

Subject index

Acetalization

Selective hydroformylation–acetalization of aryl alkenes in methanol catalyzed by $\text{RhCl}_3 \cdot 3\text{H}_2\text{O} - \text{P}(\text{O}i\text{Pr})_3$ system (El Ali, B. (230) 9)

Acetals

Selective hydroformylation–acetalization of aryl alkenes in methanol catalyzed by $\text{RhCl}_3 \cdot 3\text{H}_2\text{O} - \text{P}(\text{O}i\text{Pr})_3$ system (El Ali, B. (230) 9)

Acetylation

Niobium(V) chloride: an efficient catalyst for selective acetylation of alcohols and phenols (Yadav, J.S. (230) 107)

Acidic acid and ethanol

Catalytic application of sulfonic acid functionalized mesoporous benzene–silica with crystal-like pore wall structure in esterification (Yang, Q. (230) 85)

Adsorption

Enantioselective hydrogenation of α, β -unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode (Szöllősi, G. (230) 91)

Alcohols

Catalytic oxidation of alcohols to carbonyl compounds with hydrogen peroxide using dinuclear iron complexes (Balogh-Hergovich, É. (230) 79)

Niobium(V) chloride: an efficient catalyst for selective acetylation of alcohols and phenols (Yadav, J.S. (230) 107)

Aldehydes

Selective hydroformylation–acetalization of aryl alkenes in methanol catalyzed by $\text{RhCl}_3 \cdot 3\text{H}_2\text{O} - \text{P}(\text{O}i\text{Pr})_3$ system (El Ali, B. (230) 9)

C-alkylation

ortho-Selective ethylation of phenol with ethanol catalyzed by bimetallic mesoporous catalyst, CoAl-MCM-41 (Vinu, A. (230) 151)

Alkylation

Friedel–Crafts alkylation reactions in pyridinium-based ionic liquids (Xiao, Y. (230) 129)

Aluminum chloride

Friedel–Crafts alkylation reactions in pyridinium-based ionic liquids (Xiao, Y. (230) 129)

Bamboo-shaped structure

Influence of acid treatments of carbon nanotube precursors on Ni/CNT in the synthesis of carbon nanotubes (Liu, H. (230) 17)

Benzylation

Zirconia-supported phosphotungstic acid as catalyst for alkylation of phenol with benzyl alcohol (Devassy, B.M. (230) 113)

BINOL-Ca

Synthesis of 6,6'- and 6-MeO-PEG-BINOL-Ca soluble polymer bound ligands and their application in asymmetric Michael and epoxidation reactions (Kumaraswamy, G. (230) 59)

Binuclear macrocyclic ligand

Synthesis of hetero binuclear macrocyclic CoV complex bonded to chemically modified alumina support for oxidation of cyclohexane using oxygen (Kishore, M.J.L. (230) 35)

2,6-Bis(imino)pyridyl iron complex

A series of novel 2,6-bis(imino)pyridyl iron catalysts: synthesis, characterization and ethylene oligomerization (Zhang, Z. (230) 1)

Calcium oxide

Synthesis of 1,3-dialkylurea from ethylene carbonate and amine using calcium oxide (Fujita, S.-i (230) 43)

Caprolactone

Correlation between phenol structure and catalytic activity of samarium(III) phenolates in polymerization of ϵ -caprolactone. Part 2. *Tert*-butyl's electronic and steric effects (Peng, F. (230) 135)

Carbamate

Synthesis of 1,3-dialkylurea from ethylene carbonate and amine using calcium oxide (Fujita, S.-i (230) 43)

Carbon dioxide

Dehydrogenation of ethylbenzene with CO_2 over Cr-MCM-41 catalyst (Ohishi, Y. (230) 49)

Carbon nanotubes

Influence of acid treatments of carbon nanotube precursors on Ni/CNT in the synthesis of carbon nanotubes (Liu, H. (230) 17)

Catalysts

Catalytic activity of palladium supported on single wall carbon nanotubes compared to palladium supported on activated carbon. Study of the Heck and Suzuki couplings, aerobic alcohol oxidation and selective hydrogenation (Corma, A. (230) 97)

Catalytic oxidation

Direct synthesis, characterization of Cu-SBA-15 and its high catalytic activity in hydroxylation of phenol by H_2O_2 (Wang, L. (230) 143)

Chalcone

Synthesis of 6,6'- and 6-MeO-PEG-BINOL-Ca soluble polymer bound ligands and their application in asymmetric Michael and epoxidation reactions (Kumaraswamy, G. (230) 59)

Characterization

Synthesis of hetero binuclear macrocyclic CoV complex bonded to chemically modified alumina support for oxidation of cyclohexane using oxygen (Kishore, M.J.L. (230) 35)

Chromate species

Dehydrogenation of ethylbenzene with CO_2 over Cr-MCM-41 catalyst (Ohishi, Y. (230) 49)

Cinchonidine

Enantioselective hydrogenation of α, β -unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode (Szöllősi, G. (230) 91)

CoAl-MCM-41

ortho-Selective ethylation of phenol with ethanol catalyzed by bimetallic mesoporous catalyst, CoAl-MCM-41 (Vinu, A. (230) 151)

Cr-MCM-41

Dehydrogenation of ethylbenzene with CO_2 over Cr-MCM-41 catalyst (Ohishi, Y. (230) 49)

Crystal-like pore wall

Catalytic application of sulfonic acid functionalized mesoporous benzene–silica with crystal-like pore wall structure in esterification (Yang, Q. (230) 85)

Cu

Study by in situ FTIR of the SCR of NO by propene on Cu^{2+} ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)

Cu-SBA-15

Direct synthesis, characterization of Cu-SBA-15 and its high catalytic activity in hydroxylation of phenol by H_2O_2 (Wang, L. (230) 143)

Cu-substituted mesoporous silicas

Direct synthesis, characterization of Cu-SBA-15 and its high catalytic activity in hydroxylation of phenol by H_2O_2 (Wang, L. (230) 143)

- Cyclic carbonate
Synthesis of 1,3-dialkylurea from ethylene carbonate and amine using calcium oxide (Fujita, S.-i (230) 43)
- Cyclohexane
Synthesis of hetero binuclear macrocyclic CoV complex bonded to chemically modified alumina support for oxidation of cyclohexane using oxygen (Kishore, M.J.L. (230) 35)
- Cyclopentene
A spectroscopic study on the 12-heteropolyacids of molybdenum and tungsten ($H_3PMo_{12-n}W_nO_{40}$) combined with cetylpyridinium bromide in the epoxidation of cyclopentene (Ding, Y. (230) 121)
- Deactivation and regeneration
Dehydrogenation of ethylbenzene with CO_2 over Cr-MCM-41 catalyst (Ohishi, Y. (230) 49)
- Dehydrogenation of ethylbenzene
Dehydrogenation of ethylbenzene with CO_2 over Cr-MCM-41 catalyst (Ohishi, Y. (230) 49)
- Dialkyl urea
Synthesis of 1,3-dialkylurea from ethylene carbonate and amine using calcium oxide (Fujita, S.-i (230) 43)
- Distribution
A series of novel 2,6-bis(imino)pyridyl iron catalysts: synthesis, characterization and ethylene oligomerization (Zhang, Z. (230) 1)
- Enantioselective hydrogenation
Enantioselective hydrogenation of α,β -unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode (Szöllösi, G. (230) 91)
- Epoxidation
Synthesis of 6,6'- and 6-MeO-PEG-BINOL-Ca soluble polymer bound ligands and their application in asymmetric Michael and epoxidation reactions (Kumaraswamy, G. (230) 59)
- Esterification
Catalytic application of sulfonic acid functionalized mesoporous benzene-silica with crystal-like pore wall structure in esterification (Yang, Q. (230) 85)
- Ethyl lactate hydrogenation
Effect of promoters on the structures and properties of the RuB/ γ - Al_2O_3 catalyst (Luo, G. (230) 69)
- Ethylation
ortho-Selective ethylation of phenol with ethanol catalyzed by bimetallic mesoporous catalyst, CoAl-MCM-41 (Vinu, A. (230) 151)
- Friedel-Crafts
Friedel-Crafts alkylation reactions in pyridinium-based ionic liquids (Xiao, Y. (230) 129)
- Heterogeneous
Enantioselective hydrogenation of α,β -unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode (Szöllösi, G. (230) 91)
- Hydroformylation
Selective hydroformylation-acetalization of aryl alkenes in methanol catalyzed by $RhCl_3 \cdot 3H_2O - P(OPh)_3$ system (El Ali, B. (230) 9)
- Hydrogen peroxide
A spectroscopic study on the 12-heteropolyacids of molybdenum and tungsten ($H_3PMo_{12-n}W_nO_{40}$) combined with cetylpyridinium bromide in the epoxidation of cyclopentene (Ding, Y. (230) 121)
Catalytic oxidation of alcohols to carbonyl compounds with hydrogen peroxide using dinuclear iron complexes (Balogh-Hergovich, É. (230) 79)
- Hydrogenation
Catalytic activity of palladium supported on single wall carbon nanotubes compared to palladium supported on activated carbon. Study of the Heck and Suzuki couplings, aerobic alcohol oxidation and selective hydrogenation (Corma, A. (230) 97)
- Infrared spectroscopy
Study by in situ FTIR of the SCR of NO by propene on Cu^{2+} ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)
- Iron
Catalytic oxidation of alcohols to carbonyl compounds with hydrogen peroxide using dinuclear iron complexes (Balogh-Hergovich, É. (230) 79)
- Iron chloride
Friedel-Crafts alkylation reactions in pyridinium-based ionic liquids (Xiao, Y. (230) 129)
- Mechanism
Synthesis of hetero binuclear macrocyclic CoV complex bonded to chemically modified alumina support for oxidation of cyclohexane using oxygen (Kishore, M.J.L. (230) 35)
- MeO-PEG
Synthesis of 6,6'- and 6-MeO-PEG-BINOL-Ca soluble polymer bound ligands and their application in asymmetric Michael and epoxidation reactions (Kumaraswamy, G. (230) 59)
- Mesoporous benzene-silica
Catalytic application of sulfonic acid functionalized mesoporous benzene-silica with crystal-like pore wall structure in esterification (Yang, Q. (230) 85)
- Metallocenes
meso- $Me_2Si(1-indenyl)_2ZrCl_2$ /methylalumoxane catalyzed polymerization of the ethylene to ethyl-branched polyethylene (Melillo, G. (230) 29)
- Methylenedichloride
Niobium(V) chloride: an efficient catalyst for selective acetylation of alcohols and phenols (Yadav, J.S. (230) 107)
- Michael addition
Synthesis of 6,6'- and 6-MeO-PEG-BINOL-Ca soluble polymer bound ligands and their application in asymmetric Michael and epoxidation reactions (Kumaraswamy, G. (230) 59)
- Molybdotungstophosphoric acids
A spectroscopic study on the 12-heteropolyacids of molybdenum and tungsten ($H_3PMo_{12-n}W_nO_{40}$) combined with cetylpyridinium bromide in the epoxidation of cyclopentene (Ding, Y. (230) 121)
- Nafion
Catalytic application of sulfonic acid functionalized mesoporous benzene-silica with crystal-like pore wall structure in esterification (Yang, Q. (230) 85)
- Nanotubes
Catalytic activity of palladium supported on single wall carbon nanotubes compared to palladium supported on activated carbon. Study of the Heck and Suzuki couplings, aerobic alcohol oxidation and selective hydrogenation (Corma, A. (230) 97)
- Ni/CNT
Influence of acid treatments of carbon nanotube precursors on Ni/CNT in the synthesis of carbon nanotubes (Liu, H. (230) 17)
- Niobium(V) chloride
Niobium(V) chloride: an efficient catalyst for selective acetylation of alcohols and phenols (Yadav, J.S. (230) 107)
- NO
Study by in situ FTIR of the SCR of NO by propene on Cu^{2+} ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)
- α -Olefin
A series of novel 2,6-bis(imino)pyridyl iron catalysts: synthesis, characterization and ethylene oligomerization (Zhang, Z. (230) 1)
- Oligomerization
A series of novel 2,6-bis(imino)pyridyl iron catalysts: synthesis, characterization and ethylene oligomerization (Zhang, Z. (230) 1)
- ortho*-Selectivity
ortho-Selective ethylation of phenol with ethanol catalyzed by bimetallic mesoporous catalyst, CoAl-MCM-41 (Vinu, A. (230) 151)

- Oxidant catalyst**
Direct synthesis, characterization of Cu-SBA-15 and its high catalytic activity in hydroxylation of phenol by H₂O₂ (Wang, L. (230) 143)
- Oxidation**
Synthesis of hetero binuclear macrocyclic CoV complex bonded to chemically modified alumina support for oxidation of cyclohexane using oxygen (Kishore, M.J.L. (230) 35)
- Oxygenation**
Catalytic oxidation of alcohols to carbonyl compounds with hydrogen peroxide using dinuclear iron complexes (Balogh-Hergovich, É. (230) 79)
- Palladium**
Catalytic activity of palladium supported on single wall carbon nanotubes compared to palladium supported on activated carbon. Study of the Heck and Suzuki couplings, aerobic alcohol oxidation and selective hydrogenation (Corma, A. (230) 97)
Enantioselective hydrogenation of α,β -unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode (Szöllősi, G. (230) 91)
- Phenol**
ortho-Selective ethylation of phenol with ethanol catalyzed by bimetallic mesoporous catalyst, CoAl-MCM-41 (Vinu, A. (230) 151)
Zirconia-supported phosphotungstic acid as catalyst for alkylation of phenol with benzyl alcohol (Devassy, B.M. (230) 113)
- Phenol hydroxylation**
Direct synthesis, characterization of Cu-SBA-15 and its high catalytic activity in hydroxylation of phenol by H₂O₂ (Wang, L. (230) 143)
- Phenol structure**
Correlation between phenol structure and catalytic activity of samarium(III) phenolates in polymerization of ϵ -caprolactone. Part 2. *Tert*-butyl's electronic and steric effects (Peng, F. (230) 135)
- Phosphine**
Selective hydroformylation-acetalization of aryl alkenes in methanol catalyzed by RhCl₃·3H₂O-P(OPh)₃ system (El Ali, B. (230) 9)
- Phosphite**
Selective hydroformylation-acetalization of aryl alkenes in methanol catalyzed by RhCl₃·3H₂O-P(OPh)₃ system (El Ali, B. (230) 9)
- Phosphotungstic acid**
Zirconia-supported phosphotungstic acid as catalyst for alkylation of phenol with benzyl alcohol (Devassy, B.M. (230) 113)
- Pillared clays**
Study by in situ FTIR of the SCR of NO by propene on Cu²⁺ ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)
- PMW/CPB**
A spectroscopic study on the 12-heteropolyacids of molybdenum and tungsten (H₃PMo_{12-n}W_nO₄₀) combined with cetylpyridinium bromide in the epoxidation of cyclopentene (Ding, Y. (230) 121)
- Polyethylene**
meso-Me₂Si(1-indenyl)₂ZrCl₂/methylalumoxane catalyzed polymerization of the ethylene to ethyl-branched polyethylene (Melillo, G. (230) 29)
- Polymerization**
meso-Me₂Si(1-indenyl)₂ZrCl₂/methylalumoxane catalyzed polymerization of the ethylene to ethyl-branched polyethylene (Melillo, G. (230) 29)
- Promoting effect**
Effect of promoters on the structures and properties of the RuB/ γ -Al₂O₃ catalyst (Luo, G. (230) 69)
- PW₁₂/CPB**
A spectroscopic study on the 12-heteropolyacids of molybdenum and tungsten (H₃PMo_{12-n}W_nO₄₀) combined with cetylpyridinium bromide in the epoxidation of cyclopentene (Ding, Y. (230) 121)
- Pyridinium-based ionic liquids**
Friedel-Crafts alkylation reactions in pyridinium-based ionic liquids (Xiao, Y. (230) 129)
- Quantum chemical calculation**
Correlation between phenol structure and catalytic activity of samarium(III) phenolates in polymerization of ϵ -caprolactone. Part 2. *Tert*-butyl's electronic and steric effects (Peng, F. (230) 135)
- Reaction intermediates**
Study by in situ FTIR of the SCR of NO by propene on Cu²⁺ ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)
- Rhodium**
Selective hydroformylation-acetalization of aryl alkenes in methanol catalyzed by RhCl₃·3H₂O-P(OPh)₃ system (El Ali, B. (230) 9)
- Ring opening polymerization**
Correlation between phenol structure and catalytic activity of samarium(III) phenolates in polymerization of ϵ -caprolactone. Part 2. *Tert*-butyl's electronic and steric effects (Peng, F. (230) 135)
- RuB/ γ -Al₂O₃ catalyst**
Effect of promoters on the structures and properties of the RuB/ γ -Al₂O₃ catalyst (Luo, G. (230) 69)
- Selective catalytic reduction**
Study by in situ FTIR of the SCR of NO by propene on Cu²⁺ ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)
- Single wall carbon nanotubes**
Catalytic activity of palladium supported on single wall carbon nanotubes compared to palladium supported on activated carbon. Study of the Heck and Suzuki couplings, aerobic alcohol oxidation and selective hydrogenation (Corma, A. (230) 97)
- Sm(III) phenolates**
Correlation between phenol structure and catalytic activity of samarium(III) phenolates in polymerization of ϵ -caprolactone. Part 2. *Tert*-butyl's electronic and steric effects (Peng, F. (230) 135)
- Solid base catalyst**
Synthesis of 1,3-dialkylurea from ethylene carbonate and amine using calcium oxide (Fujita, S.-i (230) 43)
- Soluble polymer**
Synthesis of 6,6'- and 6-MeO-PEG-BINOL-Ca soluble polymer bound ligands and their application in asymmetric Michael and epoxidation reactions (Kumaraswamy, G. (230) 59)
- Structures**
Effect of promoters on the structures and properties of the RuB/ γ -Al₂O₃ catalyst (Luo, G. (230) 69)
- Styrene**
Selective hydroformylation-acetalization of aryl alkenes in methanol catalyzed by RhCl₃·3H₂O-P(OPh)₃ system (El Ali, B. (230) 9)
- Sulfonic group functionalization**
Catalytic application of sulfonic acid functionalized mesoporous benzene-silica with crystal-like pore wall structure in esterification (Yang, Q. (230) 85)
- Syngas**
Selective hydroformylation-acetalization of aryl alkenes in methanol catalyzed by RhCl₃·3H₂O-P(OPh)₃ system (El Ali, B. (230) 9)
- Ti-PILC**
Study by in situ FTIR of the SCR of NO by propene on Cu²⁺ ion-exchanged Ti-PILC (Valverde, J.L. (230) 23)
- Unsaturated carboxylic acid**
Enantioselective hydrogenation of α,β -unsaturated carboxylic acids over cinchonidine-modified Pd catalysts: effect of substrate structure on the adsorption mode (Szöllősi, G. (230) 91)
- Y junction**
Influence of acid treatments of carbon nanotube precursors on Ni/CNT in the synthesis of carbon nanotubes (Liu, H. (230) 17)
- Zirconia**
Zirconia-supported phosphotungstic acid as catalyst for alkylation of phenol with benzyl alcohol (Devassy, B.M. (230) 113)