

A Finite Cluster Approach to the Electron-Hole Pair Damping of the Adsorbate Vibration  
CO Adsorbed on Cu(100)

Sorption and retention of ethylene glycol monoethyl ether (EGME) on silicas

Thermophilic anaerobic digestion of source-sorted household solid waste  
the effects of enzyme additions

A two-stage thermophilic anaerobic process for the treatment of source sorted household solid waste

Start-up and Operation of Laboratory-Scale Thermophilic Upflow Anaerobic Sludge Blanket Reactors Treating Vegetable Processing Wastewaters

Biokalvojen rakenteen ja toiminnan simulointi tuo uutta tietoa rasvoista  
Translated title of the contribution: : Structure and dynamic properties of biological membranes studied by molecular dynamics simulations: New information on polyunsaturated lipids

Anaerobically digested poultry slaughterhouse wastes as fertiliser in agriculture

Biological treatment of pulp and paper mill process and wastewaters under thermophilic conditions - A review

A simulation case study of production planning and control in printed wiring board manufacturing

Anaerobic digestion of organic solid poultry slaughterhouse waste - A review

Modeling of anaerobic degradation of solid slaughterhouse waste  
Inhibition effects of long-chain fatty acids or ammonia

Comparison of laboratory-scale thermophilic biofilm and activated sludge processes integrated with a mesophilic activated sludge process

Modeling solid waste decomposition

Hydrolysis rates, methane production and nitrogen solubilisation of grey waste components during anaerobic degradation

Anaerobic on-site treatment of kitchen waste in combination with black water in UASB-septic tanks at low temperatures

Statistical modeling of water vapor transmission rates for extrusion-coated papers

Effects of solid-liquid separation on recovering residual methane and nitrogen from digested dairy cow manure

Anaerobic digestion of grass silage in batch leach bed processes for methane production

Leachate and gaseous emissions from initial phases of landfilling mechanically and mechanically-biologically treated municipal solid waste residuals

Group-specific quantification of methanotrophs in landfill gas-purged laboratory biofilters by tyramide signal amplification-fluorescence in situ hybridization

Effects of storage on characteristics and hygienic quality of digestates from four co-digestion concepts of manure and biowaste

Storing energy crops for methane production  
Effects of solids content and biological additive

The effects of corona and flame treatment  
Part 2. PE-HD and PP coated papers

Impact of crop species on bacterial community structure during anaerobic co-digestion of crops and cow manure

Biogas production from boreal herbaceous grasses - Specific methane yield and methane yield per hectare

On entropy-based molecular descriptors  
Statistical analysis of real and synthetic chemical structures

Surface science analysis and surface modification methods for biomaterials research

Effect of micro-aeration and leachate replacement on COD solubilization and VFA production during mono-digestion of grass-silage in one-stage leach-bed reactors

Effect of pre-treatments on barrier properties of layers applied by atomic layer deposition onto polymer-coated substrates

Enrichment polymer layers for detection of volatile vapors by ATR FT-IR

Nanoparticle deposition on packaging materials by the liquid flame spray

Chimeric avidin shows stability against harsh chemical conditions-biochemical analysis and 3D structure

Osteoconductive properties of poly(96L/4D-lactide)/beta-tricalcium phosphate in long term animal model

Two-stage anaerobic digestion of tomato, cucumber, common reed and grass silage in leach-bed reactors and upflow anaerobic sludge blanket reactors

Hybrid nanoparticle design based on cationized gelatin and the polyanions dextran sulfate and chondroitin sulfate for ocular gene therapy

Defined-size DNA triple crossover construct for molecular electronics  
Modification, positioning and conductance properties

Towards universal enrichment nanocoating for IR-ATR waveguides

The effect of organic loading rate and retention time on hydrogen production from a methanogenic CSTR

Versatile bio-ink for covalent immobilization of chimeric avidin on sol-gel substrates

Screening ethnically diverse human embryonic stem cells identifies a chromosome 20 minimal amplicon conferring growth advantage

Synthesis of depsipeptides from L-amino acids and lactones

Conductive layers on surface modified natural fibre based substrates for printed functionality

Osteogenic medium is superior to growth factors in differentiation of human adipose stem cells towards boneforming cells in 3D culture

Utilization of agrowaste polymers in PVC/NBR alloys  
Tensile, thermal, and morphological properties

Human adipose tissue extract induces angiogenesis and adipogenesis in vitro

Demonstration of increased lipid accumulation potential of *Stigeoclonium* sp., Kütz. BUM11007 under nitrogen starved regime  
A new source of lipids for biodiesel production

Highly exfoliated natural rubber/Clay composites by "propping-open procedure"  
The influence of fatty-acid chain length on exfoliation

Structural characteristics and flammability of fire retarding EPDM/layered double hydroxide (LDH) nanocomposites

Molecular mechanisms of ion-specific effects on proteins

Impact of biodiesel application at various blending ratios on passenger cars of different fueling technologies

Biomimetic surface modification of polycarbonateurethane film via phosphorylcholine-graft for resisting platelet adhesion

Fabrication of ssDNA/oligo(ethylene glycol) monolayers and complex nanostructures by an irradiation-promoted exchange reaction

Influence of ionic liquids on the dielectric relaxation behavior of CNT based elastomer nanocomposites

New reports on anti-bacterial and anti-candidal activities of fatty acid methyl esters (FAME) obtained from *Scenedesmus bijugatus* var. *bicellularis* biomass

Improving the effect of a nanoscale barrier coating on BOPP film properties by surface pretreatments

A 'clusters-in-liquid' method for calculating infrared spectra identifies the proton-transfer mode in acidic aqueous solutions

A potential nonthrombogenic small-diameter vascular scaffold with polyurethane/poly(ethylene glycol) hybrid materials by electrospinning technique

Chemically tailored dielectric-to-metal transition for the design of metamaterials from nanoimprinted colloidal nanocrystals

Fabrication of a sub-10 nm silicon nanowire based ethanol sensor using block copolymer lithography

The sensitivity of random polymer brush-lamellar polystyrene-b-polymethylmethacrylate block copolymer systems to process conditions

Immobilized bioactive agents onto polyurethane surface with heparin and phosphorylcholine group

Screening pretreatment methods to enhance thermophilic anaerobic digestion of pulp and paper mill wastewater treatment secondary sludge

Shape-dependent plasmonic response and directed self-assembly in a new semiconductor building block, indium-doped cadmium oxide (ICO)

Development and characterization of poly( $\epsilon$ -caprolactone) hollow fiber membranes for vascular tissue engineering

Mechanisms of acceleration and retardation of water dynamics by ions

Reversible biofunctionalization of surfaces with a switchable mutant of avidin

Magnetophoretic harvesting of oleaginous *Chlorella* sp. by using biocompatible chitosan/magnetic nanoparticle composites

Direct observation of the collapse of the delocalized excess electron in water

Effect of non-rubber components of NR on the carbon nanotube (CNT) localization in SBR/NR blends

Fabrication of 3-D nanodimensioned electric double layer capacitor structures using block copolymer templates

Improving the effect of nanoscale barrier coating on BOPP film properties  
Influence of substrate contamination, web handling and pretreatments

Nickel-based HVOF coatings promoting high temperature corrosion resistance of biomass-fired power plant boilers

Repeated use of stable magnetic flocculant for efficient harvest of oleaginous *Chlorella* sp.

Stearate Modified Zinc-Aluminum Layered Double Hydroxides and Acrylonitrile Butadiene Rubber Nanocomposites

Large-area arrays of three-dimensional plasmonic subwavelength-sized structures from azopolymer surface-relief gratings

A 3D Alzheimer's disease culture model and the induction of P21-activated kinase mediated sensing in iPSC derived neurons

Structure and barrier properties of human embryonic stem cell-derived retinal pigment epithelial cells are affected by extracellular matrix protein coating

Assessment of metabolic flux distribution in the thermophilic hydrogen producer *Caloramator celer* as affected by external pH and hydrogen partial pressure

Light-fuelled transport of large dendrimers and proteins

Bioprocessing of enhanced cellulase production from a mutant of *Trichoderma asperellum* RCK2011 and its application in hydrolysis of cellulose

Molecular engineering of avidin and hydrophobin for functional self-assembling interfaces

Mixotrophic cultivation of oleaginous *Chlorella* sp. KR-1 mediated by actual coal-fired flue gas for biodiesel production

Rapid, Brushless Self-assembly of a PS-b-PDMS Block Copolymer for Nanolithography

Improved biomass and lipid production in a mixotrophic culture of *Chlorella* sp. KR-1 with addition of coal-fired flue-gas

Time-resolved fluorescence methods (IUPAC technical report)

Switchavidin  
Reversible biotin-avidin-biotin bridges with high affinity and specificity

Stimuli-responsive photonic polymer coatings

Characterisation of novel regenerated cellulosic, viscose, and cotton fibres and the dyeing properties of fabrics

Chemolithotrophic denitrification in biofilm reactors

Coulomb explosion during the early stages of the reaction of alkali metals with water

Efficient preparation of shuffled DNA libraries through recombination (Gateway) cloning

Enquête de la variabilité cycle-à-cycle du NO dans la combustion homogène  
Translated title of the contribution: : Investigation of cycle-to-cycle variability of NO in homogeneous combustion

Fungal treatment of landfill mining fine fraction to increase its stability and end-use potential

Metals removal and recovery in bioelectrochemical systems  
A review

Multifunctional ultrasmall nanoplateforms for vascular-targeted interstitial photodynamic therapy of brain tumors guided by real-time MRI

Water-responsive dual-coloured photonic polymer coatings based on cholesteric liquid crystals

A comparison of five optical surface topography measurement methods

Perfluoro-1,1'-biphenyl and perfluoronaphthalene and their derivatives as  $\pi$ -acceptors for anions

Oxidation half-reaction of aqueous nucleosides and nucleotides via photoelectron spectroscopy augmented by ab initio calculations

Second-Harmonic Generation from Metal Nanoparticles  
Resonance Enhancement versus Particle Geometry

Second-harmonic generation imaging of semiconductor nanowires with focused vector beams

Fluidized-bed denitrification of mining water tolerates high nickel concentrations

Multi-stable dynamics of the non-adiabatic repressilator

Workplace performance of a loose-fitting powered air purifying respirator during nanoparticle synthesis

'miSimBa' - A simulator of synthetic time-lapsed microscopy images of bacterial cells

Biomimetic collagen I and IV double layer Langmuir-Schaefer films as microenvironment for human pluripotent stem cell derived retinal pigment epithelial cells

A facile route to synthesis of S-doped TiO<sub>2</sub> nanoparticles for photocatalytic activity

Catalytic effect of Ca and K on CO<sub>2</sub> gasification of spruce wood char

The influence of SrO and CaO in silicate and phosphate bioactive glasses on human gingival fibroblasts

Lipid production by eukaryotic microorganisms isolated from palm oil mill effluent

Lithography-free oxide patterns as templates for self-catalyzed growth of highly uniform GaAs nanowires on Si(111)

Electricity production by a microbial fuel cell fueled by brewery wastewater and the factors in its membrane deterioration

High quality sub-10 nm graphene nanoribbons by on-chip PS-b-PDMS block copolymer lithography

Evaluation of crushing strength of spray-dried MgAl<sub>2</sub>O<sub>4</sub> granule beds

Sol-gel synthesis of quaternary (P<sub>2</sub>O<sub>5</sub>)<sub>55</sub>-(CaO)<sub>25</sub>-(Na<sub>2</sub>O)<sub>(20-x)</sub>-(TiO<sub>2</sub>)<sub>x</sub> bioresorbable glasses for bone tissue engineering applications (x = 0, 5, 10, or 15)

Influence of relative humidity and physical load during storage on dustiness of inorganic nanomaterials  
implications for testing and risk assessment

Enhanced photoactive and photoelectrochemical properties of TiO<sub>2</sub> sol-gel coated steel by the application of SiO<sub>2</sub> intermediate layer

Searching for a robust strategy for minimizing alkali chlorides in fluidized bed boilers during burning of high SRF-energy-share fuel

Surface Modified Biodegradable Electrospun Membranes as a Carrier for Human Embryonic Stem Cell-Derived Retinal Pigment Epithelial Cells

Effects of anode potentials on bioelectrogenic conversion of xylose and microbial community compositions

Molecular Design of Light-Responsive Hydrogels, for in Situ Generation of Fast and Reversible Valves for Microfluidic Applications

Cultivation of *Nannochloropsis* for eicosapentaenoic acid production in wastewaters of pulp and paper industry

Submolecular Plasticization Induced by Photons in Azobenzene Materials

Comparison of different cationized proteins as biomaterials for nanoparticle-based ocular gene delivery

Effect of rubber polarity on selective wetting of carbon nanotubes in ternary blends

Simultaneous nutrient removal and lipid production with *Chlorella vulgaris* on sterilized and non-sterilized anaerobically pretreated piggery wastewater

Tri-functionality of Fe<sub>3</sub>O<sub>4</sub>-embedded carbon microparticles in microalgae harvesting

Graphene-intercalated Fe<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> heterojunctions for efficient photoelectrolysis of water

Polypyrrole coating on poly-(lactide/glycolide)- $\beta$ -tricalcium phosphate screws enhances new bone formation in rabbits

Modeling carbon dioxide transport in PDMS-based microfluidic cell culture devices

The formation and physical properties of the particle emissions from a natural gas engine

Accelerated deactivation studies of the natural-gas oxidation catalyst-Verifying the role of sulfur and elevated temperature in catalyst aging

A novel generic algorithm for robust physiological signal classification

A review of transient suppression methods of IIR notch filters used for power-line interference rejection in ECG measurement

A tool for geometrical measurements of orthognathic surgery changes using cone beam computed tomography

Biological and Bioelectrochemical Recovery of Critical and Scarce Metals

Cell-wall disruption and lipid/astaxanthin extraction from microalgae  
*Chlorella* and *Haematococcus*

Composites of high-temperature thermomechanical pulps and polylactic acid

Decoding the Morphological Diversity in Two Dimensional Crystalline Porous Polymers by Core Planarity Modulation

Enhanced adsorption of orthophosphate and copper onto hydrochar derived from sewage sludge by KOH activation

Fire-safe and environmentally friendly nanocomposites based on layered double hydroxides and ethylene propylene diene elastomer

Functional model for organisational and safety culture

High-Yield Excited Triplet States in Pentacene Self-Assembled Monolayers on Gold Nanoparticles through Singlet Exciton Fission

Metrics for polyphonic sound event detection

Nanoscale barrier coating on BOPP packaging film by ALD

Nonlinear transmittance and optical power limiting in magnesium ferrite nanoparticles effects of laser pulsewidth and particle size

Optimal short distance electrode locations for impedance pneumography measurement from the frontal thoracic area

Preferential adsorption of Cu in a multi-metal mixture onto biogenic elemental selenium nanoparticles

Remarkable Dependence of the Final Charge Separation Efficiency on the Donor-Acceptor Interaction in Photoinduced Electron Transfer

Roll-to-roll application of photocatalytic TiO<sub>2</sub> nanoparticles for printed functionality

Superfluorinated Ionic Liquid Crystals Based on Supramolecular, Halogen-Bonded Anions

Two models for hydraulic cylinders in flexible multibody simulations

X-ray microtomography of collagen and polylactide samples in liquids

Importance of maintenance data quality in extended warranty simulation

Human Adipose Stem Cells Differentiated on Braided Polylactide Scaffolds is a Potential Approach for Tendon Tissue Engineering

Metal chalcogenide quantum dots  
Biotechnological synthesis and applications

Effect of heavy metal co-contaminants on selenite bioreduction by anaerobic granular sludge

Wetting hysteresis induced by temperature changes  
Supercooled water on hydrophobic surfaces

Development of Magnetic Losses During Accelerated Corrosion Tests for Nd-Fe-B Magnets Used in Permanent Magnet Generators



Framework for optimization and scheduling of a copper production plant

Hydrothermal carbonization of pulp mill streams

Modeling of the catalytic effects of potassium and calcium on spruce wood gasification in CO<sub>2</sub>

Spontaneous formation of three-dimensionally ordered Bi-rich nanostructures within GaAs<sub>1-x</sub>Bi<sub>x</sub>/GaAs quantum wells

The influence of high-temperature sulfuric acid solution ageing on the properties of laminated vinyl-ester joints

The Influence of Phosphorus Exposure on a Natural-Gas-Oxidation Catalyst

Designing of Elastomer Nanocomposites  
From Theory to Application

Nanostructured Ionomeric Elastomers

Recent advances in nutrient removal and recovery in biological and bioelectrochemical systems

3D micro-nano structured hybrid scaffolds

An investigation into the role of nanofiber coating on viability, proliferation and differentiation of seeded mesenchymal stem cells

Long-term stability of bioelectricity generation coupled with tetrathionate disproportionation

Elimination of arsenic-containing emissions from gasification of chromated copper arsenate wood

Increased survival rate by local release of diclofenac in a murine model of recurrent oral carcinoma

Grain orientation dependent Nb-Ti microalloying mediated surface segregation on ferritic stainless steel

Magnesium aminoclay enhances lipid production of mixotrophic *Chlorella* sp. KR-1 while reducing bacterial populations

Mild pressure induces rapid accumulation of neutral lipid (triacylglycerol) in *Chlorella* spp.

The effect of low-temperature pretreatment on the solubilization and biomethane potential of microalgae biomass grown in synthetic and wastewater media

Particle emissions characterization from a medium-speed marine diesel engine with two fuels at different sampling conditions

Aligned Poly( $\epsilon$ -caprolactone) Nanofibers Guide the Orientation and Migration of Human Pluripotent Stem Cell-Derived Neurons, Astrocytes, and Oligodendrocyte Precursor Cells In Vitro

Biological removal of selenate and ammonium by activated sludge in a sequencing batch reactor

Cultivation of *Scenedesmus acuminatus* in different liquid digestates from anaerobic digestion of pulp and paper industry biosludge

Day-to-day repeatability of the results of the finger-toe-plot analysis

Dynamic response to process disturbances—A comparison between TMB/SMB models in transient regime

Electrode comparison for textile-integrated electrocardiogram and impedance pneumography measurement

EMBEC & NBC 2017

Joint Conference of the European Medical and Biological Engineering Conference (EMBEC) and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC), Tampere, Finland, June 2017

Liquid flame spray—a hydrogen-oxygen flame based method for nanoparticle synthesis and functional nanocoatings

Short-term stability of combined finger and toe photoplethysmogram analysis

Supramolecular control of liquid crystals by doping with halogen-bonding dyes

Two cations, two mechanisms

Interactions of sodium and calcium with zwitterionic lipid membranes

Effect of air gap on the adhesion of PET layer on cardboard substrate in extrusion coating

Novel bio-based materials for active and intelligent packaging

Novel equipment to simulate hot air heat sealability of packaging materials

Tampere University of Technology, laboratory of materials science, paper converting and packaging technology Tampere, Finland

Benchmarking DFT methods with small basis sets for the calculation of halogen-bond strengths

Hierarchical Self-Assembly of Halogen-Bonded Block Copolymer Complexes into Upright Cylindrical Domains

Calcium Directly Regulates Phosphatidylinositol 4,5-Bisphosphate Headgroup Conformation and Recognition

Bioamine-crosslinked gellan gum hydrogel for neural tissue engineering

Electron microscopic studies of natural gas oxidation catalyst – Effects of thermally accelerated aging on catalyst microstructure

The effects of calcium and potassium on CO<sub>2</sub> gasification of birch wood in a fluidized bed

Dissolution-induced nanowire synthesis on hot-dip galvanized surface in supercritical carbon dioxide

Effects of different nickel species on autotrophic denitrification driven by thiosulfate in batch tests and a fluidized-bed reactor

Exhaust emissions of non-road mobile machine  
Real-world and laboratory studies with diesel and HVO fuels

Membrane Binding of Recoverin  
From Mechanistic Understanding to Biological Functionality

Understanding selenium biogeochemistry in engineered ecosystems  
Transformation and analytical methods

New Evidence for the Mechanism of Action of a Type-2 Diabetes Drug Using a Magnetic Bead-Based Automated Biosensing Platform

Starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper and their effects of phase interactions

Waves in hyperbolic and double negative metamaterials including rogues and solitons

DoGlycans-Tools for Preparing Carbohydrate Structures for Atomistic Simulations of Glycoproteins, Glycolipids, and Carbohydrate Polymers for GROMACS

Production of long chain alkyl esters from carbon dioxide and electricity by a two-stage bacterial process

Oxygen and water vapor transmission rates of starch-poly(vinyl alcohol) barrier coatings for flexible packaging paper

Photodynamic self-disinfecting surface using pyridinium phthalocyanine

Deactivation of Pt/SiO<sub>2</sub>-ZrO<sub>2</sub> diesel oxidation catalysts by sulphur, phosphorus and their combinations

A case study of focal bayesian EEG inversion for whitney element source spaces  
Mesh-based vs. cartesian orientations

Addressing closed-chain dynamics for high-precision control of hydraulic cylinder actuated manipulators

Adsorption of furfural from torrefaction condensate using torrefied biomass

Altered synaptic signaling due to  $\beta$ -amyloid interference in astrocytes  
A modeling study

A neural network strategy for learning of nonlinearities toward feed-forward control of pressure-compensated hydraulic valves with a significant dead zone

Artificial eye blink pacemaker - A first investigation into the blink production using constant-interval electrical stimulation

A strategy for dissecting the kinetics of transcription repression mechanisms

Atrial fibrillation detection from wrist photoplethysmography data using artificial neural networks

Automated pipeline for brain ROI analysis with results comparable to previous freehand measures in clinical settings

Auto-regression-driven, reallocation particle filtering approaches in PPG-based respiration rate estimation

Bilateral teleoperation of a hydraulic robotic manipulator in contact with physical and virtual constraints

Bioactive glass induced osteogenic differentiation of human adipose stem cells is dependent on cell attachment mechanism and mitogen-activated protein kinases

Characterization of chloride channels in human embryonic stem cell derived retinal pigment epithelium

Comparison of linear and non-linear heart rate variability indices between preterm infants at their theoretical term age and full term newborns

Composition and role of the attached and planktonic microbial communities in mesophilic and thermophilic xylose-fed microbial fuel cells

Computational model for multifocal imaging in optical projection tomography and numerical analysis of all-in-focus fusion in tomographic image reconstruction

Conjugated Heat Transfer Simulation of a Fin-and-Tube Heat Exchanger

Connectivity analysis of full montage EEG in traumatic brain injury patients in the ICU

Coronary artery disease diagnosis by means of heart rate variability analysis using respiratory information

Correlation of depth of anesthesia indexes with MAC in volatile anesthesia

Decomposition of persistent luminescent microparticles in corrosive phosphate glass melt

Detection and assessment of sleep-disordered breathing with emfit mattress

Direct position control of electro-hydraulic excavator

Dry electrode sizes in recording ECG and heart rate in wearable applications

Effect of driver and work cycle on losses of a loader

Effect of N/S ratio on anoxic thiosulfate oxidation in a fluidized bed reactor  
Experimental and artificial neural network model analysis

Effects of nitroglycerin to ballistocardiography by EMFi

Efficient photon upconversion at remarkably low annihilator concentrations in a liquid polymer matrix: when less is more

Electric field of eeg during anesthesia

Evaluating different shapes of cranial fixation mini-plates using finite element method

Evaluation of the accuracy and reliability for photoplethysmography based heart rate and beat-to-beat detection during daily activities

Fin-and-tube heat exchanger enhancement with a combined herringbone and vortex generator design

Finite element mapping for efficient image reconstruction in rotational electrical impedance tomography

Floating frame of reference formulation for a flexible manipulator with hydraulic actuation - Modelling and experimental validation

High resolution E-jet printed temperature sensor on artificial skin

Human activity recognition using a single optical heart rate monitoring wristband equipped with triaxial accelerometer

Identification of feasible pathway information for c-di-GMP binding proteins in cellulose production

Impacts of laminin and polyethyleneimine surface coatings on morphology of differentiating human SH-SY5Y cells and networks

Learned vs. hand-designed features for ECG beat classification  
A comprehensive study

Linearity of simultaneously recorded impedance pneumography and direct pneumotachography in thoracic surgery patients

Low-latency EMG onset and termination detection for facial pacing

Model-based control of a digital hydraulic transformer-based hybrid actuator

Multiresolution MAPEM method for 3D reconstruction of symmetrical particles with electron microscopy

Nocturnal use of light compression garments and recovery

Nonlinear dynamics of heart rate variability in children with asthmatic symptoms

Nonlinear local projection filter for impedance pneumography

Optical projection tomography imaging of single cells in 3D gellan gum hydrogel

Optimization of  $^{99m}\text{Tc}$ -sestamibi/ $^{123}\text{I}$  subtraction SPECT/CT protocol for parathyroid scintigraphy

Pathvalue  
Pathways with value

Performance analysis of novel flexible electrodes for wearable ECG/heart rate monitoring

Physical characteristics of collimators for dual-isotope imaging with  $^{99m}\text{Tc}$  and  $^{123}\text{I}$

Predicting gene expression levels from histone modification signals with convolutional recurrent neural networks

Regeneration of sulfur-poisoned Pd-based catalyst for natural gas oxidation

Reproducible preparation method of hydrogels for cell culture applications – Case study with spermidine crosslinked gellan gum

Stimulation waveform selection to suppress functional electrical stimulation artifact from surface EMG signals

Temperature effect on the baseline noise in MEA measurements

Texture-property relations of bioamine crosslinked gellan gum hydrogels

Time characteristics of prolonged partial obstruction periods using an Emfit mattress

Twelve years follow-up of ballistocardiography

Wearable RFID perspiration sensor tags for well-being applications – From laboratory to field use

Upconversion from fluorophosphate glasses prepared with NaYF<sub>4</sub>:Er<sup>3+</sup>, Yb<sup>3+</sup> nanocrystals

Design, synthesis, and structure-property relationships of Er<sup>3+</sup>-doped TiO<sub>2</sub> luminescent particles synthesized by sol-gel

Improved fatty aldehyde and wax ester production by overexpression of fatty acyl-CoA reductases

Improved Stability of Atomic Layer Deposited Amorphous TiO<sub>2</sub> Photoelectrode Coatings by Thermally Induced Oxygen Defects

Soft hydrazone crosslinked hyaluronan- and alginate-based hydrogels as 3D supportive matrices for human pluripotent stem cell-derived neuronal cells

Aqueous synthesis of Z-scheme photocatalyst powders and thin-film photoanodes from earth abundant elements

Non-intersecting leaf insertion algorithm for tree structure models

Uncertainty in multispectral lidar signals caused by incidence angle effects

Weighing trees with lasers  
Advances, challenges and opportunities

Membrane bound COMT isoform is an interfacial enzyme  
General mechanism and new drug design paradigm

Characteristics of nFOG, an aerosol-based wet thin film coating technique

Switchable light reflectance in dilute magneto-optical colloids based on nickel ferrite nanowires

Wet etching of dilute nitride GaInNAs, GaInNAsSb, and GaNAsSb alloys lattice-matched to GaAs

A Ceramide-Regulated Element in the Late Endosomal Protein LAPTM4B Controls Amino Acid Transporter Interaction

Effect of Co-Adsorbate and Hole Transporting Layer on the Photoinduced Charge Separation at the TiO<sub>2</sub>-Phthalocyanine Interface

Influence of the phosphate glass melt on the corrosion of functional particles occurring during the preparation of glass-ceramics

The effects of laser patterning 10CeTZP-Al<sub>2</sub>O<sub>3</sub> nanocomposite disc surfaces  
Osseous differentiation and cellular arrangement in vitro

Effects of wastewater constituents and operational conditions on the composition and dynamics of anodic microbial communities in bioelectrochemical systems

The effect of carbon and nickel additions on the precursor synthesis of Cr<sub>3</sub>C<sub>2</sub>-Ni nanopowder

Effect of surfactant type and sonication energy on the electrical conductivity properties of nanocellulose-CNT nanocomposite films

Fluid flow simulations meet high-speed video  
Computer vision comparison of droplet dynamics

High Bending-Mode Sensitivity of Printed Piezoelectric Poly(vinylidene fluoride- co-trifluoroethylene) Sensors

A new method to optimize natural convection heat sinks

Selenate removal in biofilm systems  
Effect of nitrate and sulfate on selenium removal efficiency, biofilm structure and microbial community

Photoinduced Energy Transfer in ZnCdSeS Quantum Dot-Phthalocyanines Hybrids

Effects of pyrolysis temperature on the hydrologically relevant porosity of willow biochar

Performance of a biotrickling filter for the anaerobic utilization of gas-phase methanol coupled to thiosulphate reduction and resource recovery through volatile fatty acids production

Electro-concentration for chemical-free nitrogen capture as solid ammonium bicarbonate

Temperature control as key factor for optimal biohydrogen production from thermomechanical pulping wastewater

Molecular Communications Pulse-based Jamming Model for Bacterial Biofilm Suppression

Novel osteoconductive  $\beta$ -tricalcium phosphate/poly(L-lactide-co-e-caprolactone) scaffold for bone regeneration  
a study in a rabbit calvarial defect

Tribocorrosion behaviour of aluminium bronze in 3.5 wt.% NaCl solution

Chromatographic studies of n-Propyl Propionate  
Adsorption equilibrium, modelling and uncertainties determination

Molecular-Scale Ligand Effects in Small Gold-Thiolate Nanoclusters

High-Yield Generation of Triplet Excited States by an Efficient Sequential Photoinduced Process from Energy Transfer to Singlet Fission in Pentacene-Modified CdSe/ZnS Quantum Dots

Aminobenzylated 4-Nitrophenols as Antibacterial Agents Obtained from 5-Nitrosalicylaldehyde through a Petasis Borono-Mannich Reaction

The importance of controlled mismatch of biomechanical compliances of implantable scaffolds and native tissue for articular cartilage regeneration

Dynamic decoupling of biomass and wax ester biosynthesis in *Acinetobacter baylyi* by an autonomously regulated switch

Less Is More  
Enhancement of Second-Harmonic Generation from Metasurfaces by Reduced Nanoparticle Density

Activity Level and Body Mass Index as Predictors of Physical Workload During Working Career

Characterization of the anisotropic deformation of the right ventricle during open heart surgery

Cost-optimal energy performance measures in a new daycare building in cold climate

$\mu$ CT based characterization of biomaterial scaffold microstructure under compression

Deposition of dry particles on a fin-and-tube heat exchanger by a coupled soft-sphere DEM and CFD

Effect of apartment building energy renovation on hourly power demand

Effect of polyolefin molecular structure on product properties in extrusion coating

Electrical stimulation of eye blink in individuals with dry eye symptoms caused by chronic unilateral facial palsy

Enablers and barriers of smart data-based asset management services in industrial business networks

High-speed production of antibacterial fabrics using liquid flame spray

How well can we predict cluster fragmentation inside a mass spectrometer?

Large-scale efficient water harvesting using bioinspired micro-patterned copper oxide nanoneedle surfaces and guided droplet transport



Market implementation of active and intelligent packaging-opportunities from a socio-economic perspective

Mechanical impact stimulation platform tailored for high-resolution light microscopy

Nanocellulose and Polylactic Acid Based Multilayer Coatings for Barrier Applications

Quality and Capacity Analysis of Molecular Communications in Bacterial Synthetic Logic Circuits

Reliability evaluation of wearable radio frequency identification tags  
Design and fabrication of a two-part textile antenna

Structure and Dynamics of Thermosensitive pDNA Polyplexes Studied by Time-Resolved Fluorescence Spectroscopy

Synergistic Computational-Experimental Discovery of Highly Selective PtCu Nanocluster Catalysts for Acetylene Semihydrogenation

Textile-integrated three-dimensional printed and embroidered structures for wearable wireless platforms

The electrical conductivity of human cerebrospinal fluid in vivo

Towards the EU emissions targets of 2050  
optimal energy renovation measures of Finnish apartment buildings

Volatile fatty acid adsorption on anion exchange resins  
kinetics and selective recovery of acetic acid

A Pentacene-based Nanotube Displaying Enriched Electrochemical and Photochemical Activities

Kinetics and thermochemistry of the reaction of 3-methylpropargyl radical with molecular oxygen

Solvent Welding and Imprinting Cellulose Nanofiber Films Using Ionic Liquids

Mining tailings as raw materials for reaction-sintered aluminosilicate ceramics  
Effect of mineralogical composition on microstructure and properties

Synthetic metabolic pathway for the production of 1-alkenes from lignin-derived molecules

Understanding the Role of Lipids in Signaling Through Atomistic and Multiscale Simulations of Cell Membranes

Miniaturized stimulator for imaging of live cell responses to high frequency mechanical vibration

Tailoring Second-Harmonic Emission from (111)-GaAs Nanoantennas

An architectural understanding of natural sway frequencies in trees

Observation of Coexistence of Yu-Shiba-Rusinov States and Spin-Flip Excitations

Alkane and wax ester production from lignin-related aromatic compounds

Photochemistry of dithiophosphate  $\text{Ni}(\text{S}_2\text{P}(\text{i-Bu})_2)_2$  complex in  $\text{CCl}_4$ . Transient species and TD-DFT calculations

Characterisation and in vitro and in vivo evaluation of supercritical- $\text{CO}_2$ -foamed  $\beta$ -TCP/PLCL composites for bone applications

Chlorine induced high-temperature corrosion mechanisms in HVOF and HVOF sprayed  $\text{Cr}_3\text{C}_2$ -based hardmetal coatings

Influence of ions to modulate hydrazone and oxime reaction kinetics to obtain dynamically cross-linked hyaluronic acid hydrogels

Shedding frequency in cavitation erosion evolution tracking

Multiresonant High-Q Plasmonic Metasurfaces

Effects of anode materials on electricity production from xylose and treatability of TMP wastewater in an up-flow microbial fuel cell

Controlled Orientations of Neighboring Tetracene Units by Mixed Self-Assembled Monolayers on Gold Nanoclusters for High-Yield and Long-Lived Triplet Excited States through Singlet Fission

Effects of elevated pressures on the activity of acidophilic bioleaching microorganisms

Power production and microbial community composition in thermophilic acetate-fed up-flow and flow-through microbial fuel cells

Transcription closed and open complex formation coordinate expression of genes with a shared promoter region

Applications of nanocellulose/nanocarbon composites  
Focus on biotechnology and medicine

CFD modeling the diffusional losses of nanocluster-sized particles and condensing vapors in  $90^\circ$  bends of circular tubes

Deformability analysis and improvement in stretchable electronics systems through finite element analysis

Ectopic Beat Detection from Wrist Optical Signals for Sinus Rhythm and Atrial Fibrillation Subjects

Efficient Conversion of Light to Chemical Energy  
Directional, Chiral Photoswitches with Very High Quantum Yields

Enhancing CT 3D Images by Independent Component Analysis of Projection Images

In-flight wind field identification and prediction of parafoil systems

Investigation of well-defined pinholes in  $\text{TiO}_2$  electron selective layers used in planar heterojunction perovskite solar cells

Kinetics and modelling of thiosulphate biotransformations by haloalkaliphilic Thioalkalivibrio versutus

Modelling of a pressure swing adsorption unit by deep learning and artificial Intelligence tools

Moving Web and Dynamic Problem of Aerothermoelastic Vibrations and Instability

The thermal contact resistance of a steel-ceramic interface with oxide intermediates

Transparent Yb<sup>3+</sup> doped phosphate glass-ceramics

Evaluation of scaffold microstructure and comparison of cell seeding methods using micro-computed tomography-based tools

Mixed carbon substrates  
a necessary nuisance or a missed opportunity?

Utilizing Neurons for Digital Logic Circuits  
A Molecular Communications Analysis

Utilizing Gelatinized Starchy Waste from Rice Noodle Factory as Substrate for L(+)-Lactic Acid Production by Amyolytic Lactic Acid Bacterium Enterococcus faecium K-1

Modular Instrumentation for Controlling and Monitoring In-Vitro Cultivation Environment and Image-based Functionality Measurements of Human Stem Cells

Additive manufacturing of monolithic supercapacitors with biopolymer separator

Nucleation and growth behavior of Er<sup>3+</sup> doped oxyfluorophosphate glasses

Optimization of photogenerated charge carrier lifetimes in ald grown tio<sub>2</sub> for photonic applications

Formation of corrosion products on zinc in wet supercritical and subcritical CO<sub>2</sub>  
In-situ spectroscopic study