

<b>Curriculum vitae</b>	<b><i>Professor Diana MARDARE PhD</i></b>		
	E-mail:		dianam@uaic.ro
<b>Born</b>	IASI/25.07.1962		
<b>Citizenship</b>	Romanian		
<b>Scientific title/Date/Institution</b>	DOCTOR IN PHYSICS / since 1999 /Alexandru Ioan Cuza University, IASI, ROMANIA RECOGNITION AS SUPERVIZOR /since 2010/Alexandru Ioan Cuza University, IASI, ROMANIA		
<b>H Index</b>	<b>19 (without self citations)</b>		
<b>Current address at work</b>	"Alexandru Ioan Cuza" University, Faculty of Physics, Department of Physics, 11 Carol I Blvd, 700506, IASI, ROMANIA		
<b>Professional experience/ Places / Period</b>	<ul style="list-style-type: none"> <li>- High (secondary) school physics teacher / Vaslui / 09.1985-09.1988</li> <li>- Researcher in Computational Physics / Faculty of Physics, "Al. I. Cuza" University of Iasi / 09.1988-09.1990</li> <li>- Assistant Professor / Solid State Physics Department / Faculty of Physics, "Al. I. Cuza" University of Iasi, / 09.1990-09.1998</li> <li>- Lecturer / Solid State Physics Department, Faculty of Physics, "Alexandru Ioan Cuza" University of Iasi / 09.1998-04.2004</li> <li>- Assoc. Professor / Solid State Physics Department, Faculty of Physics, "Alexandru Ioan Cuza" University of Iasi / 04.2004 – 09.2008</li> <li>-Professor / Physics Department, Faculty of Physics, "Alexandru Ioan Cuza" University of Iasi / 10.2008 – at the moment</li> </ul>		
<b>Foreign languages</b>			
<b>Autoevaluation</b>	<b>Write</b>	<b>Read</b>	<b>Conversation</b>
<b>English</b>	5	5	5
<b>French</b>	4	5	3
	1 – minimum level, 5 – advanced level		
<b>Courses</b>	<ul style="list-style-type: none"> <li>- Introduction to Environmental Physics and Ecology</li> <li>- Ecological Factors and Their Interaction with the Living Systems (MASTER)</li> <li>- Polycrystalline and Amorphous Thin Films (MASTER)</li> <li>- Electronic Transport Phenomena (MASTER)</li> <li>- Semiconducting Thin Films (MASTER)</li> </ul>		
<b>Books</b>	<ol style="list-style-type: none"> <li>1. Transport Phenomena in Solid Bodies, Diana Mardare, Editura "Gh. Asachi", Iași-2002</li> <li>2. Polycrystalline and Amorphous Thin Films. Titanium Oxide, Diana Mardare, Editura "Politehniun", Iași-2005.</li> <li>3. Introduction to Environmental Physics and Ecology, Diana Mardare, Editura "Politehniun", Iași-2005</li> <li>4. General Physics – Questions. Problems, Felicia Iacomi, Diana Mardare, Mihaela Bucescu, Editura Gama, Iași, 1997.</li> </ol>		
<b>Research</b>	<p><b>Study on the structure, morphology, electrical and optical properties of titanium oxide thin films and also on organic compounds in thin films.</b></p> <ul style="list-style-type: none"> <li>- 84 papers in the domain of semiconducting thin films (58 in ISI quoted journals).</li> <li>- 110 oral and poster presentations in international and national conferences</li> <li>- over 970 independent ISI citations</li> <li>- Participant at 37 national grants and 5 international grants (4 -director), about 700 000 EURO (total value)</li> </ul>		
<b>Affiliations</b>	<p><b>Member in the Council of Doctoral School</b> of Alexandru Ioan Cuza University, IASI, ROMANIA</p> <p>Member of the European Physical Society, Romanian Physical Society</p>		

<b>Others</b>	<p>- Instit. of Appl .Phys., Polytechnic Federal School of Lausanne, Switzerland -1 month (1999)</p> <p>- Expert in grants' assesment</p> <p>- Editor for the Biophysics section: Analele Stiintifice ale Universitatii "Alexandru Ioan Cuza", (Fizica medicala si Fizica mediului)</p> <p>- Member in the Organization Committee of 7 Conferences</p> <p>- Reviewer at some ISI quoted journals: 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 &amp; Interfaces, Colloids and Surfaces A, Vacuum, Materials Chemistry and Physics, Ceramics International, Reaction Kinetics, Mechanisms and Catalysis, Journal of Photochemistry and Photobiology A: Chemistry, Solid State Sciences, Central European Journal of Physics, etc.</p> <p>- member in the Physics Committee of the National Council for Confirmation of the Titles, Diplomas and University Certificates (CNATDCU) /since 2011</p> <p>- <b>Head of doctoral school</b> / since 2012 / Faculty of Physics, Alexandru Ioan Cuza University, IASI, ROMANIA</p>
---------------	--

#### List of publications in ISI quoted journals:

- [1] LOW TEMPERATURE TiO<sub>2</sub> BASED GAS SENSORS FOR CO<sub>2</sub>, Diana Mardare, Nicoleta Cornei, Carmen Mita, Daniel Florea, Alexandru Stancu, Vasile Tiron, Alina Manole, Catalin Adomnitei, Ceramics International 42 (2016) 7353-7359.
- [2] STUDIES ON Pr<sup>3+</sup>-Yb<sup>3+</sup> 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.
- [3] THE INFLUENCE OF NI DOPING ON THE SURFACE WETTABILITY OF TiO<sub>2</sub> 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.
- [4] Nb DOPED TiO<sub>2</sub> 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 .
- [5] SYNTHESIS AND HYDROPHILIC PROPERTIES OF MO DOPED TiO<sub>2</sub> 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)
- [6] Nb-DOPED TiO<sub>2</sub> 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.
- [7] 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.
- [8] 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
- [9] THE MEYER-NELDEL RULE IN AMORPHOUS TiO<sub>2</sub> FILMS WITH DIFFERENT Fe CONTENT, Diana Mardare, Abdullah Yildiz<sup>2</sup> 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.
- [10] 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)
- [11] EFFECT OF NB DOPING ON POLARONIC TRANSPORT IN TiO<sub>2</sub> THIN FILMS, Abdullah Yildiz and Diana Mardare, Philosophical Magazine 91(34) 4401-4409 (2011)
- [12] ELECTRICAL CONDUCTION MECHANISM AND GAS SENSING PROPERTIES OF Pd-DOPED TiO<sub>2</sub> FILMS, Diana Mardare, Nicoleta Iftimie, Maria Crişan, Mălina Răileanu, A. Yildiz, T. Coman, K. Pomoni, A. Vomvas, Journal of Non-Crystalline Solids 357, 1774–1779 (2011)
- [13] EFFECT OF FORMALDEHYDE GAS ADSORPTION ON THE ELECTRICAL CONDUCTIVITY OF Pd-DOPED TiO<sub>2</sub> THIN FILMS, A. Yildiz, D. Crisan, N. Dragan, N. Iftimie, D. Florea, D. Mardare, J Mater Sci: Mater Electron, 22, 1420–1425 (2011)
- [14] STRUCTURAL STUDY OF SOL–GEL Au/TiO<sub>2</sub> 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)
- [15] PHOTOINDUCED WETTABILITY OF TITANIUM OXIDE THIN FILMS, Diana Mardare, Alina Manole, A. Yildiz, and D. Luca, Chem.Eng.Comm.,198, 530–540 (2011)
- [16] POLARON TRANSPORT IN TiO<sub>2</sub> THIN FILMS, Abdullah Yildiz, Felicia Iacomi, Diana Mardare, Journal Of Applied Physics, 108(8), 083701- 083708 (2010)
- [17] 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).
- [18] 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).
- [19] 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)
- [20] UNDOPED AND Cr-DOPED TiO<sub>2</sub> THIN FILMS OBTAINED BY SPRAY PYROLYSIS, Diana Mardare, Felicia Iacomi, Nicoleta Cornei, Mihaela Girtan, Dumitru Luca, Thin Solid Films, 518, 4586–4589 (2010).
- [21] ON THE PROPERTIES OF NANOSTRUCTURED TITANIUM OXIDE THIN FILMS, D.Mardare, N. Cornei, G.I.Rusu, Superlattices and Microstructures 46 209-216 (2009)
- [22] NON-ADIABATIC SMALL POLARON HOPPING CONDUCTION IN NB-DOPED TiO<sub>2</sub> THIN FILM  
A. Yildiz, S. B. Lisesivdin, M. Kasap, D. Mardare, Physica B, 404 (8-11) 1423–1426 (2009)
- [23] GAS SENSING MATERIALS BASED ON TiO<sub>2</sub> 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)
- [24] 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
- [25] FABRICATION AND CHARACTERIZATION OF NANO-STRUCTURED FERROMAGNETIC Ti<sub>1-x</sub>Fe<sub>x</sub>O<sub>2</sub> THIN FILMS, R.Apetrei, C.Negrila, D.Macovei, V.Dascaleanu, C.-M.Teodorescu, D.Mardare, D.Luca, NSTI Nanotech 2009 (Technical Proceedings of the 2009 Nanotechnology Conference and Expo, Nanotech Houston, Texas, SUA) 1, (2009) 375-378
- [26] TiO<sub>2</sub> THIN FILMS AS SENSING GAS MATERIALS, D. Mardare, N. Iftimie, D. Luca, Journal of Non-Crystalline Solids 354 4396–4400 (2008)
- [27] 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)
- [28] CRYSTALLIZATION STUDY OF SOL– GEL UN-DOPED AND PD-DOPED TiO<sub>2</sub> 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)
- [29] THERMAL BEHAVIOUR STUDY OF SOME SOL–GEL TiO<sub>2</sub> 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)
- [30] ELECTRICAL PROPERTIES OF TiO<sub>2</sub> THIN FILMS, A. Yildiz, S. B. Lisesivdin, M. Kasap, D. Mardare, Journal of Non-Crystalline Solids 354 4944–4947 (2008)
- [31] SUBSTRATE AND Fe-DOPING EFFECTS ON THE HYDROPHILIC PROPERTIES OF TiO<sub>2</sub> THIN FILMS, Diana Mardare, Felicia Iacomi, D. Luca, Thin Solid Films, 515, 6474–6478 (2007)
- [32] ON THE HYDROPHILICITY OF NITROGEN-DOPED TiO<sub>2</sub> THIN FILMS, Diana Mardare, Dumitru Luca, C-M Teodorescu, Dan Macovei, Surface Science, 601, 4515–4520 (2007)
- [33] FE-DOPED TiO<sub>2</sub> THIN FILMS, Diana Mardare, Valentin Nica, C-M Teodorescu, D. Macovei, Surface Science, 601/18, 4479-4483 (2007)
- [34] 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)
- [35] PREPARATION AND CHARACTERIZATION OF INCREASED EFFICIENCY PHOTOCATALYTIC TiO<sub>2-x</sub>N<sub>x</sub> THIN FILMS, D. Luca, C.M. Teodorescu, R. Apetrei and Diana Mardare, Thin Solid Films, 515, 8605–8610 (2007)
- [36] 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)
- [37] HIGH TEMPERATURE VARIABLE-RANGE HOPPING CONDUCTIVITY IN UNDOPED TiO<sub>2</sub> THIN FILM, A. Yildiz, S. B. Lisesivdin, M. Kasap, D. Mardare, Optoelectronics And Advanced Materials – Rapid Communications, 1(10) 531 – 533 (2007).
- [38] 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)
- [39] TiO<sub>2</sub> 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).
- [40] 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)
- [41] 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)
- [42] THE SEEBECK COEFFICIENT OF TiO<sub>2</sub> THIN FILMS, Diana Mardare, J. Optoelectron. Adv. M.,7(2), 721-725 (2005).
- [43] COMPARISON OF THE DIELECTRIC PROPERTIES FOR DOPED AND UNDOPED TiO<sub>2</sub> THIN FILMS, D. Mardare, G. I. Rusu, J. Optoelectron. Adv. M., 6(1) 333-336 (2004).
- [44] 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).
- [45] Optical Constants of Heat-Treated TiO<sub>2</sub> Thin Films, Diana Mardare, Materials Science and Engineering B, 95/1, 83-87 (2002).
- [46] 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).
- [47] 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)

- [48] ON THE STRUCTURE AND OPTICAL DIELECTRIC CONSTANTS OF TiO<sub>2</sub> SPUTTERED THIN FILMS, Diana Mardare, G.I. Rusu, J. Optoelectron. Adv. M., 3(1) 95-100 (2001)
- [49] ON THE STRUCTURAL PROPERTIES AND OPTICAL TRANSMITTANCE OF TiO<sub>2</sub> R.F. SPUTTERED THIN FILMS, Diana Mardare, M. Tasca, M. Delibas and G. I. Rusu, Applied Surface Science, 156(1), 200-206 (2000).
- [50] STRUCTURAL AND ELECTRICAL PROPERTIES OF TiO<sub>2</sub> RF SPUTTERED THIN FILMS, Diana Mardare and G. I. Rusu, Materials Science and Engineering B 75(1), 68- 71 (2000).
- [51] ON THE OPTICAL CONSTANTS OF TiO<sub>2</sub> THIN FILMS. ELLIPSOMETRIC STUDIES., Diana Mardare and Alexandru Stancu, Materials Research Bulletin, 35 (12), 2017- 2025 (2000).
- [52] OPTICAL DISPERSION ANALYSIS OF TiO<sub>2</sub> THIN FILMS BASED ON VARIABLE - ANGLE SPECTROSCOPIC ELLIPSOMETRY MEASUREMENTS, Diana Mardare and Peter Hones, Materials Science and Engineering B, 68(1), 42-47 (1999)
- [53] 1. 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)
- [54] 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).
- [55] 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)
- [56] 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)
- [57] 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).
- [58] 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).

05.04.2016

Prof. Diana MARDARE PhD

