

Catalysis Today 55 (2000) 369-372



Subject index

Acetic acid

Catalytic wet oxidation with H_2O_2 of carboxylic acids on homogeneous and heterogeneous Fenton-type catalysts $61\,$

Acetone

Mg- and Ni-containing layered double hydroxides as soda substitutes in the aldol condensation of acetone 103

Activated carbon

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl₂F₂ (CFC-12) into CH₂F₂ (HFC-32) 125

Activated carbon

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Activity

Alkylation of biphenyl with propylene using acid catalysts 225 Adsorbed NO

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Adsorption

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Alcohol

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Alcohol synthesis

Advances in catalytic synthesis and utilization of higher alcohols 233

Aldol condensation

Mg- and Ni-containing layered double hydroxides as soda substitutes in the aldol condensation of acetone 103

Alkali

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/ C_2 H₄ reactions 247

Alkylation of biphenyl

Alkylation of biphenyl with propylene using acid catalysts 225 Ambient ozone destruction

Environmental catalysis into the 21st century 179

Basic solids

Mg- and Ni-containing layered double hydroxides as soda substitutes in the aldol condensation of acetone 103

Beta

Alkylation of biphenyl with propylene using acid catalysts 225

Carbon dioxide

Dehydrogenation of ethylbenzene to styrene over Fe₂O₃/Al₂O₃ catalysts in the presence of carbon dioxide 173

Catalysis

A role of catalysis for the destruction of waste from the nuclear industry 23

The role of catalysis in the design, development, and implementation of green chemistry 11

Catalyst

A role of catalysis for the destruction of waste from the nuclear industry 23

Improving the catalytic nitrate reduction 79

Catalyst performance

Solid acids as substitutes for sulfuric acid in the liquid phase nitration of toluene to nitrotoluene and dinitrotoluene 151

Catalytic combustion

Environmental catalysis into the 21st century 179

Catalytic cracking

The chemistry of olefins production by ZSM-5 addition to catalytic cracking units 207

CCl₂F₂

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl₂F₂ (CFC-12) into CH₂F₂ (HFC-32) 125

CFC

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl₂F₂ (CFC-12) into CH₂F₂ (HFC-32) 125

CH_2F

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl₂F₂ (CFC-12) into CH₂F₂ (HFC-32) 125

Chemical warfare agent

Catalytic hydrodesulfurization and hydrodechlorination of chloroethyl ethyl sulfide $\boldsymbol{3}$

Chloroethyl ethyl sulfide

Catalytic hydrodesulfurization and hydrodechlorination of chloroethyl ethyl sulfide 3

Chlorofluorocarbons

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl_2F_2 (CFC-12) into CH_2F_2 (HFC-32) 125

Claus reaction

The Mobil Oil SO_x Treatment Process (MOST). Catalytic removal of SO_x and H_2S from refinery tailgas 311

PII: S0920-5861(99)00321-1

Clean fuels

The chemistry of olefins production by ZSM-5 addition to catalytic cracking units 207

CO hydrogenation

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

CO insertion

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/ C_2 H₄ reactions 247

Copper

Rinse water purification using solid regenerable catalytic adsorbents 51

Copper catalysts

Advances in catalytic synthesis and utilization of higher alcohols 233

Coprecipitated catalyst

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/ C_2 H₄ reactions 247

Coulometry

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3 \ as \ the \ anode \ and \ cathode \ for \ intermediate temperature \ solid \ oxide \ fuel \ cells \ 197$

Cs-TPA

Cs-substituted tungstophosphoric acid salt supported on mesoporous silica 117

Dehydrogenation

Dehydrogenation of ethylbenzene to styrene over Fe_2O_3/Al_2O_3 catalysts in the presence of carbon dioxide 173

Selective dehydrogenation of isobutane over supported Pt/Sn catalysts 213

Emissions

The Mobil Oil SO_x Treatment Process (MOST). Catalytic removal of SO_x and H_2S from refinery tailgas 311

Emissions control

Testing zeolite SCR catalysts under protocol conditions for NO_x abatement from stationary emission sources 281

Environmental protection

The role of catalysis in the design, development, and implementation of green chemistry 11

Ethylbenzene

Dehydrogenation of ethylbenzene to styrene over Fe₂O₃/Al₂O₃ catalysts in the presence of carbon dioxide 173

Fe/ZSM5

Catalytic wet oxidation with H_2O_2 of carboxylic acids on homogeneous and heterogeneous Fenton-type catalysts $61\,$

Fe₂O₃/Al₂O₃ catalysts

Dehydrogenation of ethylbenzene to styrene over Fe₂O₃/Al₂O₃ catalysts in the presence of carbon dioxide 173

Fischer-Tropsch synthesis

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/ C_2 H₄ reactions 247

Fluidized bed

A role of catalysis for the destruction of waste from the nuclear industry 23

Formic acid

Improving the catalytic nitrate reduction 79

Fuel cells

Environmental catalysis into the 21st century 179

Green chemistry

The role of catalysis in the design, development, and implementation of green chemistry 11

Green manufacturing

Environmental catalysis into the 21st century 179

Group VIII metals

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Heteropoly acid (HPA)

Cs-substituted tungstophosphoric acid salt supported on mesoporous silica 117

Higher alcohols

Advances in catalytic synthesis and utilization of higher alcohols 233

HY zeolite

Alkylation of biphenyl with propylene using acid catalysts 225

Hydrodechlorination

Catalytic hydrodesulfurization and hydrodechlorination of chloroethyl ethyl sulfide 3

Hydrodesulfurization

Catalytic hydrodesulfurization and hydrodechlorination of chloroethyl ethyl sulfide 3

Hydroformylation

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Hydrogen peroxide

Catalytic wet oxidation with H_2O_2 of carboxylic acids on homogeneous and heterogeneous Fenton-type catalysts $61\,$

Hydrogen sulfide

The Mobil Oil SO_x Treatment Process (MOST). Catalytic removal of SO_x and H_2S from refinery tailgas 311

Hydrogenation

Use of palladium based catalysts in the hydrogenation of nitrates in drinking water: from powders to membranes 139

Hydrogenolysis

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl_2F_2 (CFC-12) into CH_2F_2 (HFC-32) 125

Hydroxyl radical

New developments in the photocatalytic conversion of methane to methanol 259

Infrared spectroscopy

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Isobutane

Selective dehydrogenation of isobutane over supported Pt/Sn catalysts 213

Isobutanol

Advances in catalytic synthesis and utilization of higher alcohols 233

Layered double hydroxides

Mg- and Ni-containing layered double hydroxides as soda substitutes in the aldol condensation of acetone 103

Lean NOx reduction

Environmental catalysis into the 21st century 179

MCM-22

Alkylation of biphenyl with propylene using acid catalysts 225

Meixnerite-like compounds

Mg- and Ni-containing layered double hydroxides as soda substitutes in the aldol condensation of acetone 103

Membrane catalysts

Use of palladium based catalysts in the hydrogenation of nitrates in drinking water: from powders to membranes 139

Membrane photoreactor

Study on a photocatalytic membrane reactor for water purification 71

Mesoporous silica

Cs-substituted tungstophosphoric acid salt supported on mesoporous silica 117

Methane conversion

New developments in the photocatalytic conversion of methane to methanol 259

Methane oxidation

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3 \ as \ the \ anode \ and \ cathode \ for \ intermediate temperature \ solid \ oxide \ fuel \ cells \ 197$

Methanol

Advances in catalytic synthesis and utilization of higher alcohols 233

New developments in the photocatalytic conversion of methane to methanol 259

Mixed waste treatment

A role of catalysis for the destruction of waste from the nuclear industry 23

Mn

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Mo

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/ C_2 H₄ reactions 247

Molten salts

A role of catalysis for the destruction of waste from the nuclear industry 23

NH₃ production

Structural and catalytic properties of Pd/Al $_2$ O $_3$ -La $_2$ O $_3$ catalysts 301

Ni

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Nitrate

Use of palladium based catalysts in the hydrogenation of nitrates in drinking water: from powders to membranes 139

Nitrate reduction

Improving the catalytic nitrate reduction 79

Nitration

Solid acids as substitutes for sulfuric acid in the liquid phase nitration of toluene to nitrotoluene and dinitrotoluene 151

Nitric oxide

Testing zeolite SCR catalysts under protocol conditions for NO_x abatement from stationary emission sources 281

Nitrogen oxide reduction

Structural and catalytic properties of Pd/Al $_2$ O $_3$ -La $_2$ O $_3$ catalysts 301

4-Nitrophenol photodegradation

Study on a photocatalytic membrane reactor for water purification 71

NO abatement

Testing zeolite SCR catalysts under protocol conditions for NO_x abatement from stationary emission sources 281

NO decomposition

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Olefins

The chemistry of olefins production by ZSM-5 addition to catalytic cracking units 207

Oxygen desorption

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Oxygen stoichiometry

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3$ as the anode and cathode for intermediate temperature solid oxide fuel cells 197

Oxygenates

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Palladium

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl₂F₂ (CFC-12) into CH₂F₂ (HFC-32) 125

Palladiun

Use of palladium based catalysts in the hydrogenation of nitrates in drinking water: from powders to membranes 139

Palladium-indium

Improving the catalytic nitrate reduction 79

Palladium-tin

Improving the catalytic nitrate reduction 79

Pd

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Pd/Al₂O₃-La₂O₃ catalysts

 $Structural \, and \, catalytic \, properties \, of \, Pd/Al_2O_3-La_2O_3 \, catalysts \, 301$

Perovskite

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3$ as the anode and cathode for intermediate temperature solid oxide fuel cells 197

Photocatalysis

Environmental catalysis into the 21st century 179

New developments in the photocatalytic conversion of methane to methanol 259

Process development

Development of a palladium on activated carbon for a conceptual process in the selective hydrogenolysis of CCl_2F_2 (CFC-12) into CH_2F_2 (HFC-32) 125

Propionic acid

Catalytic wet oxidation with H_2O_2 of carboxylic acids on homogeneous and heterogeneous Fenton-type catalysts 61

Propylene

Alkylation of biphenyl with propylene using acid catalysts 225 Pt/Sn catalysts

Selective dehydrogenation of isobutane over supported Pt/Sn catalysts 213

Rh

In situ infrared study of catalytic decomposition of NO on carbon-supported Rh and Pd catalysts 291

Rinse water

Rinse water purification using solid regenerable catalytic adsorbents 51

Selective catalytic reduction

Testing zeolite SCR catalysts under protocol conditions for NO_x abatement from stationary emission sources 281

Selective catalytic reduction of NO_x

A role of catalysis for the destruction of waste from the nuclear industry 23

Shape selectivity

Alkylation of biphenyl with propylene using acid catalysts 225 Slurry phase

Advances in catalytic synthesis and utilization of higher alcohols 233

SO_x removal

The Mobil Oil SO_x Treatment Process (MOST). Catalytic removal of SO_x and H_2S from refinery tailgas 311

Sodium-gluconate

Rinse water purification using solid regenerable catalytic adsorbents 51

Sol-gel preparation method

Structural and catalytic properties of Pd/Al₂O₃–La₂O₃ catalysts 301 Solid acids

Solid acids as substitutes for sulfuric acid in the liquid phase nitration of toluene to nitrotoluene and dinitrotoluene 151

Solid electrolyte

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3$ as the anode and cathode for intermediate temperature solid oxide fuel cells 197

Solid oxide fuel cells

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3$ as the anode and cathode for intermediate temperature solid oxide fuel cells 197

Spinel sorbent

The Mobil Oil SO_x Treatment Process (MOST). Catalytic removal of SO_x and H_2S from refinery tailgas 311

SSZ-25

Alkylation of biphenyl with propylene using acid catalysts 225

Alkylation of biphenyl with propylene using acid catalysts 225 Styrene

Dehydrogenation of ethylbenzene to styrene over Fe₂O₃/Al₂O₃ catalysts in the presence of carbon dioxide 173

Sulfidation

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Supported metal catalyst

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C_{2+} oxygenate synthesis from the CO hydrogenation and CO/H₂/ C_2 H₄ reactions 247

Synthetic fuel

Activity and selectivity of Group VIII, alkali-promoted Mn-Ni, and Mo-based catalysts for C₂₊ oxygenate synthesis from the CO hydrogenation and CO/H₂/C₂H₄ reactions 247

Temperature programmed techniques

 $La_{0.6}Sr_{0.4}Co_{0.2}Fe_{0.8}O_3$ as the anode and cathode for intermediate temperature solid oxide fuel cells 197

TiO₂ photocatalyst

Study on a photocatalytic membrane reactor for water purification 71

Triethanolamine

Rinse water purification using solid regenerable catalytic adsorbents 51

Tungsten oxide catalysts

New developments in the photocatalytic conversion of methane to methanol 259

Tungstophosphoric acid (TPA)

Cs-substituted tungstophosphoric acid salt supported on mesoporous silica 117

Waste disposal

Catalytic hydrodesulfurization and hydrodechlorination of chloroethyl ethyl sulfide 3

Wet and dry oxidation

Rinse water purification using solid regenerable catalytic adsorbents 51

Wet oxidation

Catalytic wet oxidation with H₂O₂ of carboxylic acids on homogeneous and heterogeneous Fenton-type catalysts 61

Zeolites

The chemistry of olefins production by ZSM-5 addition to catalytic cracking units 207

Testing zeolite SCR catalysts under protocol conditions for NO_x abatement from stationary emission sources 281

Zirconia

Use of palladium based catalysts in the hydrogenation of nitrates in drinking water: from powders to membranes 139

ZSM-5

The chemistry of olefins production by ZSM-5 addition to catalytic cracking units 207