

PERSONAL INFORMATION

Diana Mihaela Mardare



 "Alexandru Ioan Cuza" University of Iasi, Faculty of Physics

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Sex F | Date of birth 25/07/1962 | Nationality Romanian

WORK EXPERIENCE

10.2008 – at the moment

Professor

Alexandru Ioan Cuza University of Iasi, Faculty of Physics
Research and teaching activities

02.2004-09.2008

Assoc. professor

Alexandru Ioan Cuza University of Iasi, Faculty of Physics
Research and teaching activities

10.1998-01.2004

Lecturer

Alexandru Ioan Cuza University of Iasi, Faculty of Physics
Research and teaching activities

02.1991-09.1998

Assistant professor

Alexandru Ioan Cuza University of Iasi, Faculty of Physics
Research and teaching activities

09.1988-01.1991

Researcher in Computational Physics

Alexandru Ioan Cuza University of Iasi, Faculty of Physics
Research activities

09.1985-08.1988

Teacher

High (secondary) school no.1 Vaslui
Teaching activities

**EDUCATION
AND TRAINING**

- 02.2010-present **Recognition as PhD supervisor**
Alexandru Ioan Cuza University of Iasi, Faculty of Physics
- 12.1999 **PhD in Physics**

Alexandru Ioan Cuza University of Iasi, Faculty of Physics
Solid State Physics
- 07.1985 **B.A.in Physics**
Alexandru Ioan Cuza University of Iasi, Faculty of Physics
General Physics, pedagogical skills

PERSONAL SKILLS

Mother tongue(s) Romanian

| Other language(s) | UNDERSTANDING | | SPEAKING | | WRITING |
|-------------------|---------------|---------|--------------------|-------------------|---------|
| | Listening | Reading | Spoken interaction | Spoken production | |
| English | C1 | C1 | C1 | C1 | C1 |
| French | B1 | B1 | B1 | B1 | B1 |

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

Communication skills Good communication skills gained through my experience as a professor and as grants manager

Organisational / managerial skills Managerial skills acquired as **Head of doctoral school**, Faculty of Physics, Alexandru Ioan Cuza University, IASI, ROMANIA, since 2012 till present, in the

- Expert in grants' assesment
- Editor for the Biophysics section: Analele Stiintifice ale Universitatii "Alexandru Ioan Cuza", (Medical Physics and Environmental Physics)
- Member in the Organization Committee of 8 Conferences
- "Peer review" activities (Surface Science, Applied Surface Science, Journal of Hazardous Materials, Journal Of Physical Chemistry, Thin Solid Films, Catalysis Communications, Physica Status Solidi (a), Physica B, Journal of Alloys and Compounds, Journal of Physics and Chemistry of Solids, Surface and Coatings Technology, Applied Physics B, ACS Applied Materials & Interfaces, Colloids and Surfaces A etc.);

Digital competence

| SELF-ASSESSMENT | | | | |
|------------------------|---------------|------------------|--------|-----------------|
| Information processing | Communication | Content creation | Safety | Problem solving |

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| Independent user | Proficient user | Independent user | Independent user | Independent user |
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ADDITIONAL INFORMATION

H index **26 (WOS)**

- Research domain: Semiconductors in thin films**
- Publications** - 100 papers in the domain of semiconducting thin films (74 in ISI quoted journals).
 - Conferences** -over 170 oral and poster presentations in international and national conferences
 - Citations** - over 1800 independent ISI citations
 - Grants** - Participant at 37 national grants and 5 international grants (7 grants as director)
-Member in the Council of Doctoral School of Alexandru Ioan Cuza University, IASI, ROMANIA/ 2012-2020
 - Memberships** -Member of the European Physical Society and of the Romanian Physical Society
-Member in the Physics Committee of the National Council for Confirmation of the Titles, Diplomas and University Certificates (**CNATDCU**): 2011-2024
 - Courses**
 - Environmental Physics
 - Ecological Factors and Their Interaction with the Living Systems (MASTER)
 - Polycrystalline and Amorphous Thin Films (MASTER)
 - Electronic Transport Phenomena (MASTER)
 - Semiconducting Thin Films (MASTER)

ANNEXES

List of publications in ISI quoted journals:

- [1] ELECTRICAL CONDUCTION MECHANISM OF MG-DOPED ZRO₂ THIN FILMS, Diana Mardare; Mariana Frenti; Carmen Mita; Nicoleta Cornei; Georgiana Bulai; Marius Dobromir; Alexandr Doroshkevich; Abdullah Yildiz, *Materials*, 17 (15) (2024) 3652
- [2] HIGH STABILITY AND PHOTOCATALYTIC ACTIVITY OF N-DOPED ZRO₂ THIN FILMS, Carmen Mita, Mariana Frenti, Nicoleta Cornei, Georgiana Bulai, Marius Dobromir, Alexandr Doroshkevich, Zhanna V. Mezentsseva, Diana Mardare, *Journal of Alloys and Compounds* 1002 (2024) 175134
- [3] PHOTOCATALYTIC ACTIVITY OF N-DOPED ZRO₂ THIN FILMS DETERMINED BY DIRECT AND INDIRECT IRRADIATION, Carmen Mita, Nicoleta Cornei, Mariana Frenti, Georgiana Bulai, Marius Dobromir, Vasile Tiron, Alexandr Doroshkevich, Diana Mardare, *Materials*, 16 (2023) 5901
- [4] ZrO₂ FOR PHOTOCATALYTIC APPLICATIONS, M. Frenti, C. Mița, N. Cornei, V. Tiron, G. Bulai, M. Dobromir, A. Doroshkevich, D. Mardare, *U.P.B. Sci. Bull., Series A*, 85(2) (2023) 165-176.
- [5] THE ENHANCEMENT OF THE PHOTOCATALYTIC PROPERTIES OF SmFe_{0.7}Co_{0.3}O₃ THIN FILMS BY SYNERGISTIC EFFECT OF Sr DOPING AND H₂O₂ AS CO-CATALYST, C. Mita, N. Cornei, G. Bulai, E. Gyorgy, M. Dobromir, M. Girtan, A. Doroshkevich, D. Mardare, *Ceramics International*, 49(9) (2023) 14225–14237
- [6] THE RECTIFYING CONTACT OF HYDRATED DIFFERENT SIZE YSZ NANOPARTICLES FOR ADVANCED ELECTRONICS, Alexander S. Doroshkevich, Anna S. Zakharova, Boris L. Oksengendler, Andriy I. Lyubchyk, Sergiy I. Lyubchyk, Svitlana B. Lyubchyk, Alisa A. Tatarinova, Andriy K. Kirillov, Tatyana A. Vasilenko, Oksana O. Gorban, Viktor I. Bodnarchuk, Nadejda N. Nikiforova, Elena A. Zakharova, Maria Balasoiu, Diana M. Mardare, Carmen Mita, Anca Stanculescu, Matlab N. Mirzayev, Asif A. Nabiyev, Evgeni P. Popov 2, Le Hong Khiem, Alexander A. Donkov, Vesna Teofilović, Bozena Jasinska, Dan Chicea, Tatyana Ye. Konstantinova, *Nanomaterials*, 12 (2022) 4493.

- [7] EFFECTS OF YSZ CERAMICS DOPING WITH SILICA AND ALUMINA ON ITS STRUCTURE AND PROPERTIES, D.R. Belichko, T.E. Konstantinova, G.K. Volkova, M.N. Mirzayev, A.V. Maletsky, V.V. Burkhovetskiy, A.S. Doroskevich C. Mita, D.M. Mardare, B. Janiska, A.A. Nabiyev, A.I. Lyubchik , A.A. Tatarinova, E. Popov, Materials Chemistry and Physics 287 (2022) 126237
- [8] ELECTRIC ENERGY STORAGE EFFECT IN HYDRATED ZRO₂ – NANOSTRUCTURED SYSTEM, Alexander S. Doroshkevich *, Andriy I. Lyubchik, Boris L. Oksengendler, Tatyana Yu. Zelenyak, Nurbol O. Appazov, Andriy K. Kirillov, Tatyana A. Vasilenko, Alisa A. Tatarinova, Oksana O. Gorban, Viktor I. Bodnarchuk, Nadejda N. Nikiforova, Maria Balasoju, Diana M. Mardare, Carmen Mita, Dorin Luca, Matlab N. Mirzayev, Asif A. Nabiyev, Evgeni P. Popov, Anca Stanculescu, Tatyana E. Konstantinova, Yulia V. Aleksiyayenak, Nanomaterials 12 (2022) 1783
- [9] REVERSIBLE MARTENSITIC PHASE TRANSITION IN YTTRIUM-STABILIZED ZRO₂ NANOPOWDERS BY ADSORPTION OF WATER, Elmar B. Asgerov, Anatoly I. Beskrovnyy , Nelya V. Doroshkevich, Carmen Mita, Diana M. Mardare, Dan Chicea, Mihaela D. Lazar, Alisa A. Tatarinova, Sergiy I. Lyubchik , Svitlana B. Lyubchik , Andriy I. Lyubchik and Alexander S. Doroshkevich, Nanomaterials 12 (2022) 435.
- [10] STRUCTURE FORMATION AND PROPERTIES OF CORUNDUM CERAMICS BASED ON METASTABLE ALUMINIUM OXIDE DOPED WITH STABILIZED ZIRCONIUM DIOXIDE, Maletsky A.V., Belichko D.R., Konstantinova T.E., Volkova G.K., Doroshkevich A.S., Lyubchik A.I., Burkhovetskiy V.V., Aleksandrov V.A., Mardare D., Mita C., Chicea D, L.H.Khiem, Ceramics International, 47 (2021) 19489-19495
- [11] INFLUENCE OF HAFNIUM OXIDE ON THE STRUCTURE AND PROPERTIES OF POWDERS AND CERAMICS OF THE YSZ - HfO₂ COMPOSITION, Danil Belichko, Tetuana Konstantinova, Alexandr Maletskiy, Galina Volkova, Alexandr Doroshkevich, Marharyta Lakusta, Miroslaw Kulik, , Alice Tatarinova, Diana Mardare, Carmen Mita, Nicoleta Cornei, Ceramics International, 47 (2021) 3142–3148
- [12] IRON DOPED TiO₂ FILMS AND THEIR PHOTOACTIVITY IN NITROBENZENE REMOVAL FROM WATER, Maria Crișan, Diana Mardare, Adelina Ianculescu, Nicolae Drăgan, Ines Nițoi, Dorel Crișan, Mariana Voicescu, Ligia Todan, Petruța Oancea, Cătălin Adomniței, Marius Dobromir, Margarita Gabrovska, Bogdan Vasile, Applied Surface Science, 455 (2018) 201–215
- [13] ON THE HYDROPHILICITY OF NI-DOPED TiO₂ THIN FILMS. A STUDY BY X-RAY ABSORPTION SPECTROSCOPY, Dan Macovei, Vasile Tiron, Catalin Adomnitei, Dumitru Luca, Marius Dobromir, Stefan Antohe, Diana Mardare, Thin Solid Films 657 (2018) 42–49
- [14] THE EFFECT OF CO₂ GAS ADSORPTION ON THE ELECTRICAL PROPERTIES OF FE DOPED TiO₂ FILMS, Diana Mardare, Catalin Adomnitei, Daniel Florea, Dumitru Luca, Abdullah Yildiz Physica B 524 (2017) 17–21
- [15] PLATINUM ROLE IN HYDROPHILICITY ENHANCEMENT OF Cr-DOPED TiO₂ THIN FILMS, D. Mardare, C. Mita, N. Cornei, S. Tascu, D. Luca, M. Dobromir and C. Adomnitei, Philosophical Magazine 96 (2016) 3000–3015
- [16] LOW TEMPERATURE TiO₂ BASED GAS SENSORS FOR CO₂, Diana Mardare, Nicoleta Cornei, Carmen Mita, Daniel Florea, Alexandru Stancu, Vasile Tiron, Alina Manole, Catalin Adomnitei, Ceramics International 42 (2016) 7353-7359.
- [17] STUDIES ON Pr³⁺-Yb³⁺ CODOPED ZBLA AS RARE EARTH DOWN CONVERTOR GLASSES FOR SOLAR CELLS ENCAPSULATION, J. Merigeon, O. Maalej, B. Boulard, A. Stanculescu, L. Leontie, D. Mardare, M. Girtan, Optical Materials, 48 (2015) 243–246.
- [18] THE INFLUENCE OF NI DOPING ON THE SURFACE WETTABILITY OF TiO₂ THIN FILMS C. Adomnitei, N. Cornei, D. Luca, I. Sandu, V. Vasilache, M. Dobromir, D. Mardare, Journal of Optoelectronics and Advanced Materials, 17(5-6) (2015) 889-893.
- [19] Nb DOPED TiO₂ THIN FILMS AS PHOTOCATALYTIC MATERIALS Catalin Adomnitei, Sorin Tascu, Dumitru Luca, Marius Dobromir, Mihaela Girtan and Diana Mardare, Bulletin of Materials Science, 38(5) (2015) 1259-1262 .
- [20] SYNTHESIS AND HYDROPHILIC PROPERTIES OF MO DOPED TiO₂ THIN FILMS

- Diana Mardare, Nicoleta Cornei, Dumitru Luca, Marius Dobromir, S A. Irimiciuc, Luciana Pungă, Aurel Pui, Cătălin Adomnitei, Journal of Applied Physics, 115, 213501-1 - 2 13501-8 (2014)
- [21] Nb-DOPED TiO₂ THIN FILMS DEPOSITED BY SPRAY PYROLYSIS METHOD, C. Adomnitei, D. Luca, M. Girtan, I. Sandu, V. Nica, A.V. Sandu, D. Mardare, Journal Of Optoelectronics And Advanced Materials, 15(5- 6) (2013) 519 – 522.
- [22] ON THE PROPERTIES OF ALUMINIUM DOPED ZINC OXIDE THIN FILMS DEPOSITED ON PLASTIC SUBSTRATES FROM CERAMIC TARGETS, M.Girtan, A. Vlad, R. Mallet, M. A.Bodea, J.D. Pedarnig, A. Stanculescu, D. Mardare, D., L.Leontie, S. Antohe, Applied Surface Science, 274 (2013) 306 – 313.
- [23] SURFACE WETTABILITY OF TITANIA THIN FILMS WITH INCREASING Nb CONTENT, Diana Mardare, Abdullah Yildiz, Mihaela Girtan, Alina Manole, Marius Dobromir, Mihaela Irimia, Catalin Adomnitei, Nicoleta Cornei, Dumitru Luca, J. Appl. Phys. 112 (2012) 073502
- [24] THE MEYER-NELDEL RULE IN AMORPHOUS TiO₂ FILMS WITH DIFFERENT Fe CONTENT, Diana Mardare, Abdullah Yildiz² Radu Apetrei, Petronela Rambu, Daniel Florea, Nicoleta Georgiana Gheorghe, Dan Macovei, Cristian Mihail Teodorescu and Dumitru Luca, Journal of Materials Research, 27(17) (2012) 2271-2277.
- [25] X-RAY ABSORPTION FINE STRUCTURE INVESTIGATIONS ON HEAT-TREATED Cr-DOPED TITANIA THIN FILMS, Diana Mardare, Valentin Nica, Valentin Pohoata, Dan Macovei, Nicoleta Gheorghe, Dumitru Luca and Cristian-Mihail Teodorescu, Thin Solid Films, 520(4) 1348-1352 (2011)
- [26] POLARONIC TRANSPORT IN TiO₂ THIN FILMS WITH INCREASING NB CONTENT, Abdullah Yildiz and Diana Mardare, Philosophical Magazine 91(34) 4401-4409 (2011)
- [27] ELECTRICAL CONDUCTION MECHANISM AND GAS SENSING PROPERTIES OF Pd-DOPED TiO₂ FILMS, Diana Mardare, Nicoleta Iftimie, Maria Crișan, Mălina Răileanu, A. Yildiz, T. Coman, K. Pomoni, A. Vomvas, Journal of Non-Crystalline Solids 357, 1774–1779 (2011)
- [28] EFFECT OF FORMALDEHYDE GAS ADSORPTION ON THE ELECTRICAL CONDUCTIVITY OF Pd-DOPED TiO₂ THIN FILMS, A. Yildiz, D. Crisan, N. Dragan, N. Iftimie, D. Florea, D. Mardare, J Mater Sci: Mater Electron, 22, 1420–1425 (2011)
- [29] STRUCTURAL STUDY OF SOL–GEL Au/TiO₂ FILMS FROM NANOPOWDERS, Dorel Crisan, Nicolae Dragan, Malina Raileanu, Maria Crisan, Adelina Ianculescu, Dumitru Luca, Andrei Nastuta, Diana Mardare, Applied Surface Science 257, 4227–4231 (2011)
- [30] PHOTOINDUCED WETTABILITY OF TITANIUM OXIDE THIN FILMS, Diana Mardare, Alina Manole, A. Yildiz, and D. Luca, Chem.Eng.Comm.,198, 530–540 (2011)
- [31] POLARON TRANSPORT IN TiO₂ THIN FILMS, Abdullah Yildiz, Felicia Iacomi, Diana Mardare, Journal Of Applied Physics, 108(8), 083701- 083708 (2010)
- [32] THE SUBSTRATE TEMPERATURE DEPENDENT ELECTRICAL PROPERTIES OF TITANIUM DIOXIDE THIN FILMS, A. Yildiz, S.B.Lisesivdin, M. Kasap, Diana Mardare, Journal of Materials Science: Materials in Electronics, 21 692-697 (2010).
- [33] THE THICKNESS EFFECT ON THE ELECTRICAL CONDUCTION MECHANISM IN TITANIUM OXIDE THIN FILMS, A. Yildiz, N. Serin, M. Kasap, T. Serin, Diana Mardare, Journal of Alloys and Compounds 493 227-232 (2010).
- [34] ELECTRICAL CONDUCTION MECHANISM IN POLYCRYSTALLINE TITANIUM OXIDE THIN FILMS, Diana Mardare and G. I. Rusu, Journal of Non-Crystalline Solids, 356 (28-30) 1395–1399 (2010)
- [35] UNDOPED AND Cr-DOPED TiO₂ THIN FILMS OBTAINED BY SPRAY PYROLYSIS, Diana Mardare, Felicia Iacomi, Nicoleta Cornei, Mihaela Girtan, Dumitru Luca, Thin Solid Films, 518, 4586–4589 (2010).
- [36] ON THE PROPERTIES OF NANOSTRUCTURED TITANIUM OXIDE THIN FILMS, D.Mardare, N. Cornei, G.I.Rusu, Superlattices and Microstructures 46 209-216 (2009)
- [37] NON-ADIABATIC SMALL POLARON HOPPING CONDUCTION IN NB-DOPED TiO₂ THIN FILM

- A. Yildiz, S. B. Lisesivdin, M. Kasap, D. Mardare, Physica B, 404 (8-11) 1423–1426 (2009)
- [38] GAS SENSING MATERIALS BASED ON TiO₂ THIN FILMS, Nicoleta Iftimie, D. Luca, Felicia Iacomi, Mihaela Girtan and Diana Mardare, Journal of Vacuum Science and Technology B, 27(1) 538-541 (2009)
- [39] PHOTO-DEGRADATION ACTIVITY OF SPUTTER-DEPOSITED NITROGEN-DOPED TITANIA THIN FILMS, R. Apetrei, C. Catrinescu, D. Mardare, C. M. Teodorescu, D. Luca Thin Solid film, 518 (2009) 1040–1043
- [40] FABRICATION AND CHARACTERIZATION OF NANO-STRUCTURED FERROMAGNETIC Ti_{1-x}Fe_xO₂ THIN FILMS, R. Apetrei, C. Negrița, D. Macovei, V. Dascalescu, C.-M. Teodorescu, D. Mardare, D. Luca, NSTI Nanotech 2009 (Technical Proceedings of the 2009 Nanotechnology Conference and Expo, Nanotech Houston, Texas, USA) 1, (2009) 375-378
- [41] TiO₂ THIN FILMS AS SENSING GAS MATERIALS, D. Mardare, N. Iftimie, D. Luca, Journal of Non-Crystalline Solids 354 4396–4400 (2008)
- [42] ON THE SENSING GAS PROPERTIES OF TITANIUM DIOXIDE FILMS, N. Iftimie, M. Crisan, A. Braileanu, D. Crisan, A. Nastuta, G. B. Rusu, P.D. Popa, D. Mardare, J. Optoelectron. Adv. M. 10(9) 2363-2367 (2008)
- [43] CRYSTALLIZATION STUDY OF SOL–GEL UN-DOPED AND PD-DOPED TiO₂ MATERIALS, Dorel Crisan, Nicolae Dragan, Maria Crisan, Malina Raileanu, Ana Braileanu, Mihai Anastasescu, Adelina Ianculescu, Diana Mardare, Dumitru Luca, Virgil Marinescu, Antoniu Moldovan, Journal of Physics and Chemistry of Solids 69 2548– 2554 (2008)
- [44] THERMAL BEHAVIOUR STUDY OF SOME SOL–GEL TiO₂ BASED MATERIALS, M. Crisan, A. Braileanu, D. Crisan, M. Raileanu, N. Dragan, D. Mardare, V. Teodorescu, A. Ianculescu, R. Birjega, M. Dumitru, Journal of Thermal Analysis and Calorimetry, 92, 7–13 (2008)
- [45] ELECTRICAL PROPERTIES OF TiO₂ THIN FILMS, A. Yildiz, S. B. Lisesivdin, M. Kasap, D. Mardare, Journal of Non-Crystalline Solids 354 4944–4947 (2008)
- [46] SUBSTRATE AND Fe-DOPING EFFECTS ON THE HYDROPHILIC PROPERTIES OF TiO₂ THIN FILMS, Diana Mardare, Felicia Iacomi, D. Luca, Thin Solid Films, 515, 6474–6478 (2007)
- [47] ON THE HYDROPHILICITY OF NITROGEN-DOPED TiO₂ THIN FILMS, Diana Mardare, Dumitru Luca, C-M Teodorescu, Dan Macovei, Surface Science, 601, 4515–4520 (2007)
- [48] FE-DOPED TiO₂ THIN FILMS, Diana Mardare, Valentin Nica, C-M Teodorescu, D. Macovei, Surface Science, 601/18, 4479-4483 (2007)
- [49] THE INFLUENCE OF THE SUBSTRATE NATURE ON THE IRON REPARTITION IN THE TITANIA MATRIX, Felicia Iacomi, Diana Mardare, M.N. Grecu, D. Macovei I. Vida-Simiti, Surface Science, 601, 2692–2695 (2007)
- [50] PREPARATION AND CHARACTERIZATION OF INCREASED EFFICIENCY PHOTOCATALYTIC TiO_{2-x}N_x THIN FILMS, D. Luca, C.M. Teodorescu, R. Apetrei and Diana Mardare, Thin Solid Films, 515, 8605–8610 (2007)
- [51] INVESTIGATION OF STRUCTURAL PROPERTIES OF ITO THIN FILMS DEPOSITED ON DIFFERENT SUBSTRATES, M. Purica, F. Iacomi, C. Baban, N. Apetroaie, D. Mardare, D. Luca, Thin Solid Films 515, 8674–8678 (2007)
- [52] HIGH TEMPERATURE VARIABLE-RANGE HOPPING CONDUCTIVITY IN UNDOPED TiO₂ THIN FILM, A. Yildiz, S. B. Lisesivdin, M. Kasap, D. Mardare, Optoelectronics And Advanced Materials – Rapid Communications, 1(10) 531 – 533 (2007).
- [53] A POWER SPECTRAL DENSITY STUDY OF THIN FILMS MORPHOLOGY BASED ON AFM PROFILING, R. Gavrilă, A. Dinescu, D. Mardare, Romanian Journal Of Information Science And Technology, 10(3) 291-300 (2007)
- [54] AFM APPLICATIONS TO THE STUDY OF THIN FILMS MORPHOLOGY: A POWER SPECTRAL DENSITY APPROACH Gavrilă, R; Dinescu, A and Mardare, D 29th International Semiconductor

- Conference (CAS 2006) 2007, 2006 INTERNATIONAL SEMICONDUCTOR CONFERENCE, VOLS 1 AND 2 , pp.167
- [55] TiO₂ THIN FILMS DOPED BY CE, NB, FE, DEPOSITED ONTO ITO/GLASS SUBSTRATES, D. Mardare, E. Apostol, J. Optoelectron. Adv. M., 8(3), 914-916 (2006).
- [56] INCREASING SURFACE HYDROPHILICITY OF TITANIA THIN FILMS BY DOPING, D. Luca, Diana Mardare, Felicia Iacomi, C.M.Teodorescu, Applied Surface Science 252, 6122-6126 (2006)
- [57] CHROMIUM-DOPED TITANIUM OXIDE THIN FILMS, Diana Mardare, G. I. Rusu, Felicia Iacomi, M. Girtan, I. Vida-Simiti, Materials Science and Engineering, B, 118(1-3) 187-191 (2005)
- [58] THE SEEBECK COEFFICIENT OF TiO₂ THIN FILMS, Diana Mardare, J. Optoelectron. Adv. M.,7(2), 721-725 (2005).
- [59] COMPARISON OF THE DIELECTRIC PROPERTIES FOR DOPED AND UNDOPED TiO₂ THIN FILMS, D. Mardare, G. I. Rusu, J. Optoelectron. Adv. M., 6(1) 333-336 (2004).
- [60] ON THE STRUCTURE, MORPHOLOGY AND ELECTRICAL CONDUCTIVITIES OF TITANIUM OXIDE THIN FILMS, Diana Mardare, C.Baban, Raluca Gavrilă, M.Modreanu and G.I.Rusu, Surface Science, 507-510, 468-472 (2002).
- [61] Optical Constants of Heat-Treated TiO₂ Thin Films, Diana Mardare, Materials Science and Engineering B, 95/1, 83-87 (2002).
- [62] THE INFLUENCE OF HEAT TREATMENT ON THE OPTICAL PROPERTIES OF TITANIUM OXIDE THIN FILMS, Diana Mardare, G.I.Rusu, Materials Letters, 56/3, 210-214 (2002).
- [63] INFLUENCE OF THE SUBSTRATE TEMPERATURE ON THE OPTICAL BAND GAP OF TITANIUM OXIDE THIN FILMS, Diana Mardare, G.I.Rusu, Physics of Low-Dimensional Structures, 9/10, 111-120 (2002)
- [64] ON THE STRUCTURE AND OPTICAL DIELECTRIC CONSTANTS OF TiO₂ SPUTTERED THIN FILMS, Diana Mardare, G.I. Rusu, J. Optoelectron. Adv. M., 3(1) 95-100 (2001)
- [65] ON THE STRUCTURAL PROPERTIES AND OPTICAL TRANSMITTANCE OF TiO₂ R.F. SPUTTERED THIN FILMS, Diana Mardare, M. Tasca, M. Delibas and G. I. Rusu, Applied Surface Science, 156(1), 200-206 (2000).
- [66] STRUCTURAL AND ELECTRICAL PROPERTIES OF TiO₂ RF SPUTTERED THIN FILMS, Diana Mardare and G. I. Rusu, Materials Science and Engineering B 75(1), 68- 71 (2000).
- [67] ON THE OPTICAL CONSTANTS OF TiO₂ THIN FILMS. ELLIPSOMETRIC STUDIES., Diana Mardare and Alexandru Stancu, Materials Research Bulletin, 35 (12), 2017- 2025 (2000).
- [68] OPTICAL DISPERSION ANALYSIS OF TiO₂ THIN FILMS BASED ON VARIABLE - ANGLE SPECTROSCOPIC ELLIPSOMETRY MEASUREMENTS, Diana Mardare and Peter Hones, Materials Science and Engineering B, 68(1), 42-47 (1999)
- [69] STRUCTURAL AND ELECTRICAL PROPERTIES OF TITANIUM OXIDE DC SPUTTERED THINFILMS, Diana Mardare and G. I. Rusu, Physics of Low-Dimensional Structures, 11/12, 69-76 (1999)
- [70] STUDIES ON THE ELECTRONIC TRANSPORT AND OPTICAL PROPERTIES OF SOME NEW CHELATE MODIFIED POLYSULFONES IN THIN FILMS, G. I. Rusu, A. Airinei, C. Baban, G. G. Rusu, Diana Mardare, Mihaela Rusu, Journal of Applied Polymer Sci. 99(1), 100-106 (2006).
- [71] ELECTRICAL AND THERMOELECTRICAL PROPERTIES OF SOME NEW CONJUGATED POLYMERS IN THIN FILMS, M. Rusu, I. Caplanus, D. Mardare, G.I.Rusu, J. Optoelectron. Adv. M., 7(6), 3149-3154 (2005)
- [72] STUDIES ON THE ELECTRONIC TRANSPORT PROPERTIES OF SOME AROMATIC POLYSULFONES IN THIN FILMS, G.I.Rusu, I. Căplănuș, L. Leontie, A. Airinei, E. Butuc, D. Mardare, I.I.Rusu, Acta Materialia, 49, 553-559 (2001)
- [73] ON THE SEMICONDUCTING PROPERTIES OF SOME BISPHENOLIC CHELATE POLYMERS IN

THIN FILMS, M. Rusu, A. Airinei, L. Leontie, D. Mardare and G. I. Rusu, Physics of Low-Dimensional Structures, 5/6, 31- 42 (1998).

- [74] ON THE ELECTRICAL PROPERTIES OF SOME NEW DISUBSTITUTED YLIDES IN THIN FILMS, I. Mangalagiu, C.Baban, Diana Mardare, G. I. Rusu, M. Rusu, Applied Surface Science 108, 205-210 (1997).

Books

1. Transport Phenomena in Solid Bodies, Diana Mardare, Editura "Gh. Asachi", Iași-2002
2. Polycrystalline and Amorphous Thin Films. Titanium Oxide, Diana Mardare, Editura "Politehnicum", Iași-2005.
3. Introduction to Environmental Physics and Ecology, Diana Mardare, Editura "Politehnicum", Iași-2005
4. General Physics – Questions. Problems, Felicia Iacomi, Diana Mardare, Mihaela Bucescu Editura Gama, Iași, 1997.

Selection of Grants

| | | |
|---|----------|-----------|
| Proiect DUBNA, cod temă 04-4-1143-2021/2025, poziția nr.58 din Ordinul IUCN nr. 365 din 11.05.2021 - Research of metastable crystal phases in nanoscale oxide systems based on ZrO ₂ for applications in adsorption power engine neering and electronics using nuclear physics methods | DIRECTOR | 2020-2021 |
| Proiect DUBNA, cod temă 04-4-1122-2015/2020, poziția nr.54 din Ordinul IUCN nr.269/20.05.2020 - The study of water adsorption at nanostructured materials surfaces, by using nuclear-physical methods | DIRECTOR | 2019-2020 |
| Bilateral cooperation Roamania -Turkey, Gazi University, Ankara, prof. dr. Mehmet Kasap Studies on the obtaining and characterization of nanostructured TiO ₂ , thin films, having applications in environmental physics | DIRECTOR | 2008-2009 |
| GRANT A, 27/2007 RESEARCH ON THE PROPERTIES OF MICRO AND NANO-STRUCTURED TITANIUM OXIDE THIN FILMS WITH APPLICATIONS IN ECOLOGY | DIRECTOR | 2006-2008 |
| Grant Romanian Academy, 37/2007 Titanium oxide thin films characterization for applications in optoelectronics and gas sensing | DIRECTOR | 2006-2008 |
| Proiecte complexe de cercetare exploratorie PCCE-ID_76 ȘTIINȚA SUPRAFETELOR ȘI INTERFETELOR: FIZICA, CHIMIE, BIOLOGIE, APLICATII ȘTIINȚA SUPRAFETELOR ȘI INTERFETELOR: FIZICA, CHIMIE, BIOLOGIE, APLICATII | MEMBER | 2010-2013 |
| Grant CERNESIM 257/28.09.2010 (Capacități), CENTRUL INTEGRAT DE STUDII ÎN ȘTIINȚA MEDIULUI PENTRU REGIUNEA DE DEZVOLTARE NORD-EST | MEMBER | 2010-2014 |
| Grant Parteneriate, nr. 12-128/2008, Procese și dispozitive pe baza de straturi subțiri oxidice și polimerice pentru electronica și optoelectronica transparentă | MEMBER | 2008-2010 |

25.07.2024

Prof. Diana Mihaela MARDARE PhD