

Subject index

Acidity

The effect of water and acidity of the clay for ethylene polymerization over Cp_2ZrCl_2 supported on TMA-modified clay materials (Jeong, D.W. (206) 205)

Activation

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

Activation

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Activator

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Adiponitrile

The catalytic hydrogenation of adiponitrile to hexamethylenediamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)

Aerobic

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Alcohols

Selective reduction of aldehydes to alcohols by calcined Ni–Al hydrotalcite (Choudary, B.M. (206) 145)

Suitable ligands for homogeneous ruthenium-catalyzed hydrogenolysis of esters (van Engelen, M.Ch. (206) 185)

Aldehydes

Selective reduction of aldehydes to alcohols by calcined Ni–Al hydrotalcite (Choudary, B.M. (206) 145)

Alkanes

Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)

Alkoxy carbonyl cyclopentadienyl

Hydroformylation of olefins catalysed by alkoxy carbonyl cyclopentadienyl complexes of rhodium(I) (Busetto, L. (206) 153)

Alkynes

Iridium-catalyzed formation of *trans*-polyphenylacetylene by alkyne polymerization (Marigo, M. (206) 319)

Amorphous polymers

Highly active vinyl-polymerization of norbornene by [2-methyl-8-(diphenylphosphino)quinoline]nickel(II) dichloride/methylaluminoxane (Yang, H. (206) 23)

6-Aminocapronitrile

The catalytic hydrogenation of adiponitrile to hexamethylenediamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)

Aniline

Photoelectrocatalytic degradation of aniline over rutile TiO_2/Ti electrode thermally formed at 600 °C (Leng, W.H. (206) 239)

Aqueous catalysis

Novel palladium imidazole catalysts for Suzuki cross-coupling reactions (Mathews, C.J. (206) 77)

Aqueous formaldehyde

Condensation of benzene and aqueous formaldehyde to diphenylmethane in a biphasic system consisting of an aqueous phase of heteropolyacid (Hou, Z. (206) 121)

Aromatic

Hydrogenation of aromatics over supported noble metal catalysts ex organometallic complexes (Rojas, S. (206) 299)

Autoxidation

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Azobenzene

Supramolecular selectivity in solid phase catalytic hydrogenation of phenylalkynyl and azobenzene derivatives (Pri-Bar, I. (206) 313)

- Ball milling**
Novel modifications in preparing vanadium phosphorus oxides and their applications for partial oxidation of *n*-butane (Wang, X. (206) 261)
- Benzylation**
Phase-transfer catalyzed benzylation of sodium benzoate using aliquat 336 as catalyst in liquid–liquid system (Yang, H.-M. (206) 67)
- Benzyltin**
The oxidative cleavage of carbon–tin bond catalyzed by heteropolyacids of molybdenum (Alizadeh, M.H. (206) 89)
- Bimetal**
Partial hydrogenation of 1,3-cyclooctadiene using dendrimer-encapsulated Pd–Rh bimetallic nanoparticles (Chung, Y.-M. (206) 291)
- Bimetallic catalyst system**
Natural biopolymer-supported bimetallic catalyst system for the carbonylation to esters of Naproxen (Zhang, J. (206) 59)
- Binucleus Mn(IV) complexes**
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- Biphasic catalysis**
Developing an ionic medium for ligandless-palladium-catalysed Suzuki and Heck couplings (Zou, G. (206) 193)
- Biphasic system**
Condensation of benzene and aqueous formaldehyde to diphenylmethane in a biphasic system consisting of an aqueous phase of heteropolyacid (Hou, Z. (206) 121)
- BIPHEPHOS**
Highly selective tandem isomerization–hydroformylation reaction of *trans*-4-octene to *n*-nonanal with rhodium-BIPHEPHOS catalysis (Behr, A. (206) 179)
- Bond cleavage**
The oxidative cleavage of carbon–tin bond catalyzed by heteropolyacids of molybdenum (Alizadeh, M.H. (206) 89)
- Bromide**
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- 1,3-Butadiene**
Effects of polarizability and electronic character of phosphine ligand on the polymerization of 1,3-butadiene using Co-based catalyst (Jang, Y. (206) 29)
- n*-Butane**
Novel modifications in preparing vanadium phosphorus oxides and their applications for partial oxidation of *n*-butane (Wang, X. (206) 261)
- Calcined Ni-Al hydrotalcite**
Selective reduction of aldehydes to alcohols by calcined Ni-Al hydrotalcite (Choudary, B.M. (206) 145)
- Catalysis**
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- Catalyst precipitation**
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- Catalyst preparation**
Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)
- Catalyst**
The oxidative cleavage of carbon–tin bond catalyzed by heteropolyacids of molybdenum (Alizadeh, M.H. (206) 89)
- Catalytic cycle**
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- CCl₄**
Liquid-phase hydrodechlorination of CCl₄ in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- Cerium**
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
- 1,4-*cis*-Polybutadiene**
Effects of polarizability and electronic character of phosphine ligand on the polymerization of 1,3-butadiene using Co-based catalyst (Jang, Y. (206) 29)
- cis*-1-Propenylphosphonic acid (CPPA)**
Kinetics and mechanism on the epoxidation of *cis*-1-propenylphosphonic acid in H₂O catalyzed by tungstate(VI) or molybdate(VI) (Wang, X.-Y. (206) 213)
- CHCl₃**
Liquid-phase hydrodechlorination of CCl₄ in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- Chitosan**
Natural biopolymer-supported bimetallic catalyst system for the carbonylation to esters of Naproxen (Zhang, J. (206) 59)
An easily recoverable and efficient catalyst for heterogeneous cyclopropanation of olefins (Wang, H. (206) 199)
- Clay minerals**
The effect of water and acidity of the clay for ethylene polymerization over Cp₂ZrCl₂ supported on TMA-modified clay materials (Jeong, D.W. (206) 205)
- Cluster models**
The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)

- CO hydrogenation
Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)
- Co-based catalyst
Effects of polarizability and electronic character of phosphine ligand on the polymerization of 1,3-butadiene using Co-based catalyst (Jang, Y. (206) 29)
- Co-salen-complex
Demonstration of a zeolite effect on an encapsulated Co-salen-complex (Möllmann, E. (206) 253)
- Cobalt
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- Conformation
Demonstration of a zeolite effect on an encapsulated Co-salen-complex (Möllmann, E. (206) 253)
- Copper
Carboxylate-enhanced reactivity in the oxygenation of copper flavonolate complexes (Balogh-Hergovich, É. (206) 83)
- Cross-coupling reaction
Novel palladium imidazole catalysts for Suzuki cross-coupling reactions (Mathews, C.J. (206) 77)
- Crystallite size
Dibenzothiophene hydrodesulfurization over synthesized MoS₂ catalysts (Frag, H. (206) 399)
- Cyclohexane
Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)
- Cyclohexene hydroformylation
Rh₄(CO)₁₂-derived functionalized MCM-41-tethered rhodium complexes: preparation, characterization and catalysis for cyclohexene hydroformylation (Huang, L. (206) 371)
- Cyclopentane
Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)
- Cyclopropanation
An easily recoverable and efficient catalyst for heterogeneous cyclopropanation of olefins (Wang, H. (206) 199)
- Dendrimer
Partial hydrogenation of 1,3-cyclooctadiene using dendrimer-encapsulated Pd–Rh bimetallic nanoparticles (Chung, Y.-M. (206) 291)
- DFT
DFT analysis of titanium complexes with oxygen-containing bidentate ligands (Flisak, Z. (206) 429)
- Dibenzothiophene
Dibenzothiophene hydrodesulfurization over synthesized MoS₂ catalysts (Frag, H. (206) 399)
- Diethyl carbonate (DEC)
Liquid-phase hydrodechlorination of CCl₄ in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- 1,1-Diethoxyethane (acetal)
Liquid-phase hydrodechlorination of CCl₄ in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- Dioxygen
Carboxylate-enhanced reactivity in the oxygenation of copper flavonolate complexes (Balogh-Hergovich, É. (206) 83)
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- Dioxygenation
Carboxylate-enhanced reactivity in the oxygenation of copper flavonolate complexes (Balogh-Hergovich, É. (206) 83)
- Diphenylmethane
Condensation of benzene and aqueous formaldehyde to diphenylmethane in a biphasic system consisting of an aqueous phase of heteropolyacid (Hou, Z. (206) 121)
- DRX
Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)
- Electric fields
Unified explanation of catalyzed and non-catalyzed chemical reactions (Gardner-Chavis, R.A. (206) 269)
- Electronic character of phosphine ligand
Effects of polarizability and electronic character of phosphine ligand on the polymerization of 1,3-butadiene using Co-based catalyst (Jang, Y. (206) 29)
- Enantioselectivity
New optically active ruthenium porphyrin catalysts for asymmetric epoxidation of styrenes (Le Maux, P. (206) 95)
- Enzyme
Unified explanation of catalyzed and non-catalyzed chemical reactions (Gardner-Chavis, R.A. (206) 269)
- Epoxidation of conjugated double bonds
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- Epoxidation
New optically active ruthenium porphyrin catalysts for asymmetric epoxidation of styrenes (Le Maux, P. (206) 95)
Kinetics and mechanism on the epoxidation of *cis*-1-propenylphosphonic acid in H₂O catalyzed by tungstate(VI) or molybdate(VI) (Wang, X.-Y. (206) 213)
- Epoxide
Efficient synthesis of β-hydroxy thiocyanates from epoxides and ammonium thiocyanates using tetraarylporphyrins as new catalysts (Sharghi, H. (206) 53)

- Esters of Naproxen
Natural biopolymer-supported bimetallic catalyst system for the carbonylation to esters of Naproxen (Zhang, J. (206) 59)
- Esters
Suitable ligands for homogeneous ruthenium-catalyzed hydro-genolysis of esters (van Engelen, M.Ch. (206) 185)
- Ethanol
Liquid-phase hydrodechlorination of CCl_4 in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- Ethylene polymerization
Ethylene polymerization with catalyst systems based on sup-ported metallocenes with varying steric hindrance (Guimarães, R. (206) 353)
- Ethylene polymerization
Hybrid zirconocene supported catalysts (Silveira, F. (206) 389)
- FT-IR
Liquid-phase hydrodechlorination of CCl_4 in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- Fukui functions
The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)
- Functionalization
 $\text{Rh}_4(\text{CO})_{12}$ -derived functionalized MCM-41-tethered rhodium complexes: preparation, characterization and catalysis for cyclo-hexene hydroformylation (Huang, L. (206) 371)
- Guerbet isobutanol synthesis
Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)
- Heck-coupling
Developing an ionic medium for ligandless-palladium-catalysed Suzuki and Heck couplings (Zou, G. (206) 193)
- Heterogeneous catalysis
Selective reduction of aldehydes to alcohols by calcined Ni-Al hydrotalcite (Choudary, B.M. (206) 145)
- Heterogeneous
An easily recoverable and efficient catalyst for heterogeneous cyclopropanation of olefins (Wang, H. (206) 199)
Unified explanation of catalyzed and non-catalyzed chemical reactions (Gardner-Chavis, R.A. (206) 269)
- Heteropolyacid
The oxidative cleavage of carbon–tin bond catalyzed by hetero-polyacids of molybdenum (Alizadeh, M.H. (206) 89)
Condensation of benzene and aqueous formaldehyde to diphe-nylmethane in a biphasic system consisting of an aqueous phase of heteropolyacid (Hou, Z. (206) 121)
- Hex-1-ene
Hydroformylation of olefins catalysed by alkoxycarbonylcyclo-pentadienyl complexes of rhodium(I) (Busetto, L. (206) 153)
- Hexamethylenediamine
The catalytic hydrogenation of adiponitrile to hexamethylene-diamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)
- High activity
Highly active vinyl-polymerization of norbornene by [2-methyl-8-(diphenylphosphino)quinoline]nickel(II) dichloride/methyla-luminoxane (Yang, H. (206) 23)
- High molecular weight
Highly active vinyl-polymerization of norbornene by [2-methyl-8-(diphenylphosphino)quinoline]nickel(II) dichloride/methyla-luminoxane (Yang, H. (206) 23)
- Homogeneous catalysis
Highly selective tandem isomerization–hydroformylation reac-tion of *trans*-4-octene to *n*-nonanal with rhodium-BIPHEPHOS catalysis (Behr, A. (206) 179)
- Homogeneous catalysis
Iridium-catalyzed formation of *trans*-polyphenylacetylene by alkyne polymerization (Marigo, M. (206) 319)
- Homogeneous liquid phase catalysis
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
- Homogeneous liquid-phase catalysis
The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirco-nium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenhei-mer, W. (206) 131)
- Hybrid catalysts
Hybrid zirconocene supported catalysts (Silveira, F. (206) 389)
- Hydrido chlorocarbonyl tris-(triphenylphosphine) ruthenium(II) complex
Hydrogenation of olefins over hydrido chlorocarbonyl tris-(triphenylphosphine) ruthenium(II) complex immobilized on functionalized MCM-41 and SBA-15 (Joseph, T. (206) 13)
- Hydrodesulfurization
Dibenzothiophene hydrodesulfurization over synthesized MoS_2 catalysts (Farag, H. (206) 399)
- Hydroesterification
Natural biopolymer-supported bimetallic catalyst system for the carbonylation to esters of Naproxen (Zhang, J. (206) 59)
- Hydroformylation
Hydroformylation of olefins catalysed by alkoxycarbonylcyclo-pentadienyl complexes of rhodium(I) (Busetto, L. (206) 153)
- Hydrogen peroxide
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using $\text{Mn(IV)-Me}_3\text{TACN}$ and $\text{Mn(IV)-Me}_4\text{DTNE}$ as catalyst (Alves, V. (206) 37)
- Hydrogen
Selective reduction of aldehydes to alcohols by calcined Ni-Al hydrotalcite (Choudary, B.M. (206) 145)
- Hydrogenation
Hydrogenation of olefins over hydrido chlorocarbonyl tris-(tri-phenylphosphine) ruthenium(II) complex immobilized on func-tionalized MCM-41 and SBA-15 (Joseph, T. (206) 13)

- Suitable ligands for homogeneous ruthenium-catalyzed hydrogenolysis of esters (van Engelen, M.Chr. (206) 185)
- Partial hydrogenation of 1,3-cyclooctadiene using dendrimer-encapsulated Pd–Rh bimetallic nanoparticles (Chung, Y.-M. (206) 291)
- Hydrogenation of aromatics over supported noble metal catalysts ex organometallic complexes (Rojas, S. (206) 299)
- Supramolecular selectivity in solid phase catalytic hydrogenation of phenylalkynyl and azobenzene derivatives (Pri-Bar, I. (206) 313)
- The catalytic hydrogenation of adiponitrile to hexamethylenediamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)
- Hydrogenolysis
- Suitable ligands for homogeneous ruthenium-catalyzed hydrogenolysis of esters (van Engelen, M.Chr. (206) 185)
- Hydroxides
- Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)
- Hydroxocomplexes
- Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)
- Hydroxyapatite
- Surface changes and radical formation on hydroxyapatite by UV irradiation for inducing photocatalytic activation (Nishikawa, H. (206) 331)
- Imidazoles
- Novel palladium imidazole catalysts for Suzuki cross-coupling reactions (Mathews, C.J. (206) 77)
- In situ generation of H₂O₂
- Liquid-phase hydrodechlorination of CCl₄ in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)
- Internal olefin
- Highly selective tandem isomerization–hydroformylation reaction of *trans*-4-octene to *n*-nonanal with rhodium-BIPHEPHOS catalysis (Behr, A. (206) 179)
- Iridium
- Iridium-catalyzed formation of *trans*-polyphenylacetylene by alkyne polymerization (Marigo, M. (206) 319)
- Isomerization–hydroformylation
- Highly selective tandem isomerization–hydroformylation reaction of *trans*-4-octene to *n*-nonanal with rhodium-BIPHEPHOS catalysis (Behr, A. (206) 179)
- Kinetics
- Phase-transfer catalyzed benzylation of sodium benzoate using aliquat 336 as catalyst in liquid–liquid system (Yang, H.-M. (206) 67)
- Lewis acid strength
- The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
- Lewis acid
- The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- Lewis base
- DFT analysis of titanium complexes with oxygen-containing bidentate ligands (Flisak, Z. (206) 429)
- Ligandless-catalyst
- Developing an ionic medium for ligandless-palladium-catalysed Suzuki and Heck couplings (Zou, G. (206) 193)
- Lignin model compounds
- Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- Liquid–liquid phases
- Phase-transfer catalyzed benzylation of sodium benzoate using aliquat 336 as catalyst in liquid–liquid system (Yang, H.-M. (206) 67)
- Local softness matching
- The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)
- Maleic anhydride
- Novel modifications in preparing vanadium phosphorus oxides and their applications for partial oxidation of *n*-butane (Wang, X. (206) 261)
- Manganese
- The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
- The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- MCM-41
- Hydrogenation of olefins over hydrido chlorocarbonyl tris-(triphenylphosphine) ruthenium(II) complex immobilized on functionalized MCM-41 and SBA-15 (Joseph, T. (206) 13)
- Rh₄(CO)₁₂-derived functionalized MCM-41-tethered rhodium complexes: preparation, characterization and catalysis for cyclohexene hydroformylation (Huang, L. (206) 371)
- Mechanism
- Kinetics and mechanism on the epoxidation of *cis*-1-propenylphosphonic acid in H₂O catalyzed by tungstate(VI) or molybdate(VI) (Wang, X.-Y. (206) 213)
- Metallocene catalysts
- The effect of water and acidity of the clay for ethylene polymerization over Cp₂ZrCl₂ supported on TMA-modified clay materials (Jeong, D.W. (206) 205)
- 6-Methoxy-2-vinylnaphthalene
- Natural biopolymer-supported bimetallic catalyst system for the carbonylation to esters of Naproxen (Zhang, J. (206) 59)

Methanol

Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)

Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)

Mineral acids

Condensation of benzene and aqueous formaldehyde to diphenylmethane in a biphasic system consisting of an aqueous phase of heteropolyacid (Hou, Z. (206) 121)

Model

Carboxylate-enhanced reactivity in the oxygenation of copper flavonolate complexes (Balogh-Hergovich, E. (206) 83)

Molten salt

Developing an ionic medium for ligandless-palladium-catalysed Suzuki and Heck couplings (Zou, G. (206) 193)

Molybdenum

The oxidative cleavage of carbon–tin bond catalyzed by heteropolyacids of molybdenum (Alizadeh, M.H. (206) 89)

MoS₂

Dibenzothiophene hydrodesulfurization over synthesized MoS₂ catalysts (Farag, H. (206) 399)

N-donor ligands

Novel palladium imidazole catalysts for Suzuki cross-coupling reactions (Mathews, C.J. (206) 77)

Na₂MoO₄

Kinetics and mechanism on the epoxidation of *cis*-1-propenylphosphonic acid in H₂O catalyzed by tungstate(VI) or molybdate(VI) (Wang, X.-Y. (206) 213)

Na₂WO₄

Kinetics and mechanism on the epoxidation of *cis*-1-propenylphosphonic acid in H₂O catalyzed by tungstate(VI) or molybdate(VI) (Wang, X.-Y. (206) 213)

Nanoparticle

Partial hydrogenation of 1,3-cyclooctadiene using dendrimer-encapsulated Pd–Rh bimetallic nanoparticles (Chung, Y.-M. (206) 291)

Nanoreactor

Partial hydrogenation of 1,3-cyclooctadiene using dendrimer-encapsulated Pd–Rh bimetallic nanoparticles (Chung, Y.-M. (206) 291)

Nickel catalysts

Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)

n-Propanol

Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)

Olefin adsorption

The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)

Olefin polymerisation

DFT analysis of titanium complexes with oxygen-containing bidentate ligands (Flisak, Z. (206) 429)

Organic–inorganic composite

Partial hydrogenation of 1,3-cyclooctadiene using dendrimer-encapsulated Pd–Rh bimetallic nanoparticles (Chung, Y.-M. (206) 291)

Organometallic complexes

Hydrogenation of aromatics over supported noble metal catalysts ex organometallic complexes (Rojas, S. (206) 299)

Oxidation

Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Oxygen radical

Surface changes and radical formation on hydroxyapatite by UV irradiation for inducing photocatalytic activation (Nishikawa, H. (206) 331)

Palladium

Novel palladium imidazole catalysts for Suzuki cross-coupling reactions (Mathews, C.J. (206) 77)

Palladium

Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)

Peroxidative oxidation

Heteronuclear iron(III)–chromium(III) hydroxo complexes and hydroxides, and their catalytic activity towards peroxidative oxidation of alkanes (Kopylovich, M.N. (206) 163)

PET

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

Phase-transfer catalysis

Phase-transfer catalyzed benzylation of sodium benzoate using aliquat 336 as catalyst in liquid–liquid system (Yang, H.-M. (206) 67)

Phenylalkynyl

Supramolecular selectivity in solid phase catalytic hydrogenation of phenylalkynyl and azobenzene derivatives (Pri-Bar, I. (206) 313)

Phosphines

Iridium-catalyzed formation of *trans*-polyphenylacetylene by alkyne polymerization (Marigo, M. (206) 319)

Photoanode

Photoelectrocatalytic degradation of aniline over rutile TiO₂/Ti electrode thermally formed at 600 °C (Leng, W.H. (206) 239)

- Photocatalytic activity
Photocatalytic activity and recycle application of titanium dioxide sol for X-3B photodegradation (Xie, Y. (206) 419)
- Photocatalytic activity
Surface changes and radical formation on hydroxyapatite by UV irradiation for inducing photocatalytic activation (Nishikawa, H. (206) 331)
- Photoelectrocatalysis
Photoelectrocatalytic degradation of aniline over rutile TiO₂/Ti electrode thermally formed at 600 °C (Leng, W.H. (206) 239)
- Photosensitization
Photocatalytic activity and recycle application of titanium dioxide sol for X-3B photodegradation (Xie, Y. (206) 419)
- Polarizability of phosphine ligand
Effects of polarizability and electronic character of phosphine ligand on the polymerization of 1,3-butadiene using Co-based catalyst (Jang, Y. (206) 29)
- Polyester
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
- Polyethylene glycol
Novel modifications in preparing vanadium phosphorus oxides and their applications for partial oxidation of *n*-butane (Wang, X. (206) 261)
- Polyethylene
The effect of water and acidity of the clay for ethylene polymerization over Cp₂ZrCl₂ supported on TMA-modified clay materials (Jeong, D.W. (206) 205)
- Polymerization
Iridium-catalyzed formation of *trans*-polyphenylacetylene by alkyne polymerization (Marigo, M. (206) 319)
- p*-Xylene
The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)
- p*-Xylene
The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)
- Quantum chemical calculations
The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)
- Quercetinase
Carboxylate-enhanced reactivity in the oxygenation of copper flavonolate complexes (Balogh-Hergovich, É. (206) 83)
- Raney Ni
The catalytic hydrogenation of adiponitrile to hexamethylenediamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)
- RBS
Hybrid zirconocene supported catalysts (Silveira, F. (206) 389)
- Reaction kinetics
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- Reaction mechanisms
Comparative studies on oxidation of lignin model compounds with hydrogen peroxide using Mn(IV)-Me₃TACN and Mn(IV)-Me₄DTNE as catalyst (Alves, V. (206) 37)
- Recycle use
Photocatalytic activity and recycle application of titanium dioxide sol for X-3B photodegradation (Xie, Y. (206) 419)
- Reductions
Selective reduction of aldehydes to alcohols by calcined Ni-Al hydrotalcite (Choudary, B.M. (206) 145)
- Resonance
Unified explanation of catalyzed and non-catalyzed chemical reactions (Gardner-Chavis, R.A. (206) 269)
- Rh₄(CO)₁₂
Rh₄(CO)₁₂-derived functionalized MCM-41-tethered rhodium complexes: preparation, characterization and catalysis for cyclohexene hydroformylation (Huang, L. (206) 371)
- Rhodium catalysts
Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)
- Rhodium
Highly selective tandem isomerization-hydroformylation reaction of *trans*-4-octene to *n*-nonanal with rhodium-BIPHEPHOS catalysis (Behr, A. (206) 179)
Hydrogenation of aromatics over supported noble metal catalysts ex organometallic complexes (Rojas, S. (206) 299)
The catalytic hydrogenation of adiponitrile to hexamethylenediamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)
- Rhodium(I) complexes
Hydroformylation of olefins catalysed by alkoxycarbonylcyclopentadienyl complexes of rhodium(I) (Busetto, L. (206) 153)
- Ring opening
Efficient synthesis of β-hydroxy thiocyanates from epoxides and ammonium thiocyanates using tetraarylporphyrins as new catalysts (Sharghi, H. (206) 53)
- Ruthenium catalysts
Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)
- Ruthenium porphyrins
New optically active ruthenium porphyrin catalysts for asymmetric epoxidation of styrenes (Le Maux, P. (206) 95)
- Ruthenium
Suitable ligands for homogeneous ruthenium-catalyzed hydrolysis of esters (van Engelen, M.Chr. (206) 185)

SBA-15, immobilization

Hydrogenation of olefins over hydrido chlorocarbonyl tris-(triphenylphosphine) ruthenium(II) complex immobilized on functionalized MCM-41 and SBA-15 (Joseph, T. (206) 13)

Schiff base Cu(II) complex

An easily recoverable and efficient catalyst for heterogeneous cyclopropanation of olefins (Wang, H. (206) 199)

Selective hydrodechlorination

Liquid-phase hydrodechlorination of CCl_4 in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)

Selective oxidation

The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)

Selectivity

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Dibenzothiophene hydrodesulfurization over synthesized MoS_2 catalysts (Farag, H. (206) 399)

Silica

Hybrid zirconocene supported catalysts (Silveira, F. (206) 389)

Simulation

Demonstration of a zeolite effect on an encapsulated Co-salen-complex (Möllmann, E. (206) 253)

Sodium methoxide

Selective synthesis of isobutanol by means of the Guerbet reaction. Part 3: Methanol/*n*-propanol condensation by using bifunctional catalytic systems based on nickel, rhodium and ruthenium species with basic components (Carlini, C. (206) 409)

Sol

Photocatalytic activity and recycle application of titanium dioxide sol for X-3B photodegradation (Xie, Y. (206) 419)

Stirred slurry reactor

The catalytic hydrogenation of adiponitrile to hexamethylenediamine over a rhodium/alumina catalyst in a three phase slurry reactor (Alini, S. (206) 363)

Styrene

Hydroformylation of olefins catalysed by alkoxycarbonylcyclopentadienyl complexes of rhodium(I) (Busetto, L. (206) 153)

Sulphur resistance

Hydrogenation of aromatics over supported noble metal catalysts ex organometallic complexes (Rojas, S. (206) 299)

Supported metallocenes

Ethylene polymerization with catalyst systems based on supported metallocenes with varying steric hindrance (Guimarães, R. (206) 353)

Supported metallocenes

Hybrid zirconocene supported catalysts (Silveira, F. (206) 389)

Supported Pd or Pt catalysts

Liquid-phase hydrodechlorination of CCl_4 in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)

Supramolecules

Supramolecular selectivity in solid phase catalytic hydrogenation of phenylalkynyl and azobenzene derivatives (Pri-Bar, I. (206) 313)

Surface change

Surface changes and radical formation on hydroxyapatite by UV irradiation for inducing photocatalytic activation (Nishikawa, H. (206) 331)

Suzuki

Novel palladium imidazole catalysts for Suzuki cross-coupling reactions (Mathews, C.J. (206) 77)

Suzuki-coupling

Developing an ionic medium for ligandless-palladium-catalysed Suzuki and Heck couplings (Zou, G. (206) 193)

Syngas

Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)

Temperature-programmed surface reaction (TPSR)

Liquid-phase hydrodechlorination of CCl_4 in a medium of ethanol with co-production of acetal and diethyl carbonate (Bae, J.W. (206) 225)

Terephthalic acid

The effect of zirconium in metal/bromide catalysts during the autoxidation of *p*-xylene. Part I. Activation and changes in benzaldehyde intermediate formation (Partenheimer, W. (206) 105)

Terephthalic acid

The effect of zirconium in metal/bromide catalysts on the autoxidation of *p*-xylene. Part II. Alternative metals to zirconium and the effect of zirconium on manganese(IV) dioxide formation and precipitation with pyromellitic acid (Partenheimer, W. (206) 131)

Tethered catalyst

$\text{Rh}_4(\text{CO})_{12}$ -derived functionalized MCM-41-tethered rhodium complexes: preparation, characterization and catalysis for cyclohexene hydroformylation (Huang, L. (206) 371)

Tetraarylporphyrin

Efficient synthesis of β -hydroxy thiocyanates from epoxides and ammonium thiocyanates using tetraarylporphyrins as new catalysts (Sharghi, H. (206) 53)

Thermally oxidation

Photoelectrocatalytic degradation of aniline over rutile TiO_2/Ti electrode thermally formed at 600 °C (Leng, W.H. (206) 239)

Thiocyanohydrin

Efficient synthesis of β -hydroxy thiocyanates from epoxides and ammonium thiocyanates using tetraarylporphyrins as new catalysts (Sharghi, H. (206) 53)

 TiO_2

Photocatalytic activity and recycle application of titanium dioxide sol for X-3B photodegradation (Xie, Y. (206) 419)

Titanium dioxide

Photoelectrocatalytic degradation of aniline over rutile TiO₂/Ti electrode thermally formed at 600 °C (Leng, W.H. (206) 239)

Transhydrogenation

Demonstration of a zeolite effect on an encapsulated Co-salen-complex (Möllmann, E. (206) 253)

Tripodal phosphine

Suitable ligands for homogeneous ruthenium-catalyzed hydrogenolysis of esters (van Engelen, M.Chr. (206) 185)

Vanadyl pyrophosphate

The interplay of electrostatic and covalent effects in 1-butene oxidation over vanadyl pyrophosphate (Thompson, D.J. (206) 435)

Vinyl polynorbornene

Highly active vinyl-polymerization of norbornene by [2-methyl-8-(diphenylphosphino)quinoline]nickel(II) dichloride/methylaluminoxane (Yang, H. (206) 23)

VPO

Novel modifications in preparing vanadium phosphorus oxides and their applications for partial oxidation of *n*-butane (Wang, X. (206) 261)

Wide molecular weight distribution

Highly active vinyl-polymerization of norbornene by [2-methyl-8-(diphenylphosphino)quinoline]nickel(II) dichloride/methylaluminoxane (Yang, H. (206) 23)

XPS

Ethylene polymerization with catalyst systems based on supported metallocenes with varying steric hindrance (Guimarães, R. (206) 353)

Zeolites

Demonstration of a zeolite effect on an encapsulated Co-salen-complex (Möllmann, E. (206) 253)

Ziegler–Natta catalyst

DFT analysis of titanium complexes with oxygen-containing bidentate ligands (Flisak, Z. (206) 429)

ZnO

Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)

Zr(OH)₄

Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)

ZrO₂

Palladium-based catalysts for the synthesis of alcohols (Josefina Pérez-Zurita, M. (206) 339)