

Electric Impedance

[View the current Electric Impedance InDepth page on BioPortfolio.com](http://www.bioportfolio.com/indepth/Electric_Impedance.html)

(http://www.bioportfolio.com/indepth/Electric_Impedance.html)



Recent Publications on Electric Impedance:

- [Electrical impedance to distinguish intraneural from extraneural needle placement in porcine nerves during direct exposure and ultrasound guidance.](#)
BACKGROUND: Intraneural injection during peripheral nerve blockade can... 1st October, 2008
Department of Anesthesiology and Pain Medicine, 8-120 Clinical Sciences- Anesthesiology. 2008 Sep;109(3):479-83. ([DOI Direct Link](#))
- [Transcorneal iontophoresis for delivery of ciprofloxacin hydrochloride.](#)
PURPOSE: To investigate the feasibility of utilizing iontophoresis for... 24th September, 2008
Department of Pharmaceutics, School of Pharmacy, The University of- Curr Eye Res. 2008 Aug;33(8):661-7. ([DOI Direct Link](#))
- [Prevalence of overweight and obesity in collegiate American football players, by position.](#)
OBJECTIVE: The authors' purpose in this study was to determine overweight... 24th September, 2008
Health, Physical Education, and Recreation Department, Utah State- J Am Coll Health. 2008 Jul-Aug;57(1):33-8. ([DOI Direct Link](#))
- [Bioelectrical impedance phase angle as a prognostic indicator in breast cancer.](#)
BACKGROUND: Bioelectrical impedance analysis (BIA) is an easy-to-use,... 18th September, 2008
Cancer Treatment Centers of America at Midwestern Regional Medical Center,- BMC Cancer. 2008 Aug 27;8(1):249. ([DOI Direct Link](#))
- [Continuous monitoring of electrode-skin impedance mismatch during bioelectric recordings.](#)
In bioelectric recordings, an electrode-skin impedance mismatch leads to a... 18th September, 2008
Swiss Federal Institute of Technology, CH-1015 Lausanne, Switzerland.- IEEE Trans Biomed Eng. 2008 Jun;55(6):1711-5.
- [Proceedings of the 13th International Conference on Electrical Bioimpedance and 8th Conference on Electrical Impedance Tomography, Graz, Austria, 29 August-2 September 2007.](#)
Although cardiac arrhythmias less commonly cause hemodynamic compromise in... 16th September, 2008
- Physiol Meas. 2008 Jun;29(6):1-524.
- [Detection of breast abnormalities using a prototype resonance electrical impedance spectroscopy system: a preliminary study.](#)
Electrical impedance spectroscopy has been investigated with but limited... 16th September, 2008
Department of Radiology, University of Pittsburgh, Pittsburgh,- Med Phys. 2008 Jul;35(7):3041-8.
- [13th International Conference on Electrical Bioimpedance and 8th Conference on Electrical Impedance Tomography \(Graz, Austria, 29 August - 2 September 2007\).](#)
PURPOSE: To investigate the feasibility of utilizing iontophoresis for... 16th September, 2008

Middlesex University, London, UK.- *Physiol Meas.* 2008 Jun;29(6):E1-2.

- [Memristive switching mechanism for metal/oxide/metal nanodevices.](#)
*Nanoscale metal/oxide/metal switches have the potential to transform the...*11th September, 2008
Hewlett-Packard Laboratories, Palo Alto, California 94304, USA.- *Nat Nanotechnol.* 2008 Jul;3(7):429-33. Epub 2008 Jun 15. ([DOI Direct Link](#))
- [Prediction of very large values of magnetoresistance in a graphene nanoribbon device.](#)
*Graphene has emerged as a versatile material with outstanding electronic...*11th September, 2008
- *Nat Nanotechnol.* 2008 Jul;3(7):408-12. Epub 2008 Jun 15. ([DOI Direct Link](#))
- [Silicon nanowires feel the pinch.](#)
*Graphene has emerged as a versatile material with outstanding electronic...*11th September, 2008
- *Nat Nanotechnol.* 2008 Jun;3(6):311-2. ([DOI Direct Link](#))
- [Electromechanical response of single-walled carbon nanotubes to torsional strain in a self-contained device.](#)
*Nanoscale electronics seeks to decrease the critical dimension of devices...*11th September, 2008
Curriculum in Applied and Materials Sciences, University of North Carolina- *Nat Nanotechnol.* 2007 Jul;2(7):413-6. Epub 2007 Jun 24. ([DOI Direct Link](#))
- [Magnetoelectronics: new twist for ballistic transport.](#)
*Nanoscale electronics seeks to decrease the critical dimension of devices...*11th September, 2008
- *Nat Nanotechnol.* 2007 Mar;2(3):143-4. ([DOI Direct Link](#))
- [Corresponding measurements of delayed luminescence and impedance spectroscopy on acupuncture points.](#)
*Measurements of impedance spectroscopy and delayed luminescence have been...*4th September, 2008
Dipartimento di Metodologie Fisiche e Chimiche per l'Ingegneria,- *Indian J Exp Biol.* 2008 May;46(5):364-70.
- [Giant piezoresistance effect in silicon nanowires.](#)
*Nanoscale electronics seeks to decrease the critical dimension of devices...*3rd September, 2008
- *Nat Nanotechnol.* 2006 Oct;1(1):42-6. ([DOI Direct Link](#))

Electric Impedance Clinical Trials:



- [Electrical Impedance Scanning of Thyroid Nodules Prior to Thyroid Surgery: a Prospective Study](#)
Thyroid Neoplasms; Thyroid Nodules

Electric Impedance Patents:



- 7192752- [Real time electronic cell sensing systems and applications for cell-based assays](#)
- 7268017- [Multilayered structure, multilayered structure array and method of manufacturing the same](#)

- 7271574- [Evanescence microwave probe with enhanced resolution and sensitivity](#)
- 7283869- [Apparatus for measuring body fat](#)
- 7286863- [Device and process for putting an electrode carrier on a patient](#)
- 7291916- [Signal transmission structure and circuit substrate thereof](#)
- 7308303- [Thrombolysis and chronic anticoagulation therapy](#)
- 7313434- [Impedance monitoring for detecting pulmonary edema and thoracic congestion](#)
- 7313944- [Method and apparatus for leak testing closed containers](#)
- 7314449- [Apparatus for determining cardiovascular parameters](#)
- 7320364- [Inhibiting reflux in a heated well of an in situ conversion system](#)
- 7260230- [High performance microphone and manufacturing method thereof](#)
- 7246516- [Device for coupling thermogravimetric analyses and acoustic emission measurements](#)
- 7238185- [Method and apparatus for plasma-mediated thermo-electrical ablation](#)
- 7194906- [Acceleration sensor having resonators with reduced height](#)
- 7199509- [Multilayered structure and method of manufacturing the same, and ultrasonic transducer](#)
- 7200440- [Cardiac cycle synchronized sampling of impedance signal](#)
- 7219734- [Inhibiting wellbore deformation during in situ thermal processing of a hydrocarbon containing formation](#)
- 7221165- [Method and device for measuring the resistivity anisotropy of layered rock samples](#)
- 7225866- [In situ thermal processing of an oil shale formation using a pattern of heat sources](#)
- 7226422- [Detection of congestion from monitoring patient response to a recumbent position](#)
- 7228170- [Device and method for monitoring and controlling physiologic parameters of a dialysis patient using segmental bioimpedance](#)
- 7232994- [Contact hole standard test device, method of forming the same, method of testing contact hole, method and apparatus for measuring a thickness of a film, and method of testing a wafer](#)
- 7236820- [Standardized swallow challenge medium and method of use for esophageal function testing](#)
- 7326886- [Wafer support member and semiconductor manufacturing system using the same](#)
- 7328131- [Implantable pedometer](#)
- 7387610- [Thoracic impedance detection with blood resistivity compensation](#)
- 7391143- [Support and decoupling structure for an acoustic resonator, acoustic resonator and corresponding integrated circuit](#)
- 7399631- [Real-time impedance assay to follow the invasive activities of metastatic cells in culture](#)
- 7410904- [Sensor produced using imprint lithography](#)
- 7416529- [Detection of diastolic heart failure](#)
- 7416550- [Method and apparatus for the control and monitoring of shape change in tissue](#)
- 7417418- [Thin film sensor](#)
- 7420191- [Discharge radiation source, in particular UV radiation](#)
- 7422560- [Detection of congestion from monitoring patient response to a recumbent position](#)
- 7424915- [Vacuum pumping of conductor-in-conduit heaters](#)
- 7384395- [Detection of congestion from monitoring patient response to a recumbent position](#)
- 7383877- [Temperature limited heaters with thermally conductive fluid used to heat subsurface formations](#)
- 7379556- [Speaker device](#)
- 7340296- [Detection of pleural effusion using transthoracic impedance](#)
- 7340703- [Test structures and method for interconnect impedance property extraction](#)
- 7347851- [Needleless hypodermic jet injector apparatus and method](#)
- 7353707- [Acceleration sensor](#)
- 7353872- [Start-up of temperature limited heaters using direct current \(DC\)](#)
- 7357180- [Inhibiting effects of sloughing in wellbores](#)
- 7357474- [Method of controlling an inkjet printhead, an inkjet printhead suitable for use of said method, and an inkjet printer comprising said printhead](#)
- 7360588- [Thermal processes for subsurface formations](#)
- 7367341- [Methods and devices for selective disruption of fatty tissue by controlled cooling](#)
- 7370704- [Triaxial temperature limited heater](#)

- 7429900- [Oscillator and semiconductor device](#)

Resources from the [NCBI](#) used in this document, [NCBI's standard disclaimer applies](#).

Nothing in this document should be used in place of personal medical advice from your own qualified medical practitioner. See BioPortfolio.com [User Agreement](#)

Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

All rights reserved. All other trademarks recognized.

BioPortfolio Limited is registered in England & Wales at Wessex Barn, Dorchester Road, Frampton, Dorset, DT2 9NB, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2008 - BioPortfolio Limited.

