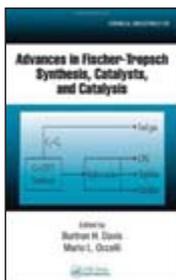


## Publications in Brief

### BOOKS

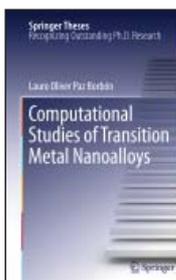
#### “Advances in Fischer-Tropsch Synthesis, Catalysts, and Catalysis”



Edited by B. H. Davis (Center for Applied Energy Research, Lexington, Kentucky, USA) and M. L. Occelli (MLO Consulting, Atlanta, Georgia, USA), CRC Press, Boca Raton, Florida, USA, 2010, 424 pages, ISBN 978-1-4200-6256-4, US\$236.95; e-ISBN 978-1-4200-6257-1

This book focuses on catalyst preparation and activation, reaction mechanism and process-related topics and is drawn from the proceedings at a symposium held during the 236th American Chemical Society Meeting in Philadelphia, Pennsylvania, USA, in August 2008. Fischer-Tropsch technology holds promise in the area of renewable resources. The book includes chapters on ‘Catalytic Performance of Ru/Al<sub>2</sub>O<sub>3</sub> and Ru/Mn/Al<sub>2</sub>O<sub>3</sub> for Fischer-Tropsch Synthesis’ and ‘Low-Temperature Water-Gas Shift: Assessing Formates as Potential Intermediates over Pt/ZrO<sub>2</sub> and Na-Doped Pt/ZrO<sub>2</sub> Catalysts Employing the SSITKA-DRIFTS Technique’.

#### “Computational Studies of Transition Metal Nanoalloys”

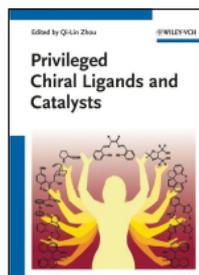


L. O. P. Borbón (Theory Department, Fritz-Haber-Institut der Max-Planck Gesellschaft, Berlin, Germany), Springer Theses, Springer-Verlag, Berlin, Heidelberg, Germany, 2011, 180 pages, ISBN 978-3-642-18011-8, €106.95; e-ISBN 978-3-642-18012-5

The Springer Theses series recognises outstanding PhD research. This thesis involves the computational modelling of bimetallic gas-phase nanoalloy clusters of palladium-platinum, silver-platinum, gold-gold and palladium-gold. The author used a combination of global optimisation techniques – coupled with a Gupta-type empirical many-body potential – and density functional theory (DFT) calculations to study the structures, bonding and chemical ordering, as well as investigate the chemisorptions of hydrogen and carbon monoxide on bimetallic clusters. The work is relevant to theoretical and experimental studies

of nanoalloy cluster structure and heterogeneous catalysis by bimetallic nanoparticles, and should also be of interest to researchers working on other applications of nanoalloys, including sensors, optics and magnetics.

#### “Privileged Chiral Ligands and Catalysts”

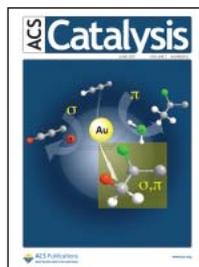


Edited by Q.-L. Zhou (Nankai University, Tianjin, China), Wiley-VCH Verlag & Co KGaA, Weinheim, Germany, 2011, 484 pages, ISBN 978-3-527-32704-1, £115.00, €138.00, US\$175.00; e-ISBN 9783527635207

This book is for chemists working in asymmetric catalysis and starts with the core structure of the catalysts, explaining why a certain ligand or catalyst is so successful. It describes in detail the history, the basic structural characteristics, and the applications of these “privileged catalysts”. Among the eleven ligands and catalysts used as examples, BINAP, DuPhos, Josiphos, spiro ligands, BOX and PHOX are chiral ligands in metal catalysts; Salen complexes are chiral metal catalysts; and cinchona alkaloids and proline are generally used as organocatalysts. BINOL and TADDOL were used as chiral ligands in Lewis acid catalysts in earlier studies but recently they have also been used as organocatalysts in various reactions. All six pgms are covered in this book.

### JOURNALS

#### ACS Catalysis

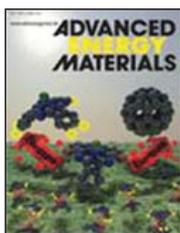


Editor-in-Chief: C. W. Jones (Georgia Institute of Technology, USA); American Chemical Society; e-ISSN 2155-5435

ACS Catalysis is a new journal from the American Chemical Society dedicated to publishing original research on heterogeneous catalysis, homogeneous catalysis and biocatalysis. Coverage includes life sciences, drug discovery & development, household products, polymer discovery & production, environmental protection and energy & fuels. The journal includes both experimental and theoretical research and reviews

on molecules, macromolecules or materials that are catalytic in nature. New reactions and new approaches to synthesis involving known catalysts, discovery or modification of new catalysts, novel mechanistic and investigatory studies, practical enhancements of known processes, and conceptual advances will be featured.

### Advanced Energy Materials



Editorial Board Co-chairs: C. Brabec (Erlangen University, Germany) and M. Waidhas (Siemens, Germany); Wiley-VCH; ISSN 1614-6832; e-ISSN 1614-6840

Wiley-VCH's new journal *Advanced Energy Materials* is an interdisciplinary forum of original peer-reviewed contributions on materials used in all forms of energy harvesting, conversion and storage. Topics include:

- Organic and inorganic photovoltaics
- Batteries and supercapacitors
- Fuel cells
- Hydrogen generation and storage
- Thermoelectrics
- Water splitting and photocatalysis
- Solar fuels and thermosolar power
- Magnetocalorics
- Piezoelectronics

### Catalysis Science & Technology



Editorial Board Editors-in-Chief: C. Friend (Harvard University, USA) and P. van Leeuwen (Institut Català d'Investigació Química (ICIQ), Tarragona, Spain); Royal Society of Chemistry; ISSN 2044-4753; e-ISSN 2044-4761

*Catalysis Science & Technology* is a new multidisciplinary journal from the Royal Society of Chemistry that focuses on both the fundamental science and technological aspects of catalysis. The journal aims to contain fundamental, applied, experimental and computational work and will bring together research from the homogeneous, heterogeneous and biocatalysis communities.

### Scientific Reports



Nature Publishing Group; e-ISSN 2045-2322

Nature Publishing Group's *Scientific Reports* is an

online, open access, primary research publication covering all areas of the natural sciences: biology, chemistry, physics and earth sciences. Hosted on nature.com, *Scientific Reports* is open to all and publishes original research papers of interest to specialists within their field.

### Contributions of Inorganic Chemistry to Energy Research

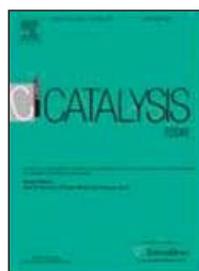


*Dalton Trans.*, 2011, **40**, (15), 3761–3996

With guest editors Duncan Wass (School of Chemistry, University of Bristol, UK) and Neil Robertson (School of Chemistry and EaStChem, University of Edinburgh, UK), this themed issue of *Dalton*

*Transactions* focuses on the inorganic chemistry of sustainable energy technologies such as solar energy conversion, hydrogen storage, fuel cells, batteries, nuclear chemistry, biomass conversion, CO<sub>2</sub> conversion and other aspects of catalysis for energy. Interesting items include 'Light-Induced Charge Separation and Photocatalytic Hydrogen Evolution from Water Using Ru<sup>II</sup>Pt<sup>II</sup>-Based Molecular Devices: Effects of Introducing Additional Donor and/or Acceptor Sites' and 'Purification-Free Synthesis of a Highly Efficient Ruthenium Dye Complex for Dye-Sensitised Solar Cells (DSSCs)', among others.

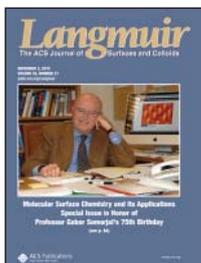
### Special Issue on Industrial Catalysis



*Catal. Today*, 2011, **163**, (1), 1–54

This special issue of *Catalysis Today* is in honour of the industrial chemist, Martin Lok, who retired from Johnson Matthey in 2008. Details on his career are highlighted by his colleague John Casci. The guest editors Sean A. Axon (Johnson Matthey Plc, UK) and Aalbert Zwijnenburg (Johnson Matthey Chemicals GmbH, Germany) aimed in their selection to shed light on some of the developments in catalysis that occurred during the span of Martin Lok's career. Those articles involving pgms include: 'A History of Industrial Catalysis', 'Catalytic Control of Emissions from Cars', 'Oxidation of Benzyl Alcohol Using Supported Gold-Palladium Nanoparticles' and 'Vapour Phase Hydrogenation of Olefins by Formic Acid over a Pd/C Catalyst'.

### Molecular Surface Chemistry and Its Applications Special Issue



*Langmuir*, 2010, **26**, (21), 16187–16624

This special issue of *Langmuir* is a celebration of Professor Gabor A. Somorjai on the occasion of his 75th birthday. Professor Somorjai is recognised for laying the foundation of modern surface chemistry. One of his main

contributions is in the area of heterogeneous catalytic chemistry which he converted into a quantitative science and enabled the catalytic site to be understood in terms of surface atomic structures and fundamental molecular properties. His pgm research has included the characterisation of particle size and size distribution of platinum nanoparticles on alumina catalysts and low energy electron diffraction (LEED) studies of platinum catalysts used in petroleum refining.