

## Contents

**Vol. 258, Nos. 1–2**

Hydrogenation of 2-ethyl-9,10-anthraquinone on Pd/SiO <sub>2</sub> catalysts. The role of humidity in the transformation of hydroquinone form A. Drelinkiewicz and A. Waksmundzka-Góra (Niezapominajek, Poland and Ingardena, Poland) . . . . .	1
Aqueous phase synthesis of <i>vic</i> -halohydrins from olefins and <i>N</i> -halosuccinimides in the presence of β-cyclodextrin M. Narendar, M.S. Reddy, Y.V.D. Nageswar and K.R. Rao (Hyderabad, India) . . . . .	10
Effect of acidity and porosity changes of dealuminated mordenites on <i>n</i> -hexane isomerization N. Viswanadham, L. Dixit, J.K. Gupta and M.O. Garg (Dehradun, India) . . . . .	15
Reduction of NO by CO over nanoscale LaCo <sub>1-x</sub> Cu <sub>x</sub> O <sub>3</sub> and LaMn <sub>1-x</sub> Cu <sub>x</sub> O <sub>3</sub> perovskites R. Zhang, A. Villanueva (Ste Foy (QC), Canada), H. Alamdar (Local, Canada) and S. Kaliaguine (Ste Foy (QC), Canada) . . . . .	22
Hydroxylation of alkanes by hydrogen peroxide in superacid: A superelectrophilic active intermediate and an ionization–hydration process H. Shi, Y. Wang and Z. Zhang (Beijing, China) . . . . .	35
A skeletal rearrangement study of a carbon-13 labelled 3-methylpentane on doped sulphated zirconia catalysts Ü.B. Demirci and F. Garin (Strasbourg, France) . . . . .	46
Reduction of benzaldehyde on alkaline earth metal oxides A. Saadi, Z. Rassoul (Bab-Ezzouar, Algeria) and M.M. Bettahar (Vandoeuvre-lès-Nancy, France) . . . . .	59
Photo-catalytic degradation of methyl orange and formaldehyde by Ag/InVO <sub>4</sub> –TiO <sub>2</sub> thin films under visible-light irradiation L. Ge (Beijing, PR China and Tianjin, PR China), M. Xu and H. Fang (Tianjin, PR China) . . . . .	68
Metal–polymer complex catalysts on the base of polyethyleneimine for oxidation of sulfides Yu.M. Sultanov (Baku, Azerbaijan), D. Wöhrle (Bremen, Germany) and A.A. Efendiev (Sumgait, Azerbaijan) . . . . .	77
Effect of photocatalytic activity of CO oxidation on Pt/TiO <sub>2</sub> by strong interaction between Pt and TiO <sub>2</sub> under oxidizing atmosphere Q. Li, K. Wang, S. Zhang, M. Zhang, J. Yang and Z. Jin (Kaifeng, China) . . . . .	83
Ullmann coupling reaction in aqueous conditions over the Ph-MCM-41 supported Pd catalyst Y. Wan, J. Chen, D. Zhang and H. Li (Shanghai, China) . . . . .	89
Water dispersible acetate stabilized ruthenium(0) nanoclusters as catalyst for hydrogen generation from the hydrolysis of sodium borohydride M. Zahmakiran and S. Özkar (Ankara, Turkey) . . . . .	95
Effects of pH on the microstructures and photocatalytic activity of mesoporous nanocrystalline titania powders prepared via hydrothermal method J. Yu, Y. Su, B. Cheng and M. Zhou (Wuhan, PR China) . . . . .	104
The novel water-soluble chiral PNNP-type ligand for the enantioselective reduction of ketones in aqueous media B.-Z. Li, J.-S. Chen, Z.-R. Dong, Y.-Y. Li, Q.-B. Li and J.-X. Gao (Fujian, PR China) . . . . .	113
Photocatalytic activity of sulfate modified titania 3: Decolorization of methylene blue in aqueous solution P. Mohapatra and K.M. Parida (Bhubaneswar, India) . . . . .	118
Nano-Ag particles doped TiO <sub>2</sub> for efficient photodegradation of Direct azo dyes N. Sobana, M. Muruganadham and M. Swaminathan (Annamalai Nagar, India) . . . . .	124
One-pot synthesis of Biginelli and Hantzsch products catalyzed by non-toxic ionic liquid (BMImSac) and structural determination of two products M. Li, W.-S. Guo, L.-R. Wen, Y.-F. Li (Qingdao, PR China) and H.-Z. Yang (Tianjin, PR China) . . . . .	133
Styrene polymerization with half-sandwich titanium complexes bearing pendent alkenyl groups: From atactic to syndiotactic C. Wang, R. Liu, J. Huang and W. Xiao (Shanghai, PR China) . . . . .	139
Propylene polymerization catalyzed by constrained geometry (cyclopentadienyl)phenoxytitanium catalysts C. Lü (Changchun, People's Republic of China and Daqing, People's Republic of China), Y. Zhang and Y. Mu (Changchun, People's Republic of China) . . . . .	146
An industrially usable Pd-catalyzed carboalkoxylation of 1,2-dibromo-3,3,3-trifluoropropane to <i>tert</i> -butyl trifluoromethacrylate in the presence of an inorganic base Y. Horino, N. Wakasa, T. Fuchikami and T. Yamakawa (Kanagawa, Japan) . . . . .	152
Biphenyl-oxazoline ligands derived from β-DDB: Their synthesis and application in asymmetric pinacol coupling reaction J. Wen, Q. Tan and T. You (Anhui, PR China) . . . . .	159
Simple preparation routes towards novel Zn-based catalysts for the solventless synthesis of propylene carbonate using dense carbon dioxide M. Ramin, N. van Veggel, J.-D. Grunwaldt and A. Baiker (Zurich, Switzerland) . . . . .	165
Oxidation of cyclohexene with molecular oxygen catalyzed by cobalt porphyrin complexes immobilized on montmorillonite H. Kameyama, F. Narumi (Ishinomaki, Japan), T. Hattori (Sendai, Japan) and H. Kameyama (Ishinomaki, Japan) . . . . .	172
Novel Schiff base complexes as catalysts in aerobic selective oxidation of β-isophorone J. Mao, N. Li, H. Li and X. Hu (Hangzhou, PR China) . . . . .	178

A novel photocatalyst $\text{PbSb}_2\text{O}_6$ for degradation of methylene blue K.-L. Zhang, X.-P. Lin (Shanghai, China and Beijing, China), F.-Q. Huang (Shanghai, China) and W.-D. Wang (Shanghai, China and Beijing, China) .....	185
Calculation on enantiomeric excess of catalytic asymmetric reactions of diethylzinc addition to aldehydes with topological indices and artificial neural network J. Chen, W. Jiwu, L. Mingzong and T. You (China) .....	191
A simple and improved regioselective bromination of aromatic compounds using <i>N</i> -methylpyrrolidin-2-one hydrotribromide and aqueous hydrogen peroxide under mild reaction conditions S. Singhal, S.L. Jain and B. Jain (Dehradun, India) .....	198
DFT studies of methanol decomposition on Ni(1 0 0) surface: Compared with Ni(1 1 1) surface Y.-H. Zhou (Tianjin, PR China), P.-H. Lv (An Yang, PR China) and G.-C. Wang (Tianjin, PR China) .....	203
Asymmetric addition of diethylzinc to benzaldehyde catalyzed by silica-immobilized titanium(IV) complexes of <i>N</i> -sulfonylated amino alcohols L.-N. Huang, X.-P. Hui and P.-F. Xu (Lanzhou, PR China) .....	216
Effect of the reduction-preparation method on the surface states and catalytic properties of supported-nickel particles M. Cerro-Alarcón, B. Bachiller-Baeza, A. Guerrero-Ruiz and I. Rodríguez-Ramos (Madrid, Spain and Unidad Asociada, Spain) .....	221
The influence of substrate composition on the kinetics of olefin epoxidation by hydrogen peroxide catalyzed by iron(III) [tetrakis(pentafluorophenyl)] porphyrin N.A. Stephenson and A.T. Bell (Berkeley, CA, USA) .....	231
Supported modified zirconocene catalyst for ethylene polymerization P. Carrión, F. Carrillo-Hermosilla, C. Alonso-Moreno, A. Otero, A. Antíñolo (Ciudad Real, Spain), J. Sancho (Móstoles, Spain) and E. Villaseñor (Ciudad Real, Spain) .....	236
Methane conversion and $\text{SO}_2$ resistance of $\text{LaMn}_{1-x}\text{Fe}_x\text{O}_3$ ( $x = 0.4, 0.5, 0.6, 1$ ) perovskite catalysts promoted with palladium M.J. Koponen, T. Venäläinen, M. Suvanto (Joensuu, Finland), K. Kallinen, T.-J.J. Kinnunen, M. Häkkinen (Oulu, Finland) and T.A. Pakkanen (Joensuu, Finland) .....	246
Pyridinium ionic liquids-accelerated amine-catalyzed Morita–Baylis–Hillman reaction S.-H. Zhao, H.-R. Zhang (Xinzhou, PR China), L.-H. Feng and Z.-B. Chen (Taiyuan, PR China) .....	251
Synthesis of a novel fumed silica-supported bidentate arsine rhodium complex and its catalytic behavior in the hydrosilylation of olefins with triethoxysilane G. Liu and M. Cai (Nanchang, PR China) .....	257
Deep desulfurization from fuel oil via selective oxidation using an amphiphilic peroxotungsten catalyst assembled in emulsion droplets J. Gao, S. Wang, Z. Jiang, H. Lu, Y. Yang, F. Jing and C. Li (Dalian, China) .....	261
Ethylene polymerization with nickel complexes containing aminophosphine ligands M.C.B. Dolinsky, W.O. Lin and M.L. Dias (Rio de Janeiro, Brazil) .....	267
Tridentate [N,N,O] Schiff-base group 4 metal complexes: Synthesis, structural characterization and reactivity in olefin polymerization G. Paolucci, A. Zanella, L. Sperni (Venezia, Italy), V. Bertolasi (Ferrara, Italy), M. Mazzeo and C. Pellecchia (Baronissi (SA), Italy) .....	275
Polymerization of ethylene and propene promoted by binaphthyl-bridged Schiff base complexes of titanium M. Strianese, M. Lamberti, M. Mazzeo, C. Tedesco and C. Pellecchia (Salerno, Italy) .....	284
The liquid-phase oxidation of olefins by molecular oxygen in the presence of metal borides and $\text{MoO}_3$ Yu. Trach (Lviv, Ukraine), B. Schulze (Leipzig, Germany), O. Makota and L. Bulgakova (Lviv, Ukraine) .....	292
The role of carboxylic acids on a $\text{Na}_2\text{WO}_4/\text{H}_2\text{WO}_4$ -based biphasic homogeneous alkene epoxidation, using $\text{H}_2\text{O}_2$ as oxidant P.U. Maheswari, X. Tang (Leiden, The Netherlands), R. Hage (Vlaardingen, The Netherlands), P. Gamez and J. Reedijk (Leiden, The Netherlands) .....	295
An easy-to-use heterogeneous promoted zirconia catalyst for Knoevenagel condensation in liquid phase under solvent-free conditions B.M. Reddy, M.K. Patil, K.N. Rao and G.K. Reddy (Hyderabad, India) .....	302
Influence of preparation methods on the structure and performance of $\text{CaO-ZrO}_2$ catalyst for the synthesis of dimethyl carbonate via transesterification H. Wang, M. Wang, S. Liu (Taiyuan, PR China and Beijing, China), N. Zhao, W. Wei and Y. Sun (Taiyuan, PR China) .....	308
Dispersion and reactivity of monolayer vanadium oxide catalysts supported on zirconia: The influence of molybdena addition K.V.R. Chary, C.P. Kumar, T. Rajiah and C.S. Srikanth (Hyderabad, India) .....	313
Oxidation of cyclic ketones by cerium(IV) in presence of iridium(III) chloride P.K. Tandon, S. Sahgal, A.K. Singh, S. Kumar and M. Dhusia (Allahabad, India) .....	320
Styrene oxidation by manganese Schiff base complexes in zeolite structures M. Silva, C. Freire, B. de Castro and J.L. Figueiredo (Porto, Portugal) .....	327
Lightly fluororous $[\text{Pd}(\text{OAc})_2\{\text{P}(\text{C}_6\text{H}_4-p\text{-SiMe}_2\text{CH}_2\text{CH}_2\text{C}_6\text{F}_{13})_3\}_2]$ in the methoxycarbonylation of styrene: Formation, performance and stability of the catalyst system J.J.M. de Pater (Utrecht, The Netherlands and Amsterdam, The Netherlands), B.-J. Deelman (Utrecht, The Netherlands and Vlissingen, The Netherlands), C.J. Elsevier (Amsterdam, The Netherlands) and G. van Koten (Utrecht, The Netherlands) .....	334
Computer simulation study of self-diffusion in Pd(1 1 1) surface G.-X. Chen, J.-M. Zhang, K.-W. Xu (Shaanxi, PR China) and V. Ji (Paris, France) .....	341
Styrene epoxidation over cesium promoted silver nanowires catalysts R.J. Chimentão, F. Medina (Tarragona, Spain), J.L.G. Fierro (Madrid, Spain), J.E. Sueiras, Y. Cesteros and P. Salagre (Tarragona, Spain) .....	346
Dehydration of 4-methylpentan-2-ol over $\text{Ce}_x\text{Zr}_{1-x}\text{O}_2/\text{SiO}_2$ nano-composite catalyst B.M. Reddy, P. Lakshmanan, P. Bharali and P. Saikia (Hyderabad, India) .....	355
Intramolecular imino-Diels–Alder reactions in [bmim] $\text{BF}_4^-$ ionic medium: Green protocol for the synthesis of tetrahydrochromanoquinolines J.S. Yadav (Hyderabad, India), B.V.S. Reddy (Cambridge, MA, USA), G. Kondaji, S. Sowjanya and K. Nagaiah (Hyderabad, India) .....	361
One-pot synthesis of 3,4-dihydropyrimidin-2(1H)-(thio)ones using strontium(II) nitrate as a catalyst C. Liu, J. Wang and Y. Li (Urumqi, PR China) .....	367

An expeditious synthesis of 3-amino 2 <i>H</i> -pyrazoles promoted by methanesulphonic acid under solvent and solvent free conditions N. Suryakiran, T.S. Reddy, K.A. Latha, P. Prabhakar, K. Yadagiri and Y. Venkateswarlu (Hyderabad, India) . . . . .	371
Following nature—Theoretical studies on factors modulating catalytic activity of porphyrins D. Rutkowska-Zbik and M. Witko (Krakow, Poland) . . . . .	376
Studies on MCM-41: Effect of sulfate on nitration of phenol K.M. Parida and D. Rath (Bhubaneswar, India) . . . . .	381
Volume contents . . . . .	388