Publications:

Compared leaf anatomy and water relations of commercial and traditional Prunus dulcis (Mill.) cultivars under rain-fed conditions
Publication: Research - peer-review › Journal article – Annual report year: 2018

Membrane separation of enzyme-converted biomass compounds: Recovery of xylose and production of gluconic acid as a value-added product
Publication: Research - peer-review › Journal article – Annual report year: 2018

Substrate specificity and transfucosylation activity of GH29 α-l-fucosidases for enzymatic production of human milk oligosaccharides
Publication: Research - peer-review › Journal article – Annual report year: 2018

A comparative study on the activity of fungal lytic polysaccharide monooxygenases for the depolymerization of cellulose in soybean spent flakes
Publication: Research - peer-review › Journal article – Annual report year: 2017

A New Functional Classification of Glucuronoyl Esterases by Peptide Pattern Recognition
Publication: Research - peer-review › Journal article – Annual report year: 2017

Biocatalysis
Publication: Research - peer-review › Encyclopedia chapter – Annual report year: 2017

Characterisation of Authentic Lignin Biorefinery Samples by Fourier Transform Infrared Spectroscopy and Determination of the Chemical Formula for Lignin
Publication: Research - peer-review › Journal article – Annual report year: 2017

Characterization and immobilization of engineered sialidases from Trypanosoma rangeli for transsialylation
Publication: Research - peer-review › Journal article – Annual report year: 2017

Characterization of alginates from Ghanaian brown seaweeds: Sargassum spp. and Padina spp
Publication: Research - peer-review › Journal article – Annual report year: 2017

Characterization of two novel bacterial type A exo-chitobiose hydrolases having C-terminal 5/12-type carbohydrate-binding modules
Publication: Research - peer-review › Journal article – Annual report year: 2017
Comparison of traditional field retting and *Phlebia radiata* Cel 26 retting of hemp fibres for fibre-reinforced composites
Publication: Research - peer-review › Journal article – Annual report year: 2017

Compositional variations of brown seaweeds *Laminaria digitata* and *Saccharina latissima* in Danish waters
Publication: Research - peer-review › Journal article – Annual report year: 2017

Crude fucoidan content in two North Atlantic kelp species, *Saccharina latissima* and *Laminaria digitata* - seasonal variation and impact of environmental factors
Publication: Research - peer-review › Journal article – Annual report year: 2017

Design of *Trypanosoma rangeli* sialidase mutants with improved trans-sialidase activity
Publication: Research - peer-review › Journal article – Annual report year: 2017

Direct rate assessment of laccase catalysed radical formation in lignin by electron paramagnetic resonance spectroscopy
Publication: Research - peer-review › Journal article – Annual report year: 2017

Elemental analysis of various biomass solid fractions in biorefineries by X-ray fluorescence spectrometry
Publication: Research - peer-review › Journal article – Annual report year: 2017

Enzymatic conversion of CO2 to CH3OH via reverse dehydrogenase cascade biocatalysis: Quantitative comparison of efficiencies of immobilized enzyme systems
Publication: Research - peer-review › Review – Annual report year: 2017

Enzymatic production of wheat and ryegrass derived xylooligosaccharides and evaluation of their in vitro effect on pig gut microbiota
Publication: Research - peer-review › Journal article – Annual report year: 2017

Enzyme discovery for tuber processing pulps
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Freezing Point Determination of Water–Ionic Liquid Mixtures
Publication: Research - peer-review › Journal article – Annual report year: 2017

Functional hydrocolloids from seaweeds
Publication: Research - peer-review › Review – Annual report year: 2017

High-performance removal of acids and furans from wheat straw pretreatment liquid by diananofiltration
Publication: Research - peer-review › Journal article – Annual report year: 2017

Homology to peptide pattern for annotation of carbohydrate-active enzymes and prediction of function
Publication: Research - peer-review › Journal article – Annual report year: 2017

Impact of the fouling mechanism on enzymatic depolymerization of xylan in different configurations of membrane reactors
Publication: Research - peer-review › Journal article – Annual report year: 2017

Kinetics based reaction optimization of enzyme catalysed reduction of formaldehyde to methanol with synchronous cofactor regeneration
Publication: Research - peer-review › Journal article – Annual report year: 2017

Laccase catalyzed grafting of-N-OH type mediators to lignin via radical-radical coupling
Publication: Research - peer-review › Journal article – Annual report year: 2017
Morphological, mechanical and antioxidant properties of Portuguese almond cultivars
Publication: Research - peer-review › Journal article – Annual report year: 2017

Municipal Solid Waste Management in a Low Income Economy Through Biogas and Bioethanol Production
Publication: Research - peer-review › Journal article – Annual report year: 2016

New degradation compounds from lignocellulosic biomass pretreatment: routes for formation of potent oligophenolic enzyme inhibitors
Publication: Research - peer-review › Journal article – Annual report year: 2016

New pentose dimers with bicyclic moieties from pretreated biomass
Publication: Research - peer-review › Journal article – Annual report year: 2017

Oxidation of lignin in hemp fibres by laccase: effects on mechanical properties of hemp fibres and unidirectional fibre/epoxy composites
Publication: Research - peer-review › Journal article – Annual report year: 2017

Oxidative cleavage and hydrolytic boosting of cellulose in soybean spent flakes by Trichoderma reesei Cel61A lytic polysaccharide monooxygenase
Publication: Research - peer-review › Journal article – Annual report year: 2017

Prebiotic potential of pectin and pectic oligosaccharides to promote anti-inflammatory commensal bacteria in the human colon
Publication: Research - peer-review › Journal article – Annual report year: 2017

Prediction of Pectin Yield and Quality by FTIR and Carbohydrate Microarray Analysis
Publication: Research - peer-review › Journal article – Annual report year: 2016

Pre-process desilication of wheat straw with citrate
Publication: Research - peer-review › Journal article – Annual report year: 2017

Rheological properties of agar and carrageenan from Ghanaian red seaweeds
Publication: Research - peer-review › Journal article – Annual report year: 2016

Selection of Bacillus species for targeted in situ release of prebiotic galacto-rhamnogalacturonan from potato pulp in piglets
Publication: Research - peer-review › Journal article – Annual report year: 2017

Separation of xylose and glucose using an integrated membrane system for enzymatic cofactor regeneration and downstream purification
Publication: Research - peer-review › Journal article – Annual report year: 2016

Significance of membrane bioreactor design on the biocatalytic performance of glucose oxidase and catalase: Free vs. immobilized enzyme systems
Publication: Research - peer-review › Journal article – Annual report year: 2016

Structural Characterization and Enzymatic Modification of Soybean Polysaccharides
Publication: Research › Ph.D. thesis – Annual report year: 2017

Surface properties correlate to the digestibility of hydrothermally pretreated lignocellulosic Poaceae biomass feedstocks
Publication: Research - peer-review › Journal article – Annual report year: 2017
Targeted pre-treatment of hemp bast fibres for optimal performance in biocomposite materials: A review
Publication: Research - peer-review › Journal article – Annual report year: 2017

Whole grain-rich diet reduces body weight and systemic low-grade inflammation without inducing major changes of the gut microbiome: a randomised cross-over trial
Publication: Research - peer-review › Journal article – Annual report year: 2017

4-Hydroxybenzoic acid from hydrothermal pretreatment of oil palm empty fruit bunches - Its origin and influence on biomass conversion
Publication: Research - peer-review › Journal article – Annual report year: 2016

An Aspergillus nidulans GH26 endo-β-mannanase with a novel degradation pattern on highly substituted galactomannans
Publication: Research - peer-review › Journal article – Annual report year: 2016

Brown seaweed processing: enzymatic saccharification of Laminaria digitata requires no pre-treatment
Publication: Research - peer-review › Journal article – Annual report year: 2015

Carbohydrate degradation mechanisms and compounds from pretreated biomass
Publication: Research › Ph.D. thesis – Annual report year: 2016

Cathode Assessment for Maximizing Current Generation in Microbial Fuel Cells Utilizing Bioethanol Effluent as Substrate
Publication: Research - peer-review › Journal article – Annual report year: 2016

Combination of ensiling and fungal delignification as effective wheat straw pretreatment
Publication: Research - peer-review › Journal article – Annual report year: 2016

Controlled retting of hemp fibres: Effect of hydrothermal pre-treatment and enzymatic retting on the mechanical properties of unidirectional hemp/epoxy composites
Publication: Research - peer-review › Journal article – Annual report year: 2016

DNA-Based Identification and Chemical Characteristics of Hypnea musciformis from Coastal Sites in Ghana
Publication: Research - peer-review › Journal article – Annual report year: 2016

Effect of pectin and hemicellulose removal from hemp fibers on the mechanical properties of unidirectional hemp fiber/epoxy composites
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Effect of pectin and hemicellulose removal from hemp fibres on the mechanical properties of unidirectional hemp/epoxy composites
Publication: Research - peer-review › Journal article – Annual report year: 2016

Enzyme discovery for fucoidan modification
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Formation of water-soluble soybean polysaccharides from spent flakes by hydrogen peroxide treatment
Publication: Research - peer-review › Journal article – Annual report year: 2016

Impact of different alginate lyases on combined cellulase–lyase saccharification of brown seaweed
Publication: Research - peer-review › Journal article – Annual report year: 2016
Backbone structures in human milk oligosaccharides: trans-glycosylation by metagenomic β-N-acetylhexosaminidases
Publication: Research - peer-review › Journal article – Annual report year: 2015

Can laccases catalyze bond cleavage in lignin?
Publication: Research - peer-review › Journal article – Annual report year: 2015

Cascade catalysis in membranes with enzyme immobilization for multienzymatic conversion of CO₂ to methanol
Publication: Research - peer-review › Journal article – Annual report year: 2015

Characterization and biological depectinization of hemp fibers originating from different stem sections
Publication: Research - peer-review › Journal article – Annual report year: 2015

Effect of harvest time and field retting duration on the chemical composition, morphology and mechanical properties of hemp fibers
Publication: Research - peer-review › Journal article – Annual report year: 2015

Fractionation and enzymatic processing of biomass for biorefinery applications
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

High performance separation of xylose and glucose by enzyme assisted nanofiltration
Publication: Research - peer-review › Journal article – Annual report year: 2015

Implications of silica on biorefineries – interactions with organic material and mineral elements in grasses
Publication: Research - peer-review › Review – Annual report year: 2015

In situ Formation of a Biocatalytic Alginate Membrane by Enhanced Concentration Polarization
Publication: Research - peer-review › Journal article – Annual report year: 2015

In situ prebiotics: enzymatic release of galacto-rhamnogalacturonan from potato pulp in vivo in the gastrointestinal tract of the weaning piglet
Publication: Research - peer-review › Journal article – Annual report year: 2015

In situ prebiotics for weaning piglets: In vitro production and fermentation of potato galactorhamnogalacturonan
Publication: Research - peer-review › Journal article – Annual report year: 2014

Mathematical modelling of membrane separation
Publication: Research › Ph.D. thesis – Annual report year: 2015

Modulating the regioselectivity of a Pasteurella multocida sialyltransferase for biocatalytic production of 3'– and 6'–sialyllactose
Publication: Research - peer-review › Journal article – Annual report year: 2015

Performance of microbial phytases for gastric inositol phosphate degradation
Publication: Research - peer-review › Journal article – Annual report year: 2015

Predicting optimal back-shock times in ultrafiltration hollow fiber modules II: Effect of inlet flow and concentration dependent viscosity
Publication: Research - peer-review › Journal article – Annual report year: 2015

Seaweed Hydrocolloid Production: An Update on Enzyme Assisted Extraction and Modification Technologies
Publication: Research - peer-review › Journal article – Annual report year: 2015
Separation of phenolic acids from monosaccharides by low-pressure nanofiltration integrated with laccase pre-treatments
Publication: Research - peer-review › Journal article – Annual report year: 2015

Thermostability enhancement of an endo-1,4-β-galactanase from Talaromyces stipitatus by site-directed mutagenesis
Publication: Research - peer-review › Journal article – Annual report year: 2014

Time of harvest affects the yield of soluble polysaccharides extracted enzymatically from potato pulp
Publication: Research - peer-review › Journal article – Annual report year: 2013

A Novel Laccase from Ganoderma Lucidum Capable of Enhancing Enzymatic Degradation of Lignocelluolitic Biomass
Publication: Research › Patent – Annual report year: 2015

A combined metabolomic and phylogenetic study reveals putatively prebiotic effects of high molecular weight arabino-oligosaccharides when assessed by in vitro fermentation in bacterial communities derived from humans
Publication: Research - peer-review › Journal article – Annual report year: 2014

A Dynamic Model for Cellulosic Biomass Hydrolysis: a Comprehensive Analysis and Validation of Hydrolysis and Product Inhibition Mechanisms
Publication: Research - peer-review › Journal article – Annual report year: 2014

An integrated membrane system for the biocatalytic production of 3′-sialyllactose from dairy by-products
Publication: Research - peer-review › Journal article – Annual report year: 2014

A Pasteurella multocida sialyltransferase displaying dual trans-sialidase activities for production of 3′-sialyl and 6′-sialyl glycans
Publication: Research - peer-review › Journal article – Annual report year: 2013

Appearance and distribution of regioisomers in metallo- and serine-protease-catalysed acylation of sucrose in N,N-dimethylformamide
Publication: Research - peer-review › Journal article – Annual report year: 2014

Application of enzymes for efficient extraction, modification, and development of functional properties of lime pectin
Publication: Research - peer-review › Journal article – Annual report year: 2014

Assessing Effects and interactions among key variables affecting the growth of mixotrophic microalgae: pH, inoculum volume, and growth medium composition.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Biocatalytic production of 3′-sialyllactose by use of a modified sialidase with superior trans-sialidase activity
Publication: Research - peer-review › Journal article – Annual report year: 2014

Biorefining of wheat straw: accounting for the distribution of mineral elements in pretreated biomass by an extended pretreatment – severity equation
Publication: Research - peer-review › Journal article – Annual report year: 2014

Characterisation of a novel endo-xyloglucanase (XcXGHA) from Xanthomonas that accommodates a xylosyl-substituted glucose at subsite −1
Publication: Research - peer-review › Journal article – Annual report year: 2014

Characterization of an extensin-modifying metalloprotease: N-terminal processing and substrate cleavage pattern of Pectobacterium carotovorum Prt1
Publication: Research - peer-review › Journal article – Annual report year: 2014
Chelating agents improve enzymatic solubilization of pectinaceous co-processing streams
Publication: Research - peer-review › Journal article – Annual report year: 2013

Chemical characterization and hydrothermal pretreatment of Salicornia bigelovii straw for enhanced enzymatic hydrolysis and bioethanol potential
Publication: Research - peer-review › Journal article – Annual report year: 2013

Design of thermostable rhamnogalacturonan lyase mutants from *Bacillus licheniformis* by combination of targeted single point mutations
Publication: Research - peer-review › Journal article – Annual report year: 2014

Directing filtration to optimize enzyme immobilization in reactive membranes
Publication: Research - peer-review › Journal article – Annual report year: 2014

Engineering aspects of enzymatic fiber solubilization from potato pulp
Publication: Research › Ph.D. thesis – Annual report year: 2015

Engineering of pectinolytic enzymes for enhanced thermostability
Publication: Research › Ph.D. thesis – Annual report year: 2014

Ensiling and hydrothermal pretreatment of grass: Consequences for enzymatic biomass conversion and total monosaccharide yields
Publication: Research - peer-review › Journal article – Annual report year: 2014

Ensiling as pretreatment of grass for lignocellulosic biomass conversion
Publication: Research › Ph.D. thesis – Annual report year: 2014

Enzymatic Cellulose Hydrolysis: Enzyme Reusability and Visualization of beta-Glucosidase Immobilized in Calcium Alginate
Publication: Research - peer-review › Journal article – Annual report year: 2015

Enzymatic production of human milk oligosaccharides
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Enzymatic production of polysaccharides from gum tragacanth
Publication: Research › Patentit – Annual report year: 2014

Enzyme catalysed production of sialylated human milk oligosaccharides and galactooligosaccharides by Trypanosoma cruzi trans-sialidase
Publication: Research - peer-review › Journal article – Annual report year: 2014

Enzyme immobilization by fouling in ultrafiltration membranes: Impact of membrane configuration and type on flux behavior and biocatalytic conversion efficacy
Publication: Research - peer-review › Journal article – Annual report year: 2014

Enzyme technology: Key to selective biorefining
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Filtration behavior of casein glycomacropeptide (CGMP) in an enzymatic membrane reactor: fouling control by membrane selection and threshold flux operation
Publication: Research - peer-review › Journal article – Annual report year: 2014
Formation of degradation compounds from lignocellulosic biomass in the biorefinery: sugar reaction mechanisms
Publication: Research - peer-review › Journal article – Annual report year: 2014

Functionalization of a Membrane Sublayer Using Reverse Filtration of Enzymes and Dopamine Coating
Publication: 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.
Publication: Research - peer-review › Journal article – Annual report year: 2014

Mathematical modelling of dextran filtration through hollow fibre membranes
Publication: Research - peer-review › Journal article – Annual report year: 2014

Methodology for quantitative determination of the carbohydrate composition of brown seaweeds (Laminariaceae)
Publication: Research - peer-review › Journal article – Annual report year: 2014

Methods for Improving Enzymatic Trans-glycosylation for Synthesis of Human Milk Oligosaccharide Biomimetics
Publication: Research - peer-review › Journal article – Annual report year: 2014

Optimizing the biocatalytic productivity of an engineered sialidase from Trypanosoma rangeli for 3′-sialyllactose production
Publication: Research - peer-review › Journal article – Annual report year: 2014

Phytases for Improved Iron Absorption
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Predicting optimal back-shock times in ultrafiltration hollow fibre modules through path-lines
Publication: Research - peer-review › Journal article – Annual report year: 2014

Rational Design of a New Trypanosoma rangeli Trans-Sialidase for Efficient Sialylation of Glycans
Publication: Research - peer-review › Journal article – Annual report year: 2014

Reactive membrane technology: Two case studies
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Separation of 3′-sialyllactose and lactose by nanofiltration: A trade-off between charge repulsion and pore swelling induced by high pH
Publication: Research - peer-review › Journal article – Annual report year: 2014

Solvant engineering and other reaction design methods for favouring enzyme-catalysed synthesis
Publication: Research › Ph.D. thesis – Annual report year: 2014

The significance of the initiation process parameters and reactor design for maximizing the efficiency of microbial fuel cells
Publication: Research - peer-review › Journal article – Annual report year: 2014

Enhanced enzymatic cellulose degradation by cellobiohydrolases via product removal
Publication: Research - peer-review › Journal article – Annual report year: 2013

Enhancing RGI lyase thermostability by targeted single point mutations
Publication: Research - peer-review › Journal article – Annual report year: 2013
Ensiling as biological pretreatment of grass (Festulolium Hykor): The effect of composition, dry matter, and inocula on cellulose convertibility
Publication: Research - peer-review › Journal article – Annual report year: 2013

Ensiling of wheat straw decreases the required temperature in hydrothermal pretreatment
Publication: Research - peer-review › Journal article – Annual report year: 2013

Enzymatic depolymerization of gum Tragacanth: Bifidogenic potential of low molecular weight oligosaccharides
Publication: Research - peer-review › Journal article – Annual report year: 2013

Enzymatic lignocellulose hydrolysis: Improved cellulase productivity by insoluble solids recycling.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Enzyme activity measurement via spectral evolution profiling and PARAFAC
Publication: Research - peer-review › Journal article – Annual report year: 2013

Fouling-induced enzyme immobilization for membrane reactors
Publication: Research - peer-review › Journal article – Annual report year: 2013

Fucoidans from brown seaweeds: An update on structures, extraction techniques and use of enzymes as tools for structural elucidation
Publication: Research - peer-review › Journal article – Annual report year: 2014

Hemp fibres: Enzymatic effect of microbial processing on fibre bundle structure
Publication: Research - peer-review › Conference article – Annual report year: 2013

Identification of a laccase from Ganoderma lucidum CBS 229.93 having potential for enhancing cellulase catalyzed lignocellulose degradation
Publication: Research - peer-review › Journal article – Annual report year: 2013

In vitro growth of four individual human gut bacteria on oligosaccharides produced by chemoenzymatic synthesis.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Laccase Enzymology in Relation to Lignocellulose Processing
Publication: Research › Ph.D. thesis – Annual report year: 2013

Mechanisms controlling retention during ultrafiltration of charged saccharides: Molecular conformation and electrostatic forces
Publication: Research - peer-review › Journal article – Annual report year: 2013

Mini Review: Basic Physiology and Factors Influencing Exogenous Enzymes Activity in the Porcine Gastrointestinal Tract
Publication: Research - peer-review › Journal article – Annual report year: 2013

Oxidative enzymatic gelation of sugar beet pectin for emulsion stabilization
Publication: Research - peer-review › Journal article – Annual report year: 2013

Potential of phytase-mediated iron release from cereal-based foods: a quantitative view.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Simultaneous measurement of two enzyme activities using infrared spectroscopy: A comparative evaluation of PARAFAC, TUCKER and N-PLS modelling
Publication: Research - peer-review › Journal article – Annual report year: 2013
Stabilization of emulsions by gum tragacanth (Astragalus spp.) correlates to the galacturonic acid content and methoxylation degree of the gum
Publication: Research - peer-review › Journal article – Annual report year: 2013

Stabilization of oil-in-water emulsions by enzyme catalyzed oxidative gelation of sugar beet pectin
Publication: Research - peer-review › Journal article – Annual report year: 2013

Tragacanth gum: Functionality and prebiotic potential
Publication: Research - peer-review › Journal article – Annual report year: 2013

Tragacanth Gum: Structural Composition, Natural Functionality and Enzymatic Conversion as Source of Potential Prebiotic Activity
Publication: Research › Ph.D. thesis – Annual report year: 2013

A framework for model-based optimization of bioprocesses under uncertainty: Lignocellulosic ethanol production case
Publication: Research - peer-review › Journal article – Annual report year: 2011

Alteration of biomass composition in response to changing substrate particle size and the consequences for enzymatic hydrolysis of corn bran
Publication: Research - peer-review › Journal article – Annual report year: 2012

Biocatalytic cross-linking of pectic polysaccharides for designed food functionality: Structures, mechanisms, and reactions
Publication: Research - peer-review › Journal article – Annual report year: 2012

Bioethanol from lignocellulose - pretreatment, enzyme immobilization and hydrolysis kinetics
Publication: Research › Ph.D. thesis – Annual report year: 2012

Controlling the rejection of protein during membrane filtration by adding selected polyelectrolytes
Publication: Research - peer-review › Journal article – Annual report year: 2012

Designed optimization of a single-step extraction of fucose-containing sulfated polysaccharides from Sargassum sp.
Publication: Research - peer-review › Journal article – Annual report year: 2011

Effect of Charge on Membrane Rejection During Ultrafiltration: Comparison of Dextran and Carboxymethilcellulose (CMC) Solutions
Publication: Research - peer-review › Conference article – Annual report year: 2012

Enzyme catalyzed oxidative cross-linking of faruloylated pectic polysaccharides from sugar beet: Kinetics and rheology
Publication: Research › Ph.D. thesis – Annual report year: 2012

Enzyme catalyzed oxidative gelation of sugar beet pectin: Kinetics and rheology
Publication: Research - peer-review › Journal article – Annual report year: 2012

Enzyme kinetics and identification of the rate-limiting step of enzymatic arabinoxylan degradation
Publication: Research - peer-review › Journal article – Annual report year: 2012

Expression and characterization of an endo-1,4-β-galactanase from Emericella nidulans in Pichia pastoris for enzymatic design of potentially prebiotic oligosaccharides from potato galactans
Fucose-containing sulfated polysaccharides from brown seaweed: Extraction technology and bioactivity assessment

In vitro fermentation of sugar beet arabino-oligosaccharides by fecal microbiota obtained from patients with ulcerative colitis to selectively stimulate the growth of Bifidobacterium spp. and Lactobacillus spp.

Optimization of reaction parameters for enzymatic glyceride synthesis from fish oil: Ethyl esters versus free fatty acids

Process/reactor selection for multistep biocatalysis.

Product inhibition of enzymatic hydrolysis of cellulose: are we running the reactions all wrong?

Production of Monascus-like pigments

Rapid near infrared spectroscopy for prediction of enzymatic hydrolysis of corn bran after various pretreatments

Statistical modelling of the interplay between solute shape and rejection in porous membranes

Strategies for Controlling the Rejection of Charged Oligosaccharides During Ultrafiltration: Modification of Molecular Shape, Operational Pressure and Membrane Cutoff

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

Controlled enzyme catalyzed heteropolysaccharide degradation: Xylans

Enzymatic hydrolysis of corn bran arabinoxylan: - theory versus practice

A continuous membrane microbioreactor system for development of integrated pectin modification and separation processes

Activity and stability of feruloyl esterase A from Aspergillus niger in ionic liquid systems
Advances in the effective application of membrane technology in the food industry
Publication: Research - peer-review › Book chapter – Annual report year: 2011

A framework for model-based optimization of bioprocesses under uncertainty: Identifying critical parameters and operating variables
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

A framework for model-based optimization of bioprocesses under uncertainty: Identifying critical parameters and operating variables
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2011

A Framework for Optimization of Bioprocess Operation under Uncertainties: A lignocellulosic Ethanol Production Case Study
Publication: Research - peer-review › Poster – Annual report year: 2011

A Laboratory Exercise To Understand the Importance of Enzyme Technology in the Fruit-Processing Industry: Viscosity Decrease and Phenols Release from Apple Mash
Publication: Research - peer-review › Journal article – Annual report year: 2011

A Mathematical Model for Simultaneous Saccharification and Co-fermentation (SSCF) of C6 and C5 Sugars
Publication: Research - peer-review › Journal article – Annual report year: 2011

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

An integral analysis for second generation bioethanol production via a dynamic model-based simulation approach: stochastic nonlinear optimisation
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Definition and characterization of enzymes for maximal biocatalytic solubilization of prebiotic polysaccharides from potato pulp
Publication: 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
Publication: Research - peer-review › Journal article – Annual report year: 2011

Differential growth response of Ulva lactuca to ammonium and nitrate assimilation
Publication: Research - peer-review › Journal article – Annual report year: 2011

Dynamic Model-Based Evaluation of Process Configurations for Integrated Operation of Hydrolysis and Co-Fermentation for Bioethanol Production from Lignocellulose
Publication: Research - peer-review › Journal article – Annual report year: 2011

Extraction and Bioactivity assessment of Fucoidan from Brown seaweed
Publication: Research › Poster – Annual report year: 2011

Feruloylated and Nonferuloylated Arabino-oligosaccharides from Sugar Beet Pectin Selectively Stimulate the Growth of Bifidobacterium spp. in Human Fecal in Vitro Fermentations
Publication: Research - peer-review › Journal article – Annual report year: 2011

Fucoidan from Sargassum sp. and Fucus vesiculosus reduces cell viability of lung carcinoma and melanoma cells in vitro and activates natural killer cells in mice in vivo
Publication: Research - peer-review › Journal article – Annual report year: 2011
Fucose-Containing Sulfated Polysaccharides from Brown Seaweeds Inhibit Proliferation of Melanoma Cells and Induce Apoptosis by Activation of Caspase-3 in Vitro
Publication: Research - peer-review › Journal article – Annual report year: 2011

Identification, expression, and characterization of a novel bacterial RGI Lyase enzyme for the production of bio-functional fibers
Publication: Research - peer-review › Journal article – Annual report year: 2012

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

In Vitro Fermentation of Sugar Beet Arabino-Oligosaccharides by Fecal Microbiota Obtained from Patients with Ulcerative Colitis To Selectively Stimulate the Growth of Bifidobacterium spp. and Lactobacillus spp.
Publication: Research - peer-review › Journal article – Annual report year: 2011

Kinetics of enzyme-catalyzed cross-linking of feruloylated araban from sugar beet
Publication: Research - peer-review › Journal article – Annual report year: 2011

Low temperature lignocellulose pretreatment: effects and interactions of pretreatment pH are critical for maximizing enzymatic monosaccharide yields from wheat straw
Publication: Research - peer-review › Journal article – Annual report year: 2011

Maximal release of highly bifidogenic soluble dietary fibers from industrial potato pulp by minimal enzymatic treatment
Publication: Research - peer-review › Journal article – Annual report year: 2011

Modelling Framework for the Identification of Critical Variables and Parameters under Uncertainty in the Bioethanol Production from Lignocellulose
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Modelling Framework for the Identification of Critical Variables and Parameters under Uncertainty in the Bioethanol Production from Lignocellulose
Publication: Research - peer-review › Poster – Annual report year: 2011

pH catalyzed pretreatment of corn bran for enhanced enzymatic arabinoxylan degradation
Publication: Research - peer-review › Journal article – Annual report year: 2011

Reactor selection for multi-enzymatic processes
Publication: Research - peer-review › Poster – Annual report year: 2011

Recovery of volatile fruit juice aroma compounds by membrane technology: Sweeping gas versus vacuum membrane distillation
Publication: Research - peer-review › Journal article – Annual report year: 2012

Tailored enzymatic production of oligosaccharides from sugar beet pectin and evidence of differential effects of a single DP chain length difference on human faecal microbiota composition after in vitro fermentation
Publication: Research - peer-review › Journal article – Annual report year: 2011

Technology Evaluation of Process Configurations for Second Generation Bioethanol Production using Dynamic Model-based Simulations
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011
Technology Evaluation of Process Configurations for Second Generation Bioethanol Production using Dynamic Model-based Simulations
Publication: Research - peer-review › Poster – Annual report year: 2011

Validation of Inhibition Effect in the Cellulose Hydrolysis: a Dynamic Modelling Approach
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Validation of Inhibition Effect in the Cellulose Hydrolysis: a Dynamic Modelling Approach
Publication: Research - peer-review › Poster – Annual report year: 2011

A Dynamic Model for Cellulosic Biomass Hydrolysis: Validation of Hydrolysis and Product Inhibition Mechanism
Publication: Research › Sound/Visual production (digital) – Annual report year: 2010

Assessing Reliability of Cellulose Hydrolysis Models to Support Biofuel Process Design – Identifiability and Uncertainty Analysis
Publication: Research - peer-review › Journal article – Annual report year: 2010

Continuous membrane microbioreactor for integrated pectin degradation and separation
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Development of a mathematical model describing hydrolysis and co-fermentation of C6 and C5 sugars
Publication: Research › Sound/Visual production (digital) – Annual report year: 2010

Development of a mathematical model describing hydrolysis and co-fermentation of C6 and C5 sugars
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Discriminated release of phenolic substances from red wine grape skins (Vitis vinifera L.) by multicomponent enzymes treatment
Publication: Research - peer-review › Journal article – Annual report year: 2010

Dynamic plant-wide modelling for bioethanol production from lignocellulosic biomass (2G)
Publication: Research › Sound/Visual production (digital) – Annual report year: 2010

Effect and Modeling of Glucose Inhibition and In Situ Glucose Removal During Enzymatic Hydrolysis of Pretreated Wheat Straw
Publication: Research - peer-review › Journal article – Annual report year: 2010

Effects of specific carbohydrates on the intestinal microbiota
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Enzymatic modifications of grape skin phenolics A new look at wine maceration ?
Publication: Research - peer-review › Journal article – Annual report year: 2010

Enzymatic Xylose Release from Pretreated Corn Bran Arabinoxylan: Differential Effects of Deacetylation and Deferuloylation on Insoluble and Soluble Substrate Fractions
Publication: Research - peer-review › Journal article – Annual report year: 2010

Enzyme technology for precision functional food ingredient processes
Publication: Research - peer-review › Conference article – Annual report year: 2010
From lab experiments to plant operation and design: Bioethanol production from lignocellulose using different enzyme technologies
Publication: Research › Sound/Visual production (digital) – Annual report year: 2010

Fungal polyketide azaphilone pigments as future natural food colorants?
Publication: Research - peer-review › Journal article – Annual report year: 2010

Integrated Dynamic Plant-Wide Model-Based Simulation of Bioethanol Production from Lignocellulose
Publication: Research › Article in proceedings – Annual report year: 2010

Integrated Dynamic Plant-Wide Model-Based Simulation of Bioethanol Production from Lignocellulose
Publication: Research › Poster – Annual report year: 2010

Juice clarification by protease and pectinase treatments indicates new roles of pectin and protein in cherry juice turbidity
Publication: Research - peer-review › Journal article – Annual report year: 2010

Kinetics and substrate selectivity of a Triticum aestivum xylanase inhibitor (TAXI) resistant D11F/R122D variant of Bacillus subtilis XynA xylanase
Publication: Research - peer-review › Journal article – Annual report year: 2010

Lignocellulose pretreatment severity – relating pH to biomatrix opening
Publication: Research - peer-review › Journal article – Annual report year: 2010

Membrane Microbioreactor for Enzyme-Catalyzed Degradation of Pectin
Publication: Research › Sound/Visual production (digital) – Annual report year: 2010

Membrane microbioreactor prototype for enzyme-catalyzed degradation of pectin
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Monosaccharide yields and lignin removal from wheat straw in response to catalyst type and pH during mild thermal pretreatment
Publication: Research - peer-review › Journal article – Annual report year: 2010

N-uptake and growth monitoring of the macrophyte Ulva lactuca by photo-scanning technology
Publication: Research › Poster – Annual report year: 2010

Process Technology Evaluation for Lignocellulosic Bioethanol Production: Plantwide Configurations Using a Dynamic Modeling Approach
Publication: Research › Sound/Visual production (digital) – Annual report year: 2010

Reactor design for minimizing product inhibition during enzymatic lignocellulose hydrolysis II. Quantification of inhibition and suitability of membrane reactors
Publication: Research - peer-review › Review – Annual report year: 2010

Reactor design for minimizing product inhibition during enzymatic lignocellulose hydrolysis: I. Significance and mechanism of cellobiose and glucose inhibition on cellulosolytic enzymes
Publication: Research - peer-review › Review – Annual report year: 2010

Size exclusion chromatography for the quantitative profiling of the enzyme-catalyzed hydrolysis of xylo-oligosaccharides
Publication: Research - peer-review › Journal article – Annual report year: 2010
Statistically designed optimisation of enzyme catalysed starch removal from potato pulp
Publication: Research - peer-review › Journal article – Annual report year: 2010

Enzymatic release of phenolics from fruit skins: With grape as the main model
Publication: Research › Ph.D. thesis – Annual report year: 2009

Chemotaxonomic Exploration of Fungal Biodiversity for Polyketide Natural Food Colorants…
Publication: Research › Ph.D. thesis – Annual report year: 2009

Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Development of An Integrated Dynamic Model for Bioethanol Production From Lignocellulosic Biomass
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Enzymatic solubilization of a pectinaceous dietary fiber fraction from potato pulp: Optimization of the fiber extraction process
Publication: Research - peer-review › Journal article – Annual report year: 2009

European Nutrition and Health
Publication: Communication › Report – Annual report year: 2009

Grape skins (Vitis vinifera L.) catalyze the in vitro enzymatic hydroxylation of p-coumaric acid to caffeic acid
Publication: Research - peer-review › Journal article – Annual report year: 2009

Identification of potentially safe promising fungal cell factories for the production of polyketide natural food colorants using chemotaxonomic rationale
Publication: Research - peer-review › Journal article – Annual report year: 2009

Influence of Substrate Particle Size and Wet Oxidation on Physical Surface Structures and Enzymatic Hydrolysis of Wheat Straw
Publication: Research - peer-review › Journal article – Annual report year: 2009

In vitro fermentation of arabinoxylan-derived carbohydrates by Bifidobacteria and mixed fecal microbiota
Publication: Research - peer-review › Journal article – Annual report year: 2009

Membrane technology for purification of enzymatically produced oligosaccharides: Molecular and operational features affecting performance
Publication: Research - peer-review › Journal article – Annual report year: 2009

Photostability of Natural Orange-Red and Yellow Fungal Pigments in Liquid Food Model Systems
Publication: Research - peer-review › Journal article – Annual report year: 2009

Process design and production of chemicals. Food ingredients, fuels and pharmaceuticals
Publication: Research › Book chapter – Annual report year: 2009
PRODUCTION OF MONASCUS-LIKE AZAPHILONE PIGMENT
Publication: Research › Patent – Annual report year: 2009

Quantitative Prediction of Cell Wall Polysaccharide Composition in Grape (Vitis vinifera L.) and Apple (Malus domestica) Skins from Acid Hydrolysis Monosaccharide Profiles
Publication: Research › peer-review › Journal article – Annual report year: 2009

Teknologisk fællesnævner sikrer videnudveksling
Publication: Communication › Journal article – Annual report year: 2009

The minimal enzyme cocktail concept for biomass processing
Publication: Research › peer-review › Journal article – Annual report year: 2009

Prediction of wine color from phenolic profiles of red grapes
Publication: Research › Ph.D. thesis – Annual report year: 2008

Antioxidant strategies for preventing oxidative flavour deterioration of foods enriched with n-3 polyunsaturated lipids: a comparative evaluation
Publication: Research › peer-review › Journal article – Annual report year: 2008

Bioprodukter bliver til gavnlige kostfibre
Publication: Communication › Journal article – Annual report year: 2008

Comparison of methods for compositional characterisation of grape (Vitis vinifera) and apple (Malus domestica) skins
Publication: Research › peer-review › Journal article – Annual report year: 2008

Computerized screening for novel producers of Monascus-like food pigments in Penicillium species
Publication: Research › peer-review › Journal article – Annual report year: 2008

Dansk-amerikansk forskningssamarbejde om sundhed og livsstilssygdomme
Publication: Communication › Journal article – Annual report year: 2008

Effect of wine dilution on the reliability of tannin analysis by protein precipitation
Publication: Research › peer-review › Journal article – Annual report year: 2008

Enzyme-assisted extraction of antioxidants: Release of phenols from vegetal matrixes
Publication: Research › peer-review › Journal article – Annual report year: 2008

Evaluation of Epicoccum nigrum for growth, morphology and production of natural colorants in liquid media and on a solid rice medium
Publication: Research › peer-review › Journal article – Annual report year: 2008

Identification of Spectral Regions for Quantification of Red Wine Tannins with Fourier Transform Mid-Infrared Spectroscopy
Publication: Research › peer-review › Journal article – Annual report year: 2008

Influence of substrate particle size and wet oxidation on physical surface structures and enzymatic hydrolysis of wheat straw
Publication: Research › Sound/Visual production (digital) – Annual report year: 2008

Phytate: impact on environment and human nutrition. A challenge for molecular breeding
Publication: Research › peer-review › Journal article – Annual report year: 2008
Prediction of wine color attributes from the phenolic profiles of red grapes (Vitis vinifera)
Publication: Research - peer-review › Journal article – Annual report year: 2008

Selection of the elderberry (Sambucus nigra L.) genotypes best suited for the preparation of juice
Publication: Research - peer-review › Journal article – Annual report year: 2008

Selective release of phenols from apple skin: Mass transfer kinetics during solvent and enzyme extraction
Publication: Research - peer-review › Journal article – Annual report year: 2008

Enzymatic hydrolysis of pretreated barley and wheat straw
Publication: Research › Ph.D. thesis – Annual report year: 2007

Production of oxidatively stable fish oil enriched food emulsions
Publication: Research › Ph.D. thesis – Annual report year: 2007

Ascorbyl palmitate, gamma-tocopherol, and EDTA affect lipid oxidation in fish oil enriched salad dressing differently
Publication: Research - peer-review › Journal article – Annual report year: 2007

Characterization of oligosaccharides from enzyme treated industrial fermentation residues by Matrix Assisted Laser Desorption Ionization, ElectroSpray Mass Spectrometry and GC-MS
Publication: Research - peer-review › Journal article – Annual report year: 2007

Characterization of solubilised arabinoxylo-oligosaccharides by MALDI-TOF MS analysis to direct and unravel enzyme catalyzed hydrolysis of insoluble wheat arabinoxylan
Publication: Research - peer-review › Journal article – Annual report year: 2007

Comparison of different pretreatment strategies for enzymatic hydrolysis of wheat and barley straw
Publication: Research - peer-review › Journal article – Annual report year: 2007

Effect of Cellulases, Solvent Type and Particle Size Distribution on the Extraction of Chlorogenic Acid and Other Phenols from Spent Coffee Grounds
Publication: Research - peer-review › Journal article – Annual report year: 2007

Effect of ripeness and postharvest storage on the evolution of color and anthocyanins in cherries (Prunus avium L.),
Publication: Research - peer-review › Journal article – Annual report year: 2007

Enzymatic Hydrolysis of Wheat Arabinoxylan by a Recombinant "Minimal" Enzyme Cocktail Containing beta-Xylosidase and Novel endo-1,4-beta-Xylanase and alpha-L-Arabinofuranosidase Activities
Publication: Research - peer-review › Journal article – Annual report year: 2007

Evaluation of Minimal Trichoderma reesei Cellulase Mixtures on Differently Pretreated Barley Straw Substrate
Publication: Research - peer-review › Journal article – Annual report year: 2007

Evaluation of minimal Trichoderma reesei cellulase mixtures on differently pretreated barley straw substrates
Publication: Research - peer-review › Journal article – Annual report year: 2007

Fødevarer i en rationel helhedsbetragtning
Publication: Communication › Journal article – Annual report year: 2007

Homogenization conditions affect the oxidative stability of fish oil enriched milk emulsions: Lipid oxidation
Publication: Research - peer-review › Journal article – Annual report year: 2007
Identification of thermostable beta-xylosidase activities produced by Aspergillus brasiliensis and Aspergillus niger
Publication: Research - peer-review › Journal article – Annual report year: 2007

Identification of thermostable β-xylosidase activities produced by Aspergillus brasiliensis and Aspergillus niger
Publication: Research - peer-review › Journal article – Annual report year: 2007

Lipid oxidation in milk, yoghurt, and salad dressing enriched with neat fish oil or pre-emulsified fish oil
Publication: Research - peer-review › Journal article – Annual report year: 2007

Optimisation of oxidative stability of omega-3 enriched milk
Publication: Research › Conference abstract for conference – Annual report year: 2007

Predictions of flavonoid solubility in ionic liquids by COSMO-RS: experimental verification, structural elucidation, and solvation characterization
Publication: Research - peer-review › Journal article – Annual report year: 2007

Product inhibition of cellulases during enzymatic hydrolysis of the pre-treated ligno-cellulose
Publication: Research - peer-review › Poster – Annual report year: 2007

Quantification of glucose inhibition of enzymatic cellulose degradation in pre-treated wheat straw
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Quantitative analysis of phytate globoids isolated from wheat bran and characterization of their sequential dephosphorylation by wheat phytase
Publication: Research - peer-review › Journal article – Annual report year: 2007

Rapid extraction of polyphenols from red grapes
Publication: Research - peer-review › Journal article – Annual report year: 2007

Soluble fiber extracted from potato pulp is highly fermentable but has no effect on risk markers of diabetes and cardiovascular disease in Goto-Kakuzaki rats
Publication: Research - peer-review › Journal article – Annual report year: 2007

Statistically designed two step response surface optimization of enzymatic prepress treatment to increase juice yields and lower turbidity of elderberry juice
Publication: Research - peer-review › Journal article – Annual report year: 2007

Synergistic enzymatic interactions and effects of sequential enzyme additions during hydrolysis of wheat arabinoxylan
Publication: Research - peer-review › Journal article – Annual report year: 2007

Targeted isolation of constituents of Hubertia species by HPLC-SPE-NMR
Publication: Research - peer-review › Journal article – Annual report year: 2007

Targeted natural product isolation guided by HPLC-SPE-NMR: Constituents of Hubertia species
Publication: Research - peer-review › Journal article – Annual report year: 2007

Wine dilution affects the reliability of tannin analysis by protein precipitation
Publication: Research › Poster – Annual report year: 2007

A novel GH43 α-L-arabinofuranosidase from Humicola insolens: mode of action and synergy with GH51 α-L-arabinofuranosidases on wheat arabinoxylan
Colorimetric Characterization for Comparative Analysis of Fungal Pigments and Natural Food Colorants
Publication: Research - peer-review › Journal article – Annual report year: 2006

Effect of enzymatic clarification and rat intestinal extracts incubation on phenolic composition and antioxidant activity of black currant juice
Publication: Research - peer-review › Journal article – Annual report year: 2006

Efficiency of new fungal cellulase systems in boosting enzymatic degradation of barley straw lignocellulose
Publication: Research - peer-review › Journal article – Annual report year: 2006

Funktionelle fødevarer
Publication: Communication › Journal article – Annual report year: 2006

Hvordan påvirker hydrokolloider aromafrigivelse fra fødevarer?
Publication: Communication › Journal article – Annual report year: 2005

Liver paté enriched with dietary fibre extracted from potato fibre as fat substitute
Publication: Research - peer-review › Journal article – Annual report year: 2006

New potato fibre for improvement of texture and colour of wheat bread
Publication: Research - peer-review › Journal article – Annual report year: 2006

Optimization of reaction conditions for enzymatic viscosity reduction and hydrolysis of wheat arabinoxylan in an industrial ethanol fermentation residue
Publication: Research - peer-review › Journal article – Annual report year: 2006

Oxidative Stability of fish enriched yoghurts
Publication: Research - peer-review › Article in proceedings – Annual report year: 2006

Oxidative stability of fish oil enriched yoghurts
Publication: Research - peer-review › Book chapter – Annual report year: 2006

Preventing oxidation in milk enriched with omega-3 fatty acids
Publication: Research › Journal article – Annual report year: 2006

Protease assisted clarification of black currant juice
Publication: Research - peer-review › Journal article – Annual report year: 2006

Separate and Simultaneous enzymatic hydrolysis and fermentation of wheat hemicellulose with recombinant xylose utilizing Saccharomyces cerevisiae
Publication: Research - peer-review › Journal article – Annual report year: 2006

Synergistic enzyme mechanisms and effects of sequential enzyme additions on degradation of water insoluble wheat arabinoxylan
Publication: Research - peer-review › Journal article – Annual report year: 2006

Upgrading of grape skins: Significance of plant cell-wall structural components and extraction techniques for phenol release
Publication: Research - peer-review › Journal article – Annual report year: 2006
Characterisation of volatile aroma compounds of orange juices by three dynamic and static headspace gas chromatography techniques
Publication: Research - peer-review › Journal article – Annual report year: 2005

Effect of xanthan on flavor release from thickened viscous food model systems
Publication: Research - peer-review › Journal article – Annual report year: 2005

Efficiencies of designed enzyme combinations in releasing xylose and arabinose from wheat arabinoxylan in an industrial ethanol residue
Publication: Research - peer-review › Journal article – Annual report year: 2005

Enzymatic enhancement of anthocyanins and other phenolics in black currant juice
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Enzymatic hydrolysis of hemicellulose: Use of statistical designs for optimization of reactions and uncovering of synergy mechanisms
Publication: Communication › Journal article – Annual report year: 2005

Enzymatic upgrading of antioxidant phenolics in berry juice and in press residues
Publication: Research - peer-review › Journal article – Annual report year: 2005

Exploring fungal biodiversity for the production of water-soluble pigments as potential natural food colorants: Fungi as a source of natural food colorants
Publication: Research - peer-review › Journal article – Annual report year: 2005

From straw to ethanol: The hunt for better enzymes for degradation of straw is part of the development of a new bioethanol process
Publication: Communication › Journal article – Annual report year: 2005

Influence of hydrocolloids and viscosity on aroma release
Publication: Research - peer-review › Article in proceedings – Annual report year: 2005

Kan saftevand laves sundere ved hjælp af enzymer og ny procesteknologi?
Publication: Communication › Journal article – Annual report year: 2005

Protection against oxidation of fish-oil-enriched milk emulsions through addition of rapeseed oil or antioxidants
Publication: Research - peer-review › Journal article – Annual report year: 2005

Sensory stability and oxidation of fish oil enriched milk is affected by milk storage temperature and oil quality
Publication: Research - peer-review › Journal article – Annual report year: 2005

Synergistic antioxidative effects of alkamides, caffeic acid derivatives and polysaccharide fractions from Echinacea purpurea on in vitro oxidation of human low density lipoproteins
Publication: Research - peer-review › Journal article – Annual report year: 2005

Chemical and olfactometric characterization of volatile flavor compounds in a fish oil enriched milk emulsion
Publication: Research - peer-review › Journal article – Annual report year: 2004

Effect of ripeness and postharvest storage on the phenolic profiles of cherries (Prunus avium L.)
Publication: Research - peer-review › Journal article – Annual report year: 2004

Effects of different enzymatic maceration treatments on enhancement of anthocyanins and other phenolics in black currant juice
Effects of different enzymatic pre-press maceration treatments on the release of phenols into blackcurrant juice
Publication: Research - peer-review › Journal article – Annual report year: 2004

Effects of fish oil type, lipid antioxidants and presence of rapeseed oil on oxidative flavour stability of fish oil enriched milk
Publication: Research - peer-review › Journal article – Annual report year: 2004

Effects of lactoferrin, phytic acid, and EDTA on oxidation in two food emulsions enriched with long-chain polyunsaturated fatty acids
Publication: Research - peer-review › Journal article – Annual report year: 2004

Functional foods 1: Definitioner og produktexempler
Publication: Research › Journal article – Annual report year: 2004

Functional foods 2: Nye processer til produktion af sundere frugtsaft
Publication: Research › Journal article – Annual report year: 2004

Functional foods. What is that?
Publication: Communication › Journal article – Annual report year: 2004

Generation of flavour compounds in fermented sausages-the influence of curing ingredients, Staphylococcus starter culture and ripening time
Publication: Research - peer-review › Journal article – Annual report year: 2004

Impact of Isolation Method on the Antioxidant Activity of Rapeseed Meal Phenolics
Publication: Research - peer-review › Journal article – Annual report year: 2004

Influence of lambda-carrageenan on the release of systematic series of volatile flavor compounds from viscous food model systems
Publication: Research - peer-review › Journal article – Annual report year: 2004

Modeling the sensory impact of defined combinations of volatile lipid oxidation products on fishy and metallic off-flavors
Publication: Research - peer-review › Journal article – Annual report year: 2004

Recovery of volatile aroma compounds from black currant juice by vacuum membrane distillation
Publication: Research - peer-review › Journal article – Annual report year: 2004

Rye bran bread intake elevates urinary excretion of ferulic acid in humans, but does not affect the susceptibility of LDL to oxidation ex vivo
Publication: Research - peer-review › Journal article – Annual report year: 2004

Screening and identification of novel fungal pigments as potential natural food colorants
Publication: Research › Poster – Annual report year: 2004

Storage affects the phenolic profiles and antioxidant activities of cherries (Prunus avium L) on human low-density lipoproteins
Publication: Research - peer-review › Journal article – Annual report year: 2004

Antibacterial enzymes
Publication: Research - peer-review › Book chapter – Annual report year: 2003
Changes in macroscopic viscosity do not affect the release of aroma aldehydes from a pectinaceous food model system of low sucrose content
Publication: Research - peer-review › Journal article – Annual report year: 2003

Enzymatic hydrolysis of water-soluble wheat arabinoxylan. 1. Synergy between alpha-L-arabinofuranosidases, endo-1,4-beta-xylanases, and beta-xylosidase activities
Publication: Research - peer-review › Journal article – Annual report year: 2003

Oxidative flavour deterioration of fish oil enriched milk
Publication: Research - peer-review › Journal article – Annual report year: 2003

Progress of lipid oxidation in different fish oil enriched milk emulsions supplemented with EDTA
Publication: Research › Article in proceedings – Annual report year: 2003

Quantitative analysis of the main phenolics in rapeseed meal and oils processed differently using enzymatic hydrolysis and HPLC
Publication: Research - peer-review › Journal article – Annual report year: 2003

Antioxidants in fruits, berries and vegetables
Publication: Research - peer-review › Book chapter – Annual report year: 2002

Changes in dietary fibre, phenolic acids and activity of endogenous enzymes during rye bread-making
Publication: Research › Book chapter – Annual report year: 2002

Effect of storage on phenolic profiles and antioxidant activity of cherries (Prunus avium L.)
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Enhance extraction of antioxidant phenols from wine and juice press residues via enzymatic polysaccharide hydrolysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Enzymatic enhancement of anthocyanins and other phenolics in black currant juice
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Enzymatic extraction of antioxidative phenols from black currant juice pomace (Ribes nigrum)
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Fate of anthocyanins in industrial clarification treatment of cherry and black currant juice and the effects on antioxidant activity on low density lipoprotein oxidation in vitro
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Inhibition of oxidation of human-low-density lipoprotein by phenolic extracts from rye and by pure monomeric and dimeric hydroxycinnamates
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Microfiltration of red berry juice with thread filters: Effects of temperature, flow and filter pore size
Publication: Research - peer-review › Journal article – Annual report year: 2002

Natural food preservation
Publication: Research › Book chapter – Annual report year: 2002

Oxidative stability of fish and algae oils containing long-chain polyunsaturated fatty acids in bulk and in oil-in-water emulsions
Publication: Research - peer-review › Journal article – Annual report year: 2002
Retention of phenolic phytochemicals by new technological approaches in berry juice processing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2002

Antioxidant activity of hydroxycinnamic acids on human low-density lipoprotein oxidation
Publication: Research › Book chapter – Annual report year: 2001

Antioxidant effects of phenolic rye (Secale cereale L.) extracts, monomeric hydroxycinnamates, and ferulic acid dehydrodimers on human low-density lipoproteins
Publication: Research - peer-review › Journal article – Annual report year: 2001

Ascorbic acid improves the antioxidant activity of European grape juices by improving the juices' ability to inhibit lipid peroxidation of human LDL in vitro
Publication: Research - peer-review › Journal article – Annual report year: 2001

Efficiency of enzymatic and other alternative clarification and fining treatments on turbidity and haze in cherry juice
Publication: Research - peer-review › Journal article – Annual report year: 2001

Enzymatic enhancement and antioxidant activities of anthocyanins and other phenolic compounds in black currant juice
Publication: Research › Book chapter – Annual report year: 2001

Enzymatic enhancement and oxidant activities of anthocyanins and other phenolic compounds in black currant juice
Publication: Research - peer-review › Article in proceedings – Annual report year: 2001

Enzyme-assisted extraction of antioxidative phenols from black current juice press residues (Ribes nigrum)
Publication: Research - peer-review › Journal article – Annual report year: 2001

Enzyme-assisted release of phenolic antioxidants from wine and juice press residues and their effect on human LDL oxidation in vitro
Publication: Research - peer-review › Book chapter – Annual report year: 2001

Lipid oxidation in fish oil enriched mayonnaise: Calcium disodium ethylenediaminetetraacetate, but not gallic acid, strongly inhibited oxidative deterioration
Publication: Research - peer-review › Journal article – Annual report year: 2001

Oxidation in fish oil-enriched mayonnaise 4: Effect of tocopherol concentration on oxidative deterioration
Publication: Research - peer-review › Journal article – Annual report year: 2001

Oxidation in fish oil enriched mayonnaise: Ascorbic acid and low pH increase oxidative deterioration
Publication: Research - peer-review › Journal article – Annual report year: 2001

Rancidity in fish oil enriched foods
Publication: Communication › Journal article – Annual report year: 2001

Content of phenolic acids and ferulic acid dehydrodimers in 17 rye (Secale cereale L.) varieties
Publication: Research - peer-review › Journal article – Annual report year: 2000

Effect of ascorbic acid on iron release from the emulsifier interface and on the oxidative flavor deterioration in fish oil enriched mayonnaise
Publication: Research - peer-review › Journal article – Annual report year: 2000
Enzyme assisted solubilization of beta-glucans from rye bran
Publication: Research - peer-review › Article in proceedings – Annual report year: 2000

Ferulic acid dehydrodimers in rye (Secale cereale L)
Publication: Research - peer-review › Journal article – Annual report year: 2000

Oxidation in fish-oil-enriched mayonnaise 2: Assessment of the efficacy of different tocopherol antioxidant systems by discriminant partial least squares regression analysis
Publication: Research - peer-review › Journal article – Annual report year: 2000

Oxidation in fish oil-enriched mayonnaise 3: Assessment of the influence of the emulsion structure on oxidation by discriminant partial least squares regression analysis
Publication: Research - peer-review › Journal article – Annual report year: 2000

The problems of using one-dimensional methods to evaluate multifunctional food and biological antioxidants
Publication: Research - peer-review › Journal article – Annual report year: 2000

Antioxidant activity of hydroxycinnamic acids on human LDL oxidation in vitro
Publication: Research - peer-review › Article in proceedings – Annual report year: 1999

Antioxidant activity of phenolic compounds in grape juice and prune juice on human low-density lipoproteins
Publication: Research - peer-review › Journal article – Annual report year: 1999

Enzymatic hydrolysis of plant material: Kinetics, reactions conditions and substrate effects
Publication: Research › Journal article – Annual report year: 1999

Enzymatic hydrolysis of plant material: Synergism and antagonism among enzymes
Publication: Research › Journal article – Annual report year: 1999

Oxidation in fish-oil-enriched mayonnaise 1: Assessment of propyl gallate as an antioxidant by discriminant partial least squares regression analysis
Publication: Research - peer-review › Journal article – Annual report year: 1999

Oxidation mechanisms in real food emulsions: Oil-water partition coefficients of selected volatile off-flavor compounds in mayonnaise
Publication: Research - peer-review › Journal article – Annual report year: 1999

Partitioning of selected antioxidants in mayonnaise
Publication: Research - peer-review › Journal article – Annual report year: 1999

Plant cell wall degrading enzymes for fruit juice processing
Publication: Research › Journal article – Annual report year: 1999

Release of hydroxycinnamic and hydroxybenzoic acids in rye by commercial plant cell wall degrading enzyme preparations
Publication: Research - peer-review › Journal article – Annual report year: 1999

The architecture of the plant plant wall: Fruits
Publication: Research › Journal article – Annual report year: 1999

Antioxidant activity of berry phenolics on human low-density lipoprotein and liposome oxidation
Publication: Research - peer-review › Journal article – Annual report year: 1998
Antioxidant activity of phenolic compounds in grapes
Publication: Research - peer-review › Article in proceedings – Annual report year: 1998

Antioxidant interactions of catechin, cyanidin, caffeic acid, quercetin, and ellagic acid on human LDL oxidation
Publication: Research - peer-review › Journal article – Annual report year: 1998

Antioxidants in grapes and grape juices and their potential health effects
Publication: Research - peer-review › Journal article – Annual report year: 1998

Commercial grape juices inhibit the in vitro oxidation of human low-density lipoproteins
Publication: Research - peer-review › Journal article – Annual report year: 1998

Enzymatic release of antioxidants for human LDL from grape pomace
Publication: Research - peer-review › Journal article – Annual report year: 1998

Enzymatic release of antioxidants for human low-density lipoprotein from grape pomace
Publication: Research - peer-review › Journal article – Annual report year: 1998

Fruit hydroxycinnamic acids inhibit human LDL oxidation in vitro
Publication: Research - peer-review › Journal article – Annual report year: 1998

Interactions between functional ingredients, antioxidants and off-flavour compounds in mayonnaise with fish oil
Publication: Research › Conference abstract for conference – Annual report year: 1998

Oxidation mechanisms in real food emulsions: Method for separation of mayonnaise by ultracentrifugation
Publication: Research - peer-review › Journal article – Annual report year: 1998

Phenolic composition and antioxidant activity of prunes and prune juice (Prunus domestica)
Publication: Research - peer-review › Journal article – Annual report year: 1998

Antioxidant activity of grape extracts in a lecithin liposome system
Publication: Research - peer-review › Journal article – Annual report year: 1997

Inhibition of low-density lipoprotein oxidation in relation to composition of phenolic antioxidants in grapes
Publication: Research - peer-review › Journal article – Annual report year: 1997

The effect of various food parameters on the activity and stability of catalase from Aspergillus niger and catalase from bovine liver
Publication: Research - peer-review › Journal article – Annual report year: 1997

Fate of the synergistic antioxidant system ascorbic acid, lecithin, and tocopherol in mayonnaise: Partition of ascorbic acid
Publication: Research - peer-review › Journal article – Annual report year: 1996

Oxidoreductases as food antioxidants
Publication: Research - peer-review › Article in proceedings – Annual report year: 1996

Critical Assessment of the Applicability of Superoxide Dismutase As An Antioxidant in Lipid Foods
Publication: Research - peer-review › Journal article – Annual report year: 1994
Methods of Evaluating Food Antioxidants
Publication: Research - peer-review › Journal article – Annual report year: 1994

The Combined Inhibitory Effect of Lysozyme and Low pH on Growth of Listeria Monocytogenes
Publication: Research - peer-review › Journal article – Annual report year: 1994

Inactivation of Copper, Zinc Superoxide Dismutase from Saccharomyces Cerevisiae in Lipid Food Model Systems
Publication: Research - peer-review › Journal article – Annual report year: 1992

Projects:

Discovery and engineering of new enzymes for efficient enzymatic conversion of CO2 to CH2OH
Project: PhD

Homology to peptide pattern for annotation of carbohydrate-active enzymes and prediction of function
Project

Production of alkali from cocoa husk ash and biological extraction of hydrocolloid from Sargassum sp.
Project

Production of alkali from cocoa husk ash for extraction of hydrocolloid from biologically pretreated red seaweed
Project

Systematic enzyme discovery, targeted to fungal and algal biomass
Project: PhD

PhD position in Valorization of Industrial Waste Streams from Tuber Processing - Sino Danish Center (SDC)
Project: PhD

Enzymatic lignin biorefining by cleavage of lignin-carbohydrate complexes
Project: PhD

Energy production from seaweed and seaweed processing residues
Project: PhD

Laccase engineering and reaction analysis
Project: PhD

Fractionation and enzymatic processing of biomass for biorefinery applications
Project: PhD

Study of Fixed Film Fixed Filter AD (4FAD) Biogas System Performance at High Suspende Solids and COD loads
Project: PhD

Cellulase enzymology and production
Project: PhD

Enzyme discovery for seaweed processing
Project: PhD
Research of conductive spinning solution in ionic liquid and enzymatic modification cellulose system  
Project: PhD

Seaweed polysaccharides production using enzymes technologies  
Project: PhD

New fungal endomannanase diversity for mannan containing substrates in bioenergy  
Project: PhD

Integration between enzyme technology and membrane separation in biorefinery processes  
Project: PhD

Bioredoxation reactor and process design  
Project: PhD

Biorefining of hemp seeds: Enzymatic assisted upgrading technology  
Project

Chemical Bioreaction Engineering methods for Plant Seed Upgrading: Literature review and introductory experimental work  
Project

Developments in enzyme immobilization with downstream renewable energy applications  
Project: PhD

Production of prebiotic oligosaccharides by biocatalysis  
Project: PhD

Structural characterization and enzymatic modification of soy polysaccharides  
Project: PhD

Pretreatment of hemp fibers for utilization in strong biocomposite materials  
Project: PhD

Lignin processing within biorefining  
Project: PhD

Carbohydrate degradation products within biorefining  
Project: PhD

Reactive Separation Technology: Biometric Enzyme Immobilization  
Project: PhD

Enzymatic polishing and modification of lignin  
Project: PhD

Enhancing micronutrient bioavailability via designed in situ enzyme catalysis  
Project: PhD

Prebiotika til hindring af tarmssygdomme hos svin  
Project: PhD
The MacroAlgaeBiorefinery 3G (MAB3) - sustainable production of 3G bioenergy carriers and high value aquatic fish feed from macroalgae
Project: PhD

Extraction of protein and amino acid from hemp seed meal
Project

Optimizing the anaerobic digestion of manure
Project: PhD

Lignin derived phenolics
Project: PhD

Functional Electrospun Nanostructures and Microstructures for Food and Bioengineering Applications
Project

Large scale enzymatic production of bioactive fibers from potato pulp
Project: PhD

Reactor and Process Design for Multi-enzymatic Synthesis
Project: PhD

Combined silage pretreatment and enzymatic hydrolysis of energy grasses for 2G bioethanol production
Project: PhD

PhD Project in Membrane Technology
Project: PhD

Matematisk modellering af membranseparation
Project: PhD

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

Effekter af kulhydrater på tarmens mikrobiologi
Project: PhD

Process development: Enzymatic upgrading of pectin from sugar beet pulp
Project: PhD

Discovery, Characterization and Design of a thermostable RGI Lyase for production of Bio-Functional Fibers
Project: PhD

Enzymatic Production of Gut-functional Polysaccharides
Project: PhD

Enzymatic Upgrading of Plant Biomass
Project: PhD
Enzymatic Production of Dietary Fibres and Prebiotics from Potato Pulp  
Project: PhD

Biofuels from Nuisance Marine Algae  
Project: PhD

Enzymatic Production of Prebiotics from Sugar Beet Pectin  
Project: PhD

Ethanol Production from Rapeseed Straw and Agricultural Residues  
Project: PhD

Continuous Membrane Microbioreactors for Development of Integrated Pectin Modification and Separation Processes  
Project: PhD

The Cloning and Expression of Lignocellulose Degrading Enzymes in Thermophilic Bacteria  
Project: PhD

Lignocellulose Pretreatment for Lignin Removal and Maximal Enzymatic (Ligno) Cellulose Degradation  
Project: PhD

Enzymatic Opening of Diferulate Cross-Links in Plant Cell Walls  
Project: PhD

Development of Quantitative Kinetic Models Describing Enzyme Catalyzed Heteropolysaccharide Degradation: Soluble Arabinoxylan  
Project: PhD

Development of Quantitative Kinetic Models Describing Enzyme Catalysed Heteropolysaccharide Degradation: Insoluble Arabinoxylans  
Project: PhD

Workpackage 2 in Prebiotic Center: Gut microbiota and Immune Response Effects  
Project

WP2 in Prebiotic Center: Gut microbiota and Immune Response Effects  
Project

Enzymatic Lipophilisation of Bioactive Compounds  
Project: PhD

Enzymatic catalysis for increased extraction and positive modulation of phenolic antioxidants in functional juice and wine production  
Project

Pre-Treatment (and Enzymatic Hydrolysis) of Ligno-Cellulose  
Project: PhD

Process for Recovering and Enzymatically Modifying Immuno-Modulating Lipoteichoic Acid from Industrial Bacillus Fermentations  
Project: PhD
Prediction of Wine Quality from Phenolic Profiles of Grapes, forkortet "Wine Quality"
Project: PhD

Fungal Pigments Potential Natural Food Colourants
Project: PhD

Optimizing Enzyme Catalyzed Phytate Degradation in Cereal Foods
Project: PhD

Post-translational Modifications of Proteins: Novel in Vitro Methods for their Study and Scale-up
Project: PhD

Development of Berry Fruit Juices with Improved Health Potential
Project: PhD

Enzymatisk Hydrolyse af Lignocellulose fra Byg, Strå og Skaller
Project: PhD

Enzyme Catalysed Production of Phospholipids with Modified Fatty Acid Profile
Project: PhD

Regulation and Characterization of Cellulases and Hemicellulases Produced by Penicillium
Project: PhD

New Thermostable Enzymes for Biomass Conversion
Project: PhD

Enzymteknologi i frugtsaftprocesser
Project: PhD

Diagnostiske tools for forståelse og afværgelse af procesproblemer i biogasanlæg
Project: PhD

Oxidationsbeskyttelse af fiskeolieholdige produkter
Project: PhD

Enzymatisk nedbrydning af arabinoxylan fra hvede
Project: PhD

Ulinær dynamik i biologiske reaktioner
Project: PhD

Nye Strategier til Forbedring af frugtsaftkvalitet
Project: PhD

Aroma formation by staphylococcus starter cultures - the influence of growth parameters
Project: PhD

Funktionel kvalitet af hvede til produktion af kiks
Project: PhD
Phenolic acids in rye
Project

Oxidationsmekanismer i fiskeolieholdige
Project: PhD

Oxidation mechanisms in fish oil enriched emulsions
Project

Application of enzymes for food protection
Project

Application of plant cell wall degrading enzymes in food technology.
Project

Activities:

Surface properties and chemistry correlate to the digestibility of biomass following hydrothermal pretreatment at different severities
Activity: Talks and presentations › Conference presentations