

Journal of Molecular Catalysis A: Chemical 152 (2000) 283-287



www.elsevier.com/locate/molcata

Subject index

2-Acetyl-6-methoxynaphthalene

The regioselective acylation of 2-methoxynaphthalene to 2acetyl-6-methoxynaphthalene over zeolite beta (Kim, S.D. (152) 33)

Acid-base catalysis

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

Active center structure

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

Acylation

The regioselective acylation of 2-methoxynaphthalene to 2acetyl-6-methoxynaphthalene over zeolite beta (Kim, S.D. (152) 33)

Adsorption

Catalytic methanol decomposition to carbon monoxide and hydrogen over nickel supported on silica (Matsumura, Y. (152) 157)

²⁷Al MAS NMR

Ligand control of the catalytic activities of Al³⁺-immobilized solid Lewis acids (Dewa, T. (152) 257)

Aluminum

Ligand control of the catalytic activities of Al³⁺-immobilized solid Lewis acids (Dewa, T. (152) 257)

Aniline conversion

Selective *N*-monomethylation of aniline using $Zn_{1-x}Co_x$ -Fe₂O₄ (x = 0, 0.2, 0.5, 0.8 and 1.0) type systems (Sreekumar, K. (152) 225)

Arylacetylenes

Improvements in the synthesis of terminal alkynes via coupling of arylbromides with 2-methylbut-3-yn-2-ol (Menchi, G. (152) 77)

Aryl bromides

Improvements in the synthesis of terminal alkynes via coupling of arylbromides with 2-methylbut-3-yn-2-ol (Menchi, G. (152) 77)

Benzene

Multicenter active sites of vanadium-substituted polyoxometalate catalysts on benzene hydroxylation with hydrogen peroxide and two reaction types with and without an induction period (Nomiya, K. (152) 55)

1-Butene

Catalytic synthesis of a novel tertiary ether, 3-methoxy-3methyl heptane, from 1-butene (Karinen, R.S. (152) 253)

Carbon-carbon coupling

Efficient two-phase Suzuki reaction catalyzed by palladium

complexes with water-soluble phosphine ligands and detergents as phase transfer reagents (Paetzold, E. (152) 69)

Catalysis

Regioselective oxidative cyclization of hydroxyalkenes to tetrahydrofurans catalyzed by methyltrioxorhenium (Tan, H. (152) 83)

Heterogeneous liquid phase catalysis by metal (IV) phosphates of cyclic ether formation and a reverse Prins reaction (Al-Qallaf, F.A.H. (152) 187)

Catalyst precursor

Multicenter active sites of vanadium-substituted polyoxometalate catalysts on benzene hydroxylation with hydrogen peroxide and two reaction types with and without an induction period (Nomiya, K. (152) 55)

Catalytic carbonylation

The unprecedented detection of the intermediate formation of N-hydroxy derivatives during the carbonylation of 2'-nitrochalcones and 2-nitrostyrenes catalysed by palladium (Tollari, S. (152) 47)

Catalytic decomposition

Catalytic decomposition of formic acid on oxide catalysts. III. IOM model approach to bimolecular mechanism (Borowiak, M.A. (152) 121)

Catalytic synthesis

Catalytic synthesis of a novel tertiary ether, 3-methoxy-3methyl heptane, from 1-butene (Karinen, R.S. (152) 253)

Chemically modified electrode

Electrocatalysis of NADH oxidation at a glassy carbon electrode modified with pyrocatechol sulfonephthalein (Cai, C.-X. (152) 179)

Chemisorption of methane

Chemisorption of methane over Ni/Al_2O_3 catalysts (Chen, Y. (152) 237)

Choroacetonitrile

Phase-transfer-catalyzed Darzen's condensation of chloroacetonitrile with cyclohexanone using aqueous sodium hydroxide and a new phase transfer catalyst (Jayachandran, J.P. (152) 91) Concerted mechanism

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

 $Cp'TiCl_2(O-2,6^{-i}Pr_2C_6H_3)$ -MAO system

Polymerization of 1-hexene, 1-octene catalyzed by Cp'Ti-Cl₂(O-2,6- ${}^{i}Pr_{2}C_{6}H_{3}$)–MAO system. Unexpected increase of the catalytic activity for ethylene/1-hexene copolymerization by (1,3- ${}^{t}Bu_{2}C_{5}H_{3}$)TiCl₂(O-2,6- ${}^{i}Pr_{2}C_{6}H_{3}$)–MAO catalyst system (Nomura, K. (152) 249)

Cross-coupling

Improvements in the synthesis of terminal alkynes via cou-

pling of arylbromides with 2-methylbut-3-yn-2-ol (Menchi, G. (152) 77)

Cyclic olefins

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. I. Epoxidation of cyclic olefins (Haber, J. (152) 111)

Cyclisation

Heterogeneous liquid phase catalysis by metal (IV) phosphates of cyclic ether formation and a reverse Prins reaction (Al-Qallaf, F.A.H. (152) 187)

Cyclohexanone

Phase-transfer-catalyzed Darzen's condensation of chloroacetonitrile with cyclohexanone using aqueous sodium hydroxide and a new phase transfer catalyst (Jayachandran, J.P. (152) 91)

Darzen's condensation

Phase-transfer-catalyzed Darzen's condensation of chloroacetonitrile with cyclohexanone using aqueous sodium hydroxide and a new phase transfer catalyst (Jayachandran, J.P. (152) 91) Dawson

The solid-state thermal rearrangement of the Dawson anion $[P_2Mo_{18}O_{62}]^{6-}$ into a Keggin-type $[PMo_{12}O_{40}]^{3-}$ -containing phase and their reactivity in the oxidative dehydrogenation of isobutyraldehyde (Hu, J. (152) 141)

Dehydration

Heterogeneous liquid phase catalysis by metal (IV) phosphates of cyclic ether formation and a reverse Prins reaction (Al-Qallaf, F.A.H. (152) 187)

Detergents

Efficient two-phase Suzuki reaction catalyzed by palladium complexes with water-soluble phosphine ligands and detergents as phase transfer reagents (Paetzold, E. (152) 69)

Diels-Alder reaction

Ligand control of the catalytic activities of Al³⁺-immobilized solid Lewis acids (Dewa, T. (152) 257)

Diol

Heterogeneous liquid phase catalysis by metal (IV) phosphates of cyclic ether formation and a reverse Prins reaction (Al-Qallaf, F.A.H. (152) 187)

DRIFT

Synthesis, characterization and activity studies of vanadia catalysts supported on sol-gel derived Al_2O_3 -ZrO₂ mixed oxide (Lakshmi, J.L. (152) 99)

Electrocatalysis

Electrocatalysis of NADH oxidation at a glassy carbon electrode modified with pyrocatechol sulfonephthalein (Cai, C.-X. (152) 179)

Enolether hydrogenation

Ether synthesis from alcohol and aldehyde in the presence of hydrogen and palladium deposited on charcoal (Bethmont, V. (152) 133)

Epoxidation

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. I. Epoxidation of cyclic olefins (Haber, J. (152) 111)

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. Part II. Epoxidation of linear olefins (Haber, J. (152) 117)

Ethanol

Reactions of ethanol over metal oxides (Idriss, H. (152) 201) Ethanol oxidation

Synthesis, characterization and activity studies of vanadia catalysts supported on sol-gel derived Al_2O_3 -ZrO₂ mixed oxide (Lakshmi, J.L. (152) 99)

Ether synthesis

Ether synthesis from alcohol and aldehyde in the presence of hydrogen and palladium deposited on charcoal (Bethmont, V. (152) 133)

Ethylene

Effect of the zeolite HY-support on the monoalkene polymerization by group IV metallocenes (Michelotti, M. (152) 167)

Ferrites

Selective *N*-monomethylation of aniline using $Zn_{1-x}Co_x$ -Fe₂O₄ (x = 0, 0.2, 0.5, 0.8 and 1.0) type systems (Sreekumar, K. (152) 225)

Formic acid

Catalytic decomposition of formic acid on oxide catalysts. III. IOM model approach to bimolecular mechanism (Borowiak, M.A. (152) 121)

Heterocycles

The unprecedented detection of the intermediate formation of N-hydroxy derivatives during the carbonylation of 2'-nitrochalcones and 2-nitrostyrenes catalysed by palladium (Tollari, S. (152) 47)

1-Hexene

Polymerization of 1-hexene, 1-octene catalyzed by Cp'Ti-Cl₂(O-2,6-^{*i*}Pr₂C₆H₃)–MAO system. Unexpected increase of the catalytic activity for ethylene/1-hexene copolymerization by $(1,3-^{\prime}Bu_{2}C_{5}H_{3})$ TiCl₂(O-2,6-^{*i*}Pr₂C₆H₃)–MAO catalyst system (Nomura, K. (152) 249)

Homopolymerization

Effect of the zeolite HY-support on the monoalkene polymerization by group IV metallocenes (Michelotti, M. (152) 167)

Hydrodesulfurization

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

Hydrogen activation

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

Hydroxyalkene

Regioselective oxidative cyclization of hydroxyalkenes to tetrahydrofurans catalyzed by methyltrioxorhenium (Tan, H. (152) 83)

N-Hydroxy derivatives

The unprecedented detection of the intermediate formation of N-hydroxy derivatives during the carbonylation of 2'-nitrochalcones and 2-nitrostyrenes catalysed by palladium (Tollari, S. (152) 47)

Hydroxylation

Multicenter active sites of vanadium-substituted polyoxometalate catalysts on benzene hydroxylation with hydrogen peroxide and two reaction types with and without an induction period (Nomiya, K. (152) 55)

Induction period

Multicenter active sites of vanadium-substituted polyoxometalate catalysts on benzene hydroxylation with hydrogen peroxide and two reaction types with and without an induction period (Nomiya, K. (152) 55)

Isobutyraldehyde

The solid-state thermal rearrangement of the Dawson anion $[P_2Mo_{18}O_{62}]^{6-}$ into a Keggin-type $[PMo_{12}O_{40}]^{3-}$ -containing phase and their reactivity in the oxidative dehydrogenation of isobutyraldehyde (Hu, J. (152) 141)

Keggin

The solid-state thermal rearrangement of the Dawson anion $[P_2Mo_{18}O_{62}]^{6-}$ into a Keggin-type $[PMo_{12}O_{40}]^{3-}$ -containing phase and their reactivity in the oxidative dehydrogenation of isobutyraldehyde (Hu, J. (152) 141)

Ketal hydrogenation

Ether synthesis from alcohol and aldehyde in the presence of hydrogen and palladium deposited on charcoal (Bethmont, V. (152) 133)

Mediator

Electrocatalysis of NADH oxidation at a glassy carbon electrode modified with pyrocatechol sulfonephthalein (Cai, C.-X. (152) 179)

Metallocenes

Effect of the zeolite HY-support on the monoalkene polymerization by group IV metallocenes (Michelotti, M. (152) 167)

Metalloporphyrins

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. I. Epoxidation of cyclic olefins (Haber, J. (152) 111)

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. Part II. Epoxidation of linear olefins (Haber, J. (152) 117)

Metal oxides

Reactions of ethanol over metal oxides (Idriss, H. (152) 201) Methanol decomposition

Catalytic methanol decomposition to carbon monoxide and hydrogen over nickel supported on silica (Matsumura, Y. (152) 157)

3-Methoxy-3-methyl heptane

Catalytic synthesis of a novel tertiary ether, 3-methoxy-3methyl heptane, from 1-butene (Karinen, R.S. (152) 253)

Microporous solid

Ligand control of the catalytic activities of Al³⁺-immobilized solid Lewis acids (Dewa, T. (152) 257)

Monoterpenes

Platinum/tin catalyzed hydroformylation of naturally occurring monoterpenes (Gusevskaya, E.V. (152) 15) Multi-site phase transfer catalyst

Phase-transfer-catalyzed Darzen's condensation of chloroacetonitrile with cyclohexanone using aqueous sodium hydroxide and a new phase transfer catalyst (Jayachandran, J.P. (152) 91)

NADH

Electrocatalysis of NADH oxidation at a glassy carbon electrode modified with pyrocatechol sulfonephthalein (Cai, C.-X. (152) 179)

N-alkylation of aniline

Selective *N*-monomethylation of aniline using $Zn_{1-x}Co_x$ -Fe₂O₄ (x = 0, 0.2, 0.5, 0.8 and 1.0) type systems (Sreekumar, K. (152) 225)

Nanomaterial

Nitrobenzene hydrogenation on Ni–P, Ni–B and Ni–P–B ultrafine materials (Lee, S.-P. (152) 213)

Ni/Al₂O₃ catalyst

Chemisorption of methane over Ni/Al_2O_3 catalysts (Chen, Y. (152) 237)

Nickel

Catalytic methanol decomposition to carbon monoxide and hydrogen over nickel supported on silica (Matsumura, Y. (152) 157)

Ni-P-B ultrafine amorphous alloy catalyst

Nitrobenzene hydrogenation on Ni–P, Ni–B and Ni–P–B ultrafine materials (Lee, S.-P. (152) 213)

Nitrobenzene hydrogenation

Nitrobenzene hydrogenation on Ni–P, Ni–B and Ni–P–B ultrafine materials (Lee, S.-P. (152) 213)

Occluded hydrogen

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

1-Octene

Polymerization of 1-hexene, 1-octene catalyzed by Cp'Ti-Cl₂(O-2,6-^{*i*}Pr₂C₆H₃)–MAO system. Unexpected increase of the catalytic activity for ethylene/1-hexene copolymerization by $(1,3-^{i}Bu_{2}C_{5}H_{3})$ TiCl₂(O-2,6-^{*i*}Pr₂C₆H₃)–MAO catalyst system (Nomura, K. (152) 249)

Olefins

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. Part II. Epoxidation of linear olefins (Haber, J. (152) 117)

Organic nitro compounds

The unprecedented detection of the intermediate formation of *N*-hydroxy derivatives during the carbonylation of 2'nitrochalcones and 2-nitrostyrenes catalysed by palladium (Tollari, S. (152) 47)

Oxidation

Regioselective oxidative cyclization of hydroxyalkenes to tetrahydrofurans catalyzed by methyltrioxorhenium (Tan, H. (152) 83)

Pernitrated metalloporphyrins as catalysts in oxidation with magnesium monoperoxophthalate. Part II. Epoxidation of linear olefins (Haber, J. (152) 117)

Oxidative addition of dihydrogen

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

Oxidative dehydrogenation

The solid-state thermal rearrangement of the Dawson anion $[P_2Mo_{18}O_{62}]^{6-}$ into a Keggin-type $[PMo_{12}O_{40}]^{3-}$ -containing phase and their reactivity in the oxidative dehydrogenation of isobutyraldehyde (Hu, J. (152) 141)

Oxide catalysts

Catalytic decomposition of formic acid on oxide catalysts. III. IOM model approach to bimolecular mechanism (Borowiak, M.A. (152) 121)

Palladium

The unprecedented detection of the intermediate formation of N-hydroxy derivatives during the carbonylation of 2'-nitrochalcones and 2-nitrostyrenes catalysed by palladium (Tollari, S. (152) 47)

Palladium/copper catalysts

Improvements in the synthesis of terminal alkynes via coupling of arylbromides with 2-methylbut-3-yn-2-ol (Menchi, G. (152) 77)

Palladium on charcoal

Ether synthesis from alcohol and aldehyde in the presence of hydrogen and palladium deposited on charcoal (Bethmont, V. (152) 133)

Peroxide

Regioselective oxidative cyclization of hydroxyalkenes to tetrahydrofurans catalyzed by methyltrioxorhenium (Tan, H. (152) 83)

Phosphates

Heterogeneous liquid phase catalysis by metal (IV) phosphates of cyclic ether formation and a reverse Prins reaction (Al-Qallaf, F.A.H. (152) 187)

Platinum

Platinum/tin catalyzed hydroformylation of naturally occurring monoterpenes (Gusevskaya, E.V. (152) 15)

Prins

Heterogeneous liquid phase catalysis by metal (IV) phosphates of cyclic ether formation and a reverse Prins reaction (Al-Qallaf, F.A.H. (152) 187)

Propene insertion

Secondary syndiotactic-specific propene insertion in the presence of homogeneous V-based catalysts (Zambelli, A. (152) 25)

Propylene

Effect of the zeolite HY-support on the monoalkene polymerization by group IV metallocenes (Michelotti, M. (152) 167)

Pyrocatechol sulfonephthalein

Electrocatalysis of NADH oxidation at a glassy carbon electrode modified with pyrocatechol sulfonephthalein (Cai, C.-X. (152) 179)

Reactions

Reactions of ethanol over metal oxides (Idriss, H. (152) 201) Regioselectivity

The regioselective acylation of 2-methoxynaphthalene to 2acetyl-6-methoxynaphthalene over zeolite beta (Kim, S.D. (152) 33)

Rhenium

Regioselective oxidative cyclization of hydroxyalkenes to tetrahydrofurans catalyzed by methyltrioxorhenium (Tan, H. (152) 83)

Sol-gel Al₂O₃-ZrO₂

Synthesis, characterization and activity studies of vanadia catalysts supported on sol-gel derived Al_2O_3 -ZrO₂ mixed oxide (Lakshmi, J.L. (152) 99)

Sol-gel method

Catalytic methanol decomposition to carbon monoxide and hydrogen over nickel supported on silica (Matsumura, Y. (152) 157)

Solid Lewis acid catalyst

Ligand control of the catalytic activities of Al³⁺-immobilized solid Lewis acids (Dewa, T. (152) 257)

Solid-state NMR

Synthesis, characterization and activity studies of vanadia catalysts supported on sol-gel derived Al_2O_3 -ZrO₂ mixed oxide (Lakshmi, J.L. (152) 99)

Solvent effect

The regioselective acylation of 2-methoxynaphthalene to 2acetyl-6-methoxynaphthalene over zeolite beta (Kim, S.D. (152) 33)

Spinel systems

Selective *N*-monomethylation of aniline using $Zn_{1-x}Co_x$ -Fe₂O₄ (x = 0, 0.2, 0.5, 0.8 and 1.0) type systems (Sreekumar, K. (152) 225)

Sulfide catalysts

Concerted mechanisms in heterogeneous catalysis by sulfides (Startsev, A.N. (152) 1)

Supported catalysts

Effect of the zeolite HY-support on the monoalkene polymerization by group IV metallocenes (Michelotti, M. (152) 167)

Suzuki reaction

Efficient two-phase Suzuki reaction catalyzed by palladium complexes with water-soluble phosphine ligands and detergents as phase transfer reagents (Paetzold, E. (152) 69)

Syndiotactic

Secondary syndiotactic-specific propene insertion in the presence of homogeneous V-based catalysts (Zambelli, A. (152) 25)

Thermal rearrangement

The solid-state thermal rearrangement of the Dawson anion $[P_2Mo_{18}O_{62}]^{6-}$ into a Keggin-type $[PMo_{12}O_{40}]^{3-}$ -containing phase and their reactivity in the oxidative dehydrogenation of isobutyraldehyde (Hu, J. (152) 141)

Tin

Platinum/tin catalyzed hydroformylation of naturally occurring monoterpenes (Gusevskaya, E.V. (152) 15)

Two-phase system

Efficient two-phase Suzuki reaction catalyzed by palladium complexes with water-soluble phosphine ligands and detergents as phase transfer reagents (Paetzold, E. (152) 69)

Vanadia catalysts

Synthesis, characterization and activity studies of vanadia catalysts supported on sol-gel derived Al_2O_3 -ZrO₂ mixed oxide (Lakshmi, J.L. (152) 99)

Vanadium-substituted polyoxometalate

Multicenter active sites of vanadium-substituted polyoxometalate catalysts on benzene hydroxylation with hydrogen peroxide and two reaction types with and without an induction period (Nomiya, K. (152) 55)

V-based catalysts

Secondary syndiotactic-specific propene insertion in the presence of homogeneous V-based catalysts (Zambelli, A. (152) 25)

Water-soluble catalyst

Efficient two-phase Suzuki reaction catalyzed by palladium complexes with water-soluble phosphine ligands and detergents as phase transfer reagents (Paetzold, E. (152) 69)

Zeolite

Effect of the zeolite HY-support on the monoalkene polymerization by group IV metallocenes (Michelotti, M. (152) 167)

Zeolite beta

The regioselective acylation of 2-methoxynaphthalene to 2acetyl-6-methoxynaphthalene over zeolite beta (Kim, S.D. (152) 33)