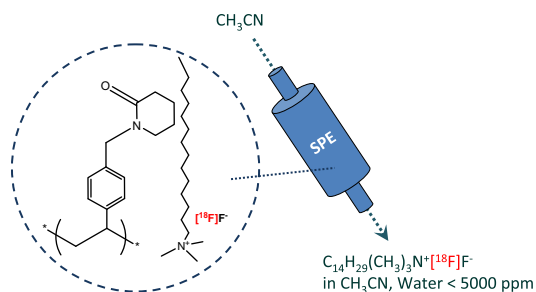
Nicolas Rabasso, Antoine Fadel*



Fast production of highly concentrated reactive [¹⁸F] fluoride for aliphatic and aromatic nucleophilic radiolabelling

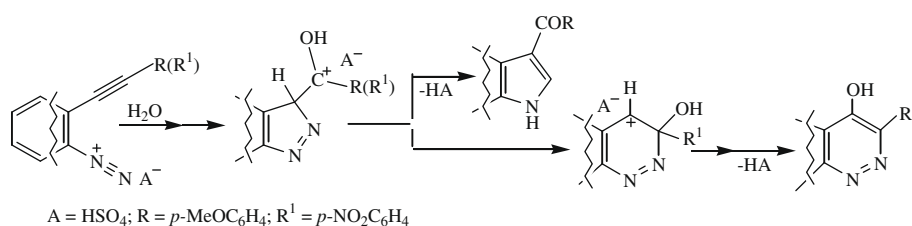
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Joël Aerts*, Samuel Voccia, Christian Lemaire, Fabrice Giacomelli, David Goblet, David Thonon, Alain Plenevaux, Geoffrey Warnock, André Luxen

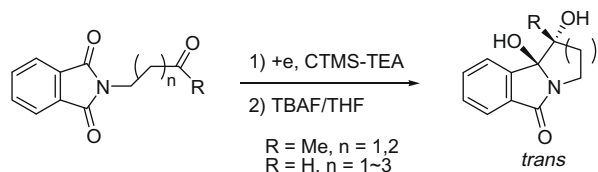


The effect of substrate structure on the direction of cyclization of *ortho*-alkynylbenzene diazonium salts

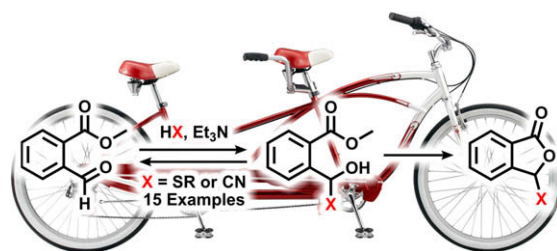
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Lidiya G. Fedenok^{*}, Mark S. Shvartsberg, Valentina S. Bashurova, George A. Bogdanchikov**Electroreductive intramolecular coupling of *N*-(oxoalkyl)phthalimides: complementary method to samarium(II) iodide reduction**

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Naoki Kise^{*}, Toshihiko Sakurai**Tandem reversible addition–intramolecular lactonization for the synthesis of 3-functionalized phthalides**

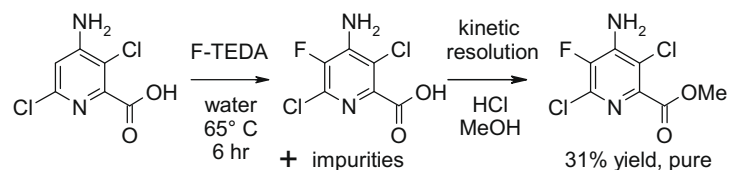
pp 75–78

Morakot Sakulsombat, Marcus Angelin, Olof Ramström^{*}

A one-pot tandem reaction for the efficient synthesis of 3-substituted phthalides is presented based on reversible nucleophilic addition to methyl 2-formylbenzoate followed by lactonization.

**Electrophilic fluorination: the aminopyridine dilemma**

pp 79–81

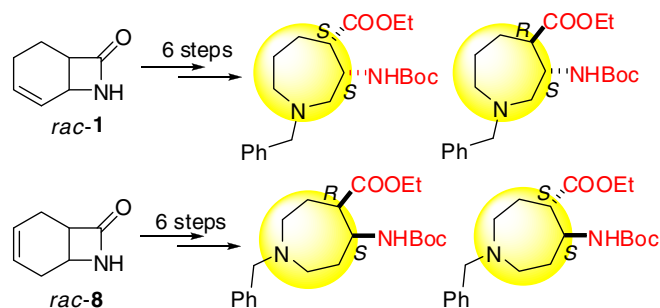
Stephen C. Fields, William C. Lo, William K. Brewster^{*}, Christian T. Lowe

5-Fluoroaminopyridine was prepared on kilogram scale via electrophilic fluorination of aminopyridine using F-TEDA (SELECTFLUOR™) in warm water. It was purified as its methyl ester via an iterative esterification/saponification sequence (kinetic resolution) on the crude.

Synthesis of orthogonally protected azepane β -amino ester enantiomers

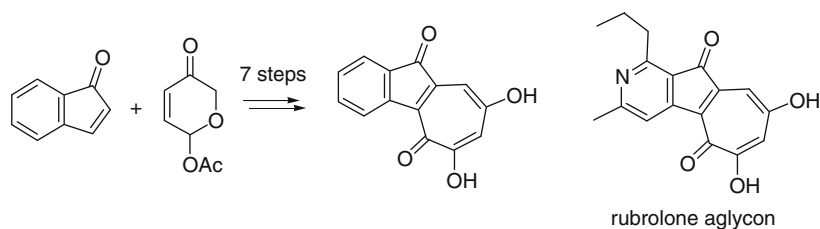
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Brigitta Kazi, Loránd Kiss, Enikő Forró, Ferenc Fülöp*

**Rapid annulation of tropolone units via a pyrylium ylide 1,3-dipolar cycloaddition reaction**

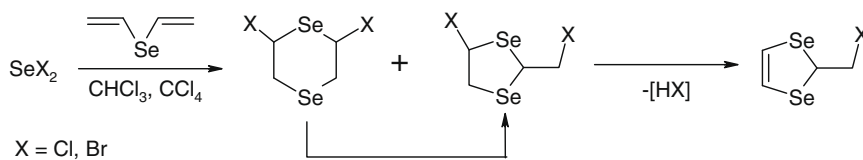
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Kirill Tchabanenko*, Peter McIntyre, John F. Malone

**Reactions of selenium dichloride and dibromide with divinyl selenide: synthesis of novel selenium heterocycles and rearrangement of 2,6-dihalo-1,4-diselenanes**

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Vladimir A. Potapov*, Svetlana V. Amosova, Kaleria A. Volkova, Maxim V. Penzik, Alexander I. Albanov

**Synthesis of heterosteroids. First synthesis of oxa steroid from cholic acid**

pp 93–95

Malika Ibrahim-Ouali*, Nicaise Botsi-Nkomendi, Luc Rocheblave

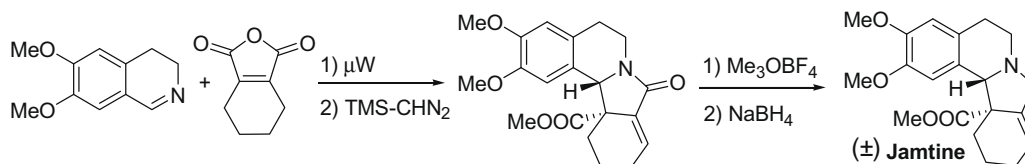


A new efficient synthesis of heterosteroid from cholic acid is described.

An expeditious total synthesis of (±)-jamtine using condensation between imine and acid anhydride

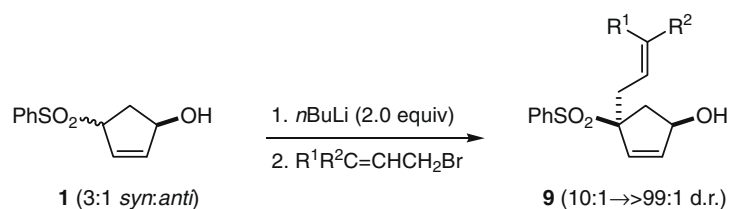
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Joelle Pérard-Viret, Florence Souquet, Marie-Line Manisse, Jacques Royer *

**Highly diastereoselective allylation reactions of dilithiated 4-(phenylsulfonyl)-cyclopent-2-enol**

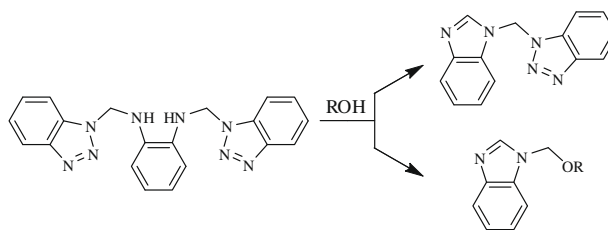
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Donald Craig *, Pengfei Lu, Andrew J. P. White

**Novel access to 1-substituted-benzimidazoles via benzotriazole-mediated synthesis**

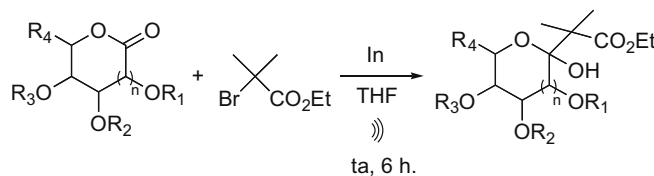
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Augusto Rivera *, Mauricio Maldonado, Jaime Ríos-Motta, Miguel Angel Navarro, Diego González-Salas

**Indium-mediated Reformatsky reaction on lactones: preparation of 2-deoxy-2,2'-dimethyl-3-ulosonic acids**

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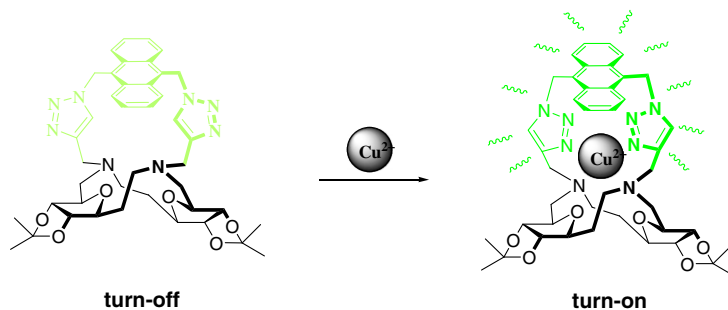
Raquel G. Soengas



Synthesis of a sugar-aza-crown ether-based cavitand as a selective fluorescent chemosensor for Cu²⁺ ion

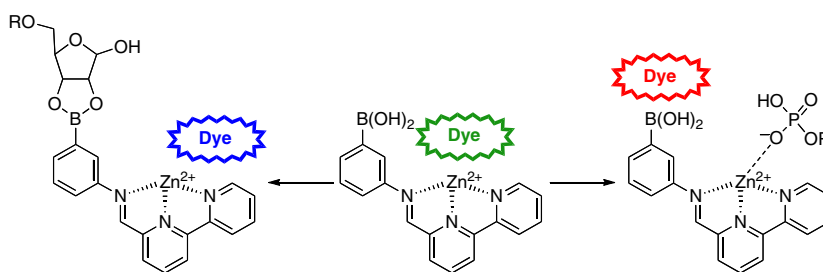
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Yu-Chi Hsieh, Jiun-Ly Chir, Hsiu-Han Wu, Chao-QI Guo, An-Tai Wu *

**An indicator displacement assay with independent dual wavelength emission**

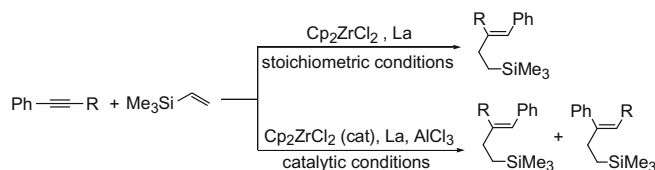
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Shaohui Zhang, Timothy E. Glass *

**Catalytic versus stoichiometric coupling of alkynes with trimethylvinylsilane mediated by zirconocene**

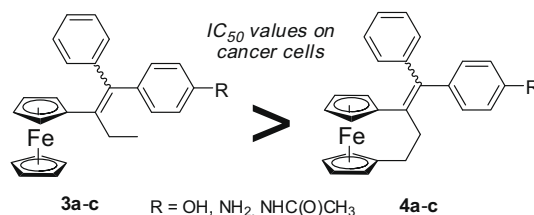
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Mohamad Soueidan, Florence Héliou *, Jean-Louis Namy, Jan Szymoniak

**Comparative toxicity of [3]ferrocenophane and ferrocene moieties on breast cancer cells**

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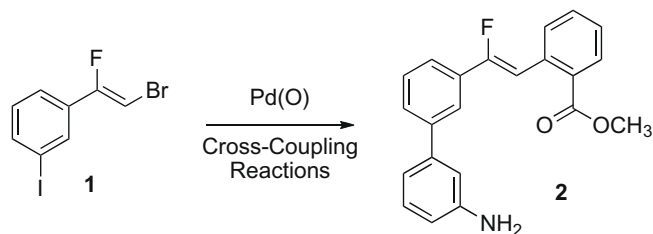
Meral Gormen, Damian Plazuk, Pascal Pigeon, Elizabeth A. Hillard, Marie-Aude Plamont, Siden Top *, Anne Vessières, Gérard Jaouen *



Ferrocene compounds possessing the [3]ferrocenophane motif are strongly toxic against hormone-independent breast cancer cells; more so than their non-cyclic counterparts.

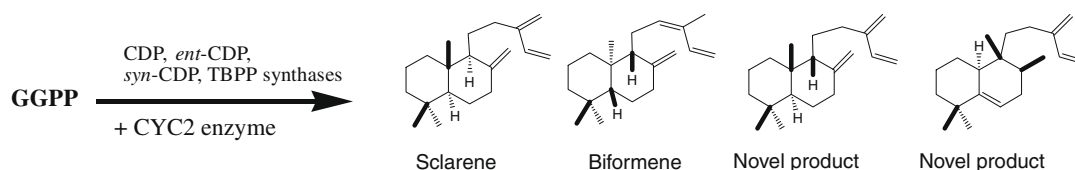
A general preparation of (Z)-1-fluorostilbene derivatives for the design of conformationally restricted peptidomimetics

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David R. Williams ^{*}, Micheal W. Fultz, Thomas E. Christos ^{*}, Jeffery S. Carter

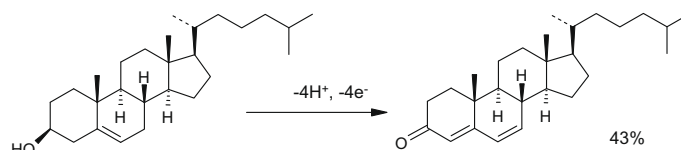
Substrate specificity of the CYC2 enzyme from *Kitasatospora griseola*: production of sclarene, biformene and novel bicyclic diterpenes by the enzymatic reactions of labdane- and halimane-type diterpene diphosphates

pp 125–128

Chiaki Nakano, Tsutomu Hoshino ^{*}, Tsutomu Sato, Tomonobu Toyomasu, Tohru Daiiri, Takeshi Sassa

Electrosynthesis of cholesta-4,6-dien-3-one from cholesterol on a laboratory synthetic scale

pp 129–132

Yu-Ya Hosokawa, Hideki Hakamata ^{*}, Tomonori Murakami, Fumiyo Kusu

Carrier soln: CH₃CN cont. 50 mmol/L LiClO₄ and
200 μmol/L cholesterol

Flow rate: 2.5 mL/min

Column electrolytic cell: WE, carbon fiber electrode

RE, Ag/AgCl

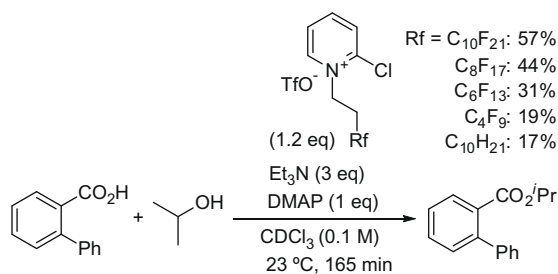
CE, carbon fiber cloth

Applied potential: 1.9 V vs. Ag/AgCl



Pronounced rate enhancements in condensation reactions attributed to the fluorous tag in modified Mukaiyama reagents

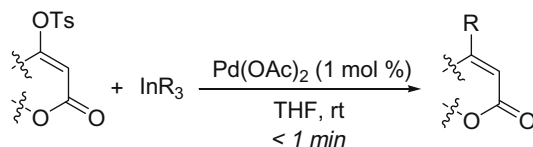
pp 133–135

Masato Matsugi ^{*}, Shuichi Nakamura, Yoko Kunda, Yuya Sugiyama, Takayuki Shioiri

An efficient route to 4-substituted coumarins, 2(5H)-furanones, and pyrones via palladium-catalyzed couplings of alkenyl tosylates with organoindium reagents

pp 136–138

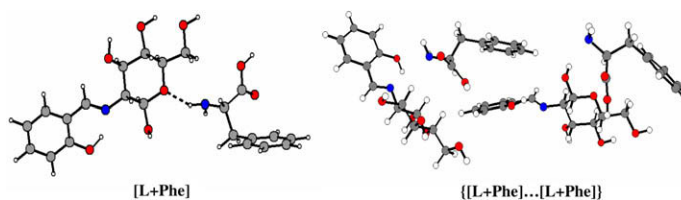
Wei Gao, Yong Luo, Qiuping Ding, Yiyuan Peng*, Jie Wu*


1-(D-Glucopyranosyl-2'-deoxy-2'-iminomethyl)-2-hydroxybenzene as chemosensor for aromatic amino acids by switch-on fluorescence

pp 139–142

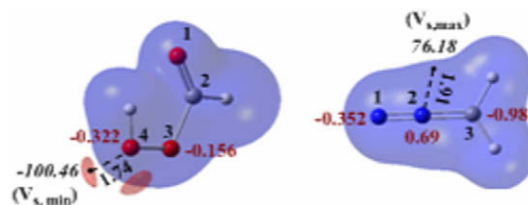
Atanu Mitra, Jugun Prakash Chinta, Chebrolu P. Rao*

A glucose based C2-glyco-conjugate, viz., 1-(D-glucopyranosyl-2'-deoxy-2'-iminomethyl)-2-hydroxybenzene (L), has been synthesized in high yield and characterized. Titration of L with all the twenty naturally occurring amino acids resulted in a large fluorescence intensity enhancement only in case of aromatic amino acids, viz., Phe, Trp, His and Tyr and not with the others. This has been attributed to the initial formation of 1:1 hydrogen bonded complex followed by π - π interactions present between the aromatic moieties of such complexes as demonstrated by absorption and computational methods. Thus L has been able to recognize aromatic amino acids down to 1.5–3 ppm through switch-on fluorescence behavior.


Electrostatic origin towards the reversal of π -facial selectivity of 5,6-cis,exo-disubstituted bicyclic[2.2.2]oct-2-enes with *m*-chloroperbenzoic acid and diazomethane: a computational study

pp 143–146

Anik Sen, Bishwajit Ganguly*

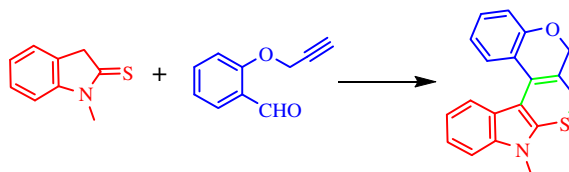


The π -facial selectivity of 5,6-disubstituted bicyclic [2.2.2]oct-2-enes with *m*-cpba and diazomethane has been studied computationally. The reversal of face selectivity with *m*-cpba and diazomethane arises due to an electrostatic effect. The calculations further revealed that an atom centre of an electrophile which is not directly involved in the bond formation can govern the face selectivity.


Catalyst-free domino-Knoevenagel-hetero-Diels–Alder reaction of terminal alkynes in water: an efficient one-step synthesis of indole-annulated thiopyranobenzopyran derivatives

pp 147–150

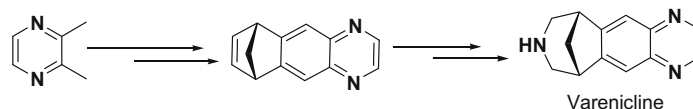
K. C. Majumdar*, Abu Taher, Sudipta Ponra



An efficient synthesis of varenicline

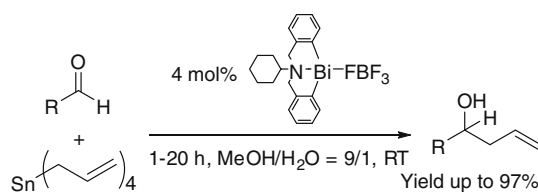
pp 151–152

Srinivas Pasikanti, D. Srinivasa Reddy, B. Venkatesham, P. K. Dubey, Javed Iqbal, Parthasarathi Das *

**Air-stable hypervalent organobismuth(III) tetrafluoroborate as effective and reusable catalyst for the allylation of aldehyde with tetraallyltin**

pp 153–156

Xiaowen Zhang, Renhua Qiu, Nianyuan Tan, Shuangfeng Yin *, Jun Xia, Shenglian Luo, Chak-Tong Au

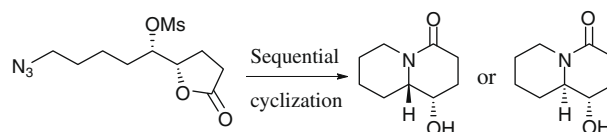


The allylation of different aldehydes with tetraallyltin was successfully operated over hypervalent organobismuth(III) tetrafluoroborate catalyst in a medium of aqueous methanol, giving the corresponding homoallylic alcohols in excellent chemoselectivity and yields.

Asymmetric and diastereodivergent approach to key intermediates for the synthesis of homopumiliotoxin 223G and epiquinamide isomer

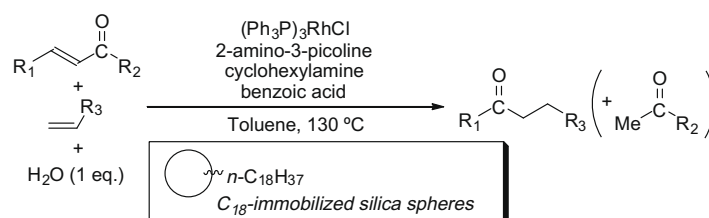
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Le Anh Tuan, Hyeyoung Pyeon, Guncheol Kim *

**One-pot catalytic C–C double bond cleavage of α,β -enones aided by alkyl group-immobilized silica spheres**

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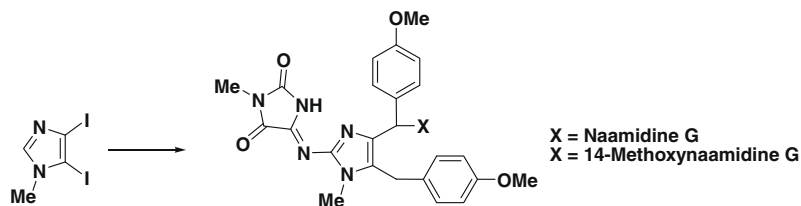
Dong Hun Lee, Eun-Ae Jo, Jung-Woo Park, Chul-Ho Jun *



Total syntheses of naamidine G and 14-methoxynaamidine G

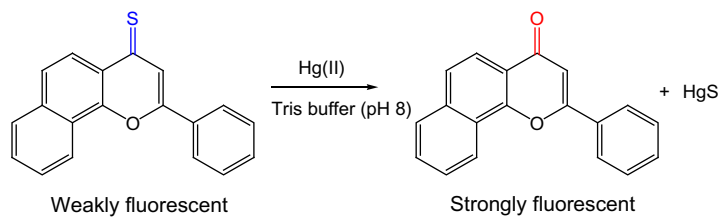
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Panduka B. Koswatta, Carl J. Lovely *

**Hg²⁺-selective fluorogenic chemodosimeter based on naphthoflavone**

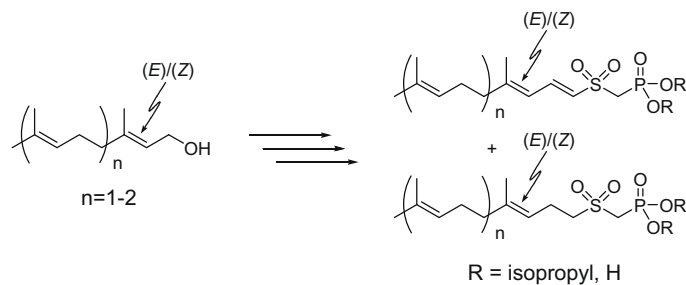
pp 167–169

Ji Eun Namgoong, Hye Lim Jeon, Youn Hwan Kim, Myung Gil Choi, Suk-Kyu Chang *

**Synthesis of (sulfonyl)methylphosphonate analogs of prenyl diphosphates**

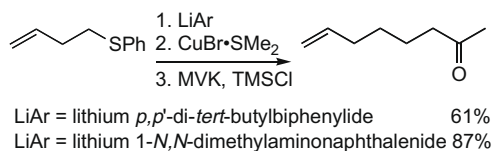
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Michael W. Lodewyk, Victor G. Lui, Dean J. Tantillo *

**The superiority of properly prepared lithium 1-*N,N*-dimethylaminonaphthalenide (LDMAN) over other aromatic radical-anions for the generation of organolithiums by reductive lithiation**

pp 174–176

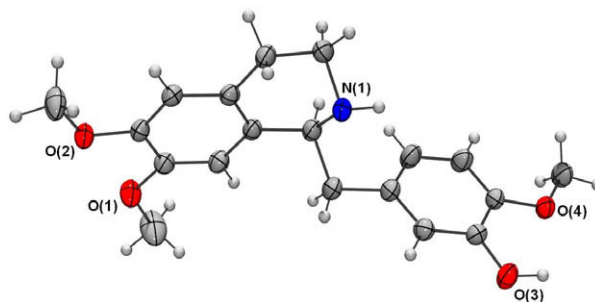
Roman Ivanov *, Ilan Marek, Theodore Cohen *



Enantioselective syntheses and X-ray structures of (*S*)- and (*R*)-*N*-norlaudanidine: trace opium constituents

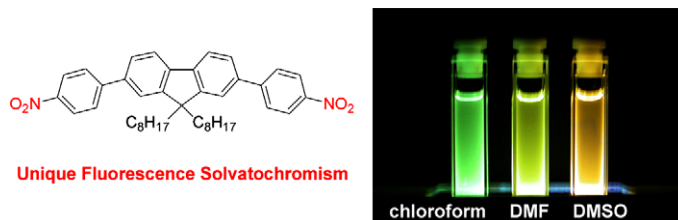
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Ahmed L. Zein, Otman O. Dakhil, Louise N. Dawe, Paris E. Georghiou *

**Synthesis and photoluminescence properties of π -extended fluorene derivatives: the first example of a fluorescent solvatochromic nitro-group-containing dye with a high fluorescence quantum yield**

pp 181–184

Hidehiro Kotaka, Gen-ichi Konishi *, Kazuhiko Mizuno

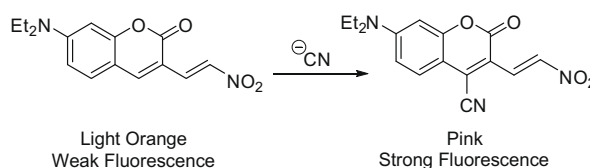


2,7-Di(*p*-nitrophenyl)fluorene has high fluorescence quantum yield ($\phi_F = 0.31$ in *N,N'*-dimethyl-formamide) and exhibits large Stoke's shift with green to orange emission and unique on-off behavior of the emission governed by solvents.

Doubly activated coumarin as a colorimetric and fluorescent chemodosimeter for cyanide

pp 185–187

Gun-Joong Kim, Hae-Jo Kim *

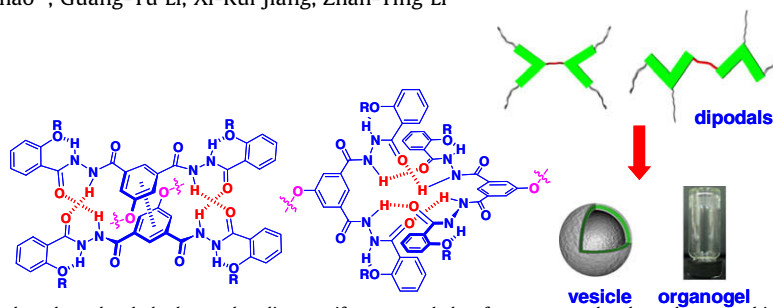


The chemodosimeter shows a selective response to cyanide through the nucleophilic aromatic substitution reaction of **1** by the cyanide anion.

**Two novel quadruple hydrogen-bonding motifs: the formation of supramolecular polymers, vesicles, and organogels**

pp 188–191

Ping Du, Gui-Tao Wang, Xin Zhao *, Guang-Yu Li, Xi-Kui Jiang, Zhan-Ting Li *

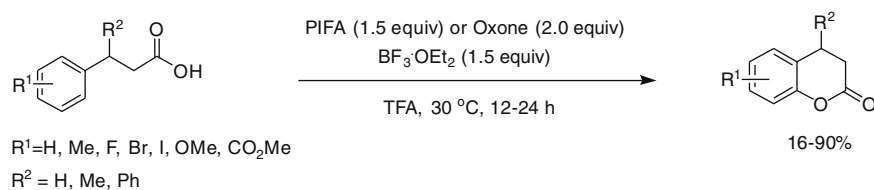


Dipodals based on two new hydrazide-based quadruple hydrogen-bonding motifs are revealed to form supramolecular polymers, which can further aggregate to form vesicles and/or organogels in hydrocarbons.

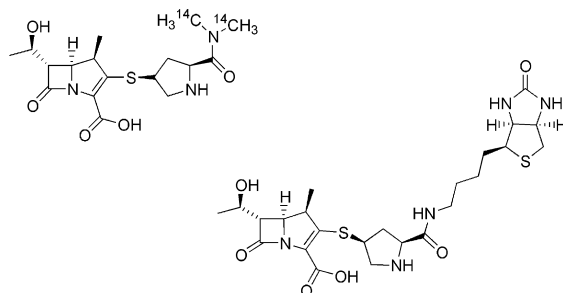


Direct oxidative cyclization of 3-arylpropionic acids using PIFA or Oxone: synthesis of 3,4-dihydrocoumarins

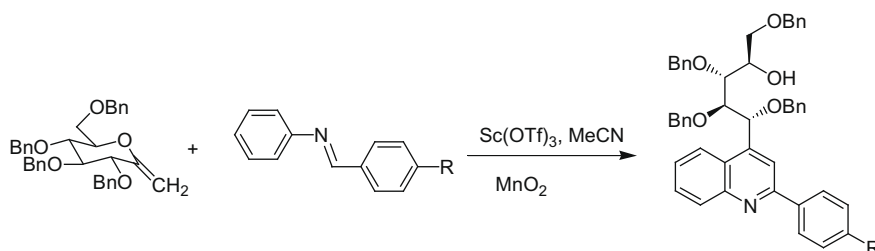
pp 192–196

Yonghong Gu^{*}, Kun Xue**Synthesis of labeled meropenem for the analysis of *M. tuberculosis* transpeptidases**

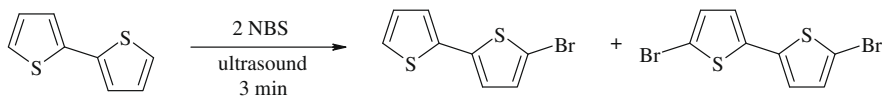
pp 197–200

David B. Kastrinsky, Clifton E. Barry III^{*}**Facile one-pot method for the synthesis of novel glycosylidene-based quinolines**

pp 201–204

Peter H. Dobbelaar, Cecilia H. Marzabadi^{*}**A novel method for the bromination of thiophenes**

pp 205–208

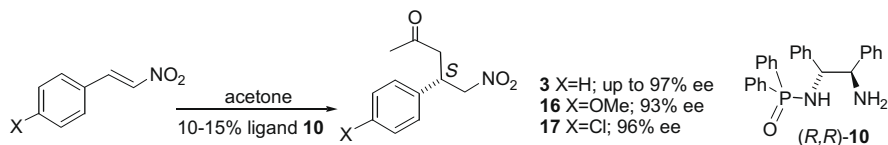
Pavel Arsenyan^{*}, Edgars Paegle, Sergey Belyakov

A novel, fast and convenient method for the bromination of thiophenes and oligothiophenes with *N*-bromosuccinimide using ultrasonic irradiation is elaborated.

Asymmetric organocatalysis of the addition of acetone to 2-nitrostyrene using *N*-diphenylphosphinyl-1,2-diphenylethane-1,2-diamine (PODPEN)

pp 209–212

David J. Morris, A. Simon Partridge, Charles V. Manville, Daugidas T. Racys, Gary Woodward, Gordon Docherty, Martin Wills *



*Corresponding author

+ Supplementary data available via ScienceDirect

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