

Catalysis Today 58 (2000) 347-349



Subject index

Absorbents

Titanium dioxide/adsorbent hybrid photocatalysts for photodestruction of organic substances of dilute concentrations 133

Acetaldehyde

Synthesis of vinyl acetate monomer from synthesis gas 281 Acetic acid

High productivity methanol carbonylation catalysis using iridium. The $\text{Cativa}^{\text{TM}}$ process for the manufacture of acetic acid 293

Additive

Ethylene hydroformylation and carbon monoxide hydrogenation over modified and unmodified silica supported rhodium catalysts 271

Alkali halides

Photoreactions of small molecules at the surface of alkali metal

Aqueous

Indication of water in the coordination sphere of rhodium by conversions of 2,5-dimethoxy-2,5-dihydrofuran with syngas 241

Aqueous solutions

Hydroxides of transition metals as artificial catalysts for oxidation of water to dioxygen 71

Artificial catalysts

Hydroxides of transition metals as artificial catalysts for oxidation of water to dioxygen 71

Artificial light

Photocatalysis in water environments using artificial and solar light 199

Artificial photosynthesis

Mimicking photosystem II reactions in artificial photosynthesis: Ru(II)-polypyridine photosensitisers linked to tyrosine and manganese electron donors 57

Attrition

Development of Fe Fischer-Tropsch catalysts for slurry bubble column reactors 335

The synthesis of attrition resistant slurry phase iron Fischer-Tropsch catalysts 233

B/TiO₂

Photocatalytic production of hydrogen from water using TiO_2 and B/TiO_2 125

Carbon dioxide photodecomposition

Photoreactions of small molecules at the surface of alkali metal halides 89

Carbon monoxide hydrogenation

Development of Fe Fischer-Tropsch catalysts for slurry bubble column reactors 335

Carbonylation

High productivity methanol carbonylation catalysis using iridium. The CativaTM process for the manufacture of acetic acid 293

CativaTM

High productivity methanol carbonylation catalysis using iridium. The CativaTM process for the manufacture of acetic acid 293

CdS

II-VI semiconductors made by soft chemistry. Syntheses and optical properties 151

CdT

II-VI semiconductors made by soft chemistry. Syntheses and optical properties 151

CO hydrogenation

Ethylene hydroformylation and carbon monoxide hydrogenation over modified and unmodified silica supported rhodium catalysts 271

CO₂

Fe-Co based metal/spinel to produce light olefins from syngas 263

Cobalt

Fe-Co based metal/spinel to produce light olefins from syngas 263

Fischer-Tropsch synthesis over cobalt catalysts supported on zirconia-modified alumina 247

Cobalt catalyst

Oxidation of cobalt based Fischer–Tropsch catalysts as a deactivation mechanism 321

Computational modelling

Solid state aspects of oxidation catalysis 1

Coupled semiconductors

Photocatalytic behavior of mixed WO₃/WS₂ powders 141

2,5-Dimethoxy-2,5-dihydrofuran

Indication of water in the coordination sphere of rhodium by conversions of 2,5-dimethoxy-2,5-dihydrofuran with syngas 241

Dioxygen evolution

Hydroxides of transition metals as artificial catalysts for oxidation of water to dioxygen 71

Direction of light irradiation

Photocatalytic production of hydrogen from water using TiO_2 and B/TiO_2 125

Electron donor-acceptor complexes

Photoinduced phenomena on the surface of wide-band-gap oxide catalysts 103

Electron transfer

Mimicking photosystem II reactions in artificial photosynthesis: Ru(II)-polypyridine photosensitisers linked to tyrosine and manganese electron donors 57

Environmental remediation

Titanium dioxide/adsorbent hybrid photocatalysts for photodestruction of organic substances of dilute concentrations 133

Fe-Cu catalyst

The synthesis of attrition resistant slurry phase iron Fischer-Tropsch catalysts 233

Fischer-Tropsch

Fe-Co based metal/spinel to produce light olefins from syngas 263

Oxidation of cobalt based Fischer–Tropsch catalysts as a deactivation mechanism 321

Fischer-Tropsch catalyst

The synthesis of attrition resistant slurry phase iron Fischer-Tropsch catalysts 233

Fischer-Tropsch synthesis

¹³C-tracer study of the Fischer-Tropsch synthesis: another interpretation 255

Development of Fe Fischer–Tropsch catalysts for slurry bubble column reactors 335

Fischer–Tropsch synthesis over cobalt catalysts supported on zirconia-modified alumina 247

Kinetics of Fischer-Tropsch synthesis on titania-supported cobalt 309

Heterogeneous photocatalysis

Photoreactions of small molecules at the surface of alkali metal halides 89

Hybrid phtotocatalysts

Titanium dioxide/adsorbent hybrid photocatalysts for photodestruction of organic substances of dilute concentrations 133

Hydroformylatio

Ethylene hydroformylation and carbon monoxide hydrogenation over modified and unmodified silica supported rhodium catalysts 271

Indication of water in the coordination sphere of rhodium by conversions of 2,5-dimethoxy-2,5-dihydrofuran with syngas 241

Hydrogenation

Indication of water in the coordination sphere of rhodium by conversions of 2,5-dimethoxy-2,5-dihydrofuran with syngas 241

Synthesis of vinyl acetate monomer from synthesis gas 281 Hydroxides

Hydroxides of transition metals as artificial catalysts for oxidation of water to dioxygen 71

II-VI semiconductors

II-VI semiconductors made by soft chemistry. Syntheses and optical properties 151

Ion-radicals

Photoinduced phenomena on the surface of wide-band-gap oxide catalysts 103

Iridinn

High productivity methanol carbonylation catalysis using iridium. The $\text{Cativa}^{\text{TM}}$ process for the manufacture of acetic acid 293

Iron

Fe–Co based metal/spinel to produce light olefins from syngas 263 Iron catalysts

Development of Fe Fischer–Tropsch catalysts for slurry bubble column reactors 335

Ketene

Synthesis of vinyl acetate monomer from synthesis gas 281

Light absorption

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Light scattering

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Low water

High productivity methanol carbonylation catalysis using iridium. The $\text{Cativa}^{\text{TM}}$ process for the manufacture of acetic acid 293

Manganese

Mimicking photosystem II reactions in artificial photosynthesis: Ru(II)-polypyridine photosensitisers linked to tyrosine and manganese electron donors 57

Membranes

Solid state aspects of oxidation catalysis 1

Methanol

High productivity methanol carbonylation catalysis using iridium. The Cativa TM process for the manufacture of acetic acid 293 $\,$

Mössbauer emission spectroscopy

Oxidation of cobalt based Fischer–Tropsch catalysts as a deactivation mechanism 321

Nanocrystalline

Scaling properties in photocatalysis 115

Oxidation

Oxidation of cobalt based Fischer-Tropsch catalysts as a deactivation mechanism 321

Oxidation catalysis

Solid state aspects of oxidation catalysis 1

Oxygen ion and proton conductors

Solid state aspects of oxidation catalysis 1

Oxygen surface exchange

Solid state aspects of oxidation catalysis 1

Particle size

Ethylene hydroformylation and carbon monoxide hydrogenation over modified and unmodified silica supported rhodium catalysts 271

Phenol photooxidation

Photocatalytic behavior of mixed WO₃/WS₂ powders 141

Photoadsorption

Photoreactions of small molecules at the surface of alkali metal halides 89

Photocatalysis

Photocatalysis in water environments using artificial and solar light 199

Photocatalytic decomposition of water

Photocatalytic production of hydrogen from water using TiO_2 and B/TiO_2 125

Photocatalytic reactor

Photocatalysis in water environments using artificial and solar light 199

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Photochemistry

Mimicking photosystem II reactions in artificial photosynthesis: Ru(II)-polypyridine photosensitisers linked to tyrosine and manganese electron donors 57

Scaling properties in photocatalysis 115

Photodecomposition

Titanium dioxide/adsorbent hybrid photocatalysts for photodestruction of organic substances of dilute concentrations 133

Photooxidation

Photoreactions of small molecules at the surface of alkali metal halides 89

Photosystem II

Hydroxides of transition metals as artificial catalysts for oxidation of water to dioxygen 71

Mimicking photosystem II reactions in artificial photosynthesis: Ru(II)-polypyridine photosensitisers linked to tyrosine and manganese electron donors 57

Promoters

High productivity methanol carbonylation catalysis using iridium. The Cativa $^{\mathrm{TM}}$ process for the manufacture of acetic acid 293

Reaction engineering

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Reaction kinetics

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Reactive distillation

Synthesis of vinyl acetate monomer from synthesis gas 281 Reactor engineering

Photocatalysis in water environments using artificial and solar light 199

Reactor modelling

Photocatalysis in water environments using artificial and solar light 199

Rhodium

Ethylene hydroformylation and carbon monoxide hydrogenation over modified and unmodified silica supported rhodium catalysts 271

Indication of water in the coordination sphere of rhodium by conversions of 2,5-dimethoxy-2,5-dihydrofuran with syngas 241

Ruthenium

Mimicking photosystem II reactions in artificial photosynthesis: Ru(II)-polypyridine photosensitisers linked to tyrosine and manganese electron donors 57

Slurry bubble column reactor

Development of Fe Fischer–Tropsch catalysts for slurry bubble column reactors 335

Solar light

Photocatalysis in water environments using artificial and solar light 199

Spinel

Fe-Co based metal/spinel to produce light olefins from syngas 263

Support

Fischer-Tropsch synthesis over cobalt catalysts supported on zirconia-modified alumina 247

Surface photochemistry

Photoinduced phenomena on the surface of wide-band-gap oxide catalysts 103

Suspended solid

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Syngas

¹³C-tracer study of the Fischer–Tropsch synthesis: another interpretation 255

Synthesis and optical properties

II-VI semiconductors made by soft chemistry. Syntheses and optical properties 151

TiO_2

Scaling properties in photocatalysis 115

Titania-supported cobalt

Kinetics of Fischer-Tropsch synthesis on titania-supported cobalt 309

Titanium dioxide

Reaction engineering of suspended solid heterogeneous photocatalytic reactors 167

Tracei

¹³C-tracer study of the Fischer–Tropsch synthesis: another interpretation 255

Transition metals

Hydroxides of transition metals as artificial catalysts for oxidation of water to dioxygen 71

Turnover frequency

Kinetics of Fischer-Tropsch synthesis on titania-supported cobalt 309

Vinyl acetate

Synthesis of vinyl acetate monomer from synthesis gas 281

Wide-band-gap oxides

Photoinduced phenomena on the surface of wide-band-gap oxide catalysts 103

WO_3/WS_2

Photocatalytic behavior of mixed WO_3/WS_2 powders 141