

## Subject index

### Acetaldehyde decomposition

Aerogel processing of  $\text{MTi}_2\text{O}_5$  (M=Mg, Mn, Fe, Co, Zn, Sn) compositions using single source precursors: synthesis, characterization and photocatalytic behavior (Kapoor, P.N. (229) 145)

### Acid catalysis

Activity–acidity relationship for alkane cracking over zeolites: *n*-hexane cracking over HZSM-5 (Borges, P. (229) 127)

### Acidity–activity relationship

Activity–acidity relationship for alkane cracking over zeolites: *n*-hexane cracking over HZSM-5 (Borges, P. (229) 127)

### Alicyclic alcoholato-ligand

Ethylene polymerisation with hafnocene difenolate/MAO system: a comparison with other hafnocenes (Grafov, A.V. (229) 59)

### Alkyl anthrahydroquinone

Epoxidation of allyl chloride with molecular oxygen and 2-ethyl-anthrahydroquinone catalyzed by TS-1 (Wang, Q. (229) 71)

### Allyl chloride

Epoxidation of allyl chloride with molecular oxygen and 2-ethyl-anthrahydroquinone catalyzed by TS-1 (Wang, Q. (229) 71)

### AIMCM-41

Effect of nickel precursors on the performance of Ni/AIMCM-41 catalysts for *n*-dodecane hydroconversion (Fang, K. (229) 51)

### Amines

Palladium supported catalysts for the selective hydrogenation of sunflower oil (Nohair, B. (229) 117)

### Amorphous

Gas-phase photo-oxidations of organic compounds over different forms of zirconia (Wu, C. (229) 233)

### Arsenic-substituted

Selective oxidation of isobutane over  $\text{H}_x\text{Fe}_{0.12}\text{Mo}_{11}\text{VPA}_{0.3}\text{O}_y$  heteropoly compound catalyst (Deng, Q. (229) 165)

### Benzylamine

Tris(3,5-dimethylpyrazole)copper(II) nitrate: as an oxidation catalyst (Sharma, S. (229) 171)

### Benylation of benzene

Friedel-Crafts benzylation of benzene using Zn and Cd ions exchanged clay composites (Ahmed, O.S. (229) 227)

### Benzylic alcohols

Tris(3,5-dimethylpyrazole)copper(II) nitrate: as an oxidation catalyst (Sharma, S. (229) 171)

### Beta zeolite

Beta zeolite: an efficient and eco-friendly catalyst for the nitration of *o*-xylene with high regio-selectivity in liquid phase (Kantam, M.L. (229) 67)

### Bifunctional catalyst

Effect of nickel precursors on the performance of Ni/AIMCM-41 catalysts for *n*-dodecane hydroconversion (Fang, K. (229) 51)

### 4,4'-Bis(triethylmethylammonium)-1,1'-biphenyl dichloride

Synthesis of novel multi-site phase-transfer catalyst and its application in the reaction of 4,4'-bis(chloromethyl)-1,1'-biphenyl with 1-butanol (Wang, M.-L. (229) 259)

### Bisindoles

Synthesis of polyaniline–bismoclite composite and its function as recoverable and reusable catalyst (Palaniappan, S. (229) 221)

### Bis-quaternary phosphonium

Oxidation of alcohols with  $\text{H}_2\text{O}_2$  catalyzed by bis-quaternary phosphonium peroxotungstates (or peroxomolybdates) under halide- and organic solvent-free condition (Shi, X.-y. (229) 13)

### Bromohydrins

Comments on a facile conversion of epoxides to halohydrins with elemental halogen using isonicotinic hydrazide (isoniazide) as a new catalyst—a reinvestigation (Soroka, M. (229) 271)

### Carbon dioxide

Electrochemical reduction of  $\text{CO}_2$  mediated by poly-M-aminophthalocyanines (M=Co, Ni, Fe): poly-Co-tetraaminophthalocyanine, a selective catalyst (Isaacs, M. (229) 249)

Photo-catalysis of ethane and carbon dioxide to produce hydrocarbon oxygenates over ZnO-TiO<sub>2</sub>/SiO<sub>2</sub> catalyst (Wang, X.-T. (229) 87)

### Carbon monoxide

A new catalytic system for copolymerization of styrene with CO: PdCl<sub>2</sub>/bipy/M(CF<sub>3</sub>SO<sub>3</sub>)<sub>n</sub> (Lin, L. (229) 39)

### Catalysis

Polymetric membranes: the role this support plays in the reactivity of the different generations of metalloporphyrins (Gotardo, M.C.A.F. (229) 137)

### Catalysis stability

Direct synthesis, characterization and catalytic application of SBA-15 containing heteropolyacid H<sub>3</sub>PW<sub>12</sub>O<sub>40</sub> (Yang, L. (229) 199)

### Catalyst

Palladium nanoparticles in poly(ethyleneglycol): the efficient and recyclable catalyst for Heck reaction (Luo, C. (229) 7)

### Catalysts

Nitrogen- and phosphorus-coordinated nickel(II) complexes as catalysts for the oligomerization of ethylene (Bluhm, M.E. (229) 177)

### Catalytic behaviour

Ethylene polymerisation with hafnocene difenolate/MAO system: a comparison with other hafnocenes (Grafov, A.V. (229) 59)

### Cation exchanged clay

Esterification of succinic anhydride to di-(*p*-cresyl) succinate over M<sup>n+</sup>-montmorillonite clay catalysts (Ravindra Reddy, C. (229) 31)

### CBS method

An ab initio study of ethane conversion reactions on zeolites using the complete basis set composite energy method (Zheng, X. (229) 77)

### C–C coupling

Heck coupling by Pd deposited onto organic–inorganic hybrid supports (Papp, A. (229) 107)

### Chiral

A chiral disulfide derived from (*R*)-cysteine in the enantioselective addition of diethylzinc to aldehydes: loading effect and asymmetric amplification (Braga, A.L. (229) 47)

### Chloramine-T

Ru(III)-catalysed oxidation of some N-heterocycles by chloramine-T in hydrochloric acid medium: a kinetic and mechanistic study (Puttaswamy (229) 211)

### Cinchonidine

Enantioselective hydrogenation of  $\alpha$ -hydroxyketones over cinchona-modified Pt: influence of reactant and modifier structure (Sonderegger, O.J. (229) 19)

- Clean catalytic  
Oxidation of alcohols with H<sub>2</sub>O<sub>2</sub> catalyzed by bis-quaternary phosphonium peroxotungstates (or peroxomolybdates) under halide- and organic solvent-free condition (Shi, X.-y. (229) 13)
- Cluster approach  
An ab initio study of ethane conversion reactions on zeolites using the complete basis set composite energy method (Zheng, X. (229) 77)
- Conducting polymers  
Electrochemical reduction of CO<sub>2</sub> mediated by poly-M-aminophthalocyanines (M=Co, Ni, Fe): poly-Co-tetraaminophthalocyanine, a selective catalyst (Isaacs, M. (229) 249)
- Copolymerization  
A new catalytic system for copolymerization of styrene with CO: PdCl<sub>2</sub>/bipy/M(CF<sub>3</sub>SO<sub>3</sub>)<sub>n</sub> (Lin, L. (229) 39)
- Copper(II) oxide  
Tris(3,5-dimethylpyrazole)copper(II) nitrate: as an oxidation catalyst (Sharma, S. (229) 171)
- Coupled semiconductors  
Photo-catalysis of ethane and carbon dioxide to produce hydrocarbon oxygenates over ZnO-TiO<sub>2</sub>/SiO<sub>2</sub> catalyst (Wang, X.-T. (229) 87)
- Covalently anchored vanadium complex  
Oxyfunctionalization of limonene using vanadium complex anchored on functionalized SBA-15 (Joseph, T. (229) 241)
- Crystalline  
Gas-phase photo-oxidations of organic compounds over different forms of zirconia (Wu, C. (229) 233)
- Crystallinity  
Synthesis of polyaniline–bismoclite composite and its function as recoverable and reusable catalyst (Palaniappan, S. (229) 221)
- Cyclohexene  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)
- Deoxygenation  
Direct transformation of terminal *vic*-diols to primary alcohols and alkanes through hydrogenation catalyzed by [*cis*-Ru(6,6'-Cl<sub>2</sub>-bipy)<sub>2</sub>(OH)<sub>2</sub>](CF<sub>3</sub>SO<sub>3</sub>)<sub>2</sub> in acidic medium (Xie, Z. (229) 151)
- Di-(*p*-cresyl) succinate  
Esterification of succinic anhydride to di-(*p*-cresyl) succinate over M<sup>n+</sup>-montmorillonite clay catalysts (Ravindra Reddy, C. (229) 31)
- 1,2-Dichloroethane  
Beta zeolite: an efficient and eco-friendly catalyst for the nitration of *o*-xylene with high regio-selectivity in liquid phase (Kantam, M.L. (229) 67)
- Diimine complexes  
Nitrogen- and phosphorus-coordinated nickel(II) complexes as catalysts for the oligomerization of ethylene (Bluhm, M.E. (229) 177)
- Dimerization  
Nitrogen- and phosphorus-coordinated nickel(II) complexes as catalysts for the oligomerization of ethylene (Bluhm, M.E. (229) 177)
- Diols  
Direct transformation of terminal *vic*-diols to primary alcohols and alkanes through hydrogenation catalyzed by [*cis*-Ru(6,6'-Cl<sub>2</sub>-bipy)<sub>2</sub>(OH)<sub>2</sub>](CF<sub>3</sub>SO<sub>3</sub>)<sub>2</sub> in acidic medium (Xie, Z. (229) 151)
- n*-Dodecane hydroconversion  
Effect of nickel precursors on the performance of Ni/AlMCM-41 catalysts for *n*-dodecane hydroconversion (Fang, K. (229) 51)
- Electroreduction  
Electrochemical reduction of CO<sub>2</sub> mediated by poly-M-aminophthalocyanines (M=Co, Ni, Fe): poly-Co-tetraaminophthalocyanine, a selective catalyst (Isaacs, M. (229) 249)
- Enantioselective  
Enantioselective hydrogenation of  $\alpha$ -hydroxyketones over cinchona-modified Pt: influence of reactant and modifier structure (Sonderregger, O.J. (229) 19)
- Enantioselectivities  
A chiral disulfide derived from (*R*)-cysteine in the enantioselective addition of diethylzinc to aldehydes: loading effect and asymmetric amplification (Braga, A.L. (229) 47)
- Epoxidation  
Epoxidation of allyl chloride with molecular oxygen and 2-ethyl-anthrahydroquinone catalyzed by TS-1 (Wang, Q. (229) 71)
- Epoxidation of allylic compounds  
Liquid phase epoxidation of allylic compounds with hydrogen peroxide over titanium silicalite catalysts (Wróblewska, A. (229) 207)
- Esterification  
Esterification of succinic anhydride to di-(*p*-cresyl) succinate over M<sup>n+</sup>-montmorillonite clay catalysts (Ravindra Reddy, C.R. (229) 31)
- Ethane  
An ab initio study of ethane conversion reactions on zeolites using the complete basis set composite energy method (Zheng, X. (229) 77)  
Photo-catalysis of ethane and carbon dioxide to produce hydrocarbon oxygenates over ZnO-TiO<sub>2</sub>/SiO<sub>2</sub> catalyst (Wang, X.-T. (229) 87)
- Etherification  
Synthesis of novel multi-site phase-transfer catalyst and its application in the reaction of 4,4'-bis(chloromethyl)-1,1'-biphenyl with 1-butanol (Wang, M.-L. (229) 259)
- Ethylene  
Nitrogen- and phosphorus-coordinated nickel(II) complexes as catalysts for the oligomerization of ethylene (Bluhm, M.E. (229) 177)
- Ethylene polymerisation  
Catalytic polymerisation of ethylene with tris(pyrazolyl)borate complexes of late transition metals (Santi, R. (229) 191)
- Friedel-Crafts reaction  
Friedel-Crafts benzylation of benzene using Zn and Cd ions exchanged clay composites (Ahmed, O.S. (229) 227)
- Functionalized Si-SBA-15  
Oxyfunctionalization of limonene using vanadium complex anchored on functionalized SBA-15 (Joseph, T. (229) 241)
- Halohydrins  
Comments on a facile conversion of epoxides to halohydrins with elemental halogen using isonicotinic hydrazide (isoniazide) as a new catalyst—a reinvestigation (Soroka, M. (229) 271)
- Heck reaction  
Palladium nanoparticles in poly(ethylene glycol): the efficient and recyclable catalyst for Heck reaction (Luo, C. (229) 7)
- Heterogeneous catalysis  
Heck coupling by Pd deposited onto organic–inorganic hybrid supports (Papp, A. (229) 107)  
Preparation and catalytic property of the solid base supported on the mixed zirconium phosphate phosphonate for Knoevenagel condensation (Zeng, R.Q. (229) 1)
- Heteropoly compound  
Selective oxidation of isobutane over H<sub>x</sub>Fe<sub>0.12</sub>Mo<sub>11</sub>VPAs<sub>0.3</sub>O<sub>y</sub> heteropoly compound catalyst (Deng, Q. (229) 165)
- Hexane cracking  
Activity–acidity relationship for alkane cracking over zeolites: *n*-hexane cracking over HZSM-5 (Borges, P. (229) 127)
- Hydrazide oxidation by halogens  
Comments on a facile conversion of epoxides to halohydrins with elemental halogen using isonicotinic hydrazide (isoniazide) as a new catalyst—a reinvestigation (Soroka, M. (229) 271)
- Hydrogen peroxide  
Oxidation of alcohols with H<sub>2</sub>O<sub>2</sub> catalyzed by bis-quaternary phosphonium peroxotungstates (or peroxomolybdates) under halide- and organic solvent-free condition (Shi, X.-y. (229) 13)
- $\alpha$ -Hydroxyketones  
Enantioselective hydrogenation of  $\alpha$ -hydroxyketones over cinchona-modified Pt: influence of reactant and modifier structure (Sonderregger, O.J. (229) 19)

- Interlamellar spacings  
Friedel-Crafts benzylation of benzene using Zn and Cd ions exchanged clay composites (Ahmed, O.S. (229) 227)
- Ionic hydrogenation  
Direct transformation of terminal *vic*-diols to primary alcohols and alkanes through hydrogenation catalyzed by  $[cis\text{-Ru}(6,6'\text{-Cl}_2\text{-bipy})_2(\text{OH}_2)_2](\text{CF}_3\text{SO}_3)_2$  in acidic medium (Xie, Z. (229) 151)
- Isobutane  
Selective oxidation of isobutane over  $\text{H}_x\text{Fe}_{0.12}\text{Mo}_{11}\text{VPAs}_{0.3}\text{O}_y$  heteropoly compound catalyst (Deng, Q. (229) 165)
- Kinetics  
Photocatalytic degradation of pesticide pyridaben on  $\text{TiO}_2$  particles (Zhu, X. (229) 95)  
Synthesis of novel multi-site phase-transfer catalyst and its application in the reaction of 4,4'-bis(chloromethyl)-1,1'-biphenyl with 1-butanol (Wang, M.-L. (229) 259)
- Knoevenagel condensation  
Preparation and catalytic property of the solid base supported on the mixed zirconium phosphate phosphonate for Knoevenagel condensation (Zeng, R.Q. (229) 1)
- Leaching  
Heck coupling by Pd deposited onto organic-inorganic hybrid supports (Papp, A. (229) 107)
- Lead  
Palladium supported catalysts for the selective hydrogenation of sunflower oil (Nohair, B. (229) 117)
- Limonene  
Oxyfunctionalization of limonene using vanadium complex anchored on functionalized SBA-15 (Joseph, T. (229) 241)
- Macrocyclic complexes  
Electrochemical reduction of  $\text{CO}_2$  mediated by poly-M-aminophthalocyanines (M=Co, Ni, Fe): poly-Co-tetraaminophthalocyanine, a selective catalyst (Isaacs, M. (229) 249)
- Mechanisms  
Photocatalytic degradation of pesticide pyridaben on  $\text{TiO}_2$  particles (Zhu, X. (229) 95)
- 14-Membered macrocycle  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)
- Membrane  
Polymeric membranes: the role this support plays in the reactivity of the different generations of metalloporphyrins (Gotardo, M.C.A.F. (229) 137)
- Metallocenes  
Ethylene polymerisation with hafnocene difenolate/MAO system: a comparison with other hafnocenes (Grafov, A.V. (229) 59)
- Metalloporphyrins  
Polymeric membranes: the role this support plays in the reactivity of the different generations of metalloporphyrins (Gotardo, M.C.A.F. (229) 137)
- Methacrylic acid  
Selective oxidation of isobutane over  $\text{H}_x\text{Fe}_{0.12}\text{Mo}_{11}\text{VPAs}_{0.3}\text{O}_y$  heteropoly compound catalyst (Deng, Q. (229) 165)
- Microkinetic model  
CO oxidation and NO reduction over supported Pt-Rh and Pd-Rh nanocatalysts: a comparative study (De Sarkar, A. (229) 25)
- Microreactor  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)
- Molecular oxygen  
Epoxidation of allyl chloride with molecular oxygen and 2-ethyl-anthrahydroquinone catalyzed by TS-1 (Wang, Q. (229) 71)
- Monte-Carlo (MC) simulation  
CO oxidation and NO reduction over supported Pt-Rh and Pd-Rh nanocatalysts: a comparative study (De Sarkar, A. (229) 25)
- Montmorillonite  
Esterification of succinic anhydride to di-(*p*-cresyl) succinate over  $\text{M}^{III}$ -montmorillonite clay catalysts (Ravindra Reddy, C. (229) 31)
- Montmorillonite clay  
Friedel-Crafts benzylation of benzene using Zn and Cd ions exchanged clay composites (Ahmed, O.S. (229) 227)
- Multi-site phase-transfer catalysts  
Synthesis of novel multi-site phase-transfer catalyst and its application in the reaction of 4,4'-bis(chloromethyl)-1,1'-biphenyl with 1-butanol (Wang, M.-L. (229) 259)
- Nanocatalysts  
CO oxidation and NO reduction over supported Pt-Rh and Pd-Rh nanocatalysts: a comparative study (De Sarkar, A. (229) 25)
- Nanocomposites  
Aerogel processing of  $\text{MTi}_2\text{O}_5$  (M=Mg, Mn, Fe, Co, Zn, Sn) compositions using single source precursors: synthesis, characterization and photocatalytic behavior (Kapoor, P.N. (229) 145)
- Nanoscale  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)
- Nanosized zirconia  
Gas-phase photo-oxidations of organic compounds over different forms of zirconia (Wu, C. (229) 233)
- N-heterocycles  
Ru(III)-catalysed oxidation of some N-heterocycles by chloramine-T in hydrochloric acid medium: a kinetic and mechanistic study (Puttaswamy (229) 211)
- Nickel  
Catalytic polymerisation of ethylene with tris(pyrazolyl)borate complexes of late transition metals (Santi, R. (229) 191)
- Nickel precursor  
Effect of nickel precursors on the performance of Ni/AIMCM-41 catalysts for *n*-dodecane hydroconversion (Fang, K. (229) 51)
- Nickel(II)  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)
- Nitration  
Beta zeolite: an efficient and eco-friendly catalyst for the nitration of *o*-xylene with high regio-selectivity in liquid phase (Kantam, M.L. (229) 67)
- NMR spectra  
Ethylene polymerisation with hafnocene difenolate/MAO system: a comparison with other hafnocenes (Grafov, A.V. (229) 59)
- Nonlinear effects  
A chiral disulfide derived from (*R*)-cysteine in the enantioselective addition of diethylzinc to aldehydes: loading effect and asymmetric amplification (Braga, A.L. (229) 47)
- Oligomerization  
Nitrogen- and phosphorus-coordinated nickel(II) complexes as catalysts for the oligomerization of ethylene (Bluhm, M.E. (229) 177)
- Oxidation  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)  
Polymeric membranes: the role this support plays in the reactivity of the different generations of metalloporphyrins (Gotardo, M.C.A.F. (229) 137)  
Tris(3,5-dimethylpyrazole)copper(II) nitrate: as an oxidation catalyst (Sharma, S. (229) 171)

- Oxidation kinetics  
Ru(III)-catalysed oxidation of some N-heterocycles by chloramine-T in hydrochloric acid medium: a kinetic and mechanistic study (Puttaswamy (229) 211)
- Oxiranes  
Comments on a facile conversion of epoxides to halohydrins with elemental halogen using isonicotinic hydrazide (isoniazide) as a new catalyst—a reinvestigation (Soroka, M. (229) 271)
- Oxofunctionalization  
Oxyfunctionalization of limonene using vanadium complex anchored on functionalized SBA-15 (Joseph, T. (229) 241)
- Palladium  
Catalytic polymerisation of ethylene with tris(pyrazolyl)borate complexes of late transition metals (Santi, R. (229) 191)  
Heck coupling by Pd deposited onto organic–inorganic hybrid supports (Papp, A. (229) 107)  
Palladium supported catalysts for the selective hydrogenation of sunflower oil (Nohair, B. (229) 117)
- Palladium nanoparticles  
Palladium nanoparticles in poly(ethyleneglycol): the efficient and recyclable catalyst for Heck reaction (Luo, C. (229) 7)
- PdCl<sub>2</sub> catalyst  
A new catalytic system for copolymerization of styrene with CO:PdCl<sub>2</sub>/bipy/M(CF<sub>3</sub>SO<sub>3</sub>)<sub>n</sub> (Lin, L. (229) 39)
- Peroxide  
Tris(3,5-dimethylpyrazole)copper(II) nitrate: as an oxidation catalyst (Sharma, S. (229) 171)
- Peroxomolybdate  
Oxidation of alcohols with H<sub>2</sub>O<sub>2</sub> catalyzed by bis-quaternary phosphonium peroxotungstates (or peroxomolybdates) under halide- and organic solvent-free condition (Shi, X.-y. (229) 13)
- Peroxotungstate  
Oxidation of alcohols with H<sub>2</sub>O<sub>2</sub> catalyzed by bis-quaternary phosphonium peroxotungstates (or peroxomolybdates) under halide- and organic solvent-free condition (Shi, X.-y. (229) 13)
- Phosphotungstic acid  
Direct synthesis, characterization and catalytic application of SBA-15 containing heteropolyacid H<sub>3</sub>PW<sub>12</sub>O<sub>40</sub> (Yang, L. (229) 199)
- Photocatalysis  
Photocatalytic degradation of pesticide pyridaben on TiO<sub>2</sub> particles (Zhu, X. (229) 95)
- Photocatalysts  
Aerogel processing of MTi<sub>2</sub>O<sub>5</sub> (M=Mg, Mn, Fe, Co, Zn, Sn) compositions using single source precursors: synthesis, characterization and photocatalytic behavior (Kapoor, P.N. (229) 145)
- Photocatalytic oxidation  
Gas-phase photo-oxidations of organic compounds over different forms of zirconia (Wu, C. (229) 233)
- Photolysis  
Photocatalytic degradation of pesticide pyridaben on TiO<sub>2</sub> particles (Zhu, X. (229) 95)
- Photo-oxidation  
Photo-catalysis of ethane and carbon dioxide to produce hydrocarbon oxygenates over ZnO-TiO<sub>2</sub>/SiO<sub>2</sub> catalyst (Wang, X.-T. (229) 87)
- Platinum black  
A catalytic oxidation of sugar by vanadium(IV) (Larsson, R. (229) 183)
- Polanyi relationship  
Activity–acidity relationship for alkane cracking over zeolites: *n*-hexane cracking over HZSM-5 (Borges, P. (229) 127)
- Poly(dimethylsiloxane)  
Polymeric membranes: the role this support plays in the reactivity of the different generations of metalloporphyrins (Gotardo, M.C.A.F. (229) 137)
- Poly(ethyleneglycol)  
Palladium nanoparticles in poly(ethyleneglycol): the efficient and recyclable catalyst for Heck reaction (Luo, C. (229) 7)
- Polyaniline–bismoclite composite  
Synthesis of polyaniline–bismoclite composite and its function as recoverable and reusable catalyst (Palaniappan, S. (229) 221)
- Polyketone  
A new catalytic system for copolymerization of styrene with CO:PdCl<sub>2</sub>/bipy/M(CF<sub>3</sub>SO<sub>3</sub>)<sub>n</sub> (Lin, L. (229) 39)
- Pyridaben  
Photocatalytic degradation of pesticide pyridaben on TiO<sub>2</sub> particles (Zhu, X. (229) 95)
- Regeneration of catalyst  
Esterification of succinic anhydride to di-(*p*-cresyl) succinate over M<sup>III</sup>-montmorillonite clay catalysts (Ravindra Reddy, C. (229) 31)
- Regio-selectivity  
Beta zeolite: an efficient and eco-friendly catalyst for the nitration of *o*-xylene with high regio-selectivity in liquid phase (Kantam, M.L. (229) 67)
- Reusable catalyst  
Synthesis of polyaniline–bismoclite composite and its function as recoverable and reusable catalyst (Palaniappan, S. (229) 221)
- Ring opening  
Comments on a facile conversion of epoxides to halohydrins with elemental halogen using isonicotinic hydrazide (isoniazide) as a new catalyst—a reinvestigation (Soroka, M. (229) 271)
- Ru(III) catalysis  
Ru(III)-catalysed oxidation of some N-heterocycles by chloramine-T in hydrochloric acid medium: a kinetic and mechanistic study (Puttaswamy (229) 211)
- SBA-15  
Direct synthesis, characterization and catalytic application of SBA-15 containing heteropolyacid H<sub>3</sub>PW<sub>12</sub>O<sub>40</sub> (Yang, L. (229) 199)
- Schiff base complexes  
Nitrogen- and phosphorus-coordinated nickel(II) complexes as catalysts for the oligomerization of ethylene (Bluhm, M.E. (229) 177)
- Selective electrocatalyst  
Electrochemical reduction of CO<sub>2</sub> mediated by poly-M-aminophthalocyanines (M=Co, Ni, Fe): poly-Co-tetraaminophthalocyanine, a selective catalyst (Isaacs, M. (229) 249)
- Selective hydrogenation  
Palladium supported catalysts for the selective hydrogenation of sunflower oil (Nohair, B. (229) 117)
- Selective oxidation  
Selective oxidation of isobutane over H<sub>3</sub>Fe<sub>0.12</sub>Mo<sub>11</sub>VPAs<sub>0.3</sub>O<sub>y</sub> heteropoly compound catalyst (Deng, Q. (229) 165)
- Sol–gel method  
Aerogel processing of MTi<sub>2</sub>O<sub>5</sub> (M=Mg, Mn, Fe, Co, Zn, Sn) compositions using single source precursors: synthesis, characterization and photocatalytic behavior (Kapoor, P.N. (229) 145)  
Direct synthesis, characterization and catalytic application of SBA-15 containing heteropolyacid H<sub>3</sub>PW<sub>12</sub>O<sub>40</sub> (Yang, L. (229) 199)
- Solid acid catalysts  
Friedel-Crafts benzylation of benzene using Zn and Cd ions exchanged clay composites (Ahmed, O.S. (229) 227)
- Solid base  
Preparation and catalytic property of the solid base supported on the mixed zirconium phosphate phosphonate for Knoevenagel condensation (Zeng, R.Q. (229) 1)
- Spectral studies  
Synthesis of polyaniline–bismoclite composite and its function as recoverable and reusable catalyst (Palaniappan, S. (229) 221)
- Styrene  
A new catalytic system for copolymerization of styrene with CO:PdCl<sub>2</sub>/bipy/M(CF<sub>3</sub>SO<sub>3</sub>)<sub>n</sub> (Lin, L. (229) 39)
- Sulfation  
Gas-phase photo-oxidations of organic compounds over different forms of zirconia (Wu, C. (229) 233)

- Support  
Preparation and catalytic property of the solid base supported on the mixed zirconium phosphate phosphonate for Knoevenagel condensation (Zeng, R.Q. (229) 1)
- Surface effect  
Heck coupling by Pd deposited onto organic–inorganic hybrid supports (Papp, A. (229) 107)
- Surface hydroxyl group  
Gas-phase photo-oxidations of organic compounds over different forms of zirconia (Wu, C. (229) 233)
- Tetraaza  
Nanoscale microreactor-encapsulation 14-membered nickel(II) hexamethyl tetraaza: synthesis, characterization and catalytic activity (Salavati-Niasari, M. (229) 159)
- The mixed zirconium phosphate phosphonate  
Preparation and catalytic property of the solid base supported on the mixed zirconium phosphate phosphonate for Knoevenagel condensation (Zeng, R.Q. (229) 1)
- Three-way catalysts  
CO oxidation and NO reduction over supported Pt-Rh and Pd-Rh nanocatalysts: a comparative study (De Sarkar, A. (229) 25)
- TiO<sub>2</sub>  
Photocatalytic degradation of pesticide pyridaben on TiO<sub>2</sub> particles (Zhu, X. (229) 95)
- Titanium silicalite catalysts  
Liquid phase epoxidation of allylic compounds with hydrogen peroxide over titanium silicalite catalysts (Wróblewska, A. (229) 207)
- Tris(3,5-dimethylpyrazole)copper(II) nitrate  
Tris(3,5-dimethylpyrazole)copper(II) nitrate: as an oxidation catalyst (Sharma, S. (229) 171)
- Tris(pyrazolyl)borates  
Catalytic polymerisation of ethylene with tris(pyrazolyl)borate complexes of late transition metals (Santi, R. (229) 191)
- TS-1  
Epoxidation of allyl chloride with molecular oxygen and 2-ethyl-anthrahydroquinone catalyzed by TS-1 (Wang, Q. (229) 71)
- UHP  
Oxyfunctionalization of limonene using vanadium complex anchored on functionalized SBA-15 (Joseph, T. (229) 241)
- Vanadium(IV)  
A catalytic oxidation of sugar by vanadium(IV) (Larsson, R. (229) 183)
- Vegetable oils  
Palladium supported catalysts for the selective hydrogenation of sunflower oil (Nohair, B. (229) 117)
- Wet oxidation of sugars  
A catalytic oxidation of sugar by vanadium(IV) (Larsson, R. (229) 183)
- o*-Xylene  
Beta zeolite: an efficient and eco-friendly catalyst for the nitration of *o*-xylene with high regio-selectivity in liquid phase (Kantam, M.L. (229) 67)
- Zeolite  
An ab initio study of ethane conversion reactions on zeolites using the complete basis set composite energy method (Zheng, X. (229) 77)
- Zeolites  
Liquid phase epoxidation of allylic compounds with hydrogen peroxide over titanium silicalite catalysts (Wróblewska, A. (229) 207)
- ZnO-TiO<sub>2</sub>/SiO<sub>2</sub> catalyst  
Photo-catalysis of ethane and carbon dioxide to produce hydrocarbon oxygenates over ZnO-TiO<sub>2</sub>/SiO<sub>2</sub> catalyst (Wang, X.-T. (229) 87)
- ZSM-5  
Activity–acidity relationship for alkane cracking over zeolites: *n*-hexane cracking over HZSM-5 (Borges, P. (229) 127)