

Densitometry

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Densitometry is the quantitative measurement of optical density in light-sensitive materials, such as photographic film, due to exposure to light. Optical density is a result of the darkness of a developed picture and can be expressed absolutely as the number of dark spots in a given area, but usually it is a relative value, expressed in a scale. Density is also the logarithm of the inverse of transparency. Since density is usually measured by the decrease in the amount of light which shines through a transparent film, it is also called absorptiometry, the measure of light absorption through the medium. The corresponding measuring device is called a densitometer or an absorptiometer. According to the principle of operation of the densitometer, one can have:

- * spot densitometry: the value of light absorption is measured at a single spot*
- line densitometry: the values of successive spots along a dimension are expressed as a graph*
- bidimensional densitometry: the values of light absorption are expressed as a 2D synthetic image, usually using false-color shading

Dual energy X-ray absorptiometry is used in medicine to evaluate calcium bone density, which is altered in several diseases such as osteopenia and osteoporosis. Special devices have been developed and are in current use for clinical diagnosis, called bone densitometers.

Recent Publications on Densitometry:



- [Susceptibility of phaseolin \(Phaseolus vulgaris\) subunits to trypsinolysis and influence of dietary level of raw phaseolin on protein digestion in the small intestine of rats.](#)
The aim of the present work was (a) to investigate trypsinolysis of... 11th October, 2008
Institut National de la Recherche Agronomique, UMR1079 SENAH, F-35590- Br J Nutr. 2008 Oct 10:1-9. ([DOI Direct Link](#))
- [Use of biochemical markers of bone turnover in the management of postmenopausal osteoporosis.](#)
Abstract Background: We currently have guidelines that allow us to use... 11th October, 2008
1Division of Endocrinology and Metabolism, Loyola University Stritch- Clin Chem Lab Med. 2008;46(10):1345-57. ([DOI Direct Link](#))
- [Pilot proteomic profile of differentially regulated proteins in right atrial appendage before and after cardiac surgery using cardioplegia and cardiopulmonary bypass.](#)
BACKGROUND: Although highly protective, cardiac surgery using cardioplegia... 10th October, 2008
Division of Cardiothoracic Surgery, Beth Israel Deaconess Medical Center,- Circulation. 2008 Sep 30;118(14 Suppl):S24-31. ([DOI Direct Link](#))
- [Real-Time Intraoperative Assessment of Residual Liver Functional Reserve Using Pulse Dye Densitometry.](#)
BACKGROUND: For a safe major hepatectomy, preoperative methods that can... 9th October, 2008
Department of Surgery and Clinical Oncology, Graduate School of Medicine,- World J Surg. 2008 Oct 8. ([DOI Direct Link](#))
- [To the nucleolar density and size in apoptotic human leukemic myeloblasts produced in vitro by](#)

[Trichostatin A.](#)

*The present study was designed to provide more information on nucleoli in...*9th October, 2008
Institute of Hematology and Blood Transfusion, Unemocnice 1, Prague 2,- Eur J Histochem. 2008 Jul-Sep;52(3):143-8.

- [Phosphorylation of caspase-9 in the cytosolic fraction of the cerebral cortex of newborn piglets following hypoxia.](#)
*We have previously shown that hypoxia leads to increased expression and...*9th October, 2008
Department of Pediatrics, Drexel University College of Medicine and St.- Neurosci Lett. 2008 Oct 1. ([DOI Direct Link](#))
- [Vertebral fracture assessment using standard bone densitometry equipment predicts incident fractures in women.](#)
*Vertebral fractures are the most common fracture among the elderly, have a...*8th October, 2008
ML Bouxsein is Assistant Professor of Orthopedic Surgery at the Orthopedic- Nat Clin Pract Endocrinol Metab. 2008 Oct 7. ([DOI Direct Link](#))
- [Tolerance to the cataleptic effect that follows repeated nitric oxide synthase inhibition may be related to functional enzymatic recovery.](#)
*Abstract Systemic or intra-striatal acute administration of nitric oxide...*8th October, 2008
Department of MEF-Physiology, School of Odontology, Campus USP, Ribeirao- J Psychopharmacol. 2008 Oct 6. ([DOI Direct Link](#))
- [Factors Influencing Changes in Bone Mineral Density in Patients with Anorexia Nervosa-Related Osteoporosis: The Effect of Hormone Replacement Therapy.](#)
*The purpose of this longitudinal study was to evaluate factors affecting...*7th October, 2008
Department of Rheumatology, CHRU Lille, Hopital Roger Salengro, 59037,- Calcif Tissue Int. 2008 Oct 4. ([DOI Direct Link](#))
- [Tyrosine hydroxylase deficit in the chemoafferent and the sympathoadrenergic pathways of the Mecp2 deficient mouse.](#)
*Mutations in the gene encoding the transcriptional methyl-CpG binding...*7th October, 2008
INSERM U910, Faculte de Medecine de La Timone, Marseille F-13385, France;- Neurosci Lett. 2008 Sep 24. ([DOI Direct Link](#))
- [Three years follow-up of pamidronate therapy in two brothers with osteoporosis-pseudoglioma syndrome \(OPPG\) carrying an LRP5 mutation.](#)
*Osteoporosis-pseudoglioma (OPPG) is a rare syndrome characterized by...*2nd October, 2008
Division of Endocrinology, Federal University of Sao Paulo, Brazil.- J Pediatr Endocrinol Metab. 2008 Aug;21(8):811-8.
- [Intravenous zoledronate improves bone density in adults with cystic fibrosis.](#)
*SUMMARY Objective: Reduced bone mineral density (BMD) and increased rates...*1st October, 2008
Endocrinology Department, Royal Adelaide Hospital, North Terrace,- Clin Endocrinol (Oxf). 2008 Sep 25. ([DOI Direct Link](#))
- [\[Clinical usefulness of biochemical markers of bone turnover in early postmenopausal women: two years longitudinal study.\]](#)
*BACKGROUND AND OBJECTIVE: Many studies have been performed on the ability...*27th September, 2008
Laboratorio de Analisis Clinicos. Hospital General Universitario de- Med Clin (Barc). 2008 Sep 20;131(9):333-8.
- [\[A case of severe hypophosphatemia related to adefovir dipivoxil treatment in a patient with liver cirrhosis related to hepatitis B virus\]](#)
*Adefovir dipivoxyl (ADV) effectively suppresses hepatitis B virus (HBV)...*26th September, 2008
Department of Internal Medicine, Yeungnam University College of Medicine,- Korean J Hepatol. 2008 Sep;14(3):381-6. ([DOI Direct Link](#))
- [A preliminary study of the use of peripheral quantitative computed tomography for investigating root canal anatomy.](#)
*Aim To evaluate the use of peripheral quantitative computed tomography...*25th September, 2008
Department of Odontoiatrics, Scientific Institute H San Raffaele, Milan,- Int Endod J. 2008 Sep 22. ([DOI](#)

[Direct Link](#))

BioNews Results for Densitometry

- [Dual-Frequency Ultrasound Technique Minimizes Errors Induced by Soft Tissue in Ultrasound Bone Densitometry](#)
MDLinx: Oct 9 2008 12:16PM Matching: densitometry
- [Perceptive Informatics Appoints Leading Imaging Expert Dr. Kenneth G. Faulkner to Vice President of Medical Im](#)
Pharma Live: Jul 28 2008 3:55PM Matching: densitometry

Densitometry Clinical Trials:



- [T-Score Comparability Between GE Lunar Prodigy and Norland Excel Densitometers](#)
Bone Densitometry

Densitometry Patents:



- 7400335- [Method for printing a halftone digital image](#)
- 7408030- [Purification of immunoglobulins using affinity chromatography and peptide ligands](#)
- 7408048- [Mammalian grainyhead transcription factors](#)
- 7408098- [Regulation of quinolate phosphoribosyl transferase expression](#)
- 7411673- [Scanning spectrophotometer for high throughput fluorescence detection](#)
- 7413754- [Use of extracts of the genus Cimicifuga as organoselective medicines for treating diseases of the genitourinary system caused by sex hormones](#)
- 7413863- [Identification of substances that inhibit NEMO oligomerization](#)
- 7413906- [Quantitative, high-throughput screening method for protein stability](#)
- 7414042- [Method and composition for selectively inhibiting melanoma](#)
- 7414146- [Imaging element containing a blocked photographically useful compound](#)
- 7416723- [Therapeutic compositions and methods useful in modulating protein tyrosine phosphatases](#)
- 7408027- [Tools for the diagnosis and treatment of Alzheimer's disease](#)
- 7407805- [Skin substitutes with improved barrier function](#)
- 7402305- [Polypeptides of the IFN.alpha.-21 gene](#)
- 7402310- [Deoxyribonuclease, gene encoding same and use thereof](#)
- 7402410- [Humanized immunoglobulin reactive with .alpha.4.beta.7 integrin](#)

- 7402567- [Treatment of disease by inducing cell apoptosis](#)
- 7402664- [Nucleic acids and expression vectors comprising carotenoid binding peptides](#)
- 7405039- [Viral variants with altered susceptibility to nucleoside analogs and uses thereof](#)
- 7405205- [Antitumor antisense sequences directed against R1 and R2 components of ribonucleotide reductase](#)
- 7405305- [Pyrrole-2, 5dione derivatives and their used as GSK-3 inhibitors](#)
- 7407753- [Methods, kits and pharmaceutical compositions for diagnosing, delaying onset of, preventing and/or treating osteoporosis](#)
- 7407759- [Genetic alterations associated with prostate cancer](#)
- 7416848- [DNA encoding SNORF25 receptor](#)
- 7416849- [HBM variants that modulate bone mass and lipid levels](#)
- 7419680- [Calcium phosphate-based materials containing zinc, magnesium, fluoride and carbonate](#)
- 7429472- [Method of immobilizing a protein or molecule via a mutant dehalogenase that is bound to an immobilized dehalogenase substrate and linked directly or indirectly to the protein or molecule](#)
- 7429482- [Screening tools for discovery of novel anabolic agents](#)
- 7429484- [Nucleic acid molecules encoding osteogenic proteins](#)
- 7429643- [POSH nucleic acids, polypeptides and related methods](#)
- 7430272- [Full field mammography with tissue exposure control, tomosynthesis, and dynamic field of view processing](#)
- 7432047- [Method for selective inactivation of viral replication](#)
- 7432066- [Non-invasive enzyme screen for tissue remodeling associated conditions](#)
- 7432304- [Small molecule antagonists of Bcl-2 family proteins](#)
- 7432349- [Tumor suppressor gene, p28ING5](#)
- 7432414- [Transgenic mouse having an amyloid precursor protein with a modified beta secretase cleavage site](#)
- 7427608- [Protection against and treatment of hearing loss](#)
- 7427605- [Inhibitors of ribonucleotide reductase subunit 2 and uses thereof](#)
- 7419796- [Method of making a test device](#)
- 7419816- [Attenuated rabies virus with nucleoprotein mutation at the phosphorylation site for vaccination against rabies and gene therapy in the CNS](#)
- 7419954- [Staphylococcus peptides for bacterial interference](#)
- 7421295- [Implantable cardiac lead having removable fluid delivery port](#)
- 7422884- [Feedback-resistant mevalonate kinases](#)
- 7424142- [Display and analysis of medical images using calibrated pixel values in units of known properties of reference materials](#)
- 7425436- [Covalent tethering of functional groups to proteins and substrates therefor](#)
- 7425443- [Treatment of diabetes with synthetic beta cells](#)
- 7425670- [Methods and compositions for protein production in tobacco plants with reduced nicotine](#)
- 7427476- [PITX2 polynucleotide, polypeptide and methods of use therefor](#)
- 7433001- [Liquid crystal display device with resin black matrix having polarizing function](#)

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