

Contents

Preface	111
The preparation and activity of copper zinc oxide catalysts for ambient temperature carbon monoxide oxidation S.H. Taylor, G.J. Hutchings and A.A. Mirzaei	113
Inhibition effects of organosulphur compounds on the hydrodechlorination of tetrachloroethylene over Pd/Al ₂ O ₃ catalysts E. López, S. Ordóñez and F.V. Díez	121
Deep desulfurization: reactions, catalysts and technological challenges M. Breyse, G. Djega-Mariadassou, S. Pessayre, C. Geantet, M. Vrinat, G. Pérot and M. Lemaire	129
Selective catalytic reduction of NO _x with propylene in the presence of oxygen over Co–Pt promoted H-MFI and HY S.E. Maisuls, L. Lefferts, K. Seshan, T. Furusawa, K. Aika, B. Mosqueda-Jimenez, M. Smidt and J.A. Lercher	139
Dehydrogenation of light alkanes over oxidized diamond-supported catalysts in the presence of carbon dioxide K. Nakagawa, C. Kajita, N.-o. Ikenaga, M. Nishitani-Gamo, T. Ando and T. Suzuki	149
Catalytic activity of Pd loaded on WO ₃ /Al ₂ O ₃ for NO–CH ₄ –O ₂ in the presence of water vapor R. Yoshimoto, K. Okumura and M. Niwa	159
Decomposition of NO and N ₂ O on Cu-AITS-1: oscillatory behaviour at full N ₂ O conversion Z. Schay, L. Guczi, G. Pál-Borbély and A.V. Ramaswamy	165
Effects of pH and surface modification of TiO ₂ with SiO _x on the photocatalytic degradation of a pyrimidine derivative H.-S. Lee, T. Hur, S. Kim, J.-H. Kim and H.-I. Lee	173
Solvothermal syntheses of semiconductor photocatalysts of ultra-high activities H. Kominami, J.-i. Kato, S.-y. Murakami, Y. Ishii, M. Kohno, K.-i. Yabutani, T. Yamamoto, Y. Kera, M. Inoue, T. Inui and B. Ohtani	181
Photocatalytic degradation of organic compounds diluted in water using visible light-responsive metal ion-implanted TiO ₂ catalysts: Fe ion-implanted TiO ₂ H. Yamashita, M. Harada, J. Misaka, M. Takeuchi, B. Neppolian and M. Anpo	191
Development of kerosene fuel processing system for PEFC T. Fukunaga, H. Katsuno, H. Matsumoto, O. Takahashi and Y. Akai	197
NO _x storage and reduction characteristics of Pd/MnO _x –CeO ₂ at low temperature M. Machida, D. Kurogi and T. Kijima	201
Development of residential PEFC cogeneration systems: Ru catalyst for CO preferential oxidation in reformed gas M. Echigo, N. Shinke, S. Takami, S. Higashiguchi, K. Hirai and T. Tabata	209
Effect of precious metal addition to Ni-YSZ cermet on reforming of CH ₄ and electrochemical activity as SOFC anode T. Takeguchi, R. Kikuchi, T. Yano, K. Eguchi and K. Murata	217
Electrochemical oxidation of CO in sulfuric acid solution over Pt and PtRu catalysts modified with TaO _x and NbO _x A. Ueda, Y. Yamada, T. Ioroi, N. Fujiwara, K. Yasuda, Y. Miyazaki and T. Kobayashi	223
Previous Issues of Catalysis Today	I