

Tetrahedron Symposium-in-Print Number 133

Cycloaddition and benzannulation approaches to functionalised aromatic compounds

Guest editor: Joseph P.A. Harrity

Department of Chemistry, University of Sheffield, Sheffield S3 7HF, UK

Contents

Announcement: Tetrahedron Symposia-in-Print
Preface

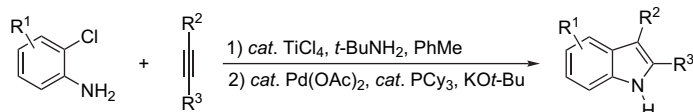
pp 763–765
p 767

ARTICLES

Annulation of internal alkynes through a hydroamination/aza-Heck reaction sequence
for the regioselective synthesis of indoles

pp 769–777

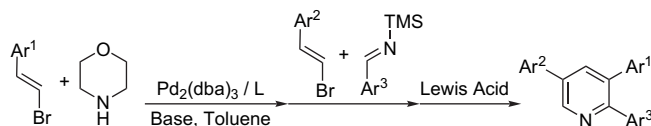
Lutz Ackermann*, René Sandmann, Amparo Villar, Ludwig T. Kaspar



Multicomponent and one-pot synthesis of trisubstituted pyridines through a Pd-catalyzed
cross-coupling/cross-coupling/cycloaddition sequence

pp 778–786

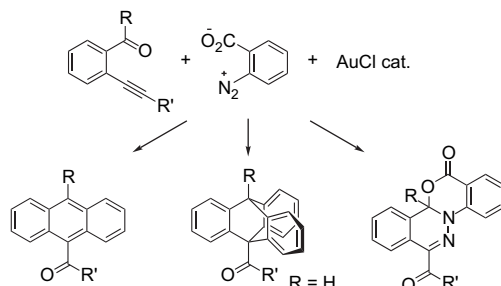
José Barluenga*, Agustín Jiménez-Aquino, M. Alejandro Fernández, Fernando Aznar, Carlos Valdés*



AuCl-catalyzed reaction of *ortho*-alkynyl(oxo)benzene with benzenediazonium 2-carboxylate as a synthetic method towards anthracene, triptycene, and phthalazine derivatives

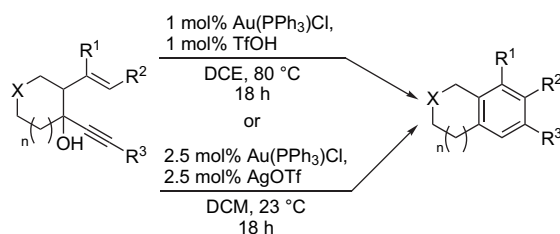
pp 787–796

Kenichiro Sato, Menggenbateer, Toshihiko Kubota, Naoki Asao*


Gold(I)-catalyzed benzannulation of 3-hydroxy-1,5-enynes: an efficient synthesis of substituted tetrahydronaphthalenes and related compounds

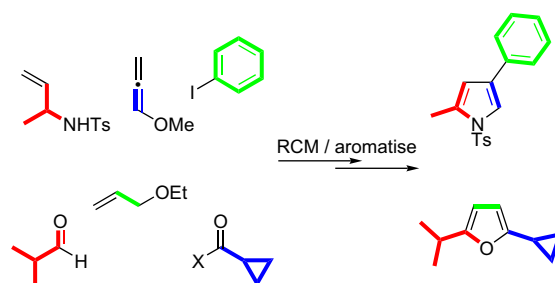
pp 797–808

Christiane M. Grisé, Eric M. Rodrigue, Louis Barriault*


Flexible metathesis-based approaches to highly functionalised furans and pyrroles

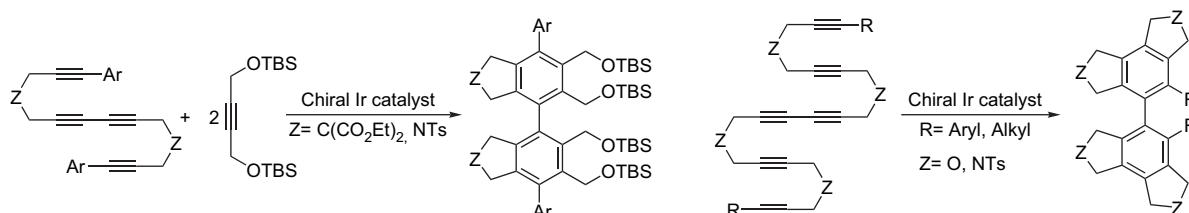
pp 809–820

Timothy J. Donohoe*, Neil M. Kershaw, Allan J. Orr, Katherine M.P. Wheelhouse, (nee Gosby) Lisa P. Fishlock, Adam R. Lacy, Matilda Bingham, Panayiotis A. Procopiou


Iridium-catalyzed consecutive and enantioselective [2+2+2] cycloaddition of tetraynes and hexaynes for the construction of an axially chiral biaryl system

pp 821–830

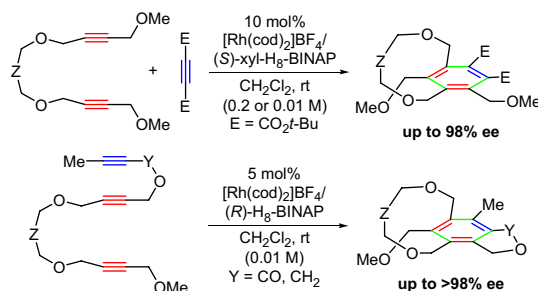
Takanori Shibata*, Shiho Yoshida, Yoshikazu Arai, Maiko Otsuka, Kohei Endo



Enantioselective synthesis of planar-chiral metacyclophanes through cationic Rh(I)/modified-BINAP-catalyzed inter- and intramolecular alkyne cyclotrimerizations

pp 831–846

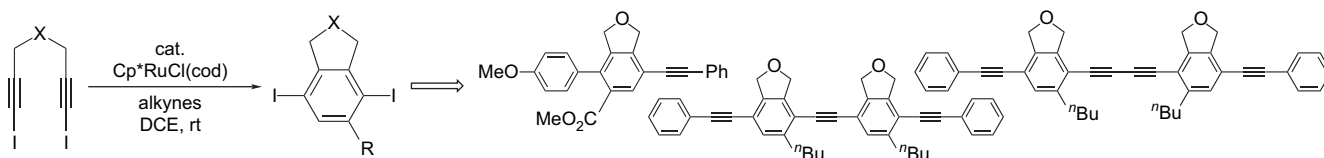
Ken Tanaka*, Hiromi Sagae, Kazuki Toyoda, Masao Hirano



Synthesis of multiply functionalized benzenes via ruthenium-catalyzed cycloaddition of diiododiyne

pp 847–855

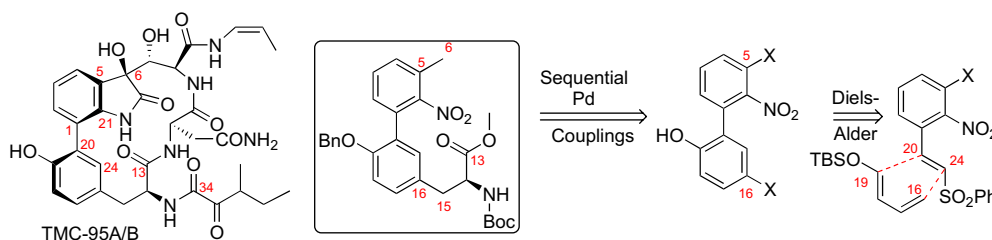
Yoshihiko Yamamoto*, Kozo Hattori



A Diels–Alder approach to biaryls (DAB): synthesis of the western portion of TMC-95

pp 856–865

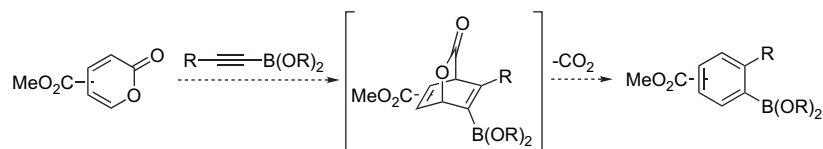
Bradley O. Ashburn, Lauren K. Rathbone, Elizabeth H. Camp, Rich G. Carter*



A 2-pyrone cycloaddition route to functionalised aromatic boronic esters

pp 866–873

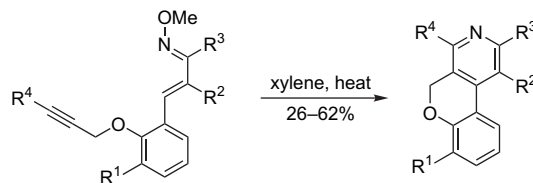
Patrick M. Delaney, Duncan L. Browne, Harry Adams, Andrew Plant, Joseph P.A. Harrity*



Intramolecular Diels–Alder reactions of α,β -unsaturated oxime ethers as 1-azadienes: synthesis of [c]-fused pyridines

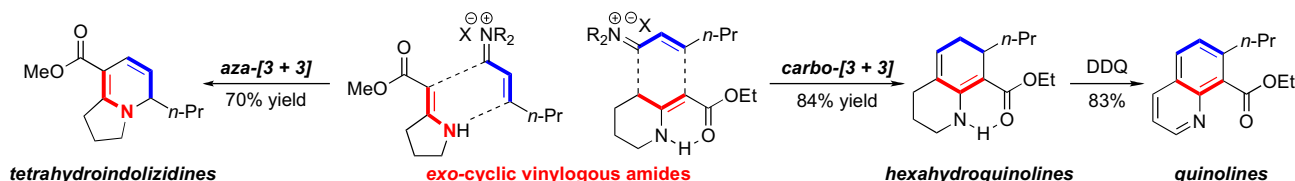
pp 874–882

Timothy E. Hurst, Timothy J. Miles, Christopher J. Moody*


Aza- and carbo-[3 + 3] annulations of *exo*-cyclic vinyllogous amides and urethanes. Synthesis of tetrahydroindolizidines and an unexpected formation of hexahydroquinolines

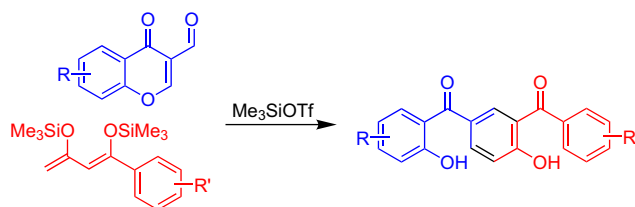
pp 883–893

Sunil K. Ghosh, Grant S. Buchanan, Quincy A. Long, Yonggang Wei, Ziyad F. Al-Rashid, Heather M. Sklenicka, Richard P. Hsung*


Synthesis of 2-benzoyl-4-(2-hydroxybenzoyl)phenols by catalytic domino ‘Michael–retro-Michael–Mukaiyama-aldol’ reactions of 1-aryl-1,3-bis(silyloxy)buta-1,3-dienes with 3-formylchromones

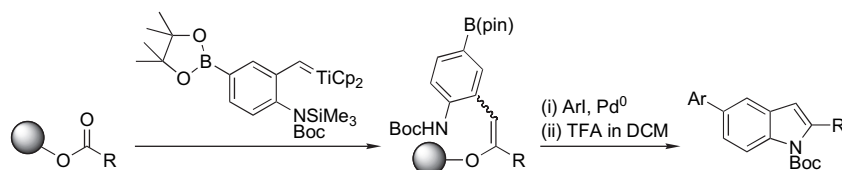
pp 894–900

Mirza A. Yawer, Ibrar Hussain, Christine Fischer, Helmar Görls, Peter Langer*


High throughput synthesis of diverse 2,5-disubstituted indoles using titanium carbenoids bearing boronate functionality

pp 901–914

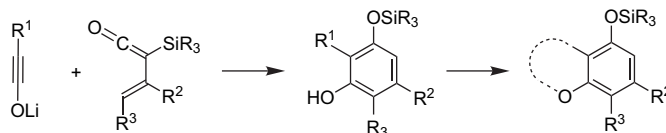
Calver A. Main, Hanna M. Petersson, Shahzad S. Rahman, Richard C. Hartley*



A benzannulation strategy for the synthesis of phenols and heteroaromatic compounds based on the reaction of (trialkylsilyl)vinylketenes with lithium ynolates

pp 915–925

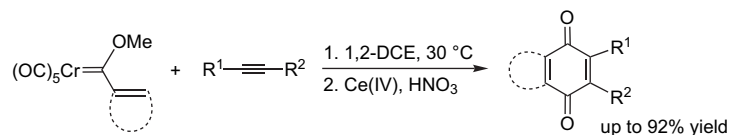
Wesley F. Austin, Yongjun Zhang, Rick L. Danheiser*



Approaching ambient temperatures in 1,2-DCE to deliver efficient intermolecular Dötz benzannulation processes

pp 926–935

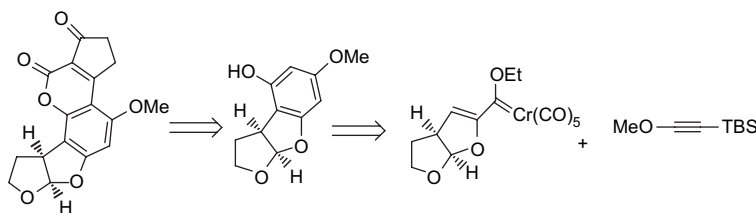
Stephanie Irvine, William J. Kerr*, Allan R. McPherson, Colin M. Pearson



Towards aflatoxins: a formal synthesis of aflatoxin B2

pp 936–948

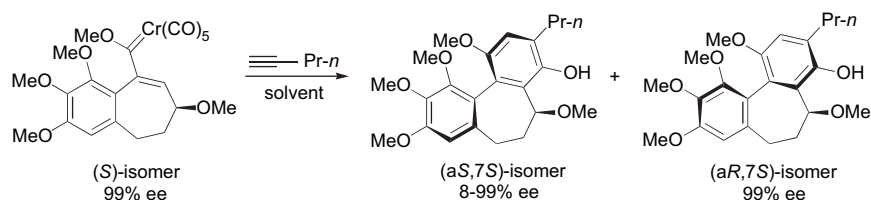
Stephen A. Eastham, Steven P. Ingham, Michael R. Hallett, John Herbert, Andrea Modi, Timothy Morley, James E. Painter, Prakash Patel, Peter Quayle*, Dean C. Ricketts, James Raftery



Central-to-axial chirality transfer in the benzannulation reaction of optically pure Fischer carbene complexes in the synthesis of allocolchicinoids

pp 949–968

Andrei V. Vorogushin, William D. Wulff*, Hans-Jürgen Hansen



The optical purity of the carbene complex is lost in only one of the two diastereomeric products which is attributed to the intermediacy of an *o*-quinone methide chromium tricarbonyl complexed intermediate.

*Corresponding author

 Supplementary data available via ScienceDirect

COVER

This Symposium-in-Print describes a series of strategies for the assembly of aromatic and heteroaromatic compounds from simple substrates. Cover figure designed by Duncan Browne.

© 2007 D. L. Browne, J. P. A. Harrity. Published by Elsevier Ltd.



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