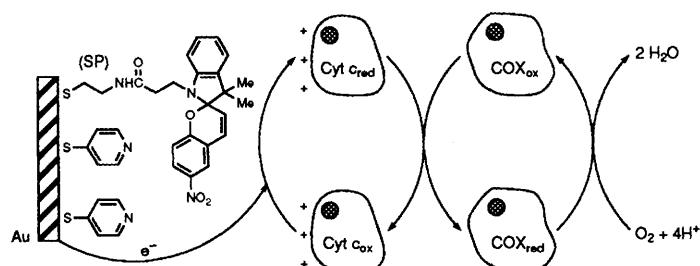


JOURNAL OF THE CHEMICAL SOCIETY

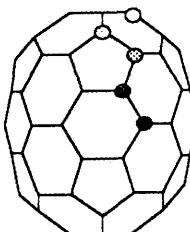
Chemical CommunicationsNumber 24
1994**CONTENTS**

- 2741 A Bifunctional Monolayer Electrode consisting of 4-Pyridyl Sulfide and Photoisomerizable Spiropyran: Photoswitchable Electrical Communication between the Electrode and Cytochrome C**

Mazzi Lion-Dagan, Eugenii Katz, Itamar Willner



- 2743 C₇₀ Fulleryl Radicals**

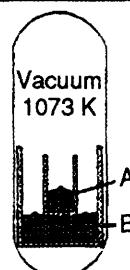
Alexandros Lappas, Konstantinos Vavekis,
Kosmas Prassides

The five C₇₀ fulleryl radicals corresponding to addition at the five symmetry-inequivalent carbon positions of the molecule have been observed by transverse-field muon spin-rotation (TF-μSR) spectroscopy.

- 2745 A Novel Reaction between Physically Separated Solid Reactants**

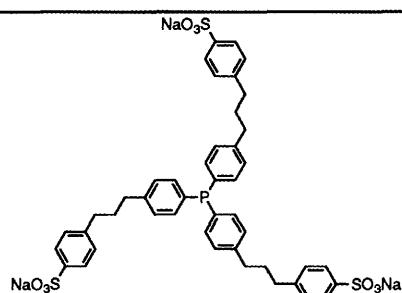
Marten G. Barker, James E. Gareh

A + B → Products			
Starting Materials		Products	
A	B	A	B
NaNbO ₃	Y ₂ S ₃	Na _x NbS ₂	Y ₂ O ₂ S
V ₂ O ₃	YN	VN	Y ₂ O ₃
V ₂ O ₃	TiC	V ₄ C ₃	TiO ₂



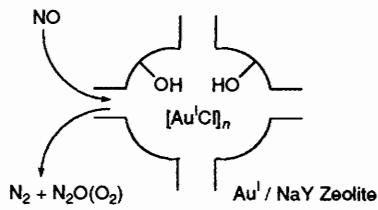
- 2747 Reaction Activity and Selectivity as a Function of Solution Ionic Strength in Oct-1-ene Hydroformylation with Sulfonated Phosphines**

Hao Ding, Brian E. Hanson



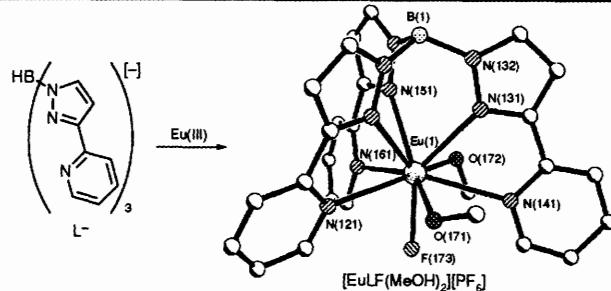
Aggregation of sulfonated triarylphosphines in water affects reaction rate and selectivity in two-phase hydroformylation reactions.

2749 Low-temperature Catalytic Decomposition of NO over Excess-loading Gold(I) in NaY Zeolite



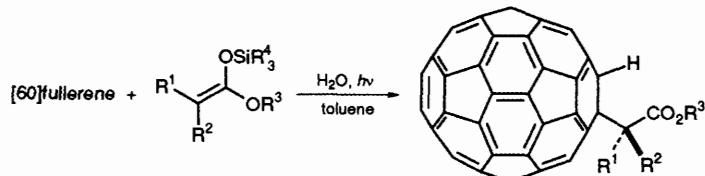
Tarek M. Salama, Takafumi Shido, Ryuichiro Ohnishi, Masaru Ichikawa

2751 Synthesis of the New Tripodal Ligand Tris-[3-(2'-pyridyl)pyrazol-1-yl]hydroborate, and the Crystal Structure of its Europium(III) Complex



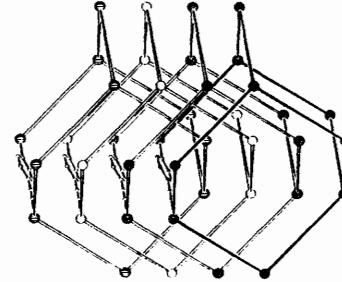
Angelo J. Amoroso, Alexander M. Cargill Thompson, John C. Jeffery, Peter L. Jones, Jon A. McCleverty, Michael D. Ward

2753 Photoaddition of Silyl Ketene Acetal to [60]Fullerene. Synthesis of α -Fullerene-substituted Carboxylic Esters



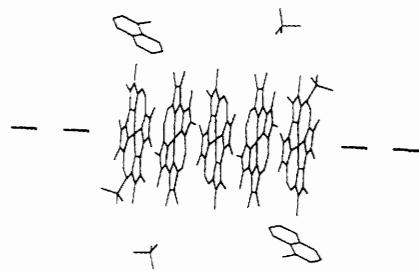
Hidetoshi Tokuyama, Hiroyuki Isobe, Eiichi Nakamura

2755 Interpenetrating Diamondoid Frameworks of Silver(I) Cations Linked by *N,N'*-Bidentate Molecular Rods



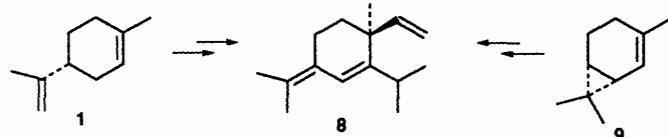
Lucia Carlucci, Gianfranco Ciani, Davide M. Proserpio, Angelo Sironi

2757 Electrococrystallization and X-Ray Structure of a New Porphycene-based Material, $[\text{Ni}(\text{OMPc})]_{2.5}(\text{BF}_4)_2 \cdot \text{C}_{10}\text{H}_7\text{Cl}$



Jean-Michel Barbe, Philippe Richard, M. Ally Aukauloo, Claude Lecomte, Pierre Petit, Roger Guillard

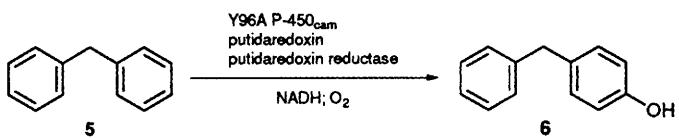
2759 Terpenes to Terpenes. Stereo- and Enantio-selective Synthesis of (+)- α -Elemene and a Short Route to a Versatile Diquinane Chiron



Goverdhan Mehta, Palle V. R. Acharyulu

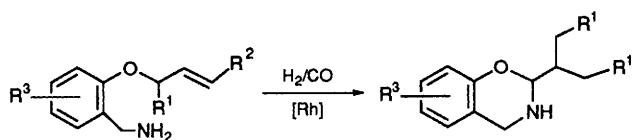
Synthesis of sesquiterpene (+)- α -elemene **8** from (+)-limonene **1** and (+)-2-carene **9** is reported.

- 2761 Cytochrome P-450_{cam} Monooxygenase can be Redesigned to Catalyse the Regioselective Aromatic Hydroxylation of Diphenylmethane



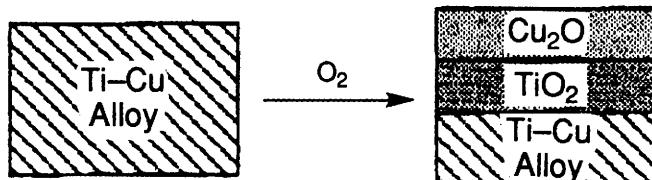
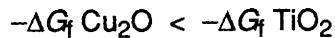
Stephen M. Fowler, Paul A. England, Andrew C. G. Westlake, Duncan R. Rouch, Darren P. Nickerson, Caroline Blunt, David Braybrook, Susan West, Luet-Lok Wong, Sabine L. Flitsch

- 2763 Allylic Rearrangements During the Rhodium-catalysed Reactions of 2-Allyloxybenzylamines and 2-(*N*-Allyl-*N*-benzylamino)benzylamine



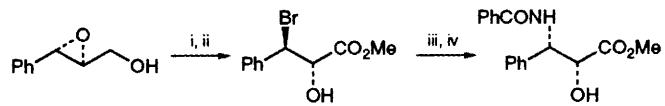
Eva M. Campi, W. Roy Jackson, Quentin J. McCubbin, Andrew E. Trnacek

- 2765 Prediction of Alloy Component Oxidation Order from a Kinetic Model using Free Energies of Oxide Formation



David L. Cocke, Thomas R. Hess, Donald E. Mencer, Jr., Donald G. Naugle

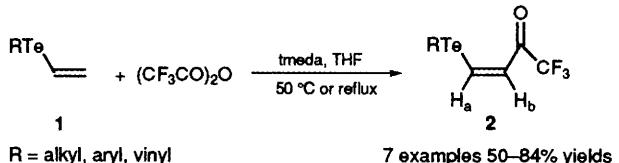
- 2767 Enantio- and Stereo-selective Route to the Taxol Side Chain via Asymmetric Epoxidation of *trans*-Cinnamyl Alcohol and Subsequent Epoxide Ring Opening



i, NaIO₄, RuCl₃, then CH₂N₂, 56%; ii, MgBr₂·Et₂O, 6 h, 98%; iii, NaN₃, 98%; iv, PhCOCl, DMAP, Et₃N, 96%; H₂, Pd/C, 88%.

Carlo Bonini, Giuliana Righi

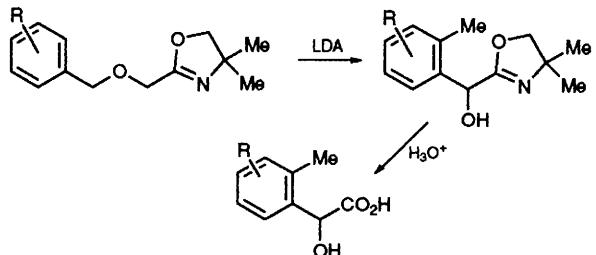
- 2769 Stereospecific Synthesis of (*Z*)- β -Trifluoroacetylvinyltellurides; X-Ray Crystal Structure of (*Z*)- β -Trifluoroacetylvinyl-2-(ethoxycarbonyl)ethyltelluride



The X-ray crystal structure of **2c** [R = (CH₂)₂CO₂Et] was determined.

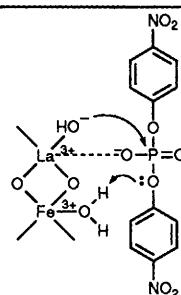
Xue-Sheng Mo, Yao-Zeng Huang, Yu-Rong Zhao

- 2771 Rearrangement of 2-(Arylmethoxy)methyl-2-oxazolines via Lithium Azaenolates: a Facile Synthetic Route to *ortho*-Methylmandelic Acid Derivatives



Kazuyuki Kamata, Masanao Terashima

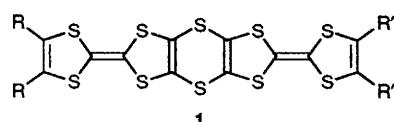
- 2773 Cooperation of Lanthanum Ion and Non-lanthanide Metal Ions for the Hydrolysis of Bis(4-nitrophenyl)phosphate



Lanthanum(III) ion and non-lanthanide metal ions show a cooperative catalysis for the hydrolysis of bis(4-nitrophenyl)phosphate.

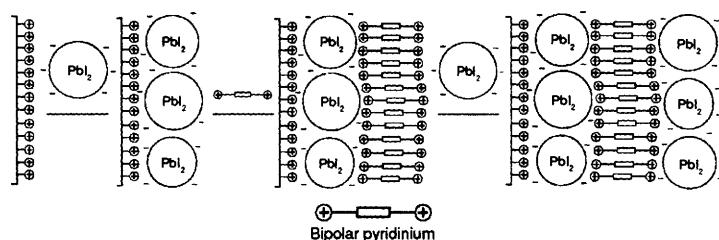
Naoya Takeda, Makoto Irisawa, Makoto Komiya

- 2775 New π -Electron Donors containing Two Tetraphiafulvalene Units Fused to 1,4-Dithiine and a Conducting Charge-transfer Complex with Tetracyanoquinodimethane



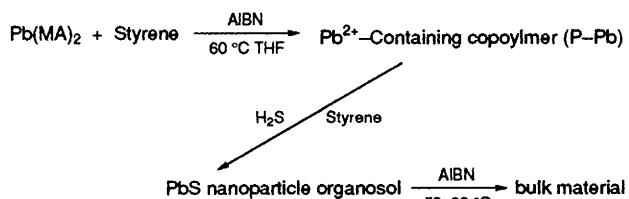
Emad Aqad, James Y. Becker, Joel Bernstein, Arkady Ellern, Vladimir Khodorkovsky, Lev Shapiro

- 2777 Constructing PbI_2 Nanoparticles into a Multilayer Structure using the Molecular Deposition (MD) Method



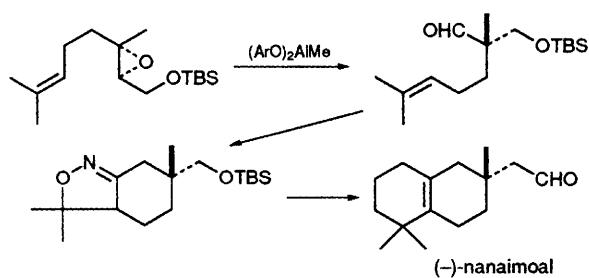
Mingyuan Gao, Manglai Gao, Xi Zhang, Yi Yang, Bai Yang, Jiacong Shen

- 2779 Synthesis of PbS Nanoparticles in Polymer Matrices



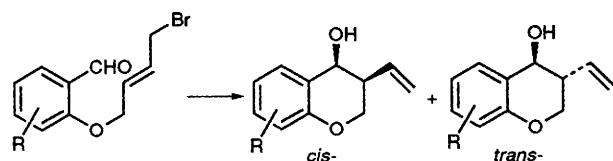
Mingyuan Gao, Yi Yang, Bai Yang, Fenglan Bian, Jiacong Shen

- 2781 Total Enantioselective Synthesis of the Marine Sesquiterpene Nanaimoal



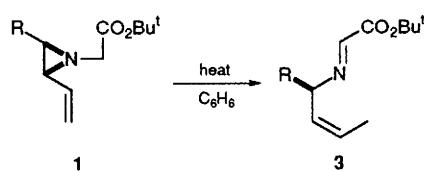
Tomoki Omodani, Kozo Shishido

- 2783 Tin-promoted Stereocontrolled Intramolecular Allylation of Carbonyl Compounds: a Facile and Stereoselective Method for Ring Construction



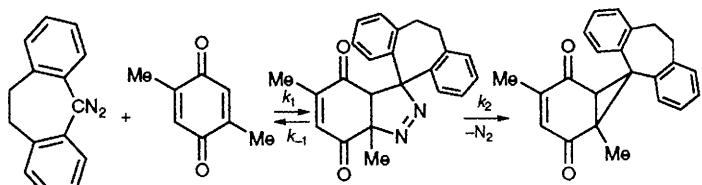
Jing-Yao Zhou, Zhao-Gen Chen, Shi-Hui Wu

2785 Homodienyl 1,5-Hydrogen Shifts in Vinyl Aziridines



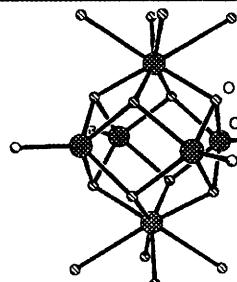
Jens Åhman, Peter Somfai, David Tanner

2787 1,3-Dipolar Cycloreversion of the 1-Pyrazoline from 5-Diazo-10,11-dihydro-5H-dibenzo[*a,d*]-cycloheptene and 2,5-Dimethyl-1,4-benzoquinone



Takumi Oshima, Toshikazu Nagai

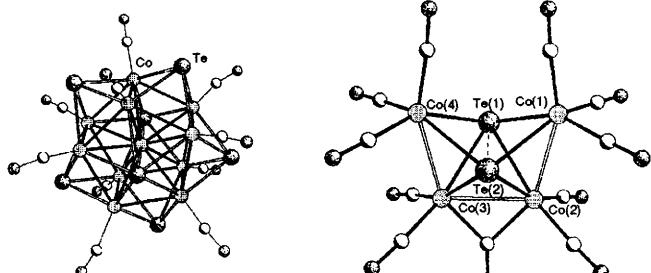
2789 Self-assembly of Single-(Cd₄O₄) and Double-cube (Cd₇O₈) and Stellated-octahedron (Cd₆O₈) [Cd_n(C₆F₅)_{2n-p}(moe)_p] Complexes (moe = 2-methoxyethanolate) and the X-Ray Crystal Structures of [n,p] = [4,4], [7,8] and [6,8]



Complex [6,8] contains a Cd₆ octahedron with five- and eight-coordinated metal atoms.

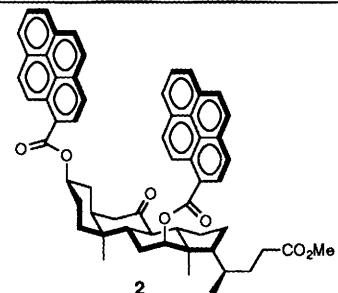
Insa Büsching, Henry Strasdeit

2791 [Co₁₁Te₇(CO)₁₀]²⁻, a Novel Cobalt Telluride Cluster Anion containing a Body-centred Pentagonal-prismatic Cobalt Framework, and [Co₄Te₂(CO)₁₁], a Possible Precursor with a Metal-deficient Pentagonal-planar Cobalt Frame



Renate Seidel, Rainer Kliss, Stefan Weissgräber, Gerald Henkel

2793 Bile Acid Based Semi-rigid Molecular Tweezers



Uday Maitra, Lawrence J. D'Souza

AUTHOR INDEX

- Acharyulu, Palle V. R., 2759
Amoroso, Angelo J., 2751
Aqad, Emad, 2775
Aukaloo, M. Ally, 2757
Barbe, Jean-Michel, 2757
Barker, Marten G., 2745
Becker, James Y., 2775
Bernstein, Joel, 2775
Bian, Fenglan, 2779
Blunt, Caroline, 2761
Bonini, Carlo, 2767
Braybrook, David, 2761
Büsching, Insa, 2789
Campi, Eva M., 2763
Cargill Thompson, Alexander M., 2751
Carlucci, Lucia, 2755
Chen, Zhao-Gen, 2783
Ciani, Gianfranco, 2755
Cocke, David L., 2765
Ding, Hao, 2747
D'Souza, Lawrence J., 2793
Ellern, Arkady, 2775
England, Paul A., 2761
Flitsch, Sabine L., 2761
Fowler, Stephen M., 2761
Gao, Manglai, 2777
Gao, Mingyuan, 2777, 2779
Gareh, James E., 2745
Guilard, Roger, 2757
Hanson, Brian E., 2747
Henkel, Gerald, 2791
Hess, Thomas R., 2765
Åhman, Jens, 2785
Huang, Yao-Zeng, 2769
Ichikawa, Masaru, 2749
Irisawa, Makoto, 2773
Isobe, Hiroyuki, 2753
Jackson, W. Roy, 2763
Jeffery, John C., 2751
Jones, Peter L., 2751
Kamata, Kazuyuki, 2771
Katz, Eugenii, 2741
Khodorkovsky, Vladimir, 2775
Kliss, Rainer, 2791
Komiyama, Makoto, 2773
Lappas, Alexandros, 2743
Lecomte, Claude, 2757
Lion-Dagan, Mazzi, 2741
McCleverty, Jon A., 2751
McCubbin, Quentin J., 2763
Maitra, Uday, 2793
Mehta, Goverdhan, 2759
Mencer, Jr., Donald E., 2765
Mo, Xue-Sheng, 2769
Nagai, Toshikazu, 2787
Nakamura, Eiichi, 2753
Naugle, Donald G., 2765
Nickerson, Darren P., 2761
Ohnishi, Ryuichiro, 2749
Omodani, Tomoki, 2781
Oshima, Takumi, 2787
Petit, Pierre, 2757
Prassides, Kosmas, 2743
Proserpio, Davide M., 2755
Richard, Philippe, 2757
Righi, Giuliana, 2767
Rouch, Duncan R., 2761
Salama, Tarek M., 2749
Seidel, Renate, 2791
Shapiro, Lev, 2775
Shen, Jiacong, 2777, 2779
Shido, Takafumi, 2749
Shishido, Kozo, 2781
Sironi, Angelo, 2755
Somfai, Peter, 2785
Strasdeit, Henry, 2789
Takeda, Naoya, 2773
Tanner, David, 2785
Terashima, Masanao, 2771
Tokuyama, Hidetoshi, 2753
Trnacek, Andrew E., 2763
Vavekis, Konstantinos, 2743
Ward, Michael D., 2751
Weissgräber, Stefan, 2791
West, Susan, 2761
Westlake, Andrew C. G., 2761
Willner, Itamar, 2741
Wong, Luet-Lok, 2761
Wu, Shi-Hui, 2783
Yang, Bai, 2777, 2779
Yang, Yi, 2777, 2779
Zhang, Xi, 2777
Zhao, Yu-Rong, 2769
Zhou, Jing-Yao, 2783

The contents list of the latest issue of *Journal of Materials Chemistry* is reproduced here for the information of readers of *Chemical Communications*.

Journal of Materials Chemistry

Synthesis, structures, properties and applications of materials, particularly those associated with advanced technology

CONTENTS

-
- 1659 **FEATURE ARTICLE.** Chemical routes for preparation of oxide high-temperature superconducting powders and precursors for superconductive ceramics, coatings and composites **Yu. G. Metlin and Yu. D. Tretyakov**
- 1667 Pre-tilt angles as a function of polyimide composition for copolyimides **H. Yokokura, B. O. Myrvold, K. Kondo and S. Oh-hara**
- 1673 Synthesis, transition temperatures, some physical properties and the influence of linkages, outboard dipoles and double bonds on smectic C formation in cyclohexylphenylpyrimidines **S. M. Kelly and J. Fünfschilling**
- 1689 α -Fluoro esters incorporating a cyclohexane ring: some new chiral dopants for ferroelectric mixtures **S. M. Kelly, R. Buchecker and J. Fünfschilling**
- 1699 A new type of main-chain liquid-crystal polymer derived from 4'-hydroxybiphenyl-4-carboxylic acid and its smectic mesophase behaviour **Y. Nakata and J. Watanabe**
- 1705 Effect of spacer length on the thermal properties of side-chain liquid-crystal poly(methacrylate)s **A. A. Craig and C. T. Imrie**
- 1715 Synthesis and mesomorphic properties of 4-[$(4$ -cyanophenyl)acetylenyl]-2,3,5,6-tetrafluorophenyl 4-*n*-alkoxybenzoates **J. Wen, H. Yu and Q. Chen**
- 1719 X-Ray crystal structure and solid-state properties of a 1:1 complex of tetrathiafulvalene (TTF) and 1-Oxo-2,6-dimethyl-4-dicyanomethylenecyclohexa-2,5-diene **A. S. Batsanov, M. R. Bryce, S. R. Davies and J. A. K. Howard**
- 1723 X-Ray absorption spectroscopic study of the AlPO₄-5: ferrocene inclusion compound and its thermally decomposed products **A. Lund, D. G. Nicholson, G. Lamble and B. Beagley**
- 1731 Properties of the guest molecules in the 1,10-dibromodecane/urea inclusion compound: A molecular dynamics simulation study **A. R. George and K. D. M. Harris**
- 1737 Ion-exchange properties of lithium aluminium layered double hydroxides **I. C. Chisem and W. Jones**
- 1745 Formation and decomposition of LaBa₂Cu₃O₇₋₈ **J. M. S. Skakle and A. R. West**
- 1749 ¹⁷O Nuclear magnetic resonance spectroscopy of the structural evolution of vanadium pentoxide gels **G. A. Pozarnsky and A. V. McCormick**
- 1755 Characterisation of silicated anatase powders **L. Yi, G. Ramis, G. Busca and V. Lorenzelli**
-

MATERIALS CHEMISTRY COMMUNICATIONS

-
- 1763 Preliminary crystal structure of mixed-valency Sr₄Ni₃O₉, the actual formula of the so-called Sr₅Ni₄O₁₁ **F. Abraham, S. Minaud and C. Renard**
- 1765 Corrigendum to self-consistent interatomic potentials for the simulation of binary and ternary oxides **T. S. Bush, J. D. Gale, C. R. A. Catlow and P. D. Battle**
- 1765 Corrigendum to Examination of the structural features necessary for mesophase formation with aroylhydrazinato-nickel(II) and -copper(II) complexes **M. N. Abser, M. Bellwood, C. M. Buckley, M. C. Holmes and R. W. McCabe**
-
- 1767 Book Reviews **G. H. W. Milburn; K. Kawasaki**