

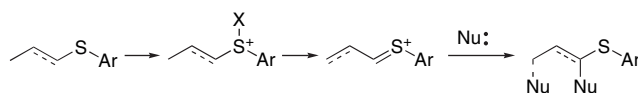
Contents

REPORT

Modern Pummerer-type reactions

Ken S. Feldman

pp 5003–5034

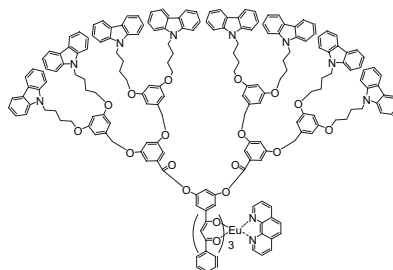


ARTICLES

Antenna-functionalized dendritic β -diketonates and europium complexes: synthetic approaches to generation growth

Shangfeng Li, Weihong Zhu,* Zhongyu Xu, Jianfeng Pan and He Tian*

pp 5035–5048

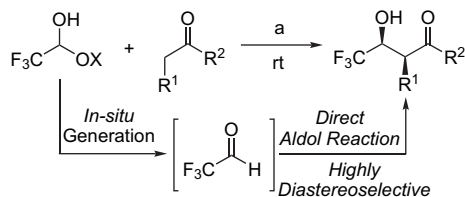


Antenna-functionalized europium dendrimers

Direct aldol reaction of trifluoroacetaldehyde ethyl hemiacetal with ketones by use of the combination of amines and acids

Kazumasa Funabiki,* Hideyuki Nagaya, Mika Ishihara and Masaki Matsui

pp 5049–5053

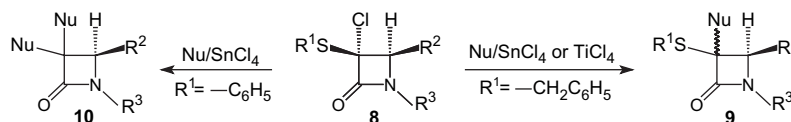


(a) 30-50 mol% amine / 30-50 mol% organic acid
or 30-50 mol% amine / solid acid

C-3 β -lactam carbocation equivalents: versatile synthons for C-3 substituted β -lactams

pp 5054–5063

Aman Bhalla, Sachin Madan, Paloth Venugopalan and Shamsheer S. Bari*

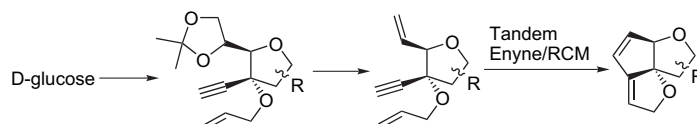


An efficient and operationally simple strategy for the synthesis of differently C-3 monosubstituted (**9**) and disubstituted (**10**) monocyclic β -lactams is described. This involves reaction of β -lactam carbocation equivalents (**8**) with an active aromatic, aliphatic and heterocyclic substrates in the presence of a Lewis acid.

A tandem enyne/ring closing metathesis approach to the synthesis of novel angularly fused dioxo-triquinanes

pp 5064–5073

Krishna P. Kaliappan,* Rahul S. Nandurdikar and Mobin M. Shaikh

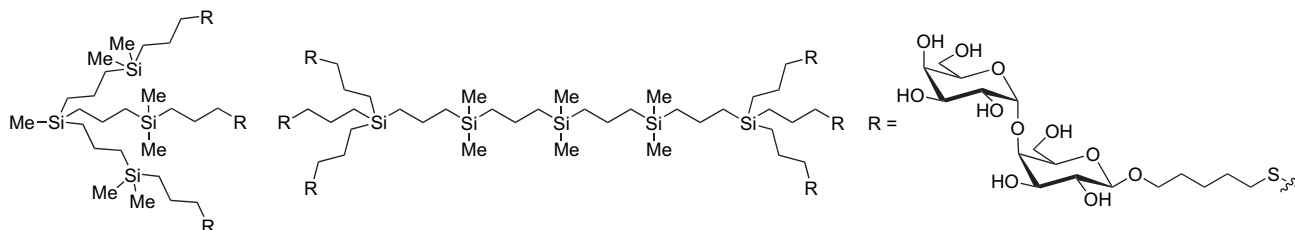


A novel class of angularly fused dioxo-triquinanes is synthesized by a tandem enyne/RCM of a diene-yne derived from a sugar template. The effect of ethylene atmosphere and different protecting groups on the tandem enyne/RCM reaction is demonstrated here.

Syntheses and Vero toxin-binding activities of carbosilane dendrimers periphery-functionalized with galabiose

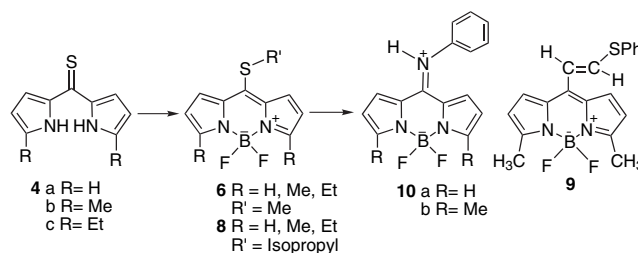
pp 5074–5083

Akihiro Yamada, Ken Hatano, Koji Matsuoka, Tetsuo Koyama, Yasuaki Esumi, Hiroyuki Koshino, Kumiko Hino, Kiyotaka Nishikawa, Yasuhiro Natori and Daiyo Terunuma*

**Synthesis of 8-heteroatom-substituted 4,4-difluoro-4-bora-3a,4a-diaza-s-indacene dyes (BODIPY)**

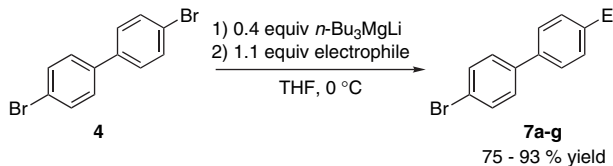
pp 5084–5091

Thirumani Venkateshwar Goud, Ahmet Tutar and Jean-François Biellmann*

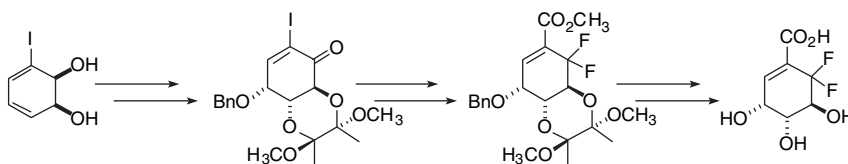


Selective metal-halogen exchange of 4,4'-dibromobiphenyl mediated by lithium tributylmagnesiolate pp 5092–5098

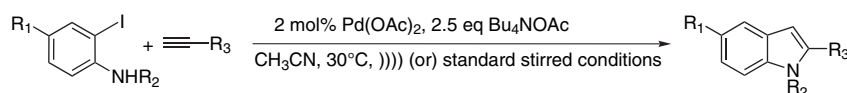
Sarah J. Dolman,* Francis Gosselin, Paul D. O'Shea and Ian W. Davies

**Arene *cis*-dihydrodiols—useful precursors for the preparation of antimetabolites of the shikimic acid pathway: application to the synthesis of 6,6-difluoroshikimic acid and (6*S*)-6-fluoroshikimic acid** pp 5099–5108

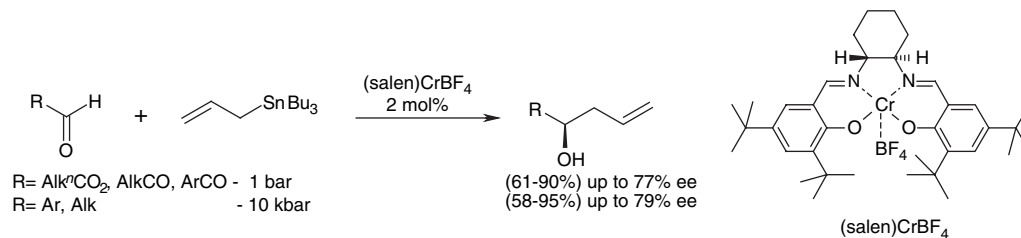
Jane L. Humphreys, David J. Lowes, Karen A. Wesson and Roger C. Whitehead*

**Ligand-, copper-, and amine-free one-pot synthesis of 2-substituted indoles via Sonogashira coupling** pp 5109–5115
5-*endo-dig* cyclization

Sanjay S. Palimkar, P. Harish Kumar, Rajgopal J. Lahoti and Kumar V. Srinivasan*

**Catalytic asymmetric allylation of aldehydes using the chiral (salen)chromium(III) complexes** pp 5116–5125

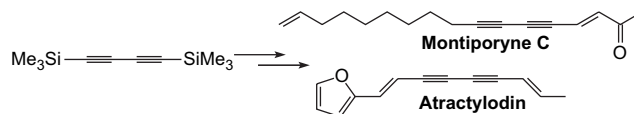
Piotr Kwiatkowski, Wojciech Chaładaj and Janusz Jurczak*



Synthesis of naturally occurring polyacetylenes via a bis-silylated diyne

pp 5126–5132

Vito Fiandanese,* Daniela Bottalico, Giuseppe Marchese and Angela Punzi

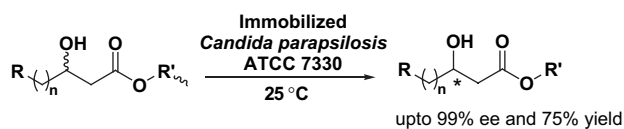


A series of naturally occurring acetylenes has been synthesized starting from the readily available 1,4-bis(trimethylsilyl)-1,3-butadiyne.

Deracemisation of β -hydroxy esters using immobilised whole cells of *Candida parapsilosis* ATCC 7330: substrate specificity and mechanistic investigation

pp 5133–5140

Santosh Kumar Padhi, D. Titu, N. Ganesh Pandian and Anju Chadha*

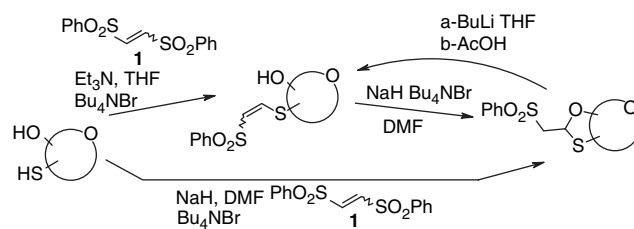


R=C₆H₅, *p*-MeC₆H₄, *o*-MeC₆H₄, *p*-OMeC₆H₄, *o*-OMeC₆H₄, *p*-EtC₆H₄, *p*-ClC₆H₄, *m*-BrC₆H₄, *m*-NO₂C₆H₄, *p*-NO₂C₆H₄, 1-Naphthyl, 9-Anthryl and Me; *n*=0, 1 and 2; R'=Me, Et, *n*-Pr, *n*-Bu, -CH₂C₆H₅ and -CH₂CH=CH-C₆H₅.

Vinyl bis-sulfone methodology in thiosugars: selective access to chiral thiovinyl sulfones and PSE oxathianes

pp 5141–5151

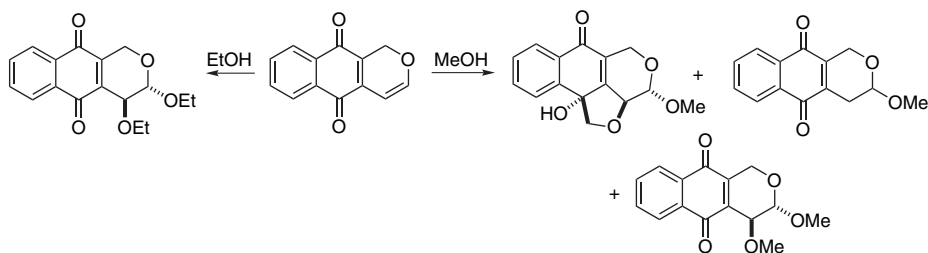
Florence Chéry, Christelle Pillard, Arnaud Tatibouët,* Ottorino De Lucchi and Patrick Rollin*



The behaviour of the natural pyranonaphthoquinone pentalongin in alcoholic solvents

pp 5152–5158

Sven Claessens, Guido Verniest, Samir El Hady, Tuyen Van Nguyen, Bart Kesteleyn, Luc Van Puyvelde and Norbert De Kimpe*



*Corresponding author



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

Indexed/Abstracted 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



ELSEVIER

ISSN 0040-4020