


## PERSONAL INFORMATION

## Iacomi Felicia Dacia



 Alexandru Ioan Cuza University of Iasi, Romania

 +40 232 201102/2332  +40745078961

 [iacomi@uaic.ro](mailto:iacomi@uaic.ro)

 [www.tera2cmp.org](http://www.tera2cmp.org) [www.phys.uaic.ro](http://www.phys.uaic.ro)

Date of birth 16/12/1951 | Nationality Romanian

## WORK EXPERIENCE

01/10/1975–01/03/1980

**Physicist**

Metalurgical Enterprise, 132 Tutora, Iasi (Romania)

▪ As a physicist I performed metallographic analyzes for all types of raw metal materials (carbon steel and high alloyed steels for tubes and tools, bronze, brass, zinc, etc. materials) and metal produces (tubes, high speed tools, etc) in order to certify their quality. As a consequence of fact that I obtained expertise in Technical Control Quality and Alloys Thermal Treatments, I was selected in 1977 to be the leader of Technical Quality Control Lab. I was responsible of metallographic, spectral and chemical analysis and mechanical testing of tubes and also of thermal treatments of metallurgical tools. Some of my investigation results on the welded tubes were published in the journal "Matalurgia" in 1980. Due to my expertise I was invited to have classes of Structural Theory of Metal Properties at the sections of Metallurgy and Foundry from the Mechanics Faculty of Gheorghe Asachi Technical University of Iasi.

01/03/1980–01/10/1990

**Scientific Researcher**

Faculty of Physics, Alexandru Ioan Cuza University of Iasi, 11 Carol I Blvd., 700506 Iasi, Romania

As a scientific researchers in the period 1980-1990 I was responsible or a member in 14 scientific projects with different enterprises and institutions. I was responsible with the design and elaboration of an equipment for the nondestructive control with eddy currents of welded pipes for refrigerators and their quality improvement by annealing (for the Research Center of Metalurgical Enterprise) with the improvement of an equipment for the centrifugal foundry of bronze (for the Metalurgical Enterprise), an equipment for the nondestructive control with ultrasounds of polymer products (Plastic Mass Enterprise Iasi), of the quality of synthetic fibers by inserting natural and synthetic zeolites in their composition (a collaboration with the Chemical Faculty of Alexandru Ioan Cuza of Iasi for Synthetic Fibers Iasi), of the quality of detergents by introduction of zeolite materials in their composition and of the quality of liquid dielectrics by introducing their purification in magnetic fields and controlling their composition (Chemical Research Center Ramnicu Valcea). I was a member of a team in realization of five research projects focused on the study of zeolite materials structure, magnetic thin films, analysis of electronic circuits functioning, etc. Some of my scientific results were presented in four papers published in scientific journals and were disseminated in national and international conferences. I had also some teaching activities at the laboratories of Electricity and Magnetism, Molecular Physics and Solid State Physics..

01/10/1990–01/10/2003

01/10/2003–01/10/2007

### Lecturer

Faculty of Physics, Aleadru Ioan Cuza University of Iasi, 11 Carol I Blvd., 700506 Iasi, Romania

Courses, laboratories and seminars of General Physics, Solid State Theory, Atmosphere Physics, Solid State Physics. I introduced new laboratories and seminars for these disciplines: 5 labs for Atmosphere Physics (license 4th year, Faculty of Physics), 11 for General Physics (1st year Faculty of Geology and Faculty of Geochemistry), 4 seminars (license 4th year, Faculty of Physics), 4 labs for Solid State Physics (license 3rd year Faculty of Physical Chemistry). Some of these laboratories works were included in the book entitled "Fizică generală. Lucrări de aborator. Întrebări. Probleme", Editura Gama, Iași, 1997, 150 p, ISBN 973-979-37-9-7, Felicia Iacomi, Diana Mardare, Mihaela Bucescu. The scientific activity was developed in the frame of 13 scientific projects. I was responsible for the study of the electrical, magnetic and optical properties of natural and synthetic zeolites modified by different chemical treatments. I published on this subject 14 papers and I participated to important national and international conferences. I finished my PhD thesis and got PhD in 1999 and in 2001 I published the my original results in "Zeoli ii Naturali. Structură. Proprietă i. Utilizări" Ed. Univ. Aurel Vlaicu Arad, 2001, author Felicia Iacomi. In 2003 I was invited to give a lecture entitled "The Science of the Advanced Zeolite Materials" at Summer School "Physics of Advanced Materials" organized at Univ."Aristotle" Thessaloniki, Greece. As a member of the semiconductor research team, I was involved in the experimental work on semiconductor thin films and heterojunctions.

01/10/2007–Present

### Associated Professor

Faculty of Physics, Aleadru Ioan Cuza University of Iasi, 11 Carol I Blvd., 700506 Iasi, Romania

Classes, laboratories and seminars of Materials Technology (license 4th year Technological Physics), Magnetic Nuclear Resonance in medicine and biology (Master II, section Medical Physics and Biophysics), Actual Problems of Metals and Alloys Physics (Master II, section Advanced Materials and Nanotechnologies), Advanced Materials (Master II, section Advanced Materials and Nanotechnologies), Physical Processes in Nanostructured Materials, Nanotechnologies (Master II, section Advanced Materials and Nanotechnologies), Methods for the Study of Crystalline Structure of Solid State (Master I, section Advanced Materials and Nanotechnologies) and Solid State Physics (license 3rd year Faculty of Physical Chemistry). I introduced new labs and seminars for these new courses: 10 labs for Materials Technology, 7 labs for Methods for the Study of Crystalline Structure of Solid State, 6 labs for Solid State Physics. In this period I was involved in 13 research projects. For five of them I was responsible as a Manager .The research activity was focused on functional materials for advanced applications in optoelectronics, smart textiles, catalysis (methanation reaction), organic electronics. As a member of a research team I was involved in research studies on magnetism of clusters in interaction, on functional properties of titanium dioxide and on transport phenomena in semiconductor thin films.

Invited talks and lectures:

- Structural properties of advanced zeolite materials, F. Iacomi, Summer School "Physics of Advanced Materials", 2004, "Aristotle" University, Thessaloniki, Greece;
- Zeolite materials as host matrices for semiconductor clusters, Summer School "Physics of Advanced Materials", 2004, "Aristotle" University, Thessaloniki, Greece;
- The effect of Cr and Fe doping on the magnetic and hydrophilic properties of titania, 2005, Technishe Universitat from Braunschweig, Germany;
- Studies on Some Oxide Diluted Magnetic Semiconductors, 2007, 8th IBWAP Constanta.

The research results are the subject of 13 scientific papers published in important journals: Surface Science, Thin Solid Films, Applied Surface Science, Physica Status Solidi, Materials Science and Engineering, etc. and were disseminated in national and international conferences (CAS, ICPAM, EMRS, ECOSS, BPU etc.). I received Best Paper Award at CAS Sinaia, Romania in 2005. In 2007 I published the book Spectroscopia vibratională a materialelor zeolitice, Ed. Stef, Iasi.

## Professor

Faculty of Physics, Aleadru Ioan Cuza University of Iasi, 11 Carol I Blvd., 700506 Iasi, Romania

Courses and laboratories in Solid State Physics, Intelligent Multifunctional Materials, Low Dimensional Systems, Modern Methods in the Study of Solid State Structures, Spintronics, Transparent and Conductive Oxide Semiconductor Thin Films. I supervised 16 PhD Theses work since 2008 (8 of them got PhD). My present research field includes thin films for transparent electronics, spintronics and gas sensing, studies on nanostructured inorganic and organic semiconductors, hybrid nanocomposites for advanced applications. I was responsible for thin films and nanostructures for advanced applications in optoelectronics, spintronics and sensors (PN-II-CT-RO-FR-2012-1-0065); Processes and devices based on oxide thin films and polymers for transparent electronics and optoelectronics (PNII 12-128/2008 ELOTRANSP); Processing and characterization of some oxide functional thin films and nanostructures for advanced applications (Theme no. 54, 04-4-1069-2009/2014 IUCN Dubna); Thin films and nanostructures for medical and spintronic applications (no. 68, Theme 04-4-1121-2015 IUCN Dubna); Synthesis and characterization of some nanoparticles, nanocomposites and thin films for medical applications (nr.70, theme 04-4-1121-2015/2017).

Invited talks:

- Some Hybrid Composites for Smart Systems, ICPAM 2008 Iasi, Romania;
- Some recent developments in oxide thin films doped with 3d ions, ROCAM 2009, Brasov, Romania;
- Smart nanocomposites for functional applications, F. Iacomi, NMM 2010 Iasi, Romania;
- Introduction in ultrasound physics, Exploratory Workshop "Sonographic Investigation of joints" 2011, Apollonia University from Iasi, Romania;
- Effect of doping on the structural and functional properties of ZnO thin films, F. Iacomi, TCM-2012, Heraklion, Greece;
- Studies on the effect of Co content and UV irradiation on the structure and gas sensing properties of ZnO thin films, TIM-12 Physics Conference 2012, Timisoara, Romania;
- Functional properties of Mn doped nanostructured titanium oxide powders and thin films, TIM-13 Physics Conference 2013, Timisoara, Romania;
- Advanced nanostructures for medical applications, Congres International "Pregatim viitorul promovand excelenta", 2014, Iasi, Romania;
- Studies on some oxide nanocomposites and thin films, IBWAP 2014, Constanta, Romania;
- ESR studies on inter-particle interactions in some iron oxide nanocomposites, EMRS fall meeting 2014, Warsaw, Poland;
- Oxide thin films for transparent electronic, spintronic and sensor devices TIM14 Physics Conference Physics without frontiers 2014, Timisoara, Romania;
- Oxide Thin Films for Optoelectronic and Spintronic Devices, EMN Meeting on Optoelectronics, 2015, Beijing, China;
- Oxide Thin Films and Nanostructures for transparent electronics, spintronics and sensors, ROCAM 2015, Buchares, Romania;
- Materials structure and their investigation, De Montford University, 2015, Leicester, UK.
- Studies on some iron oxide nanoparticles, nanocomposites and thin films for advanced applications, invited presentation to SANS YUMO, 2016, Dubna, Russia.
- Functional thin films and nanostructures for advanced applications, Shizuoka University, Hamamatsu, Japonia, Erasmus+;
- Hybrid nanocomposites for advanced applications, CMSMS'17, Dubna, Russia;
- Structural and EPR studies of some perovskite and double perovskite-type oxide nanopowders and thin films, CMRNS-Dubna, Constanta, 2017, Romania;
- EPR investigation of some ferrite nanoparticles and thin films, IBWAP 2017, Constanta, Romania;
- Studies on some emerging layered hybrid nanocomposites, ROCAM 2017, Bucharest, Romania;
- Tuning the photocatalytic properties of gold nanoparticles by exposure to green light; AdvPhotoCat-E 2017, Heraklion, Greece.

## EDUCATION AND TRAINING

01/10/1970–20/07/1975

Graduated

Replace with EQF  
(or other) level if  
relevant

Faculty of Physics, Babes-Bolyai University, Cluj-Napoca (Romania)

- I was selected for the specialization Solid State Physics and I was involved in research activities on electron paramagnetic resonance and nuclear magnetic resonance investigations of single crystals doped with transitional elements, under the supervision of prof. dr. Alexandru Nicula. The title of my degree thesis: EPR and NMR studies on zeolite single crystals.

05/06/1999

**Ph.D. in Physics**

Alexandru Ioan Cuza University, Iasi (Romania)

The PhD thesis entitled " Study of natural zeolite structure as a function of state parameters" under the supervision of prof.dr. Alexandru Nicula and prof.dr. Ilie D. Bursuc was focused (for the first time in Romania) on the investigation of structure, electrical, optical and magnetic properties of romanian zeolite deposits from Transilvania area, chemically modified, in order to find potential applications

**PERSONAL SKILLS**

Mother tongue(s) Romanian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
French	B1	B1	B1	B1	B1
Russian	B1	B1	B1	B1	B1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user  
[Common European Framework of Reference for Languages](#)

Communication skills

My communication skills with my colleagues, collaborators, PhD students and students were gained through my experience as a researcher, professor, conference speaker and project manager. I established collaborations with researchers, PhD students and postdoc students from Universita della Calabria, Cosenza Italy; Technological Educational Institute of Crete, Heraklion, Greece; De Montford University, Leicester, UK; Aix Marseille University, Marseille, France, in the frame of Erasmus program and of academic agreement with Insitute of Fundamental and Frontier Sciences, University of Electronic Science and Technology of China. I have good collaborations with researchers from Babes-Bolyai University Cluj-Napoca, Technical University Cluj-Napoca, INCDTIM Cluj-Napoca, Gheorghe Asachi Technical University Iasi, Petru Poni Institute of Macromolecular Chemistry Iasi, University of Bucharest, IMT Bucharest, METAV-CD Bucharest, West University Timisoara, Ovidius University Constanta/

Organisational / managerial skills

- Coordinator of Advanced Experimental and Theoretical Research Center on Condensed Matter Physics (TERA2CMP) and lider of the Condensed Matter Physics&Advanced Functional Applications Research Group.

Job-related skills

My expertise includes deposition (magnetron sputtering, thermal vacuum evaporation, pin coating) and structural, composition and functional characterization of thin films (XRD, XPS, EPR, effect Hall, UV-VIS, etc) for transparent electronics, spintronics and gas sensing, synthesis and characterization of nanoparticles, nanostructures and hybrid nanocomposites for advanced applications. As a tutor, I was responsible for the training of 6 postdoc students in the field of my expertise. I was responsible for the research programs of three PhD and postdoc students in the frame of Erasmus+ and Eugen Ionescu programs

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user  
[Digital competences - Self-assessment grid](#)

- I am familiar with ORIGIN, Christallographica, MindLab, XPSPEAK, Carine, etc. programs

#### ADDITIONAL INFORMATION

---

##### Books Published books and chapters:

1. Felicia Iacomi. Diana Mardare. Mihaela Bucescu, Fizica generala". Lucrari de laborator. Întrebari. Probleme, Editura Gama, Iasi, 1997, 150 p, ISBN 973-979-37-9-7;
2. F. Iacomi, Spectroscopia vibrationala a materialelor zeolitice, Editura Stef, Iasi, 2007, 274 p. SBN 978-973-8961-99-9;
3. F. Iacomi, Zeolitii naturali. Structura. Proprietati..Utilizari,. Ed. Univ. „A.Vlaicu", Arad, 2001, ISBN 973-8363-13-6, 272p;
4. Co-author to chapter 3, Imbracaminte functionala - Functii inteligente ale echipamentelor de protectie", C.Loghin (editor) - vol.I. Editura PIM, Iasi, 2008, ISBN 978-606-520-126;
5. Co-author to chapter 4, chapter 5 and chapter 10 Imbracaminte functionala - Modelarea si simularea functiilor de protectie", C.Loghin (editor) vol.II Editura PIM, Iasi, 2008, ISBN 978-606-520-127
6. Co-author to chapter 2, chapter 3 and chapter 5 Imbracaminte functionala - Proiectarea materialelor textile compozite",vol.III C.Loghin, L.Ciobanu (editori), Editura PIM, Iasi, 2008, ISBN 978-606-520-128.

- ISI papers
1. Vasile, B.S., Daly, A.B., Craciun, D., Alexandrou, I., Lazar, S., Lemaître, A., Maaref, M.A.b, Iacomi, F.f, Craciun, V., Structural and physical properties of InAlAs quantum dots grown on GaAs, *Physica B: Condensed Matter* (2017) , in press
  2. Cocean, A., Pelin, V., Cazacu, M.M., Cocean, I., Sandu, I., Gurlui, S, Iacomi, F., Thermal effects induced by laser ablation in non-homogeneous limestone covered by an impurity layer, *Applied Surface Science*, 424 ( 2017) 324-329.
  3. Ben Daly, A., Craciun, D., Laura Ursu, E., Lemaître, A., Maaref, M.A., Iacomi, F., Vasile, B.S., Craciun, V., Optical and structural properties in type-II InAlAs/AlGaAs quantum dots observed by photoluminescence, X-ray diffraction and transmission electron microscopy, *Superlattices and Microstructures*, 110 (2017) 1-9..
  4. Pascariu-Dorneanu, P., Airinei, A., Olaru, N., Fifere, N., Doroftei, C., Iacomi, F., Preparation and characterization of some electrospun polysulfone nanocomposites reinforced with Ni doped SnO<sub>2</sub> nanoparticles, *European Polymer Journal*, 91 (2017) 326-336.
  5. Toloman, D., Popa, A, Stan, M., Socaci, C., Biris, A.R., Katona, G, Tudorache, F., Petrila, I. Iacomi, F., Reduced graphene oxide decorated with Fe doped SnO<sub>2</sub> nanoparticles for humidity sensor, *Applied Surface Science*, 402 ( 2017)) 410-417.
  6. R. Danac, L. Leontie, A. Carlescu, S. Shova, V. Tiron, G.G. Rusu, F. Iacomi, S. Gurlui, O. Susu, G.I. Rusu, Electric conduction mechanism of some heterocyclic compounds, 4,4'-bipyridine and indolizine derivatives in thin films, *Thin Solid Films*, 612 (2016)358-368
  7. M. Andries, D. Pricop, L. Oprica, D.-E. Creanga, F. Iacomi, The effect of visible light on gold nanoparticles and some bioeffects on environmental fungi, *International Journal of Pharmaceutics*, 505 (1-2) (2016) 255-261.
  8. P. Pascariu, A. Airinei, M. Grigoras, L. Vacareanu, F. Iacomi, Metal-polymer nanocomposites based on Ni nanoparticles and polythiophene obtained by electrochemical method, *Applied Surface Science*, 352, (2015) 95-102.
  9. G.G. Nedelcu, A. Nastro, L. Filippelli, M. Dobromir, F. Iacomi, Structural characterization of copolymer embedded magnetic nanoparticles, *Applied Surface Science*, 352 (2015) 109-116. Zone 1
  10. Suchea, M; Tudose, IV; Ionita, S ; Sandu; Iacomi, F; Koudoumas, E, ZnO Nanostructures for Potential Applications in Organic Solar Cells, *REVISTA DE CHIMIE*, 6 12 (2015) 2044-2046.
  11. Al Matameh, CM; Danac, R; Leontie, L; Tudorache, F; Petrila; Iacomi, F; Carlescu, A; Nedelcu, G; Mangalagiu, I, Synthesis And Electron Transport Properties Of Some New 4,7-Phenanthroline Derivatives In Thin Films, *Environmental Engineering And Management Journal*, 14 2 (2015) 421-431.
  12. C. Doroftei, P. D. Popa, F. Iacomi, L. Leontie, The influence of Zn<sup>2+</sup> ions on the microstructure, electrical and gas sensing properties of La<sub>0.8</sub>Pb<sub>0.2</sub>FeO<sub>3</sub> perovskite, *Sensors and Actuators B: Chemical*, 191 (2014) 239-245.
  13. F. Tudorache, P.D. Popa, M. Dobromir, F. Iacomi, Studies on the structure and gas sensing properties of nickel-cobalt ferrite thin films prepared by spin coating, *Materials Science and Engineering B*, 178 (19) (2013) 1334-1338.
  14. C. Doroftei, P.D. Popa, F. Iacomi, Selectivity between methanol and ethanol gas of La-Pb-Fe-O perovskite synthesized by novel method, *Sensors and Actuators, A: Physical*, 190 (2013) 176-180
  15. C. Doroftei, P.D. Popa, F. Iacomi, The influence of nickel ions substitutes in barium stannates used as humidity capacitive sensors, *Journal of Optoelectronics and Advanced Materials*, 15 (1-2) (2013) 50-53
  16. Rambu, A.P., Ursu, L., Iftimie, N., Nica, V., Dobromir, M., Iacomi, F. Study on Ni-doped ZnO films as gas sensors, *Applied Surface Science*, 280 (2013) 598-604
  17. Rambu, A.P., Doroftei, C., Ursu, L., Iacomi, F. Structure and gas sensing properties of nanocrystalline Fe-doped ZnO films prepared by spin coating method, *Journal of Materials Science*, 48 (12), (2013) 4305-4312

- ISI papers
18. Yildiz, A., Iacomi, F, On the mechanism of electrical conduction in cobalt-doped zinc oxide nanocrystalline thin films, *Journal of the Physical Society of Japan*, 81 (5) (2012) 054602
  19. A. Yildiz, B. Yurduguzel, B. Kayhan, G. Calin, M. Dobromir, F. Iacomi, Electrical conduction properties of Co-doped ZnO nanocrystalline thin films, *J Mater Sci: Mater Electron* 23 (2012) 425-430
  20. C. Doroftei, P.D. Popa, I. Fiacomi, Preparation and study of structural properties of zincdoped barium stannate, *Journal of Optoelectronics and Advanced Materials*, 14 (3-4) (2012) 413-417.
  21. C. Doroftei, P.D. .Popa, F. Iacomi, Study of the influence of nickel ions substitutes in barium stannates used as humidity resistive sensors *Sensors and Actuators A: Physical* 173 (2012) 24.
  22. C. Doroftei, P.D. Popa, F. Iacomi, Synthesis of nanocrystalline La-Pb-Fe-O perovskite and methanol-sensing characteristics, *Sensors and Actuators B: Chemical* 161 (2012) 977
  23. A. Yildiz, F. Iacomi, M. Cazacu, A. Amironesei, G.I. Rusu, S. Simon, The MeyerNeldel Rule in ayered Silicone-Silver Nanocomposites, *Polymer Composites*, 32 (11) (2011) 1751 - 1756
  24. F. Iacomi, G. Calin, C. Scarlat, M. Irimia, C. Doroftei, M. Dobromir, G.G. Rusu, N. Iftimie, A.V. Sandu, Functional properties of nickel cobalt oxide thin films, *Thin Solid Films* 520 (2011) 651-655
  25. P. Prepelita, R. Medianu, F. F. Iacomi, I. Sandu, Physico-chemical Properties of CuInGa-ZnS Heterostructure Deposited, *Revista de Chimie*, 62 ( 9) (2011) 905-907
  26. A. Yildiz, B. Kayhan, B. Yurduguzel, A. P. Rambu, F. Iacomi, S. Simon, Ni doping effect on electrical conductivity of ZnO nanocrystalline thin films, *Journal of Material Science: Materials in Electronics* 22 (9) (2011) 1473 - 1478
  27. A. Amironesei, A. Airinei, D. Timpu, V. Cozan, A.P. Rambu, M. Irimia, F.F. Iacomi, G.I. Rusu, Electrical and optical properties of some polyazomethine thin films prepared by a spin-coating method, *Journal of Optoelectronics and Advanced Materials*, 13(7-8) (2011) 802 - 806
  28. C. Dantus D. Timpu, D. Luca, F. Iacomi, UV irradiation influence on the structural and optical properties of CdO thin films, *European Physical Journal-Applied Physics*, 55(1) (2011) 10301
  29. C. Tabacaru, A. Carlescu, A.V. Sandu, M.I. Petcu, F. Iacomi, Effect of Annealing and Gamma Irradiation on Clay Mineral Properties, *Revista de Chimie* 62(4) (2011) 427-431
  30. A.I. Amironesei, C. Tabacaru, I. Sandu, M. Cazacu, G.I. Rusu, F. Iacomi, Layered Silicone - Silver Composites, *Revista de Chimie*, 62 (4) (2011) 455-458
  31. A. Yildiz, F. Iacomi, D. Mardare, Polaron transport in TiO(2) thin films, *Journal of Applied Physics*, 108(8) (2010) 083701
  32. D. Mardare, F. Iacomi, N. Cornei, M. Girtan, D. Luca, Dumitru Undoped and Cr-doped TiO(2) thin films obtained by spray pyrolysis, *Thin Solid Films*, 518 (16) (2010) 4586-4589
  33. P. Prepelita, R. Medianu, F. Garoi, N. Stefan, F. Iacomi, On the structural and electrical characteristics of zinc oxide thin films, *Thin Solid Films*, 518 (16) (2010) 4615-4618
  34. M. Cazacu, A. Vlad, F. Iacomi, P. Budrugaec, A. Ioanid, Condensation Products of the Bifunctionalized Titanocene and Siloxane Derivatives, *Materiale Plastice*, 47(2) (2010) 135-140
  35. .M. Cazacu, A. Vlad, M. Alexandru, P. Budrugaec, C. Racles, F. Iacomi, Polydimethyldiphenylsiloxanes/silica interconnected networks: preparation and properties evaluation, *Polymer Bulletin*, 64(5) (2010) 421 - 434
  36. M. Cazacu, C. Racles, A. Vlad, G. Calin, D. Timpu, F. Iacomi, New experimental insights into self-organization of poly(ferrocenyl-amide-siloxane), *Journal of Optoelectronics and Advanced Materials*, 12(2) (2010) 294-300
  37. M. Alexandru, M. Cazacu, S. Vlad, F. Iacomi, Polydimethylsiloxane-silica Composites. Influence of the Silica on the Morphology and the Surface, Thermal, Mechanical Properties, *High Performance Polymers*, 21(4) (2009) 379-392
  38. N. Iftimie, F. Iacomi, N. Rezlescu, High performance gas sensing materials based on nanostructured zinc oxide films, *Journal of Optoelectronics and Advanced Materials*, 10(7) (2008) 1810-1813
  39. E. Budianu, M. Purica, F. Iacomi, C. Baban, P. Prepelita, E. Manea, Silicon metal-semiconductor-metal photodetector with zinc oxide transparent conducting electrodes *Thin Solid Films*, 516( 7) (2008) 1629-1633 Zone 2
  40. M. Purica, F. Iacomi, C. Baban, P. Prepelita, N. Apetroaei, D. Mardare, D. Luca, Investigation of structural properties of ITO thin films deposited on different substrates *Thin Solid Films*, 515(24) (2007) 8674-8678.
  41. P. Prepelita, C. Baban, F. Iacomi, The study of the influence of Al and Sn doping on the optical and electrical properties of ZnO thin films, *Journal of Optoelectronics and Advanced Materials*, 9(7) (2007) 2166 - 2169

42. F. Iacomi, D. Mardare, M.N.Grecu, D. Macovei, I.Vida-Simiti, The influence of the substrate nature on the iron repartition in the titania matrix, *Surface Science*, 601(13) (2007) 2692-2695.
  43. F. Iacomi, N. Apetroaei, G. Calin, G. Zoderiu, M.M.Cazacu, C.Scarlat, V. Goian, D.Menzel, I.Jursic, J. Schoenes, Structure and surface morphology of Mnimplanted TiO<sub>2</sub>, *Thin Solid Films*, 515 (16) (2007) 6402-6406.
  44. D.Mardare, F.Iacomi, D.Luca, Substrate and Fe-doping effects on the hydrophilic properties of TiO<sub>2</sub> thin films, *Thin Solid Films*, 515(16) (2007) 6474-6478.
  45. F. Iacomi, M. Purica, E. Budianu, P. Prepelita, D. Macovei, Structural studies on some doped CdS thin films deposited by thermal evaporation, *Thin Solid Films*, 515 (15) (2007) 6080-6084.
  46. F. Iacomi, M.Vasilescu, S. Simon, Studies of MnS cluster formation in laumontite zeolite, *Surface Science*, 600(18) (2006) 4323-4327
  47. D.Luca, D.Mardare, F.Iacomi, C.M.Teodorescu, Increasing surface hydrophilicity of titania thin films by doping, *Applied Surface Science*, 252(18 ) (2006) 6122-6126.
  48. M.Chipara, F. Iacomi, J.M.Zaleski, J.B. Bai, Electron spin resonance spectroscopy investigations of carbon nanotubes - epoxy composites, *Journal of Optoelectronics and Advanced Materials*, 8(2) (2006) 820-824
  49. F.Iacomi, I.Salaoru, N.Apetroaei, A.Vasile, C.M.Teodorescu, CM); D.Macovei, Physical characterization of CdMnS nanocrystalline thin films grown by vacuum thermal evaporation, *Journal of Optoelectronics and Advanced Materials*, 8(1) (2006) 266-270
  50. D. Menzel, I. Jursic, J. Schoenes, F. Iacomi, D.Cacaina, Room-temperature ferromagnetism in Mn-implanted TiO<sub>2</sub>, *Physica Status Solidi C-Current Topics in Solid State Physics*, 3(12) (2006) 4119-4122
  51. D.Mardare, G.I.Rusu, F.Iacomi, M.Girtan, I.Vida-Simiti, Chromium-doped titanium oxide thin films, *Materials Science and Engineering B-Solid State Materials for Advanced Technology*, 118(1-3) (2005) 187-191.
  52. F. Iacomi, A. Vasile, E. Pavlidou, K.M. Paraskevopoulos, N.Varoutzis, C.Lioutas, E.K.Polychroniadis, Formation of MnS clusters into laumontite zeolite, *Journal of Optoelectronics and Advanced Materials*, 7(2) (2005) 859-863
  53. F.Iacomi, A.Vasile, E.K.Polychroniadis, MnS clusters in natural zeolites, *Materials Science and Engineering B-Solid State Materials for Advanced Technology*, 101(1-3) (2003) 275 - 278.
  54. F.F.Iacomi, Formation of semiconductor clusters in zeolites, *Surface Science*, 532 (2003) 816-821.
  55. F. Iacomi, MnS and CdS clusters encapsulated in natural zeolites, *Journal of Optoelectronics and Advanced Materials*, 3 (2001) 763-768
  56. F. Iacomi, A. Vasile, M. Bucescu, Electrical Conductivity of some silica-rich zeolites, *Rev. Roumaine de Chimie*, 43 (11) p.1021-1026, 1998.
  57. F.Iacomi, E.Popovici, G.I.Rusu, M.G?burici, Structure and Surface Properties of Natural Clinoptilolite, *Revue Roumaine de Chimie*, 41(9-10), p.749-754, 1996.
  58. F.Iacomi, M.Rusu, E.Popovici, A.Vasile, M.Alexandroaei, The electrical conductivity of some oxidic compounds in the system Na<sub>2</sub>O.K<sub>2</sub>O.SiO<sub>2</sub>.H<sub>2</sub>O, *Revue Roumaine de Chimie*, 41(11-12) p. 899-904, 1996.
  59. G.I.Rusu, F.Iacomi, E.Popovici, A.Vasile, M.Alexandroaei, M.Crueceanu, Influen?a fierului asupra propriet??ilor electrice ale zeoli?ilor de tip NaA *Revista de chimie*, 47 5, p. 446-449, 1996.
  60. F.Iacomi, E.Trif, E.Popovici, A.Vasile, M.Alexandroaei, M.Crueceanu, G.Singurel, Determination of the nature of iron (III) impurities in NaA zeolites, *Revue Roumaine de Chimie*, 33 2 (1988) 149-155,
  61. F.Iacomi, E.Trif, E.Popovici, A Study of cation-zeolitic surface interaction by ESR spectroscopy, *App.Surf.Sci.* 65/66 (1993) 298-301
  62. E. Popovici, F.Iacomi, G.Singurel, E.Trif, A.Nicula, N.Du?oiu, The study of natural clinoptilolite acid treatment using EPR, IR and X-Ray diffraction Methods, *Analtical Letters*, 21(10) (1988) 1901-1915,
  63. M.Crueceanu, A.Popa, E.Popovici, A.Vasile, M.Alexandroaei, F.Iacomi, Impurificarea cu fier a sitelor moleculare de tip NaA, , *Revista de Chimie*, 36 8 (1985) 727-733,
- Non ISI Web of Science:
- 64 Felicia Iacomi, Physical characterization of some semiconductor clusters encapsulated in zeolites, *Bulgarian Journal of Physics*, 27, Suppl. 1, p. 173-177, 2000.
  - 65 F. Iacomi, A. Vasile, A. Caraman, Semiconductor clusters encapsulated in zeolites, *Romanian Reports*, 53 (9-10) (2001) 595-600,
  63. F. Iacomi, M. Caraman, MnS clusters encapsulated in zeolites, *Moldavian Journal of Physical Sci.*, N.1, (2002) 111 -115,
  66. F. Iacomi, M. Purica, E. Budianu, D. Macovei, Transparent and conductive CdS thin films preparation and structural and optical investigation, , *ROMJIST*, 8 3, (2005) 257-268,



- CNCSIS B+ BD
67. A. Vasile, F. Iacomi, M. Caraman, Synthesis and characterization of CdS and ZnS clusters encapsulated in mordenite type zeolites, *Analele ?t.Univ."Al.I.Cuza" din Ia?i, Tom XLVII, s.Fizic?*, (2000) 157-162
68. F. Iacomi, Nanometer-Sized Cds And Zns Clusters In Zeolites, *Analele Stiintifice Ale Universitatii „Al.I.Cuza" Iasi, T. XLV - XLVI, s. Fizica Starii Condensate*, (1999 -2000) 287 - 291,
69. F. Iacomi, Localization, disordering and motion of water molecules in chabazite, *Analele Stiintifice Ale Universitatii „Al.I.Cuza" Iasi, T. XLV - XLVI, s. Fizica Starii Condensate* (1999 - 2000) 280 - 286,
70. F. Iacomi, A. Vasile, M. Caraman, Structural investigation of some semiconductor clustering in zeolites, , *Bul. Inst. Pol. Ia?i, Tom XLVIII, Fasc.1-2* (2002) 135-140
71. D. Guta, E. Pasculete, C. Teodorescu, F. Iacomi, L. Pasare, Valorificarea superioara a carbunilor prin co-gazeificare pentru obtinerea gazului de oras, *Energetica*, 57 (3) (2009)132-134
72. E.Popovici, F.Iacomi, I.I.Nicolaescu, I.Bedelean, Physicochemical characterization of some natural zeolites, ,, *Anal. St. Univ."Al.I.Cuza Iasi, Tom XXXI, s. I b*, (1985) 39-43
73. N. Bohosievici, V. Pânzaru, F.Iacomi, Aspecte ale calitatii cusaturii tevilor sudate, *Metalurgia*, 32 6 (1980) 296-301,
- Proceedings
74. F.Iacomi, Physycal Characterization of some Semiconductor Clusters Encapsulated in Zeolites, *EUROMAT99, vol.9, Interface Controlled Materials, Ed. M. Ruhle et all., Material Science, Willey, VCH, p. 169-174, ISBN: 9783527301911, 2000.*
75. F. Iacomi, ESR studies of Cu<sup>2+</sup> ions in chabazite single crystals, *Proc. 6th Int. Conf. On the Occ., Prop. and Util. of Natural Zeolites, Thessaloniki, 3-7 June, p.137-139, 2002*
76. F. Iacomi, M. Purica, E. Budianu, D. Macovei, Syntesis of the transparent and conductive CdS thin films for optoelectronic devices applications, , *Proc. International Semiconductor Conference CAS 2005, October 3-5, Sinaia, Romania, Vol. IEEE 05TH8818, 2005, vol.1, pp. 161.*
77. D. Luca, D. Mardare, F. Iacomi, Hydrophilic properties of doped TiO<sub>2</sub> thin films, *4th International Conference on Global Research and Educations, INTER-ACADEMIA, vol.2, 19-22 sept. 2005, Wuppertal, p. 367-375*
78. E.Budianu, M. Purica, F. Iacomi, C. Baban, Optically transparent electrodes for photoresponse enhancement of MSM photodetector, , *Proc. of International Semiconductor Conference - CAS, 1 (2007) 4063178 137-140,*
79. F. Iacomi, C. Baban, N. Iftimie, P. Prepelita, D. Luca, Influence of Substrate Nature and Annealing on Electro-Optical Properties of ZnO Thin Films, *AIP Conference Proceedings 899 (2007) 253-254*
80. F. Iacomi, C. Baban, R. Apetrei, D. Luca, Structural and electro-optical properties of ZnO thin films, *Proc. of International Semiconductor Conference - CAS 2007 Sept 27-29, Sinaia, Romania, vol.1, pp. 223, IEEE 05TH8867*
81. R. Bosinceanu, F. Iacomi, The magnetic properties optimization in diluted magnetic oxide semiconductor nanoparticles obtained by a modified co-precipitation approach in intrazeolite networks, *NSTI-Nanotech 2010, ISBN 978-1-4398-3401-5, p 838-841.*
82. Calin, G., Irimia, M., Scarlat, C., Comanescu, F., Iacomi, F., Synthesis and characterization of nickel cobalt oxide thin films, *Proceedings of the International Semiconductor Conference, CAS, 2 (2010) 5650627 387-390.*
83. Irimia, M., Rambu, A.P., Zodieru, G., Purica, M., Iacomi, F., Ga doped ZnO thin films deposited by RF magnetron sputtering Preparation and properties, *Proceedings of the International Semiconductor Conference, CAS, 2 6095794 (2011) 287-290*
84. Iacomi, F; Lazar, A; Frunza, R; Rotaru; Carlescu; Sandu, I; Purica, M; Gavrilă, R, Electrical and optical properties of In<sub>2-x-y</sub>Sn<sub>x</sub>Zn<sub>y</sub>O<sub>3-δ</sub> thin films, *International Semiconductor Conference (CAS 2011), Vols 1, 2 Book series:International Semiconductor Conference 283-286.*
85. Florin, C.C., Purica, M., Iacomi, F., Budianu, E., Schiopu, P., Heterojunctions based on transparent oxidic layer and silicon for electronic and optoelectronic device applications, *Proceedings of SPIE - The International Society for Optical Engineering, 8411 (2012) 84112C*
86. Comanescu, F.C.,Purica, M., Budianu, E., Iacomi, F., Mitu, B., Parvulcsu, C., N-ZnO channel based transparent thin film transistor: Fabrication and characterization, *Proceedings of the International Semiconductor Conference, CAS, 2 (2013) 6688676 273-276*

87. N. Iftimie, S. Tascu, I. Salaoru, M. Irimia, F. Iacomi, The Evanescent Waves in Metallic Strip Gratings and Complex Structures in Subwavelength Regime, *Materials Today: Proceedings* 2 (6) (2015) 3846-3852
88. Andries, M; Pricop, D; Grigoras, M; Lupu, N; Sacarescu, L; Creanga, D; Iacomi, F, Comparative Study on the Uptake and Bioimpact of Metal Nanoparticles Released into Environment, *AIP Conference Proceedings*, 1700 (2015) 060012
89. Puscasu, E; Domocos, A; Leostean, C; Turcu, R; Brinza, F; Nadejde, C; Iacomi, F; Creanga, D.E., Electrostatic vs Steric Stabilization of Fe<sub>3</sub>O<sub>4</sub> and Co<sub>0.5</sub>Fe<sub>2.5</sub>O<sub>4</sub> Nanoparticles, *AIP Conference Proceedings*, 1700 (2015) 060013.
90. Cocean, A., Cocean, I., Gurlui, S., Iacomi, F., Study of the pulsed laser deposition phenomena by means of comsol multiphysics, *UPB Scientific Bulletin, Series A: Applied Mathematics and Physics*, 79 (2) (2017) 263-274.

**Prefaces** Prefaces:

- Craciun, V., Iacomi, F., Tetean, R., Preface, *Applied Surface Science* 424 (2017) 257.
- Iacomi, F., Craciun, V., Popescu, S., Mueller, K., Lattuada, M., Preface, *Materials Today: Proceedings* 2 (6) (2015) 3789
- Craciun, V., Iacomi, F., Dubourdieu, C., Sánchez Barrera, F., Kompitsas, M, Preface, *Applied Surface Science* 352 (2015) 1
- Iacomi, F., Rusu, G., Berbezier, I., Harabagiu, V., Lupu, N., Preface, *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, 178 (19) (2013) 1257-1258.

**Editor** :Editor

- *Materials Science and Engineering: B*, 178 (19) (2013);
- *Materials Today: Proceedings*, 2 (6) 2015;
- *Applied Surface Science*, 352, 2015;
- *Applied Surface Science*, 424, 2016

**Patents** Patent

Resistive acetone vapour sensor, to detect and measure concentration of acetone vapour in air  
Patent Number: RO129798-A2  
Patent Assignee: UNIV IASI CUZA ALEXANDRU IOAN  
Inventor(s): DOROFTEI C; IACOMI F D.

**Projects** As Manager and Partner Manager

- Theme 04-4-1121-2015/2017, IUCN Dubna, Oxide thin films and nanocomposite structures with tunable properties for advanced applications, nr. 58.
- Theme 04-4-1121-2015/2017, IUCN Dubna, The study of some nanocomposites based on graphene for applications in modern electronics and energy conversion and storage, nr. 59.
- Theme 04-4-1121-2015/2017, IUCN Dubna, "Synthesis and characterization of some nanoparticles, nanocomposites and thin films for medical applications", nr. 96/15.02.2016.
- Theme 04-4-1121-2015/2017, IUCN Dubna, "Thin films and nanostructures for medical and spinotronic applications. Obtaining and characterization".
- Theme 04-4-1069-2009/2014 IUCN Dubna "Processing and characterization of some oxide functional thin films and nanostructures for advanced applications.
- PN-II-CT-RO-FR-2012-1-0065, "Thin films and nanostructures for advanced applications in optoelectronics, spintronics and sensors".
- PNII 12-128/2008, ELOTRANSP "Processes and devices based on oxide thin films and polymers for transparent electronics and optoelectronics"
- CEEEX -no. 270/2006-2008, GAZCOMET, Researches regarding the chemicalization of gaseous product obtained through co-gasification for obtaining gas with a high content of methane used as city gas
- CEEEX type PC-D, NANOSIMAT no.16/2006-2008, Nanostructures multifunctional silicone materials
- CEEEX, type PC-D M1-C2-6060, Epintel 2006-2008. Fundamentation of synergy routed of nano/microcomponents integrated in composite textile materials in order to assure intelligent functions to protection equipments in aggressive
- 16 CEEEX - I 03/2005-2008-FOTONTECH, Development of mixed technologies for micro/nano structures and integrated photonic systems with applications in communications

## Projects for enterprises as manager

- Project No. 1012\_12.04.1990. Establishment of thermal treatment parameters for welded tubes from special steels
- Project No. 4/27.01.1989. Possibilities of sulphate anion conductometric determination from sodium chloride electrolyze solutions
- Project No.13644/12.12.1986 Research regarding the obtaining of halogenated organic products and esters of electrotechnic use.
- Project No.11859/18.12.1985. Liquids with dielectric
- Project No.9093/4.09.1984. Acrylic fibers modified by
- Project No. 1502/4.02.1983. Establishment of technological parameters involved in spin casting to manufacture aluminum bronze bushings.
- Project No. 99/6.01.1982. Eddy current equipment for the undestructive control of refrigerator tubes. ACT202.
- Project No. 4949.15.04.1981. Undestructiv control equipment with eddy currents for the refrigerator tubes..

Prof.dr. Felicia Dacia Iacomi

