

Contents

Vol. 198, Nos. 1–2

Articles

Organometallic and Biomimetic catalysis

- Highly regioselective hydroformylation of 1-dodecene catalyzed by Rh-BISBIS in aqueous two-phase system
H. Chen, Y. Li, R. Li, P. Cheng and X. Li (Chengdu, PR China) 1
- The structure, catalytic activity and reaction mechanism modeling for halogenated iron-tetraphenylporphyrin complexes
Q. Lü (Changsha, PR China and Xinxiang, PR China), R. Yu and G. Shen (Changsha, PR China) 9
- Thermoregulated phase transfer ligands and catalysis XVIII: synthesis of *N,N*-dipolyoxyethylene-substituted-2-(diphenylphosphino)phenylamine (PEO–DPPPA) and the catalytic activity of its rhodium complex in the aqueous–organic biphasic hydroformylation of 1-decene
C. Liu, J. Jiang, Y. Wang, F. Cheng and Z. Jin (Dalian, PR China) 23
- Propylene dimerization using bis(salicylaldehyde)nickel(II) complexes in the presence of organoaluminum and phosphine ligands
S. Wu and S. Lu (Dalian, China) 29
- The role of the solvent in the asymmetric hydrogenation of β -keto esters with Ru-BINAP
A. Wolfson, I.F.J. Vankelecom (Leuven, Belgium), S. Geresh (Beersheva, Israel) and P.A. Jacobs (Leuven, Belgium) 39
- Some aspects of palladium and rhodium catalysis for synthesis of silyl ethers from Si–H bond
A. Purkayshtha and J.B. Baruah (Guwahati, India) 47
- Remarkable selectivity in the cyclopropanation reactions catalysed by an halogenated iron *meso*-tetraphenylporphyrin
P. Tagliatesta and A. Pastorini (Rome, Italy) 57
- Comparative kinetic studies on tyrosinase-like catalytic activity of dinuclear imidazole-containing copper(II) complexes
W.A. Alves, S.A. de Almeida-Filho (São Paulo, Brazil), M.V. de Almeida (Juiz de Fora, Brazil), A. Paduan-Filho, C.C. Becerra and A.M. Da Costa Ferreira (São Paulo, Brazil) 63

Ionic catalysis by acids, bases and metal ions

- Acenaphthene-1-carboxylic acid methyl ester by palladium-catalyzed chemoselective hydroesterification of acenaphthylene
J. Gironès, J. Duran, A. Polo (Girona, Spain) and J. Real (Bellaterra, Spain) 77
- Fluoride ion catalyzed silylation of ketoximes by hydrosilanes
E. Lukevics, R. Abele, M. Fleisher, J. Popelis and E. Abele (Riga, Latvia) 89
- Kinetics and mechanism of the bicarbonate dehydration of the half-sandwich zinc(II) complexes [Tp^{Ph}]ZnX ([Tp^{Ph}] = hydrotris(3-phenylpyrazolyl)borate; X[−] = OH[−], N₃[−], NCS[−])
Y.-J. Sun, L.Z. Zhang, W. Sun, P. Cheng, H.-K. Lin, S.-P. Yan, D.-Z. Liao, Z.-H. Jiang and P.-W. Shen (Tianjin, PR China) 99
- Catalytic intermolecular hydroamination of alkenes. Beneficial effect of ionic solvents
J.-J. Brunet, N.C. Chu, O. Diallo and E. Mothes (Toulouse, France) 107
- Kinetic study of dichlorocyclopropanation of 1,7-octadiene under two-phase phase-transfer catalysis at low alkaline concentration
M.-L. Wang (Taichung, Taiwan), Y.-M. Hsieh and R.-Y. Chang (Hsinchu, Taiwan) 111

Heterogeneous catalysis

- Modelling the active sites in vanadyl pyrophosphate
D.J. Thompson, M.O. Fanning and B.K. Hodnett (Limerick, Ireland) 125

MCM-41 supported Mo/Zr mixed oxides as catalysts in liquid phase condensation of 2-methylfuran with acetone T. Li, S. Cheng (Taipei, Taiwan), J.-F. Lee and L.-Y. Jang (Hsinchu, Taiwan)	139
Oxidative dehydrogenation of propane using V ₂ O ₅ /TiO ₂ /SiO ₂ catalysts prepared by grafting titanium and vanadium alkoxides on silica A. Comite (Genova, Italy), A. Sorrentino (Napoli, Italy), G. Capannelli (Genova, Italy), M. Di Serio, R. Tesser and E. Santacesaria (Napoli, Italy)	151
(S)-Proline based chiral modifiers É. Sípos, A. Tungler and I. Bitter (Budapest, Hungary)	167
Copper(II) complexes of embelin and 2-aminobenzimidazole encapsulated in zeolite Y-potential as catalysts for reduction of dioxygen R. Abraham and K.K.M. Yusuff (Cochin, India)	175
Kinetic and FT-IR study for the mechanism of addition of hydrogen sulfide to methyl acrylate over solid basic catalysts E. Breyse, F. Fajula, A. Finiels (Montpellier, France), G. Frémy (Lacq, France), J. Lamotte, F. Maugé, J.-C. Lavalley (Caen, France) and C. Moreau (Montpellier, France)	185
Vapour phase alkylation of phenol with methanol over vanadium oxide supported on zirconia K.V.R. Chary, K. Ramesh, G. Vidyasagar and V. Venkat Rao (Hyderabad, India)	195
Novel platinum incorporated vanadium phosphates and their catalytic activity A. Datta, M. Agarwal, S. Dasgupta (Dehradun, India) and R.Y. Kelkar (Thane, India)	205
The effect of peripheral substituents in metalloporphyrins on their catalytic activity in Lyons system J. Haber, L. Matachowski, K. Pamin and J. Poltowicz (Kraków, Poland)	215
Co(II)-catalysed oxidation of α -pinene by molecular oxygen. Part IV M.K. Lajunen, M. Myllykoski and J. Asikkala (Oulu, Finland)	223
Homogeneous and heterogenized copper(II) complexes as catechol oxidation catalysts M. Louloudi, K. Mitopoulou, E. Evaggelou (Ioannina, Greece), Y. Deligiannakis (Agrinio, Greece) and N. Hadjiliadis (Ioannina, Greece)	231
One-pot preparation of polyamine-silica hybrids and their use in the epoxidation of cyclohex-2-ene-1-one J.E.G. Mdoe, D.J. Macquarrie and J.H. Clark (York, UK)	241
Vanadium incorporated mesoporous silicates as catalysts for oxidation of alcohols and aromatics V. Pârvulescu, C. Anastasescu and B.L. Su (Namur, Belgium)	249
CO ₂ reforming of CH ₄ over Ru/zeolite catalysts modified with Ti S.M. Gheno (Sao Carlos, Brazil), S. Damyanova (Sofia, Bulgaria), B.A. Riguette, C.M.P. Marques (Sao Carlos, Brazil), C.A.P. Leite and J.M.C. Bueno (Sao Carlos, Brazil)	263
Physico-chemical characterisation and photocatalytic activity of nanosized SO ₄ ²⁻ /TiO ₂ towards degradation of 4-nitrophenol S.K. Samantaray, P. Mohapatra and K. Parida (Bhubaneswar, India)	277
Real-time study on cumene formation based on RGA/MS analysis G. Buelna, R.L. Jarek, S.M. Thornberg and T.M. Nenoff (Albuquerque, NM, USA)	289
Liquid-phase hydrogenation of maleic anhydride over Pd/SiO ₂ : effect of tin on catalytic activity and deactivation S.M. Jung, E. Godard, S.Y. Jung, K.-C. Park and J.U. Choi (Daejeon, South Korea)	297
Catalytic methanol decomposition over palladium deposited on thermally stable mesoporous titanium oxide M.P. Kapoor, Y. Ichihashi, K. Kuraoka (Osaka, Japan) and Y. Matsumura (Kyoto, Japan)	303
One-pot synthesis of campholenic aldehyde from α -pinene over Ti-HMS catalyst II: effects of reaction conditions Y.-W. Suh (Seoul, South Korea), N.-K. Kim, W.-S. Ahn (Inchon, South Korea) and H.-K. Rhee (Seoul, South Korea)	309
A review of the problem of distinguishing true homogeneous catalysis from soluble or other metal-particle heterogeneous catalysis under reducing conditions J.A. Widegren and R.G. Finke (Fort Collins, CO, USA)	317
Photocatalytic property of Zn-modified bismuth titanate W. Feng Yao, H. Wang, S. Xia Shang, X. Hong Xu, X. Na Yang, Y. Zhang and M. Wang (Jinan, PR China)	343
Cationic polymerization of styrene using mesoporous silica supported aluminum chloride V. Sage, J.H. Clark and D.J. Macquarrie (York, UK)	349
Characterization and kinetic investigation of tungstophosphoric supported on SiO ₂ for alkylation of benzene with 1-dodecene to synthesize linear alkylbenzene J. Zhang, Z. Zhu, C. Li, L. Wen and E. Min (Beijing, China)	359
Positive studies on the displacement reaction of trialkylaluminum with ethylene catalyzed by cobalt complexes B. Zhou (Shanghai, PR China and Dalian, PR China), R. He (Dalian, PR China) and Z. Xie (Shanghai, PR China)	369
Heterogenized redox catalysts on the basis of the chitosan matrix. I. Copper complexes A.V. Kucherov, N.V. Kramareva, E.D. Finashina, A.E. Koklin and L.M. Kustov (Moscow, Russia)	377

Contents

409

Errata	391
Author Index	395
Subject Index	399
Volume contents	407