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## PRODUCTION SCIENTIFIQUE ANNEES 1984-1999

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1**Reference Type: Journal Article****Record Number: 1****Author:** Abbas, K. Coleou, J.**Year:** 1999**Title:** Influence of feeding on the quality of young lamb meat**Journal:** Annales De Zootechnie**Volume:** 48**Issue:** 2**Pages:** 131-141**Date:** Mar-Apr**Short Title:** Influence of feeding on the quality of young lamb meat**ISSN:** 0003-424X**DOI:** 10.1051/animres:19990205**Accession Number:** WOS:000080689300005

**Abstract:** This work was realised under special conditions of collaboration with a light weight lamb producer organisation. The aim of this study was to aid this organisation in a choice of feeding resources. In a first trial, suckling lambs until slaughter were judged to have more tender meat than weaned lambs. They also showed a higher fat yield. The volatile compounds analysis did not indicate a difference between the two kinds of lamb. A second trial did not establish a negative effect of sugar beet pulp, as a concentrate feed compared with wheat, on the organoleptic quality of lamb meat. These results allowed more possibilities for the lamb producer organisation to improve their feeding system and produce better quality meat. ((C) Elsevier/Inra).

**Notes:** Abbas, K Coleou, J**URL:** <Go to ISI>://WOS:000080689300005

2

**Reference Type: Journal Article**

**Record Number: 2**

**Author:** Adjabi, A. Amokrane, S. Belattar, N. Boubuern, Y.

**Year:** 1995

**Title:** EFFECT OF PHOSPHOLIPID EXTRACTS FROM BRAIN AND EGG ON  
ACTIVATED PARTIAL PROTHROMBIN TIME

**Journal:** Biochemical Society Transactions

**Volume:** 23

**Issue:** 2

**Pages:** S301-S301

**Date:** May

**Short Title:** EFFECT OF PHOSPHOLIPID EXTRACTS FROM BRAIN AND EGG ON  
ACTIVATED PARTIAL PROTHROMBIN TIME

**ISSN:** 0300-5127

**Accession Number:** WOS:A1995RE08500194

**Notes:** Adjabi, a amokrane, s belattar, n boubuern, y 653rd Meeting of the Biochemical-Society-  
of-London Sep 13-16, 1994 Univ sussex, brighton, england Biochem Soc London

**URL:** <Go to ISI>://WOS:A1995RE08500194

3

**Reference Type: Journal Article**

**Record Number: 3**

**Author:** Adjabi, A. Belattar, N. Amani, H. Aquabed, S.

**Year:** 1995

**Title:** STUDY OF PHOSPHOLIPIDS IN MUCILAGE (GUM) OF SUNFLOWER, RAPESEED, AND SOJA - ANALYTICAL APPROACH

**Journal:** Biochemical Society Transactions

**Volume:** 23

**Issue:** 2

**Pages:** S300-S300

**Date:** May

**Short Title:** STUDY OF PHOSPHOLIPIDS IN MUCILAGE (GUM) OF SUNFLOWER, RAPESEED, AND SOJA - ANALYTICAL APPROACH

**ISSN:** 0300-5127

**Accession Number:** WOS:A1995RE08500193

**Notes:** Adjabi, a belattar, n amani, h aquabed, s 653rd Meeting of the Biochemical-Society-of-London Sep 13-16, 1994 Univ sussex, brighton, england Biochem Soc London

**URL:** <Go to ISI>://WOS:A1995RE08500193

**Reference Type: Journal Article****Record Number:** 4**Author:** Adnani-Amardjia, H. Abdi, D. Boudoukha-Djabi, H. Boucenna, A.**Year:** 1999**Title:** Correlation between thermal treatment by CO<sub>2</sub> laser, and surface modification of TA6V titanium alloys**Journal:** Annales De Chimie-Science Des Materiaux**Volume:** 24**Issue:** 7**Pages:** 493-503**Date:** Jul**Short Title:** Correlation between thermal treatment by CO<sub>2</sub> laser, and surface modification of TA6V titanium alloys**ISSN:** 0151-9107**DOI:** 10.1016/s0151-9107(00)88442-1**Accession Number:** WOS:000082748600004

**Abstract:** The transfer of electromagnetic wave energy to the metallic material is done by an exchange between the laser photons and the lattice electrons via the inverse bremsstrahlung. This process induces the passage of an electron from the valence to the conduction band in which it becomes h-ee and energetic and it provokes, by collision with others electrons of the crystal lattice, the heating of the sample surfaces. The laser energy is then transformed, at the surface, into thermal energy (heat) which diffuses into the sample. For the same kind of materials with surfaces prepared in the same conditions, only laser beam parameters vary, following the relation:  $Q_s = P \tau / S$ , where  $Q_s$  is the specific energy at the lighted surface,  $P$  the power of the laser,  $\tau$  the interaction time and  $S$  the surface lighted by the laser beam. This factor indicates if the laser treatments are done without microstructural modification of the samples or with melting of the material surface. The martensitic phase  $\alpha'$  obtained after the laser treatment is metastable, with a small grain size compared to those obtained with the classical thermal treatments. The size of  $\alpha'$  grains depends on the energy density ( $Q_s = P \tau / S$ ) received by the specimen from the laser wave.

**Notes:** Adnani-Amardjia, H Abdi, D Boudoukha-Djabi, H Boucenna, A**URL:** <Go to ISI>://WOS:000082748600004

**Reference Type: Journal Article****Record Number: 5****Author:** Adnani-Amardjia, H. Abdi, D. Boucenna, A.**Year:** 1999**Title:** Conditions of the thermal treatment of TA6V titanium alloys by power CO2 laser**Journal:** Annales De Chimie-Science Des Materiaux**Volume:** 24**Issue:** 7**Pages:** 515-524**Date:** Jul**Short Title:** Conditions of the thermal treatment of TA6V titanium alloys by power CO2 laser**ISSN:** 0151-9107**DOI:** 10.1016/s0151-9107(00)88445-7**Accession Number:** WOS:000082748600007

**Abstract:** Titanium alloys and particularly TA6V are much used in the domain of the aerospace industry and also of chemical engineering. The thermal treatment by laser of these alloys helps for the improvement of their physico-chemical properties. The laser energy is transformed on the surface of the metallic specimen to thermal energy or heat; this heat diffuses to the interior of the specimen. The microstructure obtained after the laser treatment are metastable ones obtained by quenching out-of equilibrium microstructures; this is due in the case of the laser treatment to the fact that the heating time is a fraction of a second and the cooling rate is very high, in the order of 10(3)K/s. The microstructures obtained are fine with interesting physico-chemical properties. Considering the strong reaction of titanium with O-2 and N-2, and in order to avoid modifying the resulting microstructure on the surface, a protection against environment during the thermal treatment by laser is required. Blowing argon on the specimens, during the laser treatment results in contaminated materials. The protection against environment is satisfactory when the specimens are treated in a box of Plexiglas filled with argon.

**Notes:** Adnani-Amardjia, H Abdi, D Boucenna, A**URL:** <Go to ISI>://WOS:000082748600007

**Reference Type: Journal Article****Record Number:** 6**Author:** Ahmed, E. Zegadi, A. Hill, A. E. Pilkington, R. D. Tomlinson, R. D.**Year:** 1995**Title:** Optical properties of flash-evaporated  $\text{CuIn}_{0.75}\text{Ga}_{0.25}\text{Se}_2$  thin films by photoacoustic spectroscopy**Journal:** Thin Solid Films**Volume:** 268**Issue:** 1-2**Pages:** 144-151**Date:** Nov**Short Title:** Optical properties of flash-evaporated  $\text{CuIn}_{0.75}\text{Ga}_{0.25}\text{Se}_2$  thin films by photoacoustic spectroscopy**ISSN:** 0040-6090**DOI:** 10.1016/0040-6090(95)06811-2**Accession Number:** WOS:A1995TL76500024

**Abstract:** A high-resolution near-infrared photoacoustic spectrometer of the gas-microphone type is used for room-temperature analysis (in the subgap region of the spectrum) of non-radiative defect levels in as-grown  $\text{CuIn}_{0.75}\text{Ga}_{0.25}\text{Se}_2$  thin films. Films were grown by flash evaporation onto glass substrates at 200 degrees C. The absorption coefficient has been derived from the photoacoustic spectra to determine the gap energy and establish the activation energies for several defect-related energy levels. We also present preliminary results relating to the influence of postdeposition heat treatments in a selenium atmosphere on the photoacoustic spectral response. The improvements in the photoacoustic spectrum following annealing are directly correlated with the sample compositional, structural and electrical properties. Finally, the effect of interference on the photoacoustic spectra is discussed.

**Notes:** Ahmed, E Zegadi, A Hill, AE Pilkington, RD Tomlinson, RD**URL:** <Go to ISI>://WOS:A1995TL76500024

7**Reference Type: Journal Article****Record Number:** 7**Author:** Amardjia-Adnani, H. Abdi, D. Boucenna, A. Pelletier, J. M.**Year:** 1999**Title:** Microstructure of laser melted titanium alloys**Journal:** Lasers in Engineering**Volume:** 9**Issue:** 3**Pages:** 157-168**Short Title:** Microstructure of laser melted titanium alloys**ISSN:** 0898-1507**Accession Number:** WOS:000084949300001

**Abstract:** Titanium alloy Ti-6 % Al-4% V was surface melted using a CO<sub>2</sub> laser beam. Depth of the melted zone may be up to 4mm. The resulting microstructure of the melted zone is very fine and consists of alpha' grains (metastable martensitic microstructure). The average size of these alpha' grains depends on laser processing parameters (density laser energy, laser scanning rate) and on location in the treated zone. Results are discussed in connection with the solidification process.

**Notes:** Amardjia-Adnani, H Abdi, D Boucenna, A Pelletier, JM**URL:** <Go to ISI>://WOS:000084949300001



**Reference Type: Journal Article****Record Number:** 8**Author:** Arrar, L. Selloum, L. Maiza, A. Touabti, A. Allali, M. Guenfoud, K.**Year:** 1995**Title:** RELATIONSHIP BETWEEN LEVELS OF IGG AND IGM AND IGM RHEUMATOID-FACTOR IN HUMAN SERA**Journal:** Biochemical Society Transactions**Volume:** 23**Issue:** 3**Pages:** S475-S475**Date:** Aug**Short Title:** RELATIONSHIP BETWEEN LEVELS OF IGG AND IGM AND IGM RHEUMATOID-FACTOR IN HUMAN SERA**ISSN:** 0300-5127**Accession Number:** WOS:A1995RU08500138**Notes:** Arrar, l selloum, l maiza, a touabti, a allali, m guenfoud, k 654th Meeting of the Biochemical-Society Apr 04-07, 1995 Leicester, england Biochem Soc**URL:** <Go to ISI>://WOS:A1995RU08500138

**Reference Type: Journal Article****Record Number:** 9**Author:** Bartel, J. Bencheikh, K. Chabanat, E. Meyer, J.**Year:** 1996**Title:** Extended Thomas-Fermi description of rotating nuclei**Journal:** Acta Physica Polonica B**Volume:** 27**Issue:** 1-2**Pages:** 133-137**Date:** Jan-Feb**Short Title:** Extended Thomas-Fermi description of rotating nuclei**ISSN:** 0587-4254**Accession Number:** WOS:A1996UA91300014

**Abstract:** We present a semiclassical description of rotating nuclei in the framework of the Extended Thomas-Fermi density functional theory up to order  $\langle \hbar \rangle^2$ . It leads to functional expressions of quantities such as the kinetic energy, current and spin vector densities in terms of the local (spin-scalar) density  $\rho(r)$  alone. For effective nucleon-nucleon interactions of the Skyrme type a simple analytical expression is obtained for moments of inertia. It consists, at lowest order, of the Thomas-Fermi (TF) term which is shown to be identical to the rigid-body moment of inertia and semiclassical corrections of order  $\langle \hbar \rangle^2$  which are small. The importance of the Thouless-Valatin selfconsistency terms which are included in our approach, is pointed out. Within this approach we have performed self-consistent semiclassical calculations in the restricted space of diffuse (Fermi type) densities and ellipsoidal triaxial shapes. Our analysis is qualitatively consistent with LDM results as in the paper by Cohen, Plasil and Swiatecki. However a significant dependence of the LDM parameters as function of the angular momentum has been pointed out. Generalizing our method to finite temperature we recover functional expressions formally similar to the  $T = 0$  case with temperature dependent coefficients. The above formalism has also been extended to the semi-quantal description of other large amplitude collective modes and of their couplings. In particular it has been applied to the dynamics of a rigid rotation coupled with a simple (uniform) intrinsic vortical motion.

**Notes:** Bartel, J Bencheikh, K Chabanat, E Meyer, J High Angular Momentum Phenomena Workshop, in Honour of Zdzislaw Szymanski Aug 23-26, 1995 Piaski, poland

**URL:** <Go to ISI>://WOS:A1996UA91300014

**Reference Type: Journal Article****Record Number:** 10**Author:** Beck, D. P. Wery, J. Saxena, M. C. Ayadi, A.**Year:** 1991**Title:** DINITROGEN FIXATION AND NITROGEN-BALANCE IN COOL-SEASON FOOD LEGUMES**Journal:** Agronomy Journal**Volume:** 83**Issue:** 2**Pages:** 334-341**Date:** Mar-Apr**Short Title:** DINITROGEN FIXATION AND NITROGEN-BALANCE IN COOL-SEASON FOOD LEGUMES**ISSN:** 0002-1962**Accession Number:** WOS:A1991FF78200015

**Abstract:** Understanding the magnitude of N<sub>2</sub> fixation and export of plant N, particularly in the harvested grain and straw, is necessary to assess the potential for grain legumes to contribute to long-term agricultural production stability. The proportions of total plant N derived from N<sub>2</sub> fixation in four grain legume crops, faba bean (*Vicia faba* L.), chickpea (*Cicer arietinum* L.), lentil (*lens culinaris* L), and pea (*Pisum sativum* L.), were estimated in three field experiments conducted for two seasons in Syria (Vertic Chromoxeralf soil) and one season in France (Calcaric Cambisol). Since cultural practices and cultivars affect grain yield, the impact of N<sub>2</sub> fixation of sowing date in chickpea and Sitona insect control in lentil, and of cultivar selection of pea and faba bean, was evaluated. By calculating the proportion of total plant N derived from N<sub>2</sub> fixation (%Ndfa) using N-15 isotope dilution with barley (*Hordeum vulgare* L.) and non-nodulating chickpea as reference crops, the effects of removal of N in grain and straw, relative to N fixed and plant uptake of soil mineral N, were estimated. Pea and lentil had similar %Ndfa values across locations, seasons, and cultural practices, with an average 70%Ndfa. In chickpea, winter sowing increased %Ndfa to 72 from 26% in the spring-sown crop. Dinitrogen fixation in the spring-sown crop was higher in France (44%Ndfa), while fixation in the winter crop was higher in Syria (80%). Faba bean obtained 90%Ndfa in France, but only 69% in Syria. The large-seeded type fixed higher N (74%Ndfa) than the small-seeded type (64%) in Syria but not in France. The calculated N balance where only grain was removed ranged from 44 kg N ha<sup>-1</sup> net gain to 44 kg N ha<sup>-1</sup> loss. Where both seed and straw were removed, nearly all calculations were negative, with loss of up to 70 kg N ha<sup>-1</sup> from soil.

**Notes:** Beck, dp wery, j saxena, mc ayadi, a**URL:** <Go to ISI>://WOS:A1991FF78200015

11

**Reference Type: Journal Article**

**Record Number: 11**

**Author:** Belguith, J. Billiet, Y. Weigel, D.

**Year:** 1984

**Title:** 2-COLORED TWO-DIMENSIONAL CRYSTALS CONSIDERED ASSESSED (2+1)-  
DIMENSIONALS SEMI-CRYSTALS

**Journal:** Acta Crystallographica Section A

**Volume:** 40

**Issue:** NOV

**Pages:** 631-635

**Short Title:** 2-COLORED TWO-DIMENSIONAL CRYSTALS CONSIDERED ASSESSED  
(2+1)-DIMENSIONALS SEMI-CRYSTALS

**ISSN:** 0108-7673

**DOI:** 10.1107/s0108767384001306

**Accession Number:** WOS:A1984TU03100004

**Notes:** Belguith, j billiet, y weigel, d

**URL:** <Go to ISI>://WOS:A1984TU03100004

**Reference Type: Journal Article****Record Number:** 12**Author:** Belkhiat, S.**Year:** 1997**Title:** Surface study of Cu-4at%Be: Surface stability**Journal:** Annales De Chimie-Science Des Materiaux**Volume:** 22**Issue:** 3-4**Pages:** 183-188**Short Title:** Surface study of Cu-4at%Be: Surface stability**ISSN:** 0151-9107**Accession Number:** WOS:A1997XN44900011

**Abstract:** Auger electron Spectroscopy (AES) has been used to study the surface of a copper beryllium alloy (4 at.% Be). We studied its oxidation at various temperature and compared with the surface evolution after an hydrogen adsorption. In this work, we followed the surface stability after a progressive oxidation, an oxidation at 500 degrees C and a hydrogenation. We showed that the segregation of Be oxide is irreversible. We followed the surface atomic composition, in a hydrogen atmosphere, as a function of temperature. Contrary to oxidation, hydrogenation leads to a copper enrichment and induces a passivation of the surface towards further oxidation.

**Notes:** Belkhiat, S 5th North-African Materials Science Symposium Nov 08-10, 1996 Hammamet, tunisia

**URL:** <Go to ISI>://WOS:A1997XN44900011

**Reference Type: Journal Article****Record Number:** 13**Author:** Belkhiat, S.**Year:** 1998**Title:** Kinetics of BeO formation at the surface of a Cu-Be alloy**Journal:** Annales De Chimie-Science Des Materiaux**Volume:** 23**Issue:** 1-2**Pages:** 445-454**Date:** Jan-Feb**Short Title:** Kinetics of BeO formation at the surface of a Cu-Be alloy**ISSN:** 0151-9107**DOI:** 10.1016/s0151-9107(98)80109-8**Accession Number:** WOS:000072825700099

**Abstract:** Auger Electrons Spectroscopy was used to follow the kinetics of beryllium oxide layer formation at the surface of a Cu-Be alloy. All the Auger spectra were recorded during heating in order to follow the thermal fluctuations and to monitor the oxidation kinetics of the surface under dynamic conditions. We showed that the process of beryllium oxide layer growth takes place in three sequences. Each sequence corresponds to one state of the surface. We characterized a competition between two physical phenomena which depend on temperature, namely the diffusion of oxygen in the Cu-Be bulk and the segregation-oxidation of Be. We showed that after 60 minutes of heating at 350 degrees C, 600 degrees C or 750 degrees C the second phenomenon becomes dominant and results in the appearance of oxidized beryllium at the surface. On the other hand, copper was oxidized after 45 minutes of heating at 600 degrees C and goes to the surface after 30 minutes of heating at 750 degrees C.

**Notes:** Belkhiat, S 7th Moroccan Meeting on Solid State Chemistry (REMCES VII) Oct 30-nov 01, 1996 Marrakech, morocco

**URL:** <Go to ISI>://WOS:000072825700099

**Reference Type: Journal Article****Record Number:** 14**Author:** Belkhir, A.**Year:** 1999**Title:** A comparative study of silver diffusion in a glass substrate for optical waveguide applications**Journal:** Ieee Journal of Quantum Electronics**Volume:** 35**Issue:** 3**Pages:** 306-311**Date:** Mar**Short Title:** A comparative study of silver diffusion in a glass substrate for optical waveguide applications**ISSN:** 0018-9197**DOI:** 10.1109/3.748835**Accession Number:** WOS:000078899200008

**Abstract:** Multimode optical waveguides are fabricated in two steps by electrodiffusion of silver ions in a soda-lime glass from a metallic coating and are characterized by the methods of integrated optics. In the first step, the electromigration process and the fabrication parameters are controlled through electrical measurements, and an effective diffusion coefficient is calculated at 230 degrees C from the Nernst-Einstein relation as well. In the second step, a new experimental method, allowing the calculation of silver and sodium self-diffusion coefficients, is presented. It is based on the diffusion equation from which it is shown that, for two given values of ion concentrations, the two diffusion coefficients are deduced. Both diffusion coefficients and optical properties of the waveguides are discussed and compared to the results of other works with which we find good agreement.

**Notes:** Belkhir, A**URL:** <Go to ISI>://WOS:000078899200008

**Reference Type: Journal Article****Record Number:** 15**Author:** Benachour, D.**Year:** 1997**Title:** Polymer education in Algeria: new challenges after 25 years**Journal:** Trends in Polymer Science**Volume:** 5**Issue:** 8**Pages:** 244-245**Date:** Aug**Short Title:** Polymer education in Algeria: new challenges after 25 years**ISSN:** 0966-4793**Accession Number:** WOS:A1997XR42000001**Notes:** Benachour, D**URL:** <Go to ISI>://WOS:A1997XR42000001



**Reference Type: Journal Article****Record Number:** 16**Author:** Benarioua, Y. Bouaouadja, N. Wendler, B.**Year:** 1996**Title:** Carbide formation in titanium coatings deposited on carbon steel**Journal:** Journal of Materials Science Letters**Volume:** 15**Issue:** 12**Pages:** 1067-1069**Date:** Jun**Short Title:** Carbide formation in titanium coatings deposited on carbon steel**ISSN:** 0261-8028**DOI:** 10.1007/bf00274909**Accession Number:** WOS:A1996UV97900020**Notes:** Benarioua, Y Bouaouadja, N Wendler, B**URL:** <Go to ISI>://WOS:A1996UV97900020

**Reference Type: Journal Article****Record Number:** 17**Author:** Benboubetra, M. Gleeson, A. Harris, C. P. D. Khan, J. Arrar, L. Brennand, D. Reid, J. Reckless, J. D. Harrison, R.**Year:** 1997**Title:** Circulating anti-(xanthine oxidoreductase) antibodies in healthy human adults**Journal:** European Journal of Clinical Investigation**Volume:** 27**Issue:** 7**Pages:** 611-619**Date:** Jul**Short Title:** Circulating anti-(xanthine oxidoreductase) antibodies in healthy human adults**ISSN:** 0014-2972**DOI:** 10.1046/j.1365-2362.1997.1550704.x**Accession Number:** WOS:A1997XL84500014

**Abstract:** Levels of free anti-(xanthine oxidoreductase) (XOR) antibodies in the serum of normal healthy human subjects were determined, using both human and bovine enzyme as antigen, in an enzyme-linked immunosorbent assay (ELISA). Levels of IgM class anti-(human XOR) antibodies were found to be particularly high (mean values representing approximately 3% of total IgM) and to be significantly higher than levels of IgM anti(bovine XOR) antibodies, indicating that endogenous XOR, rather than ingested bovine milk XOR, is the immunogen. IgM anti-XOR antibody levels were significantly higher in women under 50 years than in age-matched men, or in older women. Levels of IgG class anti-XOR antibodies were much lower and showed no correlation with gender or age. Affinity-purified anti-(human XOR) antibodies only partially inhibited enzymic activities of XOR. The majority of both IgM and IgG anti-(human XOR) antibodies in serum occurred as immune complexes, suggesting that the specific antibodies have a protective role in removing potentially damaging XOR from the circulation.

**Notes:** Benboubetra, M Gleeson, A Harris, CPD Khan, J Arrar, L Brennand, D Reid, J Reckless, JD Harrison, R Joint Symposium of the Biochemical-Society / Society-for-Free-Radical-Research 1993 Royal free hosp, london, england Biochem Soc, Soc Free Rad Res

**URL:** <Go to ISI>://WOS:A1997XL84500014

**Reference Type: Journal Article****Record Number:** 18**Author:** Bencheikh, K.**Year:** 1999**Title:** Properties of the semiclassical functionals in the case of broken time reversal symmetry**Journal:** Journal of Physics a-Mathematical and General**Volume:** 32**Issue:** 43**Pages:** 7483-7488**Date:** Oct**Short Title:** Properties of the semiclassical functionals in the case of broken time reversal symmetry**ISSN:** 0305-4470**DOI:** 10.1088/0305-4470/32/43/304**Accession Number:** WOS:000083693400005

**Abstract:** Starting with a general one-body Hamiltonian which includes an  $\langle \alpha \rangle$  over right arrow  $\cdot$  (p) over right arrow term describing the coupling between orbital motion and the arbitrary vector field  $\langle \alpha \rangle$  over right arrow, we investigate some properties of the semiclassical functionals of various physical quantities. In particular, we show that these functionals could be written in a very compact way. An approximate expression for the noninteracting total kinetic energy is given. We also show that these approximate semiclassical functionals transform by gauge transformation exactly as the corresponding exact quantum functionals.

**Notes:** Bencheikh, K**URL:** <Go to ISI>://WOS:000083693400005

**Reference Type: Journal Article****Record Number:** 19**Author:** Bencheikh, K. Quentin, P. Bartel, J. Meyer, J.**Year:** 1993**Title:** A SEMICLASSICAL DESCRIPTION OF RAPIDLY ROTATING NUCLEI**Journal:** Nuclear Physics A**Volume:** 557**Pages:** C459-C468**Date:** May**Short Title:** A SEMICLASSICAL DESCRIPTION OF RAPIDLY ROTATING NUCLEI**ISSN:** 0375-9474**Accession Number:** WOS:A1993LQ80300038

**Abstract:** A brief review is made of a recent semiclassical treatment of nuclear rotation where explicit and simple expressions for relevant densities and moments of inertia in terms of the matter densities of rotating nuclei, have been derived within the framework of the Extended Thomas-Fermi approximation upon using a Skyrme nucleon-nucleon effective interaction. As a result of preliminary non-fully self-consistent calculations, the moments of inertia are found not to deviate very much from the rigid body ansatz, since corrective terms arising from the orbital motion and the spin degrees of freedom are found to roughly cancel each other. We particularly develop here a proof of equivalence in our routhian approach, of kinematic and dynamic moments of inertia. As a testing case we have also extended the formalism to the translational case in the "pushing model" approach and found the right translational mass.

**Notes:** Bencheikh, k quentin, p bartel, j meyer, j 21st international symp on rapidly rotating nuclei Oct 26-30, 1992 Univ tokyo, hongo campus, tokyo, japan Univ tokyo, inst nucl study, inst phys & chem res, japan atom energy res inst, nishina mem fdn & commemorat assoc japan world exposit

**URL:** <Go to ISI>://WOS:A1993LQ80300038

**Reference Type: Journal Article****Record Number:** 20**Author:** Bencheikh, K. Quentin, P. Bartel, J.**Year:** 1994**Title:** ROTATIONS IN NUCLEI - A SEMICLASSICAL DESCRIPTION**Journal:** Nuclear Physics A**Volume:** 571**Issue:** 3**Pages:** 518-540**Date:** May**Short Title:** ROTATIONS IN NUCLEI - A SEMICLASSICAL DESCRIPTION**ISSN:** 0375-9474**DOI:** 10.1016/0375-9474(94)90223-2**Accession Number:** WOS:A1994NJ03700005

**Abstract:** An explicit formulation of extended Thomas-Fermi density functionals relevant to a microscopic description of rotating nuclei within the Skyrme Hartree-Fock formalism, is presented up to order  $\hbar^2$ . Simple analytical expressions have been obtained for the dynamical moments of inertia within this semiclassical framework. Phenomena identical to Landau orbital diamagnetism and Pauli spin paramagnetism have been exhibited upon using standard Skyrme force parametrizations. Both effects almost cancel. As a result, the Thomas-Fermi moments of inertia, which assume explicitly the rigid-body expression, turn out to represent a rather good approximation of the semiclassical results. Finally the validity of the Inglis formula is discussed in this context.

**Notes:** Bencheikh, k quentin, p bartel, j**URL:** <Go to ISI>://WOS:A1994NJ03700005

**Reference Type: Journal Article****Record Number:** 21**Author:** Bencheikh, L.**Year:** 1993**Title:** MODIFIED FUNDAMENTAL-SOLUTIONS FOR THE SCATTERING OF ELASTIC-WAVES BY A CAVITY - NUMERICAL RESULTS**Journal:** International Journal for Numerical Methods in Engineering**Volume:** 36**Issue:** 19**Pages:** 3283-3302**Date:** Oct**Short Title:** MODIFIED FUNDAMENTAL-SOLUTIONS FOR THE SCATTERING OF ELASTIC-WAVES BY A CAVITY - NUMERICAL RESULTS**ISSN:** 0029-5981**DOI:** 10.1002/nme.1620361906**Accession Number:** WOS:A1993MA93200005

**Abstract:** The boundary integral equation method is very often used to solve exterior problems of scattering of waves (elastic waves, acoustic waves, water waves and electromagnetic waves). It is known, however, that this method fails to provide a unique solution at the so-called irregular frequencies. This difficulty is inherent to the method used rather than the nature of the problem. In the context of elastodynamics, we proposed, in a recent work<sup>1</sup>, two methods for eliminating these irregular frequencies. Both are based on modifying the fundamental solution. Here we present numerical results pertaining to the solutions of the modified and unmodified integral equations.

**Notes:** Bencheikh, 1**URL:** <Go to ISI>://WOS:A1993MA93200005

**Reference Type: Journal Article****Record Number:** 22**Author:** Bencheikh, L.**Year:** 1995**Title:** LOW-FREQUENCY SCATTERING OF ELASTIC-WAVES BY A CAVITY USING A MATCHED ASYMPTOTIC-EXPANSION METHOD**Journal:** Journal of the Australian Mathematical Society Series B-Applied Mathematics**Volume:** 37**Pages:** 99-120**Date:** Jul**Short Title:** LOW-FREQUENCY SCATTERING OF ELASTIC-WAVES BY A CAVITY USING A MATCHED ASYMPTOTIC-EXPANSION METHOD**ISSN:** 0334-2700**Accession Number:** WOS:A1995RL14000007

**Abstract:** This work deals with low-frequency asymptotic solutions using the method of matched asymptotic expansions. It is based on two papers by Buchwald [3] and Buchwald and Tran Gong [4] who studied the diffraction of elastic waves by a small circular cavity and a small elliptic cavity, respectively, in an otherwise unbounded domain. Here we clarify and systematize some aspects of their work and extend it to the diffraction of elastic waves by a small cylindrical cavity with a hypotrochoidal boundary. Results for the case of an incident P-wave are compared, in the special case of an elliptic boundary, with the results from the numerical solution of the boundary integral equation method.

**Notes:** Bencheikh, 1 1**URL:** <Go to ISI>://WOS:A1995RL14000007

**Reference Type: Journal Article****Record Number:** 23**Author:** Bencheikh, Y.**Year:** 1999**Title:** Cross clustering and models**Journal:** Rairo-Recherche Operationnelle-Operations Research**Volume:** 33**Issue:** 4**Pages:** 525-541**Short Title:** Cross clustering and models**ISSN:** 0399-0559**DOI:** 10.1051/ro:1999122**Accession Number:** WOS:000084556500007

**Abstract:** The relations between automatic clustering methods and inferential statistical models have mostly been studied when the data involves only one set. We propose to study these relations in the case of data involving two sets. We shall look at cross clustering methods as suggested by Govaert [6]; we show that these methods, like the simple clustering methods, can be considered as a clustering approach of a mixture model. We introduce the notion of crossed mixture from a concret example and define the notions of likelihood and associated clustered likelihood. Then, we study the relations which exist between the crossed mixture models and simple models and we show that these relations are completely similar to those which exist between the crossed clustering methods and simple clustering methods.

**Notes:** Bencheikh, Y**URL:** <Go to ISI>://WOS:000084556500007



**Reference Type: Journal Article****Record Number:** 24**Author:** BencherifMadani, A.**Year:** 1995**Title:** A new construction of the local time of a semi-stable process**Journal:** Comptes Rendus De L Academie Des Sciences Serie I-Mathematique**Volume:** 321**Issue:** 11**Pages:** 1509-1511**Date:** Dec**Short Title:** A new construction of the local time of a semi-stable process**ISSN:** 0764-4442**Accession Number:** WOS:A1995TK67300021

**Abstract:** Let  $X(t)$  be a Stone [6] semi stable process of indices  $(\alpha, \nu)$ ,  $\alpha \in ]1, 2[$  and  $\nu \in ]-1, \infty[$ . Let  $I(k)$  be the interval  $[k2^{-n}, (k+1)2^{-n}]$ ,  $N(n)$  be the number of these intervals that contain a zero of  $X(t)$  for  $k=0, \dots, 2^n-1$  and  $K(n)$  be the functional  $N(n)/2^n$  where  $\beta = (\alpha-1)/(\alpha+\nu)$ . We show that  $\lim_{n \rightarrow \infty} K(n) = cL(1)$ ,  $L(t)$  being the local time at the origin and  $c$  a constant independent of  $\omega$ .

**Notes:** BencherifMadani, A**URL:** <Go to ISI>://WOS:A1995TK67300021

**Reference Type: Journal Article****Record Number:** 25**Author:** Benkherourou, O. Deville, J. P.**Year:** 1998**Title:** Ar<sup>+</sup> and He<sup>+</sup>-ion influence on Si-2p and O-1s atomic lines: an XPS study**Journal:** Vacuum**Volume:** 49**Issue:** 2**Pages:** 121-124**Date:** Feb**Short Title:** Ar<sup>+</sup> and He<sup>+</sup>-ion influence on Si-2p and O-1s atomic lines: an XPS study**ISSN:** 0042-207X**DOI:** 10.1016/s0042-207x(97)00148-6**Accession Number:** WOS:000072473700008

**Abstract:** Quantitative XPS analysis was used to examine the modification in a thin silica surface of its stoichiometry by the determination of nO/nSi atomic ratios after Ar<sup>+</sup>-ion and He<sup>+</sup>-ion bombardment under the fixed conditions of 1 keV energy and 1.5 x 10<sup>16</sup> ions cm<sup>-2</sup> fluence for Ar<sup>+</sup>-ions; and 3 keV and 1 x 10<sup>17</sup> ions cm<sup>-2</sup> fluence for He<sup>+</sup>-ions. The qualitative information, under the above conditions, shows that there is an evidence of the line width (or FWHM) stability. This effect is from conservation of chemical environment around the silicon atoms, resulting from the summation weighted over different local atomic environments. In addition, after this examination, the surface is annealed at 500 degrees C for 1 h in a way that a silica surface can be restored eventually. This operation shows that the previous surface is not disturbed under ion-beam treatment and thus the silica surface remains undamaged. (C) 1998 Elsevier Science Ltd. All rights reserved.

**Notes:** Benkherourou, O Deville, JP**URL:** <Go to ISI>://WOS:000072473700008

**Reference Type: Journal Article****Record Number:** 26**Author:** Benkherourou, O. Sahnoune, S. Djabi, M. Deville, J. P.**Year:** 1999**Title:** Analysis of photoemission lines in silicon nitrided layers formed by low-energy nitrogen ion implantation in silicon**Journal:** Vacuum**Volume:** 53**Issue:** 3-4**Pages:** 427-433**Date:** Jun**Short Title:** Analysis of photoemission lines in silicon nitrided layers formed by low-energy nitrogen ion implantation in silicon**ISSN:** 0042-207X**DOI:** 10.1016/s0042-207x(98)00465-5**Accession Number:** WOS:000080055000010

**Abstract:** The in-depth composition of silicon nitrided layers obtained by low-energy ion implantation of nitrogen atoms (6 keV;  $3 \times 10^{17}$  ions  $\text{cm}^{-2}$ ) into silicon single crystal was analyzed using X-ray photoelectron spectroscopy coupled with ion milling. Besides elemental composition, the XPS lines allow the description of local morphology through a decomposition of spectra in a set of one to five components after each argon-ion etching step. In this way, this procedure is used for the characterisation of the interfacial region between the pure silicon substrate and the  $\text{Si}_3\text{N}_4$  layer, which can be compared with the theoretical models: such as the random bonding model (RBM) or random mixture model (RMM). However, in this interfacial area, there is evidence of a pile-up of nitrogen atoms which correlates with its role in determining electronic properties. (C) 1999 Elsevier Science Ltd. All rights reserved.

**Notes:** Benkherourou, O Sahnoune, S Djabi, M Deville, JP**URL:** <Go to ISI>://WOS:000080055000010

**Reference Type: Journal Article****Record Number:** 27**Author:** Benmahammed, K.**Year:** 1994**Title:** EVALUATION OF COMPLEX POLYNOMIALS IN ONE AND 2 VARIABLES**Journal:** Multidimensional Systems and Signal Processing**Volume:** 5**Issue:** 3**Pages:** 245-261**Date:** Jul**Short Title:** EVALUATION OF COMPLEX POLYNOMIALS IN ONE AND 2 VARIABLES**ISSN:** 0923-6082**DOI:** 10.1007/bf00980708**Accession Number:** WOS:A1994NP91700003

**Abstract:** New techniques for the evaluation of complex polynomials in one and two variables are presented. Polynomials arise in many areas of network analysis, synthesis, etc., and their evaluations are time consuming. This paper introduces new algorithms that are straightforward and require fewer arithmetic operations which are easily

**Notes:** Benmahammed, k**URL:** <Go to ISI>://WOS:A1994NP91700003

**Reference Type: Journal Article****Record Number:** 28**Author:** Benmakroha, F. Boudjerda, T. Boufenar, R. Allag, H. Djerboua, F. McCallum, J. J.**Year:** 1993**Title:** MONITORING OF SULFUR-DIOXIDE USING A PIEZOELECTRIC CRYSTAL BASED CONTROLLER**Journal:** Analyst**Volume:** 118**Issue:** 4**Pages:** 401-406**Date:** Apr**Short Title:** MONITORING OF SULFUR-DIOXIDE USING A PIEZOELECTRIC CRYSTAL BASED CONTROLLER**ISSN:** 0003-2654**DOI:** 10.1039/an9931800401**Accession Number:** WOS:A1993KY80600015

**Abstract:** A piezoelectric crystal based detector/controller for monitoring the level of sulfur dioxide in the environment is described. In this instance, the device is configured as a detector/monitor giving an alarm rather than a control function. Additionally, a transmitter was added to allow remote monitoring. Coatings studied included ethylenedinitrilotetraethanol, triethanolamine and quadrol. Good results were obtained at ambient and higher than ambient temperatures.

**Notes:** Benmakroha, f boudjerda, t boufenar, r allag, h djerboua, f mccallum, jj Symp on sensors and signals, at the 1992 autumn meeting of the royal soc of chemistry Sep 16-18, 1992 Trinity coll, dublin, ireland Royal soc chem, anal div

**URL:** <Go to ISI>://WOS:A1993KY80600015

**Reference Type: Journal Article****Record Number:** 29**Author:** Benouattas, N. Tamaarat, B. Bouabellou, A. Halimi, R. Mosser, A.**Year:** 1999**Title:** Electrical properties of Cr/Si(p) structures**Journal:** Solid-State Electronics**Volume:** 43**Issue:** 2**Pages:** 439-446**Date:** Feb**Short Title:** Electrical properties of Cr/Si(p) structures**ISSN:** 0038-1101**DOI:** 10.1016/s0038-1101(98)00187-7**Accession Number:** WOS:000077736000030

**Abstract:** A chromium layer was evaporated on single-crystal silicon wafers ions implanted with phosphorus at 40 keV to doses of  $5 \times 10^{14}$  and  $5 \times 10^{15}$  atm cm<sup>(-2)</sup>. Interface reaction was followed by Rutherford backscattering spectroscopy and X-ray diffraction analysis. In order to investigate the charge carrier transport mechanism across the Cr/Si interface, I-V and C-V characteristics were measured in Cr/Si samples thermally annealed at 475 degrees C and 550 degrees C for a variety of time lengths. The degradation of Cr/Si structures deviating from Schottky barriers behavior is noted and the p-type conductivity of CrSi<sub>2</sub> was confirmed. (C) 1998 Published by Elsevier Science Ltd. All rights reserved.

**Notes:** Benouattas, N Tamaarat, B Bouabellou, A Halimi, R Mosser, A**URL:** <Go to ISI>://WOS:000077736000030

**Reference Type: Journal Article****Record Number:** 30**Author:** Benseghir, A. Closset, J. L.**Year:** 1996**Title:** The electrostatics-electrokinetics transition: Historical and educational difficulties**Journal:** International Journal of Science Education**Volume:** 18**Issue:** 2**Pages:** 179-191**Date:** Mar**Short Title:** The electrostatics-electrokinetics transition: Historical and educational difficulties**ISSN:** 0950-0693**DOI:** 10.1080/0950069960180204**Accession Number:** WOS:A1996UG05800004

**Abstract:** This study deals with the transition between electrostatics and electrokinetics from two points of view, the historical and psychological. In both cases it is shown that previously acquired knowledge of electrostatics is liable to be a 'deforming prism' in the study of electric circuits. We examine the use of ideas from electrostatics during the initial study of current phenomena.

**Notes:** Benseghir, A Closset, JL**URL:** <Go to ISI>://WOS:A1996UG05800004

**Reference Type: Journal Article****Record Number:** 31**Author:** Berdjane, Z. Rueda, D. R. Baltacalleja, F. J.**Year:** 1993**Title:** INFLUENCE OF POLYMERIZATION TIME ON THE PROPERTIES OF POLYPYRROLE GROWN AT THE SURFACE OF SULFONATED POLYETHYLENE FILMS**Journal:** Synthetic Metals**Volume:** 55**Issue:** 2-3**Pages:** 1153-1158**Date:** Mar**Short Title:** INFLUENCE OF POLYMERIZATION TIME ON THE PROPERTIES OF POLYPYRROLE GROWN AT THE SURFACE OF SULFONATED POLYETHYLENE FILMS**ISSN:** 0379-6779**DOI:** 10.1016/0379-6779(93)90216-j**Accession Number:** WOS:A1993LH62000071**Abstract:** The influence of polymerization time on the electrical properties of polypyrrole grown at the sulfonated surface of polyethylene films has been investigated. Sulfonated films of low and high density polyethylene with two very different sulfonation degrees values (0.15 and almost-equal-to 2.5 g/m<sup>2</sup>) were used as substrate of the polymerization reaction. Infrared data from freshly prepared samples and data concerning electrical conductivity are presented.**Notes:** Berdjane, z rueda, dr baltacalleja, fj International conf on science and technology of synthetic metals ( icsm 92 ) Aug 12-18, 1992 Goteborg, sweden**URL:** <Go to ISI>://WOS:A1993LH62000071



**Reference Type: Journal Article****Record Number:** 32**Author:** Billiet, Y.**Year:** 1984**Title:** PERMISSIBLE INDEXES FOR MAXIMAL ISOMORPHIC SUBGROUPS OF TWO-DIMENSIONAL SPACE-GROUPS**Journal:** Acta Crystallographica Section A**Volume:** 40**Pages:** C457-C457**Short Title:** PERMISSIBLE INDEXES FOR MAXIMAL ISOMORPHIC SUBGROUPS OF TWO-DIMENSIONAL SPACE-GROUPS**ISSN:** 0108-7673**Accession Number:** WOS:A1984TK54501328**Notes:** Billiet, y S**URL:** <Go to ISI>://WOS:A1984TK54501328

**Reference Type: Journal Article****Record Number:** 33**Author:** Billiet, Y. Sayari, A.**Year:** 1984**Title:** ISOMORPHIC SUBGROUPS OF A SPATIAL GROUP OF TYPE-P4 .1. UNIVOCAL DETERMINATION**Journal:** Acta Crystallographica Section A**Volume:** 40**Issue:** NOV**Pages:** 624-631**Short Title:** ISOMORPHIC SUBGROUPS OF A SPATIAL GROUP OF TYPE-P4 .1. UNIVOCAL DETERMINATION**ISSN:** 0108-7673**DOI:** 10.1107/s010876738400129x**Accession Number:** WOS:A1984TU03100003**Notes:** Billiet, y sayari, a**URL:** <Go to ISI>://WOS:A1984TU03100003

**Reference Type: Journal Article****Record Number:** 34**Author:** Bosch, F. X. Manos, M. M. Munoz, N. Sherman, M. Jansen, A. M. Peto, J. Schiffman, M. H. Moreno, V. Kurman, R. Shah, K. V. Alihonou, E. Bayo, S. Mokhtar, H. C. Chicareon, S. Daudt, A. Delosrios, E. Ghadirian, P. Kitinya, J. N. Koulibaly, M. Ngelangel, C. Tintore, L. M. P. Riosdalen, J. L. Sarjadi, Schneider, A. Tafur, L. Teyssie, A. R. Rolon, P. A. Torroella, M. Tapia, A. V. Wabinga, H. R. Zatonski, W. Sylla, B. Vizcaino, P. Magnin, D. Kaldor, J. Greer, C. Wheeler, C.**Year:** 1995**Title:** PREVALENCE OF HUMAN PAPILLOMAVIRUS IN CERVICAL-CANCER - A WORLDWIDE PERSPECTIVE**Journal:** Journal of the National Cancer Institute**Volume:** 87**Issue:** 11**Pages:** 796-802**Date:** Jun**Short Title:** PREVALENCE OF HUMAN PAPILLOMAVIRUS IN CERVICAL-CANCER - A WORLDWIDE PERSPECTIVE**ISSN:** 0027-8874**DOI:** 10.1093/jnci/87.11.796**Accession Number:** WOS:A1995RA84300009

**Abstract:** Background: Epidemiologic studies have shown that the association of genital human papillomavirus (HPV) with cervical cancer is strong, independent of other risk factors, and consistent in several countries. There are more than 20 different cancer-associated HPV types, but little is known about their geographic variation. Purpose: Our aim was to determine whether the association between HPV infection and cervical cancer is consistent worldwide and to investigate geographic variation in the distribution of HPV types. Methods: More than 1000 specimens from sequential patients with invasive cervical cancer were collected and stored frozen at 32 hospitals in 22 countries. Slides from all patients were submitted for central histologic review to confirm the diagnosis and to assess histologic characteristics. We used polymerase chain reaction-based assays capable of detecting more than 25 different HPV types. A generalized linear Poisson model was fitted to the data on viral type and geographic region to assess geographic heterogeneity. Results: HPV DNA was detected in 93% of the tumors, with no significant variation in HPV positivity among countries, HPV 16 was present in 50% of the specimens, HPV 18 in 14%, HPV 45 in 8%, and HPV 31 in 5%, HPV 16 was the predominant type in all countries except Indonesia, where HPV 18 was more common, There was significant geographic variation in the prevalence of some less common virus types. A clustering of HPV 45 was apparent in western Africa, while HPV 39 and HPV 59 were almost entirely confined to Central and South America, In squamous cell tumors, HPV 16 predominated (51% of such specimens), but HPV 18 predominated in adenocarcinomas (56% of such tumors) and adenosquamous tumors (39% of such tumors), Conclusions: Our results confirm the role of genital HPVs, which are transmitted sexually, as the central etiologic factor in cervical cancer worldwide. They also suggest that most genital HPVs are associated with cancer, at least occasionally. Implication: The demonstration that more than 20 different genital HPV types are associated with cervical cancer has important implications for cervical cancer-prevention strategies that include the development of vaccines targeted to genital HPVs.

**Notes:** Bosch, fx manos, mm munoz, n sherman, m jansen, am peto, j schiffman, mh moreno, v kurman, r shah, kv alihonou, e bayo, s mokhtar, hc chicareon, s daudt, a delosrios, e ghadirian, p kitinya, jn koulibaly, m ngelangel, c tintore, lmp riosdalen, jl sarjadi schneider, a tafur, l teyssie, ar rolon, pa torroella, m tapia, av wabinga, hr zatonski, w sylla, b vizcaino, p magnin, d kaldor, j greer, c wheeler, c

**URL:** <Go to ISI>://WOS:A1995RA84300009

**Reference Type: Journal Article****Record Number:** 35**Author:** Bottreau, A. M. Boutaudon, A. Sardos, R. Merzouki, A.**Year:** 1997**Title:** Couple epsilon, mu behaviour study by the electromagnetic response of the composite PVC/Fe(3)O4 by time domain spectroscopy and measurements at 10 GHz versus the applied magnetic field**Journal:** Journal De Physique Iv**Volume:** 7**Issue:** C1**Pages:** 413-414**Date:** Mar**Short Title:** Couple epsilon, mu behaviour study by the electromagnetic response of the composite PVC/Fe(3)O4 by time domain spectroscopy and measurements at 10 GHz versus the applied magnetic field**ISSN:** 1155-4339**DOI:** 10.1051/jp4:19971166**Accession Number:** WOS:A1997XE52900170**Abstract:** Using the time domain spectroscopy (TDS) and a 10 GHz three waves reflecto - interferometer (TWRI) with an applied magnetic field we have measured epsilon mu as a function of the volumetric fraction of the composite material PVC-Fe3O4. The experimental results are compared to several mixing laws. Further, the moment expansion of the scattering matrix up to fifth order enables us to determine the size parameter as a function of the volumetric fraction.**Notes:** Bottreau, AM Boutaudon, A Sardos, R Merzouki, A 7th International Conference on Ferrites (ICF 7) Sep 03-06, 1996 Bordeaux, france**URL:** <Go to ISI>://WOS:A1997XE52900170

**Reference Type: Journal Article****Record Number:** 36**Author:** Bottreau, A. M. Boutaudon, A. Merzouki, A. Merzouki, A.**Year:** 1997**Title:** Dielectric study of some composites polymer/carbon in a broadband of frequencies .1. experimental results**Journal:** Journal De Chimie Physique Et De Physico-Chimie Biologique**Volume:** 94**Issue:** 9**Pages:** 1568-1586**Date:** Sep**Short Title:** Dielectric study of some composites polymer/carbon in a broadband of frequencies .1. experimental results**ISSN:** 0021-7689**Accession Number:** WOS:A1997XZ52500004**Abstract:** The authors have studied some composites polymer/carbon in a large band of frequencies. This research was motivated by the possibility substituting storage battery at present in lead by composite plate. We present here results obtained first on neat materials and second on those exposed to acid surroundings (H<sub>2</sub>SO<sub>4</sub>) during six months. The results show the influence of an acid medium on each kind of polymer matrices.**Notes:** Bottreau, AM Boutaudon, A Merzouki, A Merzouki, A**URL:** <Go to ISI>://WOS:A1997XZ52500004

**Reference Type: Journal Article****Record Number:** 37**Author:** Bottreau, A. M. Merzouki, A. Boutaudon, A.**Year:** 1996**Title:** Water study in porous media with large granulometry by time domain spectroscopy**Journal:** Journal De Chimie Physique Et De Physico-Chimie Biologique**Volume:** 93**Issue:** 6**Pages:** 1100-1116**Date:** Jun**Short Title:** Water study in porous media with large granulometry by time domain spectroscopy**ISSN:** 0021-7689**Accession Number:** WOS:A1996UT42000002

**Abstract:** In a previous publication [1], we had determined the existence of three types of water (adsorbed, bonded and quasi free) in sintered glasses with water, versus, the porosity and the percentage of water, (for a granulometry of 62 to 75  $\mu\text{m}$ ). Following this study on sintered glasses with a larger granulometry  $128 < \mu < 148 \mu\text{m}$  and  $320 < \mu < 350 \mu\text{m}$ , the same types of water have been found. Furthermore we have determined a conductivity which appears with the presence of a weakly bonded water. A correlation with a static permittivity variation has been established.

**Notes:** Bottreau, AM Merzouki, A Boutaudon, A**URL:** <Go to ISI>://WOS:A1996UT42000002

**Reference Type: Journal Article****Record Number:** 38**Author:** Bouamama, K. Horig, W. Neumann, H.**Year:** 1998**Title:** Temperature dependence of photoreflectance measurements in Ga<sub>0.47</sub>In<sub>0.53</sub>As epitaxial layers**Journal:** Semiconductor Science and Technology**Volume:** 13**Issue:** 1**Pages:** 75-78**Date:** Jan**Short Title:** Temperature dependence of photoreflectance measurements in Ga<sub>0.47</sub>In<sub>0.53</sub>As epitaxial layers**ISSN:** 0268-1242**DOI:** 10.1088/0268-1242/13/1/011**Accession Number:** WOS:000071401500010

**Abstract:** Photoreflectance (PR) spectra were measured for different temperatures within the range from 78 K to 287 K. The obtained PR spectra of both LPE and VPE grown samples measured at different temperatures show Franz-Keldysh oscillations near the bandgap E<sub>0</sub>. These spectra are well fitted with the cosine function approximation. The behaviour of E<sub>0</sub> with temperature is shown to be temperature-range dependent. E<sub>0</sub> varies linearly with temperatures above 150 K while this is not the case when T falls below 150 K. The obtained values for the energy bandgap E<sub>0</sub>, the temperature coefficient dE<sub>0</sub>/dT and the spin-orbit splitting Δ(0) are compared with the published data in the literature.

**Notes:** 'Bouamama, K Horig, W Neumann, H**URL:** <Go to ISI>://WOS:000071401500010

**Reference Type: Journal Article****Record Number:** 39**Author:** Bouaouadja, N. Hamidouche, M. Osmani, H. Fantozzi, G.**Year:** 1994**Title:** FRACTURE-TOUGHNESS OF WC-CO CEMENTED CARBIDES AT ROOM-TEMPERATURE**Journal:** Journal of Materials Science Letters**Volume:** 13**Issue:** 1**Pages:** 17-19**Date:** Jan**Short Title:** FRACTURE-TOUGHNESS OF WC-CO CEMENTED CARBIDES AT ROOM-TEMPERATURE**ISSN:** 0261-8028**DOI:** 10.1007/bf02352907**Accession Number:** WOS:A1994MR06000007**Notes:** Bouaouadja, n hamidouche, m osmani, h fantozzi, g**URL:** <Go to ISI>://WOS:A1994MR06000007



**Reference Type: Journal Article****Record Number:** 40**Author:** Bouaouadja, N. Hamidouche, M. Osmani, H. Orange, G. Fantozzi, G.**Year:** 1994**Title:** TEMPERATURE EFFECT ON THE FRACTURE-TOUGHNESS OF WC 25-PERCENT CO CERMET**Journal:** Journal of Materials Science Letters**Volume:** 13**Issue:** 23**Pages:** 1691-1693**Date:** Dec**Short Title:** TEMPERATURE EFFECT ON THE FRACTURE-TOUGHNESS OF WC 25-PERCENT CO CERMET**ISSN:** 0261-8028**DOI:** 10.1007/bf00451742**Accession Number:** WOS:A1994PX08400013**Notes:** Bouaouadja, n hamidouche, m osmani, h orange, g fantozzi, g**URL:** <Go to ISI>://WOS:A1994PX08400013

**Reference Type: Journal Article****Record Number:** 41**Author:** Bouaouadja, N. Hamidouche, M. Fantozzi, G.**Year:** 1994**Title:** TEMPERATURE EFFECT ON THE MECHANICAL-BEHAVIOR OF WC-CO CEMENTED CARBIDES**Journal:** Revue Internationale Des Hautes Temperatures Et Des Refractaires**Volume:** 29**Issue:** 4**Pages:** 115-121**Short Title:** TEMPERATURE EFFECT ON THE MECHANICAL-BEHAVIOR OF WC-CO CEMENTED CARBIDES**ISSN:** 0035-3434**Accession Number:** WOS:A1994QP19700002

**Abstract:** This work is based on a study of the mechanical behaviour of four WC-Co cemented carbides grades at high temperature. The tests, carried out in four point bending, have allowed to establish the variations of fracture stress, elastic limit and elastic modulus versus temperature. All these properties decrease regularly as the temperature increases. Weibull's modulus has been determined at 600 and 800 degrees C. The effects of: processing defects, cobalt content and temperature, on the scattering values of fracture stress have been discussed. An exponential expression is adjusted to the  $E=f(T)$  curves taking into account volumic cobalt fraction, temperature, activation energy of Co and WC/Co interface, and the porosity.

**Notes:** Bouaouadja, n hamidouche, m fantozzi, g**URL:** <Go to ISI>://WOS:A1994QP19700002

**Reference Type: Journal Article****Record Number:** 42**Author:** Bouarissa, N.**Year:** 1998**Title:** Electron valence charge densities in Hg<sub>1-x</sub>Cd<sub>x</sub>Te mixed crystals**Journal:** Infrared Physics & Technology**Volume:** 39**Issue:** 5**Pages:** 265-270**Date:** Aug**Short Title:** Electron valence charge densities in Hg<sub>1-x</sub>Cd<sub>x</sub>Te mixed crystals**ISSN:** 1350-4495**DOI:** 10.1016/s1350-4495(98)00012-7**Accession Number:** WOS:000075607800001

**Abstract:** On the basis of local pseudopotential and virtual crystal approximation methods, the electronic valence charge densities in Hg<sub>1-x</sub>Cd<sub>x</sub>Te alloys for the zincblende phase are computed for the two special k points of the scheme of Chadi and Cohen [D.J. Chadi, M.L. Cohen, Phys. Rev. B 8 (1973) 5747]. It is found that when going from HgTe (semimetal) to CdTe (semiconductor), the bond charges tend to move gradually away from the anion and cation sites towards the bond center sites. The results are used to analyze the bonding properties of the crystals studied. (C) 1998 Elsevier Science B.V. All rights reserved.

**Notes:** Bouarissa, N**URL:** <Go to ISI>://WOS:000075607800001

**Reference Type: Journal Article****Record Number:** 43**Author:** Bouarissa, N.**Year:** 1998**Title:** Effects of compositional disorder upon electronic and lattice properties of  $GaxIn_{1-x}As$ **Journal:** Physics Letters A**Volume:** 245**Issue:** 3-4**Pages:** 285-291**Date:** Aug**Short Title:** Effects of compositional disorder upon electronic and lattice properties of  $GaxIn_{1-x}As$ **ISSN:** 0375-9601**DOI:** 10.1016/s0375-9601(98)00403-4**Accession Number:** WOS:000075502700018

**Abstract:** The empirical pseudopotential method within the virtual crystal approximation for the entire range of alloy concentrations of cubic  $GaxIn_{1-x}As$  is presented. The atomic form factors have been deduced empirically by fitting the band structure of parent compounds to experimental data available from the literature. To make allowance for the compositional disorder, a correction to the alloy potential has been introduced. Illustrative results of calculated electronic and lattice properties indicate that the contribution of the compositional disorder plays an important role and must be included to obtain a meaningful agreement with the experiment. (C) 1998 Elsevier Science B.V.

**Notes:** Bouarissa, N**URL:** <Go to ISI>://WOS:000075502700018

**Reference Type: Journal Article****Record Number:** 44**Author:** Bouarissa, N.**Year:** 1999**Title:** Pseudopotential study of bonding and ionicity in InP at various pressures**Journal:** Infrared Physics & Technology**Volume:** 40**Issue:** 2**Pages:** 117-121**Date:** Apr**Short Title:** Pseudopotential study of bonding and ionicity in InP at various pressures**ISSN:** 1350-4495**DOI:** 10.1016/s1350-4495(98)00055-3**Accession Number:** WOS:000078795500009

**Abstract:** We have investigated the chemical trends of the m-V semiconductor InP in the zinc-blende structure under hydrostatic pressure by means of empirical pseudopotential calculations. The pressure coefficients of the main band gaps (at Gamma, X, and L) are given and compared with the available experimental data. In agreement with experiments, we find that the transverse effective charge decreases with increasing pressure which indicates the increased covalent bonding in the studied material. (C) 1999 Published by Elsevier Science B.V. All rights reserved.

**Notes:** Bouarissa, N**URL:** <Go to ISI>://WOS:000078795500009

**Reference Type: Journal Article****Record Number:** 45**Author:** Bouarissa, N. Aourag, H.**Year:** 1995**Title:** THEORETICAL INVESTIGATION OF THE PRESSURE DEPENDENCES OF ENERGY GAPS IN INAS AND INSB**Journal:** Materials Science and Engineering B-Solid State Materials for Advanced Technology**Volume:** 33**Issue:** 2-3**Pages:** 122-132**Date:** Sep**Short Title:** THEORETICAL INVESTIGATION OF THE PRESSURE DEPENDENCES OF ENERGY GAPS IN INAS AND INSB**ISSN:** 0921-5107**DOI:** 10.1016/0921-5107(94)01181-8**Accession Number:** WOS:A1995RV13800010**Abstract:** The observed dependences on pressure of the energy gaps in InAs and InSb at symmetry points in the Brillouin zone are successfully calculated using an empirical method based on the pseudopotential method. The negative pressure derivatives of the gaps at the X points of the conduction band relative to the valence band maxima are due to the d states.**Notes:** Bouarissa, n aourag, h**URL:** <Go to ISI>://WOS:A1995RV13800010

**Reference Type: Journal Article****Record Number:** 46**Author:** Bouarissa, N. Aourag, H.**Year:** 1995**Title:** POSITRON ENERGY-LEVELS IN NARROW-GAP SEMICONDUCTORS**Journal:** Materials Science and Engineering B-Solid State Materials for Advanced Technology**Volume:** 34**Issue:** 1**Pages:** 58-66**Date:** Oct**Short Title:** POSITRON ENERGY-LEVELS IN NARROW-GAP SEMICONDUCTORS**ISSN:** 0921-5107**DOI:** 10.1016/0921-5107(95)01218-4**Accession Number:** WOS:A1995TA59700011

**Abstract:** We have studied the behaviour of a positron in  $\text{In}_x\text{Ga}_{1-x}\text{Sb}$  and  $\text{InAs}_x\text{Sb}_{1-x}$  alloys by calculating their energy levels at different points of the reciprocal space at normal and under low pressure. The calculations are performed with the pseudopotential method and the virtual crystal approximation which incorporates the disorder effect as an effective potential coupled with the independent particle approximation. These energies determine quantities such as the positron and positronium work function and the deformation potentials which are important parameters in slow-position beam experiments.

**Notes:** Bouarissa, n aourag, h**URL:** <Go to ISI>://WOS:A1995TA59700011

**Reference Type: Journal Article****Record Number:** 47**Author:** Bouarissa, N. Abbar, B. Dufour, J. P. Amrane, N. Aourag, H.**Year:** 1996**Title:** Work function and energy levels of positrons in elemental semiconductors**Journal:** Materials Chemistry and Physics**Volume:** 44**Issue:** 3**Pages:** 267-272**Date:** Jun**Short Title:** Work function and energy levels of positrons in elemental semiconductors**ISSN:** 0254-0584**DOI:** 10.1016/0254-0584(96)80067-8**Accession Number:** WOS:A1996UU37200011

**Abstract:** We have studied the behaviour of the positron in diamond, silicon and germanium by calculating its energy levels at different points of the reciprocal space using the pseudopotential approach coupled with the independent particle approximation. These energies determine quantities, such as the positron and positronium work functions and the deformation potentials, which are important parameters in slow-positron-beam experiments. We have tentatively estimated the positron diffusion constant in these semiconductors. The results are compared to values extracted from experiments.

**Notes:** Bouarissa, N Abbar, B Dufour, JP Amrane, N Aourag, H**URL:** <Go to ISI>://WOS:A1996UU37200011



**Reference Type: Journal Article****Record Number:** 48**Author:** Bouarissa, N. Aourag, H.**Year:** 1997**Title:** Electron-positron momentum density in  $\text{InAs}_x\text{Sb}_{1-x}$ **Journal:** Philosophical Magazine B-Physics of Condensed Matter Statistical Mechanics  
Electronic Optical and Magnetic Properties**Volume:** 75**Issue:** 3**Pages:** 325-334**Date:** Mar**Short Title:** Electron-positron momentum density in  $\text{InAs}_x\text{Sb}_{1-x}$ **ISSN:** 0141-8637**DOI:** 10.1080/13642819708202321**Accession Number:** WOS:A1997WN47900002

**Abstract:** Positron annihilation calculations have been performed on semiconductor alloys with the aim of studying the disorder effect on the electron momentum distribution in  $\text{InAs}_x\text{Sb}_{1-x}$ . The electron wavefunctions are calculated using the pseudopotential method within the virtual-crystal approximation with and without incorporating the disorder effect as an effective potential. The calculations of the positron wavefunctions have been made in an identical manner, employing the point-core approximation for the ionic potential. The shapes of the profiles indicate that the angular correlation of positron annihilation radiation along different crystallographic directions in  $\text{InAs}_x\text{Sb}_{1-x}$  is not sensitive to the disorder effect.

**Notes:** Bouarissa, N Aourag, H**URL:** <Go to ISI>://WOS:A1997WN47900002

**Reference Type: Journal Article****Record Number:** 49**Author:** Bouarissa, N. Aourag, H.**Year:** 1997**Title:** The temperature dependence of the band gaps in narrow-gap semiconductors**Journal:** Infrared Physics & Technology**Volume:** 38**Issue:** 3**Pages:** 153-161**Date:** Apr**Short Title:** The temperature dependence of the band gaps in narrow-gap semiconductors**ISSN:** 1350-4495**DOI:** 10.1016/s1350-4495(97)00007-8**Accession Number:** WOS:A1997WV22800005

**Abstract:** We calculate the dependence of the direct and indirect band gaps on temperature in the narrow-gap semiconductors InAs and InSb. Our calculations are based on the empirical pseudopotential method. The obtained results compare reasonably well with available experimental data. (C) 1997 Published by Elsevier Science B.V.

**Notes:** Bouarissa, N Aourag, H**URL:** <Go to ISI>://WOS:A1997WV22800005

**Reference Type: Journal Article****Record Number:** 50**Author:** Bouarissa, N. Charifi, Z.**Year:** 1998**Title:** The alloying effect on positron states in Si<sub>1-x</sub>Ge<sub>x</sub>**Journal:** Materials Chemistry and Physics**Volume:** 53**Issue:** 2**Pages:** 179-184**Date:** May**Short Title:** The alloying effect on positron states in Si<sub>1-x</sub>Ge<sub>x</sub>**ISSN:** 0254-0584**DOI:** 10.1016/s0254-0584(97)02060-9**Accession Number:** WOS:000073078300009

**Abstract:** The effect of alloying on positrons in Si<sub>1-x</sub>Ge<sub>x</sub> is reported. Our computations are based on the independent particle model combined with the empirical pseudopotential method. To make an allowance for the chemical disorder, the virtual crystal approximation is used, including a correction to the alloy potential. The evolution of the positron thermalization energy versus mole fraction shows that the positrons diffuse better over the range 0.15 less than or equal to x less than or equal to 1.0. Our calculated positron effective band masses for Si and Ge are in good agreement with the available experimental and theoretical ones, and vary non-linearly from Si to Ge. The positron distribution difference between different compositions indicates that the positron has an affinity for one sort of atom in Si<sub>1-x</sub>Ge<sub>x</sub>. It was noted that the positron is not sensitive to the disorder effect. Based on these results, this study could stimulate further work on the alloying effect on positron annihilation in semiconductor alloys. (C) 1998 Elsevier Science S.A. All rights reserved.

**Notes:** Bouarissa, N Charifi, Z**URL:** <Go to ISI>://WOS:000073078300009

**Reference Type: Journal Article****Record Number:** 51**Author:** Bouarissa, N. Certier, M. Amrane, N. Aourag, H.**Year:** 1998**Title:** Study on momentum density in narrow-gap mixed III-V alloys by positron annihilation under pressure**Journal:** Materials Science and Engineering B-Solid State Materials for Advanced Technology**Volume:** 54**Issue:** 3**Pages:** 161-167**Date:** Jun**Short Title:** Study on momentum density in narrow-gap mixed III-V alloys by positron annihilation under pressure**ISSN:** 0921-5107**DOI:** 10.1016/s0921-5107(98)00154-8**Accession Number:** WOS:000074950200005

**Abstract:** The pressure dependence of the electron-positron momentum density in  $\text{InAs}_x\text{Sb}_{1-x}$  was studied. The computational technique used here is based on the independent particle model coupled with the use of the electron pseudo-wave functions. The variation of the momentum density versus pressure is weak and shows that  $\text{InAs}_x\text{Sb}_{1-x}$  exhibits a more metallic character. The observation that the calculated total positron annihilation rate increases with pressure has been explained in terms of increased positron penetration into the ion cores. The obtained results have an essential role in the determination of the electronic band structure of narrow gap mixed III-V alloys under pressure. (C) 1998 Elsevier Science S.A. All rights reserved.

**Notes:** Bouarissa, N Certier, M Amrane, N Aourag, H**URL:** <Go to ISI>://WOS:000074950200005

**Reference Type: Journal Article****Record Number:** 52**Author:** Bouarissa, N. Kobayasi, T. Nara, H. Aourag, H.**Year:** 1995**Title:** PRESSURE-DEPENDENCE OF POSITRON-ANNIHILATION IN GERMANIUM**Journal:** Solid State Communications**Volume:** 96**Issue:** 9**Pages:** 689-695**Date:** Dec**Short Title:** PRESSURE-DEPENDENCE OF POSITRON-ANNIHILATION IN GERMANIUM**ISSN:** 0038-1098**DOI:** 10.1016/0038-1098(95)00398-3**Accession Number:** WOS:A1995RZ27400016

**Abstract:** Electron-positron momentum densities are calculated for the (001-110) plane in Ge at normal and increased pressure. The calculations are based on the independent particule approximation coupled with the pseudopotential method. The shapes of the profiles indicate that the angular correlation of positron annihilation radiation (ACPAR) along different crystallographic directions in Ge are highly sensitive to pressure.

**Notes:** Bouarissa, n kobayasi, t nara, h aourag, h**URL:** <Go to ISI>://WOS:A1995RZ27400016

**Reference Type: Journal Article****Record Number:** 53**Author:** Bouarissa, N. West, R. N. Aourag, H.**Year:** 1997**Title:** Theoretical investigation of the pressure dependences of positron annihilation in InAs and InSb**Journal:** Materials Chemistry and Physics**Volume:** 47**Issue:** 1**Pages:** 23-30**Date:** Jan**Short Title:** Theoretical investigation of the pressure dependences of positron annihilation in InAs and InSb**ISSN:** 0254-0584**DOI:** 10.1016/s0254-0584(97)80023-5**Accession Number:** WOS:A1997WG64200005**Abstract:** Electron-positron momentum densities are calculated for the (001-110) plane in InAs and InSb under normal and different pressures. The calculations are based on the independent particle approximation coupled with the pseudopotential method. The shapes of the profiles indicate that the angular correlation of positron annihilation radiation (ACPAR) along different crystallographic directions in InAs and InSb is highly sensitive to the pressure effect. It is shown that the choice of the experimental pressure derivative of energy gaps is the major parameter for the relevant momentum distribution.**Notes:** Bouarissa, N West, RN Aourag, H**URL:** <Go to ISI>://WOS:A1997WG64200005

**Reference Type: Journal Article****Record Number:** 54**Author:** Bouarissa, N. Walker, A. B. Aourag, H.**Year:** 1998**Title:** Backscattering of slow positrons from semi-infinite aluminum**Journal:** Journal of Applied Physics**Volume:** 83**Issue:** 7**Pages:** 3643-3648**Date:** Apr**Short Title:** Backscattering of slow positrons from semi-infinite aluminum**ISSN:** 0021-8979**DOI:** 10.1063/1.366583**Accession Number:** WOS:000072744100031

**Abstract:** Monte Carlo simulation for 1-10 keV positron backscattering from semi-infinite aluminum with normal angle of incidence is reported. The elastic scattering cross sections have been obtained from the modified Rutherford differential cross section where the numerical coefficient in the atomic screening parameter is taken to be variable. To model inelastic scattering, we have investigated for the first time the effects of continuous slowing down through collisions with conduction electrons. Attention has also been paid to effects of changing the angle of incidence. Our simulated results and the available experimental data are found to be in reasonable agreement, and show that the energy dependence of the backscattered fractions can be fitted with a simple function:  $B(E) = 0.0187997 \ln E + 0.102644$ . This suggests that both the transport model and the scattering cross sections used in the present work are reliable. (C) 1998 American Institute of Physics. [S0021-8979(98)06706-1].

**Notes:** Bouarissa, N Walker, AB Aourag, H**URL:** <Go to ISI>://WOS:000072744100031

**Reference Type: Journal Article****Record Number:** 55**Author:** Boucenna, A.**Year:** 1997**Title:** Shell model calculations for two- and three-particle states**Journal:** Nuovo Cimento Della Societa Italiana Di Fisica a-Nuclei Particles and Fields**Volume:** 110**Issue:** 7**Pages:** 711-724**Date:** Jul**Short Title:** Shell model calculations for two- and three-particle states**ISSN:** 1124-1861**Accession Number:** WOS:000071549300003

**Abstract:** In this paper, we present a simplified shell model to calculate the excited state energies of two and three nucleons moving on orbits outside an inert core. The two-body matrix elements (TBME) describing the interaction between active particles outside the core are those determined experimentally. High spin states fed by the two- and three-nucleon transfer on C-12, O-16, Si-28, Ca-40, Fe-54, Ni-58, Ni-60, Ni-62, Ni-64, Zn-64, Zn-66, Zn-68, target nuclei are calculated and compared to the experimental results.

**Notes:** Boucenna, A**URL:** <Go to ISI>://WOS:000071549300003



**Reference Type: Journal Article****Record Number:** 56**Author:** Boudissa, M. Frikach, K. Taoufik, A. Senoussi, S. Sarrhini, O. Halimi, R.**Year:** 1997**Title:** Influence of twins in the vortex pinning in YBaCuO single crystals**Journal:** Physica C-Superconductivity and Its Applications**Volume:** 282**Pages:** 1979-1980**Date:** Aug**Short Title:** Influence of twins in the vortex pinning in YBaCuO single crystals**ISSN:** 0921-4534**DOI:** 10.1016/s0921-4534(97)01060-5**Accession Number:** WOS:A1997YA41700019

**Abstract:** We have studied the magnetization hysteresis loop of twined and detwined YBaCuO single crystals. We investigated the temperature dependence, angular and time dependence of the magnetization. Comparisons between the hysteresis loops of the two samples are made and conclusions concerning the twin pinning are drawn.

**Notes:** Boudissa, M Frikach, K Taoufik, A Senoussi, S Sarrhini, O Halimi, R International Conference on Materials and Mechanisms of Superconductivity - High Temperature Superconductors V Feb 28-mar 04, 1997 Beijing, peoples r china IChemE 4

**URL:** <Go to ISI>://WOS:A1997YA41700019

**Reference Type: Journal Article****Record Number:** 57**Author:** Bouguezal, S. Chikouche, D. Khellaf, A.**Year:** 1999**Title:** An efficient algorithm for the computation of the multidimensional discrete Fourier transform**Journal:** Multidimensional Systems and Signal Processing**Volume:** 10**Issue:** 3**Pages:** 275-304**Date:** Jul**Short Title:** An efficient algorithm for the computation of the multidimensional discrete Fourier transform**ISSN:** 0923-6082**DOI:** 10.1023/a:1008469008412**Accession Number:** WOS:000081797200002

**Abstract:** In this paper, we propose a new approach for computing multidimensional Cooley-Tukey FFT's that is suitable for implementation on a variety of multiprocessor architectures. Our algorithm is derived in this paper from a Cooley decimation-in-time algorithm by using an appropriate indexing process and the tensor product properties. It is proved that the number of multiplications necessary to compute our proposed algorithm is significantly reduced while the number of additions remains almost identical to that of conventional Multidimensional FFT's (MFFT). Comparison results show the powerful performance of the proposed MFFT algorithm against the row-column FFT transform when data dimension M is large. Furthermore, this algorithm, presented in a simple matrix form, will be much easier to implement in practice. Connections of the proposed approach with well-known DFT algorithms are included in this paper and many variations of the proposed algorithm are also pointed out.

**Notes:** Bouguezal, S Chikouche, D Khellaf, A**URL:** <Go to ISI>://WOS:000081797200002

**Reference Type: Journal Article****Record Number:** 58**Author:** Bounekhel, M. McNeill, I. C.**Year:** 1999**Title:** Preparation and thermal degradation studies of telechelic poly(methyl methacrylate)**Journal:** Polymer Degradation and Stability**Volume:** 65**Issue:** 3**Pages:** 443-448**Short Title:** Preparation and thermal degradation studies of telechelic poly(methyl methacrylate)**ISSN:** 0141-3910**DOI:** 10.1016/s0141-3910(99)00034-8**Accession Number:** WOS:000082017500013

**Abstract:** Bifunctional methyl methacrylate polymers, with CH<sub>2</sub>CH<sub>2</sub>OH or CH<sub>2</sub>CH<sub>2</sub>ONa chain ends, have been prepared by anionic polymerisation. The stability and degradation behaviour of these materials has been examined by thermogravimetry and thermal volatilisation analysis (TVA) and compared with the corresponding behaviour of anionically prepared PMMA samples with saturated chain ends. The nature of the degradation products has also been studied using the TVA approach. The telechelic samples were found to be slightly more stable, and the presence of these end structures results in significant differences in product composition, although methyl methacrylate remains the predominant product. Mechanisms are suggested to account for the new products and differences in stability. (C) 1999 Elsevier Science Ltd. All rights reserved.

**Notes:** Bounekhel, M McNeill, IC**URL:** <Go to ISI>://WOS:000082017500013

**Reference Type: Journal Article****Record Number:** 59**Author:** Bouree, P. Hamouda, R. A. Zaim, R. Haouchi, K.**Year:** 1987**Title:** EXPECTORATION OF NOCTUID LARVAE AFTER CONSUMPTION OF DATES**Journal:** Presse Medicale**Volume:** 16**Issue:** 38**Pages:** 1922-1922**Date:** Nov**Short Title:** EXPECTORATION OF NOCTUID LARVAE AFTER CONSUMPTION OF DATES**ISSN:** 0755-4982**Accession Number:** WOS:A1987K873600011**Notes:** Bouree, p hamouda, ra zaim, r haouchi, k**URL:** <Go to ISI>://WOS:A1987K873600011

**Reference Type: Journal Article****Record Number:** 60**Author:** Bousbaa, C. Iferroudjene, N. Bouzid, S. Madjoubi, M. Bouaouadja, N.**Year:** 1998**Title:** Effects of duration of sand blasting on the properties of window glass**Journal:** Glass Technology**Volume:** 39**Issue:** 1**Pages:** 24-26**Date:** Feb**Short Title:** Effects of duration of sand blasting on the properties of window glass**ISSN:** 0017-1050**Accession Number:** WOS:000165531600004

**Abstract:** In Saharan regions, sandstorms have severe damaging effects on transparent articles such as window glass wind-screens and protective glass sheets of solar panels. Sandstorms occur particularly in spring with velocities that can reach 120 km/h and for various durations typically of 48 h and sometimes even more. Smaller particles of sand (average size  $<120 \mu\text{m}$ ) rise high in the atmosphere, and relatively larger particles (average size  $>120 \mu\text{m}$ ) remain at low altitudes at the level of ground habitations. This preliminary work considers the effects of the sand blasting duration on the properties of window glass by simulating a sandstorm. The results show that the glass erosion affects the optical transmission more than the fracture strength and that the erosion mechanisms seem to be complex for the chosen test conditions.

**Notes:** Bousbaa, C Iferroudjene, N Bouzid, S Madjoubi, M Bouaouadja, N**URL:** <Go to ISI>://WOS:000165531600004

**Reference Type: Journal Article****Record Number:** 61**Author:** Boussendel, A. Haroun, A.**Year:** 1996**Title:** Magnetic properties of ultrathin films of Cr on W(001)**Journal:** Journal of Physics-Condensed Matter**Volume:** 8**Issue:** 23**Pages:** 4165-4169**Date:** Jun**Short Title:** Magnetic properties of ultrathin films of Cr on W(001)**ISSN:** 0953-8984**DOI:** 10.1088/0953-8984/8/23/009**Accession Number:** WOS:A1996UP44600009

**Abstract:** We have investigated the magnetic properties of Cr layers adsorbed on W(001) by means of self-consistent tight-binding calculations in the framework of the Hubbard Hamiltonian within the unrestricted Hartree-Fock approximation. We have observed that the polarization appears at the Cr-W interface until the fourth plane is reached and the magnetic moment in the W interface decreases when the number of Cr layers increases. In all cases we obtain an antiferromagnetic coupling between Or layers and Cr-W interfaces. The general results can be understood in terms of the competition between surface and interface effects.

**Notes:** Boussendel, A Haroun, A**URL:** <Go to ISI>://WOS:A1996UP44600009

**Reference Type: Journal Article****Record Number:** 62**Author:** Boussendel, A. Haroun, A.**Year:** 1998**Title:** Magnetism in Cr thin films on V(001)**Journal:** Thin Solid Films**Volume:** 325**Issue:** 1-2**Pages:** 201-203**Date:** Jul**Short Title:** Magnetism in Cr thin films on V(001)**ISSN:** 0040-6090**DOI:** 10.1016/s0040-6090(98)00491-x**Accession Number:** WOS:000075107000033

**Abstract:** The magnetism of Cr layers on V(001) is determined by using a tight-binding Hubbard Hamiltonian in the unrestricted Hartree-Fock approximation. In all cases we obtain an antiferromagnetic (AF) coupling between Cr and nearest neighbors V with an important increase of the Cr magnetic moment at the interface as compared to its bulk value, and the magnetic moment on the V atoms decreases when the number of Cr layers increases. We find that the hybridization of the V and Cr d-bands plays an important role in determining the magnetism of the Cr/V(001) system. (C) 1998 Published by Elsevier Science S.A. All rights reserved.

**Notes:** Boussendel, A Haroun, A**URL:** <Go to ISI>://WOS:000075107000033

**Reference Type: Journal Article****Record Number:** 63**Author:** Boutehala, M. Tedjar, F.**Year:** 1993**Title:** APPLICATIONS OF EXCHANGED MONTMORILLONITE AS PROTONIC SOLID-ELECTROLYTE**Journal:** Solid State Ionics**Volume:** 61**Issue:** 1-3**Pages:** 257-263**Date:** May**Short Title:** APPLICATIONS OF EXCHANGED MONTMORILLONITE AS PROTONIC SOLID-ELECTROLYTE**ISSN:** 0167-2738**DOI:** 10.1016/0167-2738(93)90363-8**Accession Number:** WOS:A1993LK91100037

**Abstract:** Temperature dependences for conductivity of an Algerian montmorillonite was studied in comparison with various ion exchanges. By using conductivity measurements, activation energies for ion transport were determined. The obtained values for conductivity and activation energy are similar to those of some protonic conductors. Electrical parameters were extracted from impedance spectra and correlated to the water content (from Thermogravimetric Analysis results, TGA) and to dehydration energy (from Differential Thermic Analysis results, DTA). A protonic conduction is assumed to be under protonic translocation mode, via a translocation chain. Zinc and sodium exchanged montmorillonite were used as solid electrolyte in, respectively, an "all solid" battery and an "all solid" pH sensor.

**Notes:** Boutehala, m tedjar, f 6th european conf on solid state protonic conductors ( sspc-6 ) Sep 06-11, 1992 Villard de lans, france Cnrs, programme interdisciplinaire rech energie & mat, direct rech etudes & tech, army gen direct, european communities, cnet

**URL:** <Go to ISI>://WOS:A1993LK91100037



**Reference Type: Journal Article****Record Number:** 64**Author:** Bouttout, F. Benabdelaziz, F. Benghalia, A. Khedrouche, D. Fortaki, T.**Year:** 1999**Title:** Uniaxially anisotropic substrate effects on resonance of rectangular microstrip patch antenna**Journal:** Electronics Letters**Volume:** 35**Issue:** 4**Pages:** 255-256**Date:** Feb**Short Title:** Uniaxially anisotropic substrate effects on resonance of rectangular microstrip patch antenna**ISSN:** 0013-5194**DOI:** 10.1049/el:19990026**Accession Number:** WOS:000079068600006**Abstract:** The influence of uniaxial anisotropy in the substrate on the resonant frequency of a rectangular microstrip patch is investigated. Computations show that changes in  $\epsilon(x)$  can drastically shift the resonant frequency; moreover, a small shift is observed when  $\epsilon(x)$  changes. Other results also indicate that the effect of  $\epsilon(x)$  tends to be insignificant for low substrate thicknesses.**Notes:** Bouttout, F Benabdelaziz, F Benghalia, A Khedrouche, D Fortaki, T**URL:** <Go to ISI>://WOS:000079068600006

**Reference Type: Journal Article****Record Number:** 65**Author:** Bouzerzour, H. Dekhili, M.**Year:** 1995**Title:** HERITABILITIES, GAINS FROM SELECTION AND GENETIC CORRELATIONS FOR GRAIN-YIELD OF BARLEY GROWN IN 2 CONTRASTING ENVIRONMENTS**Journal:** Field Crops Research**Volume:** 41**Issue:** 3**Pages:** 173-178**Date:** Jun**Short Title:** HERITABILITIES, GAINS FROM SELECTION AND GENETIC CORRELATIONS FOR GRAIN-YIELD OF BARLEY GROWN IN 2 CONTRASTING ENVIRONMENTS**ISSN:** 0378-4290**DOI:** 10.1016/0378-4290(95)00005-b**Accession Number:** WOS:A1995RJ43000005

**Abstract:** Heritabilities and variance component estimates were obtained from a set of 15 barley lines and cultivars grown for three consecutive years in two contrasting environments in the high plateaux of Eastern Algeria. Genotype X environment interactions, particularly related to seasonal effects, seriously limited selection for increased barley grain yield. Their effect was to reduce the genetic variance component, heritability estimates and genetic correlation coefficients. The results indicated that selection in a high-yielding location does not identify genotypes suitable for low-yielding environments, which are more representative of the production conditions of a low-input agriculture. Selection in low-yielding environments appears more efficient.

**Notes:** Bouzerzour, h dekhili, m**URL:** <Go to ISI>://WOS:A1995RJ43000005

**Reference Type: Journal Article****Record Number:** 66**Author:** Bouzid, D. Bouzid, S. Bouafia, M. Jungstand, U. Herold, V.**Year:** 1997**Title:** Comparative investigations on the polishing performance of various polishers**Journal:** Glass Technology**Volume:** 38**Issue:** 1**Pages:** 18-21**Date:** Feb**Short Title:** Comparative investigations on the polishing performance of various polishers**ISSN:** 0017-1050**Accession Number:** WOS:A1997WL19300001

**Abstract:** The relationship was studied between the polishing efficiency of optical glass and the technological polishing parameters using a statistical method of planning tests. Progress of polishing was assessed by means of glass weight loss and by the amount of light scattered from the surface. It is shown that there is a special optimum polishing time as well as polishing pressure for each of the polishers. This is valid for the three different types of polishers used in this work: polyurethane, cerium oxide abrasive pellet and pitch.

**Notes:** Bouzid, D Bouzid, S Bouafia, M Jungstand, U Herold, V**URL:** <Go to ISI>://WOS:A1997WL19300001

**Reference Type: Journal Article****Record Number:** 67**Author:** Burgess, C. J. Saidi, M.**Year:** 1996**Title:** The automatic generation of test cases for optimizing Fortran compilers**Journal:** Information and Software Technology**Volume:** 38**Issue:** 2**Pages:** 111-119**Date:** Feb**Short Title:** The automatic generation of test cases for optimizing Fortran compilers**ISSN:** 0950-5849**DOI:** 10.1016/0950-5849(95)01055-6**Accession Number:** WOS:A1996UU83400005

**Abstract:** This paper describes the design of an automatic generator of compiler test cases which are aimed at testing the correctness of the code-generation and optimization phases of a compiler. The test cases are designed to contain specific features that optimizing compilers are known to exploit frequently, and to include self-checking code to check for their correct execution. Fortran77 is used to illustrate the results, although the general principles employed are applicable to many compilers for imperative languages.

**Notes:** Burgess, CJ Saidi, M**URL:** <Go to ISI>://WOS:A1996UU83400005

**Reference Type: Journal Article****Record Number:** 68**Author:** Cadeville, M. C. Pierronbohnes, V. Bouzidi, L. Sanchez, J. M.**Year:** 1993**Title:** THERMODYNAMIC, ELECTRONIC AND MAGNETIC-PROPERTIES OF INTERMETALLIC COMPOUNDS THROUGH STATISTICAL-MODELS**Journal:** Physica Scripta**Volume:** T49A**Pages:** 364-372**Short Title:** THERMODYNAMIC, ELECTRONIC AND MAGNETIC-PROPERTIES OF INTERMETALLIC COMPOUNDS THROUGH STATISTICAL-MODELS**ISSN:** 0281-1847**DOI:** 10.1088/0031-8949/1993/t49a/064**Accession Number:** WOS:A1993MM84400065

**Abstract:** Local and average electronic and magnetic properties of transition metal alloys are strongly correlated to the distribution of atoms on the lattice sites. The ability of some systems to form long range ordered structures at low temperature allows to discuss their properties in term of well identified occupation operators as those related to long range order (LRO) parameters. We show that using theoretical determinations of these LRO parameters through statistical models like the cluster variation method (CVM) developed to simulate the experimental phase diagrams, we are able to reproduce a lot of physical properties. In this paper we focus on two points: (i) a comparison between CVM results and an experimental determination of the LRO parameter by NMR at Co-59 in a CoPt<sub>3</sub> compound, and (ii) the modelling of the resistivity of ferromagnetic and paramagnetic intermetallic compounds belonging to Co-Pt, Ni-Pt and Fe-Al systems. All experiments were performed on samples in identified thermodynamic states, implying that kinetic effects are thoroughly taken into account.

**Notes:** Cadeville, mc pierronbohnes, v bouzidi, l sanchez, jm 13th General Conf of Condensed-Matter-Division of European-Physical-Soc / Spring Meeting of Arbeitskreises-Festkorperphysik of Deutschen-Physikalischen-Gesellschaft Mar 29-apr 02, 1993 Regensburg, germany European phys soc, condensed matter div, deut phys gesell, arbeitskreises festkorperphys

**URL:** <Go to ISI>://WOS:A1993MM84400065

**Reference Type: Journal Article****Record Number:** 69**Author:** Chabanat, E. Meyer, J. Bencheikh, K. Quentin, P. Bartel, J.**Year:** 1994**Title:** EQUILIBRIUM DEFORMATIONS OF ROTATING NUCLEI IN A SELF-CONSISTENT SEMICLASSICAL APPROACH**Journal:** Physics Letters B**Volume:** 325**Issue:** 1-2**Pages:** 13-19**Date:** Apr**Short Title:** EQUILIBRIUM DEFORMATIONS OF ROTATING NUCLEI IN A SELF-CONSISTENT SEMICLASSICAL APPROACH**ISSN:** 0370-2693**DOI:** 10.1016/0370-2693(94)90064-7**Accession Number:** WOS:A1994NG47400003

**Abstract:** We study here equilibrium deformations of rotating nuclei within a self-consistent semiclassical cranking approach using the SkM\* Skyrme effective interaction. The different axial rotational configurations, i.e. where the rotation axis is parallel or perpendicular to the symmetry axis, are studied as well as the Jacobi bifurcation into triaxial rotational equilibrium shapes. Finally the validity of the concept of a rotating liquid drop which has been widely used for the determination of average shapes of rotating nuclei is assessed by comparison with our microscopic results.

**Notes:** Chabanat, e meyer, j bencheikh, k quentin, p bartel, j**URL:** <Go to ISI>://WOS:A1994NG47400003

**Reference Type: Journal Article****Record Number:** 70**Author:** Chafaa, S. Douadi, T. Khan, M. A. Meullemeestre, J. Schwing, M. J. Vierling, F.**Year:** 1991**Title:** COPPER(II) HALOGEN COMPLEXES IN ANHYDROUS ETHANOL SOLUTION**Journal:** New Journal of Chemistry**Volume:** 15**Issue:** 1**Pages:** 39-46**Date:** Jan**Short Title:** COPPER(II) HALOGEN COMPLEXES IN ANHYDROUS ETHANOL SOLUTION**ISSN:** 1144-0546**Accession Number:** WOS:A1991FB06400008

**Abstract:** The complexation of  $\text{Cu}^{2+}$  by  $\text{X}^-$  ions, ( $\text{X} = \text{Cl}, \text{Br}$ ), is investigated spectrophotometrically at 25-degrees-C in anhydrous ethanol using  $\text{Li}^+$  ( $\text{X}^-$ ,  $\text{ClO}_4^-$ ) electrolyte mixtures maintained at 1M constant ionic strength where the halide analytical concentration increase from 0 up to 1 mol L<sup>-1</sup>. The numerical analysis of a large set of absorption spectra covering the UV, visible and near IR demonstrate the simultaneous existence of four successive mononuclear halogenocomplexes,  $\text{CuX}^+$ ,  $\text{CuX}_2$ ,  $\text{CuX}_3^-$  and  $\text{CuX}_4(2-)$ . The study of the apparent overall formation constants of these complexes measured in different dissociating or non-dissociating protic solvents shows a regular decrease of their stability with the dielectric constant of the solvents. The individual electronic spectra of the halogenocomplexes are calculated for the first time. In anhydrous ethanol, the d-d transition bands calculated for these copper(II) complexes indicate a square planar configuration ( $D_{4h}$ ) for the  $\text{CuCl}_4(2-)$  ion and a flattened tetrahedral configuration ( $D_{2d}$ ) for  $\text{CuBr}_4(2-)$ , consistent with all the structural results of the solid state.

**Notes:** Chafaa, s douadi, t khan, ma meullemeestre, j schwing, mj vierling, f**URL:** <Go to ISI>://WOS:A1991FB06400008

**Reference Type: Journal Article****Record Number:** 71**Author:** Charifi, Z. Bouarissa, N.**Year:** 1997**Title:** The effect of the violation of Vegard's law on the optical bowing in Si<sub>1-x</sub>Gex alloys**Journal:** Physics Letters A**Volume:** 234**Issue:** 6**Pages:** 493-497**Date:** Oct**Short Title:** The effect of the violation of Vegard's law on the optical bowing in Si<sub>1-x</sub>Gex alloys**ISSN:** 0375-9601**DOI:** 10.1016/s0375-9601(97)00575-6**Accession Number:** WOS:A1997YB83300015

**Abstract:** The effect of the deviation of the lattice parameters from Vegard's rule on the optical bowing of the fundamental gap in Si<sub>1-x</sub>Gex semiconductor alloys is discussed. Our computations are based on the pseudopotential method. To make allowance for the chemical disorder, the virtual-crystal approximation is used, including a correction to the alloy potential. Our results show that the bowing parameter is highly improved when the lattice relaxation effect is included which indicates the importance of the lattice mismatch in the electronic band structure calculations of IV-IV semiconductor alloys. (C) Published by Elsevier Science B.V.

**Notes:** Charifi, Z Bouarissa, N**URL:** <Go to ISI>://WOS:A1997YB83300015



**Reference Type: Journal Article****Record Number:** 72**Author:** Chelali, N. Zerroual, L. Hammouche, A. Kahoul, A. Guitton, J.**Year:** 1996**Title:** Electrochemical behaviour of alpha- and beta-PbO<sub>2</sub> .2. Lithium diffusion from non-aqueous electrolyte**Journal:** Solid State Ionics**Volume:** 91**Issue:** 3-4**Pages:** 289-294**Date:** Oct**Short Title:** Electrochemical behaviour of alpha- and beta-PbO<sub>2</sub> .2. Lithium diffusion from non-aqueous electrolyte**ISSN:** 0167-2738**DOI:** 10.1016/s0167-2738(96)00423-7**Accession Number:** WOS:A1996VZ56300017**Abstract:** The cathodic behaviour of alpha- and beta-PbO<sub>2</sub> was studied in the presence of lithium ions using slow-scan voltametry. The beta-PbO<sub>2</sub> shows two peaks at 2.95 V and 2.45 V versus Li/Li<sup>+</sup>. However, in the case of alpha-PbO<sub>2</sub>, similar peaks appear at 2.74 V and 2.35 V versus Li/Li<sup>+</sup>. The values of  $(D)_{\text{over tilde(Li+)}}$  calculated for both samples were  $5 \times 10^{-13}$  cm<sup>2</sup> s<sup>-1</sup> for alpha-PbO<sub>2</sub> and  $10^{-14}$  cm<sup>2</sup> s<sup>-1</sup> for beta-PbO<sub>2</sub>. The alpha phase seems to be a better lithium conductor than the beta phase.**Notes:** Chelali, N Zerroual, L Hammouche, A Kahoul, A Guitton, J**URL:** <Go to ISI>://WOS:A1996VZ56300017

**Reference Type: Journal Article**

**Record Number: 73**

**Author:** Chellal, A. Lukasova, E.

**Year:** 1995

**Title:** EVIDENCE FOR ANTIBIOTICS IN THE 2 ALGERIAN TRUFFLES TERFEZIA AND TIRMANIA

**Journal:** Pharmazie

**Volume:** 50

**Issue:** 3

**Pages:** 228-229

**Date:** Mar

**Short Title:** EVIDENCE FOR ANTIBIOTICS IN THE 2 ALGERIAN TRUFFLES TERFEZIA AND TIRMANIA

**ISSN:** 0031-7144

**Accession Number:** WOS:A1995QR10800023

**Notes:** Chellal, a lukasova, e

**URL:** <Go to ISI>://WOS:A1995QR10800023

**Reference Type: Journal Article****Record Number:** 74**Author:** Chevallier, B. Durand, P. Mougnot, B. Sinassamy, P. Bouhali, D. Lagardere, B.**Year:** 1988**Title:** GLOMERULAR LESION AFTER PORTACAVAL ANASTOMOSIS FOR CONGENITAL LIVER FIBROSIS**Journal:** Presse Medicale**Volume:** 17**Issue:** 25**Pages:** 1316-1316**Date:** Jun**Short Title:** GLOMERULAR LESION AFTER PORTACAVAL ANASTOMOSIS FOR CONGENITAL LIVER FIBROSIS**ISSN:** 0755-4982**Accession Number:** WOS:A1988P046200012**Notes:** Chevallier, b durand, p mougnot, b sinassamy, p bouhali, d lagardere, b**URL:** <Go to ISI>://WOS:A1988P046200012

**Reference Type: Journal Article****Record Number:** 75**Author:** Chikouche, D. Bekka, R. E.**Year:** 1998**Title:** Cylindrical architectures for 1-D recursive digital filters: A state space approach**Journal:** Iee Proceedings-Computers and Digital Techniques**Volume:** 145**Issue:** 5**Pages:** 327-332**Date:** Sep**Short Title:** Cylindrical architectures for 1-D recursive digital filters: A state space approach**ISSN:** 1350-2387**DOI:** 10.1049/ip-cdt:19981942**Accession Number:** WOS:000076599400002

**Abstract:** The paper considers the array processors' implementation of finite impulse response digital filters that require recursive computations. The state space representation is used to obtain efficient implementation via dynamically switchable systolic arrays (cylindrical type) of 1-D direct realisation. This direct description leads to a reduction in the computation speed and the throughput rate. Two solutions are proposed to improve the array performance: the use of sparse matrices representing the filters is shown to considerably reduce the hardware complexity and the effect of feedback delays, consequently improving the throughput rate. The use of fast form algorithms of Porter-Aravena is also considered as an approach to design IIR filters via much faster cylindrical architectures.

**Notes:** Chikouche, D Bekka, RE**URL:** <Go to ISI>://WOS:000076599400002

**Reference Type: Journal Article****Record Number:** 76**Author:** Chikouche, D. Khellaf, A. Bouguezel, S.**Year:** 1999**Title:** A new proposed algorithm of arbitrary radix for the computation of the 2D FFT**Journal:** International Journal for Numerical Methods in Engineering**Volume:** 46**Issue:** 1**Pages:** 103-115**Date:** Sep**Short Title:** A new proposed algorithm of arbitrary radix for the computation of the 2D FFT**ISSN:** 0029-5981**Accession Number:** WOS:000081969200006

**Abstract:** In this paper, we propose a new approach for computing 2D FFT's that are suitable for implementation on a systolic array architecture. Our algorithm is derived in this paper from a Cooley decimation-in-time algorithm by using an appropriate indexing process. It is proved that the number of multiplications necessary to compute our proposed algorithm is significantly reduced while the number of additions remains almost identical to that of conventional 2D FFT's. Comparison results show the good performance of the proposed 2D FFT algorithm against the row-column FFT transform. Copyright (C) 1999 John Wiley & Sons, Ltd.

**Notes:** Chikouche, D Khellaf, A Bouguezel, S**URL:** <Go to ISI>://WOS:000081969200006

**Reference Type: Journal Article****Record Number:** 77**Author:** Dali, S. Benganem, F. Khan, M. A. Meullemeestre, J. Vierling, F.**Year:** 1991**Title:** HALOGEN-COMPLEXES OF COPPER(II) IN ANHYDROUS PROPAN-2-OL**Journal:** Polyhedron**Volume:** 10**Issue:** 22**Pages:** 2529-2533**Short Title:** HALOGEN-COMPLEXES OF COPPER(II) IN ANHYDROUS PROPAN-2-OL**ISSN:** 0277-5387**DOI:** 10.1016/s0277-5387(00)81326-1**Accession Number:** WOS:A1991GU35500002

**Abstract:** Solutions of copper(II) halides in propan-2-ol were investigated spectrophotometrically at 25-degrees-C and at constant ionic strength. For the chlorides as well as the bromides four mononuclear complexes are present in the solutions and their overall stability constants were calculated as  $\log\text{-}\beta\text{-CuCl}^+ = 5.7$ ,  $\log\text{-}\beta\text{-CuCl}_2 = 8.6$ ,  $\log\text{-}\beta\text{-CuCl}_3^- = 10.2$ ,  $\log\text{-}\beta\text{-CuCl}_4^{2-} = 10.6$ , and  $\log\text{-}\beta\text{-CuBr}^+ = 6.1$ ,  $\log\text{-}\beta\text{-CuBr}_2 = 8.4$ ,  $\log\text{-}\beta\text{-CuBr}_3^- = 10.2$ ,  $\log\text{-}\beta\text{-CuBr}_4^{2-} = 10.7$ . Electronic spectra of all the species present in the solution were calculated; the tetrahalogenocuprate  $\text{CuX}_4^{2-}$  has  $D_{2d}$  symmetry. A comparative study of the thermodynamic stabilities of these complexes in alcohols shows a tendency of stability as an increasing function of number of carbon atoms in the alcohol.

**Notes:** Dali, s benganem, f khan, ma meullemeestre, j vierling, f**URL:** <Go to ISI>://WOS:A1991GU35500002

**Reference Type: Journal Article****Record Number:** 78**Author:** Deri, F. Behar, O.**Year:** 1992**Title:** VISCOELASTIC BEHAVIOR IN THE MOLTEN STATE OF LOW-DENSITY POLYETHYLENE POLYBUTENE-1 BLENDS**Journal:** Polymer International**Volume:** 28**Issue:** 1**Pages:** 63-66**Short Title:** VISCOELASTIC BEHAVIOR IN THE MOLTEN STATE OF LOW-DENSITY POLYETHYLENE POLYBUTENE-1 BLENDS**ISSN:** 0959-8103**DOI:** 10.1002/pi.4990280111**Accession Number:** WOS:A1992HU21400009

**Abstract:** The viscoelastic behaviour in the molten state of low density polyethylene polybutene 1 blends has been studied according to temperature, shearing stress and shearing rate. Measurements were made with a capillary viscometer for the static properties and a balance-rheometer system of Kepes for the dynamic properties. Correction of experimental data has been performed and flow activation energies at a constant shear stress determined, whilst elasticity was investigated by means of the Barus factor. Furthermore, an investigation has been performed on variations of the real  $\eta'$  and imaginary  $\eta''$  parts of the complex viscosity with regard to the pulsation frequency- $\omega$ . The Cole-Cole and the Smyth representations were utilised to determine the Newtonian viscosity- $\eta_0$ , the parameter of distribution of relaxation time  $h$  and the average relaxation time  $\tau_0$ - $\overline{O}BAR$ .

**Notes:** Deri, f behar, o Polymer 91 - international symp on polymer materials : preparation, characterization and properties Feb 10-14, 1991 Melbourne, australia Int union pure & appl chem, austr acad sci, austr acad technol sci & engn

**URL:** <Go to ISI>://WOS:A1992HU21400009

**Reference Type: Journal Article****Record Number:** 79**Author:** Deri, F. Lallam, A.**Year:** 1991**Title:** RHEOLOGICAL PROPERTIES IN THE MELT OF BINARY-MIXTURES OF POLYETHYLENE AND POLY(1-BUTENE)**Journal:** Makromolekulare Chemie-Macromolecular Chemistry and Physics**Volume:** 192**Issue:** 11**Pages:** 2811-2826**Date:** Nov**Short Title:** RHEOLOGICAL PROPERTIES IN THE MELT OF BINARY-MIXTURES OF POLYETHYLENE AND POLY(1-BUTENE)**ISSN:** 0025-116X**Accession Number:** WOS:A1991GV19200025

**Abstract:** The dynamic rheological study on a series of binary blends obtained from low-density polyethylene and poly(1-butene) was carried out. From our results we can propose an analogical pattern which is able to simulate the rheological behaviour of the blend in the melt state. We have calculated the different parameters of the model and their variations with temperature, composition, mixing and frequency. We have demonstrated that: The viscosity  $\eta_0$  and the mean relaxation time  $\tau_0$  decrease with increasing temperature, while the parameter  $h$  of the distribution of relaxation times remains independent of the temperature. Kneading operation gives rise to a drop of the  $\tau_0$ ,  $\eta_0$  and  $h$  values compared to those products which have not been kneaded. The viscosity  $\eta_0$  is the weighted sum of the blend components. The viscosity  $\eta_0$  of the blend is a function of the molecular weight.

**Notes:** Deri, f lallam, a**URL:** <Go to ISI>://WOS:A1991GV19200025



**Reference Type: Journal Article****Record Number:** 80**Author:** Djabi, F. Meullemeestre, J. Vierling, F. Bouet, G. Khan, M. A.**Year:** 1994**Title:** COPPER(II) CHLOROCOMPLEXES IN PROPAN-1-OL AND BUTAN-2-OL - EFFECT OF THE POSITION OF THE OH GROUP**Journal:** Bulletin De La Societe Chimique De France**Volume:** 131**Issue:** 1**Pages:** 53-57**Short Title:** COPPER(II) CHLOROCOMPLEXES IN PROPAN-1-OL AND BUTAN-2-OL - EFFECT OF THE POSITION OF THE OH GROUP**ISSN:** 0037-8968**Accession Number:** WOS:A1994MV52000007

**Abstract:** Copper(II) chlorocomplexes in propan-1-ol and butan-2-ol. Effect of the position of the OH group. A spectrophotometric study of copper(II) chlorocomplexes was carried out at 25 degrees C and constant ionic strength of 1 M. Four mononuclear complexes were identified and their overall stability constants calculated as  $\log \beta(1) = 4.0$ ;  $\log \beta(2) = 7.0$ ;  $\log \beta(3) = 8.6$  and  $\log \beta(4) = 9.6$  in propan-1-ol and as  $\log \beta(1) = 4.5$ ;  $\log \beta(2) = 8.0$ ;  $\log \beta(3) = 9.8$  and  $\log \beta(4) = 10.5$  in butan-2-ol. The electronic spectra of all of these species in these solvents are reported here for the first time. This study confirms earlier results that the stability constants of these complexes increase with the molar molecular weight of the solvent and we further report here that the position of the alcoholic function has no significant effect on either the stability or the electronic spectra in this system.

**Notes:** Djabi, f meullemeestre, j vierling, f bouet, g khan, ma**URL:** <Go to ISI>://WOS:A1994MV52000007

**Reference Type: Journal Article****Record Number:** 81**Author:** Djabi, M. Fort, A. Benkherourou, O. Deville, J. P.**Year:** 1999**Title:** Desorption of cesium induced by laser heating at the W(100) surface**Journal:** Annales De Chimie-Science Des Materiaux**Volume:** 24**Issue:** 2**Pages:** 157-162**Date:** Feb**Short Title:** Desorption of cesium induced by laser heating at the W(100) surface**ISSN:** 0151-9107**DOI:** 10.1016/s0151-9107(99)80060-9**Accession Number:** WOS:000078573700007

**Abstract:** The Second Harmonic Generation (SHG) technique was used to study the adsorption of cesium atoms on tungsten surface. However, we have observed that the laser beam is itself responsible for the desorption of cesium atoms from the tungsten surface. In order to explain this desorption, we have determined the temperatures induced by a laser beam on tungsten surfaces and we have shown that they can reach several hundred, or even thousands of degrees.

**Notes:** Djabi, M Fort, A Benkherourou, O Deville, JP**URL:** <Go to ISI>://WOS:000078573700007

**Reference Type: Journal Article****Record Number:** 82**Author:** Djahli, F. Autran, J. L. Plossu, C.**Year:** 1994**Title:** USE OF THE CHARGE-PUMPING TECHNIQUE TO UNDERSTAND NONUNIFORM N-CHANNEL MOSFET DEGRADATION**Journal:** Materials Science and Engineering B-Solid State Materials for Advanced Technology**Volume:** 23**Issue:** 2**Pages:** 120-122**Date:** Apr**Short Title:** USE OF THE CHARGE-PUMPING TECHNIQUE TO UNDERSTAND NONUNIFORM N-CHANNEL MOSFET DEGRADATION**ISSN:** 0921-5107**DOI:** 10.1016/0921-5107(94)90344-1**Accession Number:** WOS:A1994NE13600008

**Abstract:** By using the charge pumping technique we have separated the interface state from the fixed charge effects when non-uniform MOSFET degradation is induced by hot-carrier injection under electrical stress. For n-channel MOSFETs we show that, after a hot-electron injection, hot-holes can also be injected into the gate oxide under the same stress conditions. In this article we also show, by the study of static characteristics before and after the electrical stress, that the transductance degradation  $\Delta G(m)$  and the threshold voltage shift  $\Delta V(T)$  (induced by a maximum substrate current stress condition) follow an  $A t^n$  law, but with very different values of  $n$ .

**Notes:** Djahli, f autran, jl plossu, c**URL:** <Go to ISI>://WOS:A1994NE13600008

**Reference Type: Journal Article****Record Number:** 83**Author:** Djahli, F. Kaabi, L.**Year:** 1997**Title:** A macro model in SMART SPICE to study the MOSFET degradations with CP technique**Journal:** International Journal of Electronics**Volume:** 82**Issue:** 5**Pages:** 471-481**Date:** May**Short Title:** A macro model in SMART SPICE to study the MOSFET degradations with CP technique**ISSN:** 0020-7217**DOI:** 10.1080/002072197135850**Accession Number:** WOS:A1997WX08500003

**Abstract:** We have simulated the experimental charge pumping technique by the elaboration and the implementation of a macro model, in the electrical simulator SMART SPICE on a personal computer. This macro model takes into account all the geometrical and electrical parameters of the studied transistor and gives their mathematical expressions. It also gives the different curves of the charge pumping current, which can be obtained experimentally by this technique versus different parameters, before or after different ageing stresses. The obtained results are compared to recent experimental results.

**Notes:** Djahli, F Kaabi, L**URL:** <Go to ISI>://WOS:A1997WX08500003

**Reference Type: Journal Article****Record Number:** 84**Author:** Djahli, F. Kaabi, L.**Year:** 1998**Title:** A macromodel in SMART SPICE to study MOSFET degradations with the CP technique**Journal:** Microelectronics Journal**Volume:** 29**Issue:** 11**Pages:** 805-811**Date:** Nov**Short Title:** A macromodel in SMART SPICE to study MOSFET degradations with the CP technique**ISSN:** 0026-2692**DOI:** 10.1016/s0026-2692(97)00022-0**Accession Number:** WOS:000075348100006

**Abstract:** In this work, we have simulated the experimental charge pumping technique by the development and implementation of a macro model in the electrical simulator SMART SPICE on a personal computer. This macro model takes into account all of the geometrical and electrical parameters of the studied transistor and gives their mathematical expressions. It also gives the different curves of the charge pumping current, which can be obtained experimentally by this technique for different parameters, before or after different ageing stresses. The results obtained are compared with recent experimental results. (C) 1998 Published by Elsevier Science Ltd. All rights reserved.

**Notes:** Djahli, F Kaabi, L**URL:** <Go to ISI>://WOS:000075348100006

**Reference Type: Journal Article****Record Number:** 85**Author:** Djahli, F. Mayouf, A. Dekik, M.**Year:** 1999**Title:** Modelling of microstrip open-end and gap discontinuities using an ameliorated moments method**Journal:** International Journal of Electronics**Volume:** 86**Issue:** 2**Pages:** 245-254**Date:** Feb**Short Title:** Modelling of microstrip open-end and gap discontinuities using an ameliorated moments method**ISSN:** 0020-7217**DOI:** 10.1080/002072199133616**Accession Number:** WOS:000078399300010

**Abstract:** In this work, we carry out a study of gap and open-end discontinuities, using the ameliorated moment method which eliminates the spurious solutions in the calculation of eigenmodes. A rigorous solution for radiation and surface wave generation at high frequencies is obtained. Results are given for coupling and terminal capacitance and conductance, for the extended length versus the metallic strip width, the substrate thickness, the gap width, and versus the frequency for different values of permittivity. Our results, given here in the form of curves, are compared to other results obtained by quasi-static and full-wave methods, and to experimental results.

**Notes:** Djahli, F Mayouf, A Dekik, M**URL:** <Go to ISI>://WOS:000078399300010

**Reference Type: Journal Article****Record Number:** 86**Author:** Djahli, F. Rahmani, S. Remmouche, R.**Year:** 1998**Title:** A static model for the SOI TMOS in strong inversion**Journal:** Microelectronic Engineering**Volume:** 43-4**Pages:** 587-598**Date:** Aug**Short Title:** A static model for the SOI TMOS in strong inversion**ISSN:** 0167-9317**DOI:** 10.1016/s0167-9317(98)00231-7**Accession Number:** WOS:000075867000082

**Abstract:** The recent development of the manufacturing technology of (SOI) TMOS integrated circuits promoted by the fundamental advantages of dielectric insulation have stimulated the thin film SOI TMOS modeling. An accurate model which takes into account the structural unity of the component is then necessary for Computer-Aided Design (CAD). In this work we propose an SOI TMOS model taking into account the effects related to the small geometry. This model has been implemented in SPICE3 simulator. (C) 1998 Elsevier Science B.V. All rights reserved.

**Notes:** Djahli, F Rahmani, S Remmouche, R 2nd International Conference on Low Dimensional Structures and Devices May 19-21, 1997 Lisbon, portugal

**URL:** <Go to ISI>://WOS:000075867000082

**Reference Type: Journal Article****Record Number:** 87**Author:** Djidjelli, H. Benachour, D.**Year:** 1998**Title:** Effects of recycling on mechanical and thermal properties of polystyrene**Journal:** Macromolecular Symposia**Volume:** 127**Pages:** 181-185**Date:** Feb**Short Title:** Effects of recycling on mechanical and thermal properties of polystyrene**ISSN:** 1022-1360**DOI:** 10.1002/masy.19981270124**Accession Number:** WOS:000072592900023

**Abstract:** A commercial Polystyrene ( $M_w = 2.5 \times 10^5$ ,  $MFI = 14.80$ ) was extruded repeatedly from one to eight times at 190 degrees C. The effects of extrusion process on physical and chemical properties of polystyrene were investigated using: Average molecular weight Izod Impact strength; Thermal properties (TGA, DTA). The results showed that processing of polystyrene leads to degradation. In fact, a decrease of 23% in the average molecular weight was observed for the 8(th) cycle sample and a reduction in impact strength by 34% was also noticed for the 4(th) cycle sample.

**Notes:** Djidjelli, H Benachour, D 10th Rolduc Polymer Meeting on Petro Polymers vs Green Polymers May 05-07, 1997 Kerkrade, netherlands

**URL:** <Go to ISI>://WOS:000072592900023



**Reference Type: Journal Article****Record Number:** 88**Author:** Drabla, S. Sofonea, M.**Year:** 1999**Title:** Analysis of a Signorini problem with friction**Journal:** Ima Journal of Applied Mathematics**Volume:** 63**Issue:** 2**Pages:** 113-130**Date:** Oct**Short Title:** Analysis of a Signorini problem with friction**ISSN:** 0272-4960**DOI:** 10.1093/imamat/63.2.113**Accession Number:** WOS:000083124600001

**Abstract:** This paper deals with the study of a nonlinear problem of frictional contact between an elastic body and a rigid foundation. The elastic constitutive law is assumed to be nonlinear and the contact is modelled with Signorini's conditions and a version of Coulomb's law of dry friction. We present two weak formulations of the problem and establish existence and uniqueness results, using arguments of elliptic variational inequalities and a fixed-point property. Moreover, we prove some equivalence results and study the behaviour of the solution when the coefficient of friction tends to zero.

**Notes:** Drabla, S Sofonea, M**URL:** <Go to ISI>://WOS:000083124600001

**Reference Type: Journal Article****Record Number:** 89**Author:** Fernandes, R. Z. D. Hammou, A. Hammouche, A.**Year:** 1989**Title:** INFLUENCE OF DOPANT CONCENTRATION ON OXYGEN REDUCTION FOR HIGHLY DOPED ZIRCONIAS**Journal:** Solid State Ionics**Volume:** 37**Issue:** 1**Pages:** 31-35**Date:** Dec**Short Title:** INFLUENCE OF DOPANT CONCENTRATION ON OXYGEN REDUCTION FOR HIGHLY DOPED ZIRCONIAS**ISSN:** 0167-2738**DOI:** 10.1016/0167-2738(89)90283-x**Accession Number:** WOS:A1989CC58600004**Notes:** Fernandes, rzd hammou, a hammouche, a**URL:** <Go to ISI>://WOS:A1989CC58600004

**Reference Type: Journal Article****Record Number:** 90**Author:** Fitas, R. Zerroual, L. Chelali, N. Djellouli, B.**Year:** 1996**Title:** Heat treatment of alpha- and beta-battery lead dioxide and its relationship to capacity loss**Journal:** Journal of Power Sources**Volume:** 58**Issue:** 2**Pages:** 225-229**Date:** Feb**Short Title:** Heat treatment of alpha- and beta-battery lead dioxide and its relationship to capacity loss**ISSN:** 0378-7753**DOI:** 10.1016/s0378-7753(96)02372-5**Accession Number:** WOS:A1996VQ21300016

**Abstract:** It is well known that lead dioxide contains, what has been called, 'structural water'. Present in the form of OH<sup>-</sup> ions replacing O<sup>2-</sup> ions in the anionic sublattice, the 'structurally bonded' water can be removed by heating, in the temperature range from 150 to 250 degrees C. In the present study, the discharge capacities of fresh and heat-treated (140 and 230 degrees C, respectively) alpha- and beta-PbO<sub>2</sub> samples were evaluated in H<sub>2</sub>SO<sub>4</sub> solution of 1.28 g cm<sup>-3</sup> sp. gr. at different current densities of 5 to 40 mA cm<sup>-2</sup>. It was found that the capacity decreased when structural water was removed. This loss of capacity is important when alpha-PbO<sub>2</sub> samples are considered. The energy of dehydroxilation was deduced by applying kinetic considerations to thermograms, obtained experimentally. The removal of the OH<sup>-</sup> groups from beta-PbO<sub>2</sub> needs an energy twice that of the alpha-form.

**Notes:** Fitas, R Zerroual, L Chelali, N Djellouli, B**URL:** <Go to ISI>://WOS:A1996VQ21300016

**Reference Type: Journal Article****Record Number:** 91**Author:** Fitas, R. Zerroual, L. Chelali, N. Djellouli, B.**Year:** 1997**Title:** Role of hydration water in the reduction process of PbO<sub>2</sub> in lead/acid cells**Journal:** Journal of Power Sources**Volume:** 64**Issue:** 1-2**Pages:** 57-60**Date:** Jan-Feb**Short Title:** Role of hydration water in the reduction process of PbO<sub>2</sub> in lead/acid cells**ISSN:** 0378-7753**DOI:** 10.1016/s0378-7753(96)02502-5**Accession Number:** WOS:A1997XE59600009

**Abstract:** The influence of 'hydrogen loss' on the electrochemical properties of both alpha-PbO<sub>2</sub> and beta-PbO<sub>2</sub> was studied using galvanostatic discharge and cyclic voltammetry. The thermal decomposition of electroformed PbO<sub>2</sub> shows two types of hydration water: the first type, which disappears at low temperature, is adsorbed on the surfaces of the PbO<sub>2</sub> particles, and the second one is localized within the PbO<sub>2</sub> crystal structure. The reduction process of PbO<sub>2</sub> in lead/acid cells is mainly determined by diffusion processes within the oxide. The hydrogen diffusion coefficient (D) over tilde(H) in lead dioxide has been determined at 25 degrees C; the values obtained are between 0.42 and 1.67 X 10<sup>(-7)</sup> cm<sup>(2)</sup> s<sup>(-1)</sup>. The removing of structurally bonded' water, by heating the samples at 230 degrees C, affects considerably the electrochemical properties of PbO<sub>2</sub> and leads to a decrease in (D) over tilde(H).

**Notes:** Fitas, R Zerroual, L Chelali, N Djellouli, B International Conference on Lead/Acid Batteries (LABAT 96) Jun 03-07, 1996 Varna, bulgaria

**URL:** <Go to ISI>://WOS:A1997XE59600009

**Reference Type: Journal Article****Record Number:** 92**Author:** Frikach, K. Taoufik, A. Boudissa, M. Senoussi, S. Halimi, R.**Year:** 1997**Title:** Influence of the magnetic field sweep rate on flux creep in melt textured sample of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-d</sub>**Journal:** Physica C**Volume:** 282**Pages:** 2263-2264**Date:** Aug**Short Title:** Influence of the magnetic field sweep rate on flux creep in melt textured sample of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-d</sub>**ISSN:** 0921-4534**DOI:** 10.1016/s0921-4534(97)01212-4**Accession Number:** WOS:A1997YA41700161

**Abstract:** We investigated the influence of the field sweep rate  $dH/dt$  (3Oe/s less than or equal to  $H/dt$  less than or equal to 1kOe/s) on the flux creep in a melt textured YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-d</sub> at different temperatures and for a fixed fields parallel to the c-axis. The initial stage of the relaxation is imposed by the macroscopic sample dimension and the field sweep rate. As a result, all the relaxation curves, at a given field and temperature, collapse into a single one that is independent from the experimental conditions by a transformation  $t \rightarrow t + \tau$  in which  $\tau$  is a transient time. The experimental values of  $\tau$  coincides well with literature.

**Notes:** Frikach, K Taoufik, A Boudissa, M Senoussi, S Halimi, R International Conference on Materials and Mechanisms of Superconductivity - High Temperature Superconductors V Feb 28-mar 04, 1997 Beijing, peoples r china IChemE 4

**URL:** <Go to ISI>://WOS:A1997YA41700161

**Reference Type: Journal Article****Record Number:** 93**Author:** Frikach, K. Taoufik, A. Boudissa, M. Senoussi, S.**Year:** 1997**Title:** Magnetic relaxation and collective creep in a grain aligned sample of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>-delta**Journal:** Physica C**Volume:** 282**Pages:** 2253-2254**Date:** Aug**Short Title:** Magnetic relaxation and collective creep in a grain aligned sample of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>-delta**ISSN:** 0921-4534**DOI:** 10.1016/s0921-4534(97)01202-1**Accession Number:** WOS:A1997YA41700156**Abstract:** Measurements of creep of magnetic flux lines are conducted in a c axis grain-aligned sample of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>-delta within the temperature region from 4.2 to 90K, for fields ranging from 0 to 6T. The effective pinning energy  $U_0$  and the power  $\mu$  are obtained.**Notes:** Frikach, K Taoufik, A Boudissa, M Senoussi, S International Conference on Materials and Mechanisms of Superconductivity - High Temperature Superconductors V Feb 28-mar 04, 1997 Beijing, Peoples R China IChemE 4**URL:** <Go to ISI>://WOS:A1997YA41700156

**Reference Type: Journal Article****Record Number:** 94**Author:** Gehu, J. M. Kaabeche, M. Gharzouli, R.**Year:** 1994**Title:** Phytosociological observations in North Eastern Algeria**Journal:** Phytocoenologia**Volume:** 24**Pages:** 369-382**Date:** Mar**Short Title:** Phytosociological observations in North Eastern Algeria**ISSN:** 0340-269X**Accession Number:** WOS:000208428400017**Notes:** Gehu, J. M. Kaabeche, M. Gharzouli, R.**URL:** <Go to ISI>://WOS:000208428400017

**Reference Type: Journal Article****Record Number:** 95**Author:** Gharzouli, K. Gharzouli, A. Aiouaz, L. Berais, A.**Year:** 1996**Title:** Effect of sodium fluoride on the transmural potential difference of the rat stomach**Journal:** Fluoride**Volume:** 29**Issue:** 1**Pages:** 13-19**Date:** Feb**Short Title:** Effect of sodium fluoride on the transmural potential difference of the rat stomach**ISSN:** 0015-4725**Accession Number:** WOS:A1996TV67500004

**Abstract:** Transmural potential difference (PD) was measured in vivo under continuous perfusion of the rat stomach. Luminal NaF (5 mM) perfusion elicited a net temporal decrease of PD, whereas lower NaF concentrations (1 and 2 mM) had no effect. The fall of PD induced by 5 mM NaF was abolished at pH 8.4 and was enhanced (161%) at pH 3.2. Compared to NaF alone, the decrease of PD induced by the simultaneous perfusion of NaF and salicylic acid (5 mM each) was more pronounced (209%) with a previous perfusion of salicylic acid alone than the direct perfusion of NaF and salicylic acid (136%). These results suggest that the observed variations of PD reflect the early functional alterations of the mucosa preceding the structural damaging effects of hydrofluoric and salicylic acids.

**Notes:** Gharzouli, K Gharzouli, A Aiouaz, L Berais, A**URL:** <Go to ISI>://WOS:A1996TV67500004



**Reference Type: Journal Article****Record Number:** 96**Author:** Gharzouli, K. Gharzouli, A. Amira, S. Khennouf, S.**Year:** 1999**Title:** Prevention of ethanol-induced gastric lesions in rats by natural honey and glucose-fructose-sucrose-maltose mixture**Journal:** Pharmacological Research**Volume:** 39**Issue:** 2**Pages:** 151-156**Date:** Feb**Short Title:** Prevention of ethanol-induced gastric lesions in rats by natural honey and glucose-fructose-sucrose-maltose mixture**ISSN:** 1043-6618**DOI:** 10.1006/phrs.1998.0420**Accession Number:** WOS:000078848700011

**Abstract:** The cytoprotective properties of various natural honey specimens and of a glucose-fructose-sucrose-maltose mixture (GFSM) against gastric ethanol-induced lesions have been evaluated in rats. GFSM mixture and honey (2.5 g kg<sup>-1</sup>) were given orally 30 min before administration of 100% ethanol (5 ml kg<sup>-1</sup>) for a further 15-min period. Animal pretreatment with GFSM or honey prevented the formation of gastric lesions. The number and severity of haemorrhagic lesions were reduced by 98%. Stomach acid content increased by 110-703% according to honey specimens. The similar protective effects of honey and GFSM mixture suggest that carbohydrates at high concentrations behave as mild irritants that can induce adaptive cytoprotection. (C) 1999 The Italian Pharmacological Society.

**Notes:** Gharzouli, K Gharzouli, A Amira, S Khennouf, S**URL:** <Go to ISI>://WOS:000078848700011

**Reference Type: Journal Article****Record Number:** 97**Author:** Gharzouli, K. Khennouf, S. Amira, S. Gharzouli, A.**Year:** 1999**Title:** Effects of aqueous extracts from *Quercus ilex* L. root bark, *Punica granatum* L. fruit peel and *Artemisia herba-alba* asso leaves on ethanol-induced gastric damage in rats**Journal:** Phytotherapy Research**Volume:** 13**Issue:** 1**Pages:** 42-45**Date:** Feb**Short Title:** Effects of aqueous extracts from *Quercus ilex* L. root bark, *Punica granatum* L. fruit peel and *Artemisia herba-alba* asso leaves on ethanol-induced gastric damage in rats**ISSN:** 0951-418X**DOI:** 10.1002/(sici)1099-1573(199902)13:1<42::aid-ptr383>3.0.co;2-2**Accession Number:** WOS:000078797300009

**Abstract:** The gastroprotective effect of tannic acid and the aqueous extract of *Quercus ilex* L. root bark, *Punica granatum* L, fruit peel and *Artemisia herba-alba* Asso leaves was investigated in the rat against ethanol-induced damage. Tannic acid, *Q. ilex* and *P. granatum* extracts gave 100% precipitation of ovine haemoglobin in vitro, whereas *A. herba-alba* extract was devoid of any protein-binding property. Oral administration of these plant extracts or tannic acid induced a significant decrease in gastric lesions (47.7%-76%), The observed protection was more pronounced when the test solution was given at the same time with ethanol, except for *Q. ilex* extract. The acid content of the stomach was significantly increased by *P. granatum* (368%) and *A. herba-alba* (251%) extracts prepared in ethanol, It is suggested that monomeric and polymeric polyphenols can strengthen the gastric mucosal barrier. (C) 1999 John Wiley & Sons, Ltd.

**Notes:** Gharzouli, K Khennouf, S Amira, S Gharzouli, A**URL:** <Go to ISI>://WOS:000078797300009

**Reference Type: Journal Article**

**Record Number: 98**

**Author: Gharzouli, K. Senator, A.**

**Year: 1994**

**Title: FLUORIDE ABSORPTION IN-VITRO BY THE GASTROINTESTINAL-TRACT OF THE RAT**

**Journal: Fluoride**

**Volume: 27**

**Issue: 4**

**Pages: 185-188**

**Date: Oct**

**Short Title: FLUORIDE ABSORPTION IN-VITRO BY THE GASTROINTESTINAL-TRACT OF THE RAT**

**ISSN: 0015-4725**

**Accession Number: WOS:A1994PM65200002**

**Abstract:** Fluoride absorption by the gastrointestinal tract of the rat was studied with the everted sacs. Duodenum, proximal jejunum, distal ileum, and colon absorbed fluoride proportionally to luminal concentration (0.5 - 10 mM), whereas absorption by the stomach was curvilinear and lower than that observed in the intestines. In the stomach and duodenum a net flux of fluoride directed towards the mucosa was observed when 0.5 mM NaF was initially present on both sides of the everted sacs.

**Notes:** Gharzouli, k senator, a

**URL:** <Go to ISI>://WOS:A1994PM65200002

**Reference Type: Journal Article****Record Number:** 99**Author:** Gharzouli, K. Senator, A. Gharzouli, A. Mustapha, M. Abed, S.**Year:** 1995**Title:** ACID-SECRETION AND FLUORIDE ABSORPTION BY THE LIGATED STOMACH OF THE RAT - MUTUAL INFLUENCES OF FLUORIDE AND LUMINAL ACIDITY**Journal:** Fluoride**Volume:** 28**Issue:** 1**Pages:** 3-9**Date:** Feb**Short Title:** ACID-SECRETION AND FLUORIDE ABSORPTION BY THE LIGATED STOMACH OF THE RAT - MUTUAL INFLUENCES OF FLUORIDE AND LUMINAL ACIDITY**ISSN:** 0015-4725**Accession Number:** WOS:A1995QF94500002

**Abstract:** The ligated stomach of the rat was used to study the net fluxes of acid and fluoride. Luminal 10 mM NaF decreased basal and histamine-stimulated acid secretion (-53%), but increased four times the loss of acid from the gastric lumen filled with 100 mM HCl. Two hours intravenous infusion of 5 mM NaF alone (20  $\mu$  moles F<sup>-</sup>.Kg(-1).h(-1)) did not affect acid secretion, but the addition of 0.1 mM AlF(3) to the infused solution stimulated acid secretion (+28%). The stimulation of acid secretion by histamine did not change absorption of fluoride. When the luminal concentration of acid was increased with 100 mM HCl, fluoride absorption was enhanced by 80% as compared with control. The increase of fluoride absorption was accompanied by a rise of fluoride concentration in the plasma (+43% - +53%). A positive correlation was observed between the percentage absorption of fluoride and its concentration in the plasma.

**Notes:** Gharzouli, k senator, a gharzouli, a mustapha, m abed, s**URL:** <Go to ISI>://WOS:A1995QF94500002

**Reference Type: Journal Article****Record Number:** 100**Author:** Ghebouli, B. Layadi, A. Kerkache, L.**Year:** 1998**Title:** Effect of the substrate on the structural and electrical properties of dc sputtered Ni thin films**Journal:** European Physical Journal-Applied Physics**Volume:** 3**Issue:** 1**Pages:** 35-39**Date:** Jul**Short Title:** Effect of the substrate on the structural and electrical properties of dc sputtered Ni thin films**ISSN:** 1286-0042**DOI:** 10.1051/epjap:1998201**Accession Number:** WOS:000075466900006

**Abstract:** We have studied the effect of the substrate on the structural and electrical properties of Ni thin films. Series of Ni thin films have been prepared by dc diode sputtering on four different substrates, glass, Si(111), Si(100) and mica; the Ni thickness ranges from about 47 nm to 317 nm. We observed that Ni grown on glass has no texture. On the other hand Ni deposited on Si gets the (111) preferred orientation for all samples, even the thinner ones. Grain sizes were found to increase with increasing thickness for Ni/glass and Ni/Si(100), with the grains in Ni/Si(100) much larger than the corresponding ones for Ni on glass. The lattice constant of Ni on glass is smaller than that of the bulk. For the Ni on Si, however, the lattice constant is practically equal to the bulk value. We noted that the resistivity  $\rho$  decreases with increasing thickness and with increasing grain size for practically all samples. Also the Ni thin films deposited on a semiconductor substrate (Si(100) and Si(111)) get a higher resistivity than Ni on an insulator (Ni/glass for example) for the same Ni thickness. No magnetoresistance was observed in these Ni thin films at ambient temperature and for about a half kOe perpendicular magnetic field. These experimental results will be interpreted and discussed.

**Notes:** Ghebouli, B Layadi, A Kerkache, L**URL:** <Go to ISI>://WOS:000075466900006

**Reference Type: Journal Article****Record Number:** 101**Author:** Guechi, A. Girre, L.**Year:** 1994**Title:** SOURCES OF CYCLOCONIUM-OLEAGINUM (CAST) CONIDIA FOR INFECTION OF OLIVE LEAVES AND CONDITIONS DETERMINING LEAF-SPOT DISEASE DEVELOPMENT IN THE REGION OF SETIF, ALGERIA**Journal:** Mycopathologia**Volume:** 125**Issue:** 3**Pages:** 163-171**Date:** Mar**Short Title:** SOURCES OF CYCLOCONIUM-OLEAGINUM (CAST) CONIDIA FOR INFECTION OF OLIVE LEAVES AND CONDITIONS DETERMINING LEAF-SPOT DISEASE DEVELOPMENT IN THE REGION OF SETIF, ALGERIA**ISSN:** 0301-486X**DOI:** 10.1007/bf01146522**Accession Number:** WOS:A1994NT10600006

**Abstract:** In the region of Setif, peacock leaf spot disease caused by *Cycloconium oleaginum* was found to be most prevalent in the period from late autumn to spring and of minor significance in the period from the beginning of July until the middle of November. Severity of infection on the lower parts was greater than on the upper parts of the trees. Damage on leaves facing north was much greater than on those facing south. Production of conidia leaf spots was found to be high in spring and late autumn but very low in summer and early autumn. Temperatures from 15 to 18 degrees C were found optimal for the growth of the fungus. Reduced growth was seen at 3, 1 and 25 degrees C with total inhibition at 30 degrees C. Our results suggest that fallen leaves play no role in new infections and the role of the remaining spots on the tree during summer is of little importance. Four phases for the infection of new leaves were determined. In the first, during late spring, three newly opened pairs of leaves were infected, this infection remains hidden until late autumn. The second phase occurs in early autumn after rain. The third stage in late autumn and in the beginning of winter is characterized by the occurrence of new leaf spots which are usually concentrated on the basal pair of newly grown leaves. The fourth phase of infection, at the beginning of spring, is the most important of all. The infected leaves at this stage, comprise the infection source for all the following stages.

**Notes:** Guechi, a girre, 1**URL:** <Go to ISI>://WOS:A1994NT10600006

**Reference Type: Journal Article****Record Number:** 102**Author:** Guittoum, A. Kerkache, L. Layadi, A.**Year:** 1999**Title:** Effect of thickness on the physical properties of ITO thin films**Journal:** European Physical Journal-Applied Physics**Volume:** 7**Issue:** 3**Pages:** 201-206**Date:** Sep**Short Title:** Effect of thickness on the physical properties of ITO thin films**ISSN:** 1286-0042**DOI:** 10.1051/epjap:1999214**Accession Number:** WOS:000083575700002

**Abstract:** We have studied the effect of thickness on the structural, optical and electrical properties of In<sub>2</sub>O<sub>3</sub>:Sn (ITO) thin films. Two series of ITO thin films have been deposited onto glass substrates by DC sputtering at two partial pressures of oxygen (ppo):  $4 \times 10^{-4}$  and  $4.75 \times 10^{-4}$  mbar. Each series consists of samples with thickness ranging from 306 nm to 1440 nm. We observed a change of texture with thickness; the thinner films grow with a (111) preferred orientation; however as the thickness increased, the preferred orientation becomes in the (100) direction. The lattice constant and the grain size have also been obtained from the X-ray spectra. The energy gap, E-g, has been obtained from the transmission curve; E-g is found to decrease with increasing thickness for both series. The electrical resistivity  $\rho$  has been studied as a function of thickness, ppo and temperature (T). The temperature was varied from room temperature (RT) to 450 degrees C and back to RT; a hysteresis effect was observed in the  $\rho$  vs. T curve. Also, a minimum in  $\rho$  was observed, in all these samples, in the temperature range 260 to 280 degrees C. For these temperatures, we have studied the effect of annealing time on the electrical resistivity for samples having both textures. We noted that  $\rho$  increased with annealing time and reaches a saturation value equal to the RT temperature value. Hall effect experiments were done on all these samples. The concentration n and the mobility  $\mu(H)$  were obtained. These parameters are found to be sensitive to the thickness and the texture of these films. All these results will be correlated and discussed.

**Notes:** Guittoum, A Kerkache, L Layadi, A**URL:** <Go to ISI>://WOS:000083575700002

**Reference Type: Journal Article**

**Record Number: 103**

**Author: Halimi, R. Merabet, A.**

**Year: 1989**

**Title: KINETICS OF COMPOUND FORMATION IN CU-SB THIN-FILMS**

**Journal: Surface Science**

**Volume: 223**

**Issue: 3**

**Pages: 599-606**

**Date: Dec**

**Short Title: KINETICS OF COMPOUND FORMATION IN CU-SB THIN-FILMS**

**ISSN: 0039-6028**

**DOI: 10.1016/0039-6028(89)90684-5**

**Accession Number: WOS:A1989CH64900023**

**Notes: Halimi, r merabet, a**

**URL: <Go to ISI>://WOS:A1989CH64900023**



**Reference Type: Journal Article**

**Record Number: 104**

**Author: Halimi, R. Merabet, A.**

**Year: 1989**

**Title: REACTION AT THE INTERFACE OF THIN CU-SB FILMS**

**Journal: Thin Solid Films**

**Volume: 182**

**Pages: L17-L20**

**Date: Dec**

**Short Title: REACTION AT THE INTERFACE OF THIN CU-SB FILMS**

**ISSN: 0040-6090**

**DOI: 10.1016/0040-6090(89)90274-5**

**Accession Number: WOS:A1989CK15500037**

**Notes: Halimi, r merabet, a**

**URL: <Go to ISI>://WOS:A1989CK15500037**

**Reference Type: Journal Article****Record Number:** 105**Author:** Hamdicherif, M. Sekfali, N. Coleman, M. P.**Year:** 1991**Title:** CANCER INCIDENCE IN THE WILAYA OF SETIF, ALGERIA**Journal:** Bulletin Du Cancer**Volume:** 78**Issue:** 2**Pages:** 155-167**Short Title:** CANCER INCIDENCE IN THE WILAYA OF SETIF, ALGERIA**ISSN:** 0007-4551**Accession Number:** WOS:A1991FD16300004

**Abstract:** Preliminary results are presented for a general population-based cancer registry in Setif, Algeria, for 1986-88. Standardised incidence rates for all sites, excluding non-melanoma skin cancer, are 70.1 for men and 59.9 for women: these rates are lower than those reported for most populations. The most frequent cancers are lung, stomach and liver in men, and cervix, liver and breast in women. Nasopharyngeal carcinoma is frequent in both sexes. Incidence of cancers of the gallbladder and extrahepatic bile ducts in women appears particularly high. These results represent the first detailed incidence data for all cancers in an Algerian population.

**Notes:** Hamdicherif, m sekfali, n coleman, mp**URL:** <Go to ISI>://WOS:A1991FD16300004

**Reference Type: Journal Article****Record Number:** 106**Author:** Hamidouche, M. Bouaouadja, N. Osmani, H. Torrecillias, R. Fantozzi, G.**Year:** 1996**Title:** Thermomechanical behaviour of mullite-zirconia composite**Journal:** Journal of the European Ceramic Society**Volume:** 16**Issue:** 4**Pages:** 441-445**Short Title:** Thermomechanical behaviour of mullite-zirconia composite**ISSN:** 0955-2219**DOI:** 10.1016/0955-2219(95)00110-7**Accession Number:** WOS:A1996UF43700010

**Abstract:** Mullite is one of the most widely used compounds in many industrial products. It has been shown that addition of zirconia to mullite improves its mechanical properties, particularly at high temperature. Some investigations have been attempted to explain the fracture toughening of this material. In this paper, the Mechanical properties of mullite-zirconia composite have been determined from room temperature trp to 1400 degrees C. The thermomechanical behaviour of this material is sensitive to the phase transformation of zirconia. The obtained results are presented and discussed.

**Notes:** Hamidouche, M Bouaouadja, N Osmani, H Torrecillias, R Fantozzi, G**URL:** <Go to ISI>://WOS:A1996UF43700010

**Reference Type: Journal Article****Record Number:** 107**Author:** Hamidouche, M. Louahdi, R. Bouaouadja, N. Osmani, H.**Year:** 1994**Title:** THE FRACTURE OF SODA LIME GLASS**Journal:** Glass Technology**Volume:** 35**Issue:** 4**Pages:** 183-185**Date:** Aug**Short Title:** THE FRACTURE OF SODA LIME GLASS**ISSN:** 0017-1050**Accession Number:** WOS:A1994PF61200003

**Abstract:** An indentation technique was used as a means of evaluating the fracture toughness of a soda-lime glass. The specimens were indented using a conventional Vickers hardness testing machine. Toughness values,  $K(Ic)$  values were calculated in terms of the indentation parameters  $2a$  and  $2c$ , using the Liang formula. A comparison was made between these values and others obtained from three and four point bending experiments. The effect of different storage environments (vacuum, air, water) was also studied.

**Notes:** Hamidouche, m louahdi, r bouaouadja, n osmani, h**URL:** <Go to ISI>://WOS:A1994PF61200003

**Reference Type: Journal Article****Record Number:** 108**Author:** Hammouche, A. Caire, J. P. Chelali, N. Boutahala, M.**Year:** 1997**Title:** A novel conception of a comparison electrode for the kinetical study of all-solid PbO<sub>2</sub>-Zn cells**Journal:** Electrochimica Acta**Volume:** 42**Issue:** 16**Pages:** 2511-2515**Short Title:** A novel conception of a comparison electrode for the kinetical study of all-solid PbO<sub>2</sub>-Zn cells**ISSN:** 0013-4686**DOI:** 10.1016/s0013-4686(96)00441-0**Accession Number:** WOS:A1997XG50000008

**Abstract:** The aim of this paper is to propound a novel conception of a comparison electrode, allowing the evaluation of both anode and cathode polarizations involved in the all-solid Zn/PbO<sub>2</sub> cell. This consists of separating each electrode layer deposited on the electrolyte pellet into two distinct parts. During discharge, one of these parts, which will be crossed by the current, acts as a working electrode while the other, staying at its equilibrium state, can play the role of a comparison electrode. First, the reversibility and the potential stability of the comparison electrode are checked. Subsequently, the method is applied to demonstrate the effect of electrode morphology and current density of discharge on electrode polarization in the Zn/PbO<sub>2</sub> system. (C) 1997 Elsevier Science Ltd.

**Notes:** Hammouche, A Caire, JP Chelali, N Boutahala, M**URL:** <Go to ISI>://WOS:A1997XG50000008

**Reference Type: Journal Article****Record Number:** 109**Author:** Kaabeche, M.**Year:** 1996**Title:** The relationship climate-vegetation in the basin of Hodna (Algeria)**Journal:** Acta Botanica Gallica**Volume:** 143**Issue:** 1**Pages:** 85-94**Short Title:** The relationship climate-vegetation in the basin of Hodna (Algeria)**ISSN:** 1253-8078**Accession Number:** WOS:A1996WB46200008

**Abstract:** The main object of the author was to present the principal plant communities in the Hodna region (Algeria). The first step has been to define the general characteristics of the concerned region; and second step was to investigate the plant communities. This approach was based on the structural floristic aspects, syntaxonomics and synchorologies. Then, these plant communities were classified into these phytosociological categories : Quercetea pubescentis (Oberd 1948) Doing-Kraft 1955 et des Quercetea ilicis Br.-Bl. 1947, Ononido-Rosmarinetea Br.-Bl. 1947, Lygeo-Stipetea Riv.-Mart. 1977.

**Notes:** Kaabeche, M**URL:** <Go to ISI>://WOS:A1996WB46200008

**Reference Type: Journal Article****Record Number:** 110**Author:** Kerkache, L. Sadaoui, K. Layadi, A.**Year:** 1998**Title:** Structural and electrical properties of as-deposited and annealed DC sputtered ITO thin films**Journal:** European Physical Journal-Applied Physics**Volume:** 1**Issue:** 2**Pages:** 177-180**Date:** Feb**Short Title:** Structural and electrical properties of as-deposited and annealed DC sputtered ITO thin films**ISSN:** 1286-0042**DOI:** 10.1051/epjap:1998102**Accession Number:** WOS:000073229800007

**Abstract:** We have studied the effect of annealing on the structural and electrical properties of tin-doped indium oxide,  $\text{In}_2\text{O}_3:\text{Sn}$  (ITO), thin films prepared by DC sputtering at different partial pressure of oxygen (ppo). Annealing experiments have been done in vacuum and in Ar atmosphere up to a temperature of 450 degrees C. A change of texture from [100] to [111] as the ppo was increased was noted in the as-deposited films. Annealing induced cristallinity and improved the texture of these films. The lattice constant decreased after annealing. The (222) grain size increased after vacuum annealing but was unaffected by annealing in Ar atmosphere; while the (400) grain size decreased for samples having the [100] texture. The electrical resistivity decreases sharply after annealing to a minimum value of  $87 \times 10^{-4}$  Omega cm.

**Notes:** Kerkache, L Sadaoui, K Layadi, A North-African Conference on Material Science Nov 08-10, 1996 Hammamet, tunisia

**URL:** <Go to ISI>://WOS:000073229800007

**Reference Type: Journal Article****Record Number:** 111**Author:** Kerouani, N. Kerouani, D. Janda, M.**Year:** 1995**Title:** SYNTHESIS AND CHARACTERIZATION OF A NOVEL POLYMER - THE POLY(ALPHA-PYRIDINE-TRIENE)**Journal:** Journal De Chimie Physique Et De Physico-Chimie Biologique**Volume:** 92**Issue:** 4**Pages:** 843-846**Date:** Apr**Short Title:** SYNTHESIS AND CHARACTERIZATION OF A NOVEL POLYMER - THE POLY(ALPHA-PYRIDINE-TRIENE)**ISSN:** 0021-7689**Accession Number:** WOS:A1995QY74800023**Abstract:** A new type of conjugated polymer was synthesized by application of the general reaction of aldolisation of 2, 6 dimethylpyridine and butendial. The characterisation of this polymer was realized by mass spectroscopy and IR spectra. The electrical conductivity was also measured for doped and non-doped polymer.**Notes:** Kerouani, n kerouani, d janda, m Conference on Polymer Conductors 1994 Sep 19-23, 1994 Strasbourg, france**URL:** <Go to ISI>://WOS:A1995QY74800023



**Reference Type: Journal Article****Record Number:** 112**Author:** Kerouani, N. Kerouani, D. Benachour, D.**Year:** 1995**Title:** SYNTHESIS AND ELECTROCHEMICAL STUDY OF COLLOIDAL DISPERSIONS OF POLYDIBENZO-CROWN-ETHER PARTICLES IN A NON-AQUEOUS MEDIUM**Journal:** Journal De Chimie Physique Et De Physico-Chimie Biologique**Volume:** 92**Issue:** 4**Pages:** 847-850**Date:** Apr**Short Title:** SYNTHESIS AND ELECTROCHEMICAL STUDY OF COLLOIDAL DISPERSIONS OF POLYDIBENZO-CROWN-ETHER PARTICLES IN A NON-AQUEOUS MEDIUM**ISSN:** 0021-7689**Accession Number:** WOS:A1995QY74800024**Abstract:** Stable dispersions of polydibenzoethercrown latex particles were prepared by dispersion polymerisation technique using a mixture of sulfuric acid and potassium sulfate as the initiator and polyvinylalcohol or polyethylene oxyde as stabilisator. The electrical conductivity was mesured on pressed pellet after evaporating the solution and reaches after doping from  $2.10(-4)$  (Omega cm)<sup>(-1)</sup> to  $3.12 10(-4)$  (Omega cm)<sup>(-1)</sup>.**Notes:** Kerouani, n kerouani, d benachour, d Conference on Polymer Conductors 1994 Sep 19-23, 1994 Strasbourg, france**URL:** <Go to ISI>://WOS:A1995QY74800024

**Reference Type: Journal Article****Record Number:** 113**Author:** Kerouani, N. Kerouani, D. Benachour, D.**Year:** 1995**Title:** CATHODIC POLYMERIZATION OF ACRYLONITRILE IN METHANOL**Journal:** Journal De Chimie Physique Et De Physico-Chimie Biologique**Volume:** 92**Issue:** 4**Pages:** 839-842**Date:** Apr**Short Title:** CATHODIC POLYMERIZATION OF ACRYLONITRILE IN METHANOL**ISSN:** 0021-7689**Accession Number:** WOS:A1995QY74800022

**Abstract:** The electrochemical cathodic polymerisation of acrylonitrile was realized in a methanolic media to form polyacrylonitrile on substrat of Fe, Cu. The influence of different parameters of the polymerisation like the concentrations of the monomer, the electrolyte, the current density, the electrolysis time ... was studied. The characterisation of the polymer was effected by IR spectra. The viscosity-average molecular weights are determined on the basis of intrinsic viscosity measurements.

**Notes:** Kerouani, n kerouani, d benachour, d Conference on Polymer Conductors 1994 Sep 19-23, 1994 Strasbourg, france

**URL:** <Go to ISI>://WOS:A1995QY74800022

**Reference Type: Journal Article****Record Number:** 114**Author:** Khellaf, A. Chikouche, D. Daniel, J. P.**Year:** 1997**Title:** Calculation of electric and magnetic energy stored in a rectangular patch**Journal:** Communications in Numerical Methods in Engineering**Volume:** 13**Issue:** 8**Pages:** 617-626**Date:** Aug**Short Title:** Calculation of electric and magnetic energy stored in a rectangular patch**ISSN:** 1069-8299**Accession Number:** WOS:A1997XT72300002

**Abstract:** In this paper it is shown that, from the expression of the internal electric and magnetic fields, we can express the electric and magnetic energy stored inside a cavity in the form of a simple sum. This proposed method has the advantage of avoiding the calculation of a double integral which needs an appropriate numerical method, The knowledge of the radiating power can lead to the evaluation of the internal impedance at the desired frequency. Also it is shown that the electric and magnetic energy stored in a cavity can be expressed with the internal electric and magnetic fields in the form of the presented expression at resonance frequency. There is excellent agreement with the cavity method that has been confirmed by experimental results. (C) 1997 John Wiley & Sons, Ltd.

**Notes:** Khellaf, A Chikouche, D Daniel, JP**URL:** <Go to ISI>://WOS:A1997XT72300002

**Reference Type: Journal Article****Record Number:** 115**Author:** Khellaf, A. Thouroude, D. Daniel, J. P.**Year:** 1990**Title:** SIMPLE EXPRESSION OF RECTANGULAR PATCH RESISTANCE AT RESONANCE**Journal:** Electronics Letters**Volume:** 26**Issue:** 15**Pages:** 1188-1190**Date:** Jul**Short Title:** SIMPLE EXPRESSION OF RECTANGULAR PATCH RESISTANCE AT RESONANCE**ISSN:** 0013-5194**DOI:** 10.1049/el:19900769**Accession Number:** WOS:A1990DT18800058**Notes:** Khellaf, a thouroude, d daniel, jp**URL:** <Go to ISI>://WOS:A1990DT18800058

**Reference Type: Journal Article****Record Number:** 116**Author:** Khennouf, S. Gharzouli, K. Amira, S. Gharzouli, A.**Year:** 1999**Title:** Effects of *Quercus ilex* L. and *Punica granatum* L. polyphenols against ethanol-induced gastric damage in rats**Journal:** Pharmazie**Volume:** 54**Issue:** 1**Pages:** 75-76**Date:** Jan**Short Title:** Effects of *Quercus ilex* L. and *Punica granatum* L. polyphenols against ethanol-induced gastric damage in rats**ISSN:** 0031-7144**Accession Number:** WOS:000078585500019**Notes:** Khennouf, S Gharzouli, K Amira, S Gharzouli, A**URL:** <Go to ISI>://WOS:000078585500019

**Reference Type: Journal Article****Record Number:** 117**Author:** Koprinarov, I. N. MullerJahreis, U. Thiele, P. Bouafia, M. Seghir, A.**Year:** 1997**Title:** Critical energy densities for amorphization in Ar-ion implanted silicon at low energies**Journal:** Physics Letters A**Volume:** 227**Issue:** 3-4**Pages:** 241-244**Date:** Mar**Short Title:** Critical energy densities for amorphization in Ar-ion implanted silicon at low energies**ISSN:** 0375-9601**DOI:** 10.1016/s0375-9601(97)00053-4**Accession Number:** WOS:A1997WN19600018

**Abstract:** The amorphization of silicon during low-energy ion implantation has been investigated in the ion energy range from 0.5 to 3 keV. The ion bombardment was performed with Ar ions at samples cooled down to 150 K. The damage formation process was observed by single-wavelength ellipsometry. Critical energy densities are presented and compared with preceding measurements at 300 K. The results are discussed in relation to Sigmund's energy density in spikes. The comparatively low critical energy densities obtained ( $0.5$  to  $3.6 \times 10^{23}$ ) eV cm<sup>-3</sup>, corresponding to about 1 to 7 eV/atom) show the dominant role of the spikes in this energy range.

**Notes:** Koprinarov, IN MullerJahreis, U Thiele, P Bouafia, M Seghir, A**URL:** <Go to ISI>://WOS:A1997WN19600018

**Reference Type: Journal Article****Record Number:** 118**Author:** Krim, F. Benbaouche, L. Chaoui, A.**Year:** 1999**Title:** A novel identification-based technique for harmonics estimation**Journal:** Canadian Journal of Electrical and Computer Engineering-Revue Canadienne De Genie Electrique Et Informatique**Volume:** 24**Issue:** 4**Pages:** 149-154**Date:** Oct**Short Title:** A novel identification-based technique for harmonics estimation**ISSN:** 0840-8688**Accession Number:** WOS:000165828000002

**Abstract:** This paper presents a new technique for harmonics extraction in a signal based on a modelling and identification method. The technique is designed using a mathematical model describing the signal and a new recursive least-square-error identification algorithm. The harmonic parameters, which consist of the frequency, magnitude and phase angle, are estimated from the uniformly sampled signal. Testing of the technique based on computer-simulated and experimentally obtained data-record processing has confirmed the value of the technique developed and also its performance superiority relative to conventional spectral-analysis methods such as those of Fourier and z-transform estimation. The proposed method is general enough for any signal. Its application to pulse-width-modulation waveforms is described here.

**Notes:** Krim, F Benbaouche, L Chaoui, A**URL:** <Go to ISI>://WOS:000165828000002

**Reference Type: Journal Article****Record Number:** 119**Author:** Lamari, S.**Year:** 1995**Title:** INTERPRETATION OF CYCLOTRON-RESONANCE SPECTRA IN INVERSION-LAYERS OF NARROW-GAP SEMICONDUCTORS - APPLICATION TO INSB**Journal:** Physics Letters A**Volume:** 200**Issue:** 5**Pages:** 387-392**Date:** May**Short Title:** INTERPRETATION OF CYCLOTRON-RESONANCE SPECTRA IN INVERSION-LAYERS OF NARROW-GAP SEMICONDUCTORS - APPLICATION TO INSB**ISSN:** 0375-9601**DOI:** 10.1016/0375-9601(95)00184-5**Accession Number:** WOS:A1995QW50300010

**Abstract:** We compute the electronic structure in the space charge layer of narrow-gap semiconductors in the presence of normal magnetic fields. Self-consistent calculations are carried out in the multiband scheme and the effects of the interface are included through adequate boundary conditions. The results are used to interpret cyclotron resonance spectra and to explain the behavior of the cyclotron mass. The work clearly shows the importance of band structure effects.

**Notes:** Lamari, s**URL:** <Go to ISI>://WOS:A1995QW50300010



**Reference Type: Journal Article****Record Number:** 120**Author:** Lamari, S.**Year:** 1999**Title:** Electronic structure in space-charge layers of narrow-gap semiconductors in the presence of strong magnetic fields**Journal:** Physical Review B**Volume:** 60**Issue:** 19**Pages:** 13636-13647**Date:** Nov**Short Title:** Electronic structure in space-charge layers of narrow-gap semiconductors in the presence of strong magnetic fields**ISSN:** 1098-0121**DOI:** 10.1103/PhysRevB.60.13636**Accession Number:** WOS:000083940400064

**Abstract:** In the presence of strong normal magnetic fields, the electronic structure of inversion electrons in the space-charge layers of narrow-gap semiconductors is considered. We use the effective mass and local-density approximations and include band mixing exactly in the full eight-band Kane model. The wave function satisfies special derived boundary conditions which are generalized to include the split-off band; moreover, an improved semiclassical approximation is introduced and successfully exploited to deduce the subband structure. A special unitary transformation taking the finite field problem into its zero-field counterpart is found. In addition, the same transformation allows for the separation of the two contributions to the spin splitting of the energy levels: The one due to the self-consistent field and the one due to the external normal magnetic field. Extensive numerical computations are carried out on InSb metal oxide semiconductor heterostructure transistors and used to interpret existing experimental cyclotron resonance data. The cyclotron masses of the levels involved in cyclotron resonance are computed as a function of the electron density  $N_{inv}$  and compared to experiment with which they show satisfactory agreement. In the ground subband, our theory predicts multiple masses not found in previous interpretations; moreover, the Fermi energy  $E_F(B)$  oscillates around  $E_F(B=0)$  as  $N_{inv}$  varies leading to an effective mass  $m^*$  showing the same behavior through a combination of nonparabolicity, Landau-level filling, and the Pauli exclusion principle. [S0163-1829(99)01340-5].

**Notes:** Lamari, S**URL:** <Go to ISI>://WOS:000083940400064

**Reference Type: Journal Article****Record Number:** 121**Author:** Layadi, A.**Year:** 1998**Title:** Ferromagnetic resonance modes in coupled layers with cubic magnetocrystalline anisotropy**Journal:** Journal of Applied Physics**Volume:** 83**Issue:** 7**Pages:** 3738-3743**Date:** Apr**Short Title:** Ferromagnetic resonance modes in coupled layers with cubic magnetocrystalline anisotropy**ISSN:** 0021-8979**DOI:** 10.1063/1.366600**Accession Number:** WOS:000072744100045

**Abstract:** The ferromagnetic resonance (FMR) relations of an interfacially coupled two-layer magnetic system have been derived. In the case modeled here, the two films are assumed to be characterized by uniaxial and cubic magnetocrystalline anisotropies. Analytical expressions for the resonance condition have been found for a strong coupling case for both ferromagnetic and antiferromagnetic coupling. The FMR modes have also been studied as a function of the coupling strength. In the strong coupling cases, the system behaves as a single thin film with effective cubic and uniaxial anisotropy fields and effective magnetogyric ratios. When the coupling is antiferromagnetic a "spin-flop" can occur beyond a critical coupling value  $K$ -crit. There will be a discontinuity in mode position. The critical coupling and field have been derived. This analysis could be used to study experimentally the nature and the strength of the magnetic coupling in systems with cubic and/or uniaxial magnetocrystalline anisotropies. (C) 1998 American Institute of Physics.

**Notes:** Layadi, A**URL:** <Go to ISI>://WOS:000072744100045

**Reference Type: Journal Article****Record Number:** 122**Author:** Layadi, A.**Year:** 1999**Title:** Determination of magnetic coupling from torque curve**Journal:** Journal of Magnetism and Magnetic Materials**Volume:** 192**Issue:** 2**Pages:** 353-362**Date:** Feb**Short Title:** Determination of magnetic coupling from torque curve**ISSN:** 0304-8853**DOI:** 10.1016/s0304-8853(98)00391-6**Accession Number:** WOS:000078709600019

**Abstract:** Torque relations have been derived as a function of the coupling strength for an interfacially coupled two-layer magnetic system. The two layers are considered to be single crystal thin films characterized by uniaxial and cubic magnetocrystalline anisotropies. Both ferromagnetic and antiferromagnetic coupling cases have been studied. In the strong coupling situations, the system behaves as a single thin film with effective cubic and uniaxial anisotropy fields. The variation of the torque curve slope with the coupling strength has been studied. When the coupling is antiferromagnetic, a discontinuity in the slope value is observed at a critical coupling value where the 'spin-flop' occurs. This analysis could be used to study experimentally the nature and the strength of the magnetic coupling in a system with cubic and/or uniaxial magnetocrystalline anisotropies. (C) 1999 Elsevier Science B.V. All rights reserved.

**Notes:** Layadi, A**URL:** <Go to ISI>://WOS:000078709600019

**Reference Type: Journal Article****Record Number:** 123**Author:** Layadi, A.**Year:** 1999**Title:** A theoretical investigation of the effect of the oblique anisotropy axis on the ferromagnetic resonance linewidth**Journal:** Journal of Applied Physics**Volume:** 86**Issue:** 3**Pages:** 1625-1629**Date:** Aug**Short Title:** A theoretical investigation of the effect of the oblique anisotropy axis on the ferromagnetic resonance linewidth**ISSN:** 0021-8979**DOI:** 10.1063/1.370937**Accession Number:** WOS:000081458800075

**Abstract:** The effect of the oblique anisotropy axis on the ferromagnetic resonance (FMR) linewidth in a thin film is studied theoretically. The angular dependence of the frequency linewidth is investigated in the plane containing the anisotropy axis and in the film plane. The effect of the tilt angle on the frequency linewidth is shown. Some unusual broadening of the lines in the FMR spectra and certain features of the variation of the frequency linewidth  $\Delta f$  with field orientation and field intensity could be interpreted as being due to the fact that the magnetocrystalline anisotropy axis, i.e., the easy or hard direction of the magnetization, is tilted from the normal with an angle  $\delta$ . The tilt angle  $\delta$  as well as the Gilbert damping coefficient  $\alpha$  can be deduced from experimental data through this analysis. (C) 1999 American Institute of Physics. [S0021-8979(99)08115-3].

**Notes:** Layadi, A**URL:** <Go to ISI>://WOS:000081458800075

**Reference Type: Journal Article****Record Number:** 124**Author:** Layadi, A. Artman, J. O.**Year:** 1997**Title:** Study of antiferromagnetic coupling by ferromagnetic resonance (FMR)**Journal:** Journal of Magnetism and Magnetic Materials**Volume:** 176**Issue:** 2-3**Pages:** 175-182**Date:** Dec**Short Title:** Study of antiferromagnetic coupling by ferromagnetic resonance (FMR)**ISSN:** 0304-8853**DOI:** 10.1016/s0304-8853(97)00142-x**Accession Number:** WOS:000071396800014

**Abstract:** We have worked out the ferromagnetic resonance (FMR) mode characteristics of an antiferromagnetically coupled two-layer film system. The magnetocrystalline anisotropy was taken to be uniaxial. The analysis predicts the number, positions, intensities and linewidths of the FMR peaks as a function of the coupling strength  $K$ . Detailed calculations are given for applied DC magnetic fields either perpendicular to or parallel to the film plane. A 'spin-flop' can occur, there will be a discontinuity in mode position, intensity and linewidth above a critical value of the coupling strength  $K$ -crit. (C) 1997 Elsevier Science B.V. All rights reserved.

**Notes:** Layadi, A Artman, JO**URL:** <Go to ISI>://WOS:000071396800014

**Reference Type: Journal Article****Record Number:** 125**Author:** Layadi, A. Artman, J. O.**Year:** 1997**Title:** A ferromagnetic resonance investigation of ferromagnetic coupling**Journal:** Journal of Physics D-Applied Physics**Volume:** 30**Issue:** 24**Pages:** 3312-3316**Date:** Dec**Short Title:** A ferromagnetic resonance investigation of ferromagnetic coupling**ISSN:** 0022-3727**DOI:** 10.1088/0022-3727/30/24/008**Accession Number:** WOS:000071532600008

**Abstract:** We present the ferromagnetic resonance (FMR) mode characteristics of two ferromagnetically coupled layers. Calculations are given for an applied DC magnetic field perpendicular to the film plane. The analysis predicts the number, positions, intensities and linewidths of the FMR peaks as functions of the coupling strength  $K$ . The magnetocrystalline anisotropy was taken to be uniaxial. The model has been applied to experimental results on a NiFe/Ag/Ni system. By comparison with the in-plane DC field case, we found a possible angular dependence of the interfacial coupling constant  $K$ .

**Notes:** Layadi, A Artman, JO**URL:** <Go to ISI>://WOS:000071532600008

**Reference Type: Journal Article****Record Number:** 126**Author:** Louahdi, R. Ouakdi, E. H. Saindrenan, G. Legall, R. Boucenna, A.**Year:** 1997**Title:** The effect of non-equilibrium grain boundary segregation on the tensile properties and the electrochemical behaviour of nickel**Journal:** Journal of Materials Science Letters**Volume:** 16**Issue:** 14**Pages:** 1227-1230**Date:** Jul**Short Title:** The effect of non-equilibrium grain boundary segregation on the tensile properties and the electrochemical behaviour of nickel**ISSN:** 0261-8028**Accession Number:** WOS:A1997XM07300027**Notes:** Louahdi, R Ouakdi, EH Saindrenan, G Legall, R Boucenna, A**URL:** <Go to ISI>://WOS:A1997XM07300027

**Reference Type: Journal Article****Record Number:** 127**Author:** Louahdi, R. Ouakdi, E. H. Boucenna, A. Saindrenan, G. Legall, R. Ferhat, F.**Year:** 1998**Title:** The effect of defect annihilation on the segregation kinetics of sulphur in both quenched and cold worked nickel**Journal:** Canadian Metallurgical Quarterly**Volume:** 37**Issue:** 2**Pages:** 119-124**Date:** Apr**Short Title:** The effect of defect annihilation on the segregation kinetics of sulphur in both quenched and cold worked nickel**ISSN:** 0008-4433**DOI:** 10.1016/s0008-4433(98)00002-0**Accession Number:** WOS:000076875100004

**Abstract:** Impurity segregation to grain boundaries and free surfaces of pure metals is thought to take place according to two mechanisms. One involves the thermodynamic and kinetic laws of equilibrium, as is the case, for example, in annealing for sufficiently long periods at sufficiently high temperatures (approximate to  $0.5T(M)$ ,  $T-M$  being the melting temperature). The other takes place while a metal, initially in a non equilibrium state is returning to equilibrium, as is the case, for example, during the annealing of a quenched or cold worked metal. In this work, a kinetic study of sulphur segregation taking place during the annealing of both quenched and cold-rolled nickel is carried out. It is found that the sulphur segregation kinetics measured during the elimination of vacancies (quenched nickel) are two-three orders of magnitude higher than the ones predicted by McLean for equilibrium segregation. In the case of the cold worked material, it is found that the kinetics, compared to equilibrium ones, are accelerated by both the vacancy annihilation and the recrystallization stages of the heating process. A considerable reduction in strength and ductility, coupled with severe intergranular corrosion as shown by scanning electron micrographs, may be taken as clear evidence of intergranular segregation taking place during the recovery by the material of its equilibrium state. (C) 1998 Canadian Institute of. Mining and Metallurgy. Published by Elsevier Science Ltd. All rights reserved.

**Notes:** Louahdi, R Ouakdi, EH Boucenna, A Saindrenan, G Legall, R Ferhat, F**URL:** <Go to ISI>://WOS:000076875100004



**Reference Type: Journal Article****Record Number:** 128**Author:** Louzazna, K. Haroun, A.**Year:** 1999**Title:** Magnetism of strained bcc Fe/Ir(001)**Journal:** Solid State Communications**Volume:** 112**Issue:** 11**Pages:** 649-654**Short Title:** Magnetism of strained bcc Fe/Ir(001)**ISSN:** 0038-1098**DOI:** 10.1016/s0038-1098(99)00381-6**Accession Number:** WOS:000083528100011

**Abstract:** We have investigated the magnetic behavior of strained bcc Fe epitaxied on semi-infinite Ir(001) by using tight-binding Hamiltonian in the unrestricted HFA including s, p and d electrons. The Fe interlayer coupling is found to be antiferromagnetic (AF) for all the five systems, Fe-x/Ir (001) x = 1-5 ad-layers. The sub-interface plane of Ir is not affected by the deposited magnetic films. The absolute value of the magnetic moment of the Fe layer at the interface decreases with the increase of the Fe thickness. The surface layer presents the largest magnetic moments. For all Fe on Ir (001) systems, the magnetic moment of Fe planes remains smaller than the bulk value. (C) 1999 Elsevier Science Ltd. All rights reserved.

**Notes:** Louzazna, K Haroun, A**URL:** <Go to ISI>://WOS:000083528100011

**Reference Type: Journal Article****Record Number:** 129**Author:** Maamache, M.**Year:** 1995**Title:** ERMAKOV SYSTEMS, EXACT SOLUTION, AND GEOMETRICAL ANGLES AND PHASES**Journal:** Physical Review A**Volume:** 52**Issue:** 2**Pages:** 936-940**Date:** Aug**Short Title:** ERMAKOV SYSTEMS, EXACT SOLUTION, AND GEOMETRICAL ANGLES AND PHASES**ISSN:** 1050-2947**DOI:** 10.1103/PhysRevA.52.936**Accession Number:** WOS:A1995RN56100013

**Abstract:** Ermakov systems are pairs of coupled, time-dependent nonlinear dynamical equations possessing a joint constant of motion. We show how to derive the Ermakov system from nonharmonic oscillators. We present a detailed study of Ermakov systems from a classical and quantum point of view. Finally the nonadiabatic Hannay's angle and Berry's phase for the system are calculated along with its adiabatic limit.

**Notes:** Maamache, m**URL:** <Go to ISI>://WOS:A1995RN56100013

**Reference Type: Journal Article****Record Number:** 130**Author:** Maamache, M.**Year:** 1996**Title:** Unitary transformation approach to the exact solution for the singular oscillator**Journal:** Journal of Physics a-Mathematical and General**Volume:** 29**Issue:** 11**Pages:** 2833-2837**Date:** Jun**Short Title:** Unitary transformation approach to the exact solution for the singular oscillator**ISSN:** 0305-4470**DOI:** 10.1088/0305-4470/29/11/017**Accession Number:** WOS:A1996UP44000017**Abstract:** By performing unitary transformations, the exact solution of the time-dependent singular oscillator is obtained. The invariant operator and the auxiliary equation are rigorously established. The non-adiabatic Berry's phase is calculated.**Notes:** Maamache, M**URL:** <Go to ISI>://WOS:A1996UP44000017

**Reference Type: Journal Article****Record Number:** 131**Author:** Maamache, M.**Year:** 1996**Title:** Exact solution and geometric angle for the classical spin system**Journal:** Physica Scripta**Volume:** 54**Issue:** 1**Pages:** 21-23**Date:** Jul**Short Title:** Exact solution and geometric angle for the classical spin system**ISSN:** 0281-1847**DOI:** 10.1088/0031-8949/54/1/003**Accession Number:** WOS:A1996UW35000004**Abstract:** The exact solution for the classical spin system is obtained by means of the Lewis-Reisenfeld theory. The geometric angle associated with the non cyclic evolution and the non adiabatic Hannay's angle can be calculated along its adiabatic limit.**Notes:** Maamache, M**URL:** <Go to ISI>://WOS:A1996UW35000004

**Reference Type: Journal Article****Record Number:** 132**Author:** Maamache, M.**Year:** 1997**Title:** Invariant-angle coherent states for the singular oscillator and geometrical phases and angles**Journal:** Annals of Physics**Volume:** 254**Issue:** 1**Pages:** 1-10**Date:** Feb**Short Title:** Invariant-angle coherent states for the singular oscillator and geometrical phases and angles**ISSN:** 0003-4916**DOI:** 10.1006/aphy.1996.5555**Accession Number:** WOS:A1997WH28100001**Abstract:** Exact coherent states describing the invariant-angle variables for the time-dependent singular oscillator are constructed. Through the use of these coherent states we show how to derive the nonadiabatic Hannay's angle from nonadiabatic Berry's phase and also we get the exact classical evolution from the quantum evolution for the time dependent singular oscillator. (C) 1997 Academic Press.**Notes:** Maamache, M**URL:** <Go to ISI>://WOS:A1997WH28100001

**Reference Type: Journal Article****Record Number:** 133**Author:** Maamache, M.**Year:** 1998**Title:** Unitary transformation approach to the exact solution for a class of time-dependent nonlinear Hamiltonian system**Journal:** Journal of Mathematical Physics**Volume:** 39**Issue:** 1**Pages:** 161-169**Date:** Jan**Short Title:** Unitary transformation approach to the exact solution for a class of time-dependent nonlinear Hamiltonian system**ISSN:** 0022-2488**DOI:** 10.1063/1.532341**Accession Number:** WOS:000071384800009**Abstract:** By performing unitary transformations on the time-dependent Schrodinger equation, the exact solution for a class of nonlinear Hamiltonian systems is obtained and it is shown that these time-dependent problems are related to the associated time-independent problems. In addition, the evolution operator is derived. Nonadiabatic Berry's phase is calculated on the basis of the exact solution. The theory is applied to some illustrative examples. (C) 1998 American Institute of Physics.**Notes:** Maamache, M**URL:** <Go to ISI>://WOS:000071384800009

**Reference Type: Journal Article****Record Number:** 134**Author:** Maamache, M.**Year:** 1998**Title:** Unitary transformation approach to the cyclic evolution of SU(1, 1) and SU(2) time-dependent systems and geometrical phases**Journal:** Journal of Physics a-Mathematical and General**Volume:** 31**Issue:** 32**Pages:** 6849-6854**Date:** Aug**Short Title:** Unitary transformation approach to the cyclic evolution of SU(1, 1) and SU(2) time-dependent systems and geometrical phases**ISSN:** 0305-4470**DOI:** 10.1088/0305-4470/31/32/008**Accession Number:** WOS:000075565400008**Abstract:** Using the time-dependent unitary transformation instead of the invariant operator, the solutions of SU(1, 1) and SU(2) time-dependent quantum systems are obtained. It is shown that the evolution operator is decomposed into the product form of two unitary operators in such a way that one of them has the same periodicity as the Hamiltonian and the other correspond to the Floquet operator which gives the cyclic states and their associated phases over one period of the evolution. The non-adiabatic Berry's (or Aharonov-Anandan) phases are determined totally by such a unitary transformation.**Notes:** Maamache, M**URL:** <Go to ISI>://WOS:000075565400008

**Reference Type: Journal Article****Record Number:** 135**Author:** Maamache, M. Bencheikh, K. Hachemi, H.**Year:** 1999**Title:** Comment on "Harmonic oscillator with time-dependent mass and frequency and a perturbative potential"**Journal:** Physical Review A**Volume:** 59**Issue:** 4**Pages:** 3124-3126**Date:** Apr**Short Title:** Comment on "Harmonic oscillator with time-dependent mass and frequency and a perturbative potential"**ISSN:** 1050-2947**DOI:** 10.1103/PhysRevA.59.3124**Accession Number:** WOS:000079609100087**Abstract:** The correct wave function for the problem of a harmonic oscillator of time-dependent mass and frequency is obtained following the same approach used in the paper of Dantas et al. [Phys. Rev. A 45, 1320 (1992)]. [S1050-2947(99)01804-1].**Notes:** Maamache, M Bencheikh, K Hachemi, H**URL:** <Go to ISI>://WOS:000079609100087



**Reference Type: Journal Article****Record Number:** 136**Author:** Maamache, M. Cherbal, O.**Year:** 1999**Title:** Evolution of Grassmannian invariant-angle coherent states and nonadiabatic Hannay's angle**Journal:** European Physical Journal D**Volume:** 6**Issue:** 2**Pages:** 145-148**Date:** May**Short Title:** Evolution of Grassmannian invariant-angle coherent states and nonadiabatic Hannay's angle**ISSN:** 1434-6060**DOI:** 10.1007/s100530050294**Accession Number:** WOS:000080400500001**Abstract:** We show how the exact evolution and nonadiabatic Hannay's angle of Grassmannian classical mechanics of spin one half in a varying external magnetic field is associated with the evolution of Grassmannian invariant-angle coherent states.**Notes:** Maamache, M Cherbal, O**URL:** <Go to ISI>://WOS:000080400500001

**Reference Type: Journal Article****Record Number:** 137**Author:** Maamache, M. Provost, J. P. Vallee, G.**Year:** 1997**Title:** Berry's transport and minimization of averaged distances**Journal:** Journal of Physics a-Mathematical and General**Volume:** 30**Issue:** 7**Pages:** 2489-2496**Date:** Apr**Short Title:** Berry's transport and minimization of averaged distances**ISSN:** 0305-4470**DOI:** 10.1088/0305-4470/30/7/027**Accession Number:** WOS:A1997WT34000027

**Abstract:** In this paper we consider the metric approach to the Berry's transport (geometrical part of the adiabatic evolution) of any pure or mixed state, for possibly degenerate Hamiltonians. We emphasize that explicit formulae for the transport of such states need the introduction of an averaging procedure; in analogy with the classical case this quantum averaging involves multiplying each energy eigenstate by a different phase and then integrating over these phases. We show in particular how the transport of non-stationary pure states, rays and density matrices arise from the minimization of Hilbert, Fubini-Study and Bures averaged distances respectively.

**Notes:** Maamache, M Provost, JP Vallee, G**URL:** <Go to ISI>://WOS:A1997WT34000027

**Reference Type: Journal Article****Record Number:** 138**Author:** Maamache, M. Provost, J. P. Vallee, G.**Year:** 1999**Title:** Unitary equivalence and phase properties of the quantum parametric and generalized harmonic oscillators**Journal:** Physical Review A**Volume:** 59**Issue:** 3**Pages:** 1777-1780**Date:** Mar**Short Title:** Unitary equivalence and phase properties of the quantum parametric and generalized harmonic oscillators**ISSN:** 1050-2947**DOI:** 10.1103/PhysRevA.59.1777**Accession Number:** WOS:000079233200012

**Abstract:** A quantum parametric harmonic oscillator with a unitary evolution but not invariant under time reversal, is shown to be unitarily equivalent to a quantum generalized harmonic oscillator. As a consequence the phase properties of the two systems, in particular their geometric phases, are identical. Equivalent results for the corresponding classical systems are deduced from the study of the time evolution of the appropriate squeezed coherent states. [S1050-2947(99)09502-5].

**Notes:** Maamache, M Provost, JP Vallee, G**URL:** <Go to ISI>://WOS:000079233200012

**Reference Type: Journal Article****Record Number:** 139**Author:** Madjoubi, M. A. Bousbaa, C. Hamidouche, M. Bouaouadja, N.**Year:** 1999**Title:** Weibull statistical analysis of the mechanical strength of a glass eroded by sand blasting**Journal:** Journal of the European Ceramic Society**Volume:** 19**Issue:** 16**Pages:** 2957-2962**Date:** Dec**Short Title:** Weibull statistical analysis of the mechanical strength of a glass eroded by sand blasting**ISSN:** 0955-2219**DOI:** 10.1016/s0955-2219(99)00087-4**Accession Number:** WOS:000083466200028

**Abstract:** In Saharian regions, the erosion of glass by sand particles during sandstorms is a regular phenomenon. The progressive loss of matter on surface affects both the optical transmission and mechanical strength. In this work, the influence of sand impacts on glass strength was simulated in laboratory. We used Weibull distribution function to characterize statistically the variation of the mechanical strength of a soda-lime glass in the as received state and eroded by sand blasting during 30 and 60 min. From the failure probabilities distributions, we notice an important drop in strength values (about 13%) after 30 min and a tendency to level out with a much reduced dispersion after 60 min. The Weibull plots for the as-received state and for the 30 min eroded state present curves with a knee. They were considered as bimodal forms (two straight lines) denoting the presence of two kinds of defects that control strength. The Weibull plot for the 60 mins eroded state sample presents one straight line (unimodal form) that indicates the predominance of erosion defects. From micrographical observations on eroded specimen, we observed a tendency toward a damaging homogeneity of the surfaces exposed to sand blasting. This explains the uniformity of the strength values obtained after 1 h of sand blasting. (C) 1999 Elsevier Science Ltd. All rights reserved.

**Notes:** Madjoubi, MA Bousbaa, C Hamidouche, M Bouaouadja, N**URL:** <Go to ISI>://WOS:000083466200028

**Reference Type: Journal Article****Record Number:** 140**Author:** Mechakra, S. Bouree, P. Meddour, S. Haouchi, K. Aithamouda, R.**Year:** 1988**Title:** PERICARDITIS - UNUSUAL COMPLICATION OF TYPHOID-FEVER**Journal:** Medecine Et Maladies Infectieuses**Volume:** 18**Issue:** 8-9**Pages:** 389-390**Date:** Aug-Sep**Short Title:** PERICARDITIS - UNUSUAL COMPLICATION OF TYPHOID-FEVER**ISSN:** 0399-077X**DOI:** 10.1016/s0399-077x(88)80184-7**Accession Number:** WOS:A1988Q671500006**Notes:** Mechakra, s bouree, p meddour, s haouchi, k aithamouda, r**URL:** <Go to ISI>://WOS:A1988Q671500006

**Reference Type: Journal Article****Record Number:** 141**Author:** Mehamha, A. Benachour, D. Graczyk, J. Gleissle, W. Buggisch, H.**Year:** 1998**Title:** Capillary rheometry of aluminum dioxide silicon soil suspensions**Journal:** Angewandte Makromolekulare Chemie**Volume:** 263**Pages:** 35-39**Date:** Dec**Short Title:** Capillary rheometry of aluminum dioxide silicon soil suspensions**ISSN:** 0003-3146**Accession Number:** WOS:000078402900007

**Abstract:** The capillary rheometry measurements of concentrated suspensions of aluminum oxide hydroxide in silicon oil are described. The dimension of the extrusion dies was varied. The shear-stress curves and the pressure drop at sudden reduction of the cross section were ascertained. The influence of the properties of the solid phase (particle size, particle size distribution, particle geometry) and the concentration of the solid phase (40-65 wt.-%) on the flow behavior of the suspension were also investigated.

**Notes:** Mehamha, A Benachour, D Graczyk, J Gleissle, W Buggisch, H**URL:** <Go to ISI>://WOS:000078402900007

**Reference Type: Journal Article****Record Number:** 142**Author:** Michel, M. Krim, F. Benbaouche, L. Kosso, M. M. A.**Year:** 1997**Title:** Microcontroller-based apparatus for control of three-phase APWM and SPWM AC chopper**Journal:** International Journal of Electronics**Volume:** 83**Issue:** 5**Pages:** 717-729**Date:** Nov**Short Title:** Microcontroller-based apparatus for control of three-phase APWM and SPWM AC chopper**ISSN:** 0020-7217**DOI:** 10.1080/002072197135256**Accession Number:** WOS:A1997YD74200012

**Abstract:** A novel, intelligent and flexible microcontroller-based apparatus is described to control single/three-phase symmetrical PWM (SPWM) or asymmetrical PWM (APWM)AC chopper, which offers a superior performance. The optimized PWM techniques improve the input power factor, eliminate the harmonics up to a specified order and also enable linear control of the fundamental component of the output voltage and current. The SPWM or APWM switching patterns at the specified phase angle of output fundamental voltage are obtained by the Newton-Raphson method and are implemented by the microcontroller. Through digital simulation several characteristics are investigated and compared. A prototype of the control apparatus has been built and tested. Practical verification of the theoretical predictions is presented to confirm the capabilities of the new apparatus.

**Notes:** Michel, M Krim, F Benbaouche, L Kosso, MMA**URL:** <Go to ISI>://WOS:A1997YD74200012

**Reference Type: Journal Article****Record Number:** 143**Author:** Moutet, J. C. Ourari, A. Zouaoui, A.**Year:** 1992**Title:** ELECTROCATALYTIC HYDROGENATION OF AZIDES USING PRECIOUS METAL MICROPARTICLES DISPERSED IN POLYMER-FILMS**Journal:** Electrochimica Acta**Volume:** 37**Issue:** 7**Pages:** 1261-1263**Date:** Jun**Short Title:** ELECTROCATALYTIC HYDROGENATION OF AZIDES USING PRECIOUS METAL MICROPARTICLES DISPERSED IN POLYMER-FILMS**ISSN:** 0013-4686**DOI:** 10.1016/0013-4686(92)85065-s**Accession Number:** WOS:A1992HV13800015**Abstract:** Noble metals (Pt and Pd) microparticles dispersed in poly(pyrrole-alkylammonium) films electrodeposited on carbon felt electrodes have been proved to be active for the electrocatalytic hydrogenation of selected organic azides in aqueous electrolytes at weakly negative potentials ( $E(\text{red})$  greater-than-or-equal-to  $-0.5$  V vs. sce). The corresponding amines were formed with product yields comparable to those obtained using regular catalytic hydrogenation.**Notes:** Moutet, jc ourari, a zouaoui, a International symp on new trends in photoelectrochemistry Sep 22-26, 1991 Altavilla, italy**URL:** <Go to ISI>://WOS:A1992HV13800015



**Reference Type: Journal Article****Record Number:** 144**Author:** Mullerjahreis, U. Thiele, P. Bouafia, M. Seghir, A.**Year:** 1995**Title:** DETERMINATION OF LOW-ENERGY ION-IMPLANTATION DAMAGE PARAMETERS BY AN ELLIPSOMETRIC METHOD**Journal:** Journal De Physique Iii**Volume:** 5**Issue:** 5**Pages:** 575-584**Date:** May**Short Title:** DETERMINATION OF LOW-ENERGY ION-IMPLANTATION DAMAGE PARAMETERS BY AN ELLIPSOMETRIC METHOD**ISSN:** 1155-4320**Accession Number:** WOS:A1995QZ76200010**Abstract:** Low-energy ion implantations in semiconductor materials cause defects in near surface regions, which can sensitively be detected by ellipsometry. By means of a simple analytic model, implantation parameters as ion damage straggling and amorphization threshold can be obtained by using only one-wavelength ellipsometry. This will be demonstrated for the case of argon implantations (500 - 2500 eV) in silicon.**Notes:** Mullerjahreis, u thiele, p bouafia, m seghir, a**URL:** <Go to ISI>://WOS:A1995QZ76200010

**Reference Type: Journal Article****Record Number:** 145**Author:** Naamoune, F. Hammouche, A. Kahoul, A.**Year:** 1998**Title:** Electric properties of tantalum oxides electrogenerated in aqueous solutions**Journal:** Journal De Chimie Physique Et De Physico-Chimie Biologique**Volume:** 95**Issue:** 7**Pages:** 1640-1649**Date:** Jul-Aug**Short Title:** Electric properties of tantalum oxides electrogenerated in aqueous solutions**ISSN:** 0021-7689**Accession Number:** WOS:000075069400004

**Abstract:** The tantalum anodization in aqueous solutions has been investigated by chronopotentiometry. Analysis of admittance diagrams allows the characterization of the electrical properties of the formed oxide layer. The electrode/electrolyte interface can be modeled by an equivalent circuit consisting of a resistance  $R_p$  in parallel with a capacitance  $C_p$ , this loop being in series with a resistance  $R_s$ . The results have shown that the electrical properties of the formed oxide layer depend on the nature of the electrolyte. For a given electrolyte, the  $R_p.C_p$  product is constant for a wide range of oxide thickness. Its value is used as a criterion of the oxide quality; high values of this product indicate that the electronic transfer through the oxide layer is difficult, corresponding to highly passivated electrodes.

**Notes:** Naamoune, F Hammouche, A Kahoul, A**URL:** <Go to ISI>://WOS:000075069400004

**Reference Type: Journal Article****Record Number:** 146**Author:** Nancib, N. Ghoul, M. Larous, L. Nancib, A. Adimi, L. Z. Remmal, M. Boudrant, J.**Year:** 1999**Title:** Use of date products in production of the thermophilic dairy starter strain *Streptococcus thermophilus***Journal:** Bioresource Technology**Volume:** 67**Issue:** 3**Pages:** 291-295**Date:** Mar**Short Title:** Use of date products in production of the thermophilic dairy starter strain *Streptococcus thermophilus***ISSN:** 0960-8524**DOI:** 10.1016/s0960-8524(98)00115-1**Accession Number:** WOS:000077147300011

**Abstract:** Date-coat sugar extract and date-seed hydrolysate were utilized as the main constituents of a medium for the production of a thermophilic dairy starter strain. Date-coat sugar extract was used as the carbon source, while date-seed hydrolysate was used as the nitrogen source. A suitable concentration of date-coat sugar was in the range of 50 mg sugar/ml. Addition of various amounts of date-seed hydrolysate as the sole nitrogen source in the medium showed that, in spite of a nitrogen insufficiency found in the hydrolysate, the production of the starter strain increased with date-seed hydrolysate (nitrogen) concentration, but the maximum production of biomass was less than that observed with other nitrogen sources. Therefore, various amounts of urea were added and a mixture of urea (6 mg/ml) and of date-seed hydrolysate (4.0 mg/ml) allowed an increase in the concentration of the biomass. The addition of date-seed ash as a mineral source, at a concentration of 1.0 mg/ml in the medium containing date-coat sugar' extract, date-seed hydrolysate, and urea could substitute for MgSO<sub>4</sub>, and MnSO<sub>4</sub> of the usual medium. This medium gave the maximum production of the thermophilic lactic acid bacteria (0.57 mg/ml) and lactic acid (2 mg/ml), vers' close to what was obtained with the Elliker broth medium. (C) 1998 Published by Elsevier Science Ltd. All rights reserved.

**Notes:** Nancib, N Ghoul, M Larous, L Nancib, A Adimi, LZ Remmal, M Boudrant, J**URL:** <Go to ISI>://WOS:000077147300011

**Reference Type: Journal Article****Record Number:** 147**Author:** Nancib, N. Nancib, A. Boudrant, J.**Year:** 1997**Title:** Use of waste date products in the fermentative formation of baker's yeast biomass by *Saccharomyces cerevisiae***Journal:** Bioresource Technology**Volume:** 60**Issue:** 1**Pages:** 67-71**Date:** Apr**Short Title:** Use of waste date products in the fermentative formation of baker's yeast biomass by *Saccharomyces cerevisiae***ISSN:** 0960-8524**DOI:** 10.1016/s0960-8524(97)00004-7**Accession Number:** WOS:A1997WY32900010

**Abstract:** This work was an approach to waste date products valorization through biomass production with the yeast *Saccharomyces cerevisiae*. The carbon and nitrogen sources of a semi-synthetic fermentation medium were substituted by date-coat (fleshy part) sugar extract, date-seed hydrolysate, and ammonium nitrate. This modified medium was enriched with date-seed ash and date-seed lipid. Date-coat sugar extract as a carbon source was found to be satisfactory at a concentration of 25 g/l (expressed as its glucose concentration) and date-seed hydrolysate as a nitrogen source was equally suitable at 25 g/l. The addition to the medium of 1.0 g/l ammonium nitrate increased the efficiency of yeast biomass formation, as did phosphorus, which produced a maximum when the medium was supplemented with about 6.0 g/l  $\text{KH}_2\text{PO}_4$ . The presence of 1 g/l date-seed lipid in the medium also increased the efficiency of biomass formation. Finally, the addition of date-seed ash (0.6 g/l), as a mineral source, to the fermentation medium could substitute for  $\text{MgSO}_4$  and  $\text{CaCl}_2$  of the semi-synthetic medium. (C) 1997 Elsevier Science Ltd.

**Notes:** Nancib, N Nancib, A Boudrant, J**URL:** <Go to ISI>://WOS:A1997WY32900010

**Reference Type: Journal Article****Record Number:** 148**Author:** Nekab, M. Pape, A. Heitz, C.**Year:** 1997**Title:** S K-shell ionization cross sections by protons of 0.8 to 3.0 MeV**Journal:** Journal of Radioanalytical and Nuclear Chemistry**Volume:** 221**Issue:** 1-2**Pages:** 239-240**Date:** Jul**Short Title:** S K-shell ionization cross sections by protons of 0.8 to 3.0 MeV**ISSN:** 0236-5731**DOI:** 10.1007/bf02035277**Accession Number:** WOS:A1997YA47700044**Abstract:** Thick targets containing 2, 4, 8 and 50% by weight of S in a Li<sub>2</sub>B<sub>4</sub>O<sub>7</sub> matrix and pure S have been irradiated by protons in the energy range 0.8 to 3.0 MeV. The S K-shell ionization cross sections have been measured and compared to available theoretical and experimental data.**Notes:** Nekab, M Pape, A Heitz, C**URL:** <Go to ISI>://WOS:A1997YA47700044

**Reference Type: Journal Article****Record Number:** 149**Author:** Nessakh, B. Kotkowskamachnik, Z. Tedjar, F.**Year:** 1990**Title:** ELECTROCHEMICAL-BEHAVIOR OF FURAN, 2-METHYLFURAN AND 2,5-DIMETHYLFURAN IN ACETONITRILE**Journal:** Journal of Electroanalytical Chemistry**Volume:** 296**Issue:** 1**Pages:** 263-268**Date:** Dec**Short Title:** ELECTROCHEMICAL-BEHAVIOR OF FURAN, 2-METHYLFURAN AND 2,5-DIMETHYLFURAN IN ACETONITRILE**ISSN:** 0022-0728**DOI:** 10.1016/0022-0728(90)87249-j**Accession Number:** WOS:A1990EN74200021**Notes:** Nessakh, b kotkowskamachnik, z tedjar, f**URL:** <Go to ISI>://WOS:A1990EN74200021

**Reference Type: Journal Article****Record Number:** 150**Author:** Ouakdi, E. H. Louahdi, R. Ferron, G.**Year:** 1996**Title:** A physical model describing the visco-plastic behaviour of aluminium under tension and under creep for  $T > 0.4 T_m$ **Journal:** Journal of Materials Science Letters**Volume:** 15**Issue:** 17**Pages:** 1555-1557**Date:** Sep**Short Title:** A physical model describing the visco-plastic behaviour of aluminium under tension and under creep for  $T > 0.4 T_m$ **ISSN:** 0261-8028**DOI:** 10.1007/bf00625021**Accession Number:** WOS:A1996VF82600029**Notes:** Ouakdi, EH Louahdi, R Ferron, G**URL:** <Go to ISI>://WOS:A1996VF82600029

**Reference Type: Journal Article****Record Number:** 151**Author:** Ouakdi, E. H. Louahdi, R. Ferron, G.**Year:** 1998**Title:** A constitutive model describing the necking behaviour of aluminium during tension and creep**Journal:** Journal of Materials Science Letters**Volume:** 17**Issue:** 3**Pages:** 193-196**Date:** Feb**Short Title:** A constitutive model describing the necking behaviour of aluminium during tension and creep**ISSN:** 0261-8028**Accession Number:** WOS:000072070800005**Notes:** Ouakdi, EH Louahdi, R Ferron, G**URL:** <Go to ISI>://WOS:000072070800005



**Reference Type: Journal Article****Record Number:** 152**Author:** Ouennoughi, Z.**Year:** 1997**Title:** On the minimum in the forward capacitance in MIS tunnel diodes**Journal:** Physica Status Solidi a-Applied Research**Volume:** 160**Issue:** 1**Pages:** 127-132**Date:** Mar**Short Title:** On the minimum in the forward capacitance in MIS tunnel diodes**ISSN:** 0031-8965**DOI:** 10.1002/1521-396x(199703)160:1<127::aid-pssa127>3.0.co;2-5**Accession Number:** WOS:A1997WU42000017

**Abstract:** The capacitance-voltage dependence of MIS tunnel diodes has been investigated and a new general expression for the forward capacitance is reported. The calculated  $1/C-2$  plot exhibits a minimum at a specific value of the dc voltage. This minimum position and the corresponding voltage value are found to be sensitive to the series resistance, the insulator thickness and the doping concentration in the semiconductor. Knowing the dc current and the voltage at the minimum in the  $1/C-2$  versus voltage plot, the series resistance can be readily evaluated.

**Notes:** Ouennoughi, Z**URL:** <Go to ISI>://WOS:A1997WU42000017

**Reference Type: Journal Article****Record Number:** 153**Author:** Ouennoughi, Z. Chegaar, M.**Year:** 1999**Title:** A simpler method for extracting solar cell parameters using the conductance method**Journal:** Solid-State Electronics**Volume:** 43**Issue:** 11**Pages:** 1985-1988**Date:** Nov**Short Title:** A simpler method for extracting solar cell parameters using the conductance method**ISSN:** 0038-1101**DOI:** 10.1016/s0038-1101(99)00174-4**Accession Number:** WOS:000083891000002

**Abstract:** This paper presents and examines an alternative method for determining the series resistance, the ideality factor, the saturation current and the shunt conductance in solar cells. The technique uses the measured current voltage characteristics and the subsequently calculated conductance of the device. Although numerical techniques have been readily developed for such purposes, the alternative technique presented here avoids the difficulties and problems that are likely to arise when using very specialized numerical methods. Furthermore the present method, tested for selected cases, is easy, straightforward and requires no prior knowledge of any of the parameters of interest. The results obtained for a solar cell and a module are in good agreement with previously published data. (C) 1999 Elsevier Science Ltd. All rights reserved.

**Notes:** Ouennoughi, Z Chegaar, M**URL:** <Go to ISI>://WOS:000083891000002

**Reference Type: Journal Article****Record Number:** 154**Author:** Ouennoughi, Z. Sellai, A.**Year:** 1997**Title:** MIS tunnel admittance with an inhomogeneous dielectric**Journal:** International Journal of Electronics**Volume:** 83**Issue:** 5**Pages:** 571-580**Date:** Nov**Short Title:** MIS tunnel admittance with an inhomogeneous dielectric**ISSN:** 0020-7217**DOI:** 10.1080/002072197135148**Accession Number:** WOS:A1997YD74200001

**Abstract:** A suitable equivalent circuit which incorporates the losses in the oxide layer of MIS tunnel structures is presented. The frequency dependence of the forward capacitance-voltage and conductance-voltage characteristics also are investigated while taking into account the parallel impedance attributed to the insulating layer. In fact, the latter is included in the model as a conductance in parallel with a capacitance, the contribution of which can be subtracted from the crudely measured data. The admittance expression of an ideal MIS tunnel diode can be readily derived as a special case from the more general proposed relations. The effect of the oxide conductance on the overall structure capacitance is shown to be appreciable at low frequencies. The effect is such that the capacitance falls rapidly as the frequency decreases, whereas the conductance increases with frequency in the low frequency limit.

**Notes:** Ouennoughi, Z Sellai, A**URL:** <Go to ISI>://WOS:A1997YD74200001

**Reference Type: Journal Article****Record Number:** 155**Author:** Piperova, J. Samsøen, D. Quentin, P. Bencheikh, K. Bartel, J. Meyer, J.**Year:** 1999**Title:** Bulk properties of rotating nuclei and the validity of the liquid drop model at finite angular momenta**Journal:** Nuclear Physics A**Volume:** 652**Issue:** 2**Pages:** 142-163**Date:** Jun**Short Title:** Bulk properties of rotating nuclei and the validity of the liquid drop model at finite angular momenta**ISSN:** 0375-9474**DOI:** 10.1016/s0375-9474(99)00159-1**Accession Number:** WOS:000081022300003

**Abstract:** Out of self-consistent semi-classical calculations performed within the so-called Extended Thomas-Fermi approach for 212 nuclei at all even angular momentum values  $I$  ranging between 0 and 80 ( $\hbar$ ) over bar and using the Skyrme SkM\* effective force, the  $I$ -dependence of associated liquid drop model parameters has been studied. The latter have been obtained through separate fits of the calculated values of the strong interaction as well as direct and exchange Coulomb energies. The theoretical data basis so obtained, has allowed to make a rough quantitative assessment of the variation with  $I$  of the usual volume and surface energy parameters up to spin of similar to 30-40 ( $\hbar$ ) over bar. As a result of the combined variation of the surface and Coulomb energies, it has been shown that this  $I$ -dependence results in a significant enhancement of the fission stability of very heavy nuclei, balancing thus partially the well-known instability due to centrifugal forces. (C) 1999 Elsevier Science B.V. All rights reserved.

**Notes:** Piperova, J Samsøen, D Quentin, P Bencheikh, K Bartel, J Meyer, J**URL:** <Go to ISI>://WOS:000081022300003

**Reference Type: Journal Article****Record Number:** 156**Author:** Plassard, C. Meslem, M. Souche, G. Jaillard, B.**Year:** 1999**Title:** Localization and quantification of net fluxes of H<sup>+</sup> along maize roots by combined use of pH-indicator dye videodensitometry and H<sup>+</sup>-selective microelectrodes**Journal:** Plant and Soil**Volume:** 211**Issue:** 1**Pages:** 29-39**Short Title:** Localization and quantification of net fluxes of H<sup>+</sup> along maize roots by combined use of pH-indicator dye videodensitometry and H<sup>+</sup>-selective microelectrodes**ISSN:** 0032-079X**DOI:** 10.1023/a:1004560208777**Accession Number:** WOS:000082820400005

**Abstract:** Two methods for measuring proton fluxes along intact maize roots grown with NH<sub>4</sub><sup>+</sup> or NO<sub>3</sub><sup>-</sup> at pH 6.5 were compared. Videodensitometric measurement of changes in a pH-indicator dye by video camera was used to map pH around roots and determine the amounts of protons released by various root regions. This method was compared with potentiometric determination of the concentration of H<sup>+</sup> in the unstirred layer at the root surface using ion-selective microelectrodes. With NH<sub>4</sub><sup>+</sup> the roots released large amounts of H<sup>+</sup> in preferential regions where the rate of flux can reach 1.4 or even 2.5 nmol m<sup>(-1)</sup> s<sup>(-1)</sup>. Videodensitometry indicated a first region of root acidification in the subapical zone, but this was more difficult to localize with microelectrodes. With NO<sub>3</sub><sup>-</sup> both methods showed that the roots released small amounts of H<sup>+</sup> and that the apical region took up H<sup>+</sup> in the first 10 mm then sometimes released H<sup>+</sup> over the following 10 mm of root. The H<sup>+</sup> flux profiles obtained by both methods were in good agreement in terms of both order of magnitude of the fluxes and spatial differences along the root. These results suggest that videodensitometry, which is easier to use than potentiometry, can be used to screen different plant species or cultivars under various experimental conditions. The microelectrode technique is indispensable, however, for studying the underlying mechanisms of net H<sup>+</sup> fluxes.

**Notes:** Plassard, C Meslem, M Souche, G Jaillard, B 16th World Congress of Soil Science Aug 20-26, 1998 Montpellier, canada**URL:** <Go to ISI>://WOS:000082820400005

**Reference Type: Journal Article**

**Record Number: 157**

**Author: Sahari, A. Zerroual, L.**

**Year: 1990**

**Title: EFFECT OF CURING ON POSITIVE PLATE BEHAVIOR IN LEAD ACID CELLS**

**Journal: Journal of Power Sources**

**Volume: 32**

**Issue: 4**

**Pages: 407-412**

**Date: Oct-Dec**

**Short Title: EFFECT OF CURING ON POSITIVE PLATE BEHAVIOR IN LEAD ACID CELLS**

**ISSN: 0378-7753**

**DOI: 10.1016/0378-7753(90)87010-o**

**Accession Number: WOS:A1990EE35200010**

**Notes: Sahari, a zerroual, 1**

**URL: <Go to ISI>://WOS:A1990EE35200010**

**Reference Type: Journal Article****Record Number:** 158**Author:** Samai, M. Jarny, Y. Delaunay, D.**Year:** 1993**Title:** AN OPTIMIZATION METHOD USING AN ADJOINT EQUATION TO IDENTIFY SOLIDIFICATION FRONT LOCATION**Journal:** Numerical Heat Transfer Part B-Fundamentals**Volume:** 23**Issue:** 1**Pages:** 67-89**Date:** Jan-Feb**Short Title:** AN OPTIMIZATION METHOD USING AN ADJOINT EQUATION TO IDENTIFY SOLIDIFICATION FRONT LOCATION**ISSN:** 1040-7790**DOI:** 10.1080/10407799308914890**Accession Number:** WOS:A1993KJ18700004

**Abstract:** A general optimization algorithm is studied for the accurate identification of solidification front location from noisy temperature measurements within the solid phase in a phase-change process. The method allows the determination of the heat flux entering the solid at the front. Numerical results are first compared with an exact solution. Then the method is implemented with experimental data obtained during the solidification of paraffin.

**Notes:** Samai, m jarny, y delaunay, d**URL:** <Go to ISI>://WOS:A1993KJ18700004

**Reference Type: Journal Article****Record Number:** 159**Author:** Sellai, A. Dawson, P.**Year:** 1998**Title:** Monte Carlo calculations of quantum yield in inhomogeneous PtSi/p-Si Schottky barriers**Journal:** Semiconductor Science and Technology**Volume:** 13**Issue:** 7**Pages:** 700-704**Date:** Jul**Short Title:** Monte Carlo calculations of quantum yield in inhomogeneous PtSi/p-Si Schottky barriers**ISSN:** 0268-1242**DOI:** 10.1088/0268-1242/13/7/007**Accession Number:** WOS:000074823100005

**Abstract:** Monte Carlo calculations of quantum yield in PtSi/p-Si infrared detectors are carried out taking into account the presence of a spatially distributed barrier potential. In the 1-4  $\mu\text{m}$  wavelength range it is found that the spatial inhomogeneity of the barrier has no significant effect on the overall device photoresponse. However, above  $\lambda = 4.0 \mu\text{m}$  and particularly as the cut-off wavelength ( $\lambda$  approximate to  $5.5 \mu\text{m}$ ) is approached, these calculations reveal a difference between the homogeneous and inhomogeneous barrier photoresponse which becomes increasingly significant and exceeds 50% at  $\lambda = 5.3 \mu\text{m}$ . It is, in fact, the inhomogeneous barrier which displays an increased photoyield, a feature that is confirmed by approximate analytical calculations assuming a symmetric Gaussian spatial distribution of the barrier. Furthermore, the importance of the silicide layer thickness in optimizing device efficiency is underlined as a trade-off between maximizing light absorption in the silicide layer and optimizing the internal yield. The results presented here address important features which determine the photoyield of PtSi/Si Schottky diodes at energies below the Si absorption edge and just above the Schottky barrier height in particular.

**Notes:** Sellai, A Dawson, P**URL:** <Go to ISI>://WOS:000074823100005



**Reference Type: Journal Article****Record Number:** 160**Author:** Selloum, L. Arrar, L. Medani, B. Khenchouche, A. Bisker, H.**Year:** 1995**Title:** Effect of Cleome arabica leaves extract on inflammatory cells response in rat**Journal:** Biochemical Society Transactions**Volume:** 23**Issue:** 4**Pages:** S609-S609**Date:** Nov**Short Title:** Effect of Cleome arabica leaves extract on inflammatory cells response in rat**ISSN:** 0300-5127**Accession Number:** WOS:A1995TH86500186**Notes:** Selloum, L Arrar, L Medani, B Khenchouche, A Bisker, H 655th Meeting of the Biochemical-Society Jul 18-21, 1995 Manchester, england Biochem Soc**URL:** <Go to ISI>://WOS:A1995TH86500186

**Reference Type: Journal Article****Record Number:** 161**Author:** Selloum, L. Sebihi, L. Mekhalfia, A. Mahdadi, R. Senator, A.**Year:** 1997**Title:** Antioxidant activity of Cleome arabica leaves extract**Journal:** Biochemical Society Transactions**Volume:** 25**Issue:** 4**Pages:** S608-S608**Date:** Nov**Short Title:** Antioxidant activity of Cleome arabica leaves extract**ISSN:** 0300-5127**Accession Number:** WOS:000071214300080**Notes:** Selloum, L Sebihi, L Mekhalfia, A Mahdadi, R Senator, A 662nd Meeting of the Biochemical-Society Jul 20-31, 1997 Univ dundee, dundee, scotland Biochem Soc**URL:** <Go to ISI>://WOS:000071214300080

**Reference Type: Journal Article****Record Number:** 162**Author:** Slimani, D. Djellal, K. Chemali, H. Kolli, K. Mesli, R.**Year:** 1995**Title:** A finite difference algorithm for plotting electric force surface in three-dimensional field computation**Journal:** Communications in Numerical Methods in Engineering**Volume:** 11**Issue:** 12**Pages:** 1033-1038**Date:** Dec**Short Title:** A finite difference algorithm for plotting electric force surface in three-dimensional field computation**ISSN:** 1069-8299**DOI:** 10.1002/cnm.1640111209**Accession Number:** WOS:A1995TL08900008**Abstract:** A finite difference algorithm for plotting the electric force surface is presented in three-dimensional electrostatic field computation, Based on the flux concept, the nodal electric flux is calculated numerically through the curve integral of the electric displacement vector which was obtained by a numerical differentiation of the nodal electric potential. This latter is calculated by a finite difference method. The electric force surface may also be plotted.**Notes:** Slimani, D Djellal, K Chemali, H Kolli, K Mesli, R**URL:** <Go to ISI>://WOS:A1995TL08900008

**Reference Type: Journal Article****Record Number:** 163**Author:** Sutton, K. Aghrout, A.**Year:** 1992**Title:** AGRICULTURAL POLICY IN ALGERIA IN THE 1980S - PROGRESS TOWARDS LIBERALIZATION**Journal:** Canadian Journal of African Studies-Revue Canadienne Des Etudes Africaines**Volume:** 26**Issue:** 2**Pages:** 250-273**Short Title:** AGRICULTURAL POLICY IN ALGERIA IN THE 1980S - PROGRESS TOWARDS LIBERALIZATION**ISSN:** 0008-3968**DOI:** 10.2307/485872**Accession Number:** WOS:A1992KN01700003**Notes:** Sutton, k aghrout, a**URL:** <Go to ISI>://WOS:A1992KN01700003

**Reference Type: Journal Article**

**Record Number: 164**

**Author: Tediari, F.**

**Year: 1985**

**Title: ELECTROPOLYMERIZATION OF FURANS .1. OBTAINING PRODUCTS ON DIFFERENT SUBSTRATES**

**Journal: European Polymer Journal**

**Volume: 21**

**Issue: 3**

**Pages: 317-319**

**Short Title: ELECTROPOLYMERIZATION OF FURANS .1. OBTAINING PRODUCTS ON DIFFERENT SUBSTRATES**

**ISSN: 0014-3057**

**DOI: 10.1016/0014-3057(85)90235-6**

**Accession Number: WOS:A1985AJP6200016**

**Notes: Tediari, f**

**URL: <Go to ISI>://WOS:A1985AJP6200016**

**Reference Type: Journal Article****Record Number:** 165**Author:** Tedjar, F.**Year:** 1994**Title:** IS PROTODE A NEW NAME FOR COMPOSITE ANODES IN SOLID-STATE PROTONIC BATTERIES**Journal:** Journal of Power Sources**Volume:** 48**Issue:** 3**Pages:** 385-388**Date:** Mar**Short Title:** IS PROTODE A NEW NAME FOR COMPOSITE ANODES IN SOLID-STATE PROTONIC BATTERIES**ISSN:** 0378-7753**DOI:** 10.1016/0378-7753(94)80034-0**Accession Number:** WOS:A1994NF53800011**Abstract:** Solid-state protonic batteries need a proton-generating negative electrode. In order to realize a compromise between high cell voltage and proton supplying, a new kind of anode was recently introduced. Analysing the behaviour of such a negative electrode, it is proposed to label it as 'protode'.**Notes:** Tedjar, f**URL:** <Go to ISI>://WOS:A1994NF53800011

**Reference Type: Journal Article****Record Number:** 166**Author:** Tedjar, F. Dib, Z.**Year:** 1985**Title:** STUDY ON THE IMPURITIES OF BLACK ACETYLENE .2. STUDY OF SURFACE-PROPERTIES**Journal:** Surface Technology**Volume:** 25**Issue:** 4**Pages:** 343-348**Short Title:** STUDY ON THE IMPURITIES OF BLACK ACETYLENE .2. STUDY OF SURFACE-PROPERTIES**ISSN:** 0376-4583**DOI:** 10.1016/0376-4583(85)90086-x**Accession Number:** WOS:A1985ARM5300006**Notes:** Tedjar, f dib, z**URL:** <Go to ISI>://WOS:A1985ARM5300006

**Reference Type: Journal Article****Record Number:** 167**Author:** Tedjar, F. Demri, D. Babes, E.**Year:** 1987**Title:** ELECTROCHEMICAL REDUCTION OF IONS INCORPORATED IN A CLAY MATRIX**Journal:** Surface & Coatings Technology**Volume:** 30**Issue:** 2**Pages:** 215-221**Date:** Feb**Short Title:** ELECTROCHEMICAL REDUCTION OF IONS INCORPORATED IN A CLAY MATRIX**ISSN:** 0257-8972**DOI:** 10.1016/0257-8972(87)90146-0**Accession Number:** WOS:A1987G140800010**Notes:** Tedjar, f demri, d babes, e**URL:** <Go to ISI>://WOS:A1987G140800010



**Reference Type: Journal Article****Record Number:** 168**Author:** Tedjar, F. Guitton, J.**Year:** 1984**Title:** THE INFLUENCE OF THE CALCIUM-ION IN SALINE ELECTRODE-ELECTROLYTE INTERFACES .1. ZINC CORROSION**Journal:** Surface Technology**Volume:** 23**Issue:** 1**Pages:** 83-90**Short Title:** THE INFLUENCE OF THE CALCIUM-ION IN SALINE ELECTRODE-ELECTROLYTE INTERFACES .1. ZINC CORROSION**ISSN:** 0376-4583**DOI:** 10.1016/0376-4583(84)90079-7**Accession Number:** WOS:A1984TH48400008**Notes:** Tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1984TH48400008

**Reference Type: Journal Article****Record Number:** 169**Author:** Tedjar, F. Guitton, J.**Year:** 1985**Title:** INFLUENCE OF THE CALCIUM-ION IN SALINE ELECTRODE-ELECTROLYTE INTERFACES .3. GLOBAL BEHAVIOR OF THE (ZN-CL-)-MNO2-GAMMA ELECTROCHEMICAL CHAIN**Journal:** Surface Technology**Volume:** 24**Issue:** 2**Pages:** 125-132**Short Title:** INFLUENCE OF THE CALCIUM-ION IN SALINE ELECTRODE-ELECTROLYTE INTERFACES .3. GLOBAL BEHAVIOR OF THE (ZN-CL-)-MNO2-GAMMA ELECTROCHEMICAL CHAIN**ISSN:** 0376-4583**DOI:** 10.1016/0376-4583(85)90129-3**Accession Number:** WOS:A1985AFT9400003**Notes:** Tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1985AFT9400003

**Reference Type: Journal Article****Record Number:** 170**Author:** Tedjar, F. Guitton, J.**Year:** 1985**Title:** INFLUENCE OF THE CALCIUM-ION IN SALINE ELECTRODE-ELECTROLYTE INTERFACES .2. THE CATHODIC REDUCTION OF MNO<sub>2</sub>-GAMMA**Journal:** Surface Technology**Volume:** 24**Issue:** 2**Pages:** 115-123**Short Title:** INFLUENCE OF THE CALCIUM-ION IN SALINE ELECTRODE-ELECTROLYTE INTERFACES .2. THE CATHODIC REDUCTION OF MNO<sub>2</sub>-GAMMA**ISSN:** 0376-4583**DOI:** 10.1016/0376-4583(85)90128-1**Accession Number:** WOS:A1985AFT9400002**Notes:** Tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1985AFT9400002

**Reference Type: Journal Article****Record Number:** 171**Author:** Tedjar, F. Guitton, J.**Year:** 1985**Title:** CORRELATION BETWEEN INTERFACE ELECTROCHEMICAL PROPERTIES OF MNO<sub>2</sub> IN AQUEOUS-MEDIA AND THE STRUCTURAL COMPOSITION OF WATER**Journal:** Surface Technology**Volume:** 26**Issue:** 2**Pages:** 107-115**Short Title:** CORRELATION BETWEEN INTERFACE ELECTROCHEMICAL PROPERTIES OF MNO<sub>2</sub> IN AQUEOUS-MEDIA AND THE STRUCTURAL COMPOSITION OF WATER**ISSN:** 0376-4583**DOI:** 10.1016/0376-4583(85)90002-0**Accession Number:** WOS:A1985AWU5600002**Notes:** Tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1985AWU5600002

**Reference Type: Journal Article****Record Number:** 172**Author:** Tedjar, F. Guitton, J.**Year:** 1988**Title:** DETERMINATION OF THE ACTIVE SURFACE-AREA OF GAMMA-MNO2**Journal:** Surface & Coatings Technology**Volume:** 35**Issue:** 1-2**Pages:** 1-10**Date:** Oct**Short Title:** DETERMINATION OF THE ACTIVE SURFACE-AREA OF GAMMA-MNO2**ISSN:** 0257-8972**DOI:** 10.1016/0257-8972(88)90051-5**Accession Number:** WOS:A1988R100200001**Notes:** Tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1988R100200001

**Reference Type: Journal Article****Record Number:** 173**Author:** Tedjar, F. Guitton, J.**Year:** 1991**Title:** STRUCTURAL MODIFICATION ON HEAT-TREATMENT OF GAMMA-MNO<sub>2</sub>**Journal:** Thermochemica Acta**Volume:** 181**Pages:** 13-22**Date:** May**Short Title:** STRUCTURAL MODIFICATION ON HEAT-TREATMENT OF GAMMA-MNO<sub>2</sub>**ISSN:** 0040-6031**DOI:** 10.1016/0040-6031(91)80408-b**Accession Number:** WOS:A1991FP33500002

**Abstract:** The change of structure of gamma-MnO<sub>2</sub> was studied under heat treatment using neutron powder diffraction in vacuum between 25-degrees-C and 600-degrees-C and X-ray diffraction in air in the same temperature range. After heating either in air or under vacuum, the final product at 600-degrees-C is the well-known Mn<sub>2</sub>O<sub>3</sub>. The intermediate formation of the pyrolusite phase depends on the atmosphere in which the sample is heated. Its appearance is connected with the oxidation of the initial Mn(III) contained in gamma-MnO<sub>2</sub> as MnOOOH. Oxidation leads to the formation of beta-MnO<sub>2</sub> localized as a thin layer on dehydrated gamma-MnO<sub>2</sub>.

**Notes:** Tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1991FP33500002

**Reference Type: Journal Article****Record Number:** 174**Author:** Tedjar, F. Kotkowskamachnik, Z.**Year:** 1984**Title:** STUDY OF ORGANIC IMPURITIES OF ACETYLENE BLACK .1. EVIDENCE FOR THE RELATION BETWEEN ELECTRICAL PERFORMANCE AND THE PURIFICATION OF ACETYLENE BLACK BY MEANS OF ORGANIC EXTRACTION**Journal:** Surface Technology**Volume:** 21**Issue:** 4**Pages:** 347-350**Short Title:** STUDY OF ORGANIC IMPURITIES OF ACETYLENE BLACK .1. EVIDENCE FOR THE RELATION BETWEEN ELECTRICAL PERFORMANCE AND THE PURIFICATION OF ACETYLENE BLACK BY MEANS OF ORGANIC EXTRACTION**ISSN:** 0376-4583**DOI:** 10.1016/0376-4583(84)90132-8**Accession Number:** WOS:A1984SL92600004**Notes:** Tedjar, f kotkowskamachnik, z**URL:** <Go to ISI>://WOS:A1984SL92600004

**Reference Type: Journal Article****Record Number:** 175**Author:** Tedjar, F. Melki, T. Zerroual, L.**Year:** 1992**Title:** ZINC COMPOSITE ANODE FOR BATTERIES WITH SOLID ELECTROLYTE**Journal:** Journal of Power Sources**Volume:** 38**Issue:** 3**Pages:** 379-383**Date:** May**Short Title:** ZINC COMPOSITE ANODE FOR BATTERIES WITH SOLID ELECTROLYTE**ISSN:** 0378-7753**DOI:** 10.1016/0378-7753(92)80128-x**Accession Number:** WOS:A1992HZ14400016

**Abstract:** A new negative composite anode for batteries with a solid electrolyte is studied. Using a complex of zinc ammonium chloride mixed with zinc metal powder, the advantage of the Zn/Zn<sup>2+</sup> electrode ( $e = -760$  mV) is kept while the energy density and the shelf-life of the battery are increased.

**Notes:** Tedjar, f melki, t zerroual, l**URL:** <Go to ISI>://WOS:A1992HZ14400016



**Reference Type: Journal Article****Record Number:** 176**Author:** Tedjar, F. Ymmel, S. Janda, M. Duchek, P. Holy, P. Stibor, I.**Year:** 1989**Title:** ELECTROCHEMICAL OXIDATION OF PYRROLE DERIVATIVES IN ALCOHOLIC MEDIUM**Journal:** Collection of Czechoslovak Chemical Communications**Volume:** 54**Issue:** 5**Pages:** 1299-1305**Date:** May**Short Title:** ELECTROCHEMICAL OXIDATION OF PYRROLE DERIVATIVES IN ALCOHOLIC MEDIUM**ISSN:** 0010-0765**Accession Number:** WOS:A1989AB36200013**Notes:** Tedjar, f ymmel, s janda, m ducheck, p holy, p stibor, i**URL:** <Go to ISI>://WOS:A1989AB36200013

**Reference Type: Journal Article****Record Number:** 177**Author:** Tedjar, F. Zerroual, L.**Year:** 1990**Title:** ALL SOLID PH SENSOR**Journal:** Sensors and Actuators B-Chemical**Volume:** 2**Issue:** 3**Pages:** 215-217**Date:** Aug**Short Title:** ALL SOLID PH SENSOR**ISSN:** 0925-4005**DOI:** 10.1016/0925-4005(90)85007-1**Accession Number:** WOS:A1990DU42200007**Notes:** Tedjar, f zerroual, l**URL:** <Go to ISI>://WOS:A1990DU42200007

**Reference Type: Journal Article****Record Number:** 178**Author:** Vernin, G. Zamkotsian, R. M. Vernin, G. Ghiglione, C. Dahia, M. M. Parkanyi, C.**Year:** 1999**Title:** GC/MS analysis of the volatile constituents of the essential oils of *Pituranthos scoparius* from Algeria**Journal:** Abstracts of Papers of the American Chemical Society**Volume:** 217**Pages:** U30-U30**Date:** Mar**Short Title:** GC/MS analysis of the volatile constituents of the essential oils of *Pituranthos scoparius* from Algeria**ISSN:** 0065-7727**Accession Number:** WOS:000079148100021**Notes:** Vernin, G Zamkotsian, RM Vernin, G Ghiglione, C Dahia, MM Parkanyi, C 1**URL:** <Go to ISI>://WOS:000079148100021

**Reference Type: Journal Article**

**Record Number: 179**

**Author: Wojda, A. P. Wozniak, M.**

**Year: 1985**

**Title: PACKING AND EXTREMAL DIGRAPHS**

**Journal: Ars Combinatoria**

**Volume: 20B**

**Pages: 71-73**

**Date: Dec**

**Short Title: PACKING AND EXTREMAL DIGRAPHS**

**ISSN: 0381-7032**

**Accession Number: WOS:A1985A568200008**

**Notes: Wojda, ap wozniak, m**

**URL: <Go to ISI>://WOS:A1985A568200008**

**Reference Type: Journal Article****Record Number:** 180**Author:** Yahiaoui, R. Guechi, A. Lukasova, E. Girre, L.**Year:** 1994**Title:** MUTAGENIC AND MEMBRANAL EFFECT OF A PHYTOTOXIC MOLECULE ISOLATED FROM OLIVE LEAVES PARASITIZED BY THE FUNGUS CYCLOCONIUM-OLEAGINUM CAST**Journal:** Mycopathologia**Volume:** 126**Issue:** 2**Pages:** 121-129**Date:** May**Short Title:** MUTAGENIC AND MEMBRANAL EFFECT OF A PHYTOTOXIC MOLECULE ISOLATED FROM OLIVE LEAVES PARASITIZED BY THE FUNGUS CYCLOCONIUM-OLEAGINUM CAST**ISSN:** 0301-486X**DOI:** 10.1007/bf01146204**Accession Number:** WOS:A1994NX76100007**Abstract:** `A phytotoxic substance (C<sub>23</sub>H<sub>44</sub>O<sub>3</sub>) which is named 'Substance A', was purified from olive leaves infected with *Cycloconium oleaginum* Cast. The mutagenic effect of this substance was detected using TA 100 and TA 102 strains of *Salmonella* in the Ames test using *Bacillus subtilis* strains M45 rec(-), H17 rec(+) in the rec assay. Another substance manifesting the mutagenic effect was found in the extract from the *Cycloconium oleaginum* culture. This substance was not detected in the extract from contaminated olive leaves. Substance A increased electrolytes leakage from tissue of olive leaves, thus manifesting its phytotoxicity.**Notes:** Yahiaoui, r guechi, a lukasova, e girre, l**URL:** <Go to ISI>://WOS:A1994NX76100007

**Reference Type: Journal Article****Record Number:** 181**Author:** Zerroual, L. Chelali, N. Tedjar, F. Guitton, J.**Year:** 1994**Title:** CONVERSION OF TRIBASIC LEAD SULFATE TO LEAD DIOXIDE IN LEAD-ACID-BATTERY PLATES .1. RELATIONSHIP BETWEEN THE PHASE COMPOSITIONS OF PLATES IN THE CURED AND FORMED STATES**Journal:** Journal of Power Sources**Volume:** 51**Issue:** 3**Pages:** 425-431**Date:** Oct**Short Title:** CONVERSION OF TRIBASIC LEAD SULFATE TO LEAD DIOXIDE IN LEAD-ACID-BATTERY PLATES .1. RELATIONSHIP BETWEEN THE PHASE COMPOSITIONS OF PLATES IN THE CURED AND FORMED STATES**ISSN:** 0378-7753**DOI:** 10.1016/0378-7753(94)80110-x**Accession Number:** WOS:A1994PV28200009

**Abstract:** The influence of the initial amount of H<sub>2</sub>SO<sub>4</sub> added to lead powder on the phase compositions of plates in the cured and formed states has been studied. IR spectra, X-ray diffraction, scanning electron microscope observations, and wet-chemical analysis are used as techniques of investigation. It was found that the phase composition of the paste depends on the H<sub>2</sub>SO<sub>4</sub>:oxidized lead powder ratio. In addition, it is found that alpha- and beta-PbO<sub>2</sub> are formed in the lead/acid battery positive plate from 3PbO.PbSO<sub>4</sub>.H<sub>2</sub>O. The amounts of these two compounds were strongly affected when varying the quantity of H<sub>2</sub>SO<sub>4</sub> with respect to the lead powder.

**Notes:** Zerroual, l chelali, n tedjar, f guitton, j**URL:** <Go to ISI>://WOS:A1994PV28200009

**Reference Type: Journal Article****Record Number:** 182**Author:** Zerroual, L. Guitton, J.**Year:** 1987**Title:** POSITIVE ELECTRODES OF LEAD-ACID-BATTERIES .1. COMPOSITION DEVELOPMENT DURING CHEMICAL-PREPARATION AND 1ST ELECTROCHEMICAL-CHARGE**Journal:** Surface & Coatings Technology**Volume:** 31**Issue:** 3**Pages:** 253-263**Date:** Sep**Short Title:** POSITIVE ELECTRODES OF LEAD-ACID-BATTERIES .1. COMPOSITION DEVELOPMENT DURING CHEMICAL-PREPARATION AND 1ST ELECTROCHEMICAL-CHARGE**ISSN:** 0257-8972**DOI:** 10.1016/0257-8972(87)90078-8**Accession Number:** WOS:A1987K051900006**Notes:** Zerroual, l guitton, j**URL:** <Go to ISI>://WOS:A1987K051900006

**Reference Type: Journal Article****Record Number:** 183**Author:** Zerroual, L. Tedjar, F. Guitton, J. Mousser, A.**Year:** 1993**Title:** MECHANISM OF PBO<sub>2</sub> FORMATION IN LEAD-ACID-BATTERY POSITIVE PLATES**Journal:** Journal of Power Sources**Volume:** 41**Issue:** 3**Pages:** 231-238**Date:** Jan**Short Title:** MECHANISM OF PBO<sub>2</sub> FORMATION IN LEAD-ACID-BATTERY POSITIVE PLATES**ISSN:** 0378-7753**DOI:** 10.1016/0378-7753(93)80041-m**Accession Number:** WOS:A1993KQ30200002

**Abstract:** The processes which take place in the paste during preparation and formation of lead/acid battery positive plates in H<sub>2</sub>SO<sub>4</sub> (sp.gr. 1.05) were studied using wet chemical analysis and X-ray diffraction. It was found that basic lead sulfate was obtained in two stages. During the first stage, free lead reacts in a basic character paste with H<sub>2</sub>SO<sub>4</sub> added to the lead powder and gives lead sulfate with an overall stoichiometry equivalent to PbSO<sub>4</sub>.H<sub>2</sub>O. During the second period, PbO undergoes an acid/base reaction to 3PbO.PbSO<sub>4</sub>.H<sub>2</sub>O. When soaking and forming in free H<sub>2</sub>SO<sub>4</sub>, lead oxide (free PbO plus PbO in the basic sulfate) reacts with H<sub>2</sub>SO<sub>4</sub> and gives lead sulfate PbSO<sub>4</sub>. The X-ray diffraction data showed that PbSO<sub>4</sub>.H<sub>2</sub>O is converted to alpha-PbO<sub>2</sub>, while PbSO<sub>4</sub> leads to the beta-PbO<sub>2</sub> form.

**Notes:** Zerroual, l tedjar, f guitton, j mousser, a**URL:** <Go to ISI>://WOS:A1993KQ30200002



**Reference Type: Journal Article****Record Number:** 184**Author:** Zerroual, L. Telli, L.**Year:** 1995**Title:** APPLICATION OF A PROTON-CONDUCTING ELECTROLYTE FOR A PH SENSOR**Journal:** Sensors and Actuators B-Chemical**Volume:** 25**Issue:** 1-3**Pages:** 741-743**Date:** Apr**Short Title:** APPLICATION OF A PROTON-CONDUCTING ELECTROLYTE FOR A PH SENSOR**ISSN:** 0925-4005**DOI:** 10.1016/0925-4005(95)85164-x**Accession Number:** WOS:A1995RN87000095

**Abstract:** Both  $\text{H}_2\text{O}_2\text{PO}_4 \cdot 4\text{H}_2\text{O}$  (HUP) and PVA- $\text{H}_3\text{PO}_4$  are proton-conducting electrolytes presenting high conductivity in the low to medium range of temperatures. Mixed with compounds able to exchange protons, such as gamma- $\text{MnO}_2$ , alpha- and beta- $\text{PbO}_2$ , composite materials have been obtained and used as inner references of all-solid glass electrodes. The sensors prepared in this work exhibit Nernstian responses and the potentials of the electrodes versus the external pH obey to the relation  $E=A(T)-(2.3RT/zF)\text{pH}(c)$ . The slopes  $dE/d\text{pH}$  obtained at 25 degrees C and the response times of the different sensors tested in this investigation are comparable to those of a commercial TB/HS glass electrode.

**Notes:** Zerroual, L. Telli, L. 5th International Meeting on Chemical Sensors Jul 11-14, 1994 Rome, Italy

**URL:** <Go to ISI>://WOS:A1995RN87000095

**Reference Type: Book Section****Record Number:** 1**Author:** Bounechada, M. Univ, Gent**Year:** 1994**Title:** THE ECOLOGICAL STUDY OF CHRYSOMELIDAE (O, COLEOPTERA) IN THE REGION OF SETIF (NORTHEAST OF ALGERIA)**Book Title:** 46th International Symposium on Crop Protection, Proceedings, Vols 1-4**Volume:** 59**Series Volume:** 2A**Pages:** 243-250**Series Title:** International Symposium on Crop Protection, Proceedings**Short Title:** THE ECOLOGICAL STUDY OF CHRYSOMELIDAE (O, COLEOPTERA) IN THE REGION OF SETIF (NORTHEAST OF ALGERIA)**ISBN:** 0368-9697**Accession Number:** WOS:A1994BC90C00010**Notes:** Bounechada, m 46th International Symposium on Crop Protection May 03, 1994 Ghent, belgium**URL:** <Go to ISI>://WOS:A1994BC90C00010

**Reference Type: Book Section****Record Number:** 2**Author:** Bouzerzour, H. Monneveux, P.**Year:** 1993**Title:** ANALYSIS OF FACTORS AFFECTING STABILITY OF BARLEY YIELDS IN THE HAUTS-PLATEAUS CONDITIONS OF EASTERN ALGERIA**Editor:** Monneveux, P. BenSalem, M.**Book Title:** Drought Tolerance of Grains in the Mediterranean Area: Genetic Diversity and Varietal Improvement**Volume:** 64**Pages:** 139-158**Series Title:** Colloques De L Inra**Short Title:** ANALYSIS OF FACTORS AFFECTING STABILITY OF BARLEY YIELDS IN THE HAUTS-PLATEAUS CONDITIONS OF EASTERN ALGERIA**ISBN:** 0293-1915 2-7380-0512-8**Accession Number:** WOS:A1993BA23V00010**Notes:** Bouzerzour, h monneveux, p Seminar on Tolerance of Grains in the Mediterranean Area: Genetic Diversity and Varietal Improvement Dec 15-17, 1992 Montpellier, france Inra. montpellier ctr, ecole natl superieure agronom montpellier**URL:** <Go to ISI>://WOS:A1993BA23V00010

**Reference Type: Book Section****Record Number:** 3**Author:** Fenni, M. Bcpc**Year:** 1995**Title:** Seed longevity of *Bromus rubens* L and *Bromus rigidus* Roth**Book Title:** Brighton Crop Protection Conference, Weeds - 1995, Vols 1-3**Pages:** 775-780**Series Title:** Proceedings - Brighton Crop Protection Conference**Short Title:** Seed longevity of *Bromus rubens* L and *Bromus rigidus* Roth**ISBN:** 0955-1514 0-948404-89-2**Accession Number:** WOS:A1995BE75D00110**Notes:** Fenni, M Brighton Crop Protection Conference - Weeds Nov 20-23, 1995 Brighton, england Bcpc**URL:** <Go to ISI>://WOS:A1995BE75D00110

**Reference Type: Book Section****Record Number:** 4**Author:** Fenni, M. Univ, Gent**Year:** 1994**Title:** EFFECTS OF WEEDS ON THE YIELD OF DURUM WHEAT (VARIETY, WAHA) AND THE EFFICACY OF SOME HERBICIDES**Book Title:** 46th International Symposium on Crop Protection, Proceedings, Vols 1-4**Volume:** 59**Series Volume:** 2A**Pages:** 1299-1303**Series Title:** International Symposium on Crop Protection, Proceedings**Short Title:** EFFECTS OF WEEDS ON THE YIELD OF DURUM WHEAT (VARIETY, WAHA) AND THE EFFICACY OF SOME HERBICIDES**ISBN:** 0368-9697**Accession Number:** WOS:A1994BC90C00136**Notes:** Fenni, m 46th International Symposium on Crop Protection May 03, 1994 Ghent, belgium**URL:** <Go to ISI>://WOS:A1994BC90C00136

**Reference Type: Book Section****Record Number: 5****Author:** Hafsi, M. Bouzerzour, H.**Year:** 1993**Title:** DIAGNOSIS OF VARIETAL BEHAVIOR OF DURUM-WHEAT IN THE HIGH-PLAINS OF THE SETIF**Editor:** Monneveux, P. BenSalem, M.**Book Title:** Drought Tolerance of Grains in the Mediterranean Area: Genetic Diversity and Varietal Improvement**Volume:** 64**Pages:** 205-215**Series Title:** Colloques De L Inra**Short Title:** DIAGNOSIS OF VARIETAL BEHAVIOR OF DURUM-WHEAT IN THE HIGH-PLAINS OF THE SETIF**ISBN:** 0293-1915 2-7380-0512-8**Accession Number:** WOS:A1993BA23V00014**Notes:** Hafsi, m bouzerzour, h Seminar on Tolerance of Grains in the Mediterranean Area: Genetic Diversity and Varietal Improvement Dec 15-17, 1992 Montpellier, france Inra. montpellier ctr, ecole natl superieure agronom montpellier**URL:** <Go to ISI>://WOS:A1993BA23V00014

**Reference Type: Book****Record Number: 1****Author:** Halitim, H. Benachour, D. Hammouche, A.**Year:** 1998**Title:** Electrical and mechanical characterization of PEO-LiN(CF<sub>3</sub>SO<sub>2</sub>)(2) electrolytes**Series Editor:** Prasad, P. N. Mark, J. E. Kandil, S. H. Kafafi, Z. H.**Series Title:** Science and Technology of Polymers and Advanced Materials: Emerging Technologies and Business Opportunities**Number of Pages:** 75-84**Short Title:** Electrical and mechanical characterization of PEO-LiN(CF<sub>3</sub>SO<sub>2</sub>)(2) electrolytes**ISBN:** 0-306-45820-9**Accession Number:** WOS:000077408000007**Notes:** Halitim, H Benachour, D Hammouche, A 4th International Conference on Frontiers of Polymers and Advanced Materials Jan 04-09, 1997 Cairo, egypt Minist Econ & Int Cooperat, IDSC, Dow Corning, European Off Aerosp Res & Dev, USAF, European Res Off, USA, Hoechst-Celanese, IDRC, Int Inst Theoret Phys Trieste, Off Naval Res, Europe, Off Naval Res, US, Saudi Basic Ind Corp, Social Fund Dev, TORAY Ind**URL:** <Go to ISI>://WOS:000077408000007

**Reference Type: Book****Record Number: 2****Author:** Mendil, B. Benmahammed, K. Ieee,**Year:** 1996**Title:** Hardware oriented fuzzy neural network**Series Title:** Iscas 96: 1996 Ieee International Symposium on Circuits and Systems - Circuits and Systems Connecting the World, Vol 3**Number of Pages:** 478-482**Short Title:** Hardware oriented fuzzy neural network**ISBN:** 0-7803-3073-0**Accession Number:** WOS:A1996BG15U00120**Notes:** Mendil, B Benmahammed, K 1996 IEEE International Symposium on Circuits and Systems - Circuits and Systems Connecting the World (ISCAS 96) May 12-15, 1996 Atlanta, ga Ieee**URL:** <Go to ISI>://WOS:A1996BG15U00120