

TOPICS

1. Processing and Characterization
2. Electronic Transport Properties
3. Magnetic Properties
4. Optical and Photoelectric Properties
5. Low-dimensional Structures
6. Functional Materials. Applications

PLENARY SESSION

Thursday, June 10; 9:40 - 11:00

9 ⁴⁰ -10 ²⁰	LOW DIMENSIONAL FERROELECTRICS M. Alexe
10 ²⁰ -11 ⁰⁰	GIANT MAGNETORESISTANCE (GMR) IN ELECTRODEPOSITED MULTILAYER FILMS: THE INFLUENCE OF SUPERPARAMAGNETIC REGIONS I. Bakonyi, V. Weihnacht, L. Peter, Z. Rolik, K. Kiss-Szabo, J. Toth and L.F. Kiss

PLENARY SESSION

Thursday, June 10; 11:20 - 14:00

11 ²⁰ -12 ⁰⁰	NUMERICAL SIMULATION APPLIED TO THE ELABORATION OF MATERIAL BY CHEMICAL VAPOUR DEPOSITION Anne Bouteville
12 ⁰⁰ -12 ⁴⁰	PERIODIC NANOSTRUCTURES Mircea V. Diudea
12 ⁴⁰ -13 ²⁰	SPINTRONICS EFFECTS IN SEMICONDUCTOR HETEROSTRUCTURES WITH RASHBA LIKE SPIN-ORBIT INTERACTION V.Kantser
13 ²⁰ -14 ⁰⁰	DYNAMICS OF HALL AND MAGNETORESISTANCE EFFECTS OBTAINED FROM SIMULTANEOUS MEASUREMENTS OF LIQUID METALS AND SEMICONDUCTORS M.Ogita, T.Ito, M.Isai, I.Mogi, S.Awaji, K. Yokoo

PLENARY SESSION

Friday, June 11; 8:00 - 11:20

8 ⁰⁰ -8 ⁴⁰	NANOSTRUCTURATED COMPOSITES S. Simon
8 ⁴⁰ -9 ²⁰	PHOTO-INDUCED MODIFICATIONS IN AMORPHOUS LOW-DIMENSIONAL STRUCTURES Mihai Popesc
9 ²⁰ -10 ⁰⁰	TRANSPARENT CONDUCTING OXIDE (TCO) THIN FILMS ELABORATED BY SOL - GEL ROUTE: STRUCTURE AND PROPERTIES M.G. Blanchin , V.S. Teodorescu, B. Canut, J.A. Roger, C.S. Sandu, K. Daoudi, and C. Ghica
10 ⁰⁰ -10 ⁴⁰	MOLECULE-DERIVED NANOMATERIALS: CONTROL OF PHASE, SIZE AND MORPHOLOGY IN FUNCTIONAL MATERIALS Hao Shen, Eva Hemmer, Thomas Rugamer, Sven Barth, Rasa Rapalaviciute, Vladimir Sivakov and Sanjay Mathur
10 ⁴⁰ -11 ²⁰	MAGNETIC TRANSITIONS IN INTERMETALLIC COMPOUNDS E. Burzo
11 ²⁰ -11 ⁴⁰	RESERVED SUBJECT Gh. Popa

ORAL SESSION

Section I - Processing and Characterization

Thursday, June 10; 15:30 - 17:30

15 ³⁰ -15 ⁴⁵	O-I.1 STRUCTURE OF IRON-TIN MIXED OXIDE NANOPARTICLES V.S. Teodorescu, M.G. Blanchin, M. Sorescu, L. Diamandescu , D. Tarabasanu-Mihaila
15 ⁵⁰ -16 ⁰⁵	O-I.2 NONSTOICHIOMETRY AND SOLUBILITY LIMITS OF INDIUM IMPURITY ATOMS IN PbTe<In> THIN FILMS ON Si SUBSTRATES Alexander M. Samoylov, Alexander M. Khoviv, Yury V. Synorov, Igor S. Surovtsev
16 ¹⁰ -16 ²⁵	O-I.3 Ni, Zn/ SiO ₂ FERRITE NANOCOMPOSITES PREPARED BY AN IMPROVED SOL-GEL METHOD AND THEIR CHARACTERIZATION Stefanescu Mircea, Caizer Costică, Stoia Marcela, Stefanescu Oana
16 ³⁰ -16 ⁴⁵	O-I.4 SOLUTE DISTRIBUTION IN SHAPED SAPPHIRE CRYSTALS OBTAINED BY EFG METHOD O.Bunoiu, I. Nicoara, T.Duffar
16 ⁵⁰ -17 ⁰⁵	O-I.5 STRUCTURE AND OPTOELECTRICAL PROPERTIES OF CdTe AND CdS THIN FILMS. T. Potlog, L. Ghimpu, C. Rotaru, C. Antoniu

ORAL SESSION

Section I - Processing and Characterization

Friday, June 11; 15:30 - 17:30

15 ³⁰ -15 ⁴⁵	O-I.7 ON THE SHAPE MEMORY BEHAVIOUR OF CU-BASED ALLOYS AND POLYETHYLENETEREPHTALATE (PET) Leandru-Gheroghe Bujoreanu, Corneliu Munteanu, Iulian Ionita, Viorel Kogalniceanu
15 ⁵⁰ -16 ⁰⁵	O-I.8 PROCESSING AND CHARACTERIZATION THE ALLOYS FROM Fe _{37.5} Ni _{32.5-x} Cr ₅ Co _x B ₁₅ Si ₁₀ SYSTEM. I-STUDY OF AMORPHIZABLE STRUCTURES Corneliu Munteanu, Leandru-Gheorghe Bujoreanu, Florin Branza
16 ¹⁰ -16 ²⁵	O-I.9 PROCESSING AND CHARACTERIZATION THE ALLOYS FROM Fe _{37.5} Ni _{32.5-x} Cr ₅ Co _x B ₁₅ Si ₁₀ SYSTEM. II-STUDY OF AMORPHOUS ALLOYS Corneliu Munteanu, Leandru-Gheorghe Bujoreanu, Nicolae Sulitanu
16 ³⁰ -16 ⁴⁵	O-I.10 PREPARATION AND STRUCTURAL CHARACTERIZATION OF NICKEL/ ALUMINA NANO-PARTICLES COMPOSITE COATINGS C. Gheorghies and Geta Carac
16 ⁵⁰ -17 ⁰⁵	O-I.11 THE PHOTO-INDUCED TRANSITION FROM ELASTIC TO PLASTIC BEHAVIOR IN AMORPHOUS As-Se FILMS STUDIED BY NANOINDENTATION M.L. Trunov , S.N. Dub, R. S. Shmegeera
17 ¹⁰ -17 ²⁵	O-I.12 CHARACTERISATION OF TIOX THIN FILMS PREPARED BY REACTIVE PULSED-LASER ABLATION D. Luca

ORAL SESSION

Section II - Electronic Transport Properties

Friday, June 11; 11:40 - 13:40

11 ⁴⁰ -11 ⁵⁵	O-II.2 MAGNETORESISTANCE ANISOTROPY PECULIARITIES IN SUBMICRON SINGLE CRYSTAL WIRES OF BISMUTH AND ITS ALLOYS WITH TIN P. Bodiul, D. Gitsu, T. Huber, L. Konopko, A. Nikolaeva
12 ⁰⁰ -12 ¹⁵	O-II.3 AMPHOTERIC BEHAVIOR OF In IMPURITY ATOMS IN PbTe<In>/Si FILMS, PREPARED BY HWE TECHNIQUE Alexander M. Samoylov, Nickolay N. Dement'ev, Alexander M. Khoviv, Igor S. Surovtsev

12 ²⁰ -12 ³⁵	O-II.4 NEGATIVE DIFFERENTIAL CONDUCTIVITY OF A PLASMA IN TRANSVERSE MAGNETIC FIELD M. Toma
12 ⁴⁰ -12 ⁵⁵	O-II.5 MIDGAP ANDREEV BOUND STATES IN AN CYLINDRICAL SUPERCONDUCTOR/NORMAL METAL JUNCTION V. Kantser, I. Sandu, A. Sidorenko, A. Wixforth
13 ⁰⁰ -13 ¹⁵	O-II.6 SPIN-DEPENDENT TUNNELING IN A BARRIER STRUCTURE INDUCED BY ELECTRICAL POLARIZATION V.Kantser, S.Carlig ,G.Birliba

ORAL SESSION

Section III - Magnetic Properties

Friday, June 11; 15:30 - 17:50

15 ³⁰ -15 ⁴⁵	O-III.1 EFFECT OF ADDITIVES ON THE MICROSTRUCTURE AND COMPLEX PERMEABILITY OF Ni-Zn FERRITES B. Parvatheeswara Rao, K.H. Rao, P.V. Ramana and O.F. Caltun
15 ⁵⁰ -16 ⁰⁵	O-III.2 PLASMA LASER DEPOSITION OF Ni-Zn FERRITE THIN FILMS O.F. Caltun
16 ¹⁰ -16 ²⁵	O-III.3 EPR AND MAGNETIC INVESTIGATIONS OF CHROMIUM IONS IN TeO ₂ BASED GLASSES I. Ardelean and Sanda Filip
16 ³⁰ -16 ⁴⁵	O-III.4 MAGNETIC PROPERTIES VERSUS ANNEALING TEMPERATURE IN POSITIVE MAGNETOSTRICTIVE FeSiB CONVENTIONAL AND GLASS-COVERED AMORPHOUS WIRES Horia Chiriac, Nicoleta Lupu, Jean-Marc Greneche
16 ⁵⁰ -17 ⁰⁵	O-III.5 DYNAMIC OF MAGNETIC DOMAINS IN AMORPHOUS Fe-Sm THIN FILMS F. Brinza, N. Sulitanu
17 ¹⁰ -17 ²⁵	O-III.6 TUNING THE MAGNETIC PROPERTIES OF ELECTROCHEMICALLY DEPOSITED FILMS BY MEANS OF NANOMETER-SIZED MICROSTRUCTURE. Applications in Micro- and Nano-Technologies N. Sulitanu, F. Brinza
17 ³⁰ -17 ⁴⁵	O-III.7 MAGNETIC RELAXATION IN FERROFLUIDS Rolf Hempelmann

ORAL SESSION

Section IV - Optical and Photoelectric Properties

Thursday, June 10; 15:30 - 17:30

15 ³⁰ -15 ⁴⁵	O-IV.1 PHOTODARKENING RELAXATION IN AMORPHOUS As ₂ Se ₃ FILMS DOPED WITH RARE-EARTH IONS M.S.Iovu, P.Boolchand, D.G.Georgiev
15 ⁵⁰ -16 ⁰⁵	O-IV.2 MOLECULAR STRUCTURE AND QUENCHING OF PHOTODARKENING In As ₂ Se ₃ :Sn _x AMORPHOUS FILMS P.Boolchand, D.G.Georgiev, M.S.Iovu
16 ¹⁰ -16 ²⁵	O-IV.3 ELECTRONIC STRUCTURE AND PROPERTIES OF Sb _x S _{1-x} ALLOYS Tatiana Shchurova, N. Savchenko, V.M. Rubish, V.V. Rubish, A. Spesivikh
16 ³⁰ -16 ⁴⁵	O-IV.4 LUMINESCENT PROPERTIES OF ZnS SINGLE CRYSTAL ANNEALED IN THE V GROUP ELEMENT MELTS R.Sobolevskaya, V.Korotkov, P.Ketrush, L.Bruk, K.Sushkevci,
16 ⁵⁰ -17 ⁰⁵	O-IV.5 STUDY ON TRANSPORT MECHANISMS OF CHARGE CARRIERS THROUGH THE JUNCTION OF CdS-CdTe (P) MODULES Iuliana Caraman, Gheorghe I. Rusu
17 ¹⁰ -17 ²⁵	O-IV.6 OPTICAL ANF PHOTOCATALYTICAL PROPERTIES OF DC MAGNETRON TiO ₂ THIN FILMS M.Stamate, I.Vascan, I.Lazar, G.Lazar, I.Caraman, M.Caraman

ORAL SESSION

Section IV - Optical and Photoelectric Properties

Friday, June 11; 14:40 - 13:20

11 ⁴⁰ -11 ⁵⁵	O-IV.7 STUDY OF OPTICAL PROPERTIES OF COMPONENT LAYERS OF SOLAR CELLS ITO-CdS-Cd _{1-x} Mn _x Te (x<0.05) Iuliana Caraman, Gheorghe I. Rusu
12 ⁰⁰ -12 ¹⁵	O-IV.8 RADIATIVE CENTERS FORMED BY HALOGEN MOLECULES INTERCALATED IN MoS ₂ AND WS ₂ LAYERED SEMICONDUCTORS D. Dumchenko, C. Gherman, L. Kulyuk
12 ²⁰ -12 ³⁵	O-IV.9 THEORY OF FOUR-CENTER SYSTEMS FOR ENERGY TRANSFER IN RARE-EARTH DOPED MATERIALS C. Candu, V. Ciobu, V. Enaki
12 ⁴⁰ -12 ⁵⁵	O-IV.10 COMPUTER PROCESSING OF DIAGRAM TAPE BY USING OPTICAL INTERFACE V.Korotkov, P.Ketrush, S.Levchenko, Yu.Bruk, R.Sobolevskaya, K.Sushkevci.

13 ⁰⁰ -13 ¹⁵	O-IV.11 THE BIREFRINGENCE OF THIN FILMS OF SOME NEMATIC LIQUID CRYSTALS Sabina Picos, G. Amarandei and Dana Dorohoi
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ORAL SESSION

Section V - Low-dimensional Structures

Thursday, June 10; 15:30 - 17:30

15 ³⁰ -15 ⁴⁵	O-V.1 MAGNETISM AND MAGNETORESISTANCE IN ELECTRODEPOSITED (L10) CoPt SUPERLATTICES V. Georgescu, M. Daub
15 ⁵⁰ -16 ⁰⁵	O-V.2 STRUCTURE, ELECTRONIC PROPERTIES, AND MAGNETISM OF Ni AND Fe NANOPARTICLES EMBEDDED IN C ⁶⁰ MATRICES C.M. Teodorescu, D. Macovei, A. Lungu
16 ¹⁰ -16 ²⁵	O-V.3 FABRICATION OF SIZE-CONTROLLABLE NANOSTRUCTURES BY COMBINING SELF-ASSEMBLING POLYSTYRENE NANOSPHERES WITH REACTIV-ION ETCHING S. Astilean, N. Apetroaei, Gh. Popa
16 ³⁰ -16 ⁴⁵	O-V.4 HIGH VALUES OF THE THERMOPOWER EXPECTED IN QUASI-ONE-DIMENSIONAL ORGANIC CRYSTALS A. Casian, V. Dusciac and R. Dusciac
16 ⁵⁰ -17 ⁰⁵	O-V.5 ZEOLITE ENCAPSULATED SEMICONDUCTOR NANOMATERIALS Felicia Iacomi, Aurelia Vasile, M.Caraman, G. Amarandei
17 ¹⁰ -17 ²⁵	O-V.6 FORMATION OF MnS CLUSTERS INTO LAUMONTITE ZEOLITE Felicia Iacomi, Aurelia Vasile, Clara Radoi, Eleni Pavlidou, N.Varoutzis, E.K. Polychroniadis

ORAL SESSION

Section VI - Functional Materials. Applications

Friday, June 11; 11:40 - 13:40

11 ⁴⁰ -11 ⁵⁵	O-VI.1 OXYGEN SENSOR BASED ON Ga ₂ O ₃ FILMS OPOPERATING AT HIGH TEMPERATURE C. Baban Y.Toyoda, M. Ogita,
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12 ⁰⁰ -12 ¹⁵	O-VI.2 UN-STIRRED LAYERS AT THE BIOMEMBRANE-AQUEOUS SOLUTION INTERFACE EVIDENCED BY ION TRANSPORT MEASUREMENT THROUGH PORE-FORMING PROTEINS Tudor Luchian
12 ²⁰ -12 ³⁵	O-VI.3 THE INFLUENCE OF COMPACTING PRESSURE ON THE EFFICIENCY OF THERMOCHEMICAL TREATMENT AND WEAR RESISTANCE OF LOW ALLOYED STEELS FOR AUTOMOTIVE APPLICATIONS Victor Stanciu, A. Dima, R. Orban, M. Rosso
12 ⁴⁰ -12 ⁵⁵	O-VI.4 THIN SUPERFICIAL LAYERS WITH SPECIAL PROPERTIES DEPOSED ON STEELS BY ELECTRICAL DISCHARGE IN IMPULSE Adrian Alexandru, Ioan Alexandru, Marius Calin
13 ⁰⁰ -13 ¹⁵	O-VI.5 SEMIMAGNETIC FILMS FORMED BY NANOCRYSTALS OBTAINED BY AMONIA-FREE CHEMICAL BATH DEPOSITION Felicia Iacomi, N. Apetroaei, Iulia Salaoru, Aurelia Vasile, M. R. Craus
13 ²⁰ -13 ³⁵	O-VI.6 RESEARCH ON GASOSTATIC FORMING OF ALUMINUM SHEETS ALLOYS Gavril Grebenisan
13 ⁴⁰ -13 ⁵⁵	O-VI.7 SOME PROPERTIES OF COPPER - NICKEL Cu-Ni at DIFFERENT % OF Ni Fae'q Radwan

POSTER SESSION

Section I - Processing and Characterization

Thursday, June 10; 18:00 - 19:30

P-I.1 YTTRIUM INFLUENCE ON RELEASE BEHAVIOUR OF BIOACTIVE GLASSES D.Cacaina, H. Ylanen, S.Simon
P-I.2 STRUCTURAL AND THERMAL INVESTIGATION OF PHOSPHATE GLASSES WITH SILVER D.Muresan, I.Balasz, S.Simon
P-I.3 ATOMIC ENVIRONMENT IN IRON CONTAINING SILICA-PHOSPHATE GLASS-CERAMICS V. Simon, D. Eniu, M. Neumann, S. Simon
P-I.4 THE INFLUENCE OF DIFFERENT GROWTH CONDITIONS ON THE INTERFACE SHAPE IN BRIDGMAN AND LEC GROWTH OF GaAs CRYSTALS Bogdan Faina, Daniel Vizman
P-I.5 THE GROWTH AND CHARACTERIZATION OF PbSn AND PbSnTe EPITAXIAL LAYERS L. Lungu, N. Sulitanu

<p>P-I.6 SYNTHESIS OF CARBON NANOTUBES BY SPRAY PYROLYSIS AND THEIR INVESTIGATION BY ELECTRON MICROSCOPY P. Nemes-Incze, K. Kertesz, L. Tapasztó, A. A. Koos, Z. Osvath, Zs. Sarkozi, Z. Vertesy, Z. E. Horvath, Al. Darabont, L. P. Biro</p>
<p>P-I.7 ON THE DRAWING IN ULTRASONIC FIELD OF METALLIC WIRES WITH HIGH MECHANICAL RESISTANCE Mihai Susan, Leandru-Gheorghe Bujoreanu, Corneliu Munteanu, Constantin Calin</p>
<p>P-I.8 MICROCHEMICAL AND MECHANICAL CHARACTERISTICS OF ARC PLASMA DEPOSITED (Ti,Al)N AND TiN/(Ti,Al)N COATINGS M. Braic, V. Braic, M. Balaceanu, G. Pavelescu, A. Vladescu, C. Logofatu, C.C. Negrila</p>
<p>P-I.9 RELAXATION PHENOMENA IN GLASSY $(Ge_xAs_{1-x})_{40}S_{60}$ Bilanych V.S., Melnichenko T.D., Rizak V.M.</p>
<p>P-I.10 IR ABSORPTION PROPERTIES OF AMORPHOUS CARBON G. Lazar, K. Zellama, I. Vascan, M. Stamate, I. Lazar, I. Rusu</p>
<p>P-I.11 ON A NEW TECHNIQUE FOR TRACE ELEMENT DETERMINATION Camelia-Laura Sava</p>
<p>P-I.12 MOLECULAR DYNAMICS SIMULATIONS OF ELECTRONIC PROPERTIES OF a-SiC/c-Si HETERO-JUNCTIONS V.I. Ivashchenko, P.E.A. Turchi, L.A. Ivashchenko</p>
<p>P-I.13 ON THE SYNTHESIS AND CHARACTERIZATION OF POLYCRYSTALLINE GaSb SUITABLE FOR TPV APPLICATIONS A.Mitric, Th. Duffar, A. Amariei, X. Chatzistavrou, E. Pavlidou, K.M. Paraskevopoulos, E.K. Polychroniadis</p>
<p>P-I.14 THERMALLY STIMULATED LUMINESCENCE AND CURRENT IN NEW HETEROCYCLIC MATERIALS FOR ORGANIC FIELD EFFECT TRANSISTORS AND ORGANIC LIGHT EMITTING DIODES Marius Prelipceanu, Ovidiu-Gelu Tudose, Otilia Sanda Prelipceanu, Sigurd Schrader</p>
<p>P-I.15 NEW THERMALLY STABLE POLYMERS FOR OPTOELECTRONICS DEVICES - A LINEAR OPTICAL SPECTROSCOPY STUDY Otilia Sanda Prelipceanu, Marius Prelipceanu, Ovidiu-Gelu Tudose, Bernd Grimm, Sigurd Schrader</p>
<p>P-I.16 SCANNING PROBE INVESTIGATIONS OF MORPHOLOGY OF NEW n- AND p-CHANNEL MATERIALS FOR ORGANIC FIELD-EFFECT TRANSISTORS O.G. Tudose, M. Prelipceanu, O. S. Prelipceanu, S. Schrader</p>
<p>P-I.17 MESOPOROUS VANADIUM SILICATES SYNTHESIS AT THE ROOM TEMPERATURE Eveline Popovici, Alina-Mihaela Hanu, Rodica Pode, S. Farcas, D. Timpu, Gh. Singurel</p>
<p>P-I.18 SOME PHYSICO-CHEMICAL PROPERTIES OF VANADO-NANOPOROUS MATERIALS Eveline Popovici, Alina-Mihaela Hanu, D. Timpu and Cristina Maria Popescu</p>

P-I.19

CHARACTERIZATION OF THE ANALCITIC VOLCANIC TUFF FRACTIONS BY ELECTROCHEMICAL METHODS

Adriana Vuza, Lucia Odochian, Gh. Nemțoi, Florina Crivoi, M. Dumitras

P-I.20

NUMERICAL SIMULATIONS WITH THE MOLECULAR DYNAMICS METHOD OF THE BOMBARDMENT OF A RANDOM DISTRIBUTED ASSEMBLY

M.Ciobanu, V.Babin, N.D.Nicolae, C.Talianu, C.Radu, G.Mogaldea, M.Mogaldea

P-I.21

THERMAL PROFILE EVALUATION OF A SILICON WAFER IN A RAPID THERMAL CHEMICAL VAPOUR DEPOSITION APPARATUS

Mihaela Girtan, Pierre-Olivier Logerais, Ludovic Avril and Anne Bouteville

P-I.22

SOME CHARACTERISTICS OF RELAXOR PMNT CRYSTALS GROWN BY MEDIUM PRESSURE BRIDGMAN METHOD

Irina Nicoara, D. Nicoara, A. Ostrogorsky, C. Marin

POSTER SESSION

Section II - Electronic Transport Properties

Friday, June 11; 18:10 - 19:30

P-II.1

INVESTIGATIONS ON THE DYNAMICS OF A METAL-FERROELECTRIC-SEMICONDUCTOR HETEROSTRUCTURE

B. Mereu, M. Alexe, M. Diestelhorst, C. P. Cristescu, C. Stan

P-II.2

INFLUENCE OF V₂O₅ ADDITIONS ON THE RESISTIVITY AND DIELECTRIC PROPERTIES OF NICKEL-ZINC FERRITES

B. Parvatheeswara Rao, K.H. Rao, G.Sankaranarayana, A. Paduraru and O.F. Caltun

P-II.3

DC RESISTIVITY AND DIELECTRIC STUDIES ON Ti⁴⁺ SUBSTITUTED Ni-Zn FERRITES

B. Parvatheeswara Rao, K.H. Rao, T. Vasantha Rao, A. Paduraru and O.F. Caltun

P-II.4

ON THE ELECTRICAL CHARACTERISTICS OF VACUUM EVAPORATED INDIUM SELENIDE THIN FILMS

C.Viswanathan, G.G.Rusu, S.Gopal, D.Mangalaraj and Sa.K.Narayandass

P-II.5

CURRENT - VOLTAGE STUDIES ON VACUUM EVAPORATED In₇₀Se₃₀ THIN FILMS

C.Viswanathan, G.G.Rusu, D.Mangalaraj, Sa.K.Narayandass and J.Yi

P-II.6

ON THE SEEBECK COEFFICIENT OF TiO₂ THIN FILMS

Diana Mardare

P-II.7

STUDIES ON THE STRUCTURE AND ELECTRICAL CONDUCTIVITIES OF TITANIUM OXIDE SPUTTERED THIN FILMS

Nicoleta Cornei, Diana Mardare and G. I. Rusu

<p>P-II.8 DOPING EFFECT ON THE ELECTRICAL PROPERTIES OF TiO₂ THIN FILMS Diana Mardare</p>
<p>P-II.9 STRUCTURAL AND ELECTRICAL PROPERTIES OF ANTIMONY TRISULFIDE THIN FILMS N. Tigau, G. I. Rusu, V. Ciupina, G. Prodan, E. Vasile</p>
<p>P-II.10 THE EFFECT OF ISOTHERMAL ANNEALING IN TELLURIUM VAPOUR ON THE ELECTRICAL PROPERTIES OF Ga-DOPED PbTe CRYSTALS L. Lungu, N. Sulitanu</p>
<p>PII.11 THE GALVANOMAGNETIC EFFECTS IN THE PbTe:Ga CRYSTALS V. Nicorici, L. Lungu, A. Nicorici, N. Sulitanu</p>
<p>P-II.12 ELECTRICAL PROPERTIES OF ZnSe CRYSTALS DOPED WITH TRANSITION METALS A.N. Avdonin, G.V. Kolibaba, D.D. Nedeoglo, N.D. Nedeoglo, and V.P. Sirkeli</p>
<p>P-II.13 SIMILARITIES BETWEEN NONLINEAR PHENOMENA OBSERVED IN GASEOUS CONDUCTORS AND SEMICONDUCTORS E Lozneanu, S Popescu, M Ivan, and M Sanduloviciu</p>
<p>P-II.14 SELF-ORGANIZATION AS BASIC MECHANISM FOR CURRENT FILAMENTATION IN GASEOUS CONDUCTORS AND SEMICONDUCTORS S Popescu, E Lozneanu, M Aflori and M Sanduloviciu</p>
<p>P-II.15 ELECTRON TRANSPORT PROPERTIES IN LAYERED WIDE-GAP SEMICONDUCTORS A.V.Konstantinovich, P.I.Savitskii, and I.A. Konstantinovich</p>
<p>P-II.16 ON THE ELECTRICAL AND OPTICAL PROPERTIES OF SOME POLY(AZOMETHINE SULFONES) IN THIN FILMS Mihaela Rusu, A.Airinei, V.Cozan, Iulia Salaoru, I.Caplanus, G.I.Rusu</p>
<p>P-II.17 ON THE ELECTRONIC TRANSPORT PROPERTIES OF SOME DERIVATIVES OF THIOSEMICARBAZIDE COMPLEXED WITH COPPER CATIONS V. Sunel, Anca Ciobanu, Nicoleta Dulea, C. Baban, Petronela Prepelita, G. I. Rusu</p>
<p>P-II.18 ELECTRICAL AND THERMOELECTRICAL PROPERTIES OF SOME N-(P/M-NITROBENZOYL)-DL-ASPARAGIC ACID IN THIN FILMS Mihaela Rusu, I.Caplanus, V.Sunel, Raluca Craciun, Diana Mardare, G.I.Rusu</p>
<p>P-II.19 ON THE ELECTRONIC TRANSPORT AND OPTICAL PROPERTIES OF SOME NEW POLY(AZOMETHINE) URETHANES IN THIN FILMS Mihaela Rusu, A.Stanciu, Mihaela Vasiloschi, G.G.Rusu, Mihaela Girtan, G.I.Rusu</p>

POSTER SESSION

Section III - Magnetic Properties

Friday, June 11; 18:10 - 19:30

P-III.1 MAGNETIC ANISOTROPY AND MAGNETOTRANSPORT PROPERTIES OF NANOSTRUCTURED Fe-Pt THIN FILMS V. Georgescu, C. Iliaia, R. Musat
P-III.2 ANALOGY OF THE NON-STATIONARY JOSEFSON EFFECT IN A ROTATING SUPERCONDUCTING VORTEX LATTICE IN THE CASE OF FULL PINNING AND WITHOUT IT Cernobai Vasile
P-III.3 PERTURBATIONAL STATISTICAL THEORIES OF MAGNETIC FLUIDS B.L.Popescu, V.Socoliuc
P-III.4 THE APPLICATION OF PERTURBATIONAL STATISTICAL THEORIES TO THE INVESTIGATION OF THE STATIC MAGNETIZATION OF MAGNETIC FLUIDS B.L.Popescu, V.Socoliuc, D.Bica, L.Vekas
P-III.5 HALL EFFECT IN GRANULAR MAGNETIC METAL-INSULATOR THIN FILMS Marius Volmer, Jenica Neamtu
P-III.6 EMBEDDED FERROMAGNETIC CLUSTERS IN NANOPOROUS POLYMERIC MEMBRANS F. Brinza, N. Sulitanu, Antonela Marele, G. M. Rotaru
P-III.7 MICROSTRUCTURAL MAGNETIC STUDIES IN HARD MAGNETIC NANOCOMPOSITES M. Marinescu, H. Chiriac, L. Stoleriu and Al. Stancu
P-III.8 INFLUENCE OF Ca ON PROPERTIES OF Sr AND Ba FERRITES FOR MAGNETIC MEDIA PREPARED BY COMBUSTION P.D.Popa, E.Rezlescu and N.Rezlescu
P-III.9 MAGNETIC RELAXATION IN Co FERRITE NANOPARTICLES COVERED WITH AMORPHOUS SILICA AND DISPERSED IN WATER C. Caizer, V. Tura
P-III.10 STRUCTURAL INVESTIGATION OF B ₂ O ₃ -Ag ₂ O-CuO GLASSES R. Ciceo Lucacel, I. Ardelean
P-III.11 NANOFIBROUS STRUCTURE INDUCED BY SULPHUR INCLUSION IN ELECTRODEPOSITED MAGNETIC Fe-S COMPOSITE THIN FILMS N. Sulitanu, F. Brinza
P-III.12 MAGNETIC EXCHANGE INTERACTION IN AMORPHOUS Fe-R-B ALLOYS (WITH R = Sm AND Gd)

N. Sulitanu, F. Brinza, S. Diaz
P-III.13 MAGNETIC AND ELECTRICAL PROPERTIES OF $[\text{NiFe})/\text{SiO}_2]_x$ N MULTILAYER THIN FILMS M.Urse, A- E. Moga, M. Grigoras, H. Chiriac
P-III.14 ON THE EFFECT OF ULTRASOUND ON NI THIN FILM ELECTRODEPOSITION AND ITS MAGNETIC PROPERTIES C. Pirghie, N. Sulitanu, M. Scheffel
P-III.15 STUDIES ON MAGNETIC PROPERTIES OF AN ADSORBENT CONTAINING MAGNETITE ONTO ZEOLITIC SUPPORT Rodica Pode, Eveline Popovici, V. Pode, Violeta Georgescu

POSTER SESSION

Section IV - Optical and Photoelectric Properties

Thursday, June 10; 18:00 - 19:30

P-IV.1 THE COMBINED ZnSe(Te)/pZnTe-nCdSe SCINTILLATING DETECTORS OF THE IONIZING RADIATION. P. Gasin, C. Rotaru
P-IV.2 ELECTRICAL AND PHOTOELECTRICAL PROPERTIES OF HETEROJUNCTIONS BASED ON $\text{Cu}(\text{InGa})\text{Se}_2$ P. Ketrush, P. Gashin, V. Nicorici, V. Suman
P-IV.3 SOLAR CELLS BASED ON CdS/CdTe THIN FILM HETEROJUNCTIONS P. Gasin, V. Fedorov, S. Vatavu
P-IV.4 EXCITONIC EFFECTS IN CdS THIN FILMS AND CdS FILMS ANNEALED IN THE PRESENCE OF CdCl_2 P. Gasin, M. Caraman, S. Vatavu, I. Caraman
P-IV.5 THE OPTICAL AND PHOTOELECTRIC PROPERTIES OF $\text{Cd}_{1-x}\text{Mn}_x\text{Te}$ THIN FILMS I. Caraman, L. Gagara, S. Metelitsa, A. Nicorici, V. Nicorici, G.I. Rusu
P-IV.6 PHOTOCAPACITANCE MEASUREMENTS IN AMORPHOUS FILMS As_2Se_3 AND $\text{As}_2\text{Se}_3: \text{Sn}$ D. V. Harea, M. S. Iovu, E. P. Colomeiko, I. A. Vasiliev
P-IV.7 PHOTOCONDUCTIVITY CHARACTERISTICS OF BISMUTH OXIDE IN THIN FILMS L. Leontie
P-IV.8 OPTICAL PROPERTIES OF BISMUTH OXIDE THIN FILMS PREPARED BY REACTIVE MAGNETRON SPUTTERING L. Leontie

<p>P-IV.9 OPTICAL AND PHOTOELECTRIC PROPERTIES OF PROPOLIS-LAYERED SEMICONDUCTOR (p-InSe) HETEROJUNCTION Drapak S.I., Bakhtinov A.P., Drapak I.T., Kovalyuk Z.D., Tovarnitskii M.V.</p>
<p>P-IV.10 BISTABLE OPTIC MODULATORS MADE FROM MONOCRYSTALLINE LAYERS GaSe (Cu) Mihail Caraman, Elmira Cuculescu, Igor Evtodiev</p>
<p>P-IV.11 ON THE PHOTOMAGNETIC EFFECT IN CdTe THIN FILMS EVAPORATED ONTO UNHEATED SUBSTRATES G.G. Rusu, M. Rusu, and M. Caraman</p>
<p>P-IV.12 ON THE OPTICAL PROPERTIES OF POLYCRYSTALLINE CdSe THIN FILMS C.Baban, G. I. Rusu, Petronela Prepelita</p>
<p>P-IV.13 ELECTRICAL AND OPTICAL PROPERTIES OF POLYCRYSTALLINE CdO THIN FILMS R.S. Rusu, G.I.Rusu</p>
<p>P-IV.14 ON THE ELECTRONIC AND OPTICAL PROPERTIES OF ZnTe Thin Films G.I. Rusu, Petronela Prepelită, N.Apetroaei, G. Popa</p>
<p>P-IV.15 ON THE OPTICAL PROPERTIES OF ZINC OXIDE FILMS PREPARED BY D.C. MAGNETRON SPUTTERING I.I. Rusu, D.I.Rusu</p>
<p>P-IV.16 STRUCTURAL CHARACTERISTICS AND OPTICAL PROPERTIES OF ZnSe THIN FILMS V.Ciupină, G.I.Rusu, G.Prodan, M.E.Popa, G.G. Rusu, Iulia Salaoru</p>
<p>P-IV.17 ON THE STRUCTURAL AND OPTICAL PROPERTIES OF POLYCRYSTALLINE CdS FILMS G.I.Rusu, V.Ciupina, G.Prodan, Iulia Salaoru, G.G.Rusu</p>
<p>P-IV.18 SPECTROSCOPIC STUDIES OF ELECTROLYTICAL COLORED SHAPED CaF₂ AND BaF₂ CRYSTALS Liliana Lighezan, Irina Nicoara</p>
<p>P-IV.19 INFRARED LUMINESCENCE OF GOLD-DOPED ZnSe CRYSTALS A.N. Avdonin, G.N. Ivanova, D.D. Nedeoglo, N.D. Nedeoglo, G.V. Kolibaba, and V.P. Sirkeli</p>
<p>P-IV.20 GAP STATES IN BINARY CHALCOGENIDE SEMICONDUCTORS Nicolai Savchenko, T. Shchurova, I. Rubish, K. Popovych, G. Leising</p>
<p>P-IV.21 OPTICAL AND MECHANICAL PROPERTIES FOR Ge-As-S GLASSES Nicolai Savchenko, T. Shchurova, Alexander Kondrat, N. Popovich, V. Mitsa</p>
<p>P-IV.22 ON AZIMUTHAL DISTRIBUTION OF THE TRANSMITTED OPTICAL INTENSITY IN SOME MAGNETIC LIQUIDS Gabriela Fosa, V. Badescu Rodica Badescu and Gh. Calugaru</p>

<p>P-IV.23 POLYETHYLENETEREPHTHALATE (PET) FILMS INTERACTIONS WITH LOW ENERGY OXYGEN IONS Mariana Gheorghiu, Magda Aflori, Dana Dorohoi and G. Popa</p>
<p>P-IV.24 SELF-ORGANIZATION SCENARIO RELEVANT FOR NANOSCALE SCIENCE AND TECHNOLOGY M. Sanduloviciu, D. Dimitriu, M Aflori, C Furtuna, S Popescu and E. Lozneau</p>
<p>P-IV.25 THEORY OF RESONANT ELECTRON-PHONON INTERACTIONS FOR ENERGY POOLING IN RARE-EARTH DOPED MATERIALS C. Candu, V. Ciobu, V. Enaki</p>
<p>P-IV.26 RADIATION SPECTRA OF CHARGED PARTICLES MOVING IN A SPIRAL IN MAGNETIC FIELDS IN TRANSPARENT MEDIA A.V.Konstantinovich, S.V.Melnychuk, and I.A. Konstantinovich</p>
<p>P-IV.27 MAGNETOABSORPTION OF D- CENTERS IN QUANTUM WELLS AND ELECTRON-PLASMON RESONANCE. A.A.Klyukanov, V.Gurau</p>
<p>P-IV.28 NEW OPTO-ELECTRICAL PROPERTIES STUDY IN ORDER TO OBTAIN TRADUCERS WITH SUBMICRONIC AZO-CONJUGATED FILMS Daniel Timpu, Virgil Barboiu, Anton Airinei, Elena Rusu</p>

POSTER SESSION

Section V - Low-dimensional Structures

Thursday, June 10; 18:00 - 19:30

<p>P-V.1 THERMOELECTRIC PROPERTIES OF Te-DOPED Bi NANOWIRES A. Nicorici, E. Condrea, A. Grozav</p>
<p>P-V.2 SINGLE Ni NANOWIRES IN ION TRACK TEMPLATES M. Daub, I. Enculescu, R. Neumann, R. Spohr</p>
<p>P-V.3 SYNTHESIS AND MAGNETIC PROPERTIES OF CARBON-COATED Ni AND Co NANOPARTICLES H. Chiriac, A. E. Moga, M. Grigoras</p>
<p>P-V.4 SELF-ASSEMBLED NOBLE-METAL NANOPARTICLES AND APPLICATIONS F. Toderas, A. M. Mihut, T. Rosenzveig, C. A. Farcau, M. Baia, S. Astilean</p>
<p>P-V.5 SELF-ASSEMBLED POLYSTYRENE NANOPARTICLES AND APPLICATIONS Felicia Toderas, C.A. Farcau, Adriana Mihut, T. Rosenzveig, C. Craciun, L. Barbu Tudoran, S. Astilean</p>

<p>P-V.6 MULTIPLASMON LASER GAIN SPECTRA OF QUANTUM WELLS A.A. Klyukanov, V. Gurau</p>
<p>P-V.7 MANY-CHANNEL CONDUCTANCE FORMULA M. Latu</p>
<p>P-V.8 ON THE ELECTRONIC TRANSPORT PROPERTIES AND OPTICAL CHARACTERISTICS OF POLYCRYSTALLINE CdS THIN FILMS Mihaela Rusu, Iulia Salaoru, Mihaela Diciu, C.Gheorghies, G.I.Rusu</p>
<p>P-V.9 PREPARATION OF GaAs THIN FILMS FROM ALKALINE AQUEOUS SOLUTION C. Gheorghies and L. Gheorghies</p>
<p>P-V.10 NONLINEAR VIBRATIONS OF A NANO SIZED SENSOR WITH FRACTIONAL DAMPING Gh. E. Drăgănescu, D. L. Rujan, N. Cofan</p>
<p>P-V.11 OPTICAL BEHAVIOR OF MULTILAYERED CdTe/Cu THIN FILMS DEPOSITED BY STACKED LAYER METHOD G.G. Rusu, M. Rusu</p>
<p>P-V.12 TAYLOR–ULITOVSKY METHOD OF FABRICATION AND SOME PHYSICAL PROPERTIES OF THERMOELECTRIC GLASS-COATED Bi₂Te₃ MICROWIRES D.F.Meglei , V.G.Kantser and M.Dantu</p>

POSTER SESSION

Section VI - Functional Materials. Applications

Friday, June 11; 18:10 - 19:30

<p>P-VI.1 SPRAY-DEPOSITED ITO-nSi SOLAR CELLS A. Simashevici, D. Serban, E. Bobeico, L. Bruc, A. Coval, V. Fedorov, Iu. Usatai.</p>
<p>P-VI.2 PHOTOELECTRICAL PROPERTIES OF HETEROJUNCTIONS CONNECTED WITH VAN-DER-WAALS FORCES Kovalyuk Z.D., Katerynychuk V.M and Sydor O.M.</p>
<p>P-VI.3 PERSPECTIVE CONCERNING APPLICATION OF FERROMAGNETIC AMORPHOUS WIRES FOR ELECTROMAGNETIC PROTECTIVE CLOTHES Octavian Baltag, Doina Costandache</p>
<p>P-VI.4 MAGNETIC SENSOR WITH FERROFLUID Octavian Baltag</p>

<p>P-VI.5 A MODEL OF HUMIDITY SENSOR WITH A Mg-BASED FERRITE N.Rezlescu, E.Rezlescu, P.D.Popa and F.Tudorache</p>
<p>P-VI.6 HUMIDITY SENSITIVE MgZn FERRITES DOPED WITH SALTS FOR HUMIDITY SENSORS E. Rezlescu, P. D. Popa, F. Tudorache and N. Rezlescu</p>
<p>P-VI.7 ON THE POSSIBILITY OF THE USE OF A NICKEL FERRITE AS SEMICONDUCTING GAS SENSOR N.Iftimie, E.Rezlescu, P.D.Popa and N.Rezlescu</p>
<p>P-VI.8 SOME MAGNESIUM FERRITES USED AS SEMICONDUCTOR HUMIDITY SENSOR F.Tudorache, E.Rezlescu, P. D.Popa and N.Rezlescu</p>
<p>P-VI.9 PHOTOINDUCED BACTERICIDAL ACTIVITY OF TiO₂ THIN FILMS OBTAINED BY RADIOFREQUENCY MAGNETRON SPUTTERING DEPOSITION Camelia Miron, Antoaneta Roca, Silvia Hoisie, Paulina Cozorici, Lucel Sirghi</p>
<p>P-VI.10 SYNTHESIS AND CHARACTERISATION OF BIOCOMPATIBLE TiN AND TiAlN LAYERS OBTAINED BY MAGNETRON SPUTTERING M. Braic, A. Vladescu, C. Cotrut, V. Braic, M. Balaceanu</p>
<p>P-VI.11 PHYSICAL CHARACTERIZATION OF A FERROFLUID BASED ON HYDROCARBONS M. Pintilie, D.E.Creanga, Gh. Calugaru</p>
<p>P-VI.12 SOME NON-LINEAR FEATURES OF DENDRIMER MATERIALS D.E.Creanga, C. Stan</p>
<p>P-VI.13 POLYURETHANE FOR ACTUATION Ilie Diaconu, Dana Dorohoi</p>
<p>P-VI.14 SOME PHYSICAL PROPERTIES OF A MAGNETIC STABILIZED FLUIDIZED BED FOR BIOLOGICAL SPECIES RECOVERY Laura Elena Udrea, V. Badescu and Rodica Badescu</p>
<p>P-VI.15 FLUORESCENCE QUINCHING STUDIES OF THE INTERACTION OF SOME PYRENE-POLYURETHANES WITH QUINCHER AS NITROBENZENE TYPE M.Strat, V. Pohoata, T. Buruiana, E. Buruiana, G.Strat, G.Singurel</p>
<p>P-VI.16 THE STUDY OF PHOTOCHROMIC PROPERTIES OF SOME NEW DIAZOBENZENE POLYMERS WITH STRUCTURE PHOTOCONTROLLED Irinel Grecu, Georgeta Strat, and M.Strat</p>
<p>P-VI.17 SPECTRAL AND THERMOGRAVIMETRIC ANALYSES OF DEGRADATION AND STABILITY OF SOME POLY (N-VINYL INIDAZOLE) POLYMERS. M.Strat, Irinel Grecu and S.Gurlui</p>
<p>P-VI.18 POLYMER MATERIALS WITH OPTOELECTRONIC APPLICATIONS Virgil Barboiu, Elena Rusu, Anton Airinei, Daniel Timpu</p>

P-VI.19

MESOPOROUS MATERIALS AS MATRIX FOR DRUG DELIVERY SYSTEMS OF SOME BIOACTIVE AGENTS

L.G. Hanu, Eveline Popovici, Alina Mihaela Hanu, Georgeta Burtica, D. Timpu, Gh. Singurel

P-VI.20

STUDIES ON THE ELECTRONIC TRANSPORT PROPERTIES OF SOME NEW CHELATE COMPOUNDS CONTAINING SILOXANE

M.Marcu, G.G.Rusu, M.Cazacu, Mihaela Vasiloschi, G.I.Rusu,