

## Subject index

### Acidic zeolites

Thermal and photochemical Wallach rearrangement of azoxybenzene in zeolite cages (Lalitha, A. (160) 429)

### Air oxidation

Polymer-supported molybdenyl thioglycolate as oxygen atom transfer reagent (Arroyo, P. (160) 403)

### Alcohol

The efficient and selective oxidation of alcohols with zeolite NaY-supported sodium ruthenate (Friedrich, H.B. (160) 461)

### Alkenes

Chiral Ni(II) Schiff base complex-catalysed enantioselective epoxidation of prochiral non-functionalised alkenes (Kureshy, R.I. (160) 217)

### Alkynes

Carbonylation of terminal alkynes catalysed by Pd complexes in combination with tri(2-furyl)phosphine and methanesulfonic acid (Scrivanti, A. (160) 331)

### $\gamma$ -Alumina

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

### Alumoxanes

Ethene/propene copolymerisations with *rac*-EBTHIZrR<sub>2</sub>/alumoxane:  $\sigma$ -ligands effect (Polo, E. (160) 229)

### Amides

The catalytic hydration of nitriles to amides using a homogeneous platinum phosphinito catalyst (Ghaffar, T. (160) 249)

### Ansa-metallocenes

Ethene/propene copolymerisations with *rac*-EBTHIZrR<sub>2</sub>/alumoxane:  $\sigma$ -ligands effect (Polo, E. (160) 229)

### Asymmetric induction

Chiral Ni(II) Schiff base complex-catalysed enantioselective epoxidation of prochiral non-functionalised alkenes (Kureshy, R.I. (160) 217)

### Azoxybenzene

Thermal and photochemical Wallach rearrangement of azoxybenzene in zeolite cages (Lalitha, A. (160) 429)

### Biomimetic catalyst

Biomimetic catalytic activity of iron(III) porphyrins encapsulated in the zeolite X (Rosa, I.L.V. (160) 199)

### Bromamine-T

Bromamine-T mediated aziridination of olefins with a new polymer supported Manganese(II) complex as catalyst (Vyas, R. (160) 237)

### Carbidopa

Determination of the rates of formation and hydrolysis of the Schiff bases formed by pyridoxal 5'-phosphate and hydrazinic compounds (Echevarría, G.R. (160) 209)

### Carbonylation

Carbonylation of terminal alkynes catalysed by Pd complexes in combination with tri(2-furyl)phosphine and methanesulfonic acid (Scrivanti, A. (160) 331)

### Catalysed quaternization

Catalysed quaternization of coordinated tertiary amines by ethyl iodide: kinetics and mechanism (Santos, M.S.C.S. (160) 293)

### Catalysis

Uranium iodides as catalysts for Diels–Alder reactions (Collin, J. (160) 263)

Microwave activation of catalytic transformation of *t*-butylphenols (Hájek, M. (160) 383)

### Catalyst characterization (XRD, FTIR, SEM)

Isomorphic substitution of boron in ZSM-5 type zeolites using TBP as template (Sundaramurthy, V. (160) 367)

### Chloramine-B

Os(VIII)-catalysed oxidation of sulfides by sodium salt of *N*-chlorobenzenesulfonamide (Meenakshisundaram, S. (160) 269)

### Clays

Microwave activation of catalytic transformation of *t*-butylphenols (Hájek, M. (160) 383)

### Clusters

Quantum chemical study of neutral and single charged palladium clusters (Efremenko, I. (160) 445)

### Coordinated amines

Catalysed quaternization of coordinated tertiary amines by ethyl iodide: kinetics and mechanism (Santos, M.S.C.S. (160) 293)

### Cyclization

The effect of cocatalysts on the oligomerization and cyclization of ethylene catalyzed by zirconocene complexes (Wang, M. (160) 337)

### Cyclohexanone

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

### Cyclohexanone oxime

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

## Cyclohexylamine

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

## Cyclohexylidenecyclohexylamine

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

## Diastereoselective thio-Claisen rearrangement

Energetic study of diastereoselective thio-Claisen rearrangement (Wang, L. (160) 377)

## Dichlorobenzoate ions

Inverse phase transfer catalysis. Kinetics of the pyridine 1-oxide-catalyzed reactions of dichlorobenzoyl chlorides and benzoate ions (Chang, Y.S. (160) 357)

## Dichlorobenzoic anhydrides

Inverse phase transfer catalysis. Kinetics of the pyridine 1-oxide-catalyzed reactions of dichlorobenzoyl chlorides and benzoate ions (Chang, Y.S. (160) 357)

## Dichlorobenzoyl chlorides

Inverse phase transfer catalysis. Kinetics of the pyridine 1-oxide-catalyzed reactions of dichlorobenzoyl chlorides and benzoate ions (Chang, Y.S. (160) 357)

## Diels–Alder reactions

Uranium iodides as catalysts for Diels–Alder reactions (Collin, J. (160) 263)

## Dimethyl carbonate (DMC)

The effects of catalyst composition on the catalytic production of dimethyl carbonate (Chin, C.S. (160) 315)

## Electrocatalysis

Nafion–RuO<sub>2</sub>–Ru(bpy)<sub>3</sub><sup>2+</sup> composite electrodes for efficient electrocatalytic water oxidation (Pillai, K.C. (160) 277)

## Epoxidation

Chiral Ni(II) Schiff base complex-catalysed enantioselective epoxidation of prochiral non-functionalised alkenes (Kureshy, R.I. (160) 217)

## ES-40

Isomorphic substitution of boron in ZSM-5 type zeolites using TBP as template (Sundaramurthy, V. (160) 367)

## Ethylaluminosiloxane

Ethylene oligomerization by diimine iron(II) complexes/EAO (Mingxing, Q. (160) 243)

## Ethylene oligomerization

Ethylene oligomerization by diimine iron(II) complexes/EAO (Mingxing, Q. (160) 243)

The effect of cocatalysts on the oligomerization and cyclization of ethylene catalyzed by zirconocene complexes (Wang, M. (160) 337)

## Ethylene selectivity

Methanol conversion on metal-incorporated SAPO-34s (MeAPSO-34s) (Kang, M. (160) 437)

## Heterogeneous catalysis

Molecular simulation on hydrodesulfurization of thiophenic compounds over MoS<sub>2</sub> using ZINDO (Ma, X. (160) 409)

## Heterogeneous catalyst

Polymer-supported molybdenyl thioglycolate as oxygen atom transfer reagent (Arroyo, P. (160) 403)

## 1-Hexene double bond isomerization

Isomorphic substitution of boron in ZSM-5 type zeolites using TBP as template (Sundaramurthy, V. (160) 367)

## Homogeneous catalysis

The catalytic hydration of nitriles to amides using a homogeneous platinum phosphinito catalyst (Ghaffar, T. (160) 249)

## Homogeneous catalyst

A homogeneous catalyst made of poly(4-vinylpyridine-co-N-vinylpyrrolidone)-Pd(0) complex for hydrogenation of aromatic nitro compounds (Xu, S. (160) 287)

## Hydralazine

Determination of the rates of formation and hydrolysis of the Schiff bases formed by pyridoxal 5'-phosphate and hydrazinic compounds (Echevarría, G.R. (160) 209)

## Hydrazine

Determination of the rates of formation and hydrolysis of the Schiff bases formed by pyridoxal 5'-phosphate and hydrazinic compounds (Echevarría, G.R. (160) 209)

## Hydrocarbon oxidation

Biomimetic catalytic activity of iron(III) porphyrins encapsulated in the zeolite X (Rosa, I.L.V. (160) 199)

## Hydrodesulfurization

Molecular simulation on hydrodesulfurization of thiophenic compounds over MoS<sub>2</sub> using ZINDO (Ma, X. (160) 409)

## Hydrogenation

A homogeneous catalyst made of poly(4-vinylpyridine-co-N-vinylpyrrolidone)-Pd(0) complex for hydrogenation of aromatic nitro compounds (Xu, S. (160) 287)

## Imines

Chiral Ni(II) Schiff base complex-catalysed enantioselective epoxidation of prochiral non-functionalised alkenes (Kureshy, R.I. (160) 217)

## Inverse phase transfer catalysis

Inverse phase transfer catalysis. Kinetics of the pyridine 1-oxide-catalyzed reactions of dichlorobenzoyl chlorides and benzoate ions (Chang, Y.S. (160) 357)

## Iron complexes

Ethylene oligomerization by diimine iron(II) complexes/EAO (Mingxing, Q. (160) 243)

## Ironporphyrin

Biomimetic catalytic activity of iron(III) porphyrins encapsulated in the zeolite X (Rosa, I.L.V. (160) 199)

## Ironporphyrin encapsulation

Biomimetic catalytic activity of iron(III) porphyrins encapsulated in the zeolite X (Rosa, I.L.V. (160) 199)

## Irradiation

Thermal and photochemical Wallach rearrangement of azoxybenzene in zeolite cages (Lalitha, A. (160) 429)

## Isoniazid

Determination of the rates of formation and hydrolysis of the Schiff bases formed by pyridoxal 5'-phosphate and hydrazinic compounds (Echevarría, G.R. (160) 209)

## Kinetics

Catalysed quaternization of coordinated tertiary amines by ethyl iodide: kinetics and mechanism (Santos, M.S.C.S. (160) 293)

## Manganese (II)

Bromamine-T mediated aziridination of olefins with a new polymer supported Manganese(II) complex as catalyst (Vyas, R. (160) 237)

- MeAPSO-34s**  
Methanol conversion on metal-incorporated SAPO-34s (MeAPSO-34s) (Kang, M. (160) 437)
- Methanation**  
Methanol conversion on metal-incorporated SAPO-34s (MeAPSO-34s) (Kang, M. (160) 437)
- Methanol conversion**  
Methanol conversion on metal-incorporated SAPO-34s (MeAPSO-34s) (Kang, M. (160) 437)
- Methylenecyclopentane**  
The effect of cocatalysts on the oligomerization and cyclization of ethylene catalyzed by zirconocene complexes (Wang, M. (160) 337)
- Microwaves**  
Microwave activation of catalytic transformation of *t*-butylphenols (Hájek, M. (160) 383)
- Molybdenum**  
Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)  
Polymer-supported molybdenyl thioglycolate as oxygen atom transfer reagent (Arroyo, P. (160) 403)
- Molybdenum disulfide**  
Molecular simulation on hydrodesulfurization of thiophenic compounds over MoS<sub>2</sub> using ZINDO (Ma, X. (160) 409)
- Nafion**  
Nafion–RuO<sub>2</sub>–Ru(bpy)<sub>3</sub><sup>2+</sup> composite electrodes for efficient electrocatalytic water oxidation (Pillai, K.C. (160) 277)
- Nitrile hydrolysis**  
The catalytic hydration of nitriles to amides using a homogeneous platinum phosphinito catalyst (Ghaffar, T. (160) 249)
- Nitroaromatics**  
A homogeneous catalyst made of poly(4-vinylpyridine-co-*N*-vinylpyrrolidone)-Pd(0) complex for hydrogenation of aromatic nitro compounds (Xu, S. (160) 287)
- Non-bonding interaction**  
Energetic study of diastereoselective thio-Claisen rearrangement (Wang, L. (160) 377)
- Non-functionalised**  
Chiral Ni(II) Schiff base complex-catalysed enantioselective epoxidation of prochiral non-functionalised alkenes (Kureshy, R.I. (160) 217)
- Olefin**  
Bromamine-T mediated aziridination of olefins with a new polymer supported Manganese(II) complex as catalyst (Vyas, R. (160) 237)
- Organo-aluminum compounds**  
The effect of cocatalysts on the oligomerization and cyclization of ethylene catalyzed by zirconocene complexes (Wang, M. (160) 337)
- Os(VIII) catalysis**  
Os(VIII)-catalysed oxidation of sulfides by sodium salt of *N*-chlorobenzenesulfonamide (Meenakshisundaram, S. (160) 269)
- Oxidation**  
The efficient and selective oxidation of alcohols with zeolite NaY-supported sodium ruthenate (Friedrich, H.B. (160) 461)
- Oxidative carbonylation**  
The effects of catalyst composition on the catalytic production of dimethyl carbonate (Chin, C.S. (160) 315)
- Palladium**  
Quantum chemical study of neutral and single charged palladium clusters (Efremenko, I. (160) 445)
- Palladium complex**  
A homogeneous catalyst made of poly(4-vinylpyridine-co-*N*-vinylpyrrolidone)-Pd(0) complex for hydrogenation of aromatic nitro compounds (Xu, S. (160) 287)
- Palladium compound**  
The effects of catalyst composition on the catalytic production of dimethyl carbonate (Chin, C.S. (160) 315)
- Phenols**  
Microwave activation of catalytic transformation of *t*-butylphenols (Hájek, M. (160) 383)
- Photodegradation**  
Photodegradation of polyaromatic hydrocarbons over thin film of TiO<sub>2</sub> nanoparticles; a study of intermediate photoproducts (Pal, B. (160) 453)
- Platinum phosphinito complexes**  
The catalytic hydration of nitriles to amides using a homogeneous platinum phosphinito catalyst (Ghaffar, T. (160) 249)
- PLP**  
Determination of the rates of formation and hydrolysis of the Schiff bases formed by pyridoxal 5'-phosphate and hydrazinic compounds (Echevarría, G.R. (160) 209)
- Polyaromatic hydrocarbon**  
Photodegradation of polyaromatic hydrocarbons over thin film of TiO<sub>2</sub> nanoparticles; a study of intermediate photoproducts (Pal, B. (160) 453)
- Polymerisations**  
Ethene/propene copolymerisations with *rac*-EBTHIZrR<sub>2</sub>/alumoxane:  $\sigma$ -ligands effect (Polo, E. (160) 229)
- Porphyrin degradation**  
Structural stabilities of sulfonated manganese tetramesitylporphyrin and its  $\beta$ -brominated analogue toward NaOCl, H<sub>2</sub>O<sub>2</sub> and (CH<sub>3</sub>)<sub>3</sub>COOH (Türk, H. (160) 323)
- Porphyrin stability**  
Structural stabilities of sulfonated manganese tetramesitylporphyrin and its  $\beta$ -brominated analogue toward NaOCl, H<sub>2</sub>O<sub>2</sub> and (CH<sub>3</sub>)<sub>3</sub>COOH (Türk, H. (160) 323)
- Pyridine 1-oxide**  
Inverse phase transfer catalysis. Kinetics of the pyridine 1-oxide-catalyzed reactions of dichlorobenzoyl chlorides and benzoate ions (Chang, Y.S. (160) 357)
- Rapid crystallization method**  
Methanol conversion on metal-incorporated SAPO-34s (MeAPSO-34s) (Kang, M. (160) 437)
- Recycling**  
The efficient and selective oxidation of alcohols with zeolite NaY-supported sodium ruthenate (Friedrich, H.B. (160) 461)
- Ru(bpy)<sub>3</sub><sup>2+</sup>**  
Nafion–RuO<sub>2</sub>–Ru(bpy)<sub>3</sub><sup>2+</sup> composite electrodes for efficient electrocatalytic water oxidation (Pillai, K.C. (160) 277)
- RuO<sub>2</sub>**  
Nafion–RuO<sub>2</sub>–Ru(bpy)<sub>3</sub><sup>2+</sup> composite electrodes for efficient electrocatalytic water oxidation (Pillai, K.C. (160) 277)
- Schiff base**  
Determination of the rates of formation and hydrolysis of the Schiff bases formed by pyridoxal 5'-phosphate and hydrazinic compounds (Echevarría, G.R. (160) 209)

## Semi-empirical models and model calculations

Quantum chemical study of neutral and single charged palladium clusters (Efremenko, I. (160) 445)

## Silica

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

## Sodium ruthenate

The efficient and selective oxidation of alcohols with zeolite NaY-supported sodium ruthenate (Friedrich, H.B. (160) 461)

## Steric energy

Energetic study of diastereoselective thio-Claisen rearrangement (Wang, L. (160) 377)

## Sulfides

Os(VIII)-catalysed oxidation of sulfides by sodium salt of *N*-chlorobenzenesulfonamide (Meenakshisundaram, S. (160) 269)

## Superficial molecular arrangement

Catalysed quaternization of coordinated tertiary amines by ethyl iodide: kinetics and mechanism (Santos, M.S.C.S. (160) 293)

## Synergy effect

The effects of catalyst composition on the catalytic production of dimethyl carbonate (Chin, C.S. (160) 315)

## TBP

Isomorphic substitution of boron in ZSM-5 type zeolites using TBP as template (Sundaramurthy, V. (160) 367)

## Tetramesitylporphyrin Supported porphyrin

Structural stabilities of sulfonated manganese tetramesitylporphyrin and its  $\beta$ -brominated analogue toward NaOCl,  $H_2O_2$  and  $(CH_3)_3COOH$  (Türk, H. (160) 323)

## Thiophene

Molecular simulation on hydrodesulfurization of thiophenic compounds over  $MoS_2$  using ZINDO (Ma, X. (160) 409)

## Three-component catalyst

The effects of catalyst composition on the catalytic production of dimethyl carbonate (Chin, C.S. (160) 315)

 $TiO_2$  thin films

Photodegradation of polyaromatic hydrocarbons over thin film of  $TiO_2$  nanoparticles; a study of intermediate photoproducts (Pal, B. (160) 453)

## Transalkylation

Microwave activation of catalytic transformation of *t*-butylphenols (Hájek, M. (160) 383)

## Tri(2-furyl)phosphine

Carbonylation of terminal alkynes catalysed by Pd complexes in combination with tri(2-furyl)phosphine and methanesulfonic acid (Scrivanti, A. (160) 331)

## Tungsten

Oxidation of cyclohexylamine by air to its oxime (Kaszoniy, A. (160) 393)

## Uranium derivatives

Uranium iodides as catalysts for Diels–Alder reactions (Colin, J. (160) 263)

## Wallach rearrangement

Thermal and photochemical Wallach rearrangement of azoxybenzene in zeolite cages (Lalitha, A. (160) 429)

## Water oxidation

Nafion– $RuO_2$ – $Ru(bpy)_3^{2+}$  composite electrodes for efficient electrocatalytic water oxidation (Pillai, K.C. (160) 277)

## Zeolite

Energetic study of diastereoselective thio-Claisen rearrangement (Wang, L. (160) 377)

The efficient and selective oxidation of alcohols with zeolite NaY-supported sodium ruthenate (Friedrich, H.B. (160) 461)

## Zeolites

Biomimetic catalytic activity of iron(III) porphyrins encapsulated in the zeolite X (Rosa, I.L.V. (160) 199)

## Ziegler–Natta catalysis

Ethene/propene copolymerisations with *rac*-EBTHIZrR<sub>2</sub>/alumoxane:  $\sigma$ -ligands effect (Polo, E. (160) 229)

## ZINDO calculation

Molecular simulation on hydrodesulfurization of thiophenic compounds over  $MoS_2$  using ZINDO (Ma, X. (160) 409)

## Zirconium

Ethene/propene copolymerisations with *rac*-EBTHIZrR<sub>2</sub>/alumoxane:  $\sigma$ -ligands effect (Polo, E. (160) 229)

## Zirconocene catalyst

The effect of cocatalysts on the oligomerization and cyclization of ethylene catalyzed by zirconocene complexes (Wang, M. (160) 337)

## B-ZSM-5

Isomorphic substitution of boron in ZSM-5 type zeolites using TBP as template (Sundaramurthy, V. (160) 367)