Research outputs:

Exploring the Synthesis of Mesoporous Stannosilicates as Catalysts for the Conversion of Mono- and Oligosaccharides into Methyl Lactate
Research output: Research - peer-review › Journal article – Annual report year: 2019

MnOx/P25 with tuned surface structures of anatase-rutile phase for aerobic oxidation of 5-hydroxymethylfurfural into 2,5-diformylfuran
Research output: Research - peer-review › Journal article – Annual report year: 2019

Pd-catalysed formation of ester products from cascade reaction of 5-hydroxymethylfurfural with 1-hexene
Research output: Research - peer-review › Journal article – Annual report year: 2019

Catalytic Tandem Reaction for the Production of Jet and Diesel Fuel Range Alkanes
Research output: Research - peer-review › Journal article – Annual report year: 2018

Catalytic Transfer Hydrogenation of Bio-Based Furfural with NiO Nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2018

Control of selectivity in hydrosilane-promoted heterogeneous palladium-catalysed reduction of furfural and aromatic carboxides
Research output: Research - peer-review › Journal article – Annual report year: 2018

Fifteen Years of Supported Ionic Liquid Phase-Catalyzed Hydroformylation: Material and Process Developments
Research output: Research - peer-review › Review – Annual report year: 2018

Kinetic Analysis of Hexose Conversion to Methyl Lactate by Sn Beta: Effects of Substrate Masking and of Water
Research output: Research - peer-review › Journal article – Annual report year: 2018

Magnetic nickel ferrite nanoparticles as highly durable catalysts for catalytic transfer hydrogenation of bio-based aldehydes
Research output: Research - peer-review › Journal article – Annual report year: 2018

Noble metal-free upgrading of multi-unsaturated biomass derivatives at room temperature: Silyl species enable reactivity
Research output: Research - peer-review › Journal article – Annual report year: 2018
Response Factors Enable Rapid Quantitative 2D NMR Analysis in Catalytic Biomass Conversion to Renewable Chemicals
Research output: Research - peer-review › Journal article – Annual report year: 2018

Selective Hydrodeoxygenation of Alkyl Lactates to Alkyl Propionates with Fe-based Bimetallic Supported Catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2018

Selective Oxidative Carbonylation of Aniline to Diphenylurea with Ionic Liquids
Research output: Research - peer-review › Journal article – Annual report year: 2018

PROCESS FOR HYDROGENOLYSIS OF ALPHA-HYDROXY ESTERS OR ACIDS USING A HETEROGENEOUS CATALYST
Research output: Research › Patent – Annual report year: 2017

A Pd-Catalyzed in situ domino process for mild and quantitative production of 2,5-dimethylfuran directly from carbohydrates
Research output: Research - peer-review › Journal article – Annual report year: 2017

Carbon-Increasing Catalytic Strategies for Upgrading Biomass into Energy-Intensive Fuels and Chemicals
Research output: Research - peer-review › Journal article – Annual report year: 2017

Catalytic Transfer Hydrogenation of Furfural to Furfuryl Alcohol with Recyclable Al-Zr@Fe Mixed Oxides
Research output: Research - peer-review › Journal article – Annual report year: 2018

Chemoselective Synthesis of Dithioacetals from Bio-aldehydes with Zeolites under Ambient and Solvent-free Conditions
Research output: Research - peer-review › Journal article – Annual report year: 2017

Convenient and Sustainable Hydrogen Storage using Liquid Organic Hydrogen Carrier (LOHC) Technologies
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Facile and Benign Conversion of Sucrose to Fructose Using Zeolites With Balanced Brønsted and Lewis Acidity
Research output: Research - peer-review › Journal article – Annual report year: 2017

Giant tunability of the two-dimensional electron gas at the interface of γ-Al₂O₃/SrTiO₃
Research output: Research - peer-review › Journal article – Annual report year: 2017

Glucose Isomerization by Enzymes and Chemo-catalysts: Status and Current Advances
Research output: Research - peer-review › Journal article – Annual report year: 2017

Highly Selective Aerobic Oxidation of 5-Hydroxymethyl Furfural into 2,5-Diformylfuran over Mn-Co Binary Oxides
Research output: Research - peer-review › Journal article – Annual report year: 2017

Highly Selective Continuous Gas-Phase Methoxycarbonylation of Ethylene with Supported Ionic Liquid Phase (SILP) Catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2017

Hydrodeoxygenation of Bio-polymer Precursors with Base Metal Catalysts
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Hydroformylation with Integrated Catalytic-Membrane Separation Reaction System
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017
Hydroformylation with Integrated SILP Catalyst–Membrane Separation Reaction System
Research output: Research - peer-review › Poster – Annual report year: 2017

Off-Pathway Intermediates in the Conversion of Sugars to Plastic
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Reaction mechanism of dimethyl ether carbonylation to methyl acetate over mordenite: a combined DFT/experimental study
Research output: Research - peer-review › Journal article – Annual report year: 2017

Rhodium Catalyzed Decarbonylation
Research output: Research - peer-review › Book chapter – Annual report year: 2017

ROMEO: a new reactor concept for hydroformylation process intensification
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Ruthenium Dioxide Catalysts for the Selective Oxidation of Benzylamine to Benzonitrile: Investigating the Effect of Ruthenium Loading on Physical and Catalytic Properties
Research output: Research - peer-review › Journal article – Annual report year: 2017

Absorption and oxidation of nitrogen oxide in ionic liquids
Research output: Research - peer-review › Journal article – Annual report year: 2016

Acid-Base Bifunctional Zirconium N-Alkyltriphosphate Nanohybrid for Hydrogen Transfer of Biomass-Derived Carboxides
Research output: Research - peer-review › Letter – Annual report year: 2016

Atomically thin Pt shells on Au nanoparticle cores: facile synthesis and efficient synergetic catalysis
Research output: Research - peer-review › Journal article – Annual report year: 2016

Brønsted Acid Ionic Liquids (BAILs) as Efficient and Recyclable Catalysts in the Conversion of Glycerol to Solketal at Room Temperature
Research output: Research - peer-review › Journal article – Annual report year: 2016

Chemoselective hydrogenation of arenes by PVP supported Rh nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2016

Combined Function of Brønsted and Lewis Acidity in the Zeolite-Catalyzed Isomerization of Glucose to Fructose in Alcohols
Research output: Research - peer-review › Journal article – Annual report year: 2016

Direct transformation of carbohydrates to the biofuel 5-ethoxymethylfurfural by solid acid catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2015

Efficient Aerobic Oxidation of 5-Hydroxymethylfurfural in Aqueous Media with Au-Pd Supported on Zinc Hydroxycarbonate
Research output: Research - peer-review › Journal article – Annual report year: 2016

Lignin biomass conversion into chemicals and fuels

Mechanism and Stereoselectivity of Zeolite-catalysed Sugar Isomerisation in Alcohols
Research output: Research - peer-review › Journal article – Annual report year: 2016
Methoxycarbonylation of alkenes with biomass-derived CO

Selective H₂S removal from bio-methane gas by ionic liquid technology
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2016

Selective Reversible Absorption of the Industrial Off-Gas Components CO₂ and NOₓ by Ionic Liquids
Research output: Research › peer-review › Conference article – Annual report year: 2016

Selective Reversible Absorption of the Industrial Off-Gas Components CO₂ and NOₓ by Ionic Liquids
Research output: Research › peer-review › Conference abstract in journal – Annual report year: 2016

Synergy Effects of the Mixture of Bismuth Molybdate Catalysts with SnO2/ZrO2/MgO In Selective Propene Oxidation and the Connection between Conductivity and Catalytic Activity
Research output: Research › peer-review › Journal article – Annual report year: 2016

Tin-Containing Silicates: Identification of a Glycolytic Pathway via 3-Deoxyglucosone
Research output: Research › peer-review › Journal article – Annual report year: 2016

Zeolite and zeotype-catalysed transformations of biofuranic compounds
Research output: Research › peer-review › Review – Annual report year: 2016

Zeolite-catalyzed conversion of sucrose to fructose
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2016

Combined oxidation and absorption of nox by an ionic liquid tandem process.
Research output: Research › Patent – Annual report year: 2016

Aerobic Oxidation of Veratryl Alcohol to Veratraldehyde with Heterogeneous Ruthenium Catalysts
Research output: Research › peer-review › Journal article – Annual report year: 2015

Co2 chemosorption by functionalized amino acid derivatives.
Research output: Research › Patent – Annual report year: 2015

A Method for Effective Conversion of Saccharides to Furfural Compounds
Research output: Research › Patent – Annual report year: 2015

Aerobic oxidation of β-O-4 lignin model compounds with solid catalysts
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2015

Catalytic Alkylation of 2-Methylfuran with Formalin Using Supported Acidic Ionic Liquids
Research output: Research › peer-review › Journal article – Annual report year: 2015

Catalytic oxidation of lignin and lignin model compounds
Research output: Research › peer-review › Conference abstract in proceedings – Annual report year: 2015

Catalytic oxidation of veratryl alcohol – a β-O-4 lignin model compound - to veratraldehyde
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2015

Catalytic oxidation of veratryl alcohol – a β-O-4 lignin model compound – to veratraldehyde
Research output: Research › peer-review › Poster – Annual report year: 2015
CO2 adsorbers for upgrading of bio-gas to methan
Research output: Research - peer-review » Conference abstract in proceedings – Annual report year: 2015

Conversion of lignin into chemicals with heterogeneous catalysis: Current and future technologies
Research output: Research - peer-review » Poster – Annual report year: 2013

Copper oxide as efficient catalyst for oxidative dehydrogenation of alcohols with air
Research output: Research - peer-review » Conference abstract for conference – Annual report year: 2013

Deactivation of solid catalysts in liquid media: the case of leaching of active sites in biomass conversion reactions
Research output: Research - peer-review » Journal article – Annual report year: 2015

Heterogeneous catalysis in oxidation of lignin model compounds
Research output: Research - peer-review » Conference abstract for conference – Annual report year: 2014

Highly Selective Liquid-Phase Benzylation of Anisole with Solid-Acid Zeolite Catalysts
Research output: Research - peer-review » Journal article – Annual report year: 2015

Integration of CO2 air capture and solid oxide electrolysis for methane production

Ketene as a Reaction Intermediate in the Carbonylation of Dimethyl Ether to Methyl Acetate over Mordenite
Research output: Research - peer-review » Journal article – Annual report year: 2015

Ketene as a Reaction Intermediate in the Carbonylation of Dimethyl Ether to Methyl Acetate over Mordenite
Research output: Research - peer-review » Journal article – Annual report year: 2015

Lignin Valorization by Heterogeneous Catalytic Oxidation
Research output: Research - peer-review » Conference abstract for conference – Annual report year: 2015

Lignin Valorization using Heterogenous Catalytic Oxidation
Research output: Research - peer-review » Conference abstract for conference – Annual report year: 2015

Mechanistic insights into the oxidative dehydrogenation of amines to nitriles in continuous flow
Research output: Research - peer-review » Journal article – Annual report year: 2015

Xylose Isomerization with Zeolites in a Two-Step Alcohol–Water Process
Research output: Research - peer-review » Journal article – Annual report year: 2015

Absorption of Flue-Gas Components by Ionic Liquids
Research output: Research - peer-review » Conference article – Annual report year: 2015

Acetalization of furfural with zeolites under benign reaction conditions
Research output: Research - peer-review » Journal article – Annual report year: 2014
Amine-Functionalized Amino Acid-based Ionic Liquids as Efficient and High-Capacity Absorbents for CO2
Research output: Research - peer-review › Journal article – Annual report year: 2014

An improved method of preparation of nanoparticular metal oxide catalysts
Research output: Research › Patent – Annual report year: 2014

Catalytic Deoxygenation of Renewable Chemicals – Structure-Performance Studies
Research output: Research › Ph.D. thesis – Annual report year: 2014

Catalytic routes from biomass to fuels
Research output: Research › Conference abstract in proceedings – Annual report year: 2014

Catalytic Synthesis of Nitriles in Continuous Flow
Research output: Research › Ph.D. thesis – Annual report year: 2015

Conversion of carbohydrates to levulinic acid esters
Research output: Research › Patent – Annual report year: 2014

CO2 sorption by supported amino acid ionic liquids
Research output: Research › Patent – Annual report year: 2014

Depolymerization of organosolv lignin using doped porous metal oxides in supercritical methanol
Research output: Research - peer-review › Journal article – Annual report year: 2014

Direct catalytic transformation of carbohydrates into 5-ethoxymethylfurfural with acid–base bifunctional hybrid nanospheres
Research output: Research - peer-review › Journal article – Annual report year: 2014

Improvement of trans-sialylation versus hydrolysis activity of an engineered sialidase from Trypanosoma rangeli by use of co-solvents.
Research output: Research - peer-review › Journal article – Annual report year: 2014

Ionic liquids as recyclable and separable reaction media in Rh-catalyzed decarbonylation of aromatic and aliphatic aldehydes
Research output: Research - peer-review › Journal article – Annual report year: 2014

Isomerisation of c4-c6 aldoses with zeolites
Research output: Research › Patent – Annual report year: 2014

Lignin valorization using heterogeneous catalytic oxidation
Research output: Research › Poster – Annual report year: 2014

Pd-catalyzed ethylene methoxycarbonylation with Brønsted acid ionic liquids as promoter and phase-separable reaction media
Research output: Research - peer-review › Journal article – Annual report year: 2014

Selective Oxidations using Nanostructured Heterogeneous Catalysts
Research output: Research › Ph.D. thesis – Annual report year: 2014

Silver nanoparticles supported on alumina—a highly efficient and selective nanocatalyst for imine reduction
Research output: Research - peer-review › Journal article – Annual report year: 2014
Solvent engineering and other reaction design methods for favouring enzyme-catalysed synthesis
Research output: Research › Ph.D. thesis – Annual report year: 2014

Supported Rh-phosphine complex catalysts for continuous gas-phase decarbonylation of aldehydes.
Research output: Research › peer-review › Journal article – Annual report year: 2014

Zeolite-catalyzed isomerization of tetroses in aqueous medium
Research output: Research › peer-review › Journal article – Annual report year: 2014

Zwitterion enhanced performance in palladium-phosphine catalyzed ethylene methoxycarbonylation
Research output: Research › peer-review › Journal article – Annual report year: 2014

Absorption and oxidation of no in ionic liquids
Research output: Research › Patent – Annual report year: 2013

An alternative pathway for production of acetonitrile: ruthenium catalysed aerobic dehydrogenation of ethylamine
Research output: Research › peer-review › Journal article – Annual report year: 2013

Brønsted acid ionic liquid catalyzed formation of pyruvaldehyde dimethylacetal from triose sugars
Research output: Research › peer-review › Journal article – Annual report year: 2013

Catalyst for the carboxylation of carbonylated compounds in the gas phase
Research output: Research › Patent – Annual report year: 2013

Catalytic conversion of lignocellulosic biomass using copper doped porous metal oxides
Research output: Research › peer-review › Conference abstract in journal – Annual report year: 2013

Catalytic Performance of Zeolite-Supported Vanadia in the Aerobic Oxidation of 5-hydroxymethylfurfural to 2,5-diformylfuran
Research output: Research › peer-review › Journal article – Annual report year: 2012

Cu catalyzed oxidation of 5-hydroxymethylfurfural to 2,5-diformylfuran and 2,5-furandicarboxylic acid under benign reaction conditions
Research output: Research › peer-review › Journal article – Annual report year: 2013

Efficient Isomerization of Glucose to Fructose over Zeolites in Consecutive Reactions in Alcohol and Aqueous Media.
Research output: Research › peer-review › Journal article – Annual report year: 2013

Mechanistic investigation of the one-pot formation of amides by oxidative coupling of alcohols with amines in methanol
Research output: Research › peer-review › Journal article – Annual report year: 2013

Method for enhancing the thermal stability of ionic compounds
Research output: Research › Patent – Annual report year: 2011

Method for filling a reactor with a catalyst
Research output: Research › Patent – Annual report year: 2013

Purification of 5-hydroxymethylfurfural (hmf) by crystallization
Research output: Research › Patent – Annual report year: 2013
Revisiting the Brønsted acid catalysed hydrolysis kinetics of polymeric carbohydrates in ionic liquids by in situ ATR-FTIR spectroscopy
Research output: Research - peer-review › Journal article – Annual report year: 2013

Separation of Flue Gas Components by SILP (Supported Ionic Liquid-Phase) Absorbers
Research output: Research - peer-review › Conference article – Annual report year: 2013

Structural Characterization of 1,1,3,3-Tetramethylguanidinium Chloride Ionic Liquid by Reversible SO2 Gas Absorption
Research output: Research - peer-review › Journal article – Annual report year: 2013

Zeolite Catalyzed Transformation of Carbohydrates to Alkyl Levulinates
Research output: Research - peer-review › Journal article – Annual report year: 2014

Acetic Acid Formation by Selective Aerobic Oxidation of Aqueous Ethanol over Heterogeneous Ruthenium Catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2012

Aerobic Oxidation of 5-(Hydroxymethyl)furfural in Ionic Liquids with Solid Ruthenium Hydroxide Catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2012

Alkali resistivity of Cu based selective catalytic reduction catalysts: Potassium chloride aerosol exposure and activity measurements
Research output: Research - peer-review › Journal article – Annual report year: 2012

Alternative alkali resistant deNOx catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2012

Alternative potassium resistant deNOx catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Catalytic aerobic oxidation of bio-renewable chemicals
Research output: Research › Ph.D. thesis – Annual report year: 2012

Catalytic conversion of carbohydrates to alkyl levulinates with Brønsted acid ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Catalytic conversion of glucose to 5-hydroxymethylfurfural in ionic liquids: A techno-economic process assessment
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Catalytic production of nitriles in batch and continuous flow systems
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Characterization and parametrical study of Rh-TPPTS supported ionic liquid phase (SILP) catalysts for ethylene hydroformylation
Research output: Research - peer-review › Journal article – Annual report year: 2012

CO2 capture technologies: current status and new directions using supported ionic liquid phase (SILP) absorbers
Research output: Research - peer-review › Journal article – Annual report year: 2012

DeNOx of flue gases by ionic liquid gas absorbers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013
Efficient catalytic formation of furanic chemicals with ionic liquid technologies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Enzymatic isomerization of glucose and xylose in ionic liquids
Research output: Research - peer-review › Journal article – Annual report year: 2012

Enzymkatalysert syntese i ioniske væsker
Research output: Research › Journal article – Annual report year: 2012

Fast and accurate determination of the reaction kinetics of cellulose hydrolyse in ionic liquids using in-situ ATR-FTIR
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

FDCA as a renewable substitute for TPS in polymers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Gas-phase dehydration of acetic acid and NH3 to acetonitrile over zeolite H-ZSM-5
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Heterogenisation of Homogeneous Catalytic Processes by Supported Ionic Liquids Phase (SILP) Catalysis: A New Viable Technology for Industry
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Heteropoly acid promoted catalyst for SCR of NOx with ammonia
Research output: Research › Patent – Annual report year: 2012

Highly dispersed supported ruthenium oxide as an aerobic catalyst for acetic acid synthesis
Research output: Research - peer-review › Journal article – Annual report year: 2012

In-situ Spectroscopic Determination of Catalytic Cellulose Depolymerization
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Ionic liquid-active pharmaceutical ingredients loaded on silica: Solids handling for liquid pharmaceutical forms
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Ionic liquids as reaction media with phase separation properties: Cation effect
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Ionic liquids as solvents for catalytic decarbonylation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Ionic Liquids as Solvents for Catalytic Decarbonylation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Ionic liquids in integrated catalytic technologies to produce furanic chemical
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013

Mordenite - Type Zeolite SCR Catalysts with Iron or Copper
Research output: Research › Patent – Annual report year: 2012

New deNOx catalysts for biomass fired units
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2013
Research output: Research - peer-review › Journal article – Annual report year: 2012

One-pot reduction of 5-hydroxymethylfurfural via hydrogen transfer from supercritical methanol

One-pot synthesis of amides by aerobic oxidative coupling of alcohols or aldehydes with amines using supported gold and base as catalysts

Pharmaceutically active ionic liquids with solids handling, enhanced thermal stability, and fast release

Process Design and Evaluation for Chemicals Based on Renewable Resources

Separation of flue gas components by ionic liquids: Fundamental chemistry and industrial application

Sn-Beta catalysed conversion of hemicellulosic sugars

Solid acid catalysed formation of ethyl levulinate and ethyl gluco.pyranoside from mono- and disaccharides

Solid and catalyzed formation of ethyl levulinate from mono- and disaccharides

Supported Ionic Liquid Phase (SILP) Catalysis for the Production of Acetic acid by Methanol Carbonylation

Synergy effects in mixed Bi₂O₃, MoO₃ and V₂O₅ catalysts for selective oxidation of propylene

Synthesis and Characterization of Ammonium-, Pyridinium-, and Pyrrolidinium-Based Sulfonamido Functionalized Ionic Liquids

Thermodynamically based solvent design for enzymatic saccharide acylation with hydroxycinnamic acids in non-conventional media

Absorption of gases in guanidinium based ionic liquids

Activity and stability of feruloyl esterase A from Aspergillus niger in ionic liquid systems

Aerobic oxidation of HMF to FDA with ruthenium containing ferrite-spinel catalyst

Aerobic Oxidation of HMF to FDA with Ruthenium containing Ferrite-Spinel Catalyst
Aerobic Oxidation Reactions with Highly Selective Gold Nanoparticle Catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Alkali resistant Cu/zeolite deNOx catalysts for flue gas cleaning in biomass fired applications
Research output: Research - peer-review › Journal article – Annual report year: 2011

Alkali resistant Fe-zeolite catalysts for SCR of NO with NH3 in flue gases
Research output: Research - peer-review › Journal article – Annual report year: 2011

Alternative Flue Gas Cleaning: Selective Gas Absorption by Ionic Liquids and by Supported Ionic Liquid-Phase (SILP) Absorbers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

A method of producing hydroxymethyfurfural
Research output: Research - Patent – Annual report year: 2011

Applying the COSMO model for the design of new ionic liquids for carbohydrate dissolution
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Catalytic Conversion of Biomass in Ionic Liquids: Applying the COSMO Model for Designing the Solvents
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Catalytic conversion of fructose to ethyl levulinate with Brønsted acid ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Catalytic oxidation of unsaturated fatty esters in ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Catalytic Routes to Renewable Polymer Building Blocks
Research output: Research › Ph.D. thesis – Annual report year: 2012

Catalytic transfer hydrogenation of epoxides performed in ionic liquid
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Challenges and perspectives for catalysis in production of diesel from biomass
Research output: Research - peer-review › Journal article – Annual report year: 2011

Conversion of Mono- and Disaccharides to Ethyl Levulinate and Ethyl Pyranoside with Sulfonic Acid-Functionalyzed Ionic Liquids
Research output: Research - peer-review › Journal article – Annual report year: 2011

Research output: Research - peer-review › Journal article – Annual report year: 2011

Dependency of the hydrogen bonding capacity of the solvent anion on the thermal stability of feruloyl esterases in ionic liquid systems
Research output: Research - peer-review › Journal article – Annual report year: 2011

Effect of Support in Heterogeneous Ruthenium Catalysts Used for the Selective Aerobic Oxidation of HMF in Water
Research output: Research - peer-review › Journal article – Annual report year: 2011
Heteropoly acid promoted Cu and Fe catalysts for the selective catalytic reduction of NO with ammonia
Research output: Research - peer-review › Journal article – Annual report year: 2011

Heteropoly acid promoted V2O5/TiO2 catalysts for NO abatement with ammonia in alkali containing flue gases
Research output: Research - peer-review › Journal article – Annual report year: 2011

High performance vanadia-anatase nanoparticle catalysts for the selective catalytic reduction of NO by ammonia
Research output: Research - peer-review › Journal article – Annual report year: 2011

HMF oxidation with vanadia supported on zeolites: The search for a non-leaching catalyst
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Hydrodeoxygenation of waste fat for diesel production: Study on model feed with Pt/alumina catalyst
Research output: Research - peer-review › Journal article – Annual report year: 2011

Ionic liquid Catalysis for Upgrading Biomass to Value-added Chemicals
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Ionic Liquid Gas Absorption of Pollutants in Flue Gases
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Ionic liquid mediated oxidation of unsaturated fatty esters
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Ionic liquids as reaction media for transfer hydrogenation of epoxides
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Ionic liquids as solvent for transfer hydrogenation of epoxides
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Magnesium and nickel(II) furan-2,5-dicarboxylate
Research output: Research - peer-review › Journal article – Annual report year: 2011

Metal-Free Dehydration of Glucose to 5-(Hydroxymethyl)furfural in Ionic Liquids with Boric Acid as a Promoter
Research output: Research - peer-review › Journal article – Annual report year: 2011

New catalytic solutions for valorization of biomass resources
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

New Catalytic Systems with Ionic Liquids as Reaction Media for the Synthesis of Renewable Chemicals
Research output: Research › Ph.D. thesis – Annual report year: 2012

New solutions in sustainable chemistry with advanced materials and catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Novel deNOx catalysts for biomass fired units
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

One-pot synthesis of amides by aerobic oxidative coupling of alcohols and amines using supported gold and base as catalysts
Oxidation of unsaturated fatty acids derivatives in ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Palladium catalyst system comprising zwitterion and/or acid-functionalized ionic liquid
Research output: Research › Patent – Annual report year: 2011

Palladium catalyst system comprising zwitterion and/or acid-functionalized ionic liquid
Research output: Research › Patent – Annual report year: 2012

Preface
Research output: Research - peer-review › Editorial – Annual report year: 2011

Selective aerobic Oxidation of 5-Hydroxymethylfurfural in Water Over Solid Ruthenium Hydroxide Catalysts with Magnesium-Based Supports
Research output: Research - peer-review › Journal article – Annual report year: 2011

Selective oxidation of propylene to acrolein by silica-supported bismuth molybdate catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2011

SiLP Catalysis: The future of large scale ionic liquid catalysis?
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Structural characterization and catalytic properties of bis(1,1,3,3-tetramethylguanidinium) dichromate
Research output: Research - peer-review › Journal article – Annual report year: 2011

Supported biologically active compounds
Research output: Research › Patent – Annual report year: 2011

Synergy of boric acid and added salts in the catalytic dehydration of hexoses to 5-hydroxymethylfurfural in water
Research output: Research - peer-review › Journal article – Annual report year: 2011

Synthesis of 5-hydroxymethylfurfural and derivatives
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Synthesis of 5-(hydroxymethyl)furfural in Ionic Liquids - Paving the Way to Renewable Chemicals
Research output: Research - peer-review › Journal article – Annual report year: 2011

Alkali resistant Fe-zeolite catalysts for SCR of NO with NH3 in flue gases
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Application of Brønsted acid ionic liquids in Pd-catalyzed ethylene alkoxy carbonylation reactions
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Application of ionic liquid catalysts in the production of biodiesel
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Application of ionic liquids in fatty acid functionalizations
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010
Application of ionic Liquids in production of fuel and chemicals from bio-oil
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Application of Supported Ionic Liquid Phase (SILP) catalysis to Monsanto carbonylation reactions
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Catalytic and absorption technologies with Supported Ionic Liquid Phase (SILP) materials
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Catalytic conversion of mono- and di-saccharides into ethyl levulinate with Brønsted acid ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Catalytic flue gas cleaning by solid and liquid ionic media
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Chemicals from biomass – A new chemical infrastructure
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Designing multifunctional ionic liquids for biomass processing
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Direct conversion of glucose to 5-(hydroxymethyl)furfural in ionic liquids with lanthanide catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2010

Ethylene methoxycarbonylation with palladium-phosphine catalysts in acid-functionalized ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Formation of imines by selective gold-catalysed aerobic oxidative coupling of alcohols and amines under ambient conditions
Research output: Research - peer-review › Journal article – Annual report year: 2010

Functionalization of fatty acids in ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Functionalized ionic liquids: Synthesis, characterization and application
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Heteropoly acid promoted Cu and Fe catalysts for the selective catalytic reduction of NO with ammonia
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Imine formation by benign oxidative coupling of alcohols and amines using supported gold nanoparticles as catalyst
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Ionic liquid gas absorption of NOx, COx and SOx, Ionic Liquids in Sustainable Energy and Fuels
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Ionic Liquids as Catalysts and Solvents
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Ionic Liquids as Catalysts for Biodiesel Synthesis
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010
Monsanto carbonylation by Supported Ionic Liquid Phase (SILP) catalysis
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2010

Nanoparticular metal oxide/anatase catalysts
Research output: Research › Patent – Annual report year: 2010

New catalysts for dehydration of glucose to 5-(hydroxymethyl)furfural in ionic liquids
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2010

New dual-function catalyst for the dehydration of 5-hydroxy methylfurfural in ionic liquids
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2010

New ionic liquid catalyst systems for direct dehydration of glucose and its polymers into 5-hydroxymethylfurfural
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2010

On the importance of the phase distribution and acidity of VOx-ZrO2-SO4-sepiolite catalysts for the NH3-SCR process in relation to biomass fueled power plants
Research output: Research › Sound/Visual production (digital) – Annual report year: 2010

Oxidation of 5-hydroxymethylfurfural with homogeneous Cu(I) catalysts
Research output: Research › peer-review › Conference abstract for conference – Annual report year: 2010

Oxidation with environmentally benign heterogeneous metal catalysts
Research output: Research › Poster – Annual report year: 2010

Process Design for Chemo-enzymatic Synthesis of 2,5-Furandicarboxylic Acid
Research output: Research › Sound/Visual production (digital) – Annual report year: 2010

Process Design for Chemo-enzymatic Synthesis of 2,5-Furandicarboxylic Acid (Best Poster Award)
Research output: Research › peer-review › Poster – Annual report year: 2010

Process design for chemo-enzymatic synthesis of 5-hydroxymethylfurfural
Research output: Research › Sound/Visual production (digital) – Annual report year: 2010

Process Design for Chemo-enzymatic Synthesis of 5-Hydroxymethylfurfural
Research output: Research › Article in proceedings – Annual report year: 2010

Renewable building block for plastic industry: Gold-catalyzed oxidation of HMF to FDA in water
Research output: Research › peer-review › Poster – Annual report year: 2010
Renewable building block for plastic industry: Gold-catalyzed oxidation of HMF to FDA in water
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Selective amide and imine formation by benign oxidation of alcohols and amines using supported gold nanoparticles as catalyst
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Selective flue gas cleaning with ionic liquids
Research output: Research - peer-review › Poster – Annual report year: 2010

Selective flue gas cleaning with ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Selective gas absorption by ionic liquids
Research output: Research - peer-review › Conference article – Annual report year: 2010

Selective gold-catalysed aerobic oxidations under ambient conditions
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Solubility of CO₂ in functionalized ionic liquid
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Supported Ionic Liquid-Phase (SILP) catalysis: New applications with an industrially proven concept
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Sustainable plasticizers from bio-oil
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Synthesis and molecular modelling of functionalized ionic liquids for CO₂ capture
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Towards a sustainable chemical industry based on renewables
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Vanadia supported on zeolites for SCR of NO by ammonia
Research output: Research - peer-review › Journal article – Annual report year: 2010

X-ray Crystal Structure, Raman Spectroscopy and Ab Initio Density Functional Theory Calculations on 1,1,3,3-Tetramethylguanidinium Bromide
Research output: Research - peer-review › Journal article – Annual report year: 2010

Carbonylation in ionic liquids
Research output: Research - peer-review › Paper – Annual report year: 2009

Carbonylation reactions using Supported Ionic Liquid Phase (SILP) catalyst technology
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Catalytic conversion of biomass – A new chemical infrastructure
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Catalytic conversion of biomass - a new infrastructure
Research output: Research - peer-review › Poster – Annual report year: 2009
Catalytic Dehydration of Glucose in Ionic Liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Characterization of the surface properties of SILP catalyst
Research output: Research - peer-review › Poster – Annual report year: 2009

Conversion of biomass resources into chemicals with integrated catalytic technologies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Conversion of Biomass Resources Into Chemicals with Integrated Catalytic Technologies
Research output: Research - Sound/Visual production (digital) – Annual report year: 2009

Crystal Structure, Vibrational Spectroscopy and ab Initio Density Functional Theory Calculations on the Ionic Liquid forming 1,1,3,3-Tetramethylguanidinium bis{(trifluoromethyl)sulfonyl}amide
Research output: Research - peer-review › Journal article – Annual report year: 2009

DeNOx SCR catalysts – mechanism of deactivation and alternative alkali-resistant catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Efficient microwave-assisted synthesis of 5-hydroxymethylfurfural from concentrated aqueous fructose
Research output: Research - peer-review › Journal article – Annual report year: 2009

Enlarging the surface area of bismuth molybdate containing materials as catalyst of propylene selective oxidation
Research output: Research - peer-review › Poster – Annual report year: 2009

Enlarging the surface area of bismuth molybdate containing materials as catalyst of propylene selective oxidation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Esterification of free fatty acids in biodiesel production with sulphonated pyrolysed carbohydrate catalysts
Research output: Research - peer-review › Poster – Annual report year: 2009

Esterification of free fatty acids in biodiesel production with sulphonated pyrolysed carbohydrate catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Flue Gas Absorption by Tailored Ionic Liquids
Research output: Research - peer-review › Poster – Annual report year: 2009

Flue Gas Absorption by Tailored Ionic Liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Gas-Phase Oxidation of Aqueous Ethanol by Nanoparticle Vanadia/Anatase Catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2009

Gold-Catalyzed Aerobic Oxidation of 5-Hydroxymethylfurfural in Water at Ambient Temperature
Research output: Research - peer-review › Journal article – Annual report year: 2009
Green aerobic oxidation of HMF
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Hydrotreatment of Oils and Fats for Biodiesel
Research output: Research - peer-review › Poster – Annual report year: 2009

Hydrotreatment of Oils and Fats for Biodiesel
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Influence of metal oxide promoters on V₂O₅/TiO₂ catalysts for selective reduction of NO by NH₃: Minimization of N₂O formation
Research output: Research - peer-review › Poster – Annual report year: 2009

Influence of metal oxide promoters on V₂O₅/TiO₂ catalysts for selective reduction of NO by NH₃: Minimization of N₂O formation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Investigation of Hydrodeoxygenation of Oils and Fats
Research output: Research - peer-review › Poster – Annual report year: 2009

Ionic liquids as benign solvents for sustainable chemistry
Research output: Research - peer-review › Book chapter – Annual report year: 2009

Ionic Liquids as Reversible Gas Absorbents
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Ionic liquids as reversible gas absorbers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Ionic liquids as “solutions” for production of renewable chemicals
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Kemikalier fra biomasse - når plast gror på træerne
Research output: Communication › Journal article – Annual report year: 2009

Model feed for catalytic hydrodeoxygenation of fats for biodiesel production
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Nano-particle SCR deNOX catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Nano-sized metal oxides as highly active SCR deNOX catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Palladium-catalyzed methoxy carbonylation of ethylene with acid-functionalized ionic liquids as phase-separable media
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Process integration for the conversion of glucose to 2,5-furandicarboxylic acid
Research output: Research - peer-review › Journal article – Annual report year: 2009

Production of HMF from aqueous fructose – a microwave study
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009
Raman and DFT Study on N-H+…Cl- Hydrogen Bonding in 1,1,3,3-Tetra-Methylguanidinium Chloride forming an Ion-pair Molecule in the Vapor Phase
Research output: Research - peer-review › Poster – Annual report year: 2009

Seed-assisted sol-gel synthesis and characterization of nanoparticular V2O5/anatase
Research output: Research - peer-review › Journal article – Annual report year: 2009

SILP carbonylation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Sol-gel method for the preparation of mesoporous materials as supports for the selective oxidation of hydrocarbons
Research output: Research - peer-review › Poster – Annual report year: 2009

Sol-gel method for the preparation of mesoporous materials as supports for the selective oxidation of hydrocarbons
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Sulfated zirconia as support for alkali-resistant SCR catalysts
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Supported Ionic Liquid Phase (SILP) Catalyzed Carbonylation Reactions
Research output: Research - peer-review › Poster – Annual report year: 2009

Supported Ionic Liquid Phase (SILP) Catalyzed Carbonylation Reactions
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

The Effect of Acidic and Redox Properties of V2O5/CeO2-ZrO2 Catalysts in Selective Catalytic Reduction of NO by NH3
Research output: Research - peer-review › Journal article – Annual report year: 2009

The influence of reaction conditions on the humin formation in microwave assisted dehydration of fructose to 5-hydroxymethylfurfural
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

The synergy effect in the bismuth molybdate based catalysts: The approach from conductivity
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Udfordringer og strategier ved produktion af biodiesel
Research output: Communication › Journal article – Annual report year: 2009

Understanding hydrodeoxygenation of oils and fats
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2009

Alternative SILP-SCR Catalysts based on Guanidinium Chromates
Research output: Research › Poster – Annual report year: 2008

Bio-Petrochemicals
Research output: Research - peer-review › Poster – Annual report year: 2008

Catalytic SILP materials
Research output: Research - peer-review › Journal article – Annual report year: 2008
Continuous, gas-phase hydroformylation of long-chain olefins using supported ionic liquid phase (SILP) catalyst
Research output: Research - peer-review › Poster – Annual report year: 2008

Continuous, gas-phase hydroformylation of long-chain olefins using supported ionic liquid phase (SILP) catalysts
Research output: Research - peer-review › Poster – Annual report year: 2008

Formation of an Ion-Pair Molecule with a Single NH+...Cl- Hydrogen Bond: Raman spectra of 1,1,3,3-Tetramethylguanidinium chloride in the solid state, in solution and in the vapor phase
Research output: Research - peer-review › Journal article – Annual report year: 2008

Green Aerobic Oxidation of HMF
Research output: Research - peer-review › Poster – Annual report year: 2008

Highly active SCR deNOX catalysts based on nano-particle vanadia-anatase
Research output: Research - peer-review › Poster – Annual report year: 2008

Hydroformylation in room temperature ionic liquids (RTILs): Catalyst and process developments
Research output: Research - peer-review › Journal article – Annual report year: 2008

I&EC 14-Tuning ionic liquids as high-capacity, reversible gas absorbers for sulphur dioxide
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2008

I&EC 203-Thermomorphic organic liquid-ionic liquid systems: Characterization of phase separation by conductivity and spectroscopy
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2008

Ionic Liquids for Reversible Gas Absorption: Absorption Capacity and Structural Characterization
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

New insight in the synergy effect of the catalytic system containing bismuth molybdate for selective oxidation of propylene
Research output: Research - peer-review › Poster – Annual report year: 2008

Reversible gas absorption by ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Reversible gas absorption by ionic liquids
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Supported ionic liquid phase (SILP) catalysis and reversible gas absorption
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Supported ionic liquid phase (SILP) catalysis in gas-phase hydroformylation
Research output: Research - peer-review › Poster – Annual report year: 2008

Supported ionic liquid phase (SILP) materials for versatile catalytic and gas separation technologies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Supported Ionic Liquid Phase (SILP) Technology: Novel Catalysts and Advanced Materials
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Supported Ionic Liquid Phase (SILP) Technology – Novel Catalysts and Advanced Materials
Research output: Research › Conference article – Annual report year: 2008
Supported ionic liquid phase (SILP) technology - novel toolbox for homogeneous catalyst immobilization and reaction engineering
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Supported Ionic Liquid Phase (SILP) Technology - Novel Toolbox for Homogeneous Catalyst Immobilization and Reaction Engineering
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Supported ionic liquids: New versatile catalysts and absorber materials
Research output: Research - peer-review › Poster – Annual report year: 2008

Supported liquid catalysts
Research output: Research - peer-review › Book chapter – Annual report year: 2008

Thermomorphic organic liquid-ionic liquid systems: Characterization of phase separation by conductivity and spectroscopy
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Tuning ionic liquids as high-capacity, reversible gas absorbers for sulphur dioxide
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2008

Tuning ionic liquids for high gas solubility and reversible gas sorption
Research output: Research - peer-review › Journal article – Annual report year: 2008

V2O5-based NH3-SCR Catalysts Doped with Potassium
Research output: Research › Poster – Annual report year: 2008

Alternative flue gas cleaning by catalysis, electrocatalysis and selective gas absorption
Research output: Research › Conference abstract for conference – Annual report year: 2007

Continuous gas-phase hydroformylation of 1-butene using supported ionic liquid phase (SILP) catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2007

Continuous SILP catalysis – An efficient and solvent-free concept for homogeneously catalyzed reactions. Research output: Research › Conference abstract for conference – Annual report year: 2007

Fixed-bed reactor cascades using homogeneous catalysts immobilized via Supported Ionic Liquid Phase (SILP) technology
Research output: Research - peer-review › Poster – Annual report year: 2007

Flue Gas Cleaning With Alternative Processes and Reaction Media
Research output: Research - peer-review › Conference article – Annual report year: 2007

Formation of Acetic Acid and Ethyl Acetate by Gold Catalysed Oxidation of Ethanol
Research output: Research - peer-review › Poster – Annual report year: 2007

Gold Catalysed Aqueous-Phase Oxidation of Bioethanol
Research output: Research - peer-review › Poster – Annual report year: 2007

Gold Catalyzed Aerobic Oxidation of Ethanol: A Sustainable Path to Commodity Chemicals
Research output: Research - peer-review › Poster – Annual report year: 2007
The SILP (Supported Ionic Liquid Phase) Concept - Recent Developments within Catalysis and Reversible Gas Absorption
Research output: Research › Conference abstract for conference – Annual report year: 2007

Bæredygtig Eddikesyre
Research output: Research - peer-review › Poster – Annual report year: 2006

Catalytic SILP materials for selective, continuous gas-phase hydroformylation of 1-olefins
Research output: Research › Poster – Annual report year: 2006

Catalytic SILP materials for the continuous gas-phase hydroformylation of 1-olefins
Research output: Research › Poster – Annual report year: 2006

Continuous, gas-phase oxidation of bio-ethanol with air using gold catalysts: A green and sustainable process to make acetic acid
Research output: Research › Poster – Annual report year: 2006

DeNOX and deSOX of flue gases by catalysis, electrocatalysis and selective gas absorption using ionic media
Research output: Research › Conference abstract for conference – Annual report year: 2006

Ethanol as a renewable feedstock for commodity chemicals: Acetic acid as an example
Research output: Research › Conference abstract for conference – Annual report year: 2006

First application of supported ionic liquid phase (SILP) catalysis for continuous methanol carbonylation
Research output: Research - peer-review › Journal article – Annual report year: 2006

Flue Gas Cleaning With Alternative Processes and Reaction Media
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2006

Formation of Acetic Acid by Aqueous-Phase Oxidation of Ethanol with Air in the Presence of a Heterogeneous Gold Catalyst
Research output: Research - peer-review › Journal article – Annual report year: 2006

Gold Catalysed Aqueous-Phase Oxidation of Ethanol by Air
Research output: Research - peer-review › Poster – Annual report year: 2006

Ionic liquids: Benign reaction media for homogeneous catalysis
Research output: Research › Conference abstract for conference – Annual report year: 2006

Ionic Liquids: Benign Solvents for Supported Liquid Catalyst Systems
Research output: Research › Conference abstract for conference – Annual report year: 2006

Nano-sized metal/metal oxides in supported ionic liquid catalysis
Research output: Research › Poster – Annual report year: 2006

Reversible physical absorption of SO₂ by ionic liquids
Research output: Research - peer-review › Journal article – Annual report year: 2006

SILP catalysis in gas-phase hydroformylation and carbonylation
Research output: Research › Article in proceedings – Annual report year: 2006
SILP catalysis in gas-phase hydroformylation and carbonylation
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Supported Ionic Liquid Phase (SILP) catalysis: An innovative concept for homogeneous catalysis in continuous fixed-bed reactors
Research output: Research - peer-review › Review – Annual report year: 2006

Supported ionic liquid phase (SILP) catalysis: A new concept for continuous, fixed-bed methanol carbonylation
Research output: Research › Conference abstract for conference – Annual report year: 2006

Supported Ionic Liquid Phase (SILP) catalysis: An innovative concept for homogeneous catalysis in continuous fixed bed reactors.
Research output: Research › Conference abstract for conference – Annual report year: 2006

Supported ionic liquid phase (SILP) catalysis – A promising new industrial process design?
Research output: Research › Conference abstract for conference – Annual report year: 2006

Supported ionic liquid phase (SILP) catalysis - A promising new industrial process design?
Research output: Research › Paper – Annual report year: 2006

Supported Ionic Liquid Phase (SILP) catalysis – a versatile concept for continuous, homogeneous solvent-free processes
Research output: Research › Poster – Annual report year: 2006

Supported Ionic Liquid Phase (SILP) catalysis - A versatile concept for continuous, solvent-free processes
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2006

Supported ionic liquid phase (SILP) catalysis – Heterogenization of homogeneous catalysts
Research output: Research › Conference abstract for conference – Annual report year: 2006

Supported ionic liquid-phase (SILP) catalysts in continuous flow processes
Research output: Research › Article in proceedings – Annual report year: 2006

Supported ionic liquids: versatile reaction and separation media
Research output: Research - peer-review › Journal article – Annual report year: 2006

Sustainable Acetic acid
Research output: Research › Poster – Annual report year: 2006

Sustainable and Green Aqueous-phase Oxidation of Bioethanol to Acetic Acid Using Gold Catalysts
Research output: Research › Conference abstract for conference – Annual report year: 2006

Sustainable, gas-phase methanol carbonylation with supported ionic liquid phase (SILP) catalysis
Research output: Research › Conference abstract for conference – Annual report year: 2006

A truly homogeneous catalyst in heterogeneous form - the supported ionic liquid phase (SILP) catalyst concept for continuous, gas-phase propene hydroformylation
Research output: Research › Conference abstract in journal – Annual report year: 2005

A truly homogeneous catalyst in heterogeneous form - The supported ionic liquid phase (SILP) catalyst concept for continuous, gas-phase propene hydroformylation
Research output: Research › Conference abstract for conference – Annual report year: 2005
Catalysis in ionic media
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

First very stable and highly regioselective supported ionic liquid-phase (SILP) catalysis: Continuous-flow fixed-bed hydroformylation of propene
Research output: Research - peer-review › Journal article – Annual report year: 2005

New Applications of Supported Ionic Liquid-Phase (SILP) Catalysts in Continuous flow Processes.
Research output: Research › Conference abstract for conference – Annual report year: 2005

Stability and kinetic studies of supported ionic liquid phase catalysts for hydroformylation of propene
Research output: Research - peer-review › Journal article – Annual report year: 2005

Supported ionic liquid-phase (SILP) catalysis: Heterogenization of homogeneous rhodium phosphine catalysts.
Research output: Research › Book chapter – Annual report year: 2005

Supported ionic liquid-phase (SILP) catalysis – Heterogenization of homogeneous rhodium phosphine catalysts
Research output: Research - peer-review › Article in proceedings – Annual report year: 2005

Supported Ionic Liquid-Phase (SILP) catalysts
Research output: Research - peer-review › Poster – Annual report year: 2005

Supported Liquid Phase Catalysis: An old success with molten salts - a new era with ionic liquids?
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2005

Thermomorphic phase separation in ionic liquid-organic liquid systems – conductivity and spectroscopic characterization
Research output: Research - peer-review › Journal article – Annual report year: 2005

Continuous fixed-bed gas-phase hydroformylation using supported ionic liquid-phase (SILP) Rh catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2003

Propene and 1-octene hydroformylation with silica-supported, ionic liquid-phase (SILP) Rh-phosphine catalysts in continuous fixed-bed mode
Research output: Research - peer-review › Journal article – Annual report year: 2003

Propene and 1-octene hydroformylation with silica-supported, ionic liquid-phase (SILP) Rh-phosphine catalysts in continuous fixed-bed mode
Research output: Research - peer-review › Journal article – Annual report year: 2003

Propene Hydroformylation by Supported Aqueous-phase Rh-NORBOS Catalysts
Research output: Research - peer-review › Journal article – Annual report year: 2003

Biphasic hydroformylation catalysis: Structure and reactivity of immobilized Rh catalysts modified with water-soluble phosphine ligands
Research output: Research › Ph.D. thesis – Annual report year: 2002

CTAB micelles and the hydroformylation of octene with rhodium/TPPTS catalysts - Evidence for the interaction of TPPTS with micelle surfaces
Metal complex amino acid synthons: syntheses, structures and stereoselective reactions of (iminoacetato)cobalt(III) complexes
Research output: Research - peer-review › Journal article – Annual report year: 2002

Rh/NORBOS Hydroformylation of SAP Catalysts: Structure and Reactivity
Research output: Research › Poster – Annual report year: 2001

Structure and Reactivity of Rh/NORBOS Hydroformylation Catalysts
Research output: Research › Poster – Annual report year: 2001

Projects:

Integrated SILP Catalysts - Membrane Separation Reaction Systems
Project: PhD

Katalytisk omdannelse af biomass til flydende brændsler
Project: PhD

Katalyse og selektiv gasabsorption i ioniske væsker
Project: PhD

Development of Zeolite Catalysts and Processes for the Selective Conversion of Sugars to Bio-Polymer Monomers
Project: PhD

Bifasisk katalyse
Project: PhD

Methanol Carbonylation by SILP Catalysis
Project: PhD

DeNOx katalysatorer til biomassefyring
Project: PhD

Bio-chemicals synthesis with ionic liquid technology
Project: PhD

Catalytic Routes to Renewable Polymer Building Blocks
Project: PhD

Design of sintering stable heterogenous nanoparticle catalysts
Project: PhD

Catalytic Routes to Renewable Chemicals
Project: PhD

Alternative Alkali Resistant deNox Technologies
Project: PhD
Bio-fuel synthesis with solid acid functionalized catalysis
Project: PhD

SILP enzyme catalysis technology for upgrading of biomass C5 monomers
Project: PhD

Sustainable Chemistry for Biomass Utilization
Project: PhD

Continuous Flow Catalysis by Supported Ionic Liquid Phase (SiLP) Catalysts
Project: PhD

Chemicals from Renewables
Project: PhD

Bio-Petrochemicals
Project: PhD

Sustainable catalysis with functional ionic liquids
Project: PhD

Synthesis, Characterization and Evaluation of Tin-containing Zeolites for Biomass Conversion
Project: PhD

selective and efficient synthesis of ethanol from dimethyl ether and syngas
Project: PhD

Renewable Chemistry with ionic liquid-based Catalysis
Project: PhD

SiLP catalysts for alkoxy carbonylation
Project: PhD

Spectroscopic Investigations of Copper Substituted Zeolite Catalysts
Project: PhD

Fabrication of Green Hydrocarbon Fuels via Capture and Electrolysis of CO2
Project: PhD

Catalytic Synthesis of Alcoholic Fuels for Transportation from Syngas
Project: PhD

reactor and process design for chem.-enzymatic synthesis of FDA
Project: PhD

Catalytic Conversion of Bio-oil to Fuel for Transportation
Project: PhD

Lignin biomass conversion to fuels and chemicals
Project: PhD
Design of sintering stable heterogenous nanoparticle catalysts
Project: PhD

Catalytic reactions in Supercritical Fluids
Project: PhD

Oxidative catalytic upgrading of carbohydrates and derivatives from biomass
Project: PhD

Selective Hydrogenation of 1,3-butadiene
Project: Research

Valorisation of lignocellulosic biomass side streams for sustainable production of chemicals, materials & fuels using low environmental impact technologies
Project: Research

SILP catalysts for alkoxycarbonylation
Project: Research

Inorganic Catalysis
Project: Research

Activities:

18th Nordic Symposium on Catalysis
Activity: Attending an event › Participating in or organising a conference