

Subject index

Acetoxylation

Hydration and acetoxylation of camphene catalyzed by heteropoly acid (da Silva, K.A. (192) 129)

Acidity

Alkylation of *o*-toluidine with methanol over acidic zeolites (Anand, R. (192) 253)

Conversion of *sec*-butylbenzene over H-beta zeolites (Ferino, I. (192) 171)

Acrylic acid

Palladium complex of poly(4-vinylpyridine-*co*-acrylic acid) for homogeneous hydrogenation of aromatic nitro compounds (Xi, X. (192) 1)

Active center structure

An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)

Air

Selective oxidation of ethylbenzene with air catalyzed by simple μ -oxo dimeric metalloporphyrins under mild conditions in the absence of additives (Guo, C. (192) 295)

Alkyl lithium

All *cis*-poly(NBE) derived by the ROMP catalysts based on WCl_6 (Bokaris, E.P. (192) 263)

Al-MCM-41

Synthesis of ethyl β -naphthyl ether (neroline) using SO_4^{2-}/Al -MCM-41 mesoporous molecular sieves (Selvaraj, M. (192) 153)

(*E*)-2-Benzylidene-1-benzosuberone

Enantioselective hydrogenation of exocyclic α,β -unsaturated ketones. Part III. Hydrogenation with Pd in the presence of cinchonidine (Fogassy, G. (192) 189)

Beta zeolite

Conversion of *sec*-butylbenzene over H-beta zeolites (Ferino, I. (192) 171)

Biomimetic catalysis

Studies of simple μ -oxo-bisiron(III)porphyrin as catalyst of cyclohexane oxidation with air in absence of cocatalysts or coreductants (Guo, C.-C. (192) 289)

[1,4-bis(Salicylidene amino)-phenylene] vanadium oxo complex

Silica gel supported [1,4-bis(salicylidene amino)-phenylene] vanadium oxo complex catalyst for the oxidation of *n*-heptane using molecular oxygen (Mishra, G.S. (192) 275)

Brønsted acid site

The interaction of *cis*-2-butene over a 10-ring Brønsted acid site of zeolite: a theoretical study (Soscun, H. (192) 63)

Camphene

Hydration and acetoxylation of camphene catalyzed by heteropoly acid (da Silva, K.A. (192) 129)

Catalysis

Olefin epoxidation catalysed by Mn(II) Schiff base complex in heterogenised-homogeneous systems (Patel, S.A. (192) 53)

Selective oxidation of ethylbenzene with air catalyzed by simple μ -oxo dimeric metalloporphyrins under mild conditions in the absence of additives (Guo, C. (192) 295)

Catalyst

Syndiospecific polymerization of styrene catalyzed in situ by alkoxy substituted half-sandwich titanocene and $BF_3 \cdot Et_2O$ (Qian, Y. (192) 25)

Kinetic studies of catalytic cracking of octanoic acid (Billaud, F. (192) 281)

Chloromethylation

Olefin epoxidation catalysed by Mn(II) Schiff base complex in heterogenised-homogeneous systems (Patel, S.A. (192) 53)

p-Chlorophenyl acetonitrile

Kinetics and modeling of liquid-liquid phase transfer catalysed synthesis of *p*-chlorophenyl acetonitrile: role of co-catalyst in intensification of rates and selectivity (Yadav, G.D. (192) 41)

Cinchonidine

Enantioselective hydrogenation of exocyclic α,β -unsaturated ketones. Part III. Hydrogenation with Pd in the presence of cinchonidine (Fogassy, G. (192) 189)

cis-2-Butene

The interaction of *cis*-2-butene over a 10-ring Brønsted acid site of zeolite: a theoretical study (Soscun, H. (192) 63)

cis-Cyclooctene

Olefin epoxidation catalysed by Mn(II) Schiff base complex in heterogenised-homogeneous systems (Patel, S.A. (192) 53)

cis-Stereoselectivity

All *cis*-poly(NBE) derived by the ROMP catalysts based on WCl_6 (Bokaris, E.P. (192) 263)

Cluster

Modeling MoS_2 catalytic surface with simple clusters (Lobos, S. (192) 203)

CNDO-UHF

Modeling MoS_2 catalytic surface with simple clusters (Lobos, S. (192) 203)

Co-catalyst

Kinetics and modeling of liquid-liquid phase transfer catalysed synthesis of *p*-chlorophenyl acetonitrile: role of co-catalyst in intensification of rates and selectivity (Yadav, G.D. (192) 41)

- Conversion of β -naphthol
 Synthesis of ethyl β -naphthyl ether (neroline) using $\text{SO}_4^{2-}/\text{Al-MCM-41}$ mesoporous molecular sieves (Selvaraj, M. (192) 153)
- Copolymer
 Palladium complex of poly(4-vinylpyridine-*co*-acrylic acid) for homogeneous hydrogenation of aromatic nitro compounds (Xi, X. (192) 1)
- Cross-coupling reaction
 Preparation of (Z)-1-(3-nitrophenyl)-4-phenylbut-1-ene and (Z)-1-(3-nitrophenyl)-5-phenylpent-1-ene by Pd(0)-catalyzed cross-coupling reaction (Del Ponte, G. (192) 35)
- Cyclohexane oxidation
 Studies of simple μ -oxo-bisiron(III)porphyrin as catalyst of cyclohexane oxidation with air in absence of cocatalysts or coreductants (Guo, C.-C. (192) 289)
- Cyclohexyl acetate
 Synthesis, characterization and catalytic activity of new solid acid catalysts, $\text{H}_3\text{PW}_{12}\text{O}_{40}$ supported on to hydrous zirconia (Patel, S. (192) 195)
- Deactivation by coking
 Conversion of *sec*-butylbenzene over H-beta zeolites (Ferino, I. (192) 171)
- DFT
 DFT studies of zirconocene/MAO interaction (Belelli, P.G. (192) 9)
- Dielectric constant
 Solvent effects in enantioselective hydrogenation of 1-phenyl-1,2-propanedione (Toukoniitty, E. (192) 135)
- Diones
 Solvent effects in enantioselective hydrogenation of 1-phenyl-1,2-propanedione (Toukoniitty, E. (192) 135)
- DRIFTS
 Role of NH_3 as an intermediate in reduction of NO with CH_4 over sol-gel Pd catalysts on TiO_2 (Watson, J.M. (192) 79)
- Electronic structure of the active metal
 An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)
- Enantiomeric excess
 Enantioselective hydrogenation of exocyclic α,β -unsaturated ketones. Part III. Hydrogenation with Pd in the presence of cinchonidine (Fogassy, G. (192) 189)
- Enantioselective hydrogenation
 Enantioselective hydrogenation of exocyclic α,β -unsaturated ketones. Part III. Hydrogenation with Pd in the presence of cinchonidine (Fogassy, G. (192) 189)
 Solvent effects in enantioselective hydrogenation of 1-phenyl-1,2-propanedione (Toukoniitty, E. (192) 135)
- Epoxidation
 Molybdenum incorporated silicalite as catalyst for epoxidation of olefins (Masteri-Farahani, M. (192) 103)
 Olefin epoxidation catalysed by Mn(II) Schiff base complex in hydrogenised-homogeneous systems (Patel, S.A. (192) 53)
- Esterification of cyclohexanol
 Synthesis, characterization and catalytic activity of new solid acid catalysts, $\text{H}_3\text{PW}_{12}\text{O}_{40}$ supported on to hydrous zirconia (Patel, S. (192) 195)
- Ethoxylation of β -naphthol
 Synthesis of ethyl β -naphthyl ether (neroline) using $\text{SO}_4^{2-}/\text{Al-MCM-41}$ mesoporous molecular sieves (Selvaraj, M. (192) 153)
- Ethylbenzene
 Selective oxidation of ethylbenzene with air catalyzed by simple μ -oxo dimeric metalloporphyrins under mild conditions in the absence of additives (Guo, C. (192) 295)
- Ethylene copolymerization
 Linked cyclopentadienyl-amido titanium catalysts supported on pyridylethylsilane-modified silica for heterogeneous ethylene homo- and copolymerization (Musikabhumma, K. (192) 223)
- Ethylene polymerization
 Linked cyclopentadienyl-amido titanium catalysts supported on pyridylethylsilane-modified silica for heterogeneous ethylene homo- and copolymerization (Musikabhumma, K. (192) 223)
- GC-MS analysis
 Silica gel supported [1,4-bis(salicylidene amino)-phenylene] vanadium oxo complex catalyst for the oxidation of *n*-heptane using molecular oxygen (Mishra, G.S. (192) 275)
- Gd-Pd/ TiO_2 catalyst
 Role of NH_3 as an intermediate in reduction of NO with CH_4 over sol-gel Pd catalysts on TiO_2 (Watson, J.M. (192) 79)
- HDS
 Modeling MoS_2 catalytic surface with simple clusters (Lobos, S. (192) 203)
- Heck reaction
 Silica-supported poly- γ -aminopropylsilane Ni^{2+} , Cu^{2+} , Co^{2+} complexes: efficient catalysts for Heck vinylation reaction (Yang, Y. (192) 303)
- n*-Heptane
 Silica gel supported [1,4-bis(salicylidene amino)-phenylene] vanadium oxo complex catalyst for the oxidation of *n*-heptane using molecular oxygen (Mishra, G.S. (192) 275)
- Heteropoly acid
 Hydration and acetoxylation of camphene catalyzed by heteropoly acid (da Silva, K.A. (192) 129)
- Heteropolyacid
 Synthesis, characterization and catalytic activity of new solid acid catalysts, $\text{H}_3\text{PW}_{12}\text{O}_{40}$ supported on to hydrous zirconia (Patel, S. (192) 195)
- HMS
 Pd/ SiO_2 catalysts: synthesis of Pd nanoparticles with the controlled size in mesoporous silicas (Yuranov, I. (192) 239)
- Hydration
 Hydration and acetoxylation of camphene catalyzed by heteropoly acid (da Silva, K.A. (192) 129)
- Hydrogen activation
 An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)

- Hydrogen peroxide
Liquid phase bromination of phenols using potassium bromide and hydrogen peroxide over zeolites (Narendar, N. (192) 73)
- Hydrogenation
Palladium complex of poly(4-vinylpyridine-*co*-acrylic acid) for homogeneous hydrogenation of aromatic nitro compounds (Xi, X. (192) 1)
- Hydrous zirconia
Synthesis, characterization and catalytic activity of new solid acid catalysts, H₃PW₁₂O₄₀ supported on to hydrous zirconia (Patel, S. (192) 195)
- In situ
Syndiospecific polymerization of styrene catalyzed in situ by alkoxyl substituted half-sandwich titanocene and BF₃·Et₂O (Qian, Y. (192) 25)
- Induction period
Silica-supported poly- γ -aminopropylsilane Ni²⁺, Cu²⁺, Co²⁺ complexes: efficient catalysts for Heck vinylation reaction (Yang, Y. (192) 303)
- Ionic liquid
Oligomerization of olefins in a chloroaluminate ionic liquid (Stenzel, O. (192) 217)
- Kinetics parameters
Kinetic studies of catalytic cracking of octanoic acid (Billaud, F. (192) 281)
- Liquid–liquid phase transfer catalysis
Kinetics and modeling of liquid–liquid phase transfer catalysed synthesis of *p*-chlorophenyl acetonitrile: role of co-catalyst in intensification of rates and selectivity (Yadav, G.D. (192) 41)
- MAO cocatalyst
DFT studies of zirconocene/MAO interaction (Belelli, P.G. (192) 9)
- Mechanism of HDS reaction
An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)
- Mesoporous silica
Pd/SiO₂ catalysts: synthesis of Pd nanoparticles with the controlled size in mesoporous silicas (Yuranov, I. (192) 239)
- Metallocene
ZSM-5 acid zeolite supported metallocene catalysts for ethylene polymerization (de Fátima V. Marques, M. (192) 93)
- Metallocene catalysts
DFT studies of zirconocene/MAO interaction (Belelli, P.G. (192) 9)
- Metalloporphyrin
Studies of simple μ -oxo-bisiron(III)porphyrin as catalyst of cyclohexane oxidation with air in absence of cocatalysts or coreductants (Guo, C.-C. (192) 289)
- Methylation
Alkylation of *o*-toluidine with methanol over acidic zeolites (Anand, R. (192) 253)
- MO calculations
DFT studies of zirconocene/MAO interaction (Belelli, P.G. (192) 9)
- Modeling
Kinetics and modeling of liquid–liquid phase transfer catalysed synthesis of *p*-chlorophenyl acetonitrile: role of co-catalyst in intensification of rates and selectivity (Yadav, G.D. (192) 41)
- Molecular oxygen
Studies of simple μ -oxo-bisiron(III)porphyrin as catalyst of cyclohexane oxidation with air in absence of cocatalysts or coreductants (Guo, C.-C. (192) 289)
- Molybdenum
Molybdenum incorporated silicalite as catalyst for epoxidation of olefins (Masteri-Farahani, M. (192) 103)
- MoS₂
Modeling MoS₂ catalytic surface with simple clusters (Lobos, S. (192) 203)
- Nitro compounds
Palladium complex of poly(4-vinylpyridine-*co*-acrylic acid) for homogeneous hydrogenation of aromatic nitro compounds (Xi, X. (192) 1)
- Nitroolefin
Preparation of (Z)-1-(3-nitrophenyl)-4-phenylbut-1-ene and (Z)-1-(3-nitrophenyl)-5-phenylpent-1-ene by Pd(0)-catalyzed cross-coupling reaction (Del Ponte, G. (192) 35)
- No reduction with CH₄
Role of NH₃ as an intermediate in reduction of NO with CH₄ over sol–gel Pd catalysts on TiO₂ (Watson, J.M. (192) 79)
- Norbornene
All *cis*-poly(NBE) derived by the ROMP catalysts based on WCl₆ (Bokaris, E.P. (192) 263)
Olefin epoxidation catalysed by Mn(II) Schiff base complex in heterogenised–homogeneous systems (Patel, S.A. (192) 53)
- Occluded hydrogen
An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)
- Octanoic acid
Kinetic studies of catalytic cracking of octanoic acid (Billaud, F. (192) 281)
- Olefins
Molybdenum incorporated silicalite as catalyst for epoxidation of olefins (Masteri-Farahani, M. (192) 103)
- Oligomerization
Oligomerization of olefins in a chloroaluminate ionic liquid (Stenzel, O. (192) 217)
- Oxidation
Selective oxidation of ethylbenzene with air catalyzed by simple μ -oxo dimeric metalloporphyrins under mild conditions in the absence of additives (Guo, C. (192) 295)
- Oxidative addition of hydrogen
An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)

- μ -Oxo dimeric metalloporphyrins
 Selective oxidation of ethylbenzene with air catalyzed by simple μ -oxo dimeric metalloporphyrins under mild conditions in the absence of additives (Guo, C. (192) 295)
- Oxybromination
 Liquid phase bromination of phenols using potassium bromide and hydrogen peroxide over zeolites (Narender, N. (192) 73)
- Palladium black
 Enantioselective hydrogenation of exocyclic α,β -unsaturated ketones. Part III. Hydrogenation with Pd in the presence of cinchonidine (Fogassy, G. (192) 189)
- Palladium complex
 Palladium complex of poly(4-vinylpyridine-co-acrylic acid) for homogeneous hydrogenation of aromatic nitro compounds (Xi, X. (192) 1)
- Parametric method
 Modeling MoS₂ catalytic surface with simple clusters (Lobos, S. (192) 203)
- Para-selectivity
 Liquid phase bromination of phenols using potassium bromide and hydrogen peroxide over zeolites (Narender, N. (192) 73)
- Pd nanoparticles
 Pd/SiO₂ catalysts: synthesis of Pd nanoparticles with the controlled size in mesoporous silicas (Yuranov, I. (192) 239)
- Pd(0)-catalyzed
 Preparation of (Z)-1-(3-nitrophenyl)-4-phenylbut-1-ene and (Z)-1-(3-nitrophenyl)-5-phenylpent-1-ene by Pd(0)-catalyzed cross-coupling reaction (Del Ponte, G. (192) 35)
- Poly- γ -aminopropylsilane
 Silica-supported poly- γ -aminopropylsilane Ni²⁺, Cu²⁺, Co²⁺ complexes: efficient catalysts for Heck vinylation reaction (Yang, Y. (192) 303)
- Polyethylene
 ZSM-5 acid zeolite supported metallocene catalysts for ethylene polymerization (de Fátima V. Marques, M. (192) 93)
- Polymer support
 Olefin epoxidation catalysed by Mn(II) Schiff base complex in heterogenised-homogeneous systems (Patel, S.A. (192) 53)
- Polymerization
 Oligomerization of olefins in a chloroaluminate ionic liquid (Stenzel, O. (192) 217)
 ZSM-5 acid zeolite supported metallocene catalysts for ethylene polymerization (de Fátima V. Marques, M. (192) 93)
- Potassium bromide
 Liquid phase bromination of phenols using potassium bromide and hydrogen peroxide over zeolites (Narender, N. (192) 73)
- Potassium iodide
 Kinetics and modeling of liquid-liquid phase transfer catalysed synthesis of *p*-chlorophenyl acetonitrile: role of co-catalyst in intensification of rates and selectivity (Yadav, G.D. (192) 41)
- Pt catalyst
 Solvent effects in enantioselective hydrogenation of 1-phenyl-1,2-propanedione (Toukoniitty, E. (192) 135)
- Reaction kinetics
 Kinetics and modeling of liquid-liquid phase transfer catalysed synthesis of *p*-chlorophenyl acetonitrile: role of co-catalyst in intensification of rates and selectivity (Yadav, G.D. (192) 41)
- Reaction mechanism
 Conversion of *sec*-butylbenzene over H-beta zeolites (Ferino, I. (192) 171)
- Ring-opening metathesis
 All *cis*-poly(NBE) derived by the ROMP catalysts based on WCl₆ (Bokaris, E.P. (192) 263)
- SBA-15
 Pd/SiO₂ catalysts: synthesis of Pd nanoparticles with the controlled size in mesoporous silicas (Yuranov, I. (192) 239)
- sec*-Butylbenzene
 Conversion of *sec*-butylbenzene over H-beta zeolites (Ferino, I. (192) 171)
- Selectivity of ethyl β -naphthyl ether
 Synthesis of ethyl β -naphthyl ether (neroline) using SO₄²⁻/Al-MCM-41 mesoporous molecular sieves (Selvaraj, M. (192) 153)
- Silicalite
 Molybdenum incorporated silicalite as catalyst for epoxidation of olefins (Masteri-Farahani, M. (192) 103)
- Silica-supported catalyst
 Linked cyclopentadienyl-amido titanium catalysts supported on pyridylethylsilane-modified silica for heterogeneous ethylene homo- and copolymerization (Musikabhumma, K. (192) 223)
- Single-site catalyst
 Linked cyclopentadienyl-amido titanium catalysts supported on pyridylethylsilane-modified silica for heterogeneous ethylene homo- and copolymerization (Musikabhumma, K. (192) 223)
- Size-controlled synthesis
 Pd/SiO₂ catalysts: synthesis of Pd nanoparticles with the controlled size in mesoporous silicas (Yuranov, I. (192) 239)
- SO₄²⁻/Al-MCM-41
 Synthesis of ethyl β -naphthyl ether (neroline) using SO₄²⁻/Al-MCM-41 mesoporous molecular sieves (Selvaraj, M. (192) 153)
- Solvent effect
 Solvent effects in enantioselective hydrogenation of 1-phenyl-1,2-propanedione (Toukoniitty, E. (192) 135)
- Styrene
 Syndiospecific polymerization of styrene catalyzed in situ by alkoxy substituted half-sandwich titanocene and BF₃·Et₂O (Qian, Y. (192) 25)
- Styrene-divinylbenzene
 Olefin epoxidation catalysed by Mn(II) Schiff base complex in heterogenised-homogeneous systems (Patel, S.A. (192) 53)
- Sulfide catalysts
 An unexpected phenomenon in heterogeneous catalysis: oxidative addition of hydrogen to the sulfide catalysts (Startsev, A.N. (192) 113)
- Supported catalysts
 ZSM-5 acid zeolite supported metallocene catalysts for ethylene polymerization (de Fátima V. Marques, M. (192) 93)

Syndiospecific polymerization

Syndiospecific polymerization of styrene catalyzed in situ by alkoxyl substituted half-sandwich titanocene and $\text{BF}_3 \cdot \text{Et}_2\text{O}$ (Qian, Y. (192) 25)

Temperature-programmed desorption

Role of NH_3 as an intermediate in reduction of NO with CH_4 over sol-gel Pd catalysts on TiO_2 (Watson, J.M. (192) 79)

Titanium catalyst

Linked cyclopentadienyl-amido titanium catalysts supported on pyridylethylsilane-modified silica for heterogeneous ethylene homo- and copolymerization (Musikabhumma, K. (192) 223)

Titaniumtetrachloride

Oligomerization of olefins in a chloroaluminate ionic liquid (Stenzel, O. (192) 217)

Titanocene

Syndiospecific polymerization of styrene catalyzed in situ by alkoxyl substituted half-sandwich titanocene and $\text{BF}_3 \cdot \text{Et}_2\text{O}$ (Qian, Y. (192) 25)

T10-OH cluster

The interaction of *cis*-2-butene over a 10-ring Brønsted acid site of zeolite: a theoretical study (Soscun, H. (192) 63)

o-Toluidine

Alkylation of *o*-toluidine with methanol over acidic zeolites (Anand, R. (192) 253)

Transition metal complex

Silica-supported poly- γ -aminopropylsilane Ni^{2+} , Cu^{2+} , Co^{2+} complexes: efficient catalysts for Heck vinylation reaction (Yang, Y. (192) 303)

Transition state theory

Solvent effects in enantioselective hydrogenation of 1-phenyl-1,2-propanedione (Toukoniitty, E. (192) 135)

Tungsten chloride

All *cis*-poly(NBE) derived by the ROMP catalysts based on WCl_6 (Bokaris, E.P. (192) 263)

12-Tungstophosphoric acid

Synthesis, characterization and catalytic activity of new solid acid catalysts, $\text{H}_3\text{PW}_{12}\text{O}_{40}$ supported on to hydrous zirconia (Patel, S. (192) 195)

Upgrading of fatty acids

Kinetic studies of catalytic cracking of octanoic acid (Billaud, F. (192) 281)

Vacancies

Modeling MoS_2 catalytic surface with simple clusters (Lobos, S. (192) 203)

4-Vinylpyridine

Palladium complex of poly(4-vinylpyridine-*co*-acrylic acid) for homogeneous hydrogenation of aromatic nitro compounds (Xi, X. (192) 1)

Xylidine

Alkylation of *o*-toluidine with methanol over acidic zeolites (Anand, R. (192) 253)

Zeolite

Liquid phase bromination of phenols using potassium bromide and hydrogen peroxide over zeolites (Narender, N. (192) 73)
ZSM-5 acid zeolite supported metallocene catalysts for ethylene polymerization (de Fátima V. Marques, M. (192) 93)
Alkylation of *o*-toluidine with methanol over acidic zeolites (Anand, R. (192) 253)