Two-step bioleaching of copper and gold from discarded printed circuit boards (PCB)
Research output: Scientific - peer-review › Article

Thermo-catalytic decomposition of methane: The effect of reaction parameters on process design and the utilization possibilities of the produced carbon
Research output: Scientific - peer-review › Article

Bioluminescence-based system for rapid detection of natural transformation
Santala, V., Karp, M. & Santala, S. 1 Jul 2016 In : FEMS Microbiology Letters. 363, 13, fnw125
Research output: Scientific - peer-review › Article

Microbial electrochemical technologies with the perspective of harnessing bioenergy: Maneuvering towards upscaling
Research output: Scientific - peer-review › Review Article

A study on raw, torrefied, and steam-exploded wood: Fine grinding, drop-tube reactor combustion tests in N2/O2 and CO2/O2 atmospheres, particle geometry analysis, and numerical kinetics modeling
Research output: Scientific - peer-review › Article

Chemical and bacterial leaching of metals from a smelter slag in acid solutions
Research output: Scientific - peer-review › Article

Clashing coalitions: A discourse analysis of an artificial groundwater recharge project in Finland
Kurki, V., Takala, A. & Vinnari, E. 2016 In : Local Environment. 21, 11, p. 1317-1331
Research output: Scientific - peer-review › Article

Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles
Research output: Scientific - peer-review › Article

Revisiting cellulase production and redefining current strategies based on major challenges Article reference: RSER5103
Research output: Scientific - peer-review › Article

Use of diluted urine for cultivation of Chlorella vulgaris
Research output: Scientific - peer-review › Article

Mesophilic anaerobic digestion of pulp and paper industry biosludge-long-term reactor performance and effects of thermal pretreatment
Research output: Scientific - peer-review › Article

Fluorescent Protein Toolbox: Protein Engineering Broadens the Range of in vitro and in vivo Applications of Fluorescent Proteins
George Abraham, B. 4 Dec 2015 Tampere University of Technology. 92 p. (Tampere University of Technology. Publication; vol. 1351)
Research output: Collection of articles › Doctoral Thesis

Metabolic engineering of Acinetobacter baylyi ADP1 for removal of Clostridium butyricum growth inhibitors produced from lignocellulosic hydrolysates
Kannisto, M. S., Mangayil, R. K., Shrivastava-Bhattacharya, A., Pletschke, B. I., Karp, M. T. & Santala, V. P. 1 Dec 2015 In : Biotechnology for Biofuels. 8, 1, 198
Research output: Scientific - peer-review › Article

Preparation and antimicrobial characterization of silver-containing packaging materials for meat
Kuuliala, L., Pippuri, T., Hultman, J., Auvinen, S-M., Kolppo, K., Nieminen, T., Karp, M., Björkroth, J., Kuusipalo, J. & Jääskeläinen, E. 1 Dec 2015 In : Food Packaging and Shelf Life. 6, p. 53-60 8 p., 67
Research output: Scientific - peer-review › Article

Production of Oleaginous Microbial Biomass by Reusing Wastewaters
Marjakangas, J. 28 Nov 2015 Tampere University of Technology. 58 p. (Tampere University of Technology. Publication; vol. 1348)
Research output: Collection of articles › Doctoral Thesis

Organic Chromophores in Self-Assembled Monolayers and Supramolecular Arrays
Sariola-Leikas, E. 20 Nov 2015 Tampere University of Technology. 58 p. (Tampere University of Technology. Publication; vol. 1334)
Research output: Collection of articles › Doctoral Thesis

Simultaneous nutrient removal and lipid production with Chlorella vulgaris on sterilized and non-sterilized anaerobically pretreated piggery wastewater
Research output: Scientific - peer-review › Article

Power generation in fed-batch and continuous up-flow microbial fuel cell from synthetic wastewater
Research output: Scientific - peer-review › Article

Cultivation of Nannochloropsis for eicosapentaenoic acid production in wastewaters of pulp and paper industry
Research output: Scientific - peer-review › Article

Measuring the green color of vegetables from digital images using image analysis
Research output: Scientific - peer-review › Article

Effects of anode potentials on bioelectrogenic conversion of xylose and microbial community compositions
Research output: Scientific - peer-review › Article

Gene expression profiles of Vibrio parahaemolyticus in the early stationary phase
Research output: Scientific - peer-review › Article

Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel
Selecting an indigenous microalgal strain for lipid production in anaerobically treated piggery wastewater  
Research output: Scientific - peer-review › Article  
Fe2O3-TiO2 nanosystems by a hybrid PE-CVD/ALD approach: controllable synthesis, growth mechanism, and photocatalytic properties  
Research output: Scientific - peer-review › Article  
Fluorescent Protein Based FRET Pairs with Improved Dynamic Range for Fluorescence Lifetime Measurements  
Research output: Scientific - peer-review › Article  
Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration  
Research output: Scientific - peer-review › Article  
Column leaching of low-grade sulfide ore from Zijinshan copper mine  
Research output: Scientific - peer-review › Article  
Lipid production by eukaryotic microorganisms isolated from palm oil mill effluent  
Research output: Scientific - peer-review › Article  
Bioluminescent whole-cell reporter gene assays as screening tools in the identification of antimicrobial natural product extracts  
Research output: Scientific - peer-review › Article  
Selenium biomineralization for biotechnological applications  
Research output: Scientific - peer-review › Literature review  
Characteristics and agronomic usability of digestates from laboratory digesters treating food waste and autoclaved food waste  
Research output: Scientific - peer-review › Article  
Gene expression profiles of Vibrio parahaemolyticus in viable but non-culturable state  
Research output: Scientific - peer-review › Article  
Developing Synthetic Biology Tools and Model Chassis: Production of Bioenergy and High-Value Molecules  
Santala, S. 24 Apr 2015 Tampere University of Technology. 99 p. (Tampere University of Technology. Publication; vol. 1288)
Biohydrogen Production: A Protein to Community Level Perspective Study
Mangayil, R. 7 Apr 2015 Tampere University of Technology. 89 p. (Tampere University of Technology. Publication; vol. 1282)
Research output: Collection of articles › Doctoral Thesis

Fluidized-bed denitrification of mining water tolerates high nickel concentrations
Research output: Scientific - peer-review › Article

Improved bioconversion of crude glycerol to hydrogen by statistical optimization of media components
Research output: Scientific - peer-review › Article

Integrated in vitro-in silico screening strategy for the discovery of antibacterial compounds
Research output: Scientific - peer-review › Article

Glycerol as an Efficient Medium for the Petasis Borono-Mannich Reaction
Research output: Scientific - peer-review › Article

Aryl end-capped quaterthiophenes applied as anode interfacial layers in inverted organic solar cells
Research output: Scientific - peer-review › Article

Biological Nitrogen Removal from Acidic, Heavy-metal Containing Waters
Zou, G. 2015 Tampere: Tampere University of Technology. 92 p. (Tampere University of Technology. Publication; vol. 1314)
Research output: Collection of articles › Doctoral Thesis

Chemolithotrophic denitrification in biofilm reactors
Research output: Scientific - peer-review › Article

Combination of a novel electrode material and artificial mediators to enhance power generation in an MFC
Research output: Scientific - peer-review › Article

Metals removal and recovery in bioelectrochemical systems: A review
Research output: Scientific - peer-review › Review Article

Method with high-throughput screening potential for antioxidative substances using Escherichia coli biosensor katG::lux
Research output: Scientific - peer-review › Article

Rationally engineered synthetic coculture for improved biomass and product formation
Research output: Scientific - peer-review › Article
Biohydrogen production in extreme conditions: A comprehensive study of the fermentative metabolism of a polyextremophilic bacterium
Ciranna, A. 29 Aug 2014 Tampere: Tampere University of Technology. 220 p. (Tampere University of Technology. Publication; vol. 1228)
Research output: Collection of articles › Doctoral Thesis

Bioprocessing of enhanced cellulase production from a mutant of Trichoderma asperellum RCK2011 and its application in hydrolysis of cellulose
Research output: Scientific - peer-review › Article

Inhibitory effects of substrate and soluble end products on biohydrogen production of the alkalithermophile Caloramator celer: Kinetic, metabolic and transcription analyses
Research output: Scientific - peer-review › Article

Assessment of metabolic flux distribution in the thermophilic hydrogen producer Caloramator celer as affected by external pH and hydrogen partial pressure
Research output: Scientific - peer-review › Article

Rewiring the wax ester production pathway of acinetobacter baylyi ADP1
Research output: Scientific - peer-review › Article

Anaerobic digestion of autoclaved and untreated food waste
Research output: Scientific - peer-review › Article

Bacterial and chemical leaching of chalcopyrite concentrates as affected by the redox potential and ferric/ferrous iron ratio at 22 C
Research output: Scientific - peer-review › Article

Biosensors, Antibiotics and Food
Research output: Scientific - peer-review › Chapter

Dark fermentative hydrogen production from lignocellulosic hydrolyzates - A review
Research output: Scientific - peer-review › Article

Dynamics of microbial communities in untreated and autoclaved food waste anaerobic digesters
Research output: Scientific - peer-review › Article

Effect of arsenic on nitrification of simulated mining water
Research output: Scientific - peer-review › Article
Fluidized-bed denitrification for mine waters. Part II: effects of Ni and Co
Research output: Scientific - peer-review › Article

Fluorescent protein-based FRET sensor for intracellular monitoring of redox status in bacteria at single cell level
Research output: Scientific - peer-review › Article

Mesophilic and thermophilic anaerobic laboratory-scale digestion of Nannochloropsis microalga residues
Research output: Scientific - peer-review › Article

Metabolic engineering of Acinetobacter baylyi ADP1 for improved growth on gluconate and glucose
Research output: Scientific - peer-review › Article

Murein lytic enzyme TgaA of Bifidobacterium bifidum MIMBb75 modulates dendritic cell maturation through its cysteine- and histidine-dependent amidohydrolase/peptidase (CHAP) amidase domain
Research output: Scientific - peer-review › Article

Novel design of a multitube microbial fuel cell (UM2FC) for energy recovery and treatment of membrane concentrates
Research output: Scientific - peer-review › Article

Novel metabolic features in Acinetobacter baylyi ADP1 revealed by a multiomics approach
Research output: Scientific - peer-review › Article

Stabilization of fine fraction from landfill mining in leach bed reactor
Research output: Scientific › Conference contribution

TgaA, a VirB1-like component belonging to a putative type IV secretion system of Bifidobacterium bifidum MIMBb75
Research output: Scientific - peer-review › Article

Non-sterile process for biohydrogen and 1,3-propanediol production from raw glycerol
Research output: Scientific - peer-review › Article

Prospecting hydrogen production of Escherichia coli by metabolic network modeling
Research output: Scientific - peer-review › Article
Bioprocess data mining using regularized regression and random forests
Research output: Scientific - peer-review › Article

Screening pretreatment methods to enhance thermophilic anaerobic digestion of pulp and paper mill wastewater treatment secondary sludge
Research output: Scientific - peer-review › Article

Hydrogen and methane production in extreme thermophilic conditions in two-stage (upflow anaerobic sludge bed) UASB reactor system
Research output: Scientific - peer-review › Article

Anaerobic conversion of microalgae biomass to sustainable energy carriers - A review
Research output: Scientific - peer-review › Review Article

An in vitro study of composites of poly(L-lactide-co-e-caprolactone), β-tricalcium phosphate and ciprofloxacin intended for local treatment of osteomyelitis
Research output: Scientific - peer-review › Article

Antimicrobial assay optimization and validation for HTS in 384-well format using a bioluminescent E. coli K-12 strain
Research output: Scientific - peer-review › Article

Bioelectricity production on xylose with a compost enrichment culture
Research output: Scientific - peer-review › Article

Biomethane production from maize and liquid cow manure - Effect of share of maize, post-methanation potential and digestate characteristics
Research output: Scientific - peer-review › Article

Column bioleaching of low grade copper sulfide ore at extreme conditions for most mineral processing bacteria
Research output: Scientific - peer-review › Article

Draft genome sequence of the hydrogen- and ethanol-producing anaerobic alkali-thermophilic bacterium Caloramator celer
Research output: Scientific - peer-review › Article

Effect of NA-chloride on the bioleaching of a chalcopyrite concentrate in shake flasks and stirred tank bioreactors
Research output: Scientific - peer-review › Article

Electricity generation from young landfill leachate in a microbial fuel cell with a new electrode material
Özkaya, B., Cetinkaya, A. Y., Cakmakci, M., Karadag, D. & Sahinkaya, E. 2013 In : Bioprocess and Biosystems Engineering. 36, 4, p. 399-405
Suppression of methanogenesis in cellulose-fed microbial fuel cells in relation to performance, metabolite formation, and microbial population
Research output: Scientific - peer-review › Article

The Effect and Role of Carbon Atoms in Poly(ß-amino ester)s for DNA Binding and Gene Delivery
Research output: Scientific - peer-review › Article

Energy Demands of Nitrogen Supply In Mass Cultivation of Two Commercially Important Microalgal Species, Chlorella vulgaris and Dunaliella tertiolecta
Research output: Scientific - peer-review › Article

Eukaryotic and prokaryotic microbial communities during microalgal biomass production
Research output: Scientific - peer-review › Article

Fluidized-bed bioreactor applications for the treatment of metal-, sulfate- and nitrate-contaminated mine waters
Papirio, S. 2012 Università degli Studi di Cassino e del Lazio Meridionale. (Università degli Studi di Cassino e del Lazio Meridionale)
Research output: Monograph › Doctoral Thesis

Growth of Chlorella vulgaris and associated bacteria in photobioreactors
Research output: Scientific - peer-review › Article

Growth of Dunaliella tertiolecta and associated bacteria in photobioreactors
Research output: Scientific - peer-review › Article

Production of Electricity and Butanol from Microalgal Biomass In Microbial Fuel Cells
Research output: Scientific - peer-review › Article

Biogenic hydrogen and methane production from Chlorella vulgaris and Dunaliella tertiolecta biomass
Research output: Scientific - peer-review › Article

Biogenic hydrogen and methane production from reed canary grass
Research output: Scientific - peer-review › Article

A luminescent Escherichia coli biosensor for the high throughput detection of beta-lactams
Research output: Scientific - peer-review › Article
Comparison of the total mercury content in sediment samples with a mercury sensor bacteria test and Vibrio fischeri toxicity test
Research output: Scientific - peer-review › Article

 Detecting bioavailable toxic metals and metalloids from natural water samples using luminescent sensor bacteria
Research output: Scientific - peer-review › Article

Fractionation of DNA with Sephacryl S-1000(R)
Research output: Scientific - peer-review › Article

Time-resolved europium fluorescence in enzyme activity measurements: a sensitive protease assay
Research output: Scientific - peer-review › Article

Simultaneous extraction and combined bioluminescent assay of NAD+ and NADH
Research output: Scientific - peer-review › Article