Research outputs:

Co-digestion of Laminaria digitata with cattle manure: A unimodel simulation study of both batch and continuous experiments
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Co-digestion of municipal waste biopulp with marine macroalgae focusing on sodium inhibition
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Graphene based ZnO nanoparticles to depolymerize lignin-rich residues via UV/iodide process
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Immobilization of Clostridium kluyveri on wheat straw to alleviate ammonia inhibition during chain elongation for n-caproate production
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Microbial profiling during anaerobic digestion of cheese whey in reactors operated at different conditions
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Treating anaerobic effluents using forward osmosis for combined water purification and biogas production
Research output: Contribution to journal › Journal article – Annual report year: 2019 › Research › peer-review

Ammonia inhibition threshold during continuous biomethanation process
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

Anaerobic co-digestion of macroalgal biomass with cattle manure under high salinity conditions
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Biogas upgrading and utilization: Current status and perspectives
Research output: Contribution to journal › Review – Annual report year: 2018 › Research › peer-review

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

Energy recovery from wastewater microalgae through anaerobic digestion process: Methane potential, continuous reactor operation and modelling aspects
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review
Evaluation of enzymatic hydrolysis effects on fermentative production of lactic acid from municipal bio-waste
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

Ex-situ biogas upgrading in thermophilic trickle bed reactors
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

Impact of graphene on ZnO assisted photocatalysis for degradation of lignin rich substrates by UV/Iodide process
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2018 › Research › peer-review

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

Mechanical pretreatment for increased biogas production from lignocellulosic biomass; predicting the methane yield from structural plant components
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Nickel spiking to improve the methane yield of sewage sludge
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

Photocatalytic inactivation of Vibrio fischeri using Fe2O3-TiO2-based nanoparticles
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

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

Removal of microorganisms from seawater in order to prevent biofouling in water desalination membranes
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

Role of nano-sized compounds in anaerobic digestion of wheat straw
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

Spatial Distribution and Diverse Metabolic Functions of Lignocellulose-Degrading Uncultured Bacteria as Revealed by Genome-Centric Metagenomics
Research output: Contribution to journal › Journal article – Annual report year: 2018 › Research › peer-review

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

Visible light driven nanoparticle for degradation of organic dye in aqueous solution
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2018 › Research › peer-review

A review on prospects and challenges of biological H2S removal from biogas with focus on biotrickling filtration and microaerobic desulfurization
Research output: Contribution to journal › Review – Annual report year: 2017 › Research › peer-review
Bioaugmentation with hydrolytic microbes to improve the anaerobic biodegradability of lignocellulosic agricultural residues
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Effect of micro-aeration and inoculum type on the biodegradation of lignocellulosic substrate
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Enhancing biogas production from recalcitrant lignocellulosic residue

Improving the energy balance of grass-based anaerobic digestion through combined harvesting and pretreatment
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

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

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

TiO2/UV based photocatalytic pretreatment of wheat straw for biogas production
Research output: Contribution to journal › Journal article – Annual report year: 2017 › Research › peer-review

Forward osmosis treatment of effluents from anaerobic digestion: correlation between membrane performance and biogas potential
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2016 › Research › peer-review

Improving methane production from digested manure biofibers by mechanical and thermal alkaline pretreatment
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

Improving the energy balance of grass-based anaerobic digestion through harvesting optimization
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2016 › Research › peer-review

Methane Production and Kinetic Modeling for Co-digestion of Manure with Lignocellulosic Residues
Research output: Contribution to journal › Journal article – Annual report year: 2016 › Research › peer-review

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

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

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

Application of comminution machines to enhance the anaerobic biodegradability of ensiled meadow grass
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2015 › Research › peer-review
Biogas production from ensiled meadow grass; effect of mechanical pretreatments and rapid determination of substrate biodegradability via physicochemical methods
Research output: Contribution to journal › Journal article – Annual report year: 2015 › Research › peer-review

Mechanical Pretreatment to Increase the Bioenergy Yield for Full-scale Biogas Plants
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2015 › Research › peer-review

Effect of mechanical pre-treatment methods on the anaerobic digestibility and structure change of meadow grass for biogas production
Research output: Chapter in Book/Report/Conference proceeding › Conference abstract in proceedings – Annual report year: 2014 › Research › peer-review

Foam suppression in overloaded manure-based biogas reactors using antifoaming agents
Research output: Contribution to journal › Journal article – Annual report year: 2014 › Research › peer-review

Antifoaming effect of chemical compounds in manure biogas reactors
Research output: Contribution to journal › Journal article – Annual report year: 2013 › Research › peer-review

Foaming in manure based digesters: Effect of overloading and foam suppression using antifoam agents
Research output: Contribution to conference › Conference abstract for conference – Annual report year: 2013 › Research › peer-review

Projects:

Production of lactic acid from source-sorted organic household waste
Project: PhD

Ex-situ biogas upgrading through biologically mediated CO2 hydrogenation
Project: PhD

New technology for an efficient utilization of meadow grass in biogas reactor
Project: PhD