

Tetrahedron Letters Vol. 49, No. 51, 2008

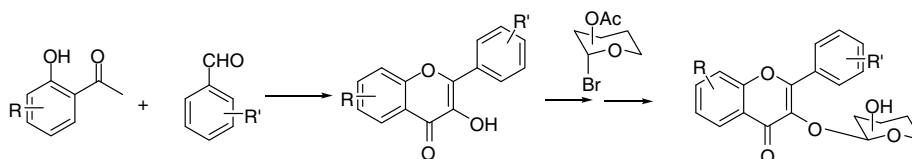
Contents

COMMUNICATIONS

Synthesis of a library of glycosylated flavonols

pp 7243–7245

Zhitao Li ^{*}, George Ngojeh, Paul DeWitt, Zhi Zheng, Min Chen, Brendan Lainhart, Vincent Li, Peter Felpo

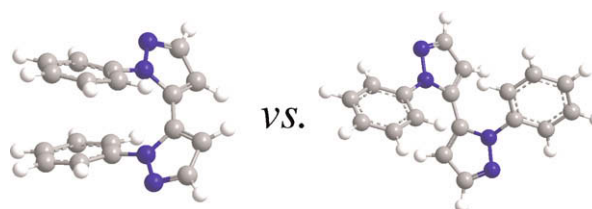


Flavonols are an important class of natural products isolated from plants. Some glycosylated flavonols showed very interesting biological activities. A library of flavonols has been made through Algar–Flynn–Oyamada reaction from 2'-hydroxyacetophenones and benzaldehydes. Glycosylation of these flavonols with various glycosyl donors affords a library of glycosylated flavonols. These compounds are potentially useful pharmacologically active compounds and will be studied for biological activities.

The use of a molecular balance derived from 5,5'-bipyrazole to calculate π - π stacking interactions

pp 7246–7249

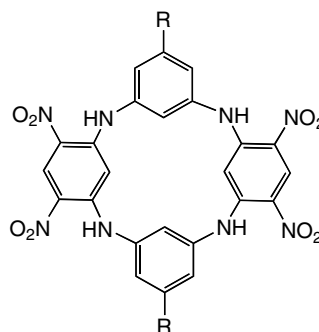
Ibon Alkorta ^{*}, Fernando Blanco, José Elguero



Metal-free synthesis of azacalix[4]arenes

pp 7250–7252

Mounia Touil, Mohammed Lachkar, Olivier Siri ^{*}

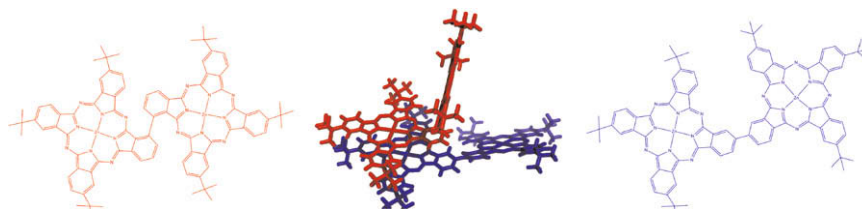


The facile preparation of new N(H)-bridged azacalix[4]arenes has been achieved by stepwise nucleophilic aromatic substitutions assisted by hydrogen bonding interactions.

Synthesis and properties of C–C conjugated phthalocyanine dimers

Hasrat Ali, Pierre Baillargeon, Johan E. van Lier *

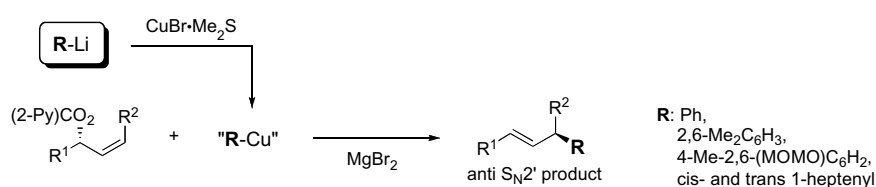
pp 7253–7255



New protocol for allylic substitution with aryl and alkenyl copper reagents derived from organolithiums

Yohei Kiyotsuka, Yuichi Kobayashi *

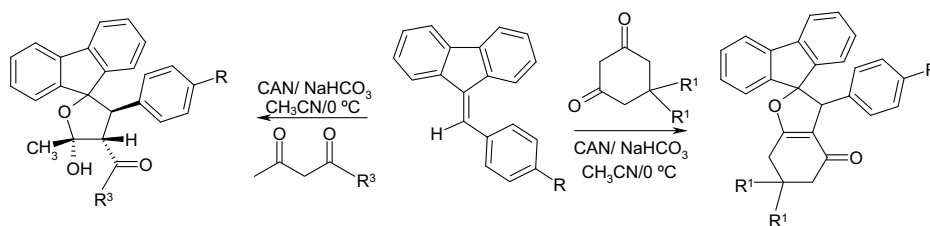
pp 7256–7259



An efficient one-pot synthesis of spiro dihydrofuran fluorene and spiro 2-hydroxytetrahydrofuran fluorene derivatives via [3+2] oxidative cycloaddition mediated by CAN

G. Savitha, R. Sudhakar, P. T. Perumal *

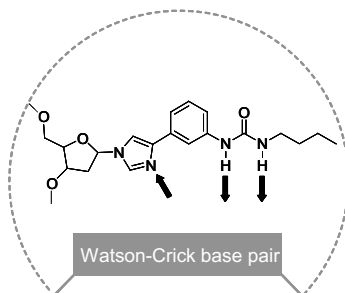
pp 7260–7263



Synthesis and DNA duplex recognition of a triplex-forming oligonucleotide with an ureido-substituted 4-phenylimidazole nucleoside

Falk Wachowius, Michael Rettig, Gottfried Palm, Klaus Weisz *

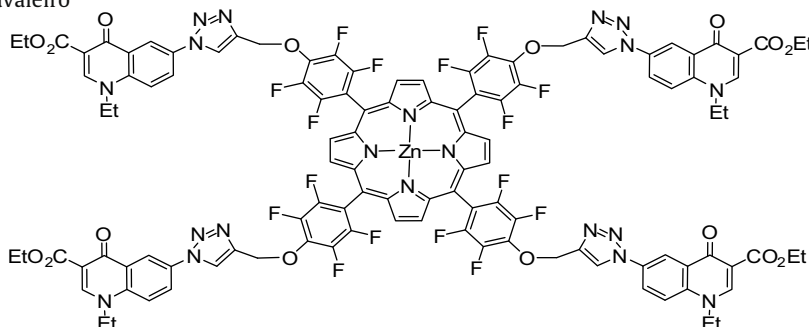
pp 7264–7267



Synthesis of porphyrin–quinolone conjugates

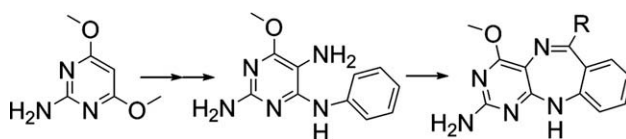
pp 7268–7270

Fernanda da C. Santos, Anna C. Cunha, Maria Cecília B. V. de Souza, Augusto C. Tomé, Maria G. P. M. S. Neves, Vitor F. Ferreira, José A. S. Cavaleiro *

**Bischler–Napieralski cyclocondensation in the synthesis of new 11H-pyrimido[4,5-b][1,4]benzodiazepines**

pp 7271–7273

Justo Cobo *, Manuel Nogueras, John N. Low, Ricaurte Rodríguez

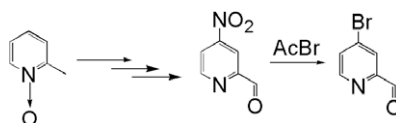


A synthetic strategy based on nitrosation–aminolysis–nitroso reduction and Bischler–Napieralski cyclocondensation has been developed for the synthesis of a family of 2-amino-4-methoxy-11H-pyrimido[4,5-b][1,4]benzodiazepines.

**A convenient synthetic route to a useful synthon: 4-bromo-2-pyridinecarboxaldehyde**

pp 7274–7275

Nicolas Zaman, Régis Guillot, Katell Sénéchal-David *, Marie-Laure Boillot

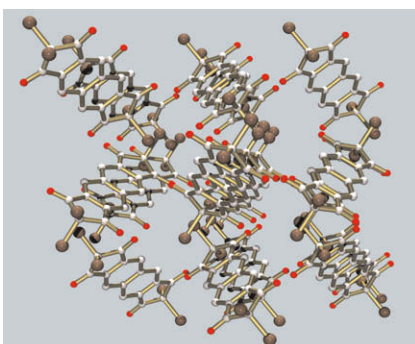


We have developed a novel four-step method to synthesise the versatile synthon, 4-bromo-2-pyridinecarboxaldehyde, from 2-picoline-N-oxide via 4-nitro-2-pyridinecarboxaldehyde, under mild reaction conditions.

**A general approach toward Janus diones: synthesis of dicyclopenta[b,g]naphthalene-1,3,6,8(2H,7H)-tetraone**

pp 7276–7278

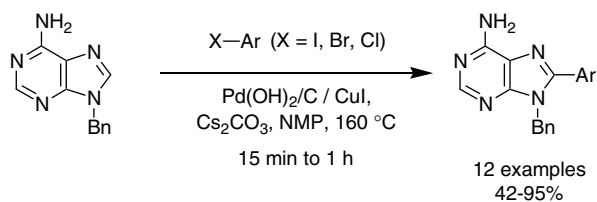
Claude Niebel, Vladimir Lokshin, Vladimir Khodorkovsky *



Microwave-assisted Pd(OH)₂-catalyzed direct C–H arylation of free-(NH₂) adenines with aryl halides

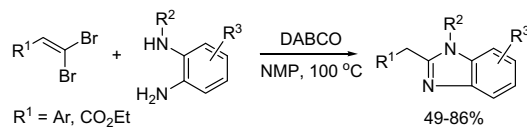
pp 7279–7283

Sophian Sahnoun, Samir Messaoudi, Jean-François Peyrat, Jean-Daniel Brion, Mouad Alami *

**Synthesis of benzimidazoles from 1,1-dibromoethenes**

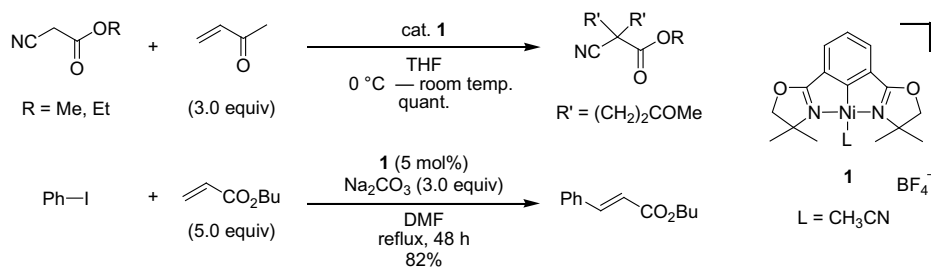
pp 7284–7286

Wang Shen *, Todd Kohn, Zice Fu, XianYun Jiao, Sujen Lai, Michael Schmitt

**Preparation of a cationic bisoxazolinic nickel pincer catalyst and its applications to Michael addition and Mizoroki–Heck reaction**

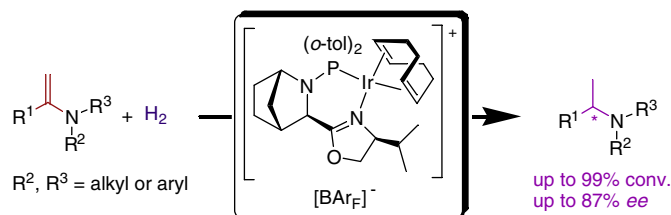
pp 7287–7289

Koichi Mitsudo *, Tatsuhiko Imura, Takashi Yamaguchi, Hideo Tanaka *

**Access to chiral tertiary amines via the iridium-catalyzed asymmetric hydrogenation of enamines**

pp 7290–7293

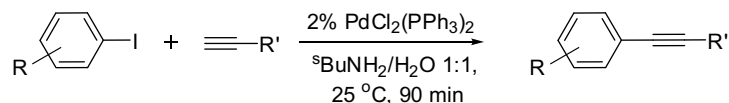
Pradeep Cheruku, Tamara L. Church, Anna Trifonova, Thomas Wartmann, Pher G. Andersson *



Copper-free Sonogashira coupling in amine–water solvent mixtures

pp 7294–7298

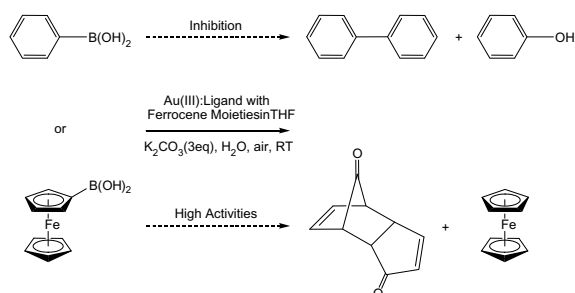
Anna Komáromi, Gergely László Tolnai, Zoltán Novák *

**Effect of stabilizing ligands bearing ferrocene moieties on the gold nanoparticle-catalyzed reactions of arylboronic acids**

pp 7299–7302

Laksamee Chaicharoenwimolkul, Ampaporn Munmai, Sanoe Chairam, Udomchai Tewasekson, Sarawut Sapudom, Yuthana Lakliang, Ekasith Somsook *

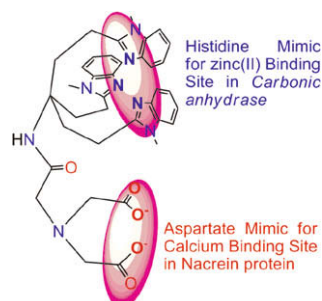
The homocoupling reaction of phenylboronic acid and demetalation reaction of ferrocenylboronic acid was inhibited and highly active, respectively, in the presence of gold nanoparticles stabilized by ligands containing ferrocene moieties.

**A promising structural zinc enzyme model for CO₂ fixation and calcification**

pp 7303–7306

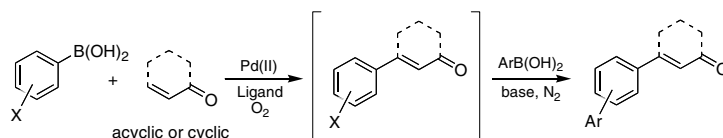
Mohamed M. Ibrahim *, Shaban Y. Shaban, Kazuhiko Ichikawa *

A new ligand: *N*-{tris([2-[(1-methylbenzimidazol-2-yl)ethyl]methyl]amino)-2-oxoethyl} iminodiacetic acid has been synthesized and characterized, and was used to prepare a zinc complex as a promising model for the active site of the nacreous protein in mollusc shells. The CO₂ fixation and calcification have been studied in light of the influence of the p*K*_a value of the coordinated water molecule and the carboxylate groups.

**Chemoselective three-component coupling via a tandem Pd-catalyzed boron-Heck and Suzuki reactions**

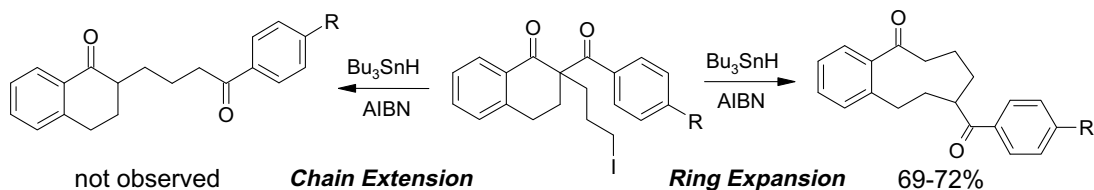
pp 7307–7310

Justin O'Neill, Kyung Soo Yoo, Kyung Woon Jung *



Free radical ring expansion and spirocyclization of 1,3-diketone derivatives

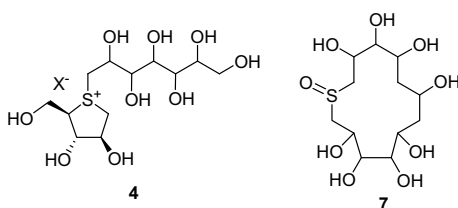
pp 7311–7314

Wei Xu, Jian-Ping Zou ^{*}, Xue-Jun Mu, Wei Zhang ^{*}

Free radical-promoted three-carbon ring expansions of 1,3-diketones to form corresponding nine-membered 1,6-diketones and associated spirocyclization reactions are described.

**On the structure of the bioactive constituent from ayurvedic medicine *Salacia reticulata*: revision of the literature**

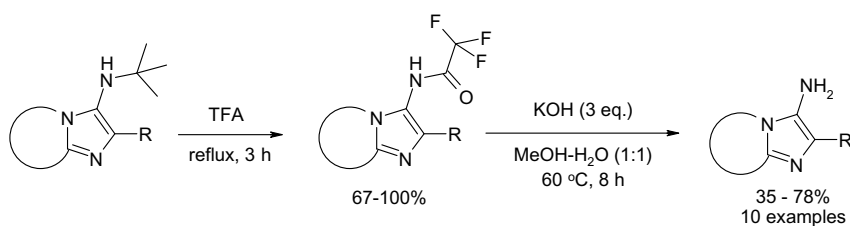
pp 7315–7317

Osamu Muraoka ^{*}, Weijia Xie, Genzoh Tanabe, Mumen F. A. Amer, Toshie Minematsu, Masayuki Yoshikawa

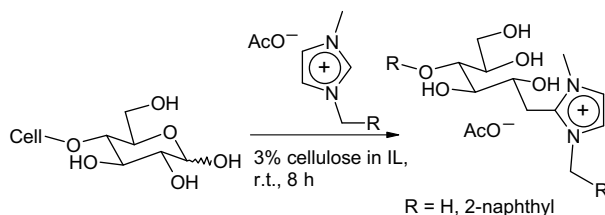
The structure of the highly potent α -glucosidase inhibitor **7** isolated recently from ayurvedic medicine *Salacia reticulata* was found incorrect, and the compound has been proved to be de-O-sulfated kotalanol **4** on the basis of the detailed analysis of the spectral data.

***tert*-Butyl isocyanide revisited as a convertible reagent in the Groebke–Blackburn reaction**

pp 7318–7321

Mikhail Krasavin ^{*}, Sergey Tsurulnikov, Mikhail Nikulnikov, Yuri Sandulenko, Konstantin Bukhryakov**Side reaction of cellulose with common 1-alkyl-3-methylimidazolium-based ionic liquids**

pp 7322–7324

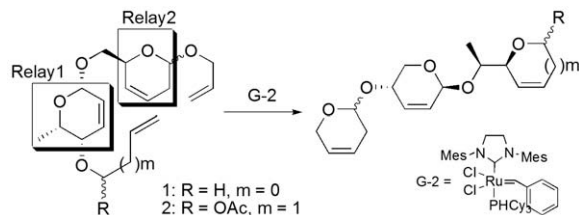
Gerald Ebner, Sonja Schiehser, Antje Potthast, Thomas Rosenau ^{*}

Ionic liquids with 1-alkyl-3-methyl-imidazolium cations react at C-2 with the reducing ends of cellulose forming a carbon–carbon bond, and are thus no inert cellulose solvents. The reaction is catalyzed by bases, such as commonly present impurities in ILs.

Extended RCM–ROM sequences: a novel approach to polyunsaturated trisaccharides

pp 7325–7327

Morgan Donnard, Théophile Tschamber, Jacques Eustache *

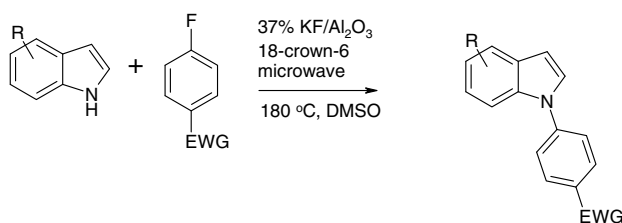


The first examples of controlled RCM–ROM–RCM–ROM–RCM sequences involving non-strained heterocyclic relays are described.

**Investigation of the N-arylation of various substituted indoles using microwave-assisted technology**

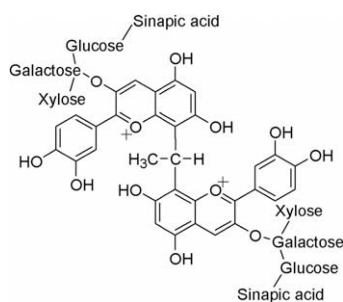
pp 7328–7329

Gregory L. Frayne, Gary M. Green *

**Structure of an anthocyanin–anthocyanin dimer molecule in anthocyanin-producing cells of a carrot suspension culture**

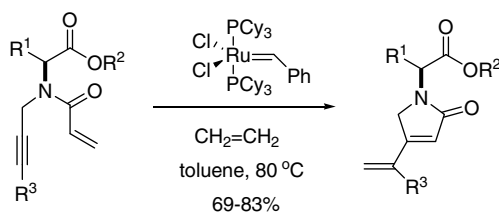
pp 7330–7333

Yutaka Abe, Atsushi Sawada, Tadayuki Momose, Nobuhiro Sasaki, Nobuo Kawahara, Hiroyuki Kamakura, Yukihiro Goda, Yoshihiro Ozeki *

**Efficient synthesis of 4-vinyl α,β -unsaturated γ -lactams by ring-closing enyne metathesis reactions**

pp 7334–7336

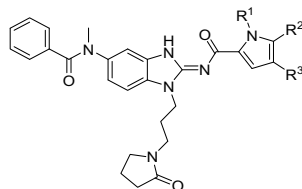
Qian Yang, Yuan-Yuan Lai, Wen-Jing Xiao *, Howard Alper *



2-Aminobenzimidazoles as potent ITK antagonists: de novo design of a pyrrole system targeting additional hydrogen bonding interaction pp 7337–7340


Ho Yin Lo ^{*}, Jörg Bentzien, Andre White, Chuk C. Man, Roman W. Fleck, Steven S. Pullen, Hnin Hnin Khine, Josephine King, Joseph R. Woska Jr., John P. Wolak, Mohammed A. Kashem, Gregory P. Roth, Hidenori Takahashi

De novo design of a series of 2-aminobenzimidazole-pyrrole type compounds as ITK inhibitors.



R¹= H or CH₃
R²= H, acetyl
R³= nitro, bromo, acetyl, benzoyl

*Corresponding author

 Supplementary data available via ScienceDirect

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ISSN 0040-4039