

Tetrahedron Vol. 62, No. 43, 2006

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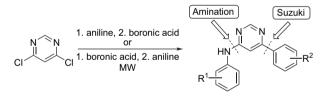
REPORT

Synthetic routes to porphyrins bearing fused rings Simon Fox and Ross W. Boyle*

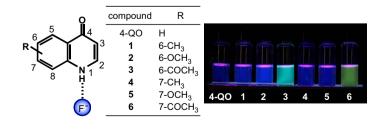
Synthetic routes to porphyrins, and related chlorins and bacteriochlorins, with fused rings are reviewed.

ARTICLES

Efficient microwave-assisted synthesis of highly functionalized pyrimidine derivatives Christian G. Hartung, Alexander C. Backes,* Beatrice Felber, Andrea Missio and Alexander Philipp pp 10055-10064



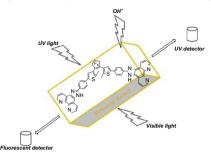
Evaluation of a simple and novel fluorescent anion sensor, 4-quinolone, and modification of the emission color by substitutions based on molecular orbital calculations Junzo Hirano, Kenji Hamase and Kiyoshi Zaitsu^{*}



pp 10039-10054

Multi-state molecular switches based on dithienylperfluorocyclopentene and imidazo [4,5-*f*] [1,10] pp 10072–10078 phenanthroline

Shuzhang Xiao, Tao Yi,* Yifeng Zhou, Qiang Zhao, Fuyou Li and Chunhui Huang*



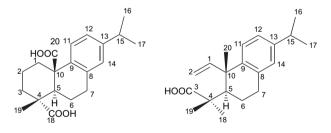
Synthesis of β -amino carbonyl compounds via a Zn(OTf)₂-catalyzed cascade reaction of anilines pp 10079–10086 with aromatic aldehydes and carbonyl compounds

Yun-Yun Yang, Wang-Ge Shou and Yan-Guang Wang*

Ar₁CHO + Ar₂NH₂ +
$$R_1$$
 R_2 $Zn(OTf)_2$ (1 mol %)
DCM, rt, 4 h Ar_2 NH R_1 Ar_1 R_2 R_2

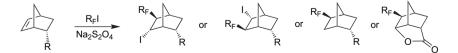
Two new abietane diterpenes from *Cordia latifolia*

Bina S. Siddiqui,* Sobiya Perwaiz and Sabira Begum



Sodium dithionite initiated regio- and stereoselective radical addition of polyfluoroalkyl iodide pp 10091–10099 with norbornene analogs

Fanhong Wu,* Fanhua Xiao, Xianjin Yang, Yongjia Shen and Tieying Pan



Sodium dithionite initiated free-radical addition of norbornene and its derivatives with polyfluoroalkyl iodides was investigated. In all the cases the addition of R_F was stereoselective at *exo*-position and the predominant configuration of products was trans. Norbornene with a high steric hindered group in the 2-*endo*-position gave 6-*exo*- R_F -5-*endo*-iodo adduct and deiodined product. Fluoroalkylation–lactonization occurred in the addition of norbornene-2-*endo*-carboxylic acid with R_F I to afford fluorinated γ -lactone products.

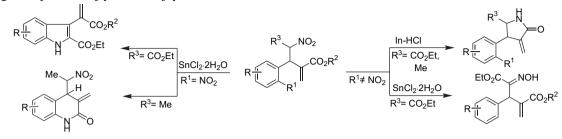
pp 10087-10090

10033

pp 10100-10110

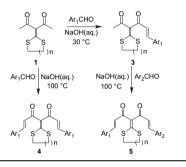
Studies on the reduction of the nitro group in 3-aryl-2-methylene-4-nitro-alkanoates afforded by the Baylis–Hillman adducts: synthesis of 4-aryl-3-methylene-2-pyrrolidinones and 3-(1-alkoxycarbonyl-vinyl)-1*H*-indole-2-carboxylates

Vijay Singh, Sanjeev Kanojiya and Sanjay Batra*



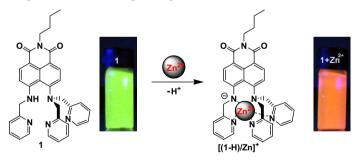
Facile and clean synthesis of α -alkenoyl ketene-(*S*,*S*)-acetals via the aldol condensation reactions pp 10111–10116 in water

Yan Ouyang, Dewen Dong,* Wei Pan, Jie Zhang and Qun Liu*

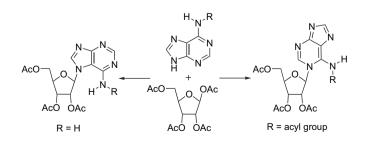


Exploiting the deprotonation mechanism for the design of ratiometric and colorimetric Zn^{2+} pp 10117–10122 fluorescent chemosensor with a large red-shift in emission Zhanghao Xu, Xuhang Qian * Lingman Qui* and Bang Zhang

Zhaochao Xu, Xuhong Qian,* Jingnan Cui* and Rong Zhang

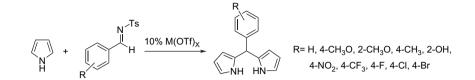


A reinvestigated mechanism of ribosylation of adenine under silylating conditions Grzegorz Framski, Zofia Gdaniec, Maria Gdaniec and Jerzy Boryski* pp 10123-10129



A novel method for the synthesis of dipyrromethanes by metal triflate catalysis Baris Temelli and Canan Unaleroglu*

pp 10130-10135



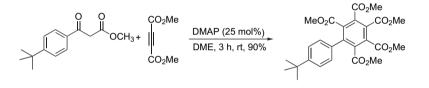
5-Substituted dipyrromethanes were synthesized by the reaction of *N*-tosyl imines with excess pyrrole in the presence of metal triflates. High yields of 5-substituted dipyrromethanes were obtained for electron donating and withdrawing substituents by performing the reaction at two different temperatures. The new reaction procedure is simple and anhydrous conditions are not required.

DMAP catalyzed reaction of β -ketoesters and dimethyl acetylenedicarboxylate: efficient synthesis of polysubstituted benzenes and biaryls

pp 10136-10140

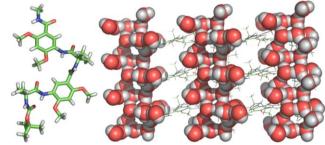
pp 10147-10151

Vijay Nair,* N. Vidya, A. T. Biju, Ani Deepthi, K. G. Abhilash and Eringathodi Suresh



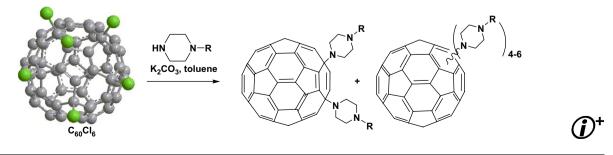
A hybrid foldamer with unique architecture from conformationally constrained aliphatic-aromatic pp 10141-10146 amino acid conjugate

Deekonda Srinivas, Rajesh Gonnade, Sapna Ravindranathan and Gangadhar J. Sanjayan*

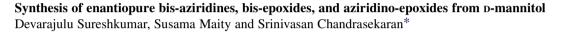


The foldamer (left) and polymeric chain of water clusters stabilized by it (right), as seen in the crystal structure.

Reactions of chlorofullerene C₆₀Cl₆ with *N*-substituted piperazines Olesya A. Troshina, Pavel A. Troshin,* Alexander S. Peregudov, Elena M. Balabaeva, Vyacheslav I. Kozlovski and Rimma N. Lyubovskaya



Synthesis and utility of new amine/nucleobase addition products of allenylphosphonates K. C. Kumara Swamy,* E. Balaraman and N. Satish Kumar



A practical synthesis of enantiopure bis-aziridines **11** and **15**, bisepoxides **12** and **17**, and aziridino-epoxides **27** and **30** is reported using inexpensive D-mannitol as the starting material.

CF

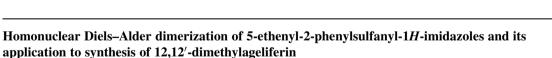
CO₂Et

Stereochemically pure α-trifluoromethyl-malic hydroxamates: synthesis and evaluation as inhibitors of matrix metalloproteinases

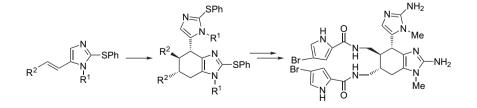
HC

TiCl₄/DIPEA

Margherita Moreno, Monica Sani, Guido Raos,* Stefano V. Meille, Dorina Belotti, Raffaella Giavazzi, Stefano Bellosta, Alessandro Volonterio and Matteo Zanda*



Ikuo Kawasaki, Norihiro Sakaguchi, Abdul Khadeer, Masayuki Yamashita and Shunsaku Ohta*



IC₅₀ = 23 µM for MMP-2

 $[R = (CH_2)_3 NHCO_2 tBu]$

10035

pp 10152-10161

pp 10162-10170

pp 10171-10181

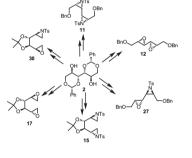
pp 10182-10192

NHCH₃

ö

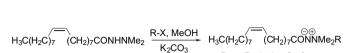
(ĊH₂)₃Ph

IC₅₀ = 15 μ M for MMP-9



Synthesis of aminimides derived from oleic acid: a new family of drag-reducing surfactants Gabriel Oba, Bridgett E. Coleman, David J. Hart,* Jacques Zakin, Ying Zhang, Yasuo Kawaguchi and Yeshayahu Talmon

pp 10193-10201

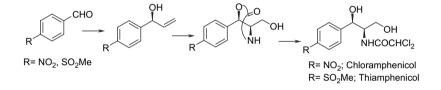


Drag-Reducing Surfactant

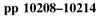


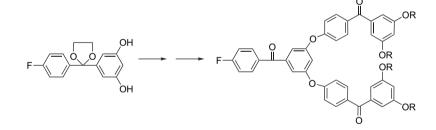
A short enantioselective synthesis of (–)-chloramphenicol and (+)-thiamphenicol using tethered pp 10202–10207 aminohydroxylation

Shyla George, Srinivasarao V. Narina and Arumugam Sudalai*



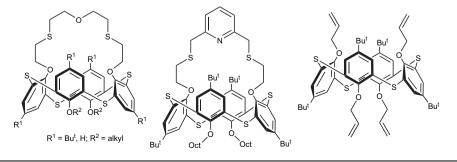
A convergent route to poly(phenyl ketone ether) dendrons A. R. Lister and S. C. Moratti^{*}





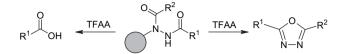
Functionalized thiacalix- and calix[4]arene-based Ag⁺ ionophores: synthesis and comparative pp 10215–10222 NMR study

Viktor Csokai, Alajos Grün, Barbara Balázs, András Simon, Gábor Tóth and István Bitter*



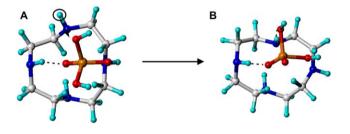
1,3,4-Oxadiazole formation as traceless release in solid phase organic synthesis Sara Cesarini, Nicoletta Colombo, Maurizio Pulici, Eduard R. Felder and Wolfgang K.-D. Brill*

pp 10223-10236

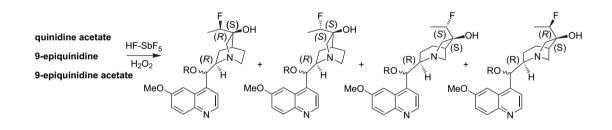


Structure, intramolecular flexibility, and complexation of aza crown ethers to anions H₂PO₄ pp 10237-10247 and HSO₄⁻ in nonprotic solvents

Erich Kleinpeter* and Anja Holzberger



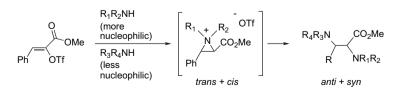
Synthesis of fluorhydrins by reaction of quinidine acetate, epiquinidine, and its acetate in superacid pp 10248–10254 Vincent Chagnault, Marie-Paule Jouannetaud,* Jean-Claude Jacquesy and Jérome Marrot



Reaction of vinyl triflates of α -keto esters and imides with secondary amines: synthesis of α , β -diamino carboxylic acid derivatives through aziridinium ions

pp 10255-10270

Marie-José Tranchant and Vincent Dalla*



*Corresponding author (**)**⁺ Supplementary data available via ScienceDirect



Full text of this journal is available, on-line from ScienceDirect. Visit www.sciencedirect.com for more information.

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