Irini Angelidaki - DTU Orbit (23/06/2018)

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Publications:

Microbial electrolytic disinfection process for highly efficient Escherichia coli inactivation
Publication: Research - peer-review › Journal article – Annual report year: 2018

Acclimation to extremely high ammonia levels in continuous biomethanation process and the associated microbial community dynamics
Publication: Research - peer-review › Journal article – Annual report year: 2018

Amino acids production focusing on fermentation technologies – A review
Publication: Research - peer-review › Review – Annual report year: 2018

A novel process for volatile fatty acids production from syngas by integrating with mesophilic alkaline fermentation of waste activated sludge
Publication: Research - peer-review › Journal article – Annual report year: 2018

A proposed mechanism for the ammonia-LCFA synergetic co-inhibition effect on anaerobic digestion process
Publication: Research - peer-review › Journal article – Annual report year: 2018

Bio-Electro-Fenton process for the degradation of Non-Steroidal Anti-Inflammatory Drugs in wastewater
Publication: Research - peer-review › Journal article – Annual report year: 2018

Biogas and its opportunities—A review
Kougias, P. & Angelidaki, I. 2018 In : Frontiers of Environmental Science & Engineering. 12, 3, 12 p., 14
Publication: Research - peer-review › Review – Annual report year: 2018

Biogas upgrading and utilization: Current status and perspectives
Publication: Research - peer-review › Review – Annual report year: 2018

Co-digestion and model simulations of source separated municipal organic waste with cattle manure under batch and continuously stirred tank reactors
Publication: Research - peer-review › Journal article – Annual report year: 2018

Converting mesophilic upflow sludge blanket (UASB) reactors to thermophilic by applying axenic methanogenic culture bioaugmentation
Publication: Research - peer-review › Journal article – Annual report year: 2018
Current as an indicator of ammonia concentration during wastewater treatment in an integrated microbial electrolysis cell - Nitrification system
Zhao, N., Angelidaki, I. & Zhang, Y. 2018 In : Electrochimica Acta. 281, p. 266-273
Publication: Research - peer-review › Journal article – Annual report year: 2018

Deciphering the microbial ecology in bio-gas reactors for optimizing the anaerobic digestion process
Publication: Research › Ph.D. thesis – Annual report year: 2018

Effect of different ammonia sources on aceticlastic and hydrogenotrophic methanogens
Publication: Research - peer-review › Journal article – Annual report year: 2018

Electricity generation and microbial communities in microbial fuel cell powered by macroalgal biomass
Publication: Research - peer-review › Journal article – Annual report year: 2018

Evaluation of microalgae production coupled with wastewater treatment
Publication: Research - peer-review › Journal article – Annual report year: 2018

Integrated production of cellulosic bioethanol and succinic acid from rapeseed straw after dilute-acid pretreatment
Publication: Research - peer-review › Journal article – Annual report year: 2018

Life cycle assessment of different strategies for energy and nutrient recovery from source sorted organic fraction of household waste
Publication: Research - peer-review › Journal article – Annual report year: 2018

Metagenomic binning reveals the functional roles of core abundant microorganisms in twelve full-scale biogas plants
Publication: Research - peer-review › Journal article – Annual report year: 2018

Microalgal process-monitoring based on high-selectivity spectroscopy tools: status and future perspectives
Publication: Research - peer-review › Review – Annual report year: 2018

Microbial electrochemical separation of CO₂ for biogas upgrading
Publication: Research - peer-review › Journal article – Annual report year: 2018
Microbial fuel cell-based biosensor for toxic carbon monoxide monitoring
Publication: Research - peer-review › Journal article – Annual report year: 2018

Nutrient recovery from industrial wastewater as single cell protein by a co-culture of green microalgae and methanotrophs
Publication: Research - peer-review › Journal article – Annual report year: 2018

Performance and genome-centric metagenomics of thermophilic single and two-stage anaerobic digesters treating cheese wastes
Publication: Research - peer-review › Journal article – Annual report year: 2018

Process performance and modelling of anaerobic digestion using source-sorted organic household waste
Publication: Research - peer-review › Journal article – Annual report year: 2018

Research in organic waste as resources: How to implement circular bio-economy in the urban context?
Publication: Research › Sound/Visual production (digital) – Annual report year: 2018

Salinity-gradient energy driven microbial electrosynthesis of value-added chemicals from CO₂ reduction
Publication: Research - peer-review › Journal article – Annual report year: 2018

Simultaneous biogas upgrading and biochemicals production using anaerobic bacterial mixed cultures
Publication: Research - peer-review › Journal article – Annual report year: 2018

Sustainable bioenergy and biofuels innovation challenge
Publication: Research - peer-review › Report chapter – Annual report year: 2018

Taxonomy of anaerobic digestion microbiome reveals biases associated with the applied high throughput sequencing strategies
Publication: Research - peer-review › Journal article – Annual report year: 2018

TiO₂–AgCl Based Nanoparticles for Photocatalytic Production of Phenolic Compounds from Lignocellulosic Residues
Publication: Research - peer-review › Journal article – Annual report year: 2018

Two-year microbial adaptation during hydrogen-mediated biogas upgrading process in a serial reactor configuration
Publication: Research - peer-review › Journal article – Annual report year: 2018
Valorisation of Effluents from Anaerobic Digestion as Single Cell Protein – Focus on Safe Gas Supply
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Acclimation of ammonia tolerant methanogenic consortia using different bioreactor types
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Acclimation to extremely high ammonia levels during continuous biomethanation process
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Algal Biomass for Bioenergy and Bioproducts Production in Biorefinery Concepts
Publication: Research › Ph.D. thesis – Annual report year: 2017

Anaerobic granular sludge for simultaneous biomethanation of synthetic wastewater and CO with focus on the identification of CO-converting microorganisms
Publication: Research - peer-review › Journal article – Annual report year: 2017

A novel archaeal species belonging to Methanoculleus genus identified via de-novo assembly and metagenomic binning process in biogas reactors
Publication: Research - peer-review › Journal article – Annual report year: 2017

An overview of electron acceptors in microbial fuel cells
Ucar, D., Zhang, Y. & Angelidaki, I. 2017 In : Frontiers in Microbiology. 8, 14 p., 643
Publication: Research - peer-review › Review – Annual report year: 2017

Antibiotic Resistance Genes and Correlations with Microbial Community and Metal Resistance Genes in Full-Scale Biogas Reactors As Revealed by Metagenomic Analysis
Luo, G., Li, B., Li, L-G., Zhang, T. & Angelidaki, I. 2017 In : Environmental Science and Technology. 51, 7, p. 4069-4080
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A review on prospects and challenges of biological H₂S removal from biogas with focus on biotrickling filtration and microaerobic desulfurization
Publication: Research - peer-review › Review – Annual report year: 2017

A systematic methodology to extend the applicability of a bioconversion model for the simulation of various co-digestion scenarios
Publication: Research - peer-review › Journal article – Annual report year: 2017

Batch, fed-batch and CSTR reactors as cultivation systems to acclimate ammonia tolerant methanogenic consortia
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Publication: Research - peer-review › Poster – Annual report year: 2017

Bioaugmentation with hydrolytic microbes to improve the anaerobic biodegradability of lignocellulosic agricultural residues
Bioelectricity production and microbial communities in microbial fuel cell powered by macroalgal biomass

Bioelectrochemical systems serve anaerobic digestion process for process monitoring and biogas upgrading

Bioelectrolytic sensor for rapid monitoring of volatile fatty acids in anaerobic digestion process

Biological caproate production by Clostridium kluyveri from ethanol and acetate as carbon sources

Biological systems for simultaneous methanation of CO2 and H2 by anaerobic microorganisms

Butanol fermentation of the brown seaweed Laminaria digitata by Clostridium beijerinckii DSM-6422

Characterization of the planktonic microbiome in upflow anaerobic sludge blanket reactors during adaptation of mesophilic methanogenic granules to thermophilic operational conditions

Co-cultivation of Green Microalgae and Methanotrophic Bacteria for Single Cell Protein Production from Wastewater

Comparison of Fenton, UV-Fenton and nano-Fe3O4 catalyzed UV-Fenton in degradation of phloroglucinol under neutral and alkaline conditions: Role of complexation of Fe3+ with hydroxyl group in phloroglucinol

Detailing the start-up and microalgal growth performance of a full-scale photobioreactor operated with bioindustrial wastewater

Different cultivation methods to acclimatise ammonia-tolerant methanogenic consortia
Effect of micro-aeration and inoculum type on the biodegradation of lignocellulosic substrate
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Effect of nitrogen source and acclimatization on specific growth rates of microalgae determined by a high throughput in vivo microplate autofluorescence method
Publication: Research - peer-review › Poster – Annual report year: 2017

Efficient treatment of aniline containing wastewater in bipolar membrane microbial electrolysis cell-Fenton system
Publication: Research - peer-review › Journal article – Annual report year: 2017

Electricity generation and microbial community in response to short-term changes in stack connection of self-stacked submersible microbial fuel cell powered by glycerol
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Enhancing biogas production from recalcitrant lignocellulosic residue
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Enriched ammonia-tolerant methanogenic cultures as bioaugmentation inocula in continuous biomethanation processes
Fotidis, I., Treu, L. & Angelidaki, I. 2017 In : Journal of Cleaner Production. 166, p. 1305-1313
Publication: Research - peer-review › Journal article – Annual report year: 2017

Ex-situ biogas upgrading and enhancement in different reactor systems
Publication: Research - peer-review › Journal article – Annual report year: 2017

High efficient ethanol and VFAs production from gas fermentation: effect of acetate, gas and inoculum microbial composition
Publication: Research - peer-review › Journal article – Annual report year: 2017

Hydrogen assisted biological biogas upgrading
Publication: Research › Ph.D. thesis – Annual report year: 2017

Improving the energy balance of grass-based anaerobic digestion through combined harvesting and pretreatment
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Insights on the activity of the anaerobic digestion microbiome by means of metatranscriptomic functional investigation
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In-situ biogas upgrading process: modeling and simulations aspects
Publication: Research - peer-review › Journal article – Annual report year: 2017

Integrated electrochemical-biological process as an alternative mean for ammonia monitoring during anaerobic digestion of organic wastes
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Intermittent provision of H₂ and CO₂ in up-flow reactors for ex-situ biogas upgrading
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

iTRAQ quantitative proteomic analysis reveals the pathways for methanation of propionate facilitated by magnetite
Publication: Research - peer-review › Journal article – Annual report year: 2017

Laminaria digitata as potential carbon source in heterotrophic microalgae cultivation for the production of fish feed supplement
Publication: Research - peer-review › Journal article – Annual report year: 2017

Life cycle assessment of castor-based biorefinery: a well to wheel LCA
Publication: Research - peer-review › Journal article – Annual report year: 2017

Macroalgae Laminaria digitata and Saccharina latissima as Potential Biomasses for Biogas and Total Phenolics Production: Focusing on Seasonal and Spatial Variations of the Algae
Publication: Research - peer-review › Journal article – Annual report year: 2017

Mechanical pretreatment at harvesting increases the bioenergy output from marginal land grasses
Publication: Research - peer-review › Journal article – Annual report year: 2017

Microalgae biorefinery symbiosis: screening, production, and process analytical technology
Publication: Research › Ph.D. thesis – Annual report year: 2017

Microbial community changes in methanogenic granules during the transition from mesophilic to thermophilic conditions
Publication: Research - peer-review › Journal article – Annual report year: 2016

Microbial community dynamics during a successful acclimation process to extremely high ammonia levels in continuous anaerobic digester
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Microbial electrochemical sensor for online ammonia monitoring of waste streams
Zhao, N., Angelidaki, I. & Zhang, Y. 2017
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Microbial electrolytic capture, separation and regeneration of CO2 for biogas upgrading
Publication: Research - peer-review > Journal article – Annual report year: 2017

Microbial population dynamics in urban organic waste anaerobic co-digestion with mixed sludge during a change in feedstock composition and different hydraulic retention times
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Novel bio-electro-Fenton technology for azo dye wastewater treatment using microbial reverse-electrodialysis electrolysis cell
Publication: Research - peer-review > Journal article – Annual report year: 2017

Novel protocol for lutein extraction from microalga Chlorella vulgaris
Publication: Research - peer-review > Journal article – Annual report year: 2017

Optimization of hydrogen dispersion in thermophilic up-flow reactors for ex situ biogas upgrading
Publication: Research - peer-review > Journal article – Annual report year: 2017

Process performance and comparative metagenomic analysis during co-digestion of manure and lignocellulosic biomass for biogas production
Publication: Research - peer-review > Journal article – Annual report year: 2017

Salinity-gradient energy driven microbial electrosynthesis of hydrogen peroxide
Li, X., Angelidaki, I. & Zhang, Y. 2017 In : Journal of Power Sources. 341, p. 357-365
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Seaweed as innovative feedstock for energy and feed – Evaluating the impacts through a Life Cycle Assessment
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The impact of anode acclimation strategy on microbial electrolysis cell treating hydrogen fermentation effluent
Publication: Research - peer-review > Journal article – Annual report year: 2017

TiO2/UV based photocatalytic pretreatment of wheat straw for biogas production
Publication: Research - peer-review > Journal article – Annual report year: 2017

Wirelessly powered submerged-light illuminated photobioreactors for efficient microalgae cultivation
Publication: Research - peer-review > Journal article – Annual report year: 2017
System and method to control h2o2 level in advanced oxidation processes
Angelidaki, I. & Zhang, Y. 6 May 2016
Publication: Research › Patent – Annual report year: 2016

Acclimation of continuous biomethanation process to extremely high ammonia levels
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Alternate switching between MFC and MEC for H2O2 synthesis and residual removal in Bioelectro-Fenton system
Zhang, Y. & Angelidaki, I. 2016 Book of abstracts: The 3rd european meeting of the international society for microbial
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

Alternative co-digestion scenarios for efficient fixed-dome reactor biomethanation processes
Fotidis, I., Laranjeiro, T. & Angelidaki, I. 2016 In : Journal of Cleaner Production. 127, p. 610-617
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ammonia inhibition on hydrogen enriched anaerobic digestion of manure under mesophilic and thermophilic conditions
Publication: Research - peer-review › Journal article – Annual report year: 2016

Ammonia - LCFA synergetic co-inhibition effect in manure-based continuous biomethanation process
Publication: Research - peer-review › Journal article – Annual report year: 2016

Anaerobic modeling for improving synergy and robustness of a manure co-digestion process
of Chemical Engineering. 33, 4, p. 871-883 13 p.
Publication: Research - peer-review › Journal article – Annual report year: 2017

An innovative process for biogas upgrading by the microbial electrolysis cell
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Bioflocculation of green microalgae using activated sludge and potential for biogas production
Publication: Research - peer-review › Poster – Annual report year: 2016

Bioremediation capacity, nutritional value and biorefining of macroalga Saccharina latissima
Silva Marinho, G., Angelidaki, I. & Holdt, S. L. 2016 Kgs. Lyngby: Technical University of Denmark, DTU Environment. 51
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Publication: Research › Ph.D. thesis – Annual report year: 2016

Co-digestion of food and garden waste with mixed sludge from wastewater treatment in continuously stirred tank reactors
Publication: Research - peer-review › Journal article – Annual report year: 2016

Co-digestion of microalgae and activated sludge following a novel bioflocculation method
Publication: Research - peer-review › Poster – Annual report year: 2016

Comparative analysis of taxonomic, functional, and metabolic patterns of microbiomes from 14 full-scale biogas reactors
by metagenomic sequencing and radiocarbon analysis
Luo, G., Fotidis, I. & Angelidaki, I. 2016 In : Biotechnology for Biofuels. 9, 12 p., 51
Cultivation of microalgae in industrial wastewaters

Deeper insight into the structure of the anaerobic digestion microbial community; the biogas microbiome database is expanded with 157 new genomes

Dynamic bioconversion mathematical modelling and simulation of urban organic waste co-digestion in continuously stirred tank reactor

Dynamic functional characterization and phylogenetic changes due to Long Chain Fatty Acids pulses in biogas reactors
Kougias, P., Treu, L., Campanaro, S., Zhu, X. & Angelidaki, I. 2016 In : Scientific Reports. 6, 10 p., 28810

Evaluation of minerals and vitamins in the Danish cultivated sugar kelp

Extraction of alginate from Sargassum muticum: process optimization and study of its functional activities

Forward osmosis treatment of effluents from anaerobic digestion: correlation between membrane performance and biogas potential

Harvesting microalgae using activated sludge can decrease polymer dosing and enhance methane production via co-digestion in a bacterial-microalgal process

Improving methane production from digested manure biofibers by mechanical and thermal alkaline pretreatment

Improving the energy balance of grass-based anaerobic digestion through harvesting optimization

Innovative microbial electrochemical process for H_2O_2 synthesis and residual H_2O_2 removal for wastewater treatment
Zhang, Y. & Angelidaki, I. 2016
Optimising the anaerobic co-digestion of urban organic waste using dynamic bioconversion mathematical modelling
Publication: Research - peer-review › Journal article – Annual report year: 2016

Optimization of biomethanation focusing on high ammonia loaded processes
Publication: Research › Ph.D. thesis – Annual report year: 2016

Recent developments on biofuels production from microalgae and macroalgae
Publication: Research - peer-review › Journal article – Annual report year: 2016

Taxonomy and functional roles of biogas microbiota binned from multiple metagenomes of anaerobic digestion systems
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

The microbiome of biogas reactors treating lignocellulosic substrates revealed different mechanisms for carbohydrates utilization
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2017

TiO2 assisted photo-oxidative pretreatment of wheat straw for biogas production
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Towards a standardization of biomethane potential tests
Publication: Research - peer-review › Journal article – Annual report year: 2016

Untangling the Effect of Fatty Acid Addition at Species Level Revealed Different Transcriptional Responses of the Biogas Microbial Community Members
Publication: Research - peer-review › Journal article – Annual report year: 2016

Using a combination of binning strategies and taxonomic approaches to unravel the anaerobic digestion microbiome
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Valorization of macroalgae Saccharina latissima as novel feedstock for fermentation-based succinic acid production in a biorefinery approach and economic aspects
Publication: Research - peer-review › Journal article – Annual report year: 2016

Variation in biochemical composition of Saccharina latissima and Laminaria digitata along an estuarine salinity gradient in inner Danish waters
Publication: Research - peer-review › Journal article – Annual report year: 2016
Recovery of ammonia and sulfate from waste streams and bioenergy production via bipolar bioelectrodialysis
Publication: Research - peer-review › Journal article – Annual report year: 2015

Alternate switching between microbial fuel cell and microbial electrolysis cell operation as a new method to control H₂O₂ level in Bioelectro-Fenton system
Publication: Research - peer-review › Journal article – Annual report year: 2015

Ammonia effect on hydrogenotrophic methanogens and syntrophic acetate oxidizing bacteria
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Ammonia tolerant enriched methanogenic cultures as bioaugmentation inocula to alleviate ammonia inhibition in continuous anaerobic reactors
Fotidis, I., Wang, H. & Angelidaki, I. 2015
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Anaerobic co-digestion of agricultural by-products with manure, for enhanced biogas production
Publication: Research - peer-review › Journal article – Annual report year: 2015

Anaerobic Mono- and Co-digestion of Mechanically Pretreated Meadow Grass for Biogas Production
Publication: Research - peer-review › Journal article – Annual report year: 2015

Application of comminution machines to enhance the anaerobic biodegradability of ensiled meadow grass
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Bioelectrochemical recovery of waste-derived volatile fatty acids and production of hydrogen and alkali
Zhang, Y. & Angelidaki, I. 2015 In : Water Research. 81, p. 188-195
Publication: Research - peer-review › Journal article – Annual report year: 2015

Biogas production from ensiled meadow grass; effect of mechanical pretreatments and rapid determination of substrate biodegradability via physicochemical methods
Publication: Research - peer-review › Journal article – Annual report year: 2015

Biogas upgrading by injection of hydrogen in a two-stage Continuous Stirred-Tank Reactor system
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016
Biogas Upgrading via Hydrogenotrophic Methanogenesis in Two-Stage Continuous Stirred Tank Reactors at Mesophilic and Thermophilic Conditions
Publication: Research - peer-review › Journal article – Annual report year: 2015

Bioremediation Potential of Sugarkelp, Saccharina Latissima, Cultivated In a Commercial Off-Shore Integrated Multi-Trophic Aquaculture
Silva Marinho, G., Holdt, S. L. & Angelidaki, I. 2015
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Characterization of nutrient removal and microalgal biomass production on an industrial waste-stream by application of the deceleration-stat technique
Publication: Research - peer-review › Journal article – Annual report year: 2015

Co-Digestion of Food Waste and Garden Waste With WTTP Mixed Sludge in CSTR
Publication: Research - peer-review › Poster – Annual report year: 2016

Combined anaerobic digestion of green waste with wastewater treatment plant mixed sludge in continuous stirred tank reactor (CSTR)
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Commercial cultivation and bioremediation potential of sugar kelp, Saccharina latissima, in Danish waters
Publication: Research - peer-review › Conference article – Annual report year: 2015

Comparison of mixotrophic to cyclic autotrophic/heterotrophic growth strategies to optimize productivity of Chlorella sorokiniana
Publication: Research - peer-review › Conference article – Annual report year: 2015

Counteracting ammonia inhibition during anaerobic digestion by recovery using submersible microbial desalination cell
Zhang, Y. & Angelidaki, I. 2015 In : Biotechnology and Bioengineering. 112, 7, p. 1478-1482
Publication: Research - peer-review › Journal article – Annual report year: 2015

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Publication: Research - peer-review › Journal article – Annual report year: 2015

Economically Viable Components from Jerusalem Artichoke (Helianthus tuberosus L.) in a Biorefinery Concept
Publication: Research - peer-review › Review – Annual report year: 2016

Effect of ammonia on hydrogenotrophic methanogens and syntrophic acetate oxidizing bacteria
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015
Lipids and Composition of Fatty Acids of Saccharina latissima Cultivated Year-round in Integrated Multi-trophic Aquaculture
Publication: Research - peer-review › Journal article – Annual report year: 2015

Macroalgae Laminaria digitata as potential carbon source in heterotrophic Chlorella protothekoides cultivation: an innovative biorefinery concept
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Mechanical Pretreatment to Increase the Bioenergy Yield for Full-scale Biogas Plants
Tsapekos, P., Kougias, P. & Angelidaki, I. 2015
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Metagenomic analysis on thermophilic biogas reactors fed with high load of Long Chain Fatty Acids (LCFA)
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Microbial diversity and dynamicity of biogas reactors due to radical changes of feedstock composition
Publication: Research - peer-review › Journal article – Annual report year: 2015

Microbial dynamics in anaerobic digestion (AD) reactors with sodium oleate in the substrate
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Microbial electrochemical monitoring of volatile fatty acids during anaerobic digestion
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2016

New steady-state microbial community compositions and process performances in biogas reactors induced by temperature disturbances
Publication: Research - peer-review › Journal article – Annual report year: 2015

Salinity-Gradient Energy Driven Microbial Electrosynthesis of Hydrogen Peroxide from Oxygen Reduction
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Seasonal Amino Acid Profile and Nutritional Value of Saccharina Latissima in a Commercial IMTA System
Holdt, S. L., Silva Marinho, G. & Angelidaki, I. 2015
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Seaweed potentials – evaluation of year-round biomass composition of commercial cultivated sugarkelp- results from project KOMBI
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Solutions for Foaming Problems in Biogas Reactors Using Natural Oils or Fatty Acids as Defoamers
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Submersible microbial desalination cell for simultaneous ammonia recovery and electricity production from anaerobic reactors containing high levels of ammonia
Publication: Research - peer-review › Conference article – Annual report year: 2015

The biodegradability of a feedstock is determining the optimal C/N ratios in anaerobic digestion
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

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Publication: Research - peer-review › Journal article – Annual report year: 2015

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Publication: Research › Ph.D. thesis – Annual report year: 2015

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Angelidaki, I. 2014 In : FIB - Forskning i Bioenergi, Brint & Brændselsceller. 50, p. 26-26
Publication: Communication › Journal article – Annual report year: 2015

A bio-electrochemical system for removing inhibitors of anaerobic digestion processes from anaerobic reactors
Angelidaki, I. & Zhang, Y. 2014
Publication: Research › Patent – Annual report year: 2014

A Green Micro-Algal Growth Model developed in the Activated Sludge Modeling Framework
Publication: Research - peer-review › Poster – Annual report year: 2014

An Activated Sludge Model for Mixed Green Microalgae (ASM-A): model identification and calibration
Publication: Research - peer-review › Paper – Annual report year: 2014

Anaerobic digestion foaming in full-scale biogas plants: A survey on causes and solutions
Publication: Research - peer-review › Journal article – Annual report year: 2014

Analysis of bacterial communities and bacterial pathogens in a biogas plant by the combination of ethidium monoazide, PCR and Ion Torrent sequencing
Publication: Research - peer-review › Journal article – Annual report year: 2014

An environmentally-friendly fluorescent method for quantification of lipid contents in yeast
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An innovative bioelectrochemical-anaerobic digestion-coupled system for in-situ ammonia recovery and biogas enhancement: process performance and microbial ecology
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A novel bioinformatic strategy to characterise microbial communities in biogas reactors
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Bioaugmentation with a hydrogenotrophic methanogen: a powerful tool to overcome ammonia inhibition of anaerobic digestion process
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Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

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Anaerobic Digestion of the Organic Fraction of Municipal Solid Waste With Recirculation of Process Water

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Mechanisms of oleate inhibition of the anaerobic degradation in upflow anaerobic sludge blanket (UASB) reactors

The effects of sustainable waste management policies on anaerobic digestion of organic solid waste

Anaerobic transformation of LAS in continuous stirred tank reactors treating sewage sludge

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Increase of anaerobic degradation of particulate organic matter in full-scale biogas plants by mechanical maceration

Linear alkylbenzene sulfonates: inhibition effect on acetate and propionate degradation during anaerobic digestion

Methods for increasing the biogas potential from the recalcitrant organic matter contained in manure

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Anaerobic co-digestion of olive mill effluents together with different wastes
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Codigestion of manure with organic industrial waste. Abstract
Publication: Research › Article in proceedings – Annual report year: 1996

Degradation of lipid containing organic industrial waste
Publication: Research - peer-review › Article in proceedings – Annual report year: 1996

Modelling og regulering af biogasprocessen
Publication: Research - peer-review › Book – Annual report year: 1996

Utilization of different wastes in biogas plants
Publication: Research › Article in proceedings – Annual report year: 1996

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Isomerization of n- and i-butyrate in Anaerobic Methanogenic Systems
Publication: Research - peer-review › Journal article – Annual report year: 1995

Volatile Fatty Acids as Indicators of Process Imbalance in Anaerobic Digestors
Publication: Research - peer-review › Journal article – Annual report year: 1995

A Mathematical Model for Dynamic Simulation of Anaerobic Digestion of Complex Substrates: Focusing on Ammonia Inhibition
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Publication: Research - peer-review › Journal article – Annual report year: 1993

Projects:

Biological production of n-Hexanol
Yang, X., Angelidaki, I. & Kougias, P.
01/12/2017 → 30/11/2020
Project: PhD

Microbial electrochemistry meet UV: For effektive degradation of organic matter
Zou, R., Angelidaki, I. & Zhang, Y.
01/12/2017 → 30/11/2020
Project: PhD
Bioinorganic artificial photosynthesis of single cell protein from carbon dioxide.
Xu, M., Angelidaki, I. & Zhang, Y.
01/11/2017 → 31/10/2020
Project: PhD

Ex-situ biogas upgrading through biologically mediated CO2 hydrogenation
Peprah, M., Angelidaki, I. & Kougias, P.
01/11/2017 → 31/10/2020
Project: PhD

Powdered bioaugmentation inocula to alleviate ammonia toxicity in anaerobic digesters
Yan, M., Angelidaki, I. & Fotidis, I.
01/11/2017 → 31/10/2020
Project: PhD

Computational modelling and simulation of anaerobic biomass conversion to biogas, focusing on the effects of substrate characterisation, solid-liquid-gas phase interactions and microbial growth dynamics
Kovalovszki, A., Angelidaki, I. & Alvarado-Morales, M.
15/09/2016 → 14/01/2020
Project: PhD

Innovative bioaugmentation strategies to tackle ammonia inhibition in anaerobic digestion process
Tian, H., Angelidaki, I. & Fotidis, I.
01/10/2015 → 30/09/2018
Project: PhD

Innovative-bio-electrochemical-anaerobic-digestion coupled system for ammonia recovery and energy production from food-waste residues
Zhao, N., Angelidaki, I. & Zhang, Y.
01/10/2015 → 28/02/2019
Project: PhD

Innovative bioaugmentation strategies to tackle ammonia inhibition in an-aerobic digestion process
Fotidis, I., Angelidaki, I. & De Francisci, D.
01/08/2015 → 31/07/2018
Project

Innovative microbial electrolysis cell-anaerobic digestion coupled system for ammonia recovery and energy production from ammonia-rich residues
Li, X., Angelidaki, I., Zhang, Y., Kougias, P., Thomsen, A. B. & Verstraete, W.
15/12/2014 → 18/04/2018
Project: PhD

Deciphering the microbial ecology in biogas reactors for optimizing the anaerobic digestion process
01/12/2014 → 28/02/2018
Project: PhD

Bioelectrochemical-anaerobic digestion-coupled system for simultaneous recovery and bioenergy production
15/10/2014 → 20/12/2017
Project: PhD

Sustainable Production of Third Generation (3G) Bioenergy Carriers and High Value Aquatic Fish Feed from Macroalgae
D’Este, M., Angelidaki, I., Alvarado-Morales, M., Fotidis, I., Thomsen, A. B. & Nakashimada, Y.
01/01/2014 → 30/08/2017
Project: PhD

Biogas enhancement and upgrading
Bassani, I., Angelidaki, I., Kougias, P., Jensen, M. M., Guwy, A. & Norddahl, B.
15/12/2013 → 06/06/2017
Project: PhD

New technology for an efficient utilization of meadow grass in biogas reactor
Tsapekos, P., Angelidaki, I., Kougias, P., Dechesne, A., Malpei, F. & Norddahl, B.
01/12/2013 → 15/03/2017
Project: PhD

Innovative bioelectrochemical-anaerobic-digestion coupled system for ammonia recovery and energy production from ammonia-rich residues
Zhang, Y., Angelidaki, I. & Fotidis, I.
01/10/2013 → 30/09/2017
Project

Integration of biomass and wind power for biogas enhancement and upgrading via hydrogen assisted anaerobic digestion
Kougias, P., Luo, G. & Angelidaki, I.
01/07/2013 → ...
Project

A novel method to recover ammonia from biogas plants
Zhang, Y. & Angelidaki, I.
01/04/2013 → 31/10/2013
Project

FISCH4 – Fish Feed from Food Waste
Angelidaki, I.
01/01/2013 → 31/12/2017
Project

Innovative biogas process for ammonia-rich wastes
01/11/2012 → 30/06/2016
Project: PhD

Algal biofilter optimization near fish farm
01/09/2012 → 29/02/2016
Project: PhD

An innovative process for simultaneous utilization of hydrogen and in-situ biogas upgrading
Luo, G. & Angelidaki, I.
01/07/2012 → 30/06/2015
Project

Sustainable Production and Utilization of Microalgae for industrial wastewater treatment
01/06/2012 → 30/08/2017
Project: PhD

Energy-efficient, community-based water and wastewater-treatment systems for deployment in India
Fotidis, I. & Angelidaki, I.
Sustainable Production and Utilization of Microalgae
van Wagener, J. M., Angelidaki, I., De Francisci, D., Karakashev, D. B., Barbosa, M. & Eriksen, N. T.
01/04/2012 → 21/04/2016
Project: PhD

Innovative biogas process for treating ammonia-rich wastes
Angelidaki, I.
01/01/2012 → 31/12/2015
Project

KOMBI-cultivation: Integrated aquaculture of fish, seaweed, and mussels for feed and food
Angelidaki, I.
01/01/2012 → 31/03/2015
Project

The MacroAlgae Biorefinery
Angelidaki, I. & Karakashev, D. B.
01/01/2012 → 31/12/2015
Project

Kombinationsopdræt af havbrugfisk, tang, muslinger til foder og konsum
Holdt, S. L., Silva Marinho, G. & Angelidaki, I.
15/12/2011 → 01/04/2015
Project

Biorefinery
15/12/2011 → 26/01/2015
Project: PhD

Kinetic Model Development of Anaerobic Fermentation for Hydrogen Production
Kongjan, P., Angelidaki, I., Min, B., Karakashev, D. B., Norddahl, B. & Prasertsan, P.
25/08/2010 → 25/08/2010
Project: PhD

Thalis
Angelidaki, I. & Andersen, H. R.
01/07/2010 → 30/06/2014
Project

Concept proof of usability of ocher as a source of iron in wastewater treatment
Mikkelsen, P. S., Angelidaki, I. & Andersen, H. R.
15/03/2010 → 01/02/2011
Project

Biorefinery for sustainable Reliable Economical Fuel production from energy crops. Second call.
Angelidaki, I. & Karakashev, D. B.
01/01/2010 → 31/12/2013
Project

High rate algal biomass production for food, feed, biochemicals and biofuels
Angelidaki, I. & Karakashev, D. B.
01/01/2010 → 31/12/2012
Optimal digestion of high ammonia containing wastes
Angelidaki, I. & Karakashev, D. B.
01/01/2010 → 31/12/2011
Project

Submersible Microbial Fuel Cell (SMFC) for electricity production from wastewater
Angelidaki, I.
01/01/2010 → 31/12/2012
Project

Optimization of a titration method for monitoring of VFA
Angelidaki, I. & Boe, K.
01/11/2009 → 31/10/2010
Project

Foaming problems in biogas plants
Kougias, P., Boe, K. & Angelidaki, I.
01/10/2009 → 30/09/2014
Project

Development of new microbial fuel cell configuration for optimization of electricity production with simultaneous wastewater treatment
Zhang, Y., Angelidaki, I., Karakashev, D. B., Norddahl, B. & Verstraete, W.
01/10/2009 → 30/09/2012
Project: PhD

Foaming problems in biogas plants
Angelidaki, I., Boe, K. & Karakashev, D. B.
01/10/2009 → 30/09/2012
Project

Clean and environmentally friendly animal waste technologies for fertilizer and energy production
Angelidaki, I.
01/04/2009 → 31/03/2013
Project

Flow cytometer and UV-laser for Confocal Laser Scanning Microscope
Albrechtsen, H., Henze, M., Jakobsen, R., Angelidaki, I., Smets, B. F. & Dechesne, A.
02/03/2009 → 31/12/2009
Project

Biorefinery for sustainable Reliable Economical Fuel production from energy crops. First call.
Angelidaki, I. & Karakashev, D. B.
01/01/2009 → 31/12/2011
Project

Electricity assisted biological hydrogen production using single chamber membrane-free anaerobic reactor
Angelidaki, I. & Karakashev, D. B.
01/01/2009 → 31/12/2011
Project

Highly effective conversion of C5 and C6 sugars to ethanol by new yield type ethanol-tolerant microorganisms: challenge for sustainable 2nd generation bioethanol production from lignocellulose
Angelidaki, I. & Karakashev, D. B.
INTERREG IVC
Angelidaki, I. & Karakashev, D. B.
01/01/2009 → 31/12/2011
Project

Optimization of bio-hydrogen production from carbohydrate rich wastes by extreme thermophillic microorganisms
Tomás, A. F., Angelidaki, I., Karakashev, D. B., Dechesne, A., Norddahl, B. & Verstraete, W.
01/11/2008 → 03/07/2013
Project: PhD

START-funding II: Preparation of EU project proposal "Biorefinery for sustainable Reliable Economical Fuel production from energy crops" (Acronym: BioREF)
Angelidaki, I., Boe, K. & Karakashev, D. B.
10/10/2008 → 02/12/2008
Project

Optimering af biogas produktion fra affald i Arktis
Jørgensen, M. W., Angelidaki, I. & Jensen, P. E.
01/07/2008 → 30/06/2011
Project: PhD

Fuldskala demonstration og dokumentation mv. af seriedrift på gyllebaseret biogasfællesanlæg (Lemvig Biogas)
Angelidaki, I.
01/04/2008 → 01/06/2009
Project

Integrated European Network for biomass and waste reutilisation for Bio-products
Angelidaki, I. & Karakashev, D. B.
01/01/2008 → 01/01/2010
Project

Microbial community structure related to process conditions: a challenge for improving performance of anaerobic digesters
Angelidaki, I. & Karakashev, D. B.
01/01/2008 → 31/12/2010
Project

START-funding I: Preparation of international proposal "Biorefinery for sustainable Reliable Economical Fuel production from energy crops" (Acronym: BioREF)
Angelidaki, I. & Karakashev, D. B.
01/11/2007 → 18/02/2008
Project

Optimization of Microbial Fuel Cells via Directed Bio-Electricigenesis
Angelidaki, I. & Smets, B. F.
01/09/2007 → 31/08/2009
Project

Production of Biogas and Bioethanol from Organic Raw Materials
Oleskowicz-Popiel, P., Schmidt, J. E., Thomsen, A. B., Angelidaki, I., Björnsson, L. & Norddahl, B.
01/09/2007 → 30/09/2010
Project: PhD
Microbial Fuel Cell - used in direct Conversion of Lignocellulosic Waste to Energy
Fang, C., Angelidaki, I., Boe, K., Karakashev, D. B., Mattiasson, B. & Norddahl, B.
01/07/2007 → 19/01/2011
Project: PhD

Biorefinery for Fuel production from energy crops
Angelidaki, I.
01/01/2007 → 31/12/2010
Project

Improved Anaerobic Digestion of Energy Crops
Bruni, E., Angelidaki, I., Jensen, A. P., Baun, A., Mattiasson, B. & Norddahl, B.
01/12/2006 → 23/06/2010
Project: PhD

Maximization of gaseous energy recovery by simultaneous biohydrogen production and biomethanation.
Angelidaki, I.
03/06/2006 → 31/12/2007
Project

Environmental Assessment of the Management of Garden and Yard Waste
Boldrin, A., Christensen, T. H., Angelidaki, I., Jensen, L. S. & Kranert, M.
01/03/2006 → 23/09/2009
Project: PhD

PSO-VFA. Anvendelse af online fedtsyresensor for at kontrollere og optimere anaerob processen for lav omkostnings biogas fra gyllen.
Angelidaki, I. & Boe, K.
01/03/2006 → 29/02/2008
Project

Schmidt, J. E., Angelidaki, I. & Karakashev, D. B.
01/01/2006 → 31/12/2007
Project

MFC-Risø. Microbial fuel cell - used in direct conversion of lignocellulosic waste to energy.
Angelidaki, I.
01/01/2006 → 31/12/2008
Project

Udvikling af innovativ proces for udnyttelse af biomasse til produktion af brint og biogas
Angelidaki, I.
21/03/2005 → 31/01/2006
Project

Process imbalance in biogas plants and strategies for prevention and reestablishment of process stability. EFP05
Angelidaki, I.
01/03/2005 → 01/05/2008
Project

CONTROL-AD4H2. Control of Anaerobic Digestion Processesfor Optimisation of Hydrogen Production
Angelidaki, I. & Steyer, J.
01/02/2005 → 31/01/2006
Project
Optimisation of Biohydrogen Production by In-Situ Hydrogen Extraction
Siriwongrungson, V., Angelidaki, I. & Zeng, R. J.
01/02/2005 → 31/12/2005
Project: PhD

Indsamling og systematisering af den eksisterende viden om gaspotentialen i forskellige typer biomasse og afgrøder.
Angelidaki, I. & Hejnfelt, A.
01/11/2004 → 30/04/2005
Project

Use of membranes for extraction of H2 produced by fermentation
Angelidaki, I.
15/10/2004 → 31/12/2007
Project

Combined Biohydrogen Biomethane Production from Waste
Liu, D., Angelidaki, I., Min, B., Zeng, R. J., Schmidt, J. E., Niel, E. W. J. V. & Svensson, B. H.
01/10/2004 → 04/07/2008
Project: PhD

Hydrogen from biomass. START-programme.
Angelidaki, I.
01/10/2004 → 01/05/2005
Project

Angelidaki, I. & Kaparaju, P. L.
01/08/2004 → 31/12/2007
Project

Bio-hydrogen production by anaerobic fermentation of waste
Angelidaki, I., Zeng, R. J. & Liu, D.
01/06/2004 → 31/05/2007
Project

Biohydrogenproduktion fra affald
Christiansen, T. L., Angelidaki, I. & Batstone, D. J.
15/03/2004 → 31/05/2006
Project: PhD

Biogas Forum Øresund. (INTERREG IIIA Øresundsregionen)
Angelidaki, I., Boe, K. & Hejnfelt, A.
01/03/2004 → 28/06/2006
Project

Innovative reactor configurations for biogas production
Angelidaki, I.
01/04/2003 → 01/04/2007
Project

Start-programmet. Improved monitoring and control of the biogas process for reliable efficient and cost-effective energy production.
Angelidaki, I.
20/01/2003 → 20/03/2003
Project
SAFEWATER. Hazardous chemicals and micro-organisms in urban water management.
01/01/2003 → 02/01/2003
Project

BIOWASTE. Bioprocessing of sewage sludge for safe recycling on agricultural land
Schmidt, J. E., Christensen, N., Angelidaki, I., Batstone, D. J., Caro Garcia, H. H., Trably, E. & Eriksson, E.
01/10/2002 → 30/09/2005
Project

Monitoring of the anaerobic biogas process by on-line VFA measurement
Angelidaki, I., Boe, K. & Batstone, D. J.
01/10/2002 → 31/12/2005
Project

On-line Monitoring and Control of the Biogas Process
Boe, K., Angelidaki, I., Batstone, D. J., Schmidt, J. E. & Norddahl, B.
01/10/2002 → 30/06/2006
Project: PhD

Development bioprocesses for handling and recycling seasonal industrial wastewaters.
Schmidt, J. E. & Angelidaki, I.
01/07/2002 → 01/08/2002
Project

Kortlægning og dokumentation af procesforhold på danske biogasanlæg.
Angelidaki, I.
01/04/2002 → 31/12/2005
Project

Miljøvurdering af organisk husholdningsaffald
Hansen, T. L., Christensen, T. H., Angelidaki, I., Kjeldsen, P., Magid, J. & Stentiford, E. I.
01/01/2002 → 14/11/2005
Project: PhD

Reduction of xenobiotic compounds found in the sewage sludge by bioprocessing. START-programmet.
Schmidt, J. E. & Angelidaki, I.
20/09/2001 → 01/02/2002
Project

Improved monitoring and control of the anaerobic process. START-programmet
Angelidaki, I.
01/07/2001 → 31/03/2002
Project

Study on anaerobic treatment of sewage sludge for removal of linear alkylbenzene sulfonates (LAS).
Angelidaki, I., Batstone, D. J., Schmidt, J. E. & Toräng, L.
01/07/2001 → 30/06/2004
Project

Biogasprogram
Angelidaki, I. & Pind, P. F.
01/03/2001 → 01/07/2001
Project
Modelling of the anaerobic decomposition of xenobiotic micropollutants common found in wastewater
Schmidt, J. E., Ahring, B. K. & Angelidaki, I.
01/12/1999 → 01/12/2001
Project

Anaerobic degradation of the organic fraction of municipal solid waste with recirculation of process water
Ahring, B. K., Uellendahl, H. & Angelidaki, I.
01/07/1999 → 06/06/2002
Project

Mathematical Model for dynamic simulation of the anaerobic digestion in UASB reactors treating wastewater with seasonal variations
Schmidt, J. E., Skiadas, I. V., Angelidaki, I. & Ahring, B. K.
01/07/1999 → 01/07/2001
Project

On-Line VFA measurement in biogas reactors.
Ahring, B. K., Andersen, T. H., Pind, P. F. & Angelidaki, I.
01/04/1998 → 01/06/2000
Project

Modeling of the anaerobic process
Angelidaki, I.
01/01/1998 → …
Project

On-line styring og regulering af biogasanlæg
Pind, P. F., Ahring, B. K., Angelidaki, I., Jørgensen, S. B., Lyberatos, G. & Mattiasson, B.
01/08/1997 → 18/06/2001
Project: PhD

Mathematical model for dynamic simulation of co-digestion of manure and industrial waste
Ahring, B. K. & Angelidaki, I.
01/01/1996 → 01/01/1997
Project

Mikrobiel fysiologi og økologi.
Ahring, B. K., Hofman-Bang, H. J. P., Angelidaki, I. & Molin, S.
01/01/1996 → 01/05/2001
Project

Method for enhancement of gas yield from organic matter in biogas plants
Ahring, B. K., Angelidaki, I., Caro Garcia, H. H. & Philipson, I. S.
01/07/1995 → 30/06/1998
Project