

Contents

SPECIAL ISSUE

Some Aspects of Catalysis

Guest Editors: Bai-Qing Dai, Jing-Xin Gao, Da-Zhi Jiang

Preface.	1
Palladium-catalyzed arylation of ethylene. A synthetic route to styrenes, stilbenes, and poly(phenylene vinylene)s J. Kiji, T. Okano and A. Ooue (Tottori, Japan)	
	3
Nickel(0)-catalyzed monoyno-maleimide double-cycloaddition and its application to nickel(0)-catalyzed diyne-maleimide, monoyno-dimaleimide, and diyne-dimaleimide double-cycloaddition copolymerizations T. Tsuda (Kyoto, Japan)	
	11
Synthesis and characterization of poly(norbornene) substituted with phthalimide and ammonium groups via living ring-opening metathesis polymerization D.-J. Liaw and C.-H. Tsai (Taipei, Taiwan)	
	23
Ab initio MO studies on protonation mechanism of ethylene over catalyst HZSM-5 Z. Guiling, L. Gang and D. Baiqing (Harbin, China)	
	33
The synthesis of sucrose ester and selection of its catalyst X. Liu, L. Gong, M. Xin and J. Liu (Harbin, China)	
	37
A study on the reforming of natural gas with steam, oxygen and carbon dioxide to produce syngas for methanol feedstock H. Xu, K. Shi, Y. Shang, Y. Zhang, G. Xu and Y. Wei (Harbin, China)	
	41
Studies of reforming natural gas with carbon dioxide to produce synthesis gas. X. The role of CeO ₂ and MgO promoters G. Xu, K. Shi, Y. Gao, H. Xu and Y. Wei (Harbin, China)	
	47
Hydrogenation of <i>o</i> -chloronitrobenzene over polymer-stabilized palladium–platinum bimetallic colloidal clusters X. Yang, H. Liu and H. Zhong (Beijing, China)	
	55
Enantioselective hydrogenation of methyl pyruvate over polymer-stabilized and supported iridium clusters X. Zuo, H. Liu and C. Yue (Beijing, China)	
	63
Modification of metal cations to the supported metal colloid catalysts W. Yu, H. Liu, X. An, X. Ma, Z. Liu and L. Qiang (Beijing, China)	
	73
Ring-opening metathesis polymerization of dicyclopentadiene by tungsten catalysts supported on polystyrene H. Li, Z. Wang and B. He (Tianjin, China)	
	83
Catalytic behavior of a Wool–Pd complex in asymmetric hydrogenation of diacetone alcohol and 3-methyl-2-butanol M.-Y. Yin, G.-L. Yuan, M.-Y. Huang and Y.-Y. Jiang (Beijing, China)	
	89
Asymmetric hydrogenation of ketones catalyzed by a silica-supported chitosan–palladium complex M.-Y. Yin, G.-L. Yuan, Y.-Q. Wu, M.-Y. Huang and Y.-Y. Jiang (Beijing, China)	
	93
Hydrogenation and hydroformylation of olefins with water-soluble Ru ₃ (CO) ₉ (TPPMS) ₃ catalyst J.-x. Gao, P.-p. Xu, X.-d. Yi, H.-l. Wan and K.-r. Tsai (Fujian, China)	
	99
Asymmetric transfer hydrogenation of prochiral ketones catalyzed by chiral ruthenium complexes with aminophosphine ligands J.-x. Gao, P.-p. Xu, X.-d. Yi, C.-b. Yang, H. Zhang, S.-h. Cheng, H.-l. Wan, K.-r. Tsai (Xiamen, China) and T. Ikariya (Tokyo, Japan)	
	105
Nickel-catalyzed carbonylation of methyl acetate to acetic anhydride J. Gong, Q. Fan and D. Jiang (Beijing, China)	
	113
Methanol synthesis from syngas in the homogeneous system K. Li and D. Jiang (Beijing, China)	
	125
Thermoregulated phase transfer ligands and catalysis. VII. Cloud point of nonionic surface-active phosphine ligands and their thermoregulated phase transfer property J. Jiang, Y. Wang, C. Liu, F. Han and Z. Jin (Dalian, China)	
	131
C–O and C–S bond activation of allyl esters, ethers, and sulfides by low valent ruthenium complexes J.G. Planas, T. Marumo, Y. Ichikawa, M. Hirano and S. Komiya (Koganei, Japan)	
	137
Catalytic behaviors of the palladium complex of MgO-supported melamino-formaldehyde polymer for hydrogenations of different substrates S. Xu, J. He and S. Cao (Zhengzhou, China)	
	155
Preparation and activity of the catalysts for the synthesis of carboxylic ester with high boiling point D. Tang, J. Huang, Y. Zhou, Y. Zhang and Q. Chen (Harbin, China)	
	159
Photocatalytic oxidation of aromatic aldehydes with Co(II)tetra-(benzoyloxyphenyl)porphyrin and molecular oxygen H. Chen, T. An, Y. Fang and K. Zhu (Lanzhou, China)	
	165
Amino acid Schiff base complex catalyst for effective oxidation of olefins with molecular oxygen R.-M. Wang, C.-J. Hao, Y.-P. Wang and S.-B. Li (Lanzhou, China)	
	173

Photochemical self-assembly reactions of polyoxovanadates. Structure of MoO_4^{2-} -encapsulated mixed-valent cluster [$\text{V}_{22}\text{O}_{54}(\text{MoO}_4)$] $^{8-}$ and template-exchange reaction of [$\text{V}_{18}\text{O}_{42}(\text{H}_2\text{O})$] $^{12-}$ T. Yamase, L. Yang and R. Suzuki (Yokohama, Japan)	179
Author index Vol. 147	191
Subject index Vol. 147	193