

Journal of Molecular Catalysis A: Chemical 151 (2000) 319-323



www.elsevier.com/locate/molcata

Subject index

Acetic acid

Mg/Al hydrotalcites: preparation, characterisation and ketonisation of acetic acid (Parida, K. (151) 185)

Acetylation of crown ethers

Heterogeneous catalysis for the acetylation of benzo crown ethers (Biró, K. (151) 179)

Acetyl chloride

Heterogeneous catalysis for the acetylation of benzo crown ethers (Biró, K. (151) 179)

Acid sites characterization

Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2furaldehyde (Armaroli, T. (151) 233)

Activity

Hydroesterification of styrene using an in situ formed Pd(OTs)₂(PPh₃)₂ complex catalyst (Seayad, A. (151) 47)

Ammonia

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Aniline

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Vapour phase synthesis of quinoline from aniline and glycerol over mixed oxide catalysts (Reddy, B.M. (151) 289)

Arylpropionic acid

Hydroesterification of styrene using an in situ formed $Pd(OTs)_2(PPh_3)_2$ complex catalyst (Seayad, A. (151) 47)

Bipyridine containing aromatic polyamide

A new type of support 'bipyridine containing aromatic polyamide' to $CuCl_2$ for synthesis of dimethyl carbonate (DMC) by oxidative carbonylation of methanol (Sato, Y. (151) 79)

Bisviologen-linked ruthenium(II) complexes

Photoinduced hydrogen evolution with bisviologen-linked ruthenium(II) complexes and hydrogenase (Hiraishi, T. (151) 7)

Carbonylation

Hydroesterification of styrene using an in situ formed $Pd(OTs)_2(PPh_3)_2$ complex catalyst (Seayad, A. (151) 47)

Carbosilane dendrimers

Low-generation carbosilane dendrimers as core for starpolymers using a Ru-ROMP catalyst (Beerens, H. (151) 279)

Catalysis

Regioselective aerobic oxidation of bis-sulfides into monosulfoxides (Dell'Anna, M.M. (151) 61)

Lewis base adducts of bis-(halogeno)dioxomolybdenum(VI): syntheses, structures, and catalytic applications (Kühn, F.E. (151) 147)

Catalyst deactivation

Transformation of cyclohexene on palladium catalysts: activity and deactivation (Aramendía, M.A. (151) 261)

Catalyst design

A new concept for the application of linear free energy relationships in catalysis (Ramírez-Corredores, M.M. (151) 271)

Catalyst regeneration

Transformation of cyclohexene on palladium catalysts: activity and deactivation (Aramendía, M.A. (151) 261)

Catalysts

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

Catalytic

Hydrosilylation of ketones catalyzed by tricarbonyl(naphthalene)manganese cation (Son, S.U. (151) 87)

Characterisation

Mg/Al hydrotalcites: preparation, characterisation and ketonisation of acetic acid (Parida, K. (151) 185)

Chelating ligands

The promoting effect of chelating ligands in the oxidative carbonylation of phenol to diphenyl carbonate catalyzed by Pd–Co–benzoquinone system (Vavasori, A. (151) 37)

Lewis base adducts of bis-(halogeno)dioxomolybdenum(VI): syntheses, structures, and catalytic applications (Kühn, F.E. (151) 147)

Chemical

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Chemometrics

In situ UV–Vis diffuse reflectance spectroscopy — *on line* activity measurements of supported chromium oxide catalysts: relating isobutane dehydrogenation activity with Cr-speciation via experimental design (Weckhuysen, B.M. (151) 115)

CO

Studies on palladium-bisphosphine catalyzed alternating copolymerization of CO and ethylene (Luo, H.-K. (151) 91) Corrosion resistance

A new type of support 'bipyridine containing aromatic polyamide' to $CuCl_2$ for synthesis of dimethyl carbonate (DMC) by oxidative carbonylation of methanol (Sato, Y. (151) 79)

CuCl₂ immobilization

A new type of support 'bipyridine containing aromatic polyamide' to $CuCl_2$ for synthesis of dimethyl carbonate (DMC) by oxidative carbonylation of methanol (Sato, Y. (151) 79)

Transformation of cyclohexene on palladium catalysts: activity and deactivation (Aramendía, M.A. (151) 261)

1,2-Diaminopropanetetraacetate

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Diffuse reflectance spectroscopy

In situ UV–Vis diffuse reflectance spectroscopy — *on line* activity measurements of supported chromium oxide catalysts: relating isobutane dehydrogenation activity with Cr-speciation via experimental design (Weckhuysen, B.M. (151) 115)

Dimethyl carbonate (DMC)

A new type of support 'bipyridine containing aromatic polyamide' to $CuCl_2$ for synthesis of dimethyl carbonate (DMC) by oxidative carbonylation of methanol (Sato, Y. (151) 79)

Dopants

A study on the photocatalytic reactions of TiO_2 with certain pyrimidine bases: effects of dopants (Fe³⁺) and calcination (Dhananjeyan, M.R. (151) 217)

Electrochemical

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Epoxidation

Mn-tetraarylporphyrins bearing *N*-alkyl sulphonamido tails: effect of the length and polarity of the chains on physical properties and reactivity (Banfi, S. (151) 17)

Epoxidation of an alkene promoted by various nickel(II) multiaza macrocyclic complexes (Lee, D. (151) 71)

Preparation and catalysis of NaY-encapsulated Mn(III) Schiff-base complex in presence of molecular oxygen (Wang, R.-M. (151) 253)

Ethylene

Studies on palladium-bisphosphine catalyzed alternating copolymerization of CO and ethylene (Luo, H.-K. (151) 91) Exchanged clays

Heterogeneous catalysis for the acetylation of benzo crown ethers (Biró, K. (151) 179)

Experimental design

In situ UV–Vis diffuse reflectance spectroscopy — *on line* activity measurements of supported chromium oxide catalysts: relating isobutane dehydrogenation activity with Cr-speciation via experimental design (Weckhuysen, B.M. (151) 115)

Fructose dehydration

Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2furaldehyde (Armaroli, T. (151) 233)

Glycerol

Vapour phase synthesis of quinoline from aniline and glycerol over mixed oxide catalysts (Reddy, B.M. (151) 289)

Heterogeneous catalysts

Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2furaldehyde (Armaroli, T. (151) 233)

Hydrazine

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Hydroesterification

Hydroesterification of styrene using an in situ formed $Pd(OTs)_2(PPh_3)_2$ complex catalyst (Seayad, A. (151) 47)

Hydrogenase

On the ruthenium(II) polypyridine labeled cytochrome c_3 (Hiraishi, T. (151) 1)

Photoinduced hydrogen evolution with bisviologen-linked ruthenium(II) complexes and hydrogenase (Hiraishi, T. (151) 7)

Hydrogen evolution

On the ruthenium (II) polypyridine labeled cytochrome c_3 (Hiraishi, T. (151) 1)

Hydrogen-peroxide

Mn-tetraarylporphyrins bearing *N*-alkyl sulphonamido tails: effect of the length and polarity of the chains on physical properties and reactivity (Banfi, S. (151) 17)

Hydrogen peroxide

Polymer-anchored platinum complexes as catalysts for the Baeyer–Villiger oxidation of ketones: preparation and catalytic properties (Palazzi, C. (151) 245)

Hydrosilylation

Hydrosilylation of ketones catalyzed by tricarbonyl(naph-thalene)manganese cation (Son, S.U. (151) 87)

Hydrotalcite

Mg/Al hydrotalcites: preparation, characterisation and ketonisation of acetic acid (Parida, K. (151) 185)

5-Hydroxymethyl-2-furaldehyde

Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2furaldehyde (Armaroli, T. (151) 233)

In situ spectroscopy

In situ UV–Vis diffuse reflectance spectroscopy — *on line* activity measurements of supported chromium oxide catalysts: relating isobutane dehydrogenation activity with Cr-speciation via experimental design (Weckhuysen, B.M. (151) 115)

Cyclohexene

Intramolecular electron transfer

On the ruthenium(II) polypyridine labeled cytochrome c_3 (Hiraishi, T. (151) 1)

Photoinduced hydrogen evolution with bisviologen-linked ruthenium(II) complexes and hydrogenase (Hiraishi, T. (151) 7)

Ion-exchange resins

Polymer-anchored platinum complexes as catalysts for the Baeyer–Villiger oxidation of ketones: preparation and catalytic properties (Palazzi, C. (151) 245)

Ion exchangers

Metal palladium dispersed inside macroporous ion-exchange resins: the issue of the accessibility to gaseous reactants (Biffis, A. (151) 283)

IPCE

The preparation, characterization, photoelectrochemical and photocatalytic properties of lanthanide metal-ion-doped TiO_2 nanoparticles (Wang, Y. (151) 205)

ISEC

Metal palladium dispersed inside macroporous ion-exchange resins: the issue of the accessibility to gaseous reactants (Biffis, A. (151) 283)

Ketonisation

Mg/Al hydrotalcites: preparation, characterisation and ketonisation of acetic acid (Parida, K. (151) 185)

LFER

A new concept for the application of linear free energy relationships in catalysis (Ramírez-Corredores, M.M. (151) 271)

Macrocycle

Epoxidation of an alkene promoted by various nickel(II) multiaza macrocyclic complexes (Lee, D. (151) 71)

Manganese

Hydrosilylation of ketones catalyzed by tricarbonyl(naphthalene)manganese cation (Son, S.U. (151) 87)

Metal chalcogenides

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

Metal-ion-doped TiO₂ nanoparticles

The preparation, characterization, photoelectrochemical and photocatalytic properties of lanthanide metal-ion-doped TiO_2 nanoparticles (Wang, Y. (151) 205)

Mixed oxides

Vapour phase synthesis of quinoline from aniline and glycerol over mixed oxide catalysts (Reddy, B.M. (151) 289)

Mn-Schiff-base

Preparation and catalysis of NaY-encapsulated Mn(III) Schiff-base complex in presence of molecular oxygen (Wang, R.-M. (151) 253)

Mn-tetraarylporphyrins

Mn-tetraarylporphyrins bearing *N*-alkyl sulphonamido tails: effect of the length and polarity of the chains on physical properties and reactivity (Banfi, S. (151) 17)

Molybdenum

Lewis base adducts of bis-(halogeno)dioxomolybdenum(VI): syntheses, structures, and catalytic applications (Kühn, F.E. (151) 147)

Nafion membrane

Cooperative catalysis and critical decomposition distances in water oxidation by tris(ethylenediamine)ruthenium (III) complex confined in a Nafion membrane (Yagi, M. (151) 29)

Naphthalene

Hydrosilylation of ketones catalyzed by tricarbonyl(naphthalene)manganese cation (Son, S.U. (151) 87)

Nickel

Epoxidation of an alkene promoted by various nickel(II) multiaza macrocyclic complexes (Lee, D. (151) 71)

Niobium phosphate

Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2furaldehyde (Armaroli, T. (151) 233)

Nitrite ion

Electrochemically promoted photocatalytic oxidation of nitrite ion by using rutile form of TiO_2/Ti electrode (Sun, C.-C. (151) 133)

α -Olefines

Mn-tetraarylporphyrins bearing *N*-alkyl sulphonamido tails: effect of the length and polarity of the chains on physical properties and reactivity (Banfi, S. (151) 17)

Olefins

Lewis base adducts of bis-(halogeno)dioxomolybdenum(VI): syntheses, structures, and catalytic applications (Kühn, F.E. (151) 147)

Oxidation

Regioselective aerobic oxidation of bis-sulfides into monosulfoxides (Dell'Anna, M.M. (151) 61)

Lewis base adducts of bis-(halogeno)dioxomolybdenum(VI): syntheses, structures, and catalytic applications (Kühn, F.E. (151) 147)

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

Polymer-anchored platinum complexes as catalysts for the Baeyer–Villiger oxidation of ketones: preparation and catalytic properties (Palazzi, C. (151) 245)

Oxidative addition of hydrogen

Oxidative addition of dihydrogen to the bimetallic sulfide catalysts: evidence by X-ray photoelectron spectroscopy (Startsev, A.N. (151) 171)

Oxidative carbonylation

The promoting effect of chelating ligands in the oxidative carbonylation of phenol to diphenyl carbonate catalyzed by Pd–Co–benzoquinone system (Vavasori, A. (151) 37)

A new type of support 'bipyridine containing aromatic polyamide' to $CuCl_2$ for synthesis of dimethyl carbonate (DMC) by oxidative carbonylation of methanol (Sato, Y. (151) 79)

Oxydehydrogenation

Vapour phase synthesis of quinoline from aniline and glycerol over mixed oxide catalysts (Reddy, B.M. (151) 289)

Palladium

Hydroesterification of styrene using an in situ formed Pd(OTs)₂(PPh₃)₂ complex catalyst (Seavad, A. (151) 47)

Metal palladium dispersed inside macroporous ion-exchange resins: the issue of the accessibility to gaseous reactants (Biffis, A. (151) 283) Palladium-bisphosphine

Studies on palladium-bisphosphine catalyzed alternating copolymerization of CO and ethylene (Luo, H.-K. (151) 91) Palladium catalysts

Transformation of cyclohexene on palladium catalysts: activity and deactivation (Aramendía, M.A. (151) 261)

Pd-Co-benzoquinone system

The promoting effect of chelating ligands in the oxidative carbonylation of phenol to diphenyl carbonate catalyzed by Pd–Co–benzoquinone system (Vavasori, A. (151) 37)

Phenylhydrazine

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Phosphoric acid-treated niobium oxide

Acid sites characterization of niobium phosphate catalysts and their activity in fructose dehydration to 5-hydroxymethyl-2-furaldehyde (Armaroli, T. (151) 233)

Photocatalysts

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

Photocatalytic

Electrochemically promoted photocatalytic oxidation of nitrite ion by using rutile form of TiO_2/Ti electrode (Sun, C.-C. (151) 133)

Photocatalytic degradation

The preparation, characterization, photoelectrochemical and photocatalytic properties of lanthanide metal-ion-doped TiO_2 nanoparticles (Wang, Y. (151) 205)

Photocurrent efficiency

Electrochemically promoted photocatalytic oxidation of nitrite ion by using rutile form of TiO_2/Ti electrode (Sun, C.-C. (151) 133)

Photoelectrochemical oxidation

Electrochemically promoted photocatalytic oxidation of nitrite ion by using rutile form of TiO_2/Ti electrode (Sun, C.-C. (151) 133)

Photoinduced hydrogen evolution

Photoinduced hydrogen evolution with bisviologen-linked ruthenium(II) complexes and hydrogenase (Hiraishi, T. (151) 7)

Phthalocyanine complexes

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

Platinum complexes

Polymer-anchored platinum complexes as catalysts for the Baeyer–Villiger oxidation of ketones: preparation and catalytic properties (Palazzi, C. (151) 245)

Polymer supports

Metal palladium dispersed inside macroporous ion-exchange resins: the issue of the accessibility to gaseous reactants (Biffis, A. (151) 283)

Pulse chemisorption

Metal palladium dispersed inside macroporous ion-exchange resins: the issue of the accessibility to gaseous reactants (Biffis, A. (151) 283)

Pyrimidine bases

A study on the photocatalytic reactions of TiO_2 with certain pyrimidine bases: effects of dopants (Fe³⁺) and calcination (Dhananjeyan, M.R. (151) 217)

Quinoline

Vapour phase synthesis of quinoline from aniline and glycerol over mixed oxide catalysts (Reddy, B.M. (151) 289)

Reactivity

The preparation, characterization, photoelectrochemical and photocatalytic properties of lanthanide metal-ion-doped TiO_2 nanoparticles (Wang, Y. (151) 205)

Redox cycle

A new type of support 'bipyridine containing aromatic polyamide' to $CuCl_2$ for synthesis of dimethyl carbonate (DMC) by oxidative carbonylation of methanol (Sato, Y. (151) 79)

Reduction

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Regioselectivity

Hydroesterification of styrene using an in situ formed $Pd(OTs)_2(PPh_3)_2$ complex catalyst (Seayad, A. (151) 47)

Ring-opening metathesis polymerization

Low-generation carbosilane dendrimers as core for starpolymers using a Ru–ROMP catalyst (Beerens, H. (151) 279) Ring slippage

Hydrosilylation of ketones catalyzed by tricarbonyl(naphthalene)manganese cation (Son, S.U. (151) 87)

Ru-carbene

Low-generation carbosilane dendrimers as core for starpolymers using a Ru-ROMP catalyst (Beerens, H. (151) 279)

Ruthenium

Investigation and characterization of hydrazine and phenylhydrazine complexes of ruthenium(III)1,2-diaminopropanetetraacetate: facile electrochemical and chemical reduction of hydrazines in relevance to nitrogenases (Prakash, R. (151) 193)

Ruthenium complex

Cooperative catalysis and critical decomposition distances in water oxidation by tris(ethylenediamine)ruthenium (III) complex confined in a Nafion membrane (Yagi, M. (151) 29)

Ruthenium(II) polypyridine labeled cytochrome c_3

On the ruthenium(II) polypyridine labeled cytochrome c_3 (Hiraishi, T. (151) 1)

Silica

Surfactant effects on the physical properties of mesoporous silica and silicates (Occelli, M.L. (151) 225)

Silicate

Surfactant effects on the physical properties of mesoporous silica and silicates (Occelli, M.L. (151) 225)

Solid acids

Heterogeneous catalysis for the acetylation of benzo crown ethers (Biró, K. (151) 179)

Starpolymers

Low-generation carbosilane dendrimers as core for starpolymers using a Ru-ROMP catalyst (Beerens, H. (151) 279)

Structure-reactivity relationship

A new concept for the application of linear free energy relationships in catalysis (Ramírez-Corredores, M.M. (151) 271)

Styrene

Hydroesterification of styrene using an in situ formed $Pd(OTs)_2(PPh_3)_2$ complex catalyst (Seayad, A. (151) 47)

Sulfated zirconia

Heterogeneous catalysis for the acetylation of benzo crown ethers (Biró, K. (151) 179)

Sulfide

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

Sulfide HDS catalysts

Oxidative addition of dihydrogen to the bimetallic sulfide catalysts: evidence by X-ray photoelectron spectroscopy (Startsev, A.N. (151) 171)

Sulfides

Regioselective aerobic oxidation of bis-sulfides into monosulfoxides (Dell'Anna, M.M. (151) 61)

Sulfoxides

Regioselective aerobic oxidation of bis-sulfides into monosulfoxides (Dell'Anna, M.M. (151) 61)

Supported chromium oxide catalysts

In situ UV–Vis diffuse reflectance spectroscopy — *on line* activity measurements of supported chromium oxide catalysts: relating isobutane dehydrogenation activity with Cr-speciation via experimental design (Weckhuysen, B.M. (151) 115)

Surfactant

Surfactant effects on the physical properties of mesoporous silica and silicates (Occelli, M.L. (151) 225)

Temperature-programmed reaction

Transformation of cyclohexene on palladium catalysts: activity and deactivation (Aramendía, M.A. (151) 261)

Thiosulfate

Oxidation and photooxidation of sulfide and thiosulfate ions catalyzed by transition metal chalcogenides and phthalocyanine complexes (Iliev, V. (151) 161)

TiO₂

A study on the photocatalytic reactions of TiO_2 with certain pyrimidine bases: effects of dopants (Fe³⁺) and calcination (Dhananjeyan, M.R. (151) 217)

Titanium dioxide

Electrochemically promoted photocatalytic oxidation of nitrite ion by using rutile form of TiO_2/Ti electrode (Sun, C.-C. (151) 133)

trans-B-Methylstyrene

Epoxidation of an alkene promoted by various nickel(II) multiaza macrocyclic complexes (Lee, D. (151) 71)

Water oxidation catalyst

Cooperative catalysis and critical decomposition distances in water oxidation by tris(ethylenediamine)ruthenium (III) complex confined in a Nafion membrane (Yagi, M. (151) 29)

X-ray photoelectron spectroscopy

Oxidative addition of dihydrogen to the bimetallic sulfide catalysts: evidence by X-ray photoelectron spectroscopy (Startsev, A.N. (151) 171)

X-ray structures

Lewis base adducts of bis-(halogeno)dioxomolybdenum(VI): syntheses, structures, and catalytic applications (Kühn, F.E. (151) 147)

Yield

Mg/Al hydrotalcites: preparation, characterisation and ketonisation of acetic acid (Parida, K. (151) 185)

Zeolite encapsulated catalyst

Preparation and catalysis of NaY-encapsulated Mn(III) Schiff-base complex in presence of molecular oxygen (Wang, R.-M. (151) 253)