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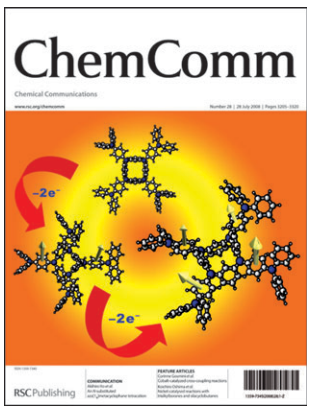
ISSN 1359–7345 CODEN CHCOFS (28) 3205–3320 (2008)



Cover
See Akihiro Ito *et al.*, pp. 3242–3244.
N-substituted aza[1_4]metacyclophane tetracation: a spin-quintet tetraradical having four *para*-phenylenediamine-based semi-quinone moieties.
Image reproduced by permission of Akihiro Ito, Syuuzi Inoue, Yasukazu Hirao, Ko Furukawa, Tatsuhisa Kato and Kazuyoshi Tanaka from *Chem. Commun.*, 2008, 3242.

Inside cover
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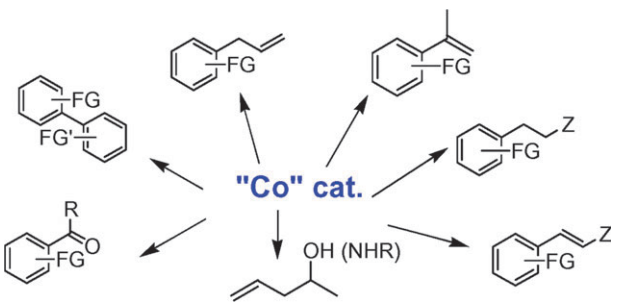
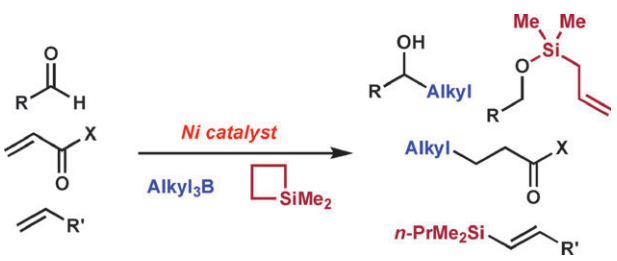
Reduction of a siRNA–polymer conjugate synthesized by RAFT polymerization releases the free RNA duplex.
Image reproduced by permission of Karina L. Heredia, Thi H. Nguyen, Chien-Wen Chang, Volga Bulmus, Thomas P. Davis and Heather D. Maynard from *Chem. Commun.*, 2008, 3245.

FEATURE ARTICLES





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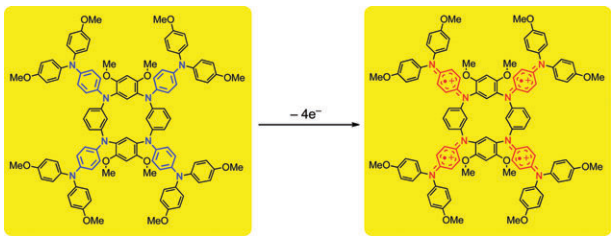

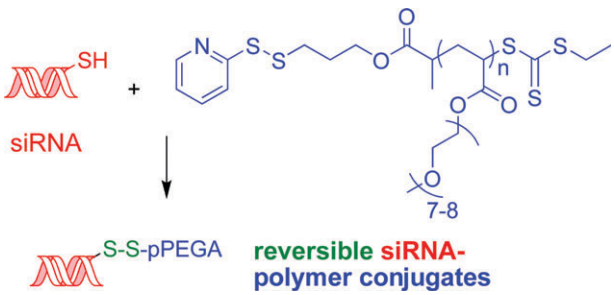

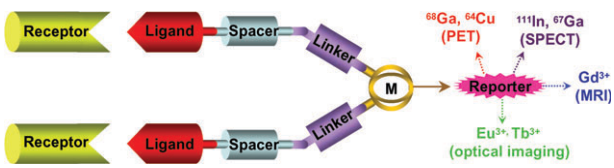

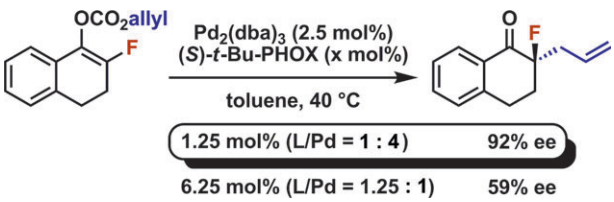

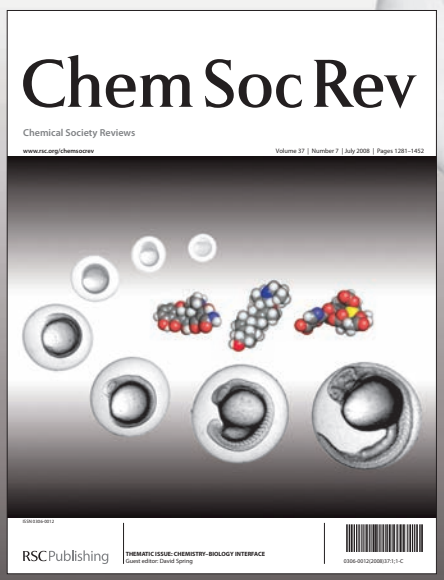

Chemistry-Biology Interface

Chemistry-Biology Interface theme issue

This theme issue covers topical areas at the chemistry–biology interface from a chemical perspective. The biological consequences of specific molecular interactions have long been a part of scientific (and non-scientific) activities throughout human history. The last century witnessed a myriad of discoveries in the life sciences at molecular detail, and the associated growth of the pharmaceutical and biotech industries. This century has seen a further growth in the field with a resultant increase in publications and journals.

Reviews include:

Nucleic acid encoding to program self-assembly in chemical biology
Zbigniew L. Pianowski and Nicolas Winssinger

Chemical technologies for probing embryonic development
Ilya A. Shestopalov and James K. Chen

Interspecies and interkingdom communication mediated by bacterial quorum sensing
Colin A. Lowery, Tobin J. Dickerson and Kim D. Janda

Small molecule inhibition of microbial natural product biosynthesis—an emerging antibiotic strategy
Justin S. Cisar and Derek S. Tan

Identification of the cellular targets of bioactive small organic molecules using affinity reagents
Benjamin J. Leslie and Paul J. Hergenrother

Expanding dialogues: from natural autoinducers to non-natural analogues that modulate quorum sensing in Gram-negative bacteria
Grant D. Geske, Jennifer C. O Neill and Helen E. Blackwell

Guest editor:

David Spring
University of Cambridge, UK

"The interface with biology is a fertile scientific pursuit for chemists"

060833

See also:

Molecular BioSystems issue 6, 2008 – Emerging Investigators theme issue
For more details see www.molecularbiosystems.org/ei

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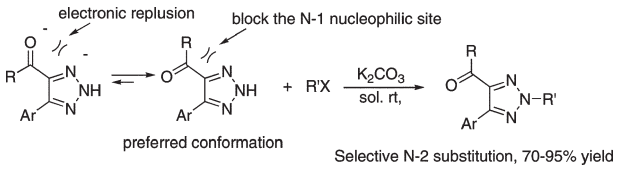
Conformational control in the regioselective synthesis of N-2-substituted-1,2,3-triazoles

Yunfeng Chen, Yuxiu Liu, Jeffrey L. Petersen and Xiaodong Shi*

An effective strategy for the synthesis of N-2-substituted-1,2,3-triazoles with excellent yields and regioselectivity has been developed.

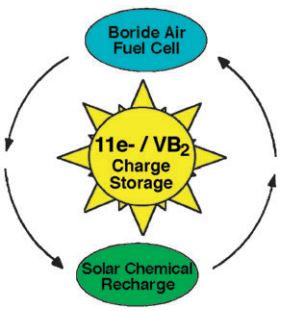


3257

Renewable highest capacity VB_2/air energy storage

Stuart Licht,* Huiming Wu, Xingwen Yu and Yufei Wang

The first renewable energy system which stores more energy than gasoline is presented. With ten-fold lithium-ion's capacity, VB_2 opens a pathway towards electric vehicles with a viable driving range.

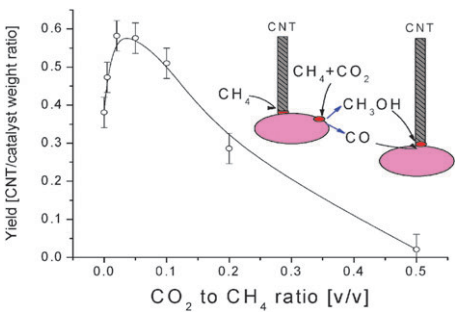


3260

CO_2 enhanced carbon nanotube synthesis from pyrolysis of hydrocarbons

Zhongrui Li,* Yang Xu, Xiaodong Ma, Enkeleda Dervishi, Viney Saini, Alexandru R. Biris, Dan Lupu and Alexandru S. Biris*

The authors report on the role of CO_2 in improving carbon nanotube yield and crystallinity from catalytic chemical vapor deposition of hydrocarbons. This approach is also valid for the synthesis of any carbon nanotube species while using various types of hydrocarbon.

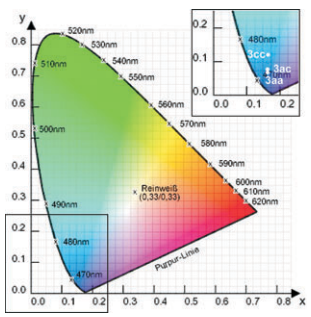


3263

Blue phosphorescent emitters: new *N*-heterocyclic platinum(II) tetracarbene complexes

Yvonne Unger, Alexander Zeller, Sebastian Ahrens and Thomas Strassner*

Photoluminescence measurements show that platinum(II) tetracarbene complexes, which could be obtained *via* different synthetic routes, are an interesting class of compounds for the development of blue emitters for PhOLEDs with good quantum yields and high photostability.



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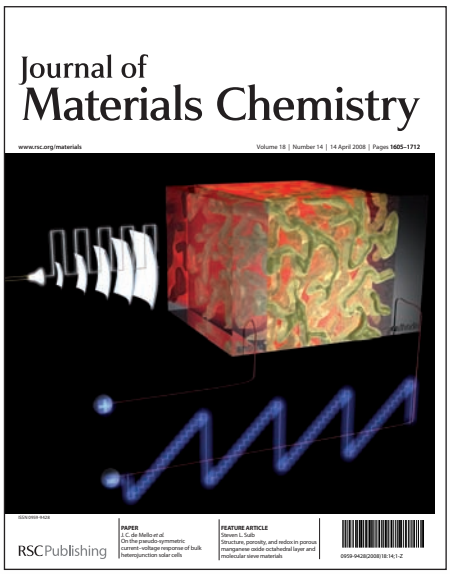

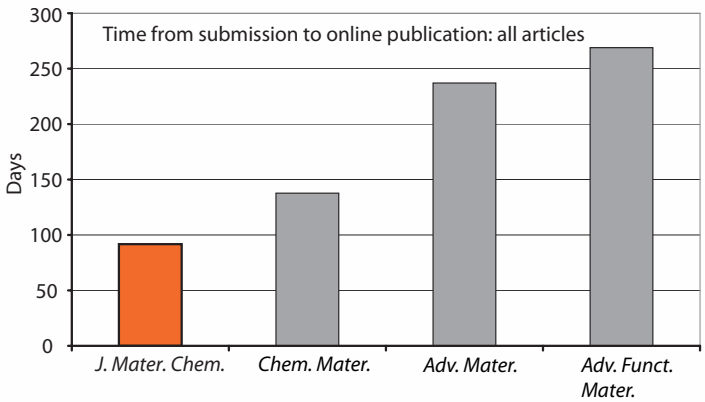

At a staggeringly quick 70 days, the average time for a Communication to go from submission to publication online at *Journal of Materials Chemistry* is more than four weeks faster than our nearest competitor. And with all articles being published online on average only 92 days after submission, we are nearly three times faster than the other leading journals in the field.*

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*Data taken from published issues from September to December (inclusive) 2007.

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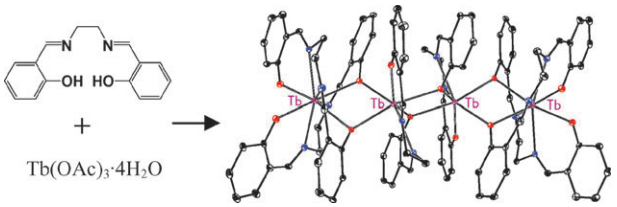

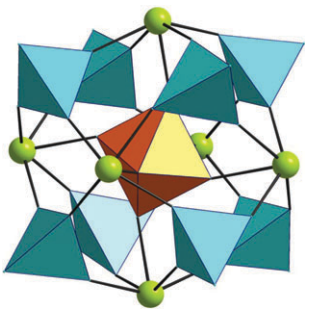

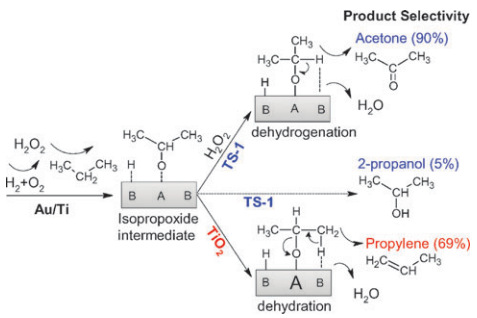

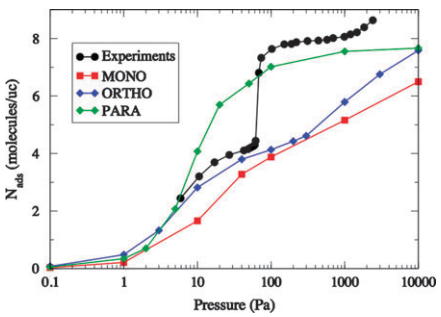

New journals from RSC Publishing in 2009!

Metallomics
Integrated biometal science

A journal covering the research fields related to biometals. It is expected to be the core journal for the emerging metallomics community. 6 issues in 2009, monthly from 2010.

Editorial Board chair is Professor Joe Caruso, University of Cincinnati/Agilent Technologies Metallomics Center of the Americas.

Contact the Editor, Niamh O'Connor, metallomics@rsc.org

www.rsc.org/metallomics

Integrative Biology
Quantitative biosciences from nano to macro

A unique, highly interdisciplinary journal focused on quantitative multi-scale biology using enabling technologies and tools to exploit the convergence of biology with physics, chemistry, engineering, imaging and informatics. Monthly from 2009.

Editorial Board chair is Distinguished Scientist Dr Mina J Bissell, Lawrence Berkeley National Laboratory.

Contact the Editor, Harp Minhas, ibiology@rsc.org

www.rsc.org/ibiology

From launch, the latest issue of *Metallomics* and *Integrative Biology* will be made freely available to all readers *via* the website. Free institutional access to 2009 and 2010 content is available following a simple registration process.

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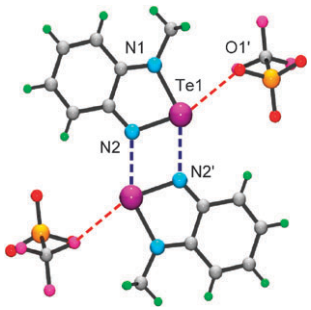

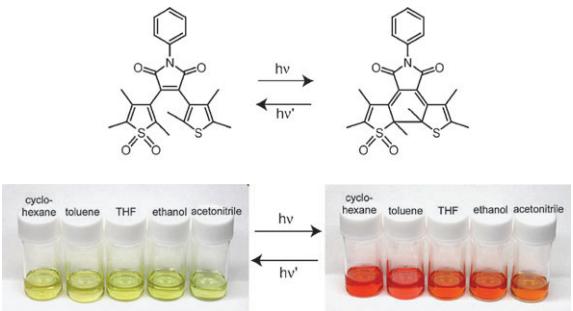

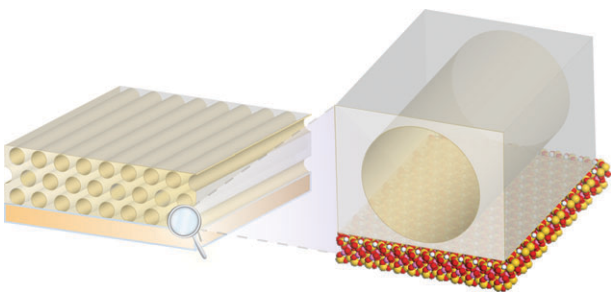

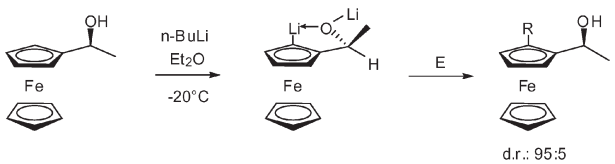

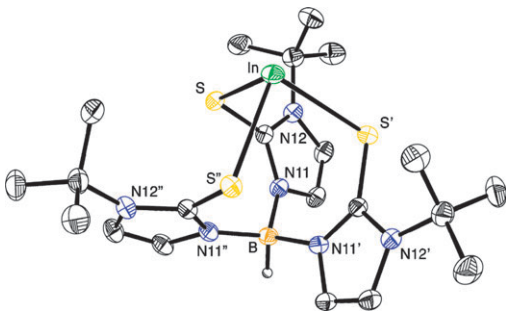

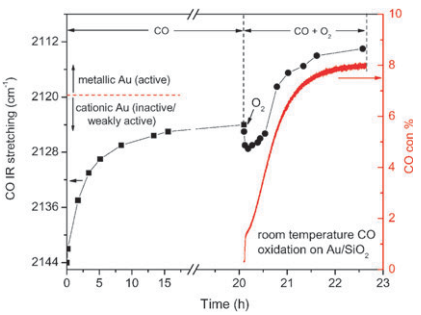

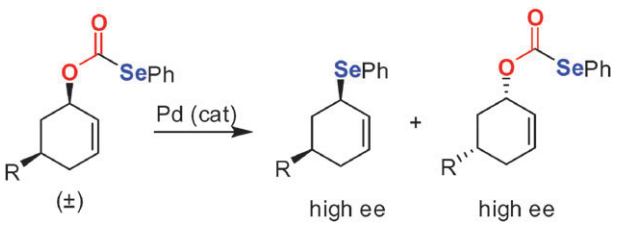

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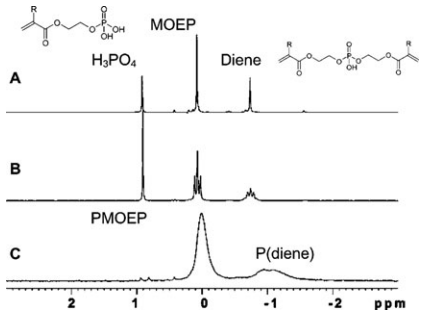

Influence of a diene impurity on the molecular structure of phosphate-containing polymers with medical applications

Lisbeth Grøndahl,* Shuko Suzuki and Edeline Wentrup-Byrne*

^{31}P NMR proved a key tool in clarifying the polymerisation processes observed for MOEP containing a previously unacknowledged high level of impurities.

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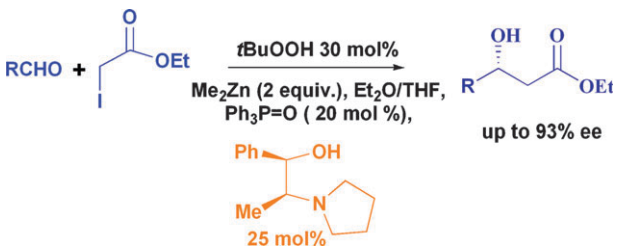

Me_2Zn mediated, *tert*-butylhydroperoxide promoted, catalytic enantioselective Reformatsky reaction with aldehydes

Pier Giorgio Cozzi,* Fides Benfatti, Montse Guiteras Capdevila and Alessandro Mignogna

A practical and highly enantioselective (up to 93% ee) catalytic Reformatsky reaction with aldehydes promoted by *t*BuOOH, and catalyzed by a cheap, commercially available aminoalcohol, is described.

AUTHOR INDEX

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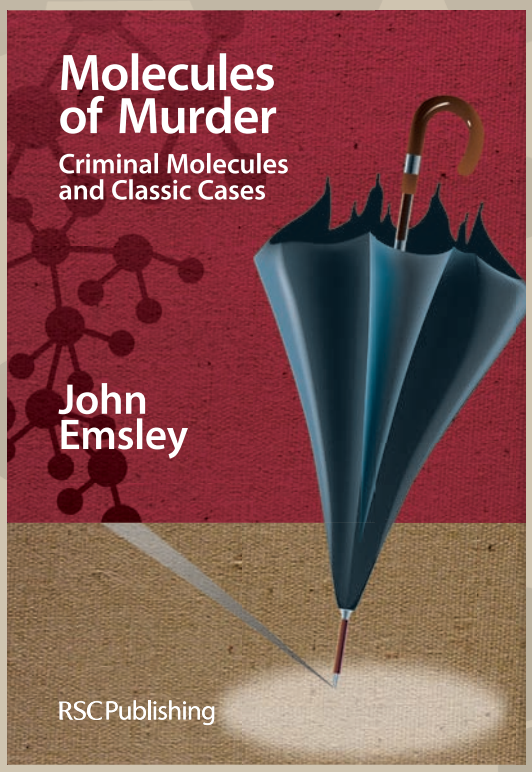
Molecules of Murder

Criminal Molecules and Classic Cases

John Emsley

The award winning popular science writer!



This fascinating new book is about infamous murderers and famous victims! It includes the stories of people like Harold Shipman, Alexander Litvinenko, Adelaide Bartlett, and Georgi Markov. Few books on poisons analyse these crimes from the viewpoint of the poison itself, and doing so throws new light on how the murders or attempted murders were carried out and ultimately how the perpetrators were uncovered and brought to justice.

The reader is taken on a journey of discovery into the world of dangerous organic poisons. Ten highly toxic molecules are described all of particular interest due to their use in notorious murder cases. Each chapter explores the discovery of the molecules, their chemistry and effects in humans, followed by a re-examination of their deliberate misuse in high profile murder cases!

Title: Molecules of Murder
Sub Title: Criminal Molecules and Classic Cases
Author: John Emsley
ISBN: 9780854049653
Publication Date: August 2008
Price: £14.95

Meet the Author…

Molecules of Murder Book Launch — **30th July 2008, London, UK.**

236th ACS National Meeting & Exposition — **17 – 21st August 2008, Philadelphia, USA.**

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