Research outputs:

A phase-transfer crystallization pathway to synthesize ultrasmall silicoaluminophosphate for enhanced catalytic conversion of dimethylether-to-olefin
Research output: Research - peer-review › Journal article – Annual report year: 2019

Optimal structuring nitrogen-doped hybrid-dimensional nanocarbons for high-performance flexible solid-state supercapacitors
Research output: Research - peer-review › Journal article – Annual report year: 2019

3D Carbon Microelectrodes with Bio-Functionalized Graphene for Electrochemical Biosensing
Research output: Research - peer-review › Journal article – Annual report year: 2018

Engineering Two-Dimensional Layered Nanomaterials for Wearable Biomedical Sensors and Power Devices
Research output: Research - peer-review › Journal article – Annual report year: 2018

Fast and facile synthesis of highly-porous 1D/2D CuCo2O4 nanohybrids for flexible energy storage
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Fast and facile synthesis of highly-porous 1D/2D CuCo2O4 nanohybrids for flexible energy storage
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Flexible Solid-State Supercapacitors Based on Tussock-Like Metal Oxide Nanowire Arrays
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Freestanding and flexible graphene paper as support for biocatalysts in enzymatic biofuel cells
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Fuel-independent and membrane-less self-charging biosupercapacitor
Research output: Research - peer-review › Journal article – Annual report year: 2018

High-performance flexible solid-state supercapacitors built from nitrogen-doped hybrid-dimensional nanocarbon materials
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2018

Inorganic Ions Assisted the Anisotropic Growth of CsPbCl3 Nanowires with Surface Passivation Effect
Research output: Research - peer-review › Journal article – Annual report year: 2018
Shape-controlled synthesis of Zinc Vanadate and its supercapacitor performance
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2018

Synergistic double-shell coating of graphene and Li 4 SiO 4 on silicon for high performance lithium-ion battery application
Research output: Research - peer-review › Journal article – Annual report year: 2018

Three-Dimensional Graphene Matrix-Supported and Thylakoid Membrane-Based High-Performance Bioelectrochemical Solar Cell
Research output: Research - peer-review › Journal article – Annual report year: 2018

Two-Dimensional Halide Perovskites for Emerging New-Generation Photodetectors
Research output: Research - peer-review › Book chapter – Annual report year: 2018

Bioenergy conversion and storage systems: from conventional electrochemical cells to hybrid bioelectronic devices
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Drastic difference between hole and electron injection through the gradient shell of Cd_{x}Se_{y}Zn_{1-x}S_{1-y} quantum dots
Research output: Research - peer-review › Journal article – Annual report year: 2017

Electroactive and biocompatible functionalization of graphene for the development of biosensing platforms
Research output: Research - peer-review › Journal article – Annual report year: 2016

Engineering Two-Dimensional Transition Metal Dichalcogenide Catalysts for Water-Splitting Hydrogen Generation
Research output: Research - peer-review › Encyclopedia chapter – Annual report year: 2017

Flexible, lightweight and paper-like supercapacitors assembled from nitrogen-doped multi-dimensional carbon materials
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

Freestanding and flexible graphene papers as bioelectrochemical cathode for selective and efficient CO₂ conversion
Research output: Research - peer-review › Journal article – Annual report year: 2017

Graphene-Conducting Polymer Nanocomposites for Enhancing Electrochemical Capacitive Energy Storage
Research output: Research - peer-review › Journal article – Annual report year: 2017

Graphene directed architecture of fine engineered nanostructures with electrochemical applications
Research output: Research - peer-review › Journal article – Annual report year: 2017

Graphene encapsulated Fe₃O₄ nanorods assembled into a mesoporous hybrid composite used as a high-performance lithium-ion battery anode material
Research output: Research - peer-review › Journal article – Annual report year: 2017

Graphene-Paper Based Electrochemical Sensors
Research output: Research - peer-review › Book chapter – Annual report year: 2017

Graphene papers: smart architecture and specific functionalization for biomimetics, electrocatalytic sensing and energy storage
Research output: Research - peer-review › Journal article – Annual report year: 2016

Inorganic ions assisted design and synthesis of all-inorganic halide perovskite nanowires for sustainable solar-energy harvesting
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017
Interlocked graphene-Prussian blue hybrid composites enable multifunctional electrochemical applications
Research output: Research - peer-review › Journal article – Annual report year: 2016

Long-range interfacial electron transfer and electrocatalysis of molecular scale Prussian Blue nanoparticles linked to Au(111)-electrode surfaces by different chemical contacting groups
Research output: Research - peer-review › Journal article – Annual report year: 2017

Metal-Organic Framework Derived Iron Sulfide-Carbon Core-Shell Nanorods as a Conversion-Type Battery Material
Research output: Research - peer-review › Journal article – Annual report year: 2017

Nanoengineering of graphene supported functional composites for performance enhanced enzymatic biofuel cells
Research output: Research - peer-review › Book chapter – Annual report year: 2017

Nanoscale engineering of 3D graphene foams for enzyme immobilization and enhanced bioelectrocatalysis
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2017

New class of two-dimensional bimetallic nanoplatelets for high energy density and electrochemically stable hybrid supercapacitors
Research output: Research - peer-review › Journal article – Annual report year: 2017

Reagent-Free Electrophoretic Synthesis of Few-Atom-Thick Metal Oxide Nanosheets
Research output: Research - peer-review › Journal article – Annual report year: 2017

Sulfur ligand mediated electrochemistry of gold surfaces and nanoparticles: what, how, and why
Research output: Research - peer-review › Journal article – Annual report year: 2016

Supercapacitive bioelectrochemical solar cells using thylakoid membranes and carbon nanotubes
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Supercapacitive Biosolar Cell Driven by Direct Electron Transfer between Photosynthetic Membranes and CNT Networks with Enhanced Performance
Research output: Research - peer-review › Journal article – Annual report year: 2017

Two-dimensional nanomaterials supported electrochemical energy storage for smart grids
Research output: Research - peer-review › Book chapter – Annual report year: 2017

Ultralight, Flexible, and Semi-Transparent Metal Oxide Papers for Photoelectrochemical Water Splitting
Research output: Research - peer-review › Journal article – Annual report year: 2017

Ultrasensitive 3D Carbon Microelectrodes for Electrochemical Biosensing Application
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Graphene-polymer-enzyme hybrid nanomaterials for biosensors
Research output: Research › Patent – Annual report year: 2016

Acetate production enhancement from carbon dioxide reduction by using modified cathode materials in microbial electrosynthesis
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Bioengineering of Solution Processed Graphene for the Development of Ultrasensitive Flexible Biosensing Platform
Research output: Research - peer-review › Conference abstract in journal – Annual report year: 2016
Constructing three-dimensional quasi-vertical nanosheet architectures from self-assemble two-dimensionalWO$_3$·2H$_2$O for efficient electrochromic devices
Research output: Research - peer-review › Conference article – Annual report year: 2016

Crown-Ether Derived Graphene Hybrid Composite for Membrane-Free Potentiometric Sensing of Alkali Metal Ions
Research output: Research - peer-review › Letter – Annual report year: 2016

Electroactive polymer functionalized graphene nanocomposites as a biosensing platform
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Electroactive polymer functionalized graphene nanocomposites as a biosensing platform
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Enhanced microbial electrosynthesis with three-dimensional graphene functionalized cathodes fabricated via solvothermal synthesis
Research output: Research - peer-review › Journal article – Annual report year: 2016

Free-standing and flexible graphene papers as disposable non-enzymatic electrochemical sensors
Research output: Research - peer-review › Journal article – Annual report year: 2016

Graphene–Metal Oxide Hybrid Nanostructured Materials for Electrocatalytic Sensing and Sustainable Energy Storage
Research output: Research - peer-review › Journal article – Annual report year: 2016

Handling and Sensing of Single Enzyme Molecules: From Fluorescence Detection towards Nanoscale Electrical Measurements
Research output: Research - peer-review › Journal article – Annual report year: 2015

In-situ construction of three-dimensional titania network on Ti foil toward enhanced performance of flexible dye-sensitized solar cells
Research output: Research - peer-review › Conference article – Annual report year: 2016

Prussian Blue Modified Graphene Enable Multifunctional Electrochemical Application
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Reagent-Free Synthesis and Plasmonic Antioxidation of Unique Nanostructured Metal-Metal Oxide Core-Shell Microfibers
Research output: Research - peer-review › Journal article – Annual report year: 2016

Sandwich-like functionalized free-standing and flexible graphene papers for supercapacitors
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2016

Single-Nanoparticle Resolved Biomimetic Long-Range Electron Transfer and Electrocatalysis of Mixed-Valence Nanoparticles
Research output: Research - peer-review › Journal article – Annual report year: 2016

Supramolecular Derivation of Graphene Nanomaterials for Chemical Sensors
Supramolecular Graphene Nanocomposites and Applications for Chemo- and Biosensors
Research output: Research - peer-review › Book chapter – Annual report year: 2016

The Au-S bond and SAM-protein contact in long-range electron transfer of pure and biomimetic metalloproteins via functionalized alkanethiol linkers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2017

Research output: Research - peer-review › Poster – Annual report year: 2015

3D Graphene-based bio-cathode for Carbon dioxide reduction in Microbial Electrosynthesis
Research output: Research - peer-review › Conference abstract in proceedings – Annual report year: 2015

Approaching the theoretical capacitance of graphene through copper foam integrated three-dimensional graphene networks
Research output: Research - peer-review › Journal article – Annual report year: 2015

Architecture and Applications of Functional Three-Dimensional Graphene Networks
Research output: Research › Book chapter – Annual report year: 2015

Azido-RGO as a universal platform for RGO based sensors
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Electroactive and Optoelectronically Active Graphene Nanofilms
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Electrochemically active dopamine functionalized graphene for sensor application
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Microwave-assisted synthesis of graphene-Prussian Blue networked nanocomposites for electrocatalysis
Research output: Research - peer-review › Poster – Annual report year: 2015

Mussel-inspired bio functionalization of graphene for electrochemical sensor applications
Research output: Research - peer-review › Poster – Annual report year: 2015

One-step Facile Functionalization of Graphene for Highly Active Electrocatalysis
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2015

Probing Bio-Nano Interactions between Blood Proteins and Monolayer-Stabilized Graphene Sheets
Research output: Research - peer-review › Journal article – Annual report year: 2015

Sandwiched confinement of quantum dots in graphene matrix for efficient electron transfer and photocurrent production
Research output: Research - peer-review › Journal article – Annual report year: 2015

Surface self-assembled hybrid nanocomposites with electroactive nanoparticles and enzymes confined in a polymer matrix for controlled electrocatalysis
Research output: Research - peer-review › Journal article – Annual report year: 2015

Directed Energy Transfer in Films of CdSe Quantum Dots: Beyond the Point Dipole Approximation.
Research output: Research - peer-review › Journal article – Annual report year: 2014
Electroactive Functionalization of Graphene as Nanohybrid Materials for Redox Sensing and Energy Storage
Research output: Research - peer-review | Conference abstract for conference – Annual report year: 2014

Graphene controlled H- and J-stacking of perylene dyes into highly stable supramolecular nanostructures for enhanced photocurrent generation.
Research output: Research - peer-review | Journal article – Annual report year: 2014

Graphene Nano films Functionalized with Electroactive Nanoparticles and Enzyme for Electrocatalytic Sensing
Research output: Research - peer-review | Poster – Annual report year: 2014

Integrated assembly of 3D graphene networks for construction of all-in-one supercapacitor electrodes
Research output: Research - peer-review | Conference abstract for conference – Annual report year: 2014

Nanoscale Electrocatlyst for Chemical and Biological Sensor
Research output: Research › Ph.D. thesis – Annual report year: 2014

Probing Structural and Catalytic Characteristics of Galactose Oxidase Confined in Nanoscale Chemical Environments
Research output: Research - peer-review | Journal article – Annual report year: 2014

Three-Dimensional Reduced Graphene Oxide Network on Copper Foam as High-performance Supercapacitor Electrodes
Research output: Research - peer-review | Conference abstract for conference – Annual report year: 2014

Triazatriangulene as binding group for molecular electronics
Research output: Research - peer-review | Journal article – Annual report year: 2014

Direct measurement and modulation of single-molecule coordinative bonding forces in a transition metal complex.
Research output: Research - peer-review | Journal article – Annual report year: 2014

Electrochemistry of Single Metalloprotein and DNA-Based Molecules at Au(111) Electrode Surfaces
Research output: Research - peer-review | Journal article – Annual report year: 2013

Graphene Paper Doped with Chemically Compatible Prussian Blue Nanoparticles as Nanohybrid Electro catalyst
Research output: Research - peer-review | Journal article – Annual report year: 2013

Nanoscale Confinement and Fluorescence Effects of Bacterial Light Harvesting Complex LH2 in Mesoporous Silicas
Research output: Research - peer-review | Journal article – Annual report year: 2013

Supramolecular functionalization of reduced graphene oxide nanosheets for chemical sensing
Research output: Research - peer-review | Conference abstract for conference – Annual report year: 2013

Au-Biocompatible metallic nanostructures in metalloprotein electrochemistry and electrocatalysis
Research output: Research - peer-review | Journal article – Annual report year: 2012

Catalytic Activity and Photophysical Properties of Biomolecules Immobilized on Mesoporous Silica
Research output: Research › Ph.D. thesis – Annual report year: 2012

Chemical surface tuning electrocatalysis of redox-active nanoparticles
Research output: Research - peer-review | Poster – Annual report year: 2012
Electrochemical surface immobilization triggers intramolecular electron transfer in multi-centre redox metalloproteins: The di-heme protein cytochrome c4
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Enzyme-like Electrocatalysis of Protein Size Redox Nanoparticles in Two- and three-dimensional Assemblies
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Fast electron transfer through a single molecule natively structured redox protein
Research output: Research - peer-review › Journal article – Annual report year: 2012

Interfacial electrochemical electron transfer in biology – Towards the level of the single molecule
Research output: Research - peer-review › Journal article – Annual report year: 2011

Modeling and computations of the intramolecular electron transfer process in the two-heme protein cytochrome c4
Research output: Research - peer-review › Journal article – Annual report year: 2012

Redox tuning of cytochrome b562 through facile metal porphyrin substitution
Research output: Research - peer-review › Journal article – Annual report year: 2012

Spontaneous and Fast Growth of Large-Area Graphene Nanofilms Facilitated by Oil/Water Interfaces
Research output: Research - peer-review › Journal article – Annual report year: 2012

Chain-Branching Control of the Atomic Structure of Alkanethiol-Based Gold–Sulfur Interfaces
Research output: Research - peer-review › Journal article – Annual report year: 2011

Electrochemically controlled self-assembled monolayers characterized with molecular and sub-molecular resolution
Research output: Research - peer-review › Journal article – Annual report year: 2011

Gold Mining by Alkanethiol Radicals: Vacancies and Pits in the Self-Assembled Monolayers of 1-Propanethiol and 1-Butanethiol on Au(111)
Research output: Research - peer-review › Journal article – Annual report year: 2011

Imaging of single biomolecules by scanning tunneling microscopy
Research output: Research - peer-review › Book chapter – Annual report year: 2011

Molecular-like Redox Activity and Size-dependent Electrocatalysis of Inorganic Hybrid Nanoparticles
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Single-molecule Biocatalyst
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Single-molecule conductivity of non-redox and redox molecules at pure and gold-mined Au(111)-electrode surfaces
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Single-molecule Mapping of Long-range Electron Transfer for a Cytochrome b562 Variant
Research output: Research - peer-review › Journal article – Annual report year: 2011

Approach to Interfacial and Intramolecular Electron Transfer of the Diheme Protein Cytochrome c(4) Assembled on Au(111) Surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2010
Electron Transport and Mapping in Heme Metalloprotein Monolayers
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2010

Stability and Catalytic Kinetics of Horseradish Peroxidase Confined in Nanoporous SBA-15
Research output: Research - peer-review › Journal article – Annual report year: 2010

Electrochemical Biosensing of Redox Proteins and Enzymes
Research output: Research - peer-review › Book chapter – Annual report year: 2009

Electronic Transfer and Mapping of Nanostructures Assembled at Liquid/Solid Interfaces
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009

Electron transfer patterns of the di-heme protein cytochrome c(4) from Pseudomonas stutzeri
Research output: Research - peer-review › Journal article – Annual report year: 2009

Encapsulation of Biological Molecules in Mesoporous Silica
Research output: Research › Poster – Annual report year: 2009

Isotope Effects in Interfacial Electrochemistry
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009

Long-Range Interfacial Electrochemical Electron Transfer of Pseudomonas aeruginosa Azurin-Gold Nanoparticle Hybrid Systems
Research output: Research - peer-review › Journal article – Annual report year: 2009

Organic compounds inhibiting S. epidermidis adhesion and biofilm formation
Research output: Research - peer-review › Conference article – Annual report year: 2009

Redox Properties and Electrocatalysis of Prussian Blue Nanoparticles
Research output: Research › Sound/Visual production (digital) – Annual report year: 2009

Scanning Tunneling Microscopic Observation of Adatom-Mediated Motifs on Gold-Thiol Self-assembled Monolayers at High Coverage
Research output: Research - peer-review › Journal article – Annual report year: 2009

Structural Mapping and Interfacial Electron Transfer towards the Single-molecule Level, invited keynote talk
Research output: Research - peer-review › Conference abstract for conference – Annual report year: 2009

Submolecular Electronic Mapping of Single Cysteine Molecules by in Situ Scanning Tunneling Imaging
Research output: Research - peer-review › Journal article – Annual report year: 2009

Charge transfer and interfacial bioelectrochemistry at the nanoscale and single-molecule levels
Research output: Research - peer-review › Book chapter – Annual report year: 2009

Electrochemical Approaches to Both Intramolecular and Interfacial Electron Transfer of a Two Redox-center Protein
Research output: Research › Sound/Visual production (digital) – Annual report year: 2008

Prussian Blue Nanoparticles for Electrocatalysis
Research output: Research › Poster – Annual report year: 2008

Single-molecule Electron Transfer in Electrochemical Environments
Research output: Research - peer-review › Journal article – Annual report year: 2008
Surface-induced intramolecular electron transfer in multi-centre redox metalloproteins: The di-haem protein cytochrome c4 in homogeneous solution and at electrochemical surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2008

Functional polythiophene nanoparticles: Site-controlled electropolymerization and ion selective response
Research output: Research - peer-review › Journal article – Annual report year: 2007

Gold nanoparticle assisted assembly of a heme protein for enhancement of long-range interfacial electron transfer
Research output: Research - peer-review › Journal article – Annual report year: 2007

Single-molecule conductance of redox molecules in electrochemical scanning tunneling microscopy
Research output: Research - peer-review › Journal article – Annual report year: 2007

Assembly Dynamics and Detailed Structure of 1-Propanethiol Monolayers on Au(111)-Surfaces Observed in Real Time by In Situ STM
Research output: Research - peer-review › Journal article – Annual report year: 2006

Kemi og Bioteknologi på Nanoskala og Enkeltmolekyle Niveau
Research output: Education › Book chapter – Annual report year: 2006

Long-Range Interfacial Electron Transfer of Metalloproteins Based on Molecular Wiring Assemblies
Research output: Research - peer-review › Journal article – Annual report year: 2006

Molecular Bioelectronics: Charge Transfer through Protein Nanostructures: Abstract NE-I-5
Research output: Research › Paper – Annual report year: 2006

Significant Enhancement of Long-Range Electron Transfer of Cytochrome c by Gold Nanoparticles: Abstract NB-O-1
Research output: Research - peer-review › Paper – Annual report year: 2006

Surface Microscopic Structure and Electrochemical Rectification of a Branched Alkanethiol Self-Assembled Monolayer
Research output: Research - peer-review › Letter – Annual report year: 2006

Electrochemistry and bioelectrochemistry towards the single-molecule level: Theoretical notions and systems
Research output: Research - peer-review › Journal article – Annual report year: 2005

Long-range protein electron transfer observed at the single-molecule level: In situ mapping of redox-gated tunneling resonance
Research output: Research - peer-review › Journal article – Annual report year: 2005

Electrochemical and bioelectrochemical electron transfer towards the single-molecule level.
Research output: Research › Conference abstract for conference – Annual report year: 2004

Electrochemistry and bioelectrochemistry towards the nanoscale and single-molecule levels: Theoretical notions and some systems.
Research output: Research › Conference abstract for conference – Annual report year: 2004

Interfacial electron transfer at the single molecule level.
Research output: Research › Paper – Annual report year: 2004

Interfacial electron transfer patterns of Pseudomonas aeruginosa azurin in biomimwetic configurations.
Research output: Research › Conference abstract for conference – Annual report year: 2004
Electronic Properties of Functional Biomolecules at Metal/Aqueous Solution Interfaces
Research output: Research - peer-review › Journal article – Annual report year: 2002

Organized monolayers of biological macromolecules on Au(111) surfaces
Research output: Research - peer-review › Journal article – Annual report year: 2002

Deuterium isotope effect on the intramolecular electron transfer in Pseudomonas aeruginosa azurin
Research output: Research - peer-review › Journal article – Annual report year: 2001

Electrochemistry of the blue copper protein Pseudomonas aeruginosa azurin
Research output: Research › Paper – Annual report year: 2001

Electrochemistry of the blue copper protein Pseudomonas aeruginosa azurin
Research output: Research › Paper – Annual report year: 2001

Functional redox proteins on single-crystal gold electrodes: Some perspectives and puzzles.
Research output: Research - peer-review › Conference article – Annual report year: 2001

Interfacial electron transfer and in situ scanning tunnelling microscopy of metalloprotein monolayers on single-crystal Au(111)
Research output: Research › Conference abstract for conference – Annual report year: 2001

Ordered Assembly and Controlled Electron Transfer of the Blue Copper Protein Azurin at Gold (111) Single-Crystal Substrates
Research output: Research - peer-review › Journal article – Annual report year: 2001

Organisation and Control of Nanoscale Structures on Au(111)
Research output: Research - peer-review › Journal article – Annual report year: 2001

Creating Nanoscale Pits on Solid Surfaces in Aqueous Environment with Scanning Tunnelling Microscopy
Research output: Research - peer-review › Journal article – Annual report year: 2000

METHOD FOR FABRICATING NANOSCALE PATTERNS ON A SURFACE
Research output: Research › Patent – Annual report year: 2000

Molecular monolayers and interfacial electron transfer of pseudomonas aeruginosa azurin on Au(111)
Research output: Research - peer-review › Journal article – Annual report year: 2000

Nanoscale depression formation for substrate surface involves bringing immersed object proximal to surface of substrate by applying two sets of operating parameters
Research output: Research › Patent – Annual report year: 2000

Two-Dimensional Cysteine and Cystine Cluster Networks on Au(111) Disclosed by Voltammetry and in Situ Scanning Tunnelling Microscopy
Research output: Research - peer-review › Journal article – Annual report year: 2000

Electrochemistry of Self-Assembled Monolayers of the Blue Copper Protein Pseudomonas Aeruginosa Azurin on Au(111)
Research output: Research - peer-review › Journal article – Annual report year: 1999

Fabrication of nanoscale patterns on solid surfaces in aqueous electrochemical environment by scanning tunnelling microscopy
Research output: Research › Article in proceedings – Annual report year: 1999

**Images of analytical chemistry**
Research output: Research › Journal article – Annual report year: 1999

**In Situ Scanning Probe Microscopy and New Perspectives in Analytical Chemistry**
Research output: Research › peer-review › Journal article – Annual report year: 1999

**Molecular nanometer scale assemblies controlled by in situ electrochemical scanning tunnelling microscopy**
Research output: Research › Article in proceedings – Annual report year: 1999

**Self-assembled monolayers of the blue copper protein Pseudomonas aeruginosa azurin on Au (111)**
Research output: Research › Article in proceedings – Annual report year: 1999

**Self-assembled monolayers of the blue copper protein Pseudomonas aeruginosa azurin on Au(111) investigated by voltammetry and in situ scanning tunnelling microscopy**
Research output: Research › Article in proceedings – Annual report year: 1999

**Single-crystal electrochemistry and in situ scanning tunnelling microscopy of redox metalloproteins**
Research output: Research › Article in proceedings – Annual report year: 1999

**Projects:**

**Engineering Doped Quantum Dots for Efficient Solar Cell Devices**
Project: PhD

**Designing Covalent. and Metal-Organic Framework Nanomaterials for Photoelectrochemical Catalysis and Solar Energy Conversion**
Project: PhD

**Graphene supported transition metal oxide composites as metal-ion battery electrode materials**
Project: PhD

**Design and Engineering of Nanostructured Halide Perovskites for Light Harvesting and Solar Power Conversion**
Project: PhD

**Engineering and structural characterization of perovskite-graphene interfaces for optimizing photovoltaic performance**
Project: Research

**Proof of Concept development project for "New low-cost diabetes measuring device".**
Project: Research

**Two-dimensional nanomaterial composites for flexible energy storage and conversion devices**
Project: PhD

**Nanostructured and Free-standing Grahene Paper Sensors for Ultrasensitive Monitoring of Food Quality and Safety**
Project: PhD

**Nanoscale Electrocatalysts for Chemical and Biological Sensors**
Project: PhD
Supermolecular Derivation of Graphene Nanomaterials for Chemical Sensors
Project: PhD

Bioengineering Functionalization of Graphene Nanomaterials for Sensor Applications
Project: PhD

Synthesis and Applications of Bioconjugated Metal Nanoparticles for Nanoscale Bioelectronics
Project: PhD

Single-Molecule Enzyme Dynamics and New Biosensing Devices
Project: PhD

Nanoporous Chemical Graphene for High-performance Electrocatalytic Energy Conversion
Project: Research

Bioinorganic Chemistry
Project: Research

Electronic Processes in Nanoscale Systems
Project: Research

Activities:

*Electrocatalysis of interfacial bioelectrochemical electron transfer processes at the single-molecule level*
Activity: Talks and presentations › Conference presentations

*Electronic single-molecule conductivity of redox proteins and metalloenzymes in biological media*
Activity: Talks and presentations › Conference presentations