

Contents

Vol. 221, Nos. 1–2

Organometallic and biomimetic catalysis

The effect of halide and the coordination geometry of chromium center in homogeneous catalyst system for ethylene trimerization H.-K. Luo (Belfast, UK), D.-G. Li and S. Li (Lanzhou, PR China)	9
Separation studies in a continuous flow fluorous biphasic system. Proof of concept E. Perperi, Y. Huang, P. Angeli, G. Manos (London, UK) and D.J. Cole-Hamilton (St. Andrews, UK)	19

Ionic catalysis by acids, bases and metal ions

Kinetic studies of carbohydrate oxidation catalyzed by novel isatin–Schiff base copper(II) complexes G. Cerchiaro, G.A. Micke, M.F.M. Tavares and A.M. da Costa Ferreira (São Paulo, Brazil)	29
Ethylene polymerization and ethylene/styrene copolymerization with secondary phosphine-pendant and phosphide-pendant complexes of Zr and Hf T. Ishiyama, K. Miyoshi (Higashi-Hiroshima, Japan) and H. Nakazawa (Osaka, Japan)	41
Selective hydrogenation of SBS catalyzed by Ru/TPPTS complex in polyether modified ammonium salt ionic liquid L. Wei, J. Jiang, Y. Wang and Z. Jin (Dalian, PR China)	47
Fe-modified CuMnZrO ₂ catalysts for higher alcohols synthesis from syngas R. Xu, C. Yang, W. Wei, W.-h. Li, Y.-h. Sun (Taiyuan, PR China) and T.-d. Hu (Beijing, PR China)	51
Novelties of microwave irradiated solid–liquid phase transfer catalysis (MISL-PTC) in synthesis of 2'-benzyloxyacetophenone G.D. Yadav and P.M. Bisht (Mumbai, India)	59

Molecular aspects of heterogeneous catalysis

Electrocatalytic oxidation of sulfite at polymeric iron tetra (4-aminophenyl) porphyrin—modified electrode M. Lucero, G. Ramírez, A. Riquelme, I. Azocar, M. Isaacs, F. Armijo, J.E. Förster, E. Trollund, M.J. Aguirre (Santiago, Chile) and D. Lexa (Marseille, France)	71
The effect of K and Al over NiCo ₂ O ₄ catalyst on its character and catalytic oxidation of VOCs M. Chen and X.-M. Zheng (Hangzhou, PR China)	77
Preparation of activated carbon fibers supported TiO ₂ photocatalyst and evaluation of its photocatalytic reactivity P. Fu, Y. Luan and X. Dai (Beijing, PR China)	81
Auto-reduction of Cu(II) species supported on Al ₂ O ₃ to Cu(I) by thermovacuum treatment F. Amano, T. Tanaka and T. Funabiki (Kyoto, Japan)	89
Vapour-phase Beckmann rearrangement of cyclohexanone-oxime over Al-MCM-41 type mesostructured catalysts L. Forni, C. Tosi, G. Fornasari, F. Trifirò, A. Vaccari and J.B. Nagy (Bologna, Italy)	97
Active Nb ₂ O ₅ -supported nickel and nickel–copper catalysts for methane decomposition to hydrogen and filamentous carbon J. Li, G. Lu, K. Li and W. Wang (Lanzhou, P.R. China)	105
Zirconia supported phosphotungstic acid as an efficient catalyst for resorcinol <i>tert</i> -butylation and <i>n</i> -heptane hydroisomerization B.M. Devassy, S.B. Halligudi (Pune, India), S.P. Elangovan, S. Ernst, M. Hartmann (Kaiserslautern, Germany) and F. Lefebvre (Villeurbanne, France)	113
Synthesis of size controlled Ag nanoparticles B. He (Penang, Malaysia), J.J. Tan (Wuhan, China), K.Y. Liew and H. Liu (Penang, Malaysia)	121
Kinetics and mechanism of steady-state catalytic NO + O ₂ reactions on Pt/SiO ₂ and Pt/CeZrO ₂ R. Marques, P. Darcy, P. Da Costa, H. Mellottée (Paris, France), J.-M. Trichard (Guyancourt, France) and G. Djéga-Mariadassou (Paris, France)	127
Silicagel supported sodium hydrogensulfate as a heterogenous catalyst for high yield synthesis of 3,4-dihydropyrimidin-2 (1 <i>H</i>)-ones M. Adharvana Chari and K. Syamasundar (Kukatpally, India)	137
Selective synthesis of primary methoxypropanol using clay supported tris(2,4-pentanedionato)zirconium(IV) Y. Permana, S. Shimazu, N. Ichikuni and T. Uematsu (Chiba, Japan)	141
Vapour phase reaction of phenol with ethyl acetate over MCM-41 molecular sieves K. Shanmugapriya, R. Anuradha, M. Palanichamy, B. Arabindoo and V. Murugesan (Chennai, India)	145
NCO adsorption over SiO ₂ and Cu/SiO ₂ cluster models from density functional theory R.M. Ferullo and N.J. Castellani (Bahía Blanca, Argentina)	155
Characterization and reactivity of SnO ₂ -doped V ₂ O ₅ /γ-Al ₂ O ₃ catalysts in dehydrogenation of isobutane to isobutene Y. Fu, H. Ma, Z. Wang, W. Zhu, T. Wu and G.-j. Wang (Changchun, PR China)	163

Alumina-supported vanadyl complexes as catalysts for the C–H bond activation of cyclohexene with <i>tert</i> -butylhydroperoxide M. Salavati-Niasari, M.R. Elzami, M.R. Mansournia and S. Hydarzadeh (Kashan, Iran)	169
Dehydration of diols catalyzed by CeO ₂ S. Sato, R. Takahashi, T. Sodesawa and N. Honda (Chiba, Japan)	177
Agglomerated non-porous silica nanoparticles as model carriers in polyethylene synthesis C. du Fresne von Hohenesche (Strasbourg, France), K.K. Unger (Mainz, Germany) and T. Eberle (Darmstadt, Germany)	185
Mesoporous MCM41-heterogenised (salen)Mn and Cu complexes as effective catalysts for oxidation of sulfides to sulfoxides. Isolation of a stable supported Mn(V)=O complex, responsible of the catalytic activity V. Ayala (Madrid, Spain), A. Corma (Valencia, Spain), M. Iglesias and F. Sánchez (Madrid, Spain)	201
Optical and catalytic properties of Ag ₂ S nanoparticles A.I. Kryukov, A.L. Stroyuk, N.N. Zin'chuk, A.V. Korzhak and S.Y. Kuchmii (Kyiv, Ukraine)	209
Author Index	223
Subject Index	225
Volume contents	229