

Contents

Vol. 184, Nos. 1–2

Articles

Organometallic and biomimetic catalysis

- Further studies on hydration of alkynes by the PtCl₄–CO catalyst
O. Israelsohn (Jerusalem, Israel), K.P.C. Vollhardt (Berkeley, CA, USA) and J. Blum (Jerusalem, Israel) 1
- Substrate selectivity in biphasic Wacker-oxidation of alkenes in the presence of water-soluble calixarenes
E. Karakhanov, T. Buchneva, A. Maximov and M. Zavertyaeva (Moscow, Russia) 11
- Supported rhodium thiolate complexes as catalyst precursors for the hydroformylation of 1-heptene in organic media
S. Rojas, P. Terreros and J.L.G. Fierro (Madrid, Spain) 19
- Synthesis and immobilization of *N*-heterocyclic carbene complexes of Ru(II): catalytic activity and recyclability for the furan formation
B. Çetinkaya (Bornova-Izmir, Turkey), N. Gürbüz, T. Seçkin and I. Özdemir (Malatya, Turkey) 31
- Coupled oxidative carbonylation of bisphenol-A and phenol into phenylcarbonate-ended polycarbonate precursors over a homogeneous Pd–Ce redox catalyst
W.B. Kim (Pohang, South Korea), K.H. Park (Taejon, South Korea) and J.S. Lee (Pohang, South Korea) 39
- Asymmetric borohydride reduction of aromatic ketones catalyzed by chiral salen–Co(II) complexes
W. Sun, C.-G. Xia and P.-Q. Zhao (Lanzhou, China) 51
- Synthesis and polymerization catalytic properties of aryl-substituted tetramethylcyclopentadienyl zirconocenes
X. Deng, B. Wang, S. Xu, X. Zhou (Tianjin, PR China and Shanghai, PR China), L. Yang, Y. Li, Y. Hu, Y. Li and F. Zou (Beijing, PR China) 57

Ionic catalysis by acids, bases and metal ions

- The hydroformylation of vegetable oils and model compounds by ligand modified rhodium catalysis
P. Kandanarachchi, A. Guo and Z. Petrovic (Pittsburg, KS, USA) 65
- Rhodium(I) catalyzed polymerization of phenylacetylene in ionic liquids
P. Mastorilli, C.F. Nobile, V. Gallo, G.P. Suranna and G. Farinola (Bari, Italy) 73
- Regioselective acetylation of 4-*t*-butylcyclohexanol in presence of β-cyclodextrin and its derivatives
H.H. Pattekhani and S. Divakar (Mysore, India) 79
- Conversion of 1,4-naphthalenediol to 1,4-naphthoquinone by 1,4-benzoquinone
J.G. Handique and J.B. Baruah (Guwahati, India) 85
- Ternary metallocene catalyst systems based on metallocene dichlorides and AlBu₃ⁱ/[PhNMe₂H][B(C₆F₅)₄]. NMR investigations of the influence of Al/Zr ratios on alkylation and on formation of the precursor of the active metallocene species
C. Götz, A. Rau and G. Luft (Darmstadt, Germany) 95
- Rhodium-catalysed asymmetric hydroformylation of vinylarenes with chiral P,N-ligands based on DIOP skeleton
A. Aghmiz, A.M. Masdeu-Bultó, C. Claver (Tarragona, Spain) and D. Sinou (Villeurbanne, France) 111
- Photooxidation of phenols in aqueous solution, catalyzed by mononuclear and polynuclear metal phthalocyanine complexes
V. Iliev, A. Mihaylova and L. Bilyarska (Sofia, Bulgaria) 121
- Interfacial aspects of the catalysis of the synthesis of amphiphilic sucrose ethers from 1,2-epoxydodecane and 1,2- epoxydecan-3-ol in water
M. Danel, J. Gagnaire and Y. Queneau (Villeurbanne, France) 131
- Transition metal acetylide catalysts for polymerization of *p*-diethynylbenzene 4. Effect of transition metals on catalytic activity of complexes
X. Zhan (Hangzhou, PR China and Beijing, PR China), M. Yang and Z. Lei (Hangzhou, PR China) 139

Organotitanium chemistry: substituent effects on the dimerization of isoprene catalyzed by alkenyl-substituted cyclopentadienyl titanium complexes L. Yong, X. Tao, F. Qian and Y. Qian (Shanghai, PR China)	147
Synthesis of 2,4-dichlorophenoxyacetic acid: novelties of kinetics of inverse phase transfer catalysis G.D. Yadav and Y.B. Jadhav (Mumbai, India)	151
Transition metal acetylide catalysts for polymerization of alkynes. 5. Homogeneous copolymerization of polar with non-polar alkynes Y. Li and M. Yang (Hangzhou, PR China)	161
Heterogeneous catalysis	
Hybrid supported zirconocene and niobocene catalysts on MAO-modified silicas J.H.Z. dos Santos, A.E. Gerbase, K.C. Rodenbusch, G.P. Pires, M. Martinelli and K.M. Bichinho (Porto Alegre, Brazil) . .	167
Kinetic study of vapor phase hydrodechlorination of halons by Pd supported catalysts S.B. Halligudi, B.M. Devassay, A. Ghosh and V. Ravikumar (Pune, India)	175
Supported palladium phthalocyanine catalysts in hydrodechlorination of CCl ₂ F ₂ Y.C. Cao and X.Z. Jiang (Hangzhou, PR China)	183
A new and convenient method for the acylation of amino acids in the presence of a modified zeolite: Ersorb [®] Z. Hell, A. Cwik, Z. Finta and Z. Horváth (Budapest, Hungary)	191
Catalytic cracking of n-hexane over MoO ₂ J.H. Song, P. Chen, S.H. Kim, G.A. Somorjai (Berkeley, CA, USA), R.J. Gartside and F.M. Dautzenberg (Bloomfield, NJ, USA)	197
H ₂ reduction behaviors and catalytic performance of bimetallic tin-modified platinum catalysts for propane dehydrogenation J. Salmones, J.-A. Wang, J.A. Galicia and G. Aguilar-Rios (Mexico, Mexico)	203
Liquid-phase oxidation of benzene to phenol by vanadium catalysts in aqueous solvent with high acetic acid concentration Y.-k. Masumoto, R. Hamada, K. Yokota, S. Nishiyama and S. Tsuruya (Kobe, Japan)	215
Implication of the acid-base properties of V/Ti-oxide catalyst in toluene partial oxidation L. Kiwi-Minsker, D.A. Bulushev, F. Rainone and A. Renken (Lausanne, Switzerland)	223
Liquid-phase hydrodechlorination of chlorobenzene over palladium-supported catalysts. Influence of HCl formation and NaOH addition M.A. Aramendía, V. Boráú, I.M. García, C. Jiménez, F. Lafont, A. Marinas, J.M. Marinas and F.J. Urbano (Cordoba, Spain)	237
Benzoylation of benzene and substituted benzenes by benzoyl chloride over In ₂ O ₃ /Si-MCM-41 catalyst V.R. Choudhary and S.K. Jana (Pune, India)	247
Preparation of Mo ₂ C/HZSM-5 and its catalytic performance for the conversion of n-butane into aromatics S. Yuan (Dalian, China), S.B. Derouane-Abd Hamid, Y. Li (Liverpool, UK), P. Ying, Q. Xin (Dalian, China), E.G. Derouane (Liverpool, UK) and C. Li (Dalian, China)	257
Mild hydrogenation of quinoline. 2. A novel Rh-containing pillared layered clay catalyst M. Campanati (Bologna, Italy), M. Casagrande (Mestre-Venezia, Italy), I. Fagiolino (Bologna, Italy), M. Lenarda, L. Storaro, M. Battagliarin (Mestre-Venezia, Italy) and A. Vaccari (Bologna, Italy)	267
Selective synthesis of isobutanol by means of the Guerbet reaction. Part 1. Methanol/n-propanol condensation by using copper based catalytic systems C. Carlini (Pisa, Italy), M. Di Girolamo, M. Marchionna (San Donato Milanese, Italy), M. Noviello, A.M.R. Galletti and G. Sbrana (Pisa, Italy)	273
Stereoselective hydrogenation of p-tert-butylphenol over supported rhodium catalyst G.D. Yadav and P.K. Goel (Mumbai, India)	281
Zeolite encapsulated ruthenium and cobalt schiff base complexes catalyzed allylic oxidation of α -pinene T. Joseph, D.P. Sawant, C.S. Gopinath and S.B. Halligudi (Pune, India)	289
Oligomerization of trimethylsilyl acetylene to form large molecules on reduced surfaces of TiO ₂ (0 0 1) A.B. Sherrill and M.A. Barteau (Newark, DE, USA)	301
CO ₂ reforming of CH ₄ over Rh-containing catalysts U.L. Portugal (Santa Maria, Brazil), A.C.S.F. Santos (São Carlos, Brazil), S. Damyanova (Sofia, Bulgaria), C.M.P. Marques and J.M.C. Bueno (São Carlos, Brazil)	311
New catalysts for deep hydrotreatment of diesel fuel. Kinetics of 4,6-dimethyldibenzothiophene hydrodesulfurization over alumina-supported molybdenum carbide P. Da Costa, C. Potvin, J.-M. Manoli (Paris, France), J.-L. Lemberon, G. Pérot (Poitiers, France) and G. Djéga- Mariadassou (Paris, France)	323
Selective oxidation of propene to acrolein on Mo-Te mixed oxides catalysts prepared from ammonium telluromolybdates P. Botella, J.M. López Nieto and B. Solsona (Valencia, Spain)	335

A combined theoretical and experimental study of supported vanadium oxide catalysts M.L. Ferreira and M. Volpe (Bahía Blanca, Argentina)	349
Reaction testing of phenol hydroxylation and cyclohexane oxidation by gas chromatography: influence of residual hydrogen peroxide N. Ma, Z. Ma, Y. Yue and Z. Gao (Shanghai, PR China)	361
DFT study of ethene metathesis proceeding on monomeric Mo ^{VI} centres of MoO ₃ /Al ₂ O ₃ catalyst. The role of the molybdacyclobutane intermediate J.V. Handzlik and J. Ogonowski (Cracow, Poland)	371
Adsorption of sulfur on Ni _m B ₂ clusters: a theoretical investigation on the mechanism of strong sulfur resistance of Ni–B alloy catalyst C. Luo, W.-N. Wang, M.-H. Qiao and K.-N. Fan (Shanghai, PR China)	379
New aspects of the induction period of ethene polymerization using Phillips CrO _x /SiO ₂ catalyst probed by XPS, TPD and EPMA B. Liu, H. Nakatani and M. Terano (Ishikawa, Japan)	387
Selective preparation of 4,4'-dichlorodiphenylmethane over zeolite K-L catalyst using sulfuryl chloride S.M. Kale and A.P. Singh (Pune, India)	399
Selective oxidations of allylic alcohols with H ₂ O ₂ on a series of lanthanide decatungstate modified with 1-hexadecylpyridinium cation [{C ₅ H ₅ N(CH ₂) ₁₅ CH ₃ } ₇ H ₂ Ln(III)W ₁₀ O ₃₆ ; cetyl-LnW ₁₀ , Ln: La–Er]: kinetic features and working mechanisms Y. Kera, A. Inagaki, Y. Mochizuki, H. Kominami, S. Yamaguchi and J. Kihara (Osaka, Japan)	413
Hydrogenation of crotonaldehyde on Rh-Sn/SiO ₂ catalysts prepared by reaction of tetrabutyltin on prerduced Rh/SiO ₂ precursors P. Reyes, M.C. Aguirre (Concepción, Chile), J.L.G. Fierro (Madrid, Spain), G. Santori and O. Ferretti (La Plata, Argentina)	431
Improved effect on the reduction of NO by propane under oxidizing conditions on sulfated Pt–Sn/Al ₂ O ₃ catalysts G. Corro and R. Montiel (Puebla, Mexico)	443
Homogeneous-phase catalytic H ₂ O ₂ oxidation of isobutyraldehyde using Keggin, Dawson and transition metal-substituted lacunary heteropolyanions J. Hu and R.C. Burns (Callaghan, Australia)	451

Letter

Ionic catalysis by acids, bases and metal ions

A novel catalyst for transesterification of dimethyl carbonate with phenol to diphenyl carbonate: samarium trifluoromethanesulfonate M. Fuming, L. Guangxing, N. Jin and X. Huibi (Hubei, PR China)	465
Author Index	469
Subject Index	473
Volume contents	481