



Tetrahedron Vol. 66, Issue 51, 2010

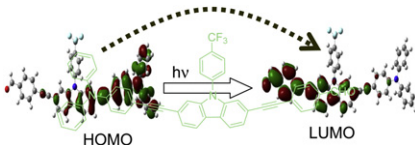
Contents

ARTICLES

Synthesis and computational studies of diphenylamine donor-carbazole linker-based donor–acceptor compounds

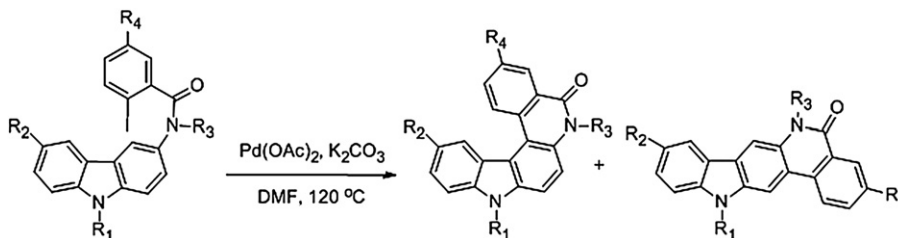
pp 9641–9649

Krishna Panthi, Patrick Z. El-Khoury, Alexander N. Tarnovsky, Thomas H. Kinstle*

Change in electron density associated with the lowest $S_0 \rightarrow S_1$ transitions on D–A type complexes visualized by TD DFT calculations.**Palladium-mediated intramolecular O-arylation: a simple route for the synthesis of quino[2,3-*c*] and quino[3,2-*b*] carbazoles**

pp 9650–9654

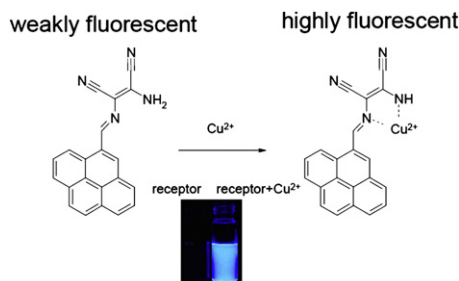
Devanga K. Sreenivas, Rajagopal Nagarajan*



A highly selective turn-on fluorescent chemosensor for copper(II) ion

pp 9655–9658

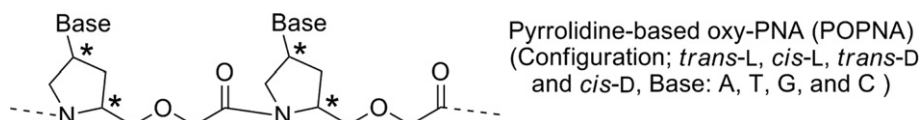
Shu-Pao Wu*, Tzu-Hao Wang, Shi-Rong Liu



Synthesis of pyrrolidine-based oxy-peptide nucleic acids carrying four types of nucleobases and their transport into cytoplasm

pp 9659–9666

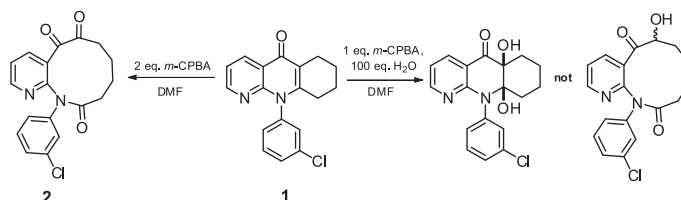
Mizuki Kitamatsu*, Akiko Takahashi, Takashi Ohtsuki, Masahiko Sisido



The chemical reactivity of a known anti-psoriasis drug. Part 1: Further insights into the products resulting from oxidative cleavage

pp 9667–9674

Alan M. Jones, Magali M. Lorion, Tomas Lebl, Alexandra M.Z. Slawin, Douglas Philp, Nicholas J. Westwood*



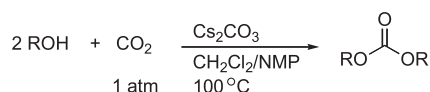
The oxidative cleavage of the known anti-psoriasis drug **1** to give **2** has been reported previously. Due to the importance of accessing medium-sized ring containing systems via oxidative cleavage, this reaction has been revisited revealing additional information about the structure of **2**. Alternative reaction products were identified when the reaction was carried out in the presence of water. The conversion of **1** to **2** has also been carried out using ruthenium tetroxide. A detailed variable temperature NMR and computational study of the restricted rotation of the *N*-aryl ring in **2** is presented.



Synthesis of carbonates directly from 1 atm CO₂ and alcohols using CH₂Cl₂

pp 9675–9680

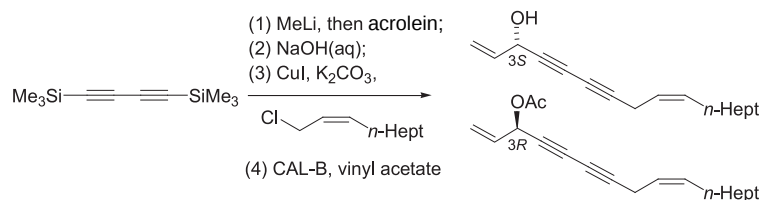
Yusuke Yamazaki, Kasumi Kakuma, Ya Du, Susumu Saito*



A short synthesis of (+) and (–)-falcarinol

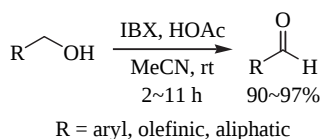
pp 9681–9687

Noel P. McLaughlin, Eibhlín Butler, Paul Evans*, Nigel P. Brunton*, Anastasios Koidis, Dilip K. Rai

**A simple method for the oxidation of primary alcohols with *o*-iodoxybenzoic acid (IBX) in the presence of acetic acid**

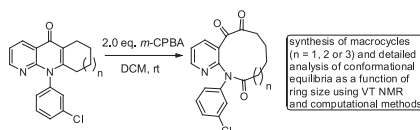
pp 9688–9693

Cheng-Kun Lin, Ta-Jung Lu*

**Synthesis and characterisation of medium-sized ring systems by oxidative cleavage. Part 2: Insights from the study of ring expanded analogues**

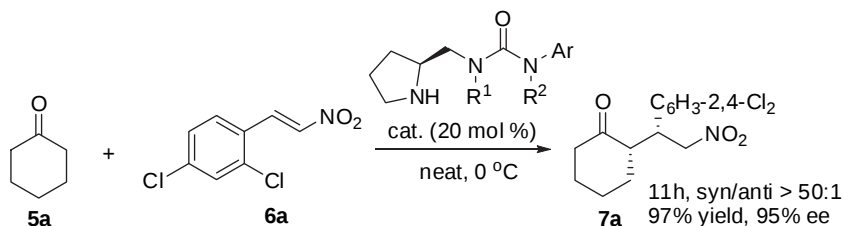
pp 9694–9702

Tomas Lebl*, Magali M. Lorion, Alan M. Jones, Douglas Philp, Nicholas J. Westwood

**Pyrrolidine-ureas as bifunctional organocatalysts for asymmetric Michael addition of ketone to nitroalkenes: unexpected hydrogen bonding effect**

pp 9703–9707

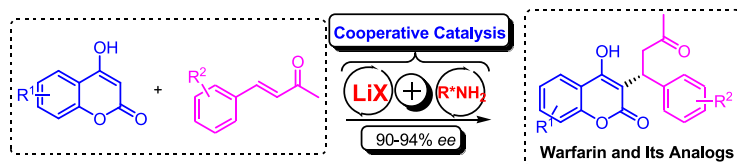
Xiao-Yu Cao, Jun-Cheng Zheng, Yu-Xue Li*, Zhen-Cao Shu, Xiu-Li Sun, Bi-Qin Wang*, Yong Tang*



Highly enantioselective synthesis of warfarin and its analogs by means of cooperative LiClO₄/DPEN-catalyzed Michael reaction: enantioselectivity enhancement and mechanism

pp 9708–9713

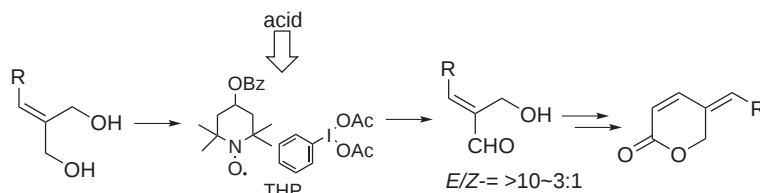
Hua-Meng Yang, Li Li, Ke-Zhi Jiang, Jian-Xiong Jiang, Guo-Qiao Lai*, Li-Wen Xu*



Regioselective TEMPO oxidation of 2-alkylidene-1,3-propanediols to (E)-2-hydroxymethyl-2-alkenals and application to 4-alkylidene-2-penten-5-olide synthesis

pp 9714–9720

Wei Peng, Kazumi Ashida, Toshiaki Hirabaru, Li-Jian Ma, Tsutomu Inokuchi*



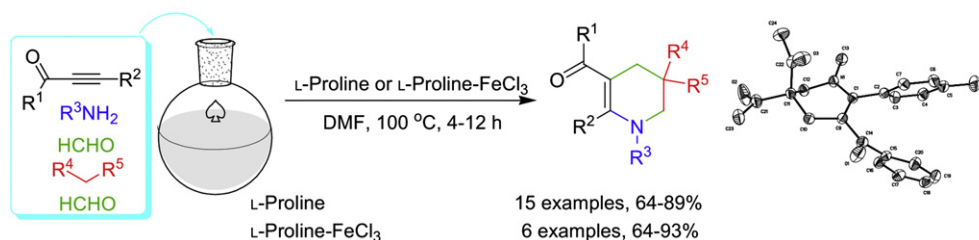
Oxidation of 2-alkylidene-1,3-propanediols with a 4-BzOTEMPO–DAIB system afforded (E)-2-hydroxymethyl-2-alkenals, useful for synthesis of 4-alkylidene-2-penten-5-olides.



L-Proline-catalyzed five-component domino reaction leading to multifunctionalized 1,2,3,4-tetrahydropyridines

pp 9721–9728

Huan-Feng Jiang*, Jing-Hao Li, Zheng-Wang Chen



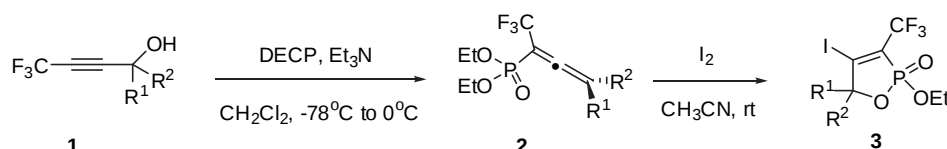
Multifunctionalized 1,2,3,4-tetrahydropyridines are concisely synthesized in good yields via L-proline-catalyzed or L-proline/FeCl₃-cocatalyzed one-pot multicomponent reactions (MCRs). The MCRs involve a domino hydroamination/prins reaction/Mannich-type reaction/intramolecular dehydration–cyclization process.



Iodocyclization of trifluoromethylallenic phosphonates: an efficient approach to trifluoromethylated oxaphospholenes

pp 9729–9732

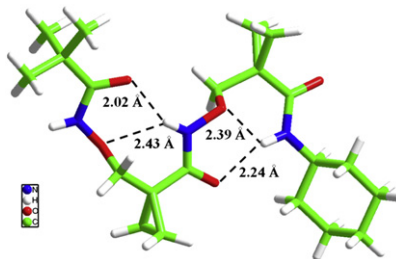
Peng Li, Zhen-Jiang Liu, Jin-Tao Liu*



1-Aminoxymethylcyclopropanecarboxylic acid as building block of β N–O turn and helix: synthesis and conformational analysis in solution and in the solid state

pp 9733–9737

Xiao-Wei Chang, Qing-Chuan Han, Zhi-Gang Jiao, Lin-Hong Weng, Dan-Wei Zhang*



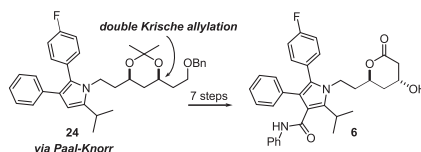
Cyclopropane side-chained $\beta^{2,2}$ -aminoxy oligopeptides possess β N–O turn in solution and β N–O helix in the solid state. This was characterized by NMR and IR as well as X-ray crystallography studies.



A novel strategy towards the atorvastatin lactone

pp 9738–9744

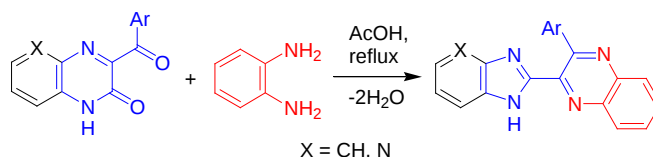
Pramod Sawant, Martin E. Maier*



A reaction for the synthesis of benzimidazoles and 1H-imidazo[4,5-b]pyridines via a novel rearrangement of quinoxalinones and their aza-analogues when exposed to 1,2-arylenediamines

pp 9745–9753

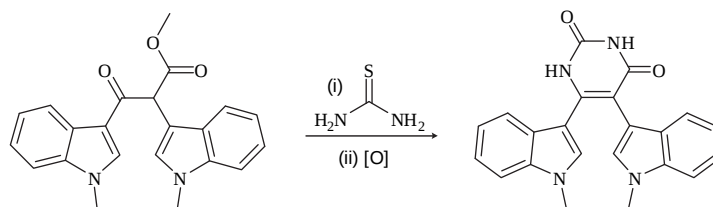
Vakhid A. Mamedov*, Nataliya A. Zhukova, Tat'yana N. Beschastnova, Aidar T. Gubaidullin, Alsu A. Balandina, Shamil K. Latypov



Design and synthesis of novel 5,6-bisindolylpyrimidin-4-ones structurally related to ruboxistaurin (LY333531)

pp 9754–9761

Larry T. Pierce, Michael M. Cahill, Florence O. McCarthy*



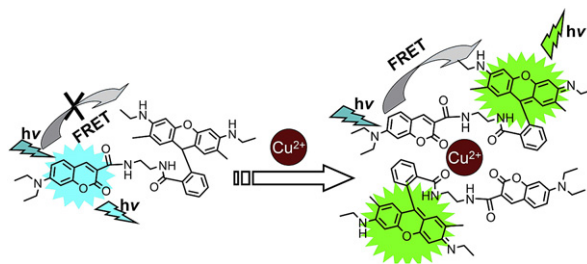
A route to a novel ruboxistaurin derivatives is described via cyclocondensation of a bisindolyl precursor and conversion to a panel of diverse pyrimidin-4-ones.



Ratiometric fluorescence chemosensors for copper(II) and mercury(II) based on FRET systems

pp 9762–9768

Guangjie He, Xiaolin Zhang*, Cheng He, Xiuwen Zhao, Chunying Duan*



*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.

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®



ELSEVIER

ISSN 0040-4020