Curriculum vitae

Personal information

Name/Surname	**Leca Victor**
Address	126A, Erou Iancu Nicolae Street, RO-077190, Bucharest, Romania
Phone no.	+4.0212690770 (office) Hand phone: +4.0752270189
E-mail	v.leca@alumnus.utwente.nl or victor.leca@imt.ro
Nationality	Romanian
Birth Date	November 5th, 1966
Sex	Male
Work place	National Institute for Research and Development in Microtechnologies – (IMT-Bucharest), Laboratory for Molecular Nanotechnology
Occupation	Senior researcher

Professional Experience

Period	1994 – 1997
Position	*chemical engineer and assistant researcher*
Employer name and address	Research and Development Institute for Electrical Engineering (ICPE SA), Bucharest.
Main activity	Scientific research on bulk synthesis and characterization of high-T_C superconductors
Period	1998
Position	*assistant Professor*
Employer name and address	University Polytechnic of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest
Main activities	teaching and research
Period	01.1999 – 12.2003
Position	*Ph.D. and postdoctoral research fellow*
Employer name and address	University of Twente, Faculty of Applied Physics, Low Temperature Division and MESA+ Research Institute, Enschede, The Netherlands.
Main activity	research on thin film growth by pulsed laser ablation (PLD), characterization and applications of copper based oxides
Period	01.2004 – 12.2011
Position	*Postdoctoral research fellow*
Employer name and address	Universität Tübingen, Physikalisches Institut, Experimentalphysik II Department, Tübingen, Germany
Main activities	fabrication and characterization of thin films and superlattices with superconducting, ferromagnetic, dielectric, ferroelectric properties; training of students in thin film growth methods (PLD, sputtering, e-beam evaporation), and characterization tools (X-ray diffraction, Reflection High Energy Electron Diffraction, Atomic Force Microscopy, transport and magnetic measurements at low temperatures), optical lithography.

Period	06.2006 - present
Position	*scientific researcher III*
Main Activities	the fabrication and characterization of thin films of complex oxides.
Employer name and address	University "Politehnica" of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest
Activity	Scientific research

Period	03.2011 - present
Position	*scientific researcher II*
Main Activities	fabrication of complex oxides, their structural characterization, electrical transport and magnetic properties, and applications to devices for renewable energy, medicine, space.
Employer name and address	National Institute for Research and Development in Microtechnologies, IMT - Bucharest
Activity	Scientific research; development of electronic devices
OBS:	*Child care break between 15.02.2009-12.07.2010*

Education

Period	1989 - 1994
Qualification/ Diploma	Chemistry engineer/**Bachelors Degree**
Studied disciplines	Inorganic chemistry, materials science, chemical engineering
Institution Name	University “Politehnica” of Bucharest, Faculty of Industrial Chemistry, Materials Science Department, Bucharest

Period	1995 - 1996
Qualification/ Diploma	Materials science**/Master degree**
Studied disciplines	Materials science, inorganic chemistry
Institution Name	University “Politehnica” of Bucharest, Faculty of Industrial Chemistry, Materials Science Department, Bucharest

Period	1999-2003
Qualification/ Diploma	Materials science**/PhD diploma**
Studied disciplines	pulsed laser ablation (PLD), characterization (structural, morphological, transport properties) and applications of copper based oxides
Institution Name	University of Twente, Faculty of Applied Physics, Low Temperature Division and MESA+ Research Institute, Enschede, The Netherlands

Language competencies

Mother tongue	**Romanian**
Known foreign languages	**English, Italian, French, German, Dutch**

Self-evaluation	**Understanding**		**Speaking**		**Writing**
European standard	Listening	Reading	Conversation	Oral speech	Writing
English	Experienced user	Experienced user	Experienced user	Experienced user	Experienced user
Italian	Average user	Average user	Average user	Average user	Average user
French	Average user	Average user	Average user	Average user	Average user
German	Beginner user	Beginner user	Beginner user	Beginner user	Beginner user
Dutch	Beginner user	Beginner user	Beginner user	Beginner user	Beginner user

Additional information

Scholarships/grants:

- 1994: TEMPUS undergraduate scholarship (3 months), Centre de Recherches de l'Industrie Belge de la Ceramique-CRIBC, Mons, Belgium. *Research topic*: Structural and mechanical properties of Hot-Pressed Si_3N_4.
- 1995: TEMPUS research grant (10 months), Politecnico di Torino, Dipartimento di Scienza dei Materiali e Ingegneria Chimica, Torino, Italy. *Research topic*: Phase diagram of the $BaO\text{-}Bi_2O_3$ binary system: synthesis and characterization of new phases.
- 1998: NUFFIC research grant (3 months) and Romanian Ministry of Education research grant (9 months), University of Twente, Faculty of Applied Physics, Low Temperature Division, Enschede, The Netherlands. *Research topic*: Synthesis, structural and electrical transport properties of new phases in the SnO_2-SrO(BaO)-CuO systems.
- 1999: European Science Foundation (ESF) research grant (1 week), Oxfordshire Neutron Diffraction Laboratory, UK. *Research topic*: Oxygen network in $(Ba,Sr)CuO_2$-$CaCuO_2$ thin film superlattices.
- 2004: European Science Foundation (ESF) research grant (2.5 months) within PiShift program, University of Twente, Inorganic Materials Science Group, The Netherlands. *Research topic*: Development of technology for fabrication of $Sr_{1-x}La_xCuO_2$-based Josephson junctions.
- 2013: German Research Foundation (DFG) research grants (2 grants of two weeks each) at University of Tübingen, Institute of Physics, Tübingen, Germany. Research topic: Fabrication and transport properties of Superconducting Quantum Interference Devices (SQUIDs) based on $Sr_{1-x}La_xCuO_2$ compounds.

SCIENTIFIC ACTIVITY:

- 18 ISI published papers (in Physical Review B, Physical Review Letters, Applied Physics Letters, Journal of Applied Physics, Applied Physics A, etc), 2 proceedings papers
- 1 book
- 1 patent
- 16 oral presentations and 12 posters (one selected as the best poster) at international and national conferences
- more than 10 national or international funded research projects as project manager or member of the research team

TOPICS OF INTEREST:

- Synthesis and physical-chemical characterization of low- or high-critical temperature superconductors, dielectric, ferroelectric, and ferromagnetic materials, in bulk or thin films;
- development of new synthesis methods for obtaining thin films of complex oxides with controllable morphological, structural and electrical transport properties suitable for their application to fabrication of planar heterostructures by pulsed laser ablation ($YBa_2Cu_3O_7$, $Sr_{1-x}La_xCuO_2$, MgB_2, $SrRuO_3$, $BaTiO_3$, $SrTiO_3$, $La_{1-x}Ce_xMnO_3$, $La_{1-x}Ca_xMnO_3$) or sputtering (Nb) or devices based on these materials;
- development of surface chemical and physical etching methods for single crystal substrates (e.g., $SrTiO_3$, $NdGaO_3$, LSAT, $KTaO_3$, $SrLaAlO_3$, etc.) in order to control the surface terminating layer and for yielding atomically flat surfaces;
- development or improvement of the technology for the fabrication of grain boundary or ramp-type Josephson junctions based on $YBa_2Cu_3O_7$ or $Sr_{1-x}La_xCuO_2$;
- characterization tools: X-ray diffraction, X-ray fluorescence, Reflection High Energy Electron Diffraction, neutron diffraction, Scanning Electron Microscopy, Transmission Electron Microscopy, Atomic Force Microscopy, Energy dispersive X-ray spectroscopy, Differential thermal analysis;
- electrical transport and magnetic properties measurements;
- optical litography.

Relevant scientific activity

A. Participation in funded research projects (selection)

Name of the project and time scale	Funding organization	Role
Bolometers for space applications in middle and long IR, 2012-2014	Romanian Space Agency	MRT
Immunoassay Lab-on-a-chip for cellular apoptosis study, 2012-2015	Romanian Ministry of Education and Research	MRT
Experimental studies on the order parameter symmetry of $Sr_{1-x}La_xCuO_2$ (x=0.15-0.175) thin films using SQUIDs, 2011-2014	Romanian Ministry of Education and Research	PL
High-T_c ramp-type Josephson junctions and SQIFS, 2008-2011	Germany Science Foundation (DFG)	MRT
Order parameter symmetry in electron-doped high temperature superconductors, 2007-2011	Germany Science Foundation (DFG)	MRT
Development of the superconducting quantum interference device (SQUID) technology for magnetocardiography, 2007-2010	Romanian Ministry of Education and Research	PL
$Sr_{1-x}La_xCuO_2$ - based (x=0-0.20) planar Josephson junctions, 2006-2008	Romanian Ministry of Education and Research	PL
Superconducting Microtraps (TRR21/Project C2), 2005-2010	Germany Science Foundation (DFG)	MRT
Nano-engineering of oxide heterostructures by PLD, 2004-2005	Baden Würtemberg Government, Germany.	PL
KATO-Micro antenna (20K0302K), 2004-2005	Federal Ministry of Economics and Labor (BMWA), Germany	MRT

Abbreviations: MRT - member of the research team, PL - project leader

B. Articles published in ISI indexed international journals:

1. S. Scharinger, M. Turad, A. Stöhr, V. Leca, E. Goldobin, R. G. Mints, D. Koelle, and R. Kleiner, Magnetic field dependence of the critical current in $YBa_2Cu_3O_{7-x}$/Au/Nb ramp-zigzag Josephson junctions, *Physical Review B* **86**, 144531 (2012)
2. J. Tomaschko, S. Scharinger, V. Leca, J. Nagel, M. Kemmler, T. Selistrovski, S. Diebold, J. Jochum, R. Kleiner, and D. Koelle, Phase-sensitive evidence for d_{x2-y2}-pairing symmetry in the parent-structure high-Tc cuprate superconductor $Sr_{1-x}La_xCuO_2$, *Physical Review B* **86**, 094509 (2012)
3. J. Tomaschko, V. Leca, T. Selistrovski, S. Diebold, J. Jochum, R. Kleiner, and D. Koelle, Properties of the electron-doped infinite-layer superconductor $Sr_{1-x}La_xCuO_2$ epitaxially grown by pulsed laser deposition, *Physical Review B* **85**, 024519 (2012)
4. J. Tomaschko, V. Leca, T. Selistrovski, R. Kleiner, and D. Koelle, Importance of grain- boundary Josephson junctions in the electron-doped infinite layer cuprate superconductor $Sr_{1-x}La_xCuO_2$, *Physical Review B* **84**, 214507 (2011)
5. J. Tomaschko, C. Raisch, V. Leca, T. Chassé, R. Kleiner, and D. Koelle, Electric transport across $Sr_{1-x}La_xCuO_2$/Au/Nb planar tunnel junctions and x-ray photoelectron and Auger-electron spectroscopy on $Sr_{1-x}La_xCuO_2$ thin films, *Physical Review B* **84**, 064521 (2011)
6. V. Leca and E. Andronescu, Improved surface morphology of (110) $NdGaO_3$ substrates by thermal and chemical treatments, *Romanian Journal of Materials* **41**, 127-131 (2011)
7. V. Leca and E. Andronescu, Properties of $BaTiO_3$ thin films grown by laser ablation, *Romanian Journal of Materials* **40**, 149-152 (2010)
8. V. Leca, D. Neagu, E. Stefan, and E. Andronescu, Growth mechanism and properties of $YBa_2Cu_3O_7$ thin films deposited by laser ablation on (001) $SrTiO_3$, *Romanian Journal of Materials* **40**, 365-369, (2010)
9. R. Werner, C. Raisch, V. Leca, V. Ion, S. Bals, G. Van Tendeloo, T. Chassé, R. Kleiner, and D. Koelle, Transport, magnetic, and structural properties of $La_{0.7}Ce_{0.3}MnO_3$ thin films: Evidence for hole-doping, *Physical Review B* **79**, 054416 (2009)
10. V. Leca, G. Visanescu, C. Back, R. Kleiner, and D. Koelle, Growth mechanism, microstructure and transport properties of $Sr_{1-x}La_xCuO_2$ (x=0.10-0.15) thin films, *Applied Physics A* **93**, 779 (2008)
11. V. Leca, S. Bals, G. Van Tendeloo, D. H. A. Blank, and G. Rijnders, Superconducting $Sr_{1-x}La_xCuO_2$ (x=0.10-0.20) thin films with improved crystallinity grown by pulsed laser ablation, *Applied Physics Letters* **89**, 92504 (2006)
12. Ariando, D. Darminto, H. -J. H. Smilde, V. Leca, D. H. A. Blank, H. Rogalla, and H. Hilgenkamp, Phase-sensitive order parameter symmetry test experiments utilizing $Nd_{2-x}Ce_xCuO_{4-y}$/Nb zigzag junctions, *Physical Review Letters* **94**, 167001 (2005)
13. S. Bals, G. van Tendeloo, G. Rijnders, M. Huijben, V. Leca, and D. H. A. Blank, Transmission electron microscopy on interface engineered superconducting thin films, *IEEE Transactions on Applied Superconductivity* **13**, 2834 (2003)
14. C. Rusu, S. Sedky, B. Parmentier, A. Verbist, O. Richard, B. Brijs, L. Geenen, A. Witvrouw, F. Lärmer, F. Fischer, S. Kronmüller, V. Leca, and B. Otter, New low-stress PECVD poly-SiGe layers for MEMS, *Journal of Microelectromechanical Systems,* **12**, 816 (2003)
15. A. C. Galca, E. S. Kooij, H. Wormeester, C. Salm, V. Leca, J. H. Rector, and B. Poelsema, Structural and optical characterisation of porous anodic aluminum oxide, *Journal of Applied Physics* **94**, 4296 (2003)
16. S. Bals, G. van Tendeloo, G. Rijnders, D. H. A. Blank, V. Leca, and M. Salluzzo, Optimization of superconducting thin films by TEM, *Physica C* **372-376**, 711 (2002)
17. A. Brinkman, D. Mijatovich, G. Rijnders, V. Leca, H. J. H. Smilde, I. Oomen, A. A. Golubov, F. Roesthuis, S. Harkema, H. Hilgenkamp, D. H. A. Blank, and H. Rogalla, Superconducting thin films of MgB_2 on Si by pulsed laser deposition, *Physica C* **353**, 1 (2001)
18. G. Rijnders, G. Koster, V. Leca, D. H. A. Blank, and H. Rogalla, Imposed layer-by-layer growth with pulsed laser interval deposition, *Applied Surface Science* **168**, 223 (2000)

C. Articles published in international journals, indexed in international databases and/or articles published in conference proceedings:

1. V. Leca, G. Koster, G. Rijnders, K. Verbiest, G. van Tendeloo, D. H. A. Blank, and H. Rogalla, Deposition, structure and characterization of superlattices from Ba-Sr-Ca-Cu-O systems, *Proceedings to the 10th CONSILOX Conference, Romania*, 198 (2000)

2. V. Leca, G. Rijnders, G. Koster, D. H. A. Blank, and H. Rogalla, Wet etching methods for perovskite substrates, *MRS Symposium* **587**, O3.6.1 (2000)
3. V. Leca, Sintering behavior of Si_3N_4, *ICPE Journal* **3-4**, 15 (1997)

D. Conference contributions:

D1. Oral presentations

1. V. Leca, J. Tomaschko, D. Wang, M. Danila, W. A. Bik, R. Kleiner, and D. Koelle, Superconducting $Sr_{0.85}La_{0.15}CuO_2$ bicrystal grain boundary Josephson junctions, 11th European Conference on Applied Superconductivity - EUCAS, Genova, Italy (2013)
2. V. Leca, J. Tomaschko, M. Danila, W. A. Bik, A. Oprisa, R. Kleiner, and D. Koelle, Structural and electrical properties in superconducting $Sr_{0.85}La_{0.15}CuO_2$-based nanostructures, International Conference on Superconductivity and Magnetism-ICSM 2012, Istanbul, Turkey (2012)
3. V. Leca, G. Visanescu, S. Bals, Ch. Back, G. Van Tendeloo, R. Kleiner, and D. Koelle, Growth mechanism, microstructure, and electrical transport properties of $Sr_{1-x}La_xCuO_2$ thin films grown by PLD, 9th International Conference on Laser Ablation - COLA 2007, Tenerife, Spain (2007)
4. V. Leca, G. Rijnders, S. Bals, G. van Tendeloo, and D. H. A. Blank, Modified doping range for the superconducting phase in $Sr_{1-x}La_xCuO_2$ (x=0.1-0.2) thin films, Interfaces in Oxide Thin film Structures – 2nd THIOX Conference, Santa Margherita Ligure, Italy (2005)
5. V. Leca, G. Rijnders, D. H. A. Blank, H. Rogalla, S. Bals, and G. van Tendeloo, Growth and properties of $Sr_{1-x}La_xCuO_2$ (x=0.1-0.2) thin films, E-MRS Conference, Strasbourg, France (2002)
6. V. Leca, G. Rijnders, D. H. A. Blank, H. Rogalla, S. Bals, and G. van Tendeloo, Properties of $Sr_{1-x}La_xCuO_2$ thin films grown by PLD, 3rd European Conference on Advanced Materials and Technologies, Bucuresti, Romania (2002)
7. V. Leca, G. Rijnders, M. Huijben, D. H. A. Blank, H. Rogalla, S. Bals, and G. van Tendeloo, Imposed layer-by-layer growth of epitaxial $ReBa_2Cu_3O_{7-x}$ thin films with pulsed laser interval deposition, 2nd European Conference on Advanced Materials and Technologies, Bucuresti, Romania (2001)
8. D. H. A. Blank, G. Rijnders, G. Koster, V. Leca, and H. Rogalla, Imposed layer-by-layer growth of high temperature superconductors with pulsed laser interval deposition, Superconductivity Group Annual Conference, Birmingham, UK (2001)
9. V. Leca, D. H. A. Blank, G. Rijnders, and H. Rogalla, Deposition, structure and electrical properties of superlattices from Ba-Sr-Ca-Cu-O system, 10th CONSILOX Conference, Alba Iulia, Romania (2000)
10. V. Leca, D. H. A. Blank, G. Rijnders, and H. Rogalla, Etching methods for perovskite substrates, 10th CONSILOX Conference, Alba Iulia, Romania (2000)
11. G. Rijnders, D. H. A. Blank, G. Koster, V. Leca, and H. Rogalla, Imposed layer-by-layer growth with pulsed laser interval deposition, E-MRS Conference, Strasbourg, France (2000)
12. V. Leca, D. H. A. Blank, G. Rijnders, and H. Rogalla, Structure and properties of $(Sr,Ca)CuO_2$-$BaCuO_2$ superlattices grown by PLD, E-MRS Conference, Strasbourg, France (2000)
13. G. Rijnders, D. H. A. Blank, G. Koster, V. Leca, and H. Rogalla, Initial growth of $SrRuO_3$ on vicinal $SrTiO_3$ substrates using pulsed laser deposition, 7th International Workshop on Oxide Electronics, Les Diablerets, Switzerland (2000)
14. G. Rijnders, D. H. A. Blank, G. Koster, V. Leca, and H. Rogalla, Manipulating the nucleation and growth of ReBaCuO, MRS Fall Meeting, Boston, USA (2000)
15. D. H. A. Blank, V. Leca, G. Rijnders, and H. Rogalla, Wet etching methods for perovskite substrates, 12th American Conference on Crystal Growth and Epitaxy, Colorado, USA (2000)
16. M. Chirculescu and V. Leca, Electrical properties of $YBa_2Cu_3O_{7-x}$ doped with Na, Nd, and Ta, National Conference of Electrical and Magnetic Materials, Cluj Napoca, Romania (1993)

D2. Posters

1. J. Tomaschko, V. Leca, R. Kleiner, and D. Koelle, Superconducting $Sr_{1-x}La_xCuO_2$ (x=0.125) thin films and junctions, Applied Superconductivity Conference, Washington DC, USA (2010)
2. A. Blank, M. Turad, Ch. Maurer, V. Leca, Ch. Back, R. Kleiner, and D. Koelle, Ramp-type Josephson junctions with $YBa_2Cu_3O_7$ and Nb electrodes, Deutsche Physikalische Gesellschaft (DFG) Conference on Condensed Matter, Dresden, Germany (2009)

2. R. Werner, V. Leca, Ch. Back, Ch. Raisch, T. Chasse, R. Kleiner, and D. Koelle, Pulsed laser deposited $La_{0.7}Ce_{0.3}MnO_3$ thin films: dependence of the properties on growth parameters, Deutsche Physikalische Gesellschaft (DFG) Conference on Condensed Matter, Dresden, Germany (2008)
3. G. Visanescu, V. Leca, S. Bals, G. Rijnders, D. H. A. Blank, R. Kleiner, and D. Koelle, Properties of $Sr_{1-x}La_xCuO_2$ thin films grown by pulsed laser ablation, XIII International Workshop on Oxide Electronics, Ischia, Italy (2006)
4. V. Leca, G. Rijnders, D. H. A. Blank, S. Bals, G. Visanescu, R. Kleiner, and D. Koelle, New method to obtain superconducting $Sr_{1-x}La_xCuO_2$ thin films by PLD, Deutsche Physikalische Gesellschaft (DFG) Conference on Condensed Matter, Dresden, Germany (2006)
5. V. Leca, G. Rijnders, S. Bals, D. H. A. Blank, N. Schopohl, R. Kleiner, and D. Koelle, Single phase infinite-layer type $Sr_{1-x}La_xCuO_2$ thin films grown by PLD, 7th European Conference on Applied Superconductivity (EUCAS'05), Vienna, Austria (2005)
6. V. Leca, G. Rijnders, D. H. A. Blank, S. Bals, G. van Tendeloo, and N. Schopohl, Superconductivity in PLD grown $Sr_{1-x}La_xCuO_2$ thin films by a new synthesis approach, Spectroscopies of Novel Superconductors Conference, Sitges, Spain (2004)
7. V. Leca, G. Rijnders, D. H. A. Blank, and H. Rogalla, Initial growth modes of $ACuO_2$ thin films deposited on $NdGaO_3$, 5th European Conference on Applied Superconductivity, Copenhagen, Denmark (2001).
8. V. Leca, G. Rijnders, G. Koster, D. H. A. Blank, and H. Rogalla, Wet etching methods for perovskite substrates, MRS Fall Meeting, Boston, USA (2000) poster (selected best poster)
9. V. Leca, I. Pasuk, and S. Cotescu, Influence of sintering history on electrical behaviour of Ca and Sr-doped $BaBiO_3$, IVth Ceramic Congress, Eskisehir, Turkey (1998)
10. V. Leca and D. Libert, Sintering behaviour of commercial Si_3N_4 powders, Xth National Conference of Chemistry, Bucharest, Romania (1997)
11. V. Leca and S. Ronchetti, $BaO\text{-}Bi_2O_3$ system, Xth National Conference of Chemistry, Bucharest, Romania (1997)
12. M. Chirculescu and V. Leca, The influence of Na_2O on the superconducting properties of $YBa_2Cu_3O_{7-x}$, National Conference of Physics, Cluj Napoca, Romania (1994)

E. Patents

1. Title: In-situ fabrication method of ramp-type Josephson junctions based on high critical temperature superconducting thin films
   Inventors: V. Leca, E. Andronescu. Assignee: University "Politehnica" of Bucharest;

F. Books

1. V. Leca, *Heteroepitaxial growth of copper oxide superconductors by pulsed laser deposition*, ISBN 9036519284, Ed. Printpartners Ipskamp, Olanda (2003)

G. Seminars or invited talks

1. Structural defects in High Temperature Superconductor thin films - University of Twente, 11.2001;
2. Challenges in PLD growth of $Sr_{1-x}La_xCuO_2$ (x=0.1-0.2), an n-type IL superconductor - University of Twente, 11.2002;
3. Epitaxial growth of p- and n-type HTSc materials by pulsed laser (interval) deposition - University of Tübingen, 12.2003;
4. Growth manipulations by means of Pulsed Laser Deposition - University of Tübingen, 07.2004;
5. Methods of improving the surface morphology for substrates with layered structure - University of Tübingen, 10.2004;
6. Growth modes and growth manipulation of epitaxial thin films - University of Tübingen, 12.2004;
7. Reflection High Energy Electron Diffraction (RHEED): Growth study and manipulation - University of Tübingen, 03.2005;
8. Pulsed Laser Deposition as a tool for growth of complex oxide films - University of Tübingen, 06.2005;
9. Thin film growth and analysis: from growth to devices - University of Tübingen, 08.2005;
10. Experimental studies on the symmetry of the order parameter in $Sr_{1-x}La_xCuO_2$ superconducting compounds – National Institute for R&D in Microtechnologies, Bucharest, 03.2012.

H. Supervision (in part or full) of the research activity for the folowing B.Sc. or Master dissertations:

- Pulsed laser deposition and properties of cuprate superconductors; G. Visanescu, University of Tübingen, Institute of Physics, Department of Experimental Physics II, Tübingen, Germany and University of Bucharest, Faculty of Physics (2007) –Master thesis;
- Fabrication of ramp-type Josephson junction from $YBa_2Cu_3O_7$ high temperature superconductor; M. Turad, University of Tübingen, Institute of Physics, Department of Experimental Physics II, Tübingen, Germany (2007)–Master thesis;
- Structure-properties corelation for $La_{0,7}Ca_{0,3}MnO_3$ thin films and $YBa_2Cu_3O_{7-\delta}/La_{0,7}Ca_{0,3}MnO_3$ bilayers grown by pulsed laser ablation; D. Neagu, University Politehnica of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest, Romania (2008)–B.Sc. thesis;
- Preliminary studies for the fabrication of Josephson junctions based on $YBa_2Cu_3O_{7-\delta}$ and $PrBa_2Cu_3O_{7-\delta}$ thin films grown by pulsed laser ablation; E. Stefan, University Politehnica of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest, Romania (2008)–B.Sc. thesis;
- Preparation and characterization of $La_{0.7}Ce_{0.3}MnO_3$ thin films; R. Werner, University of Tübingen, Institute of Physics, Department of Experimental Physics II, Tübingen, Germany (2008)–Master thesis.

I. Supervision (in part) of the research activity for the folowing Ph.D. dissertations:

- Fabrication of dc-SQUIDs based on all high-T_c superconductor ramp-type Josephson junctions; M. Turad, University of Tübingen, Institute of Physics, Department of Experimental Physics II, Tübingen, Germany (2007-2012);
- Phase-sensitive order parameter symmetry test experiments utilizing $Sr_{1-x}La_xCuO_2$ (x=0.10-0.15) based junctions; J. Tomascko, University of Tübingen, Institute of Physics, Department of Experimental Physics II, Tübingen, Germany (2008-2012);
- Preparation and characterization of $La_{0.7}Ce_{0.3}MnO_3/YBa_2Cu_3O_7$ bilayers; R. Werner, University of Tübingen, Institute of Physics, Department of Experimental Physics II, Tübingen, Germany (2008-2012);
- Nanostructures based on oxide superconductors: synthesis and characterisation; G. Stanciu, University Politehnica of Bucharest, Faculty of Applied Chemistry and Materials Science, Bucharest, Romania (2010-2013).

J. Other info

Reviewer for *Physica C* and *Optics Communications* (both Elsevier journals), and for the conferences: 9th International Conference on Laser Ablation–COLA 2007, Tenerife, Spain (2007); 7th European Conference on Applied Superconductivity (EUCAS'05), Vienna, Austria (2005); Interfaces in Oxide Thin film Structures, Santa Margherita Ligure, Italy (2005), and IEEE International Semiconductor Conference (since 2012); expert evaluator for the Romanian Ministry of Education; member of the European Society for Applied Superconductivity (ESAS).
Web of Science info: number of ISI papers: 18; Hirsch index: 8; number of citations: 223.

Abilities:

Analytical and research skills; flexibility and adaptability in managing multiple priorities; communications skills (listening, verbal, written); management skills; problem solving; creativity; team player; multicultural awareness; computer and technical skills.

Date: 05.02.2014 Victor Leca