

DEPARTAMENTO INVESTIGACION BASICA

Trabajos efectuados en el Centro Atómico Bariloche y publicados con referato

-1969-

Bajas Temperaturas

-SENSITIVE HOT WIRE LEVEL DETECTOR FOR CRYOGENIC LIQUIDS

F. de la cruz & O.J. Bressan

Review of Scientific Instruments, 40, N° 3, 483 (1969)

-EXPERIMENTAL HEAT CAPACITY OF PURE LIQUID He³

A.C. Mota, R.P. Platzeck, R. Rapp & J.C. Wheatley

Physical Review, 177, N° 1, 266 (1969) X

Colisiones Atomicas

-SEARCH FOR A POSSIBLE ISOTOPE EFFECT IN CHARGE-CHANGING COLLISIONS INVOLVING HYDROGEN AND DEUTERIUM

E.R. Salvatelli, G. Lantschner & W. Meckbach

Journal of Physics B: Atomic and Molecular Physics, 2, 772 (1969)

-CHARGE EQUILIBRIUM FRACTIONS OF A HELIUM BEAM IN HYDROGEN, NITROGEN, NEON AND ARGON FROM 60 to 850 keV

P. Torres, W. Meckbach & A. Valenzuela

Physical Review, 183, N° 1, 216 (1969)

Metales

-INTERNAL FRICTION IN VANADIUM AFTER HEATING AT LOW AIR PRESSURE

M.A. Mondino, D. Vasallo & M.C. Achterberg

Journal of Material Science, 4, 1117 (1969)

-WORK HARDENING IN SUPERLATTICES

G. Schoeck

Acta Metallurgica, 17, 147 (1969) X

-INTERNAL FRICTION DUE TO PRECIPITATION
G. Schoeck
Physica Status Solidi, 32, 651 (1969)

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-INTERNAL FRICTION IN Al-Ag ALLOYS
G. Schoeck & E. Bisogni
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Resonancias Magnéticas

-ANGULAR DEPENDENCE OF g-SHIFTS OF KRAMER'S DOUBLETS IN A CRYSTAL UNDER UNIAXIAL STRESS
R. Calvo, C. Fainstein, S.B. Oseroff & M.C. Terrile
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-KINETIC FORMULATION OF LOW-TEMPERATURE ACOUSTIC ABSORPTION IN INSULATORS
R. Nava & B. Alascio
IEEE Transactions on Sonics and Ultrasonics, SU-16, N° 3, 156 (1969)

-AN IDEALIZED MODEL OF A SUPERCURRENT
G. Beck
Nuovo Cimento, Serie X, 60B, 8 (1969)

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- SU_3 CONTINUOUS-MOMENT SUM RULES FOR MESON-BARYON SCATTERING
A. García & L. Masperi
Lettere al Nuovo Cimento, Serie I, 1, 379 (1969)

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-LOW-TEMPERATURE SPECIFIC HEATS OF THE β' AND ζ^0 PHASES IN EQUIATOMIC AgZn
J.P. Abriata, O.J. Bressan, C.A. Luengo & D. Thouloze
Physical Review B, 2, N° 6, 1464 (1970)

-ON THE EVIDENCE FOR ELECTRON-ELECTRON SCATTERING IN THE ELECTRICAL RESISTIVITY OF In
O.J. Bressan, A.E. Ridner, C.A. Luengo & B. Alascio
Solid State Communications, 8, 2129 (1970)

Metales

-DIE "AKTIVE GLEITLANGE" BEI DER PLASTISCHEN VERFORMUNG
G. Schoeck
Zeitschrift für Metallkunde, 61, 12, 970, (1970)

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-STACKING FAULT ENERGY AND MECHANICAL PROPERTIES
M. Ahlers
Metallurgical Transactions, 1, 2415 (1970)

-ON THE EFFECT OF STRUCTURE ON THE ELECTRICAL RESISTIVITY OF SOME ORDERING SOLID SOLUTIONS
C. Varotto & A.E. Vidoz
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-ENDOR MEASUREMENTS IN $^{57}\text{Fe}^{3+}$ IN CALCIUM OXIDE
R. Calvo, M.C.G. Passeggi & R.I. Isaacson
Physics Letters, 31A, N° 7, 407 (1970)

-SECOND AND FOURTH ORDER SPIN-LATTICE COEFFICIENTS FOR Gd^{3+} IN THORIA
S.B. Oseroff, R. Calvo & C. Fainsten
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-SIMPLE s HELICITY STRUCTURE AT THE NUCLEON-NUCLEON VERTEX OF THE POMERON AND MESON EXCHANGES: EXPERIMENTAL EVIDENCE AND CONNECTIONS WITH DUALITY
R. Odorico, A. García & C.A. García-Canal
Physics Letters B, 32, N° 5, 375 (1970)

-MAGNON-PHONON INTERACTION IN THE ITINERANT ELECTRON MODEL OF FERROMAGNETISM
B. Alascio & A. López
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-NON-MARKOVIAN IRREVERSIBLE BEHAVIOR IN A SIMPLE MODEL
A. López
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-COLLECTIVE-VARIABLE DESCRIPTION OF THE DYNAMICS OF CRYSTALS
B. Alascio & A. López
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-ANGULAR STRUCTURE OF πN VENEZIANO MODELS
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-COLLISIONAL-QUENCHING PROCESSES IN H(2s)

R.A. Baragiola & E.R. Salvatelli

Physical Review A, 3, N° 1, 514 (1971)

-PREPARATION OF EXTREMELY THIN SELF-SUPPORTING METAL FOILS

A. Valenzuela & J.C. Eckardt

The Review of Scientific Instruments, 42, N° 1, 127 (1971)

-ELECTRONIC TRANSLATION FACTOR IN LOW ENERGY PROTON-HYDROGEN ATOM COLLISIONS

V.H. Ponce

Proceedings of the VII International Conference on the Physics of Electronic and Atomic Collisions (1971). Theory of Ion-Atom and Atom-Atom Collisions, Electronic & Atomic Collisions, Editor Branscomb et al., North Holland Publishing Company, p. 464 (1971) X

-CROSS SECTION FOR ELECTRONIC CAPTURE AND LOSS FROM HE IONS ON MG AND PB VAPOURS

R.A. Baragiola, E.R. Salvatelli & G. Lantschner

Proceedings of the VII International Conference on the Physics of Electronic and Atomic Collisions (1971). Charge Exchange Miscellaneous, Electronic & Atomic Collisions, Editor Branscomb et al., North Holland Publishing Company, p. 788 (1971) X

-A SELECTION RULE FOR CHARGE TRANSFER

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-MEDICION DE FRACCIONES DE EQUILIBRIO DE CARGA DE HACES DE HIDROGENO EN VAPORES DE MAGNESIO

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Acta Cientifica, 4, N°1, 21 (1971) X

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-COHERENCY LOSS AND INTERNAL FRICTION

M. Mondino & G. Schoeck

Physica Status Solidi (a) 6, 665 (1971) X

-ORDERING AND RECOVERY PROCESSES IN THE Ni/Fe SYSTEM NEAR Ni_3Fe

C. Varotto & A. Vidoz

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-THE MOVEMENT OF EDGE AND SCREW DISLOCATIONS IN Al SINGLE CRYSTALS
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-THE TEMPERATURE DEPENDENCE OF WORK-HARDENING IN Cu₃Au AND Ni₃Fe
G. Schoeck & E. Perez
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-ANGULAR VARIATION OF THE EPR LINEWIDHT OF Ni²⁺ IN CaO
R. Calvo, M.C.G. Passeggi & C. Fainstein
Physics Letters, 37A, N° 3, 201 (1971)

-COVALENCY AND ORBIT-LATTICE COUPLING
M.C.G. Passeggi & T. Buch
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-UNIAXIAL STRESS SYSTEM FOR 35 GHz EPR AND ENDOR EXPERIMENTS
C. Fainstein & S.B. Oseroff
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-CALCULATION OF THE SPIN-LATTICE COEFFICIENTS OF Gd³⁺ in CaF₂ USING A POINT-CHARGE MODEL FOR THE CRYSTALLINE FIELD
R. Calvo, M.C.G. Passeggi & M. Tovar
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-A MODEL FOR THE PHASE DIAGRAM OF (V_{1-x}Cr_x)₂O₃
B. Alascio, A. López & V. Grunfeld
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-THE BORN TERM SUBTRACTION. A TEST BY INVERSE DISPERSION RELATIONS
A. García & G. Violini
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-FINITE ENERGY SUM RULES WITH ππ VENEZIANO AMPLITUDES
A. Della Selva & L. Masperi
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-A HIGH PERFORMANCE THROTTLE VALVE
A.E. Ridner, O.J. Bressan & J.M. Cotignola
Vacuum, 22, N° 2, 51 (1972)

-LOW TEMPERATURE SPECIFIC HEAT OF ThU
C.A. Luengo, J.M. Cotignola, J.G. Sereni, A.R. Sweedler, M.B. Maple & J.G. Huber
Solid State Communications, 10, 459 (1972)

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-A COMBINATION FORELINE TRAP AND VALVE

R.A. Baragiola

Vacuum, 22, N° 7, 274 (1972)

-STOPPING POWER OF SOME PURE METALS FOR 25-250 keV HYDROGEN IONS

A. Valenzuela, W. Meckbach, A.J. Kestelman & J.C. Eckardt

Physical Review B, 6, N° 1, 95 (1972)

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-INTERNAL FRICTION IN AN AGED Cu-5,09 wt % Si ALLOY

M. Mondino & C. Lardone

Scripta Metallurgica, 6, 1109 (1972)

-CHROMIUM DIFFUSION IN α -ZIRCONIUM

R. Tendler & C.F. Varotto

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-SUBLIMATION GROWTH OF HgI_2 SINGLE CRYSTALS IN THE TETRAGONAL PHASE

J.Saura & J.L. Regolini

Journal of Crystal Growth, 15, 307 (1972)

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-TOTAL NEUTRON CROSS SECTION OF MYLAR AT LOW ENERGIES

C. Castro Madero, F. Kropff, A. Oliva & J.M. Neill

Technical Note, Nuclear Science & Engineering, 49, 392 (1972)

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S.B. Oseroff

Physics Letters, 41A, N° 4, 387 (1972)

-THE SPIN LATTICE INTERACTION FOR RARE EARTH S-STATE IONS

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S.B. Oseroff & R. Calvo

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P. Schlottmann

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- LOCALIZED AND VIRTUAL MAGNETOELASTIC STATES IN A LINEAR CHAIN
C. Olmedo & B. Alascio
Journal of Physics and Chemistry of Solids, 33, 223 (1972)
- THERMODYNAMIC THEORY OF THE PHASE DIAGRAM OF MIXED TRANSITION-METAL OXIDES
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B. Alascio, A. Lopez & C. Olmedo
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- PHENOMENOLOGICAL STUDY OF HIGH ENERGY EXCHANGES BASED ON MULTIPERIPHERAL IDEAS
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- CHARGE-STATE DISTRIBUTIONS IN COLLISIONS OF H AND He WITH MAGNESIUM
R.A. Baragiola, E.R. Salvatelli & E. Alonso
Nuclear Instruments and Methods, 110, 507 (1973)
- CROSS SECTIONS FOR SINGLE AND DOUBLE ELECTRON CAPTURE FROM He^{++} ON HYDROGEN, NEON AND ARGON
R.A. Baragiola & I.B. Nemirovsky
Nuclear Instruments and Methods, 110, 511 (1973)
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R.A. Baragiola, W. Meckbach, H.B. Gilbody, J.Wm. McGowan & E. Alonso
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-FORMATION OF He^- IN COLLISIONS OF HELIUM IONS WITH THICK TARGETS OF HYDROGEN AND NITROGEN

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-PLASTIC DEFORMATION OF MARTENSITIC Cu-Zn SINGLE CRYSTALS

W. Arneodo & M. Ahlers

Scripta Metallurgica, 7, 1287 (1973)

-AN ELECTRON MICROSCOPIC STUDY OF MARTENSITE FORMATION IN β Cu-Zn

R. Rapacioli & M. Ahlers

Scripta Metallurgica, 7, 977 (1973)

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R. Tendler & C. Varotto

Journal of Nuclear Materials 46, 107 (1973)

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C. Olmedo, A. López & B. Alascio

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-EFFECT OF FINITE f LEVEL LINewidth ON THE THEORY OF THE α - γ TRANSITION IN Ce

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-SEMI LOCAL DUALITY AND FESR PROBLEMS FOR VENEZIANO MODELS

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