

Contents

Vol. 185, Nos. 1–2

Articles

Organometallic and biomimetic catalysis

- A novel homogeneous catalyst made of poly(*N*-vinyl-2-pyrrolidone)-CuCl₂ complex for the oxidative carbonylation of methanol to dimethyl carbonate
J.-C. Hu, Y. Cao, P. Yang, J.-F. Deng and K.-N. Fan (Shanghai, PR China) 1
- Mixed thioether-phosphite and phosphine-phosphite ligands for copper-catalyzed asymmetric 1,4-addition of organometallic reagents to cyclohexenone
M. Diéguez, O. Pàmies, G. Net, A. Ruiz and C. Claver (Tarragona, Spain) 11
- Diastereoselective hydroformylation of camphene catalyzed by platinum/tin complexes
C.M. Foca, E.N. dos Santos and E.V. Gusevskaya (Belo Horizonte, Brazil) 17
- Stability of various metalloporphyrin catalysts during hydrogen peroxide epoxidation of alkene
I.D. Cunningham, T.N. Danks, J.N. Hay, I. Hamerton, S. Gunathilagan and C. Janczak (Guildford, UK) 25
- Optically active pyrazolylborate: synthesis, characterization and uses in enantioselective cyclopropanation reaction
U.P. Singh, P. Babbar (Roorkee, India), B. Hassler, H. Nishiyama (Toyohashi, Japan) and H. Brunner (Regensburg, Germany) 33
- Novel effect of additional metal ion on hydroformylation of hexene-1 in biphasic system
Y. Huang (Chengdu, China and Shanghai, China), L.-e. Min, Y. Li, H. Chen, P. Cheng and X. Li (Chengdu, China) 41
- Preparation and catalysis of DMY and MCM-41 encapsulated cationic Mn(III)-porphyrin complex
Z. Li, C.-G. Xia and X.-M. Zhang (Lanzhou, China) 47
- Propylene-ethylene copolymers by one-monomer metallocene catalyzed polymerization
M.L. Dias, D.E.B. Lopes (Rio de Janeiro, Brazil) and A.V. Grafov (Kiev, Ukraine) 57
- High durability of asymmetrically modified nickel catalysts prepared by in situ modification
T. Osawa, S. Sakai, K. Deguchi (Toyama, Japan), T. Harada (Otsu, Japan) and O. Takayasu (Toyama, Japan) 65
- Benzylic oxidation with H₂O₂ catalyzed by Mn complexes of *N,N,N'*-trimethyl-1,4,7-triazacyclononane: spectroscopic investigations of the active Mn species
T.H. Bennur, S. Sabne, S.S. Deshpande, D. Srinivas and S. Sivasanker (Pune, India) 71
- Addition polymerisation of 5-vinyl-2-norbornene with nickel bis(acetyl acetonate)/methylaluminoxane system
C.-T. Zhao, M. do Rosário Ribeiro and M.F. Portela (Lisboa, Portugal) 81

Ionic catalysis by acids, bases and metal ions

- Polynuclear manganese complexes catalyzed epoxidation of olefins with molecular oxygen
R. Krishnan and S. Vancheesan (Chennai, India) 87
- Palladium catalyzed oxidation of monoterpenes: novel oxidation of myrcene with dioxygen
J.A. Gonçalves (Belo Horizonte, Brazil), O.W. Howarth (Coventry, UK) and E.V. Gusevskaya (Belo Horizonte, Brazil) 97
- Efficient telomerization of 1,3-butadiene with alcohols in the presence of in situ generated palladium(0)carbene complexes
R. Jackstell, A. Frisch, M. Beller (Rostock, Germany), D. Röttger (Marl, Germany), M. Malaun and B. Bildstein (Innsbruck, Austria) 105
- Selective copper-catalyzed allylic oxidations using a 1/1 ratio of cycloalkene and *tert*-butylperbenzoate
J. Le Bras and J. Muzart (Reims, France) 113
- Use of “TMA-depleted” MAO for the activation of zirconocenes in olefin polymerization
J.-N. Pédeutour, K. Radhakrishnan, H. Cramail and A. Deffieux (Pessac, France) 119
- Electronic and steric effects on the stereoselectivity of cyclopropanation reactions catalysed by rhodium *meso*-tetraphenylporphyrins
P. Tagliatesta and A. Pastorini (Rome, Italy) 127

Heterogeneous catalysis

Influence of pore size distribution on Pt dispersion in Pt-Sn/Al ₂ O ₃ reforming catalyst L.D. Sharma, M. Kumar, A.K. Saxena, M. Chand and J.K. Gupta (Dehradun, India)	135
Partially reduced heteropoly compound catalysts for the selective oxidation of propane H.-S. Jiang (PR China), X. Mao, S.-J. Xie and B.-K. Zhong (Guangzhou, PR China)	143
The role of copper species and Brønsted acidity in CuCl/ZSM-5 catalysts during the selective catalytic reduction of NO by propene M.J. Jia (Changchun, China and Madrid, Spain), W.X. Zhang and T.H. Wu (Changchun, China)	151
Characterization of catalyst in the synthesis of dimethyl carbonate by gas-phase oxidative carbonylation of methanol R. Jiang (Tianjin, PR China and Shanghai, PR China), Y. Wang, X. Zhao, S. Wang, C. Jin and C. Zhang (Tianjin, PR China)	159
Borane-functionalized silica supports. In situ activated heterogeneous zirconocene catalysts for MAO-free ethylene polymerization S. Charoenchaidet, S. Chavadej (Bangkok, Thailand) and E. Gulari (Ann Arbor, MI, USA)	167
Entrapment of metallic palladium and a rhodium(I) complex in a silica sol-gel matrix. Formation of a highly active recyclable arene hydrogenation catalyst R. Abu-Reziq, D. Avnir, I. Miloslavski (Jerusalem, Israel), H. Schumann (Berlin, Germany) and J. Blum (Jerusalem, Israel)	179
Hydrogenation and isomerization of 1-hexene with Ru ₃ (CO) ₉ (PPh ₂ CH ₂ CH ₂ Si(OMe) ₃) ₃ immobilized in silica matrices via the sol-gel method K. Dallmann and R. Buffon (Campinas, Brazil)	187
Effects of reaction variables on enantioselectivity of modified Raney nickel catalyst P. Kukula and L. Červený (Prague, Czech Republic)	195
Immobilization of iron porphyrins into porous vycor glass: characterization and study of catalytic activity S. Nakagaki, A.R. Ramos, F.L. Benedito, P.G. Peralta-Zamora and A.J.G. Zarkin (Curitiba, Brazil)	203
Hydrogenation of naphthalene and methylnaphthalene: modeling and spectroscopy Ş. Sayan (Bilkent-Ankara, Turkey) and J. Paul (Beytepe-Ankara, Turkey)	211
Characterization of MAO-modified silicas D. Bianchini, J.H.Z. dos Santos (Porto Alegre, Brazil), T. Uozumi and T. Sano (Ishikawa, Japan)	223
Studies on the effects of CO ₂ and CO on <i>n</i> -butane isomerisation activity over sulfated zirconia H.K. Mishra, A.K. Dalai (Saskatoon, Canada) and K.M. Parida (Bhubaneswar, India)	237
Selective alkylation of biphenyl over H-MOR and H-BEA zeolites: analysis of experimental results by computational modelling J. Horniakova, D. Mravec (Bratislava, Slovak Republic), J. Joffre and P. Moreau (Montpellier, France)	249
Ferrosipinels based on Co and Ni prepared via a low temperature route as efficient catalysts for the selective synthesis of <i>o</i> -cresol and 2,6-xyleneol from phenol and methanol K. Sreekumar and S. Sugunan (Cochin, India)	259
Kinetics of limonene epoxidation by hydrogen peroxide on PW-Amberlite A.L. Villa de P., F. Taborda A. and C. Montes de Correa (Medellín, Colombia)	269
Novel polymer-supported platinum catalyst for selective hydrogenation of crotonaldehyde Z.M. Michalska, B. Ostaszewski, J. Zientarska and J.M. Rynkowski (Łódź, Poland)	279
Biphasic oxidation of arenes with oxygen catalysed by Pd(II)—heteropoly acid system: oxidative coupling versus hydroxylation H.A. Burton and I.V. Kozhevnikov (Liverpool, UK)	285
Molybdenum oxide based partial oxidation catalyst. Part 3. Structural changes of a MoVW mixed oxide catalyst during activation and relation to catalytic performance in acrolein oxidation O. Ovsitser, Y. Uchida, G. Mestl, G. Weinberg, A. Blume, J. Jäger, M. Dieterle, H. Hibst and R. Schlögl (Berlin, Germany)	291
Zeolite-mediated regioselective nitration of phenol in solid state T. Esakkidurai and K. Pitchumani (Madurai, India)	305

Letter**Organometallic and biomimetic catalysis**

Hydrogenation of PhCH ₂ CHO catalyzed by ruthenium complex containing “polymer-attached” ligand prepared by living ring-opening metathesis polymerization K. Nomura, H. Ogura and Y. Imanishi (Nara, Japan)	311
Author Index	317
Subject Index	321
Volume contents	327