



Bioelectrochemistry 58 (2002) 207-210

www.elsevier.com/locate/bioelechem

Subject Index to Volume 58

Apoptosis

Functional role of phospholipids in the nuclear events (58) 13

A minisensor for the rapid screening of atenolol in pharmaceutical preparations based on surface-stabilized bilayer lipid membranes with incorporated DNA (58) 107

Bayer's junctions

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

Binding isotherm

Structural and thermodynamic features of complexes formed by DNA and synthetic polynucleotides with dodecylamine and dodecyltrimethylammonium bromide (58) 75

Biosensor

DNA and PNA sensing on mercury and carbon electrodes by using methylene blue as an electrochemical label (58) 119

Biosensors

A minisensor for the rapid screening of atenolol in pharmaceutical preparations based on surface-stabilized bilayer lipid membranes with incorporated DNA (58) 107

1,4-Butanediammonium-N,N -dilauryl-N,N,N ,N -tetramethyl dibromide Condensed lamellar phase in ternary DNA-DLPC-cationic gemini surfactant system: a small-angle synchrotron X-ray diffraction study (58) 87

Capacitance

Electrostriction of supported lipid films at presence of cationic surfactants, surfactant-DNA and DNA-Mg²⁺ complexes (58) 97

Caspase-3

Cellular toxicity induced by different pH levels on the R3230AC rat mammary tumour cell line. An in vitro model for investigation of the tumour destructive properties of electrochemical treatment of tumours (58) 163

Catalytic current

Voltammetric monitoring of laccase-catalysed mediated reactions (58) 149

Cationic amphiphile

Structural and thermodynamic features of complexes formed by DNA and synthetic polynucleotides with dodecylamine and dodecyltrimethylammonium bromide (58) 75

Cationic GUV

An experimental approach for direct observation of the interaction of polyanions with sphingosine-containing giant vesicles (58) 65

Cationic lipids

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Cationic liposome

Condensed lamellar phase in ternary DNA-DLPC-cationic gemini surfactant system: a small-angle synchrotron X-ray diffraction study (58) 87

Cationic surfactants

Electrostriction of supported lipid films at presence of cationic surfactants, surfactant-DNA and DNA-Mg²⁺ complexes (58) 97

Cation

DNA-lipid interactions in vitro and in vivo (58) 3

Cell fusion

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

Chromatin

Functional role of phospholipids in the nuclear events (58) 13 Nuclear and chromatin lipids: metabolism in normal and γ -irradiated rats (58) 31

Co₂Co₂SOD

A study on Cu₂Co₂SOD and Co₂Co₂SOD by voltammetry and thinlayer spectroelectrochemistry (58) 199

Computer simulation

DNA-phospholipid recognition: modulation by metal ion and lipid nature. Complexes structure and stability calculated by molecular mechanics (58) 47

Cu₂Co₂SOD

A study on Cu₂Co₂SOD and Co₂Co₂SOD by voltammetry and thinlayer spectroelectrochemistry (58) 199

Cyclic voltammetry

The influence of promoter and of electrode material on the cyclic voltammetry of *Pisum sativum* plastocyanin (58) 137

Voltammetric monitoring of laccase-catalysed mediated reactions (58) 149

Dielectric spectroscopy

The complex dielectric spectrum of heart tissue during ischemia (58) 171

Differential scanning calorimetry (DSC)

Interrelation between hydration and interheadgroup interaction in phospholipids (58) 193

1,2-Dilauroyl-sn-glycero-3-phosphorylcholine

Condensed lamellar phase in ternary DNA-DLPC-cationic gemini surfactant system: a small-angle synchrotron X-ray diffraction study (58) 87

DNA

DNA-lipid interactions in vitro and in vivo (58) 3

Structural and thermodynamic features of complexes formed by DNA and synthetic polynucleotides with dodecylamine and dodecyltrimethylammonium bromide (58) 75

Condensed lamellar phase in ternary DNA-DLPC-cationic gemini surfactant system: a small-angle synchrotron X-ray diffraction study (58) 87

DNA and PNA sensing on mercury and carbon electrodes by using methylene blue as an electrochemical label (58) 119

DNA-membrane complexes

DNA-lipid interactions in vitro and in vivo (58) 3

DNA-membrane contacts

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

DNA and polyanion interactions

An experimental approach for direct observation of the interaction of polyanions with sphingosine-containing giant vesicles (58) 65

DNA biosensor

Electrochemical DNA biosensor for analysis of wastewater samples (58) 113

DNA-bound cardiolipin

DNA-bound lipids of normal and tumor cells: retrospective and outlooks for functional genomics (58) 23

DNA-bound cholesterol

DNA-bound lipids of normal and tumor cells: retrospective and outlooks for functional genomics (58) 23

DNA-Mg²⁺-lipid complexes

Electrostriction of supported lipid films at presence of cationic surfactants, surfactant-DNA and DNA-Mg²⁺ complexes (58) 97

DNA-(phospho)lipid complexes

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Electrochemical treatment

Cellular toxicity induced by different pH levels on the R3230AC rat mammary tumour cell line. An in vitro model for investigation of the tumour destructive properties of electrochemical treatment of tumours (58) 163

Electrochemistry

A minisensor for the rapid screening of atenolol in pharmaceutical preparations based on surface-stabilized bilayer lipid membranes with incorporated DNA (58) 107

Electrostriction

Electrostriction of supported lipid films at presence of cationic surfactants, surfactant-DNA and DNA-Mg²⁺ complexes (58) 97

Endocytosis

An experimental approach for direct observation of the interaction of polyanions with sphingosine-containing giant vesicles (58) 65

Erythrocyte

Hypochlorous acid-induced oxidative damage of human red blood cells: effects of *tert*-butyl hydroperoxide and nitrite on the HOCl reaction with erythrocytes (58) 127

Eukaryotic cells

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

Fluorescence

Structural and thermodynamic features of complexes formed by DNA and synthetic polynucleotides with dodecylamine and dodecyltrimethylammonium bromide (58) 75

Formation energy

DNA-phospholipid recognition: modulation by metal ion and lipid nature. Complexes structure and stability calculated by molecular mechanics (58) 47

FTIR modeling

Interrelation between hydration and interheadgroup interaction in phospholipids (58) 193

Functional genomics

DNA-bound lipids of normal and tumor cells: retrospective and outlooks for functional genomics (58) 23

Gap junctions

The complex dielectric spectrum of heart tissue during ischemia (58) 171

Genosome

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Glutathione

Hypochlorous acid-induced membrane pore formation in red blood cells (58) 157

Graphite

Study of catalase electrode for organic peroxides assays (58) 181

Haemolysis

Hypochlorous acid-induced oxidative damage of human red blood cells: effects of *tert*-butyl hydroperoxide and nitrite on the HOCl reaction with erythrocytes (58) 127

Hypochlorous acid-induced membrane pore formation in red blood cells (58) 157

Heart

The complex dielectric spectrum of heart tissue during ischemia (58) 171

Hybridization

DNA and PNA sensing on mercury and carbon electrodes by using methylene blue as an electrochemical label (58) 119

Hydrophobic polycations

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Hypochlorite

Hypochlorous acid-induced oxidative damage of human red blood cells: effects of *tert*-butyl hydroperoxide and nitrite on the HOCl reaction with erythrocytes (58) 127

Hypochlorous acid

Hypochlorous acid-induced membrane pore formation in red blood cells (58) 157

Immobilisation

Voltammetric monitoring of laccase-catalysed mediated reactions (58) 149

Immobilized catalase

Study of catalase electrode for organic peroxides assays (58) 181 Initial cells

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

In vitro and in vivo gene transfer

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Ischemia

The complex dielectric spectrum of heart tissue during ischemia (58)

Laccase

Voltammetric monitoring of laccase-catalysed mediated reactions (58) 149

Lipid-nucleic acid interaction and recognition

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

Lipid composition and function

DNA-bound lipids of normal and tumor cells: retrospective and outlooks for functional genomics (58) 23

Lipid metabolism

Functional role of phospholipids in the nuclear events (58) 13 inids

Nuclear and chromatin lipids: metabolism in normal and γ -irradiated rats (58) 31

Lipoplex

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Live

Nuclear and chromatin lipids: metabolism in normal and γ -irradiated rats (58) 31

Mediator

Voltammetric monitoring of laccase-catalysed mediated reactions (58) 149

Membrane pore

Hypochlorous acid-induced membrane pore formation in red blood cells (58) 157

Membrane potential

Two types of kinetics of membrane potential of water plant leaves illuminated by ultraviolet light (58) 189

Metalloproteins

The influence of promoter and of electrode material on the cyclic voltammetry of *Pisum sativum* plastocyanin (58) 137

Methylene blue

DNA and PNA sensing on mercury and carbon electrodes by using methylene blue as an electrochemical label (58) 119

Microinjection

An experimental approach for direct observation of the interaction of polyanions with sphingosine-containing giant vesicles (58) 65

Molecular mechanics

DNA-phospholipid recognition: modulation by metal ion and lipid nature. Complexes structure and stability calculated by molecular mechanics (58) 47

Nafion

Study of catalase electrode for organic peroxides assays (58) 181 Nitrite

Hypochlorous acid-induced oxidative damage of human red blood cells: effects of *tert*-butyl hydroperoxide and nitrite on the HOCl reaction with erythrocytes (58) 127

Non-viral targeted gene delivery

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Nuclear matrix

Functional role of phospholipids in the nuclear events (58) 13

Functional role of phospholipids in the nuclear events (58) 13

Nuclear and chromatin lipids: metabolism in normal and $\gamma\textsubscript{-irradiated}$ rats (58) 31

Organic-phase enzyme electrode

Study of catalase electrode for organic peroxides assays (58) 181 Oxidative stress

Hypochlorous acid-induced oxidative damage of human red blood cells: effects of *tert*-butyl hydroperoxide and nitrite on the HOCl reaction with erythrocytes (58) 127

Peptide nucleic acid

DNA and PNA sensing on mercury and carbon electrodes by using methylene blue as an electrochemical label (58) 119

Phospholipid-nucleic acids complexes

DNA-phospholipid recognition: modulation by metal ion and lipid nature. Complexes structure and stability calculated by molecular mechanics (58) 47

Phospholipids

Interrelation between hydration and interheadgroup interaction in phospholipids (58) 193

Phospholipids signal transduction

Functional role of phospholipids in the nuclear events (58) 13

Plant cell

Two types of kinetics of membrane potential of water plant leaves illuminated by ultraviolet light (58) 189

Plastocyanin

The influence of promoter and of electrode material on the cyclic voltammetry of *Pisum sativum* plastocyanin (58) 137

Point mutation

DNA and PNA sensing on mercury and carbon electrodes by using methylene blue as an electrochemical label (58) 119

Polycations

Cationic lipid-DNA complexes—lipoplexes—for gene transfer and therapy (58) 53

Polyribonucleotides

Structural and thermodynamic features of complexes formed by DNA and synthetic polynucleotides with dodecylamine and dodecyltrimethylammonium bromide (58) 75

Prokaryote-to-eukaryote transition

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

Prokaryotic cells

Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes (58) 41

Promoters

The influence of promoter and of electrode material on the cyclic voltammetry of *Pisum sativum* plastocyanin (58) 137

Proton pump

Two types of kinetics of membrane potential of water plant leaves illuminated by ultraviolet light (58) 189

Quantum-chemical calculations

DNA-phospholipid recognition: modulation by metal ion and lipid nature. Complexes structure and stability calculated by molecular mechanics (58) 47

R3230AC

Cellular toxicity induced by different pH levels on the R3230AC rat mammary tumour cell line. An in vitro model for investigation of the tumour destructive properties of electrochemical treatment of tumours (58) 163

γ-Radiation

Nuclear and chromatin lipids: metabolism in normal and γ -irradiated rats (58) 31

Red blood cell

Hypochlorous acid-induced membrane pore formation in red blood cells (58) 157

Redox potential

The influence of promoter and of electrode material on the cyclic voltammetry of *Pisum sativum* plastocyanin (58) 137

Scanning tunneling microscopy

The influence of promoter and of electrode material on the cyclic voltammetry of *Pisum sativum* plastocyanin (58) 137

Screen-printed electrodes

Electrochemical DNA biosensor for analysis of wastewater samples (58) 113

Small-angle X-ray diffraction

Condensed lamellar phase in ternary DNA – DLPC-cationic gemini surfactant system: a small-angle synchrotron X-ray diffraction study (58) 87 Sphingosine

An experimental approach for direct observation of the interaction of polyanions with sphingosine-containing giant vesicles (58) 65

ssDNA

A minisensor for the rapid screening of atenolol in pharmaceutical preparations based on surface-stabilized bilayer lipid membranes with incorporated DNA (58) 107

Surface-stabilized bilayer lipid membranes

A minisensor for the rapid screening of atenolol in pharmaceutical preparations based on surface-stabilized bilayer lipid membranes with incorporated DNA (58) 107

Surfactant-DNA complexes

Electrostriction of supported lipid films at presence of cationic surfactants, surfactant-DNA and DNA-Mg²⁺ complexes (58) 97

Thermodynamics

Structural and thermodynamic features of complexes formed by DNA and synthetic polynucleotides with dodecylamine and dodecyltrime-thylammonium bromide (58) 75

Thymus

Nuclear and chromatin lipids: metabolism in normal and γ -irradiated rats (58) 31

Tissue models

The complex dielectric spectrum of heart tissue during ischemia (58) 171

Toxalert® 100

Electrochemical DNA biosensor for analysis of wastewater samples (58) 113

Transfection

Condensed lamellar phase in ternary DNA-DLPC-cationic gemini surfactant system: a small-angle synchrotron X-ray diffraction study (58) 87

Triple complexes

DNA-lipid interactions in vitro and in vivo (58) 3

Two pools of DNA-bound lipids

DNA-bound lipids of normal and tumor cells: retrospective and outlooks for functional genomics (58) 23

UV-B radiation

Two types of kinetics of membrane potential of water plant leaves illuminated by ultraviolet light (58) 189

Voltammetry

A study on Cu_2Co_2SOD and Co_2Co_2SOD by voltammetry and thin-layer spectroelectrochemistry (58) 199

Wastewater samples

Electrochemical DNA biosensor for analysis of wastewater samples (58) 113

Water content

The complex dielectric spectrum of heart tissue during ischemia (58) 171