

Tetrahedron Letters Vol. 51, No. 50, 2010

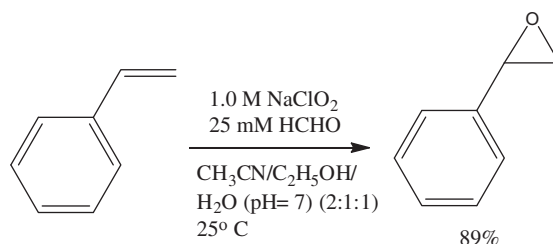
Contents

COMMUNICATIONS

Epoxidation by sodium chlorite with aldehyde-promoted chlorine dioxide formation

pp 6481–6484

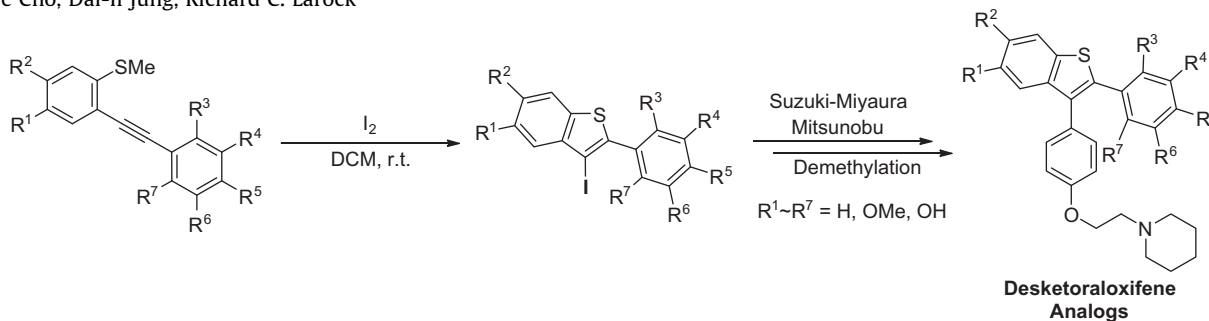
Ashok Jangam, David E. Richardson*



A new approach to desketoraloxifene analogs from oxygen-bearing 3-iodobenzo[b]thiophenes prepared via iodocyclization

pp 6485–6488

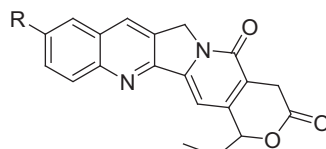
Chul-Hee Cho, Dai-Il Jung, Richard C. Larock*



Synthesis of new cytotoxic E-ring modified camptothecins

pp 6489–6492

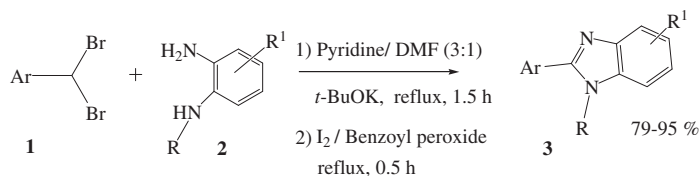
Salvatore Cananzi, Sabrina Dallavalle*, Alberto Bargiotti, Lucio Merlini, Roberto Artali, Giovanni Luca Beretta



One-pot synthesis of benzimidazoles from *gem*-dibromomethylarenes using *o*-diaminoarenes

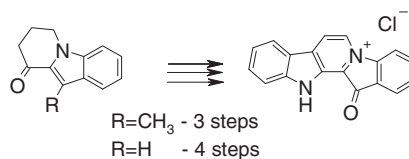
pp 6493–6497

Chandrappa Siddappa, Vinaya Kambappa, Ananda Kumar C. Siddegowda, Kanchugarakoppal S. Rangappa*

**A new method for the synthesis of the marine alkaloid fascaplysin**

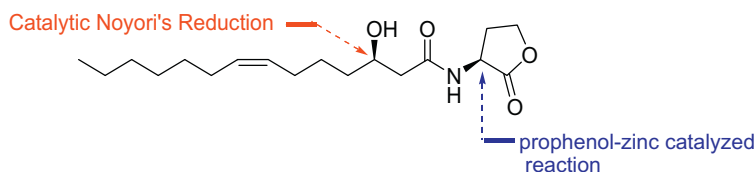
pp 6498–6499

Maxim E. Zhidkov*, Olga V. Baranova, Natalya S. Kravchenko, Sergey V. Dubovitskii

**Enantioselective synthesis of (2*S*,3'*R*,7'*Z*)-*N*-(3'-hydroxy-7'-tetradecenoyl)-homoserine lactone**

pp 6500–6502

Gullapalli Kumaraswamy*, Neerasa Jayaprakash

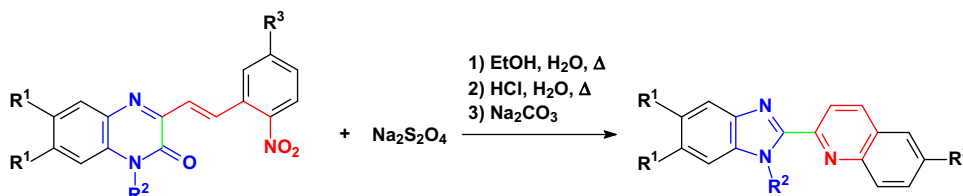


A flexible synthetic route was developed for the synthesis of quorum-sensing pheromone (2*S*,3'*R*,7'*Z*)-*N*-(3'-hydroxy-7'-tetradecenoyl)-homoserine lactone. A key feature of this protocol is that the two stereogenic centers have been installed by means of catalytic reactions with high enantioselectivity.

**Acid-catalyzed rearrangement of 3-(β-2-aminostyryl)quinoxalin-2(1*H*)ones—a new and efficient method for the synthesis of 2-benzimidazol-2-ylquinolines**

pp 6503–6506

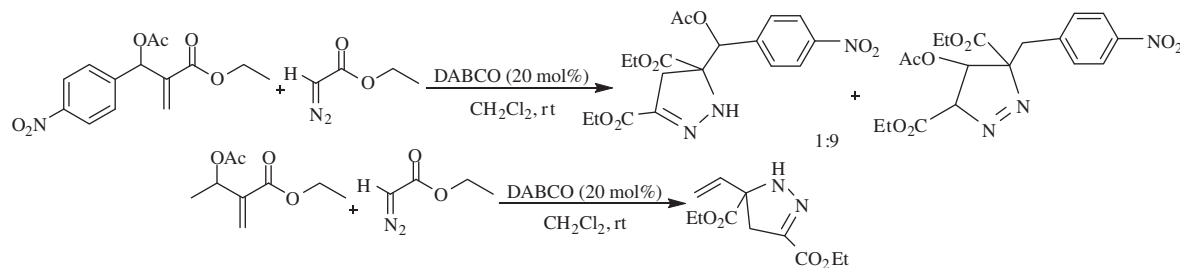
Vakhid A. Mamedov*, Dina F. Saifina, Aidar T. Gubaidullin, Venera R. Ganieva, Saniya F. Kadyrova, Dmitry V. Rakov, Il'dar Kh. Rizvanov, Oleg G. Sinyashin



DABCO catalyzed facile synthesis of highly functionalized pyrazolines from Baylis–Hillman acetates and ethyl diazoacetate

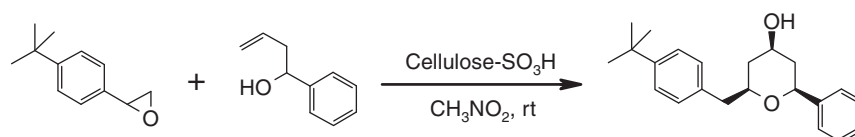
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Palakodety Radha Krishna*, Y. Lakshmi Prapurna

**Cellulose-SO₃H as a recyclable catalyst for the synthesis of tetrahydropyransols via Prins cyclization**

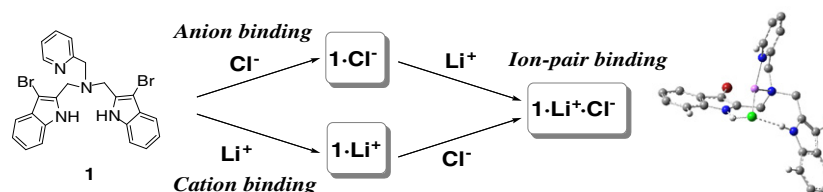
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B. V. Subba Reddy*, A. Venkateswarlu, G. G. K. S. Narayana Kumar, A. Vinu

**Anion and cation binding by a new indole/pyridine/amine-based ion-pair receptor**

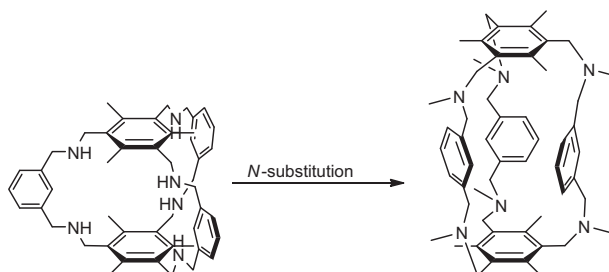
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Kristin N. Skala, Katelyn G. Perkins, Amna Ali, Robert Kutlik, Addie M. Summitt, Satyanarayana Swamy-Mruthinti, Farooq A. Khan*, Megumi Fujita*

**Synthesis and characterization of hexasubstituted azacryptands**

pp 6521–6525

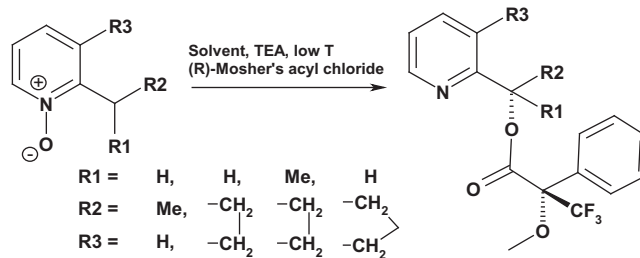
Nicolas De Rycke, Jérôme Marrot, François Couty, Olivier R. P. David*



Reaction of 2-alkyl pyridine N-oxide derivatives with Mosher's acyl chloride: first example of stereoselective Boekelheide rearrangement

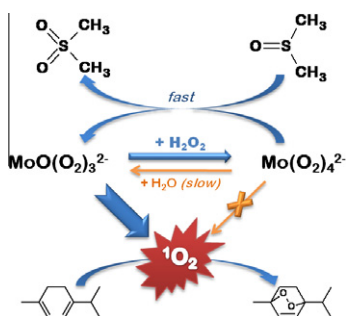
pp 6526–6530

Daniele Andreotti*, Emanuele Miserazzi, Arnaldo Nalin, Alfonso Pozzan, Roberto Profeta, Simone Spada*


Dimethylsulfoxide as a kinetic booster for the chemical generation of singlet oxygen in methanol

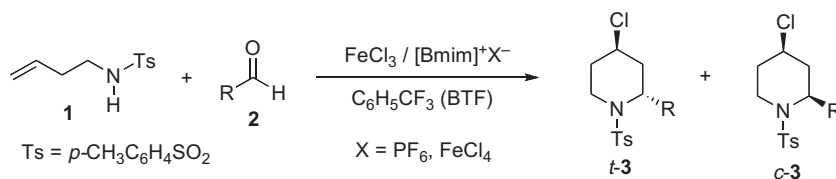
pp 6531–6534

Marion Collinet-Fressancourt, Nathalie Azaroual, Jean-Marie Aubry, Véronique Nardello-Rataj*


Application of biphasic reaction procedure using ferric chloride dissolved in an imidazolium salt and benzotrifluoride (Felm-BTF procedure) to aza-Prins cyclization reaction

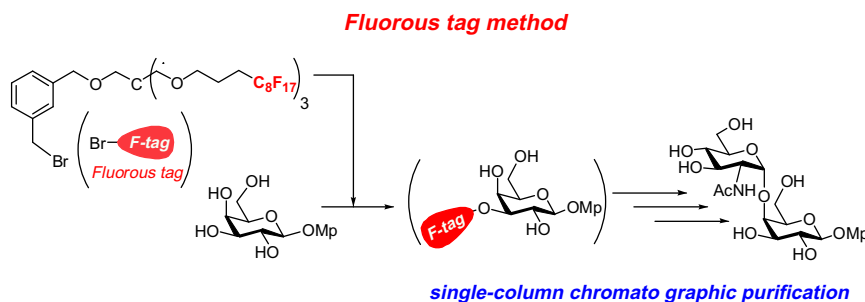
pp 6535–6538

Eietsu Hasegawa*, Nohara Hiroi, Chika Osawa, Eiji Tayama, Hajime Iwamoto


Practical heavy fluorous tag for carbohydrate synthesis with minimal chromatographic purification

pp 6539–6541

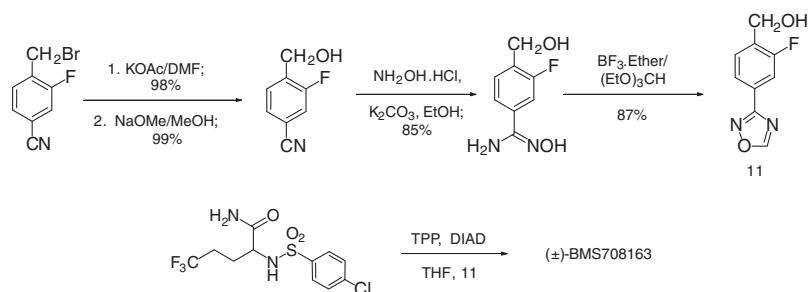
Kohtaro Goto, Mamoru Mizuno*



A synthesis of the γ -secretase inhibitor BMS-708163

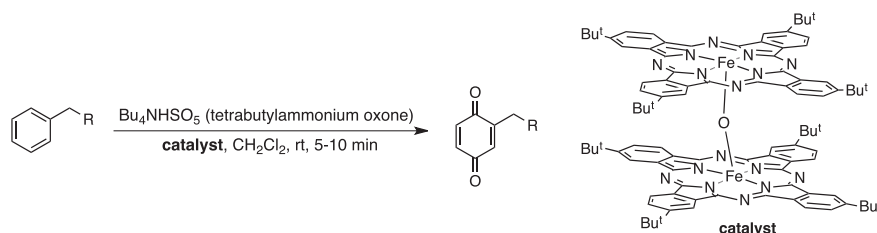
pp 6542–6544

Ghulam M. Maharvi, Abdul H. Fauq*

**Binuclear iron(III) phthalocyanine(μ -oxodimer)/tetrabutylammonium oxone: a powerful catalytic system for oxidation of hydrocarbons in organic solution**

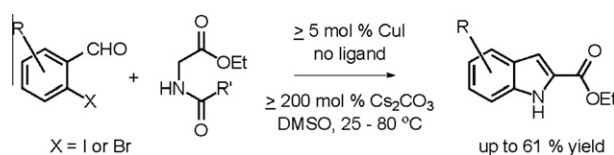
pp 6545–6548

Heather M. Neu, Viktor V. Zhdankin*, Victor N. Nemykin*

**A ligand-free, copper-catalyzed cascade sequence to indole-2-carboxylic esters**

pp 6549–6551

Stefan G. Koenig*, John W. Dankwardt, Yanbing Liu, Hang Zhao, Surendra P. Singh

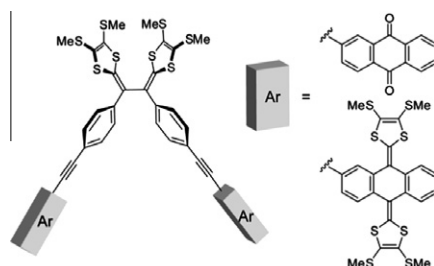


A variety of indole-2-carboxylic esters are accessible in yields up to 61% through a ligand-free, copper-catalyzed reaction of a series of commercially available 2-halo aryl aldehydes with benign glycine amidoesters, including the common reagent ethyl acetamidoacetate. This one-pot, three-reaction format allows ready entry to the desired heterocycles from starting substrates in the reactivity order of iodo > bromo \geq chloro substituents. An assortment of functional groups is tolerated, adding to the generality of this methodology.

**Synthesis and properties of TTFV-hinged molecular tweezers**

pp 6552–6556

Guang Chen, Stephen Bouzan, Yuming Zhao*



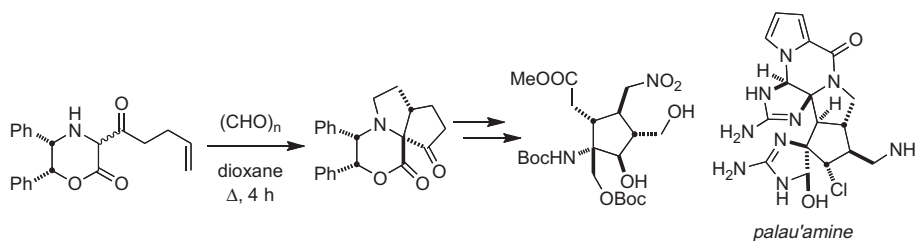
Two molecular tweezers containing a tetrathiafulvalene vinyllogue (TTFV) core were synthesized via sequential Sonogashira and Horner–Wadsworth–Emmons (HWE) reactions. The electrochemical and spectroscopic properties of these TTFV tweezers were investigated by UV–vis absorption spectroscopy, cyclic voltammetry, and spectro-electrochemical measurements. The property characterizations suggest potential application in electrochemically-actuated molecular switching devices.



Synthetic studies on palau'amine. Construction of the cyclopentane core via an asymmetric 1,3-dipolar cycloaddition

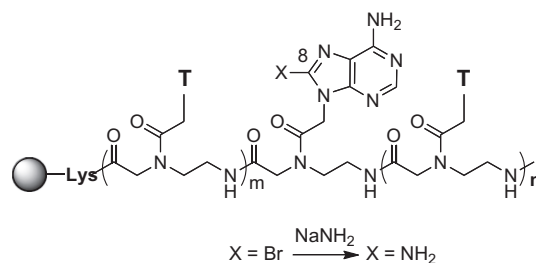
pp 6557–6559

Kosuke Namba, Makoto Inai, Uta Sundermeier, Thomas J. Greshock, Robert M. Williams*


In situ, on-resin synthesis of 8-Br/NH₂ adeninyl peptide nucleic acid (PNA) oligomers and complementation studies with DNA

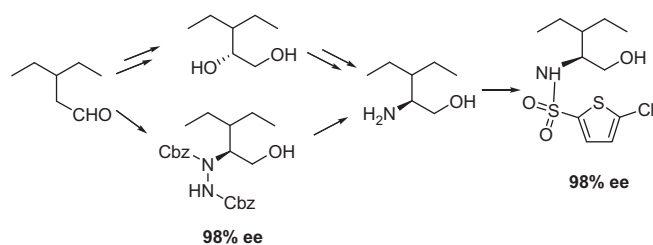
pp 6560–6564

Raman Vysabhatar, Krishna N. Ganesh*


A facile enantioselective synthesis of (S)-N-(5-chlorothiophene-2-sulfonyl)-β,β-diethylalaninol via proline-catalyzed asymmetric α-aminoxylation and α-amination of aldehyde

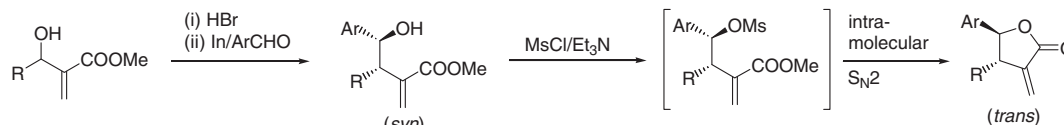
pp 6565–6567

Varun Rawat, Pandurang V. Chouthaiwale, Vilas B. Chavan, Gurunath Suryavanshi, Arumugam Sudalai*

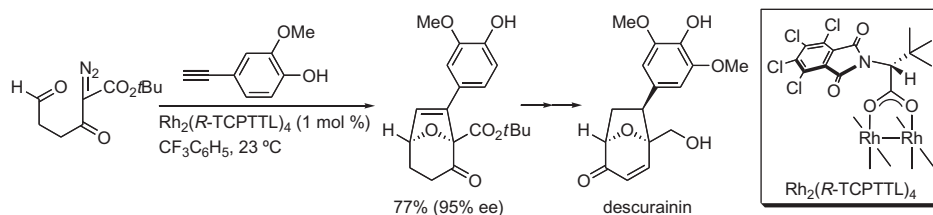

An efficient synthesis of α-methylene-γ-butyrolactones from Baylis–Hillman adducts via an In-mediated Barbier reaction and stereoselective lactonization under MeSO₂Cl/Et₃N conditions

pp 6568–6571

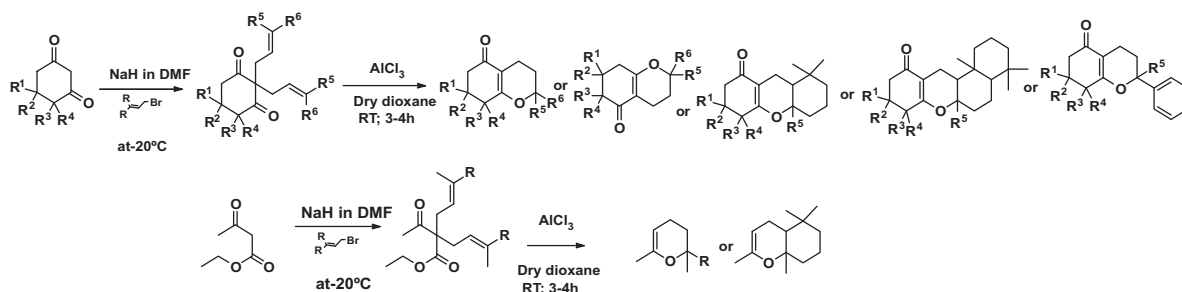
Bo Ram Park, Ko Hoon Kim, Jae Nyoun Kim*



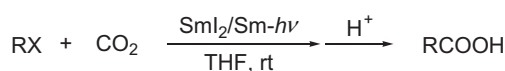
Catalytic asymmetric synthesis of descurainin via 1,3-dipolar cycloaddition of a carbonyl ylide using $Rh_2(R\text{-TCPTTL})_4$ pp 6572–6575
 Naoyuki Shimada, Taiki Hanari, Yasunobu Kurosaki, Masahiro Anada, Hisanori Nambu, Shunichi Hashimoto*



New chemical access for pyran core embedded derivatives from bisalkenylated 1,3-diketones and 1,3-diketoesters pp 6576–6579
 T. Narender*, S. Sarkar, K. Venkateswarlu, J. K. Kumar

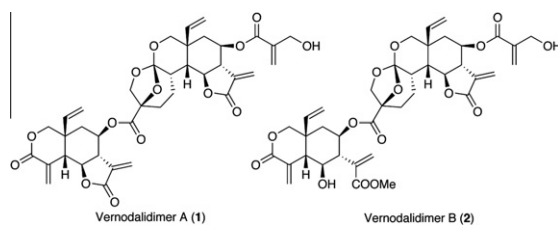


Reductive carboxylation of alkyl halides with CO_2 by use of photoinduced Sml_2/Sm reduction system pp 6580–6583
 Akihiro Nomoto, Yusuke Kojo, Go Shiino, Yuri Tomisaka, Ikuko Mitani, Masahiko Tatsumi, Akiya Ogawa*



Vernodalidimers A and B, novel orthoester elemanolide dimers from seeds of *Vernonia anthelmintica* pp 6584–6587

Yongqiang Liu, Alfarius E. Nugroho, Yusuke Hirasawa, Asami Nakata, Toshio Kaneda, Nahoko Uchiyama, Yukihiko Goda, Osamu Shirota, Hiroshi Morita*, Haji Akber Aisa*

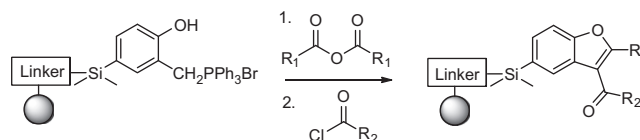


Two novel elemanolide dimers, vernodalidimers A (1) and B (2), possessing a rare tricyclic ortho ester moiety, were isolated from seeds of *Vernonia anthelmintica*. Their structures were elucidated by 1D and 2D NMR data and CD spectra. Vernodalidimers A (1) and B (2) exhibited potent cell growth inhibitory activity against HL-60 cells.

Synthesis of 2,3-disubstituted benzofurans on solid-support

pp 6588–6589

Chun-Won Jung, Liu-Lan Shen, Brian Hyun Choi, Young-Shin Kwak, Jin-Hyun Jeong*

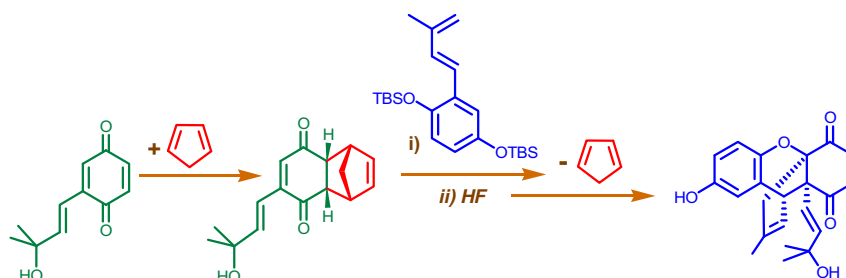


A library of 2,3-disubstituted benzofuran scaffold was developed by using intramolecular Wittig olefination and Friedel–Crafts acylation.

A biomimetic total synthesis of allomicrophyllone: protective Diels–Alder reaction as a stratagem

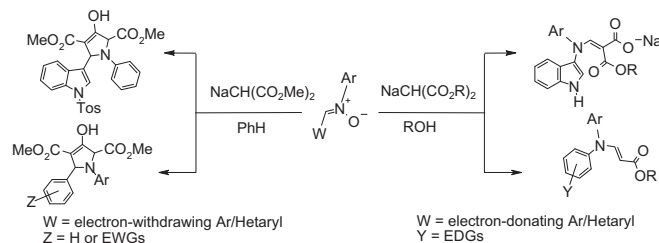
pp 6590–6593

Goverdhan Mehta*, Tabrez Babu Khan

**The stereoselective synthesis of highly functionalized tertiary 3-aminoindoles/anilines or dihydropyrroles from C-(3-indolyl)-N-aryl and C,N-diaryl nitrones**

pp 6594–6597

V. S. Velezheva*, V. N. Azev, A. G. Kornienko, A. S. Peregudov, I. A. Godovikov, Yu. L. Sebyakin

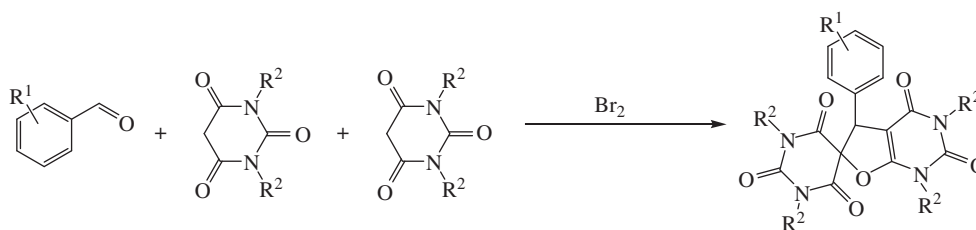


The reaction of C-(3-indolyl)/aryl-N-aryl nitrones and sodium malonates affords either derivatives of tertiary amines—salts of (2Z)-3-[(1H-(3-indolyl)/aryl)amino]-2-(alkoxycarbonyl)acrylic acid and (2E)-3-(diarylamino)acrylates, respectively, or fully-substituted dihydropyrroles, dimethyl 1-aryl-5-aryl/hetaryl-3-hydroxy-2,5-dihydro-1H-pyrrole-2,4-dicarboxylates depending on the nature of the starting C-nitrono substituent.

Cascade assembly of N,N'-dialkylbarbituric acids and aldehydes: a simple and efficient one-pot approach to the substituted 1,5-dihydro-2H,2'H-spiro[furo[2,3-d]pyrimidine-6,5'-pyrimidine]-2,2',4,4',6'(1'H,3H,3'H)-pentone framework

pp 6598–6601

Michail N. Elinson*, Anatolii N. Vereshchagin, Nikita O. Stepanov, Pavel A. Belyakov, Gennady I. Nikishin

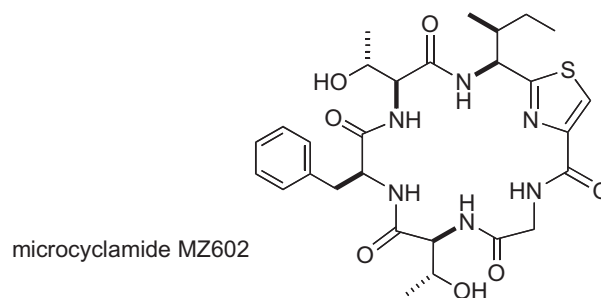


13 examples, 70–88%

Two new microcyclamides from a water bloom of the cyanobacterium *Microcystis* sp.

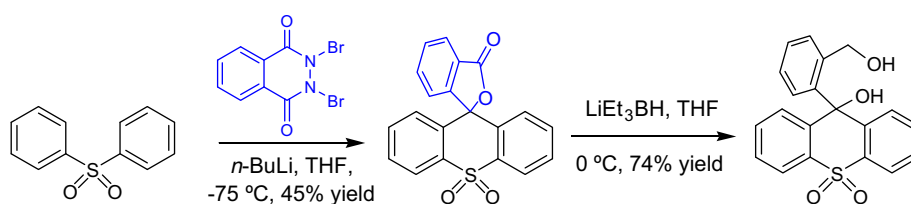
pp 6602–6604

Ella Zafrir-Ilan, Shmuel Carmeli*

**An unusual synthesis of a spirothioxanthene derivative**

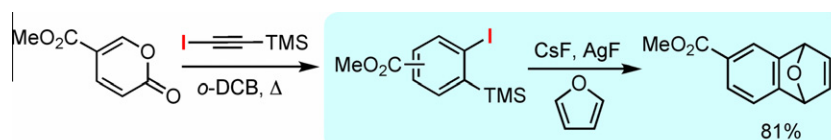
pp 6605–6607

Katja Dahms, Andrei S. Batsanov, Martin R. Bryce*

**On the use of 2-(trimethylsilyl)iodobenzene as a benzyne precursor**

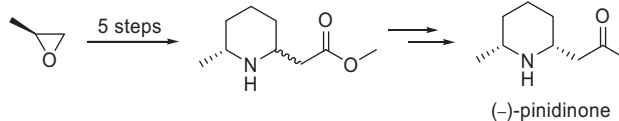
pp 6608–6610

James A. Crossley, James D. Kirkham, Duncan L. Browne*, Joseph P. A. Harrity*

**Synthesis of (–)-pinidinone**

pp 6611–6614

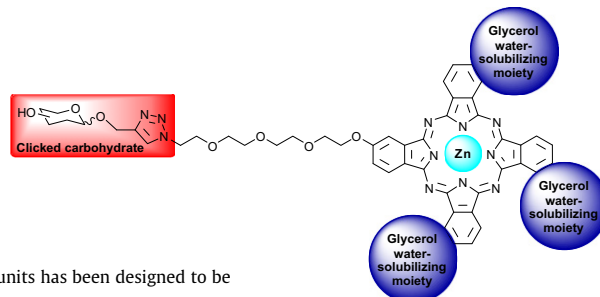
Kristína Csatayová, Ivan Špánik, Veronika Ďurišová, Peter Szolcsányi*



Monoglycoconjugated water-soluble phthalocyanines. Design and synthesis of potential selectively targeting PDT photosensitisers

pp 6615–6618

Yunus Zorlu, Fabienne Dumoulin, Denis Bouchu, Vefa Ahsen*, Dominique Lafont*

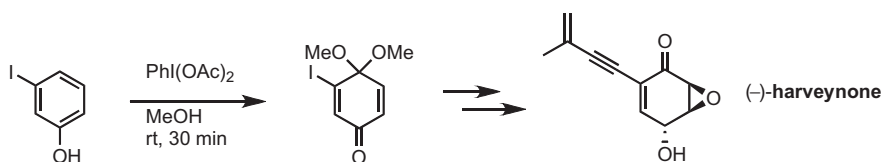


A series of asymmetrically substituted phthalocyanines conjugated to four different carbohydrate units has been designed to be used as photosensitisers for potential selective recognition by targeted cells.

A double oxidation procedure for the preparation of halogen-substituted *para*-benzoquinone monoketals: asymmetric synthesis of (-)-harveynone

pp 6619–6621

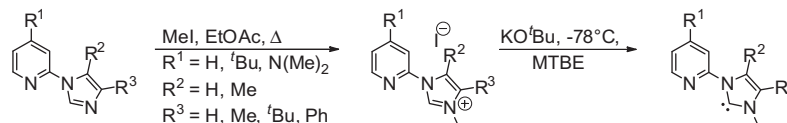
Daniel R. Hookins, Richard J. K. Taylor*



A simple synthesis of functionalized 3-methyl-1-pyridinyl-1H-imidazolium salts as bidentate *N*-heterocyclic-carbene precursors and their application in Ir-catalyzed arene borylation

pp 6622–6625

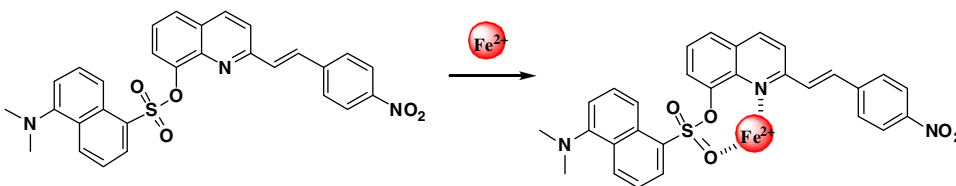
Martin Peters, Rolf Breinbauer*



Dansyl-styrylquinoline conjugate as divalent iron sensor

pp 6626–6629

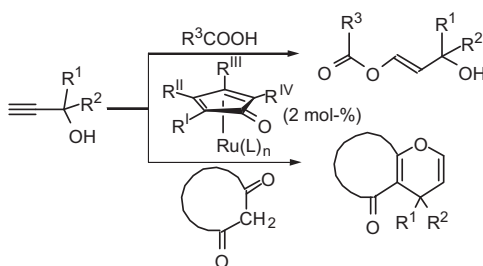
L. Praveen, M. L. P. Reddy*, R. Luxmi Varma*



Ruthenium-catalyzed addition of carboxylic acids or cyclic 1,3-dicarbonyl compounds to propargyl alcohols

pp 6630–6634

Stefanie Berger, Edgar Haak*

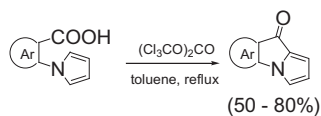


Monomeric ruthenium(0) complexes containing redox-coupled dienone ligands were found to catalyze the regio-selective addition of carboxylic acids or cyclic 1,3-dicarbonyl compounds to propargyl alcohols.

Direct cyclization of *ortho*-(1*H*-pyrrol-1-yl)aryl and heteroaryl carboxylic acids into fused pyrrolizinones

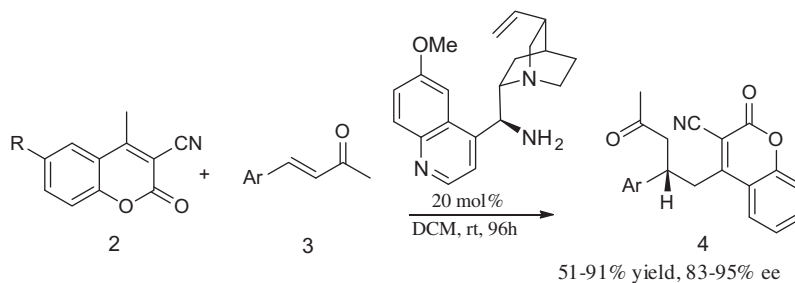
pp 6635–6636

Francesca Aiello*, Antonio Garofalo, Fedora Grande

**Organocatalytic and direct asymmetric vinylogous Michael addition of 3-cyano-4-methylcoumarins to α,β -unsaturated ketones**

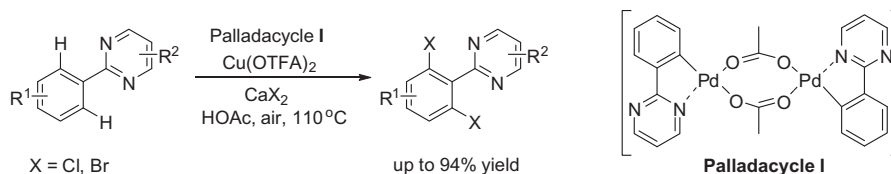
pp 6637–6640

Xiong Huang, Yi-Hang Wen, Fei-Ting Zhou, Ce Chen, Dong-Cheng Xu, Jian-Wu Xie*

**Direct synthesis of *ortho*-dihalogenated arylpyrimidines using calcium halides as halogen sources**

pp 6641–6645

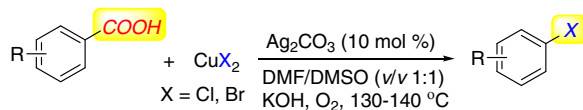
Xiaojian Zheng, Bingrui Song, Guifei Li, Bingxin Liu, Hongmei Deng, Bin Xu*



Silver-catalyzed decarboxylative halogenation of carboxylic acids

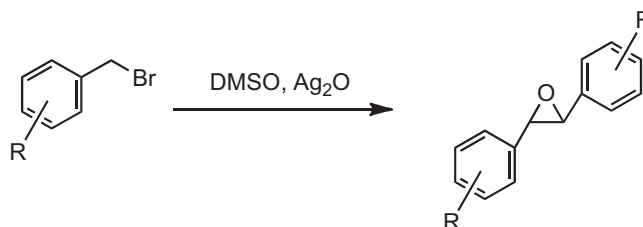
pp 6646–6648

Yong Luo, Xiaolin Pan, Jie Wu*

**Convenient one-pot synthesis of *trans*-1,2-diaryloxiranes from the direct coupling of benzyl halides**

pp 6649–6650

Freeman M. Wong, Yee Man Chan, David X. Chen, Weiming Wu*

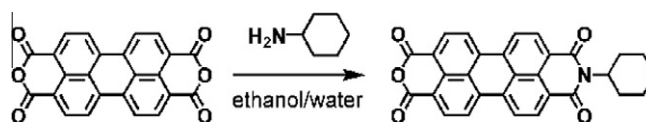


trans-1,2-Diaryloxiranes were conveniently prepared in an one-pot reaction by the direct coupling of benzyl halides in the presence of silver oxide and DMSO under mild conditions.

Direct synthesis of highly pure perylene tetracarboxylic monoimide

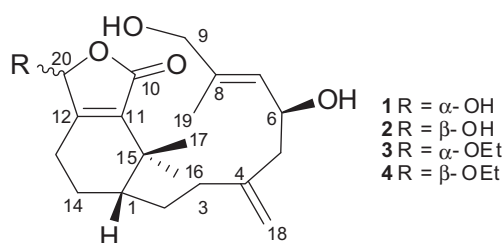
pp 6651–6653

Helin Huang, Yanke Che, Ling Zang*

**Cespitulins A–D, novel diterpenoids from Taiwanese *Cespitularia taeniata***

pp 6654–6657

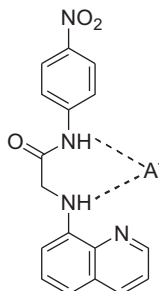
Yu-Chi Lin, Ahmed Eid Fazary, Ya-Ching Shen*



Novel receptors with quinoline and amide moieties for the biologically important ions

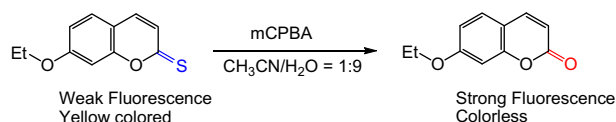
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Jongmin Kang*, Seung Pyo Jang, Young-Hee Kim, Ju Hoon Lee, Eun Bi Park, Hong Gyu Lee, Jin Hoon Kim, Youngmee Kim, Sung-Jin Kim, Cheal Kim*

**Dual signaling of *m*-chloroperbenzoic acid by desulfurization of thiocoumarin**

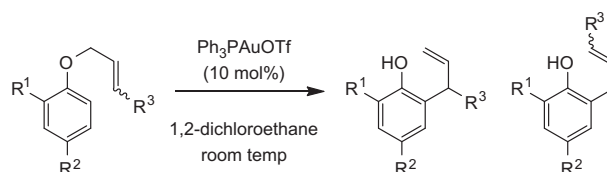
pp 6663–6665

Sunyoung Cha, Jiyoung Hwang, Myung Gil Choi, Suk-Kyu Chang*

**Gold-catalyzed rearrangement of substituted allyl aryl ethers**

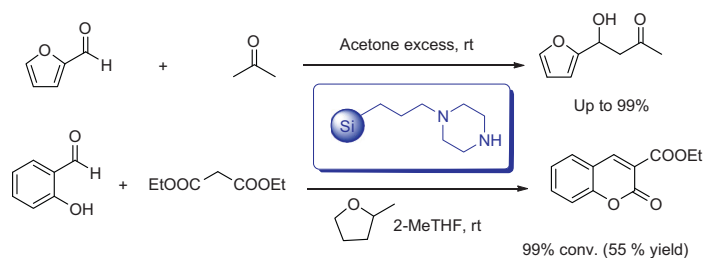
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James R. Vyvyan*, Heidi E. Dimmitt, Jennifer K. Griffith, Laura D. Steffens, Rebecca A. Swanson

Ph₃PAuOTf catalyzes the rearrangement of substituted allyl aryl ethers via an ionic mechanism to produce both branched and linear products.**Silica-immobilized piperazine: A sustainable organocatalyst for aldol and Knoevenagel reactions**

pp 6670–6672

Saravanakumar Shanmuganathan, Lasse Greiner, Pablo Domínguez de María*

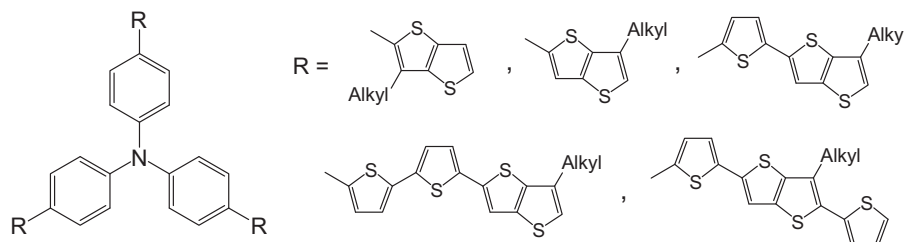


Silica-immobilized piperazine as an efficient organocatalyst for aldol condensations and Knoevenagel-type processes conducted in bio-based 2-methyltetrahydrofuran.

New star-shaped molecules derived from thieno[3,2-*b*]thiophene unit and triphenylamine

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N. Metri, X. Sallenave, L. Beouch, C. Plesse, F. Goubard*, C. Chevrot



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Corrigendum

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Supplementary data available via ScienceDirect

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