Europass Curriculum Vitae

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Work experience	17 years
Dates	1996-2000; 2000-2001; 2001-2006; 2006-present
Occupation or position held	Preparatory; Assistant; Lecturer, Assoc. Prof. PhD. Eng.
Name and address of employer	**Alexandru Ioan Cuza University of Iasi, Romania**
Dates	2004-present
Occupation or position held	**Maître de Conférences invité**
Name and address of employer	**Université des Sciences et Technologies de Lille, France** Laboratoire de Physique des Lasers, Atomes et Molécules
Personal skills and competences	
Organisational skills and competences	• Contribute in organization and co-organization of several National and International Conferences, Summer Schools or Workshops • Referent: Physics of Plasmas and IEEE Transactions on Plasma Science, • Expertise and assessment of national projects
Teaching activities (courses)	**1. Regional Air Pollution and Global Climate Changes** **2. Optical spectroscopy: methods and instrumentation** **3. Applied spectroscopy** **4. Optics** **5. Lasers and spectroscopy**
Scientific research activity	• Published **47 ISI papers**; **H-index 11**. • Competence areas: **Lasers, Optics, Spectroscopy, Environment, Physics of Plasmas**
Additional information	leader of the **Atmospheric Optics, Spectroscopy and Lasers Laboratory (LOA-SL)** http://spectroscopy.phys.uaic.ro/current.html
Network	Member of: RADO /**ACTRIS** and RADO / **AERONET** networks.

Appendices

Books

1. G. Strat, M. Strat, S. Gurlui, C. Focsa, D. Dimitriu, Self organization in nanomaterials, vol 5, p. 53-91, Ed. INOE (2007).
2. S. Gurlui, M. Delibaş, Optics. Exercises and problems, ed. TehnoPress, Iaşi, 445p (2005).
3. S. Gurlui, D. Dimitriu, Plasma double layers, ed. TehnoPress, Iaşi, 346p (2005).
4. S. Stratulat, S. Gurlui, Medical applications of linear polarized Vis/IR light, ed. TehnoPress, Iaşi, 208p (2003).

Coordinated Research Projects

1. **ELIAN: Extreme Light Induced Ablation Plasma Jet And Nano-patterning,** ELI-NP, CAPACITIES / RO-CERN E03/30.06.2014
2. **DARLIOES: Fast Laser Imaging, Detection and Ranging Of Aerosol Emissions In Aircraft Plumes,** Romanian Space Agency (ROSA) within Space Technology and Advanced Research (STAR) Program. Project nr. 98/29.11.2013, Director Gurlui Silviu
3. **"Dynamics of laser ablation plasmas: fundamentals and applications to pulsed laser deposition of thin films":** bilateral project ANCS-ANR (Romania – France), ID project PN-II-CT-RO-FR-2012-1-0058; 2013-2014.
4. **"The study of polymer-laser radiation interactions in controlled atmosphere. Laser ablation nanostructured thin films layers. Applications**" PN-II-ID-PCE-2011-3-0650, 2011-2014.
5. **"Join Physicist in Festival (My Physics, My World)"** FP7-PEOPLE, 244978/2009, 2009.
6. **"Romanian Atmospheric Research 3D Observatory (RADO)"** funded by Innovation Norway, STVES 115266/2008; 2008-2010.
7. **"New methods and technologies to investigate complex plasma nanostructures obtained through laser ablation. Technological applications"** CEEX type II – Excellence research projects for young researchers, 5879/2006, ET 70, 2006-2008.
8. **"Romanian Network of LIDAR systems"** PN II Cooperation, 31-002/2007, 2007-2010.
9. **"Study of the physical processes and phenomena from plasma double layers and biological cell membranes. Analogies and applications"** CNCSIS, 33373/2004, AT 71, 2004-2005.
10. **"Study of the processes and phenomena from electrical discharges (un-homogeneous) in atomic and molecular gases. Theoretical models and applications"** CNCSIS, 33531/2002, AT 284, 2002-2003.

Articles published in ISI reviews

1. O. Pompilian, G. dascalu, I. Mihaila, S. Gurlui., M. Olivier, P. Nemec, V. Nazabal, N. Cimpoesu, C. Focsa*, Pulsed laser deposition of rare-earth-doped gallium lanthanum sulphide chalcogenide glass thin film,* APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, Volume: 117 Issue: 1 Pages: 197-205, DOI: 10.1007/s00339-014-8359-6 (2014)
2. M. M. Cazacu, A. Timofte, F. Unga, B. Albina, S. Gurlui, *Aeronet data investigation of the aerosol mixtures over iasi area, one-year time scale overview*, Journal of Quantitative Spectroscopy and Radiative Transfer, accepted 2014
3. S. Gurlui, O. Niculescu, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Elementary processes in the dynamics of two simultaneously excited fireballs in plasma, International Journal of Mass Spectrometry Volume: 365 Special Issue: SI Pages: 42-47 (2014)
4. G. Dascalu, O. Pompilian, B. Chazallon, V. Nica, O. F. Caltun, S. Gurlui, C. Focsa, Rare earth doped cobalt ferrite thin films deposited by PLD, Applied Physics A, 110 (4), pp.: 915-922 (2013) DOI10.1007/s00339-012-7196-8
5. G. Dascalu, G. Pompilian, B. Chazallon, O. F. Caltun, S. Gurlui, C. Focsa, Femtosecond pulsed laser deposition of cobalt ferrite thin films, Applied Surface Science, Volume 278, p. 38-42 (2013) 10.1016/j.apsusc.2013.02.107
6. *Florin Unga, Marius Mihai Cazacu, Adrian Timofte, Diana Bostan, Augustin Mortier, Dan Gheorghe Dimitriu, Silviu Gurlui, Philippe Goloub, Study of tropospheric aerosol types over Iasi, Romania, during summer of 2012*, Environmental Engineering and Management Journal, Vol. 12, No. 2, 297 (2013)
7. S. Gurlui, G. O. Pompilian, P. Nemec, V. Nazabal, M. Ziskind, C. Focsa, *Plasma Diagnostics in Pulsed Laser Deposition of GaLaS Chalcogenides*, Appl. Surf. Science, 278, Pages 352-356 (2013)
8. L. Balika, C. Focsa, S. Gurlui, S. Pellerin, N. Pellerin, D. Pagnon and M. Dudeck, *Laser ablation in a running hall effect thruster for space propulsion*, Appl. Phys A, DOI 10.1007/s00339-012-7211-0, (2012)
9. P. Nica, M. Agop, S. Gurlui, C. Bejinariu, C. Focsa, *Characterization of Aluminum Laser Produced Plasma by Target Current Measurements*, Jpn. J. Appl. Phys. 51, 106102 (2012)
10. L. Balika, C. Focsa, S. Gurlui, S. Pellerin, N. Pellerin, D. Pagnon and M. Dudeck*, Laser-induced breakdown spectroscopy in a running Hall Effect Thruster for space propulsion*, Spectrochimica Acta Part B 74-75, 184-189 (2012)
11. M. M. Cazacu, A. Timofte, A., C. Talianu, D. Nicolae, M. N. Danila, F. Unga, D.G. Dimitriu, S. Gurlui, *Grímsvötn Volcano: Atmospheric volcanic ash cloud investigations, modelling-forecast and experimental environmental approach upon the Romanian area*, Journal of Optoelectronics and Advanced Materials ,14 (5-6) pp. 517 - 522 (2012)
12. S. Gurlui, C. Focsa, *Laser Ablation Transient Plasma Structures Expansion in Vacuum*, IEEE Transactions on Plasma Science, Volume: PP, Issue: 99, Publication Year: (2011), Digital Object Identifier: 10.1109/TPS.2011.2151884
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14. A. Largeanu, G.O. Pompilian, D.G. Galusca, M. Agop, S. Gurlui, *Pulsed laser deposition of NI thin films on metallic substrate*, University Politehnica of Bucharest Scientific Bulletin-Series a-Applied Mathematics and Physics, 73(3):195-202, (2011)
15. S. Gurlui, C. Focsa, Plasma Science, *Laser Ablation Transient Plasma Structures Expansion in Vacuum*, IEEE Transactions on Volume: PP, Issue: 99 , DOI: 10.1109/TPS.2011.2151884, Publication Year: (2011), Page(s): 1 – 2.
16. A. Timofte, M. M. Cazacu, R. Radulescu, C. Talianu, D. Dimitriu, S. Gurlui, *Romanian LIDAR investigation of the EYJAFJALLAJOKULL volcanic ash*, Environmental Engineering and Management Journal, Vol.10, No. 1, 91-97 (2011)
17. M. M. Cazacu, A. Timofte, D. Dimitriu, S. Gurlui, *Complementary atmospheric urban pollution studies in the north-east region of Romania, Iasi County*, Environmental Engineering and Management Journal, Vol.10, No. 1, 139-145 (2011)

18. M. Agop, P. E. Nica, S. Gurlui, C. Focsa, V. P. Paun and M. Colotin, *Implications of an extended fractal hydrodynamic model*, THE EUROPEAN PHYSICAL JOURNAL D - ATOMIC, MOLECULAR, OPTICAL AND PLASMA PHYSICS, Volume 56, Number 3, 405-419, (2010) DOI: 10.1140/epjd/e2009-00304-5
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20. R. H. Cimpoesu, G. O. Pompilian, C. Baciu, N. Cimpoesu, C. Nejneru, M. Agop, S. Gurlui, C. Focsa, *Pulsed laser deposition of poly (L-Lactide) acid on nitinol substrate*, *Optoelectronics and Advanced Materials-Rapid Communications* Vol 4, ISS.12, p.2148-2153 (2010)
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30. G. Strat, S. Gurlui, M. Strat, A. Farcas, S. Stratulat, *Studies of the self-organization phenomena in polymer materials*, Journal of Optoelectronics and advanced materials, Vol. 10, No. 11, November p. 2854 – 2858 (2008);
31. I. Grecu, G. Strat, S. Gurlui, V. Grecu, I. Lihtetchi, M. Strat, S. Stratulat, C. Picealca, *Structure and mechanical properties of nanocomposites based on polypropilene and polyethylene*, Journal of Optoelectronics and advanced materials, 10, 1408 (2008);
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40. S. Gurlui, M. Agop, M. Strat, G. Strat, Simona Bacaita, *Experimental and theoretical inveastigations of the anode double layer*, Jpn. J. Appl. Phys. 44, 3253 (2005);
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Invited Lectures

1. S. Gurlui, P. Nica, M. Agop, M. Osiac, C. Focsa, *Two-temperature plasmas generated by femtosecond laser ablation of metallic targets,* 16th International conference on plasma, physics and applications, June 20-25, 2013, Magurele, Bucharest, Romania
2. S. Gurlui and C. Focsa, *Development of Laser-Produced Plasma Technology. Fundamentals and Applications*, 8th BPU, the 8th General Conference of Balkan Physical Union, 5-7 July 2012, Constanta, Romania.
3. O. G. Pompilian, G. Dascalu, S. Gurlui, C. Focsa, *Processing and characterization of advanced materials by laser ablation techniques*, 9th International Conference on Physics of Advanced Materials, 20 - 23 September 2012, Iasi, Romania;
4. O.G. Pompilian, G. Dascalu, S. Gurlui, C. Focsa, *Laser-induced plasma: fundamentals and applications*, Physics Conference TIM-12, 27-30 November 2012, Timisoara, Romania.
5. C. Focsa, M. Ziskind, B. Chazallon, S. Gurlui, V. Nazabal, P. Nemec, *Laser ablation fundamentals and applications to the study of some inorganic materials with high technological potential*, 10th International conference Solid State Chemistry, Pardubice, Czech Republic, June 10-14, 2012
6. S. Gurlui. C. Focsa, P. Nica, M. Osiac, *High-Fluence Laser Ablation Plasma Dynamics: Fundamentals and Applications*, the 4-th National Conference of Applied Physics (CNFA-2010) in Iasi, Romania.
7. C. Focsa, S. Gurlui, M. Ziskind, *Transient plasmas generated by high-fluence laser ablation: Fundamentals and applications,* International Balkan Workshop on Applied Physics, Constanta, Roumanie, 7-9 juillet 2010

8. S. Gurlui, G. Strat , D. Lihteţchi, V. Hurduc and M. Strat, *Nanostructured surfaces and nanoagregates of photoreactive polymers in solutions and film sate*, International Balkan Workshop on Applied Physics, Constanta, Roumanie, 7-9 juillet 2010
9. S. Gurlui, E. Buruiana, T. Buruiana, G. Strat, M. Strat, V. Pohoata, *Fluorescence properties of some polyurethane derivatives with stilbene and pyrene rings*, 47th microsymposium. ADVANCED POLYMER MATERIALS FOR PHOTONICS AND ELECTRONICS, PRAGUE, 15 – 19 July 2007
10. G. Strat, M Strat, S. Gurlui and D. Dimitriu, *Optogalavanic effect in nonlinear systems*, BPU-5, Vrnjacka Banja, Serbia and Montenegro, August 25-29, 2003

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