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Naphtha reforming; Heterobimetallic complex; Ligand effect; β -H elimination (Fukuoka, A. (107) 323)

Polymerization

Ethylene; Metallocenes; MgCl₂; Nickel; Polystyrene supports; Supported catalysts; Titanium; Ylide complexes; Zeolite; Zirconium complexes (Braca, G. (107) 113)

Polymers

Radiation; Ruthenium; Diisocyanide ligands (Tannenbaum, R. (107) 207)

Polystyrene supports

Ethylene; Metallocenes; MgCl₂; Nickel; Polymerization; Supported catalysts; Titanium; Ylide complexes; Zeolite; Zirconium complexes (Braca, G. (107) 113)

Positron emission imaging

Isotope production; ¹¹C-labelled hexane; Hexane (Cunningham, R.H. (107) 153)

Process development

Enantioselectivity; Hydrogenation; α -Ketoesters; (*R*)- α -Hydroxyesters; Rhodium diphosphine complexes; Cinchona modified catalysts; Platinum; Solvent effects (Blaser, H.-U. (107) 85)

Promotion effect

Hydroformylation; Ethylene; Cluster-derived rhodium catalyst; Silica (Fusi, A. (107) 255)

Propylene

Carbonyl clusters; Surface chemistry; Organometallic chemistry; Carbon monoxide; Hydrogenation; Hydroformylation; Supported clusters (Kovalchuk, V.I. (107) 329)

Quantum chemistry

Transition metals; Zeolites (Van Santen, R.A. (107) 5)

Radiation

Polymers; Ruthenium; Diisocyanide ligands (Tannenbaum, R. (107) 207)

Redox molecular sieves

Catalytic oxidation; Ship-in-the-bottle catalysts; Catalytic carbonylation; Organometallic catalysis in water; Supported aqueous phase catalysis; Enantioselective catalysis (Sheldon, R.A. (107) 75)

Reduction

Nuclear waste; Noble metals; Rhodium; Hydrogen; Ammonia (King, R.B. (107) 145)

Rhodium

Nuclear waste; Noble metals; Hydrogen; Ammonia; Reduction (King, R.B. (107) 145)

Immobilized catalysts; Hydroformylation; Hydrogenation; Sol-gel (Blum, J. (107) 217)

Hydroxyl groups; Metal-support interactions; Silica; Supported catalysts (Santini, C.C. (107) 263)

Enantioselectivity; Hydrogenation; Immobilization; Diphosphine; Iridium; Alkene; Imine (Pugin, B. (107) 273)

Hydrogenation; Carboxylic acids; Esters; Unsaturated fatty acids; Phosphine complexes; Smectites; Supported catalysts (Shimazu, S. (107) 297)

Phosphonate-phosphanes; Hemilabile catalysts; Methanol; Carbonylation; Phosphane complexes; Supported catalysts (Bischoff, S. (107) 339)

Rhodium catalysts

Methanol; Carbonylation; Acetic acid; Carboxylic acids; Mechanism (Chateau, L. (107) 367)

Rhodium diphosphine complexes

Enantioselectivity; Hydrogenation; α -Ketoesters; (*R*)- α -Hydroxyesters; Cinchona modified catalysts; Platinum; Solvent effects; Process development (Blaser, H.-U. (107) 85)

Ru(acac)₃

Homogeneous catalysis; Heterogeneous catalysis; Electrooxidation; RuCl₃; Oxidation; Tetrabutylammonium dichromate; 2-Methylnaphthalene; Diisobutylamine; Diffuse layer; Electrochemistry; 2-Methylnaphthoquinone (Michman, M. (107) 393)

RuCl₃

Homogeneous catalysis; Heterogeneous catalysis; Electrooxidation; Ru(acac)₃; Oxidation; Tetrabutylammonium dichromate; 2-Methylnaphthalene; Diisobutylamine; Diffuse layer; Electrochemistry; 2-Methylnaphthoquinone (Michman, M. (107) 393)

Ruthenium

Radiation; Polymers; Diisocyanide ligands (Tannenbaum, R. (107) 207)

Selectivity

Iron; Pillared clays; Zeolite shape selectivity; Carbon monoxide; Hydrogenation (Pérez Zurita, M.J. (107) 175)

Shielding effect

Platinum; Alumina; α -Keto esters; Cinchonidine; Enantio-differentiation; Hydrogenation; Ethyl pyruvate (Margitfalvi, J.L. (107) 281)

Ship-in-the-bottle catalysts

Catalytic oxidation; Redox molecular sieves; Catalytic carbonylation; Organometallic catalysis in water; Supported aqueous phase catalysis; Enantioselective catalysis (Sheldon, R.A. (107) 75)

Silica

Promotion effect; Hydroformylation; Ethylene; Cluster-derived rhodium catalyst (Fusi, A. (107) 255)

Hydroxyl groups; Metal-support interactions; Rhodium; Supported catalysts (Santini, C.C. (107) 263)

Silica support

Buckytubes; Carbon nanotubes; Catalytic synthesis; Zeolite support; Co-catalyst; Fe-catalyst (Fonseca, A. (107) 159)

Silica surface

Nickel; η^2 -Benzene; Extended Hückel calculations; Density functional theory; Local density approach; Non-local density approach; DMol (Garrot, J.-M. (107) 137)

Siloxanolate

Cluster complexes; Cyclooligosiloxanolate clusters; Lanthanides; Transition metals (Zucchi, C. (107) 313)

Silver

Photocatalysis; Nitric oxide; Decomposition; Zeolite (Matsuoka, M. (107) 399)

Silylamines

Nitrogen; Tungsten; Molybdenum; Heterocycles; Arylation; Silylation (Hidai, M. (107) 105)

Silylation

Nitrogen; Tungsten; Molybdenum; Heterocycles; Arylation; Silylamines (Hidai, M. (107) 105)

Smectites

Hydrogenation; Carboxylic acids; Esters; Unsaturated fatty acids; Rhodium; Phosphine complexes; Supported catalysts (Shimazu, S. (107) 297)

Sol-gel

Immobilized catalysts; Hydroformylation; Hydrogenation; Rhodium (Blum, J. (107) 217)

Solvent effects

Enantioselectivity; Hydrogenation; α -Ketoesters; (*R*)- α -Hydroxyesters; Rhodium diphosphine complexes; Cinchona modified catalysts; Platinum; Process development (Blaser, H.-U. (107) 85)

Stereochemical control

Asymmetric reduction; Microbial reduction; Chiral esters; Fluoro- β -hydroxyesters (Forni, A. (107) 405)

Sulphides

Hammett relationships; Mechanisms; Active sites; Metals; Clays; Zeolites (Finiels, A. (107) 385)

Supported aqueous phase catalysis

Catalytic oxidation; Redox molecular sieves; Ship-in-the-bottle catalysts; Catalytic carbonylation; Organometallic catalysis in water; Enantioselective catalysis (Sheldon, R.A. (107) 75)

Supported catalysts

Cinchonidine; Hydrogenation; Palladium; Phenanthroline (Schmid, G. (107) 95)

Ethylene; Metallocenes; $MgCl_2$; Nickel; Polymerization; Polystyrene supports; Titanium; Ylide complexes; Zeolite; Zirconium complexes (Braca, G. (107) 113)

Hydroxyl groups; Metal-support interactions; Rhodium; Silica (Santini, C.C. (107) 263)

Hydrogenation; Carboxylic acids; Esters; Unsaturated fatty acids; Rhodium; Phosphine complexes; Smectites (Shimazu, S. (107) 297)

Phosphonate-phosphanes; Hemilabile catalysts; Rhodium; Methanol; Carbonylation; Phosphane complexes (Bischoff, S. (107) 339)

Supported clusters

Carbonyl clusters; Surface chemistry; Organometallic chemistry; Carbon monoxide; Hydrogenation; Hydroformylation; Propylene (Kovalchuk, V.I. (107) 329)

Surface carbon

Platinum; Nitric oxide; Oxygen; Hydrogen; Mechanisms; Monocrystal surface; Surface intermediates (Smirnov, M.Y. (107) 359)

Surface chemistry

Carbonyl clusters; Organometallic chemistry; Carbon monoxide; Hydrogenation; Hydroformylation; Supported clusters; Propylene (Kovalchuk, V.I. (107) 329)

Surface intermediates

Platinum; Nitric oxide; Oxygen; Hydrogen; Surface carbon; Mechanisms; Monocrystal surface (Smirnov, M.Y. (107) 359)

Surfaces

X-ray absorption fine structure (XAFS); Chamber in situ XAFS; Asymmetric structure analysis; Anisotropic structure analysis; Orientation of surface bonds (Chun, W.-J. (107) 55)

Surface structure

Chemisorption; Flexible surface; Metal surface; Adsorbate structure (Somorjai, G.A. (107) 39)

Tailored metal catalysts

Inorganic oxides; Zeolites; Metal carbonyl clusters; Volatile complexes; Organometallic complexes (Ugo, R. (107) 13)

Templates for ETS-10

ETS-10 synthesis; Characterization of ETS-10; Activity of ETS-10; Titanosilicate (ETS) molecular sieves (Das, T.Kr. (107) 199)

Tetrabutylammonium dichromate

Homogeneous catalysis; Heterogeneous catalysis; Electrooxidation; $RuCl_3$; $Ru(acac)_3$; Oxidation; 2-Methylnaphthalene; Diisobutylamine; Diffuse layer; Electrochemistry; 2-Methyl-naphthoquinone (Michman, M. (107) 393)

Titanium

Ethylene; Metallocenes; $MgCl_2$; Nickel; Polymerization; Polystyrene supports; Supported catalysts; Ylide complexes; Zeolite; Zirconium complexes (Braca, G. (107) 113)

Dehydration

1-Phenylethanol; Pillared clay (Gil, A. (107) 185)

Titanosilicate (ETS) molecular sieves

ETS-10 synthesis; Templates for ETS-10; Characterization of ETS-10; Activity of ETS-10 (Das, T.Kr. (107) 199)

Transition metals

Quantum chemistry; Zeolites (Van Santen, R.A. (107) 5)

Cluster complexes; Cyclooligosiloxanolate clusters; Lanthanides; Siloxanolate (Zucchi, C. (107) 313)

2,3,6-Trimethylphenol

Heteropoly anion; Molybdo vanadophosphate; Modified carbon; Oxidation; Molecular oxygen; FTIR spectroscopy (Jansen, R.J.J. (107) 241)

Tungsten

Nitrogen; Molybdenum; Heterocycles; Arylation; Silylation; Silylamines (Hidai, M. (107) 105)

Unsaturated fatty acids

Hydrogenation; Carboxylic acids; Esters; Rhodium; Phosphine complexes; Smectites; Supported catalysts (Shimazu, S. (107) 297)

Volatile complexes

Tailored metal catalysts; Inorganic oxides; Zeolites; Metal carbonyl clusters; Organometallic complexes (Ugo, R. (107) 13)

Wacker oxidation

Palladium; Heteropolyanions; Butene (Stobbe-Kreemers, A.W. (107) 247)

Water

Cyanide; Halobutanes; Crown ethers; Phase transfer catalysis (Baudou, F. (107) 351)

Water-soluble catalyst

Macrocomplexes; Oxidation; Hydroformylation; Dipyridyl; Acetylacetone; Phosphine ligands (Karakhanov, E.A. (107) 235)

X-ray absorption fine structure (XAFS)

Chamber *in situ* XAFS; Asymmetric structure analysis; Anisotropic structure analysis; Orientation of surface bonds; Surfaces (Chun, W.-J. (107) 55)

Ylide complexes

Ethylene; Metallocenes; MgCl₂; Nickel; Polymerization; Polystyrene supports; Supported catalysts; Titanium; Zeolite; Zirconium complexes (Braca, G. (107) 113)

Zeolite

Ethylene; Metallocenes; MgCl₂; Nickel; Polymerization; Polystyrene supports; Supported catalysts; Titanium; Ylide complexes; Zirconium complexes (Braca, G. (107) 113)

Photocatalysis; Nitric oxide; Decomposition; Silver (Matsuoka, M. (107) 399)

Zeolites

Quantum chemistry; Transition metals (Van Santen, R.A. (107) 5)

Tailored metal catalysts; Inorganic oxides; Metal carbonyl clusters; Volatile complexes; Organometallic complexes (Ugo, R. (107) 13)

Hammett relationships; Mechanisms; Active sites; Sulphides; Metals; Clays (Finials, A. (107) 385)

Zeolite shape selectivity

Iron; Pillared clays; Selectivity; Carbon monoxide; Hydrogenation (Pérez Zurita, M.J. (107) 175)

Zeolite support

Buckytubes; Carbon nanotubes; Catalytic synthesis; Silica support; Co-catalyst; Fe-catalyst (Fonseca, A. (107) 159)

Zirconia

Micropore volume; Pillared clays; Micas (Johnson, J.W. (107) 67)

Zirconium complexes

Ethylene; Metallocenes; MgCl₂; Nickel; Polymerization; Polystyrene supports; Supported catalysts; Titanium; Ylide complexes; Zeolite (Braca, G. (107) 113)

Zirconium molybdate

Catalysis; Heterogenised homogeneous catalysis (Beena, B. (107) 347)