

INFORMAȚII PERSONALE



Prof. Univ. Dr. Habil. Gurlui Silviu-Octavian

Universitatea Alexandru Ioan Cuza din Iași, Facultatea de Fizică

0740231971

sgurlui@uaic.ro

<http://spectroscopy.phys.uaic.ro/>

<https://www.facebook.com/silviugurlui>

Sexul Masculin | Data nașterii 05/11/1971 | Naționalitatea Romana

EXPERIENȚA PROFESIONALĂ

Scrieți datele (de la - până la)

1996-2001 (preparator, asistent), 2001-2006 (lector), 2006-2022 (conferențiar), 2022- (profesor) Universitatea Alexandru Ioan Cuza din Iași, Facultatea de Fizică

2004 - 2016 Profesor invitat al Universitatii Lille 1 din Franta

Lille 1 University of Science and Technology, France, Laboratoire de Physique des Lasers, Atomes et Molécules

Orsay, Paris XI (France), Pivoine facility at laboratoire d'Aérothermique, CNRS Orléans (France), University of Angers (France), University of Science and Technology, Lille 1, (France), Institute for Ion Physics and Applied Physics, Innsbruck Experimental Plasma Physics Group, University of Innsbruck (Austria)

EDUCAȚIE ȘI FORMARE

Scrieți datele (de la - până la)

1990 - 1995 Absolvent Facultatea de Fizica, Specializarea Fizica Tehnologica (**Diploma de merit**, media 9.92/10)

1995 - 1996 Absolvent Master, Specializarea Plasma si Spectroscopie, media 10/10)

1998 - 2003 Titlu de Doctor, Contribution to the study of the processes and phenomena in non-homogeneous discharges plasmas gas mixtures

2019 - Atestat de Abilitare, Tehnici de spectroscopie laser aplicate în domeniul nanotehnologiei și al științei mediului, Universitatea Alexandru Ioan Cuza din Iasi, Facultatea de Fizica

COMPETENTE PERSONALE

Limba(i) maternă(e) Română

Alte limbi străine cunoscute

engleza

INTELEGERE		VORBIRE		SCRIERE
Ascultare	Citire	Participare la conversație	Discurs oral	
C2	C2	C2	C2	C2
Scrieți denumirea certificatului. Scrieți nivelul, dacă îl cunoașteți.				

franceza

C2

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C2

Scrieți denumirea certificatului. Scrieți nivelul, dacă îl cunoașteți.

Niveluri: A1/A2: Utilizator elementar - B1/B2: Utilizator independent - C1/C2: Utilizator experimentat
[Cadrul european comun de referință pentru limbi străine](#)

Competențe de comunicare
 Competențe
 organizaționale/manageriale
 Competențe dobândite la locul
 de muncă

- Competențe organizatorice, de coordonare echipe și laboratoare de cercetare
- Director de laborator LOASL, <http://spectroscopy.phys.uaic.ro>
- Competențe de informare și deprinderi experimentale

Competență digitală

AUTOEVALUARE

Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
experimentat	experimentat	experimentat	experimentat	experimentat

Niveluri: Utilizator elementar - Utilizator independent - Utilizator experimentat
[Competențele digitale - Grilă de auto-evaluare](#)

Scrieți denumirea certificatului.

Permis de conducere

B

INFORMATII SUPLIMENTARE

Publicații 130 de lucrări cotate ISI

Proiecte Director la 15 proiecte de cercetare câștigate prin concurs,
 în valoare de peste 3 milioane Euro

Citări Peste 1500 de citări, H-index = 22

Cursuri Optica și Spectroscopie, Fizica Laserilor, Fizica Plasmei,
 Fizica atmosferei, cursuri de optica materialelor și a
 sistemelor de imagistică în domeniul OPTOMETRIEI

Management științific Directorul Laboratorului de Optica Atmosferei,
 Spectroscopie și LASERI – LOASL, UAIC, Facultatea de
 Fizică

Parteneriate internaționale științifice **Reprezentat al României la Agenția Spațială Europeană
 ESA**, într-un nou proiect satelitar de cercetare terestră, de
 interes științific.

- Membru al rețelilor mondiale de interes științific : **ACTRIS si AERONET/ NASA** networks: http://aeronet.gsfc.nasa.gov/cgi-bin/type_one_station_opera_v2_new?site=lasi_LOASL&nachal=2&level=1&place_code=10
- Membru al FAIR- Facility for Antiproton and Ion Research (**FAIR**), **Darmstadt, Germany** <https://www.gsi.de/forschungbeschleuniger/fair.htm>

Directii de cercetare:

- Poluarea regională a aerului și schimbările climatice globale
- Spectroscopie optică: metode și instrumentație
- Spectroscopie aplicată, optică, optica atmosferei, laseri, instalatii de teledetectie laser, instalatii optice active, instalatii optice pasive, mediu, plasma

Adrese de internet relevante, cu baze de date, care certifică activitatea de cercetare, vizibilă pe plan internațional:

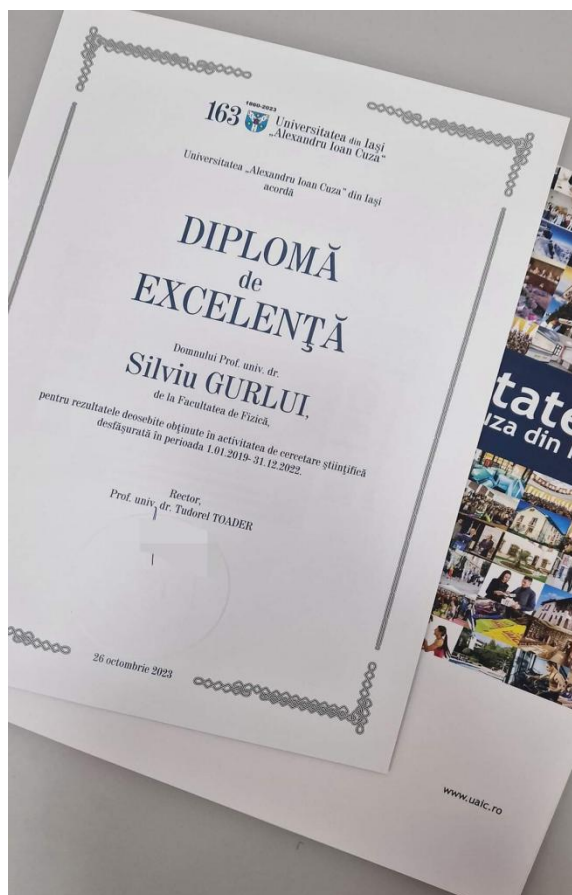
SCOPUS ID: [Silviu Gurlui](#)

ORCID: <https://orcid.org/0000-0003-2248-9954>;

RESEARCHER ID: https://www.researchgate.net/profile/Silviu_Gurlui/publications

LOASL website: <http://spectroscopy.phys.uaic.ro/>

Diplomă de excelență acordată de Universitatea Alexandru Ioan Cuza din Iași pentru cea mai buna activitate de cercetare de la Facultatea de Fizică, din ultimii 4 ani.



<https://www.facebook.com/share/p/5MiFBJSLk6eknGCp/>

ANEXE

Activitatea profesională

A se vedea paginile 6-14

Appendices

Activitatea profesională

CĂRȚI

1. P.E. Nica, S.A. Irimiciuc, M. Agop, S. Gurlui, M. Ziskind and C. Focsa, Experimental and Theoretical Studies on the Dynamics of Transient Plasmas Generated by Laser Ablation in Various Temporal Regimes, IntechOpen, 2017;
2. G. Strat, M. Strat, S. Gurlui, C. Focsa, D. Dimitriu, Self-organization in nanomaterials, vol 5, p. 53-91, Ed. INOE (2007).
3. S. Gurlui, M. Delibaş, Optics. Exercises and problems, ed. TehnoPress, Iaşi, 445p (2005).
4. S. Gurlui, D. Dimitriu, Plasma double layers, ed. TehnoPress, Iaşi, 346p (2005).

*Sub coordonarea mea directă și în parteneriate cu echipe de cercetători și profesori din Franța (Universitatea Lille 1, Paris XI / LPGP, Orsay, Universitatea Angers) din Austria (Universitatea din Innsbruck) și din România (Universitatea „Alexandru Ioan Cuza” din Iași , Universitatea Tehnică „Gh Asachi” din Iași, Universitatea din Craiova, Universitatea din București, INOE București, INFLPR Magurele etc.) am pregătit peste 30 de doctoranzi care și-au finalizat tezele în aceste laboratoare iar în 2007 am înființat **LOASL**- Laboratorul de optica atmosferei spectroscopie si laseri, dezvoltind instrumente unice în țară de teledetecție laser pentru sondarea atmosferei terestre (DARLIOES)*

Director/ Research Projects <http://spectroscopy.phys.uaic.ro/PROJECTS.html>

1. ENIAN: Enhanced ion acceleration by laser irradiation of special thin polymers layers containing nanoparticles, APPA/MML/Plasma Physics/PHELIX, FAIR 05_2020, **320.000 EURO**
2. ROBIM: MicroLIBS sensors for robotic planetary and astrobiological exploration missions, PN-III-P4-ID-PCE2020-0332, UEFISCDI, **220.000 EURO**
3. SATY: Satellite hybrid micro-thrusters, Romanian Space Agency (ROSA), 2017-2018 (**370.000 EURO**)
4. AiRFRAME: Aerosol properties retrieval from remote sensing spectroscopic measurements (partner UAIC), (ROSA), 2017-2018 (**45.000 EURO**)
5. LEO: LOASL's Earth Observatory, Romanian Space Agency (ROSA), ID 499/2016-2017 (**1.000.000 EURO**)
6. ELIAN: Extreme Light Induced Ablation Plasma Jet And Nano-patterning, ELI-NP, CAPACITIES / RO-CERN E03/30.06.2014, 2014-2016 (**140.000 EURO**)
7. 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, 2013-2016 (**177.000 EURO**)
8. "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.
9. "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. (**350.000 EURO**)
10. "Join Physicist in Festival (My Physics, My World)" FP7-PEOPLE, 244978/2009, 2009.
11. RADO: "Romanian Atmospheric Research 3D Observatory" [funded](#) by Innovation Norway, STVES 115266/2008; 2008-2010. (**247.600 EURO**)
12. "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. (**31.000 EURO**)
13. ROLINET: "Romanian Network of LIDAR systems" PN II Cooperation, 31-002/2007, (**71.000 EURO**)
14. "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.

15. "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 (web of Science)

1. 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)
2. 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)
3. C. Focsa, M. Ziskind, C. Ursu, S. Gurlui, D. Pagnon, S. Pellerin, N. Pellerin, M. Dudeck, **Laser - BnSiO₂ Ceramics Interaction: simulation of the energy deposition on dielectric wall surfaces in Hall thrusters**, J. Optoelectron. Adv. Mater. 10 2380 (2008);
4. C. Ursu, O. G. Pompilian, S. Gurlui, P. Nica, M. Agop, M. Dudeck and C. Focsa, **Al₂O₃ ceramics under high-fluence irradiation: plasma plume dynamics through space- and time-resolved optical emission spectroscopy**, **Applied physics a: materials science & processing**, Volume 101, Number 1, 153-159, (2010), DOI: 10.1007/s00339-010-5775-0
5. S. Gurlui, M. Agop, P. Nica, M. Ziskind, C. Focsa, **Experimental and Theoretical Investigations of a Laser Produced Aluminum Plasma**, Phys. Rev. E, 78, 026405 (2008). Article selected for publication in the Virtual Journal of Ultrafast Science (Vol. 7, No. 9, September 2008)
6. 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, 153, pp. 57-64 (2015)
7. A. Cocean, I. Cocean, M.M. Cazacu, G. Bulai, F. Iacomi, S. Gurlui, **Atmosphere self-cleaning under humidity conditions and influence of the snowflakes and artificial light interaction for water dissociation simulated by the means of COMSOL**, (2018) Applied Surface Science, 443, pp. 83-90.
8. P. Nica, M. Agop, S. Gurlui and C. Focsa, **Oscillatory Langmuir probe ion current in laser produced plasma expansion**, Epl-Europhys LETT 89, 6 Art no: 65001 (2010)
9. I. Cocean, A. Cocean, F. Iacomi, S. Gurlui, **City water pollution by soot-surface-active agents revealed by FTIR spectroscopy**, Applied Surface Science 499 (2020) 142487
10. 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)
11. R. W. Schrittwieser, C. Ionita, C. T. Teodorescu-Soare, O. Vasilovici, S. Gurlui, S. A. Irimiciuc and D. G. Dimitriu, **Spectral and electrical diagnosis of complex space-charge structures excited by a spherical grid cathode with orifice**, Phys. Scr. 92 044001 (2017)
12. M. Girtan, G. I. Rusu, G.G. Rusu, S. Gurlui, **Influence of oxidation conditions on the properties of indium oxide thin films**, Appl. Surf. Sci., 162, 492 (2000);
13. M. Strat, G. Strat, S. Gurlui, **Basic processes in discharge plasma double layers**, J. Phys. D: Appl. Phys. 32 34
14. Irimiciuc, S., Enescu, F., Bedeleian, H., Gurlui, S., Agop, M., **Space-and time-resolved optical investigations on ns-laser produced plasmas on various geological samples**, (2020) Spectrochimica Acta - Part B Atomic Spectroscopy, 170, art. no. 105904,
15. Bulai, G., Epure, L., Strat, M., Toma, S., Cimpoesu, N., Gurlui, S., Constantinel, R., Hurduc, N., **Azo-polysiloxanes spontaneous surface relief grating by pulsed laser irradiation**, (2020) Applied Physics A: Materials Science and Processing, 126 (8), art. no. 616, .
16. Cocean, I., Diaconu, M., Cocean, A., Postolachi, C., Gurlui, S., **Landfill Waste Fire Effects over Town Areas under Rainwaters**, (2020) IOP Conference Series: Materials Science and Engineering, 877 (1), art. no. 012048

17. Cocean, A., Cocean, I., Postolachi, C., Pricop, D., Husanu, F., Gurlui, S., **Laser Induced Dyeing (LID) with Reactive Blue 21 on Hemp Fibers**, (2020) IOP Conference Series: Materials Science and Engineering, 877 (1), art. no. 012022
18. Cocean, A., Cocean, I., Postolachi, C., Cimpoesu, N., Husanu, F., Munteanu, B., Gurlui, S., **Copper Sulfate Pentahydrate Target Behavior during Pulsed Laser Deposition to Produce Dichroic Coatings for Beam Splitters**, (2020) IOP Conference Series: Materials Science and Engineering, 877 (1), art. no. 012005, .
19. Garofalide, S., Diaconu, M., Cocean, I., Cocean, A., Pelin, V., Gurlui, S., Leontie, L., **Study of Physico-Chemical Characteristics of Some Major Urban Air Pollutants**, (2020) IOP Conference Series: Materials Science and Engineering, 877 (1), art. no. 012049
20. Irniciuc, S.A., Hodoroaba, B.C., Bulai, G., Gurlui, S., Craciun, V., **Multiple structure formation and molecule dynamics in transient plasmas generated by laser ablation of graphite**, (2020) Spectrochimica Acta - Part B Atomic Spectroscopy, 165, art. no. 105774, .
21. Agop, M., Cimpoesu, N., Gurlui, S., Irniciuc, S.A., **Investigations of transient plasma generated by laser ablation of hydroxyapatite during the pulsed laser deposition process**, (2020) Symmetry, 12 (1), art. no. 132
22. Stoica, I., Sava, I., Bulai, G., Stoian, G., Strat, M., Gurlui, S., Oprisan, B., **Development and morphological characterization of novel polyimide/Metal nano hybrid materials**, (2020) Materiale Plastice, 57 (2), pp. 94-103.
23. Cimpoesu, N., Gurlui, S., Bulai, G., Cimpoesu, R., Paun, V.-P., Irniciuc, S.A., Agop, M., **In-situ plasma monitoring during the pulsed laser deposition of Ni60Ti40 thin films**, (2020) Symmetry, 12 (1), art. no. 5605
24. Bulai, G., Trandafir, V., Irniciuc, S.A., Ursu, L., Focsa, C., Gurlui, S., **Influence of rare earth addition in cobalt ferrite thin films obtained by pulsed laser deposition**, (2019) Ceramics International, 45 (16), pp. 20165-20171
25. Enescu, F., Irniciuc, S.A., Cimpoesu, N., Bedeleian, H., Bulai, G., Gurlui, S., Agop, M., **Investigations of laser produced plasmas generated by laser ablation on geomaterials. Experimental and theoretical aspects**, (2019) Symmetry, 11 (11), art. no. 1391
26. Irniciuc, S.A., Gurlui, S., Agop, M., **Particle distribution in transient plasmas generated by ns-laser ablation on ternary metallic alloys**, (2019) Applied Physics B: Lasers and Optics, 125 (10), art. no. 190,
27. Cocean, I., Cocean, A., Postolachi, C., Pohoata, V., Cimpoesu, N., Bulai, G., Iacom, F., Gurlui, S., **Alpha keratin amino acids BEHVIOR under high FLUENCE laser interaction. Medical applications**, (2019) Applied Surface Science, 488, pp. 418-426.
28. Schrittwieser, R., Teodorescu-Soare, C.-T., Enescu, F., Ionita, C., DImitriu, D.-G., Gurlui, S., Mazzanti, F., Irniciuc,, S.-A., Hodoroaba, B., O'Hara, T., Vasilovici, O., Amarandi, L., **Oscillatory behavior of hollow grid cathode discharges**, (2019) Proceedings of the 2019 21st International Conference on Electromagnetics in Advanced Applications,, ICEAA 2019, art. no. 8879126, pp. 1359-1362.
29. Nica, P., Gurlui, S., Agop, M., Focsa, C., **Oscillatory regimes of Langmuir probe current in femtosecond laser-produced plasmas: Experimental and theoretical investigations**, (2019) Applied Surface Science, 481, pp. 125-132.
30. Bulai, G., Pompilian, O., Gurlui, S., Nemec, P., Nazabal, V., Cimpoesu, N., Chazallon, B., Focsa, C., **Ge-Sb-Te chalcogenide thin films deposited by nanosecond, picosecond, and femtosecond laser ablation**, (2019) Nanomaterials, 9 (5), art. no. 676
31. Cocean, I., Cocean, A., Pohoata, V., Iacom, F., Gurlui, S., **City water pollution by soot-surface-active agents revealed by FTIR spectroscopy**, (2019) Applied Surface Science
32. Irniciuc, S.A., Bulai, G., Gurlui, S., Agop, M., **On the separation of particle flow during pulse laser deposition of heterogeneous materials - A multi-fractal approach**, (2018) Powder Technology, 339, pp. 273-280
33. Irniciuc, S., Bulai, G., Agop, M., Gurlui, S., **Influence of laser-produced plasma parameters on the deposition process: in situ space- and time-resolved optical emission spectroscopy and fractal modeling approach**, (2018) Applied Physics A: Materials Science and Processing, 124 (9), art. no. 615

34. Pelin, V., Rusu, O., Cazacu, M.M., Gurlui, S., Sandu, A.V., Radinschi, I., Ciocan, V., Sandu, I., **Assessment of Hydrophobic Coating on Porous Calcareous Rocks Surface Exposed in Urban Ambient Air Pollution**, (2018) IOP Conference Series: Materials Science and Engineering, 374 (1), art. no. 012091
35. Leontie, L., Danac, R., Carlescu, A., Doroftei, C., Rusu, G.G., Tiron, V., Gurlui, S., Susu, O., **Electric and optical properties of some new functional lower-rim-substituted calixarene derivatives in thin films**, (2018) Applied Physics A: Materials Science and Processing, 124 (5), art. no. 355
36. Bulai, G., Rusu, O., Cazacu, M.M., Tudorache, F., Chazallon, B., Focsa, C., Gurlui, S., **Structural, magnetic and humidity sensing properties of rare earth doped cobalt ferrite thin films synthesized by pulsed laser deposition**, (2018) Journal of Ovonic Research, 14 (2), pp. 119-128.
37. A. Cocean, V. Pelin, M. M. Cazacu, I. Cocean, I. Sandu, S. Gurlui, F. Iacomì, **Thermal effects induced by laser ablation in non-homogeneous limestone covered by an impurity layer**, Applied Surface Science 424 (2017) 324–329), <http://dx.doi.org/10.1016/j.apsusc.2017.03.172>
38. A. Cocean, I. Cocean, S. Gurlui, F. Iacomì, **Study of the pulsed laser deposition phenomena by means of Comsol Multiphysics**, U.P.B. Sci. Bull., Series A, Vol. 79, Iss. 2, 2017
39. A. Cocean, I. Cocean, C. Postolachi, N. Cimpoesu, F. Husanu, B. Munteanu and S. Gurlui, **Copper Sulfate Pentahydrate Target Behavior During Pulsed Laser Deposition to Produce Dichroic Coatings for Beam Splitters**, IOP Conf. Series: Materials Science and Engineering 877 (2020) 012005, doi:10.1088/1757-899X/877/1/012005
40. I. Cocean, M. Diaconu, A. Cocean, C. Postolachi and S. Gurlui, **Landfill Waste Fire Effects Over Town Areas Under Rainwaters**, IOP Conf. Series: Materials Science and Engineering 877 (2020) 012048, doi:10.1088/1757-899X/877/1/012048
41. S. Garofalide, M. Diaconu, I. Cocean, A. Cocean, V. Pelin, S. Gurlui and L. Leontie, **Study of Physico-Chemical Characteristics of Some Major Urban Air Pollutants**, IOP Conf. Series: Materials Science and Engineering 877 (2020) 012049, doi:10.1088/1757-899X/877/1/012049
42. S.A. Irniciuc, G. Bulai, S. Gurlui, M. Agop, **On the separation of particle flow during pulse laser deposition of heterogeneous materials - A multi-fractal approach**, Powder Technology, vol 339, 273, (2018)
43. S. Irniciuc, G. Bulai, M. Agop, S. Gurlui, **Influence of laser-produced plasma parameters on the deposition process: in situ space- and time-resolved optical emission spectroscopy and fractal modeling approach**, Applied physics a-materials science & processing Volume: 124 Issue: 9 Article Number: 615, (2018)
44. L. Leontie, R. Danac, A. Carlescu, C. Doroftei, GG Rusu, V. Tiron, S. Gurlui, O. Susu, **Electric and optical properties of some new functional lower-rim-substituted calixarene derivatives in thin films**, Applied physics a-materials science & processing Volume: 124 Issue: 5 Article Number: 355 (2018)
45. G. Bulai, O. Rusu, MM Cazacu, F. Tudorache, B. Chazallon, C. Focsa, S. Gurlui, **Structural, magnetic and humidity sensing properties of rare earth doped cobalt ferrite thin films synthesized by pulsed laser deposition**, Journal Of Ovonic Research Volume: 14 Issue: 2 Pages: 119-128 (2018)
46. V. Pelin, O. Rusu, MM Cazacu, S. Gurlui, AV. Sandu. I. Radinschi, V. Ciocan, I. Sandu, **Assessment of Hydrophobic Coating on Porous Calcareous Rocks Surface Exposed in Urban Ambient Air Pollution**, IOP Conference Series: Materials Science and Engineering, Vol 374, pag 12091, (2018)
47. S. A. Irniciuc, S. Gurlui, P. Nica, C. Focsa, and M. Agop, **A compact non-differential approach for modeling laser ablation plasma dynamics**, Journal of Applied Physics 121, 083301 (2017)
48. C. Focsa, S. Gurlui, P. Nica, M. Agop, M. Ziskind, **Plume splitting and oscillatory behavior in transient plasmas generated by high-fluence laser ablation in vacuum**, Applied Surface Science, Vol 424, pag 299 (2017),
49. S. Irniciuc, R. Boidin, G. Bulai, S. Gurlui, P. Nemec, V. Nazabal, C. Focsa, **Laser ablation of (GeSe₂)_{100-x}(Sb₂Se₃)_x chalcogenide glasses: Influence of the target composition on the plasma plume dynamics**, Applied Surface Science, Vol 418, pag 594 (2017)
50. P. Nica, S. Gurlui, M. Osiac, M. Agop, M. Ziskind, C. Focsa, **Investigation of femtosecond laser-produced plasma from various metallic targets using the Langmuir probe characteristic**, Physics of Plasmas, Vol 24, 103119 (2017)

51. A. Cocean, V. Pelin, MM. Cazacu, I. Cocean, I. Sandu, S. Gurlui, F. Iacomî, **Thermal effects induced by laser ablation in non-homogeneous limestone covered by an impurity layer**, Applied Surface Science, Vol 424, pag 324 (2017)
52. S. Irimiciuc, S. Gurlui, G. Bulai, P. Nica, M. Agop, C. Focsa, **Langmuir probe investigation of transient plasmas generated by femtosecond laser ablation of several metals: Influence of the target physical properties on the plume dynamics**, Applied Surface Science, vol 417, 108 (2017)
53. S. Gurlui, I. Sandu, N. Cimpoesu, V. Pohoata, I. G. Sandu, M. Strat, **Nanoaggregates and selforganization phenomena in polyurethane coumarine film**, Materiale plastic, vpl 54, pag 589 (2017)
54. A. Banica, E.D. Bobric, MM. Cazacu, A. Timofte, S. Gurlui, I. G. Breaban, **Integrated assessment of exposure to traffic-related air pollution in Iasi city, Romania**, Environmental Engineering and Management Journal, vol 16, pag 2147 (2017)
55. V. Pelin, O. Rusu, I. Sandu, V. Vasilache, S. Gurlui, AV Sandu, MM. Cazacu, I.G. Sandu, **Approaching on Colorimetric Change of Porous Calcareous Rocks Exposed in Urban Environmental Conditions from Iasi – Romania**, IOP Conference Series: Materials Science and Engineering, vol 209, 120080 (2017)
56. V. Pelin, I.G. Breaban, I. Sandu, S. Gurlui, **The atmospheric pollution influence on the surface structures of porous geomaterials in correlation with some natural radionuclides**, Revista de Chimie, vol 68, 1431 (2017)
57. S. Gurlui, E. Buruiana, I.G. Sandu, M. Strat, **The study of photoreversibility, photopolimerization and photocleavage properties of polyurethane coumarin by means of electronic spectrometry and AFM Methods**, Revista de Chimie, vol 68, 1632 (2017)
58. A. Cocean, I. Cocean, S. Gurlui, F. Iacomî, **Study of the pulsed laser deposition phenomena by means of comsol multiphysics**, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, vol 79, pag 263 (2017)
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S. Gurlui

