

LISTA LUCRĂRILOR PUBLICATE DUPĂ SUSȚINEREA TEZEI DE DOCTORAT

I. Cărți și capitole de cărți apărute la edituri internaționale și naționale

1. D. G. Dimitriu, M. Agop – Analysis of Low-Frequency Instabilities in Low-Temperature Magnetized Plasma, Chapter 5 in *Fractional Dynamics, Anomalous Transport and Plasma Science*, Ed. C. H. Skiadas, Springer Nature Switzerland AG, Cham, 2018, ISBN 978-3-030-04482-4;
2. S. Irimiciuc, D. G. Dimitriu, M. Agop – Theoretical Modeling of the Interaction Between Two Complex Space Charge Structures in Low-Temperature Plasma, Chapter 6 in *Fractional Dynamics, Anomalous Transport and Plasma Science*, Ed. C. H. Skiadas, Springer Nature Switzerland AG, Cham, 2018, ISBN 978-3-030-04482-4;
3. D. O. Dorohoi, D. G. Dimitriu – Spectral Insights on Intermolecular Interactions in Solutions of Some Zwitterionic Compounds, Chapter 3 in *Electromagnetic Radiation in Analysis and Design of Organic Materials – Electronic and Biotechnology*, Eds. D. O. Dorohoi, A. I. Barzic and M. Aflori, CRC Press, Taylor & Francis Group, 2017, ISBN 978-1-4987-7580-9;
4. D. G. Dimitriu, M. Agop – Chaos in Plasma Physics, Chapter 19 in *Handbook of Applications in Chaos Theory*, Eds. C. H. Skiadas and C. Skiadas, CRC Press, Taylor & Francis Group, 2016, ISBN 978-1-4665-9043-4;
5. D. G. Dimitriu, S. Chiriac – Intermittency scenario of transition to chaos in plasma in connection with the nonlinear dynamics of a double layer structure, in *Chaos, Complexity and Transport – Theory and Applications*, Eds. C. Chandre, X. Leoncini and G. Zaslavsky, World Scientific, 2008, ISBN 978-981-281-879-9;
6. D. G. Dimitriu – Rezonanța magnetică nucleară în medicină și biologie – Note de curs, Editura PIM, Iași, 2008, ISBN 9789737168860;
7. G. Strat, M. Strat, S. Gurlui, C. Focsa, D. G. Dimitriu – Self-organization phenomena in polymer and plasma structures, in *Self-organization in nanomaterials*, Eds. P. Boolchand and G. Lucovsky, INOE Publishing House, București, 2008, ISBN 9789738810907;
8. M. Aflori, D. G. Dimitriu – Analiza semnalelor utilizând metode ale dinamicii neliniare, în *Complemente de fizică pentru studenții școlilor doctorale, vol. I*, Eds. L. Dumitrascu, I. Dumitrascu, D. O. Dorohoi, D. G. Dimitriu, G. Apreotesei and M. Aflori, Editura Tehnopress, Iași, 2006, ISBN 9789737023896;
9. D. G. Dimitriu – Instabilități electrostatice în plasma mașinii Q, Editura Demiurg, Iași, 2006, ISBN 9737603273;
10. S. Gurlui, D. G. Dimitriu – Straturi duble în plasmă, Editura Tehnopress, Iași, 2005, ISBN 973702155X;

II. Articole indexate ISI

1. D. O. Dorohoi, D. E. Creanga, D. G. Dimitriu, A. C. Morosanu, A. Gritco-Todirascu, G. G. Mariciuc, N. Puica Melniciuc, E. Ardelean, C. Cheptea – Computational and spectral means for characterizing intermolecular interactions in solutions and for estimating excited state dipole moment of solute, *Symmetry* **12** (2020) 1299;
2. D. Babusca, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi, C. Cheptea – Spectroscopic and quantum-chemical study of molecular interactions of iso-quinolinium ylids in polar solutions, *Molecular Crystals and Liquid Crystals* **698** (2020) 87-97;
3. M. Postolache, L. M. Ivan, N. Puica-Melniciuc, G. G. Mariciuc, D. G. Dimitriu, D. O. Dorohoi – Birefringence of binary liquid crystalline mixtures of MBBA and PPMAECOBBA in TCM, interferometric assessment, *Molecular Crystals and Liquid Crystals* **698** (2020) 78-86;
4. L. M. Ivan, D. G. Dimitriu, A. Gritco-Todirascu, A. C. Morosanu, D. O. Dorohoi, C. Cheptea – Excited state dipole moment of two pyridazinium-p-nitro-phencylids estimated from solvatochromic study, *Spectroscopy Letters* **53** (1) (2020) 1-11;
5. A. C. Luca, A. C. Morosanu, I. Macovei, D. G. Dimitriu, D. O. Dorohoi, I. S. Stratulat – Variational method for estimating the dipole moment in the second excited state of fluorescein molecule from its electronic UV absorption spectra, *Revista de Chimie* **70** (10) (2019) 3538-3544;
6. I. S. Stratulat, A. Scripa (Tudose), A. I. Barzic, D. G. Dimitriu, D. O. Dorohoi, A. C. Luca – Dispersion of nicotine circular birefringence, *Revista de Chimie* **70** (9) (2019) 3281-3283;

7. C. T. Teodorescu-Soare, S. A. Irimiciuc, C. Ionita, D. G. Dimitriu, B. Hodoroaba, T. O'Hara, O. Vasiloviciu, L. Amarandi, R. W. Schrittwieser – Concentric double hollow grid cathode discharges, *International Journal of Mass Spectrometry* **436** (2019) 83-90;
8. A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Excited state dipole moment of the fluorescein molecule estimated from electronic absorption spectra, *Journal of Molecular Structure* **1180** (2019) 723-732;
9. D. Babusca, A. C. Morosanu, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical study of some azo-derivatives, *Journal of Molecular Liquids* **269** (2018) 940-946;
10. D. A. M. Androne, D. O. Dorohoi, D. G. Dimitriu, H. U. Kasper – Optical and chemical study of quartz from granitic pegmatites, *Revista de Chimie* **69** (2018) 1846-1850;
11. V. B. Rusyn, L. Pribylova, D. G. Dimitriu – Control of the modified chaotic Chua's circuit using threshold method, *Visnik NTU KPI Serii – Radiotekhnika Radioaparaturbuduvannia (Bulletin of National Technical University of Ukraine "Kyiv Polytechnic Institute" – Radioengineering and Electronics)* **75** (2018) 61-65;
12. A. C. Benchea, D. Babusca, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral study of Rhodamine dyes in binary solutions, *Journal of Molecular Structure* **1140** (2017) 71-76;
13. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Linear birefringence of polymer foils determined by optical means, *Journal of Molecular Structure* **1140** (2017) 67-70;
14. A. C. Morosanu, A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum mechanical and solvatochromic characterization of quercetin, *Analytical Letters* **50** (2017) 2725-2739;
15. A. C. Benchea, D. Babusca, C. Podlipnik, D. G. Dimitriu – Solvatochromic and quantum-mechanical characterization of Methyl Red, *Analytical Letters* **50** (2017) 2711-2724;
16. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical characterization of 3-(2-Benzothiazolyl)-7-(Diethylamino) Coumarin (Coumarin 6) in binary solutions, *Analytical Letters* **50** (2017) 2740-2754;
17. R. W. Schrittwieser, C. Ionita, C. T. Teodorescu-Soare, O. Vasilovici, S. Gurlui, S. A. Irimiciuc, D. G. Dimitriu – Spectral and electrical diagnosis of complex space-charge structures excited by a spherical grid with orifice, *Physica Scripta* **92** (2017) 044001;
18. A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum-mechanical study and spectral analysis of some derivatives of Rhodamine in solutions, *Spectrochimica Acta A* **172** (2017) 91-99;
19. M. Strat, E. Buruiana, D. Dumitriu, A. V. Sandu, S. Gurlui – Photophysical and photochemical properties of polyurethane coumarin studied by means of electronic spectra, *Revista de Chimie* **68** (2017) 1568-1572;
20. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Dispersion of the visible rotatory power for aqueous glucose solutions, *University Politehnica of Bucharest Scientific Bulletin Series A – Applied Mathematics and Physics* **79** (2017) 307-313;
21. M. Gaina, A. C. Benchea, Č. Podlipnik, D. G. Dimitriu – Quantum-mechanical characterization and spectral study of curcumin, *University Politehnica of Bucharest Scientific Bulletin Series B – Chemistry and Materials Science* **79** (2017) 133-142;
22. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Solvatochromic characterization of Sudan derivatives in binary and ternary solutions, *Analytical Letters* **49** (16) (2016) 2615-2626;
23. A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum mechanical and absorption spectral characterization of Rhodamine B in ternary solution, *Analytical Letters* **49** (16) (2016) 2606-2614;
24. C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Experimental investigations of the nonlinear dynamics of a complex space-charge configuration inside and around a grid cathode with hole, *Physica Scripta* **91** (2016) 034002;
25. D. G. Dimitriu, S. A. Irimiciuc, S. Popescu, M. Agop, C. Ionita, R. W. Schrittwieser – On the interaction between two fireballs in low-temperature plasma, *Physics of Plasmas* **22** (2015) 113511;
26. D. O. Dorohoi, D. G. Dimitriu, I. Dumitrascu, C. B. Zelinschi, I. Breaban – Interferential method to determine the optical rotatory dispersion of crystalline layers, *U.P.B. Scientific Bulletin A* **77** (2015) 253-260;
27. V. Nedeff, G. Lazar, M. Agop, L. Eva, L. Ochiuz, D. Dimitriu, L. Vrajitoriu, C. Popa – Solid components separation from heterogeneous mixtures through turbulence control, *Powder Technology* **284** (2015) 170-186;
28. A. I. Barzic, D. G. Dimitriu, D. O. Dorohoi – Optical rotatory dispersion of Poly(propylene oxide) in Benzene solution determined from channelled spectra, *International Journal of Polymer Analysis and Characterization* **20** (2015) 565-571;
29. A. Barzic, D. Dimitriu, D. Dorohoi – New method for determining the optical rotatory dispersion of hydroxypropyl cellulose polymer solutions in water, *Polymer Engineering & Science* **55** (2015) 1077-1081;
30. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Chua's circuit: control and synchronization, *International Journal of Bifurcation and Chaos* **25** (2015) 1550050;
31. I. A. Cosutchi, D. G. Dimitriu, C. B. Zelinschi, I. Breaban, D. O. Dorohoi – Optical activity of transparent polymer layers characterized by spectral means, *Journal of Molecular Structure* **1090** (2015) 39-43;
32. D. G. Dimitriu, D. O. Dorohoi – New method to determine the optical rotatory dispersion of inorganic crystals applied to some samples of Carpathian Quartz, *Spectrochimica Acta A* **131** (2014) 674-677;
33. M. Agop, D. G. Dimitriu, L. Vrajitoriu, M. Boicu – Order to chaos transition in plasma via non-differentiability. Experimental and theoretical investigations, *Journal of the Physical Society of Japan* **83** (2014) 054501 1-11;

34. 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* **365-366** (2014) 42-47;
35. D. G. Dimitriu, M. Aflori, L. M. Ivan, V. Radu, E. Poll, M. Agop – Experimental and theoretical investigations of plasma multiple double layers and their evolution to chaos, *Plasma Sources Science and Technology* **22** (2013) 035007 1-11;
36. M. Agop, D. G. Dimitriu, O. Niculescu, E. Poll, V. Radu – Experimental and theoretical evidence of the chaotic dynamics of complex structures, *Physica Scripta* **87** (2013) 045501 1-13;
37. M. Aflori, M. Drobota, D. G. Dimitriu, I. Stoica, B. Simionescu, V. Harabagiu – Collagen immobilization on polyethylene terephthalate surface after helium plasma treatment, *Materials Science and Engineering B* **178(19)** (2013) 1303-1310;
38. D. O. Dorohoi, D. G. Dimitriu, M. Dimitriu, V. Closca – Specific interactions in N-ylid solutions, studied by nuclear magnetic resonance and electronic absorption spectroscopy, *Journal of Molecular Structure* **1044** (2013) 79-86;
39. M. Drobota, D. G. Dimitriu, B. Simionescu, I. Titorencu, M. Olariu, M. Aflori – Cytocompatibility of PET films after DC helium plasma treatments and collagen immobilization, *Revista de Chimie* **64(7)** (2013) 761-765;
40. F. Unga, M. M. Cazacu, A. Timofte, D. Bostan, A. Mortier, D. G. Dimitriu, S. Gurlui, P. Goloub – Study of the tropospheric aerosol types over Iasi, Romania, during summer of 2012, *Environmental Engineering and Management Journal* **12(2)** (2013) 297-303;
41. M. Agop, P. Nica, O. Niculescu, D. G. Dimitriu – Experimental and theoretical investigations of the negative differential resistance in a discharge plasma, *Journal of the Physical Society of Japan* **81** (2012) 064502 1-5;
42. I. Topala, N. Dumitrascu, D. G. Dimitriu – Experimental and theoretical investigations of dielectric-barrier plasma jet in helium, *IEEE Transactions on Plasma Science* **40(11)** Part 1 (2012) 2811-2816;
43. M. M. Cazacu, A. Timofte, 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)** (2012) 517-522;
44. D. G. Dimitriu, M. Aflori, L. M. Ivan, M. Agop – Experimental and modeling results on multiple double layers in low-temperature discharge plasma, *IEEE Transactions on Plasma Science* **39(11)** (2011) 2316-2317;
45. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Nonlinear effects related to the simultaneous excitation of three instabilities in magnetized plasma, *Contributions to Plasma Physics* **51 (6)** (2011) 554-559;
46. C. Stan, C. P. Cristescu, D. G. Dimitriu – Multifractal analysis of intermittency in a discharge plasma, *Romanian Journal of Physics* **56 (Suppl.)** (2011) 79-82;
47. A. Timofte, M. M. Cazacu, R. Radulescu, L. Belegante, D. G. Dimitriu, S. Gurlui – Romanian LIDAR investigation of the Eyjafjallajökull volcanic ash, *Environmental Engineering and Management Journal* **10(1)** (2011) 91-97;
48. M. M. Cazacu, A. Timofte, I. Balin, D. G. Dimitriu, S. Gurlui – Complementary atmospheric urban pollution studies in the north-east region of Romania, Iasi county, *Environmental Engineering and Management Journal* **10(1)** (2011) 139-145;
49. C. Stan, C. P. Cristescu, D. G. Dimitriu – Analysis of the intermittent behavior in a low-temperature discharge plasma by recurrence plot quantification, *Physics of Plasmas* **17(4)** (2010) 042115 1-6;
50. O. Niculescu, D. G. Dimitriu, V. P. Paun, P. D. Matasaru, D. Scurtu, M. Agop – Experimental and theoretical investigations of a plasma fireball dynamics, *Physics of Plasmas* **17(4)** (2010) 042305 1-10;
51. S. Gurlui, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Spectral investigation of a complex space charge structure in plasma, *Romanian Journal of Physics* **54(7-8)** (2009) 705-710;
52. C. Stan, C. P. Cristescu, S. Chiriac, D. G. Dimitriu – Noise induced change in the dynamics of anodic double layers, *Romanian Journal of Physics* **54(7-8)** (2009) 699-704;
53. O. Niculescu, D. G. Dimitriu – On the generation of stable complex oscillations in low-temperature plasma, *Romanian Journal of Physics* **54(5-6)** (2009) 577-584;
54. L. M. Ivan, M. Aflori, G. Amarandei, D. G. Dimitriu – Simultaneous excitation of concentric and nonconcentric multiple double layers in plasma, *IEEE Transactions on Plasma Science* **36(4)** (2008) 1396-1397;
55. L. M. Ivan, D. G. Dimitriu, M. Sanduloviciu, O. Niculescu – On the complex self-organized systems created in laboratory, *Journal of Optoelectronics and Advanced Materials* **10(8)** (2008) 1950-1953;
56. M. Mihai-Plugaru, L. M. Ivan, D. G. Dimitriu – Experimental investigation of a firerod in weakly magnetized diffusion plasma, *Romanian Journal of Physics* **53 (1-2)** (2008) 325-329;
57. L. M. Ivan, S. A. Chiriac, G. Amarandei, D. G. Dimitriu – Experimental basis of a common physical mechanism for the concentric and non-concentric multiple double layers in plasma, *Romanian Journal of Physics* **53 (1-2)** (2008) 317-324;
58. G. Amarandei, D. G. Dimitriu, A. K. Sarma, P. C. Balan, T. Klinger, O. Grulke, C. Ionita, R. Schrittwieser – Studies on the suitable materials for a laser-heated electron-emissive plasma probe, *Romanian Journal of Physics* **53 (1-2)** (2008) 311-316;
59. S. Chiriac, L. M. Ivan, D. G. Dimitriu – Intermittency scenario of transition to chaos in plasma related to the non-concentric multiple double layers, *Romanian Journal of Physics* **53 (1-2)** (2008) 303-309;
60. M. Dimitriu, D. G. Dimitriu, D. O. Dorohoi – Supply of the spectral shifts of each type of intermolecular interactions in binary solutions, *Optoelectronics and Advanced Materials – Rapid Communications* **2(12)** (2008) 867-870;
61. M. Aflori, D. O. Dorohoi, D. G. Dimitriu – Spectrophotometric measurements in an rf capacitively-coupled oxygen discharge, *Optoelectronics and Advanced Materials – Rapid Communications* **2(8)** (2008) 478-481;
62. S. A. Chiriac, D. G. Dimitriu, M. Sanduloviciu – Type I intermittency related to the spatio-temporal dynamics of double layers and ion-acoustic instabilities in plasma, *Physics of Plasmas* **14 (7)** (2007) 072309 1-5;

63. D. G. Dimitriu, M. Aflori, L. M. Ivan, C. Ionita, R. Schrittwieser – Common physical mechanism for concentric and non-concentric multiple double layers in plasma, *Plasma Physics and Controlled Fusion* **49** (3) (2007) 237-248;
64. C. Ionita, D. G. Dimitriu, R. W. Schrittwieser – Complex space charge structures in laboratory and natural plasmas, *Journal of Optoelectronics and Advanced Materials* **9** (9) (2007) 2954-2959;
65. D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Plasma experiments with relevance for nano-science, *Journal of Optoelectronics and Advanced Materials* **8** (3) (2006) 967-970;
66. M. Mihai-Plugaru, L. M. Ivan, D. G. Dimitriu – Space charge configuration formed in weakly magnetized diffusion plasma, *Journal of Optoelectronics and Advanced Materials* **8** (1) (2006) 156-159;
67. S. Chiriac, M. Aflori, D. G. Dimitriu – Investigation of the bistable behaviour of multiple anodic structures in dc discharge plasma, *Journal of Optoelectronics and Advanced Materials* **8** (1) (2006) 135-138;
68. D. G. Dimitriu – Plasma fusion torus as a complex space charge structure, *Journal of Optoelectronics and Advanced Materials* **8** (1) (2006) 128-131;
69. M. Aflori, G. Amarandei, L. M. Ivan, D. G. Dimitriu, M. Sanduloviciu – Experimental observation of multiple double layers structures in plasma. Part I: Concentric multiple double layers, *IEEE Transactions on Plasma Science* **33** (2) (2005) 542-543;
70. L. M. Ivan, G. Amarandei, M. Aflori, M. Mihai-Plugaru, C. Gaman, D. G. Dimitriu, M. Sanduloviciu – Experimental observation of multiple double layers structures in plasma. Part II: Non-concentric multiple double layers, *IEEE Transactions on Plasma Science* **33** (2) (2005) 544-545;
71. L. M. Ivan, G. Amarandei, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Physical processes at the origin of the appearance and dynamics of multiple double layers, *Acta Physica Slovaca* **55** (6) (2005) 501-506;
72. M. Aflori, G. Amarandei, L. M. Ivan, D. G. Dimitriu, D. Dorohoi – Estimating particle temperature for an argon-oxygen discharge by using Langmuir probe and optical emission spectroscopy, *Acta Physica Slovaca* **55** (6) (2005) 491-499;
73. M. Aflori, G. Amarandei, L. M. Ivan, M. Mihai-Plugaru, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Experimental control of the generation and dynamics of a complex space charge structure in a double plasma machine, *Acta Physica Slovaca* **55** (5) (2005) 423-427;
74. M. Sanduloviciu, D. G. Dimitriu, L. M. Ivan, M. Aflori, C. Furtuna, S. Popescu, E. Lozneau – Self-organization scenario relevant for nanoscale science and technology, *Journal of Optoelectronics and Advanced Materials* **7** (2) (2005) 845-851;
75. C. Ionita, D. G. Dimitriu, R. Schrittwieser – Elementary processes at the origin of the generation and dynamics of multiple double layers in DP machine plasma, *International Journal of Mass Spectrometry* **233** (1-3) (2004) 343-354;
76. D. G. Dimitriu – Physical processes related to the onset of low-frequency instabilities in magnetized plasma, *Czechoslovak Journal of Physics* **54** (Suppl. C) (2004) C468-C474;
77. D. G. Dimitriu, C. Gaman, M. Mihai-Plugaru, G. Amarandei, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Simple experimental methods to control the chaos in DP machine plasma, *Acta Physica Slovaca* **54** (2) (2004) 89-96;
78. E. Lozneau, D. G. Dimitriu, C. Gaman, C. Furtuna, E. Filep, M. Sanduloviciu – Self-organization at the origin of different states of plasma produced in dc and hf electric fields, *Acta Physica Slovaca* **54** (1) (2004) 1-6;
79. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – The influence of electron impact ionizations on low frequency instabilities in a magnetized plasma, *International Journal of Mass Spectrometry* **223-224** (2003) 141-158;

III. Articole indexate BDI

1. A. B. Agop, D. G. Dimitriu, C. M. Rusu – Theoretical modelling of an ablation plasma dynamics, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica*, **LXV(LXIX)** (2019), Fasc. 3, 39-47;
2. A. Zala, E. Hnatiuc, D. G. Dimitriu, C. M. Rusu – On the self-modulation in the biological structure, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica*, **LXV(LXIX)** (2019), Fasc. 3, 49-60;
3. A. Zala, E. Hnatiuc, D. G. Dimitriu, C. M. Rusu – On the coherence in the biological structure by means of a „hidden symmetry”, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica*, **LXV(LXIX)** (2019), Fasc. 3, 61-68;
4. A. Zala, A. L. Fânaru, D. G. Dimitriu, E. Hnatiuc, C. M. Rusu – Statistical and nonlinear dynamics analysis of electroencephalograms time series recorded during an epileptic seizure, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica*, **LXV(LXIX)** (2019), Fasc. 3, 69-80;
5. R. Schrittwieser, C. T. Teodorescu-Soare, F. Enescu, C. Ionita, D. G. Dimitriu, S. Gurlui, F. Mazzanti, S. A. Irimiciuc, B. Hodoroba, T. O'Hara, O. Vasilovici, L. Amarandei – Oscillatory behavior of hollow grid cathode discharge, *21st International Conference on Electromagnetics in Advanced Applications & 9th IEEE-APS Technical Conference on Antennas and Propagation in Wireless Communications*, Granada, Spain, 2019, pp. 1359-1362;
6. B. A. Agop, S. A. Irimiciuc, D. G. Dimitriu – Self-modulation of a hollow cathode discharge plasma dynamics. I. Experimental, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica*, **LXIII(LXVII)** (2017), Fasc. 2, 9-19;

7. S. A. Irimiciuc, D. G. Dimitriu, B. A. Agop – Self-modulation of a hollow cathode discharge plasma dynamics. II. Theoretical modeling, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica, LXIII(LXVII)* (2017), Fasc. 2, 21-35;
8. D. Babusca, A. C. Benchea, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Solvent empirical scales and their importance for the study of intermolecular interactions, *TIM 2016 Physics Conference, Timisoara, Romania, May 26-28, 2016, in AIP Conference Proceedings 1796* (2017) 030011 1-6;
9. A. E. Tudose, I. Dumitrascu, L. Dumitrascu, D. G. Dimitriu, D. O. Dorohoi – Methods for determining the linear birefringence of some inorganic uniax crystals, *TIM 2016 Physics Conference, Timisoara, Romania, May 26-28, 2016, in AIP Conference Proceedings 1796* (2017) 030007 1-5;
10. A. C. Morosanu, A. Gritco (Todirascu), D. G. Dimitriu, D. O. Dorohoi, C. Cheptea – Quantum mechanical and spectral study of fluorescein, *6th IEEE International Conference on E-Health and Bioengineering, June 22-24, 2017, Sinaia, Romania*, pp. 619-622;
11. A. C. Benchea, D. Babusca, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Excited state molecular polarizability estimated by solvatochromic means, *TIM 2016 Physics Conference, Timisoara, Romania, May 26-28, 2016, in AIP Conference Proceedings 1796* (2017) 030013 1-6;
12. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Chaotic dynamics and control of oscillations in the Chua's circuits, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica, LX(LXIV)* (2014), Fasc. 2, 21-29;
13. B. Albina, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. O. Gurlui – Studies of planetary boundary layer by infrared thermal imagery, *TIM 2013 Physics Conference, Timisoara, Romania, November 21-24, 2013, in AIP Conference Proceedings 1634* (2014) 174-179;
14. D. O. Dorohoi, D. G. Dimitriu, I. Cosutchi, I. Breaban – A new method for determining the optical rotatory dispersion of transparent crystalline layers, *2nd International Conference on Applications of Optics and Photonics, Aveiro, Portugal, May 26-30, 2014, in Proceedings of SPIE 9286* (2014) 92862Z;
15. D. G. Dimitriu – Scenarios of transition to chaos competition in low-temperature plasma, *12th TIM Physics Conference, Timisoara, Romania, November 27-30, 2012, in AIP Conference Proceedings 1564* (2013) 211-216;
16. S. Gurlui, O. Niculescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Spectral investigations of two simultaneous fireballs in plasma, *12th TIM Physics Conference, Timisoara, Romania, November 27-30, 2012, in AIP Conference Proceedings 1564* (2013) 200-204;
17. D. G. Dimitriu, M. Aflori, L. M. Ivan, E. Poll, M. Agop – Transition to chaos through sub-harmonic bifurcations in plasma. I. Experiment, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica, LVIII(LXII)* (2012), Fasc. 4, 29-35;
18. M. Agop, E. Poll, D. G. Dimitriu, M. Aflori, L. M. Ivan – Transition to chaos through sub-harmonic bifurcations in plasma. II. Fractal hydrodynamics, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica, LVIII(LXII)* (2012), Fasc. 4, 37-55;
19. E. Poll, M. Agop, D. G. Dimitriu, M. Aflori, L. M. Ivan – Transition to chaos through sub-harmonic bifurcations in plasma. III. Theoretical modeling, *Buletinul Institutului Politehnic din Iasi, Seria Matematica, Mecanica Teoretica, Fizica, LVIII(LXII)* (2012), Fasc. 4, 57-70;
20. O. Niculescu, M. M. Cazacu, M. N. Danila, D. G. Dimitriu, S. O. Gurlui, M. Agop – Magnetosphere double layers and aurora borealis. Acceleration mechanisms and instabilities, *Studia Universitatis Babeş-Bolyai Ambientum LVII (1-2)* (2012) 123-128;
21. M. N. Danila, F. Unga, M. M. Cazacu, A. Timofte, M. Strat, D. G. Dimitriu, S. Gurlui – LIDAR measurements comparison of two volcanic eruptions: Environmental influences upon the Romanian territory, *Analele Universitatii de Vest din Timisoara, Seria Fizica LVI* (2012) 68-75;
22. O. Niculescu, D. G. Dimitriu – Experimental and theoretical study of nonlinear phenomena related to the double layer dynamics in plasma, *Physics Conference (TIM 2009), Timisoara, Romania, November 27-28, 2009, in AIP Conference Proceedings 1262* (2010) 178-183;
23. S. Mijovic, M. Vuceljic, I. Vojvodic, R. Schrittwieser, M. Maljkov, D. G. Dimitriu, C. Ionita – Determination of plasma space potential from a Langmuir probe by Tikhonov's regularization method, *24th Summer School and International Symposium on the Physics of Ionized Gases, Novi Sad, Serbia, August 25-29, 2008, in Publication of the Astronomical Observatory of Belgrade – Series 84* (2008) 313-316;
24. D. G. Dimitriu, L. M. Ivan – Cascade of spatio-temporal period-doubling bifurcations in connection with the appearance and dynamics of non-concentric multiple double layers in plasma, *International Conference on Research and Applications of Plasma (PLASMA 2007) / 4th German-Polish Conference on Plasma Diagnostics for Fusion and Applications / 6th French-Polish Seminar on Thermal Plasma in Space and Laboratory, Greifswald, Germany, October 16-19, 2007, in AIP Conference Proceedings 993* (2008) 93-96;
25. D. G. Dimitriu, S. A. Chiriac – Transition to chaos by type I intermittency in plasma, *International Conference on Research and Applications of Plasma (PLASMA 2007) / 4th German-Polish Conference on Plasma Diagnostics for Fusion and Applications / 6th French-Polish Seminar on Thermal Plasma in Space and Laboratory, Greifswald, Germany, October 16-19, 2007, in AIP Conference Proceedings 993* (2008) 97-100;
26. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Simultaneous excitation and analysis of three instabilities in magnetized plasma, *International Conference on Research and Applications of Plasma (PLASMA 2007) / 4th German-Polish Conference on*

- Plasma Diagnostics for Fusion and Applications / 6th French-Polish Seminar on Thermal Plasma in Space and Laboratory, Greifswald, Germany, October 16-19, 2007*, in *AIP Conference Proceedings* **993** (2008) 105-108;
27. M. Aflori, L. M. Ivan, M. Mihai-Plugaru, D. G. Dimitriu – Estimating electrons and ions energies in an RF capacitively-coupled argon discharge, *Romanian Journal of Physics* **51** (1-2) (2006) 225-230;
 28. L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, M. Aflori, D. G. Dimitriu – The dynamic current-voltage characteristic as a powerful tool to analyze fast phenomena in plasma, *Romanian Journal of Physics* **51** (1-2) (2006) 219-224;
 29. D. G. Dimitriu, S. Gurlui, M. Aflori, M. Ivan – On the physical mechanism at the origin of multiple double layers appearance in plasma, *International Conference on Research and Applications of Plasmas (PLASMA 2005), Opole Turawa, Poland, September 6-9, 2005*, in *AIP Conference Proceedings* **812** (2006) 149-152;
 30. S. Gurlui, D. G. Dimitriu, G. Strat, M. Strat – Study of the anode plasma double layer: optogalvanic detectors, *International Conference on Research and Applications of Plasmas (PLASMA 2005), Opole Turawa, Poland, September 6-9, 2005*, in *AIP Conference Proceedings* **812** (2006) 333-336;
 31. M. Aflori, L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, D. G. Dimitriu – Controlling the appearance and dynamics of a plasma ball of fire by using an additional electrode, *Romanian Journal of Physics* **50** (9-10) (2005) 1107-1112;
 32. L. M. Ivan, C. Gaman, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Experimental investigation of multiple self-organized structure in plasma, *Romanian Journal of Physics* **50** (9-10) (2005) 1089-1094;
 33. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – Double layers with ionic deep, *Romanian Journal of Physics* **49** (5-6) (2004) 455-462;
 34. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – The study of the influence of the external optical radiation upon the stability of the double layers, *Romanian Journal of Physics* **49** (1-2) (2004) 81-88;
 35. L. M. Ivan, C. Gaman, G. Amarandei, M. Mihai-Plugaru, D. G. Dimitriu – On the application of the Lorenz model to the fluids convection analysis, *Romanian Journal of Physics* **49** (5-6) (2004) 491-498;
 36. M. Sanduloviciu, D. G. Dimitriu, E. Lozneau – Violation of the second law of thermodynamics by “engines” emerged by self-organization in nature and laboratory, *Romanian Journal of Physics* **49** (1-2) (2004) 113-123;
 37. D. G. Dimitriu, L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, C. Gaman – Nonlinear dynamics analysis of complex phenomena in plasma, *Romanian Journal of Physics* **49** (5-6) (2004) 483-489;
 38. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Chaos control in experimental and industrial plasma devices, *Romanian Journal of Physics* **49** (3-4) (2004) 341-348;
 39. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Flicker noise related to uncorrelated dynamics of multiple double layers in plasma, *Romanian Journal of Physics* **49** (3-4) (2004) 333-340;
 40. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Nonlinear dynamical analysis of two current-driven low-frequency instabilities in a magnetised plasma column, *International Congress on Plasma Physics, Sydney, Australia, July 15-19, 2002*, in *AIP Conference Proceedings* **669** (2003) 719-722;
 41. D. G. Dimitriu, S. Popescu, P. C. Balan, C. Ionita, E. Lozneau, R. Schrittwieser, M. Sanduloviciu – Self-organized anode structures acting as stimulators of oscillations in double plasma machine, *Romanian Reports in Physics* **54** (2002) 217-222;
 42. V. Ignatescu, D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – The influence of the background plasma density on the dynamics of a fireball in a DP machine, *Romanian Reports in Physics* **54** (2002) 177-183;
 43. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – New features of current-driven low-frequency instabilities in a Q-machine plasma, *Romanian Reports in Physics* **54** (2002) 161-167;

IV. Articole in reviste cu referenți, neindexate ISI sau BDI

1. O. Vasilovici, S. A. Irimiciuc, D. G. Dimitriu – Signal encryption using Chua’s chaotic circuits, *Journal of Advanced Research in Physics* **4** (1) (2013) 011307;
2. S. A. Irimiciuc, D. G. Dimitriu – Experimental investigation of the interaction between two fireballs in plasma, *Revista Stiintifica V. Adamachi serie noua XXII* (1-4) (2013) 52-54;
3. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Synchronization of two chaotic systems, *Revista Stiintifica V. Adamachi serie noua XXII* (1-4) (2013) 48-51;
4. C. T. Teodorescu-Soare, V. Closca, D. G. Dimitriu, E. Poll, M. Agop – Multiple double layers in plasma – experiments and theoretical modeling, *Revista Stiintifica V. Adamachi serie noua XXI* (1-4) (2012) 46-49;
5. V. Closca, D. G. Dimitriu – Proiectarea unui optional “Experimente epocale in fizica”, adresat elevilor de liceu, *Revista Stiintifica V. Adamachi serie noua XXI* (1-4) (2012) 5-7;
6. M. Sanduloviciu, D. G. Dimitriu, S. Chiriac, E. Lozneau – The ball lightning as a self-organized complex system, *International Journal Unconventional Electromagnetics and Plasmas* **2** (1-2) (2009) 167-167;
7. D. G. Dimitriu, M. Aflori, C. Ionita, R. Schrittwieser – Feigenbaum scenario of transition to chaos related to multiple double layer dynamics, *International Journal Unconventional Electromagnetics and Plasmas* **1** (1-2) (2008) 53-57;
8. D. G. Dimitriu, L. M. Ivan, M. Aflori, C. Ionita, R. Schrittwieser – Towards a common physical model for the appearance and dynamics of concentric and non-concentric multiple double layers in plasmas, *International Journal Unconventional Electromagnetics and Plasmas* **1** (1-2) (2008) 59-64;

9. E. Lozneau, D. G. Dimitriu, L. M. Ivan, M. Sanduloviciu – Functional double layers emerged in plasma by self-organization, *International Journal Unconventional Electromagnetics and Plasmas* 1 (1-2) (2008) 99-99;
10. A. R. Stana, L. M. Ivan, D. G. Dimitriu – Feigenbaum scenario of transition to chaos in plasma, *Revista Stiintifica V. Adamachi* serie noua XVII (1) (2008) 100-102;
11. A. Cantaragiu, D. G. Dimitriu, D. Mihailescu – Monte Carlo calculations of water-to-air stopping power ratios for degraded electron beams, *Revista Stiintifica V. Adamachi* serie noua XV (2) (2006) 116-117;
12. R. Valicu, L. M. Ivan, D. G. Dimitriu – Structuri autoorganizate in ferofluid, *Revista Stiintifica V. Adamachi* serie noua XV (2) (2006) 107-108;
13. L. M. Ivan, M. Aflori, D. G. Dimitriu – Edge localised modes (ELMs) of fusion plasma as a spatio-temporal self-organized phenomenon, *Analele Universitatii "Dunarea de Jos" din Galati, Seria Matematica, Fizica, Mecanica Teoretica, Fascicula II, XXIII(XXVIII)* (2005) 125-130;
14. M. Aflori, L. M. Ivan, D. G. Dimitriu – Experimental investigation of a transition to chaos scenario by torus breakdown in plasma, *Analele Universitatii "Dunarea de Jos" din Galati, Seria Matematica, Fizica, Mecanica Teoretica, Fascicula II, XXIII(XXVIII)* (2005) 131-136;
15. M. Aflori, L. M. Ivan, D. G. Dimitriu, M. Sanduloviciu – Nonlinear analysis of temporal series generated by multiple anodic structures in DC discharges, *Analele Universitatii "Dunarea de Jos" din Galati, Seria Matematica, Fizica, Mecanica Teoretica, Fascicula II, XXIII(XXVIII)* (2005) 119-124;
16. M. Aflori, D. G. Dimitriu, S. Popescu, L. M. Ivan, E. Lozneau, M. Sanduloviciu – Current filamentation in a DC gas discharge, *Analele Universitatii "Dunarea de Jos" din Galati, Seria Matematica, Fizica, Mecanica Teoretica, Fascicula II, XXIII(XXVIII)* (2005) 113-118;
17. M. Aflori, D. G. Dimitriu, D. O. Dorohoi – Chaos and oscillations at the anode surface in a DC gas discharge, *Analele Universitatii "Dunarea de Jos" din Galati, Seria Matematica, Fizica, Mecanica Teoretica, Fascicula II, XXIII(XXVIII)* (2005) 107-112;
18. M. Aflori, L. M. Ivan, M. Dimitriu, M. Antohe, L. Mihaescu, S. A. Chiriac, D. G. Dimitriu – Scenario of transition to chaos by torus breakdown in DP machine plasma, related to the non-concentric multiple double layers, *Revista Stiintifica V. Adamachi* serie noua XIII (1-4) (2005) 124-125;
19. P. Niga, M. Aflori, L. M. Ivan, D. G. Dimitriu, N. Murphy, L. Gaynor, G. O'Sullivan – Photoabsorption spectra of laser produced plasma, *Revista Stiintifica V. Adamachi* serie noua XIII (1-4) (2005) 116-117;
20. M. Aflori, L. M. Ivan, D. G. Dimitriu – Utilizarea metodei graficului de recurenta in studiul formatiunilor anodice care apar in descarcari de curent continuu, *Revista Stiintifica V. Adamachi* serie noua XIII (1-4) (2005) 85-86;
21. R. Marguta, M. Mihai-Plugaru, L. M. Ivan, C. Gaman, G. Amarandei, C. Borcia, D. G. Dimitriu – On nonlinear phenomena involved in the formation of convective patterns in liquids, *Analele Stiintifice ale Universitatii „Al. I. Cuza” Iasi, Seria Chimie XII* (2004) 51-54;
22. D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Generation and control of oscillations in plasma, *Analele Stiintifice ale Universitatii „Al. I. Cuza” Iasi, Seria Fizica L* (2004) 113-120;
23. D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Generation and analysis of a multiple double layer in plasma, *Analele Stiintifice ale Universitatii „Al. I. Cuza” Iasi, Seria Fizica XLIX* (2003) 55-59;
24. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu – Multiple double layers in the interspace of two independently working discharges, *Analele Universitatii de Vest din Timisoara, Seria Fizica XLIV* (2003) 88-92;
25. S. Gurlui, D. G. Dimitriu, G. Strat, M. Strat – Instability of a double layer under the influence of the external optical radiation, *Analele Universitatii de Vest din Timisoara, Seria Fizica XLIV* (2003) 7-18;
26. D. G. Dimitriu – Applying the modern methods of the nonlinear dynamics to describe some complex states of plasma, *Revista Stiintifica V. Adamachi* serie noua XI (1) (2003) 5-6;
27. M. Mihai-Plugaru, C. Gaman, M. Ivan, G. Amarandei, M. Dimitriu, D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Procesele fizice care stau la baza mecanismului de generare a oscilatiilor intr-o descarcare electrica in gaze, *Revista Stiintifica V. Adamachi* serie noua XI (1) (2003) 158-159;
28. M. Ivan, G. Amarandei, M. Mihai-Plugaru, C. Gaman, D. G. Dimitriu, C. Ionita, M. Dimitriu, E. Lozneau, R. Schrittwieser, M. Sanduloviciu – The influence of the external circuit inductance on the nonlinear dynamics of a ball of fire in DP-machine plasma, *Revista Stiintifica V. Adamachi* serie noua XI (1) (2003) 156-157;
29. C. Gaman, M. Ivan, G. Amarandei, M. Mihai-Plugaru, D. G. Dimitriu, C. Ionita, M. Dimitriu, R. Schrittwieser, E. Lozneau, M. Sanduloviciu – Experimental method to replace a chaotic behavior of a plasma system with an oscillatory one, *Revista Stiintifica V. Adamachi* serie noua XI (1) (2003) 154-155;
30. G. Amarandei, S. Popescu, C. Borcia, D. G. Dimitriu, C. Gaman, M. Mihai-Plugaru, E. Lozneau, M. Sanduloviciu – On convective pattern formation in liquids, *Revista Stiintifica V. Adamachi* serie noua XI (1) (2003) 152-153;
31. G. Amarandei, M. Mihai-Plugaru, C. Gaman, M. Ivan, E. Lozneau, C. Ionita, M. Dimitriu, D. G. Dimitriu, R. Schrittwieser, M. Sanduloviciu – On the physical basis of the negative differential resistance which appears at the onset of low-frequency instabilities in magnetized plasma, *Revista Stiintifica V. Adamachi* serie noua XI (1) (2003) 150-151;
32. D. Creanga, D. G. Dimitriu, D. Dorohoi – Electric dipole moments of some benzo-[F]-quinolinium cycloadducts, *Studia Universitatis Babes-Bolyai, Physica* 46 special issue PIM 2002, 337-340;
33. D. Dorohoi, D. G. Dimitriu – Microscopic parameters in the excited states of some anthracene derivatives, *Studia Universitatis Babes-Bolyai, Physica* 46 special issue PIM 2002, 332-335;

V. Lucrări prezentate la conferințe internaționale (invitate, orale, poster)

1. D. G. Dimitriu, S. Popescu, M. Agop – Chaotic states of plasma triggered by the nonlinear dynamics of simple and multiple double layers, *13th Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
2. D. G. Dimitriu, S. Popescu, M. Agop – Double layer in plasma as an interface generated through the interaction of two fractal fluids, *13th Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
3. M. Agop, A. Zala, D. Dimitriu, S. Irimiciuc, A. Gavrilut, G. Crumpei, L. Eva – Statistical methods and nonlinear dynamics for analyzing brain activity. Theoretical and experimental aspects, *13th Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
4. R. Schrittwieser, C. T. Teodorescu-Soare, F. Enescu, C. Ionita, D. G. Dimitriu, S. Gurlui, F. Mazzanti, S. A. Irimiciuc, B. Hodoroaba, T. O'Hara, O. Vasilovici, L. Amarandi – Oscillatory behavior of hollow grid cathode discharge, *21st International Conference on Electromagnetics in Advanced Applications & 9th IEEE-APS Technical Conference on Antennas and Propagation in Wireless Communications*, Granada, Spain, 9-13 September 2019 (conferință invitată);
5. R. Schrittwieser, C. T. Teodorescu-Soare, C. Ionita, D. G. Dimitriu, O. Vasilovici, S. Gurlui, S. A. Irimiciuc, B. Hodoroaba, T. O'Hara, L. Amarandi, F. Enescu, F. Mazzanti, R. Stenzel, J. Gruenwald – Inverted fireballs, *18th International Conference on Plasma Physics and Applications (CPPA)*, Iași, România, 20-22 June 2019 (conferință invitată);
6. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Nonlinear dynamics of non-concentric multiple double layers as a source of low-temperature plasma instabilities, *18th International Conference on Plasma Physics and Applications*, Iași, România, 20-22 June 2019;
7. S. Popescu, D. G. Dimitriu – Minimum entropy production in the process of fireball formation, *18th International Conference on Plasma Physics and Applications*, Iași, România, 20-22 June 2019;
8. S. Popescu, D. G. Dimitriu – Entropy production during the fireball formation in discharge plasma, *34th International Conference on Phenomena in Ionized Gases (ICPIG) & 10th International Conference on Reactive Plasmas (ICRP)*, Sapporo, Japan, 14-19 July 2019 (conferință orală);
9. D. G. Dimitriu, S. Popescu – Low-temperature plasma instabilities related to the nonlinear dynamics of fireballs and multiple double layers, *34th International Conference on Phenomena in Ionized Gases (ICPIG) & 10th International Conference on Reactive Plasmas (ICRP)*, Sapporo, Japan, 14-19 July 2019;
10. S. Popescu, D. G. Dimitriu – Nonlinear dynamics of complex space charge structures at the origin of low-frequency plasma instabilities, *12th CHAOS International Conference on Non Linear Analysis and Modeling: Theory and Applications*, Chania, Greece, 18-21 June 2019 (conferință orală);
11. S. Popescu, D. G. Dimitriu – A dynamical model for plasma fireball, *12th CHAOS International Conference on Non Linear Analysis and Modeling: Theory and Applications*, Chania, Greece, 18-21 June 2019 (conferință orală);
12. C. T. Teodorescu-Soare, S. A. Irimiciuc, C. Ionita, D. G. Dimitriu, B. Hodoroaba, T. O'Hara, O. Vasilovici, L. Amarandi, R. W. Schrittwieser – Concentric double hollow grid cathode discharges, *46th EPS Conference on Plasma Physics*, Milan, Italy, 8-12 July 2019 (conferință orală);
13. C. T. Teodorescu-Soare, F. Enescu, C. Ionita, D. G. Dimitriu, S. Gurlui, F. Mazzanti, R. W. Schrittwieser – Spectral investigations of concentric double hollow grid cathode discharges, *46th EPS Conference on Plasma Physics*, Milan, Italy, 8-12 July 2019;
14. D. G. Dimitriu – On the instabilities of complex space charge structures in low-temperature plasma, *2nd EPS Conference on Statistical and Nonlinear Physics*, Stockholm, Sweden, 7-11 May 2019;
15. D. Babusca, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Aminoacid derivatives containing rest of 1,2,4-Triazole-3,4-Disubstituted with potential antitumoral activity, *XXIV Galyna Puchkovska International School-Seminar "Spectroscopy of Molecules and Crystals"*, Odesa, Ukraine, 25-30 August 2019;
16. D. Babusca, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral study of intermolecular interactions in polar solutions, *XXIV Galyna Puchkovska International School-Seminar "Spectroscopy of Molecules and Crystals"*, Odesa, Ukraine, 25-30 August 2019;
17. V. Rusyn, L. Pribylova, D. Dimitriu, M. Guzan – Security information system based on chaotic system, *3rd International Scientific and Practical Conference "Information Security and Computer Technology"*, Kirovohrad, Ukraine, 19-20 April 2018;
18. S. A. Irimiciuc, G. Bulai, D. G. Dimitriu, S. Gurlui – Role of molecule formation and multiple – structure scenarios in dynamics of laser produced plasma, *Europhysics Conference on Atomic and Molecular Physics of Ionized Gases (ESCAMPIG 2018)*, Glasgow, UK, 17-21 July 2018;
19. D. G. Dimitriu, S. A. Irimiciuc – Transition to chaos by intermittency of multiple fireball dynamics in low-temperature discharge plasma, *Europhysics Conference on Atomic and Molecular Physics of Ionized Gases (ESCAMPIG 2018)*, Glasgow, UK, 17-21 July 2018;
20. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – Experimental and theoretical investigations of the interaction between two complex space charge structures in hollow grid cathode discharge plasma, *Europhysics Conference on Atomic and Molecular Physics of Ionized Gases (ESCAMPIG 2018)*, Glasgow, UK, 17-21 July 2018;

21. C. T. Teodorescu-Soare, D. G. Dimitriu, O. Vasilovici, C. Ionita, S. Irimiciuc, R. Schrittwieser – Experimental investigation of a discharge between two spherical concentric grids with axisymmetric holes, *19th International Congress on Plasma Physics*, Vancouver, Canada, 4-8 June 2018;
22. S. Popescu, D. G. Dimitriu – On energy transformation and entropy production in a DC gas discharge, *Entropy 2018 – From Physics to Information Sciences and Geometry*, Barcelona, Spain, 14-16 May 2018;
23. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – Appearance and instability of non-concentric multiple double layers in low-temperature discharge plasma, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
24. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – A compact non-differential approach for modelling laser ablation plasma dynamics, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
25. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Self-modulated oscillation in the dynamics of a hollow grid cathode discharge plasma, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
26. M. Agop, S. A. Irimiciuc, D. G. Dimitriu – Transition to chaos through intermittency related to the nonlinear dynamics of non-concentric multiple double layers in low-temperature plasma, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
27. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – On the appearance and dynamics of multiple complex space charge structures in low-temperature discharge plasma, *Conference on Complex Systems (CCS 2018)*, Thessaloniki, Greece, 23-28 September 2018;
28. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Investigation of the interaction between two complex space charge structures in low-temperature plasma, *Conference on Complex Systems (CCS 2018)*, Thessaloniki, Greece, 23-28 September 2018;
29. A. C. Morosanu, A. Gritco (Todirascu), D. G. Dimitriu, D. O. Dorohoi, C. Cheptea – Quantum mechanical and spectral study of fluorescein, *6th IEEE International Conference on E-Health and Bioengineering (EHB 2017)*, Sinaia, România, 22-24 June 2017;
30. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – Self-modulation of the discharge current oscillations in the presence of a complex space charge configuration in low-temperature plasma, *17th International Conference on Plasma Physics and Applications*, Măgurele, București, România, 15-20 June 2017;
31. D. G. Dimitriu, M. Agop – Spontaneous symmetry breaking related to the onset of instabilities in low-temperature plasma, *1st International Conference on Symmetry*, Barcelona, Spain, 16-18 October 2017;
32. D. G. Dimitriu, M. Agop – Theoretical and experimental analysis of low-frequency instabilities in low-temperature magnetized plasma, *10th Chaotic Modeling and Simulation International Conference (CHAOS 2017)*, Barcelona, Spain, 30 May – 2 June 2017;
33. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Theoretical modeling of the interaction between two complex space charge structures in low-temperature plasma – Self-modulated oscillations, *10th Chaotic Modeling and Simulation International Conference (CHAOS 2017)*, Barcelona, Spain, 30 May – 2 June 2017;
34. S. Gurlui, M. M. Cazacu, A. Timofte, G. Bulai, D. G. Dimitriu – Space- and time-resolved RAMN and breakdown spectroscopy: advanced LIDAR techniques, *28th International Laser Radar Conference (ILRC)*, București, România, 25-30 June 2017;
35. R. Schrittwieser, C. T. Teodorescu-Soare, D. G. Dimitriu, S. Gurlui, C. Ionita, O. Vasilovici – Complex space charge structures excited by a spherical grid cathode, *16th International Balkan Workshop on Applied Physics (IBWAP)*, Constanța, România, 7-9 July 2016 (conferință invitată);
36. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Optical activity of glucose solutions, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
37. A. C. Benchea, M. Gaina, D. G. Dimitriu, D. O. Dorohoi – Spectral study on ternary solutions consisting of Rhodamines, Ethylene glycol and DMSO, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
38. C. A. Morosanu, V. Closca, D. G. Dimitriu, D. O. Dorohoi – Electric dipole moments in the excited states of some zwitterionic compounds estimated from a solvatochromic study, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
39. M. Gaina, A. C. Benchea, C. Podlipnik, D. G. Dimitriu – Quantum-mechanical characterization and spectral study of Curcumin, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
40. A. E. Tudose, D. G. Dimitriu, D. O. Dorohoi – Linear birefringence dispersion of PET (poly ethyleneterephthalate) foils determined from visible channelled spectra, *33rd European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
41. A. C. Benchea, D. Babusca, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral study of Rhodamine dyes in binary and ternary solutions, *33rd European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
42. A. C. Benchea, D. Babusca, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical study of some azo derivatives, *33rd European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;

43. S. Gurlui, C. T. Teodorescu-Soare, D. G. Dimitriu, R. Schrittwieser, C. Ionita – Optical and electrical investigations of a complex space charge structure excited by a spherical grid cathode with a hole, *27th Symposium on Plasma Physics and Technology (SPPT)*, Prague, Czech Republic, 20-23 June 2016;
44. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical study of 3-(2-benzothiazolyl)-7-(diethylamino)-coumarin in binary solutions, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
45. A. C. Benchea, D. Babusca, D. G. Dimitriu, C. Podlipnik – Solvatochromic study and quantum-mechanical characterization of methyl red, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
46. C. A. Morosanu, A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum mechanical characterization and solvatochromic study of quercetine, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
47. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Dispersion of vizable rotatory power for aqueous glucose solutions, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
48. D. Babusca, A. C. Benchea, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Solvent empirical scales and their importance for the study of intermolecular interactions, *TIM 15-16 Physics Conference*, Timişoara, România, 26-28 May 2016;
49. A. C. Benchea, D. Babusca, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Excited state molecular polarizability estimated by solvatochromic means, *TIM 15-16 Physics Conference*, Timişoara, România, 26-28 May 2016;
50. C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Experimental investigations of the nonlinear dynamics of a complex space-charge configuration inside and around a grid cathode with hole, *International Conference on Research and Applications of Plasmas PLASMA 2015*, Warsaw, Poland, 7-11 September 2015;
51. D. G. Dimitriu, A. E. Tudose, D. O. Dorohoi – Linear birefringence of polymer foils determined by optical means, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
52. A. E. Tudose, D. G. Dimitriu, D. O. Dorohoi – Optical activity of glucose solutions, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
53. A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum-mecanical and spectral studies of Rhodamine B in ternary solutions, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
54. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Solvatochromic studies of two Sudan derivatives in binary and ternary solutions, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
55. C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Complex space-charge configuration inside and around a grid cathode with hole, *42nd EPS Conference on Plasma Physics*, Lisbon, Portugal, 22-26 June 2015;
56. D. O. Dorohoi, D. G. Dimitriu, I. Dumitrascu, C. B. Zelinschi, I. Breaban – Interferential method to determine the optical rotatory dispersion of crystalline layers, *4th International Colloquium "Physics of Materials"*, Bucureşti, România, 13-14 November 2014 (conferinţă orală);
57. A. Timofte, M. M. Cazacu, B. Albina, G. Dascalu, D. G. Dimitriu, S. Gurlui – Planetary boundary layer dynamics: optical emission and space-time resolved spectroscopy, *14th European Meteorological Society (EMS) Annual Meeting & 10th European Conference on Applied Climatology (ECAC)*, Prague, Czech Republic, 6-10 October 2014;
58. I. A. Cosutchi, D. G. Dimitriu, C. B. Zelinschi, I. Breaban, D. O. Dorohoi – Optical activity of transparent polymer foils characterized by spectral means, *32nd European Congress on Molecular Spectroscopy*, Düsseldorf, Germany, 24-29 August 2014 (conferinţă orală);
59. S. A. Irimiciuc, C. T. Teodorescu-Soare, C. Ionita, D. G. Dimitriu, S. Popescu, M. Agop, B. S. Schneider, R. W. Schrittwieser – Interaction between three fireballs in low-temperature plasma, *17th International Congress on Plasma Physics*, Lisbon, Portugal, 15-19 September 2014;
60. C. Ionita, S. A. Irimiciuc, D. G. Dimitriu, S. Popescu, M. Agop, R. Schrittwieser – Experimental investigation of the interaction between two fireballs in low-temperature plasma, *41st EPS Conference on Plasma Physics*, Berlin, Germany, 23-27 June 2014;
61. D. Dorohoi, D. G. Dimitriu, I. Cosutchi – A new method to determining the optical rotatory dispersion (ORD), *II International Conference on Applications of Optics and Photonics*, Aveiro, Portugal, 26-30 May 2014 (conferinţă orală);
62. D. G. Dimitriu, S. Popescu – Order to chaos transition in low temperature plasmas, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013 (conferinţă invitată);
63. D. G. Dimitriu, C. T. Teodorescu-Soare, S. Popescu – Virtual anode fireball in plasma, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013;
64. M. M. Cazacu, M. N. Danila, B. Albina, F. Unga, D. G. Dimitriu, S. Gurlui – Python processing and analyzing tool of aerosols optical parameters derived from AERONET LOA-SL data, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013;
65. B. Albina, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Studies of planetary boundary layer by infrared thermal imagery, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013;

66. G. V. Focsanianu, D. G. Dimitriu – Diffusion-weighted whole-body magnetic resonance imaging with background body signal suppression, *International Physics Conference TIM-13*, Timișoara, România, 21-24 November 2013;
67. S. A. Irimiciuc, S. Popescu, D. G. Dimitriu – Nonlinear dynamics of multiple fireballs in low-temperature plasma, *International Physics Conference TIM-13*, Timișoara, România, 21-24 November 2013;
68. O. Niculescu, S. Gurlui, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Nonlinear dynamics analysis and extensive optical investigations of two fireballs simultaneously excited in an argon-helium mixture plasma, *International Physics Conference TIM-13*, Timișoara, România, 21-24 November 2013;
69. B. Albina, D. G. Dimitriu, S. Gurlui, M. M. Cazacu – A new computational approach in atmospheric temperature retrieval from infrared imagery measurements, *International Physics Conference TIM-13*, Timișoara, România, 21-24 November 2013;
70. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Study of chaotic systems with applications to secure communications, *International Physics Conference TIM-13*, Timișoara, România, 21-24 November 2013 (conferință orală);
71. I. A. Cosutchi, D. G. Dimitriu, D. O. Dorohoi – New method for determining optical rotatory dispersion of polymer solutions, *21st International School-Seminar of Galyna Puchkovska "Spectroscopy of Molecules and Crystals"*, Beregove, Ukraine, 22-29 September 2013 (conferință orală);
72. D. O. Dorohoi, D. G. Dimitriu – A new method for determining the dispersion of optical activity, *12th International Conference on Molecular Spectroscopy – From Molecules to Nano- and Biomaterials*, Krakow – Bialka Tatrzenska, Poland, 8-12 September 2013 (conferință orală);
73. M. Strat, M. M. Cazacu, A. Timofte, D. Dimitriu, S. Gurlui – Aerosol detection and ranging: fast laser imaging optical emission spectroscopy (DARLIOES), *European Aerosol Conference*, Prague, Czech Republic, 1-6 September 2013;
74. M. M. Cazacu, F. Unga, A. Timofte, I. Popovici, A. I. Pascaru, D. Dimitriu, S. Gurlui – Mixture of biomass-burning and urban aerosols analysis: a case study, *European Aerosol Conference*, Prague, Czech Republic, 1-6 September 2013;
75. O. Niculescu, S. Gurlui, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Study on the interaction of two complex plasma structures. Optical emission spectroscopy and nonlinear dynamics analysis, *PLASMA 2013 International Conference on Research and Application of Plasmas*, Warsaw, Poland, 2-6 September 2013;
76. M. M. Cazacu, F. Unga, N. Ajtai, H. I. Stefanie, A. Timofte, D. Dimitriu, S. Gurlui – Monitoring and analyses of Grímsvötn volcanic dust intrusion over Northern Romania. LIDAR and AERONET considerations, *International Conference "Advances in Environmental Sciences", 6th Workshop on Optoelectronic Techniques for Environmental Monitoring (OTEM)*, Timișoara, România, 11-12 June 2013 (conferință orală);
77. M. M. Cazacu, F. Unga, A. Mortier, P. Goloub, D. Dimitriu, S. Gurlui – Optical parameters analysis of mixtures of biomass-burning and urban aerosols: A case study, *International Conference "Advances in Environmental Sciences", 6th Workshop on Optoelectronic Techniques for Environmental Monitoring (OTEM)*, Timișoara, România, 11-12 June 2013 (conferință orală);
78. O. Niculescu, D. G. Dimitriu – Experimental evidence of competing scenarios of transition to chaos in low-temperature plasma, *31st International Conference on Phenomena in Ionized Gases (ICPIG)*, Granada, Spain, 14-19 July 2013;
79. O. Niculescu, S. Gurlui, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Optical emission spectroscopy and nonlinear dynamics analysis of two fireballs simultaneously obtained in a cold diffusion plasma, *31st International Conference on Phenomena in Ionized Gases (ICPIG)*, Granada, Spain, 14-19 July 2013;
80. D. G. Dimitriu, M. Agop – Competition of scenarios of transition to chaos in plasma – Experiment and theoretical modelling, *6th Chaotic Modeling and Simulation International Conference*, Istanbul, Turkey, 11-14 June 2013 (conferință orală);
81. S. Popescu, D. G. Dimitriu – Nonlinear processes in low temperature plasmas related to the emergence of ordered structures, *Physics Conference TIM-12*, Timișoara, România, 37-40 November 2012 (conferință invitată);
82. D. G. Dimitriu – Scenarios of transition to chaos competition in low-temperature plasma, *Physics Conference TIM-12*, Timișoara, România, 27-30 November 2012;
83. S. Gurlui, O. Niculescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Spectral investigations of two simultaneous fireballs in plasma, *Physics Conference TIM-12*, Timișoara, România, 27-30 November 2012;
84. F. Unga, M. M. Cazacu, A. Timofte, D. Bostan, D. Dimitriu, S. Gurlui, P. Goloub – Classification of tropospheric aerosols types during summer, over Iasi area, Romania. LIDAR, AERONET and meteorological consideration, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012 (conferință orală);
85. F. Unga, N. Ajtai, M. N. Danila, D. Dimitriu, A. Timofte, M. M. Cazacu, S. Gurlui – Grímsvötn volcanic ash intrusion: LIDAR and AERONET photometer observations at Iasi and Cluj-Napoca, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
86. O. Niculescu, M. M. Cazacu, M. N. Danila, D. G. Dimitriu, S. Gurlui, M. Agop – Magnetosphere double layers and aurora borealis. Acceleration mechanisms and instabilities, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
87. M. N. Danila, F. Unga, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Eyjafjallajökull vs. Grímsvötn, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;

88. M. Aflori, M. Drobotă, D. G. Dimitriu, I. Titorencu, V. Harabagiu – Collagen immobilization on polyethylene terephthalate surface after helium plasma treatment, *9th International Conference on Physics of Advanced Materials*, Iași, România 20-23 September 2012 (conferință orală);
89. D. O. Dorohoi, D. G. Dimitriu, M. Dimitriu, V. Closca – Specific interactions in N-ylids solutions, studied by NMR and electron spectroscopy, *31st European Congress on Molecular Spectroscopy*, Cluj-Napoca, România, 26-31 August 2012 (conferință orală);
90. D. G. Dimitriu, E. Poll, O. Niculescu, P. Nica, M. Agop – Scale relativity theory applied to the modelling of the negative differential resistance in discharge plasma, *8th General Conference of Balkan Physical Union*, Constanța, România, 5-7 July 2012;
91. S. Gurlui, D. Dimitriu, M. Strat – Optical and spectral properties of polyurethane coumarine. Self-organization phenomena induces nanoaggregate formations, *8th General Conference of Balkan Physical Union*, Constanța, România, 5-7 July 2012;
92. I. S. Stratulat, A. Timofte, M. M. Cazacu, D. G. Dimitriu, S. O. Gurlui – Meteo-climatic factors influence and balneary-climatic potential studies – Cacica salt-mines, Suceava county, *38th ISMH World Congress "Medical Hydrology and Balneology: Environmental Aspects"*, Lanjaron, Granada, Spain, 20-23 June 2012;
93. S. Gurlui, D. G. Dimitriu, M. Agop, M. Osiac, O. Pompilian, C. Focsa – Patterns in laser ablation plasma plume through fractal space-time theory, *5th Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
94. M. Agop, D. G. Dimitriu, S. Gurlui – Negative differential resistance of the discharge plasma through fractal space-time theory, *5th Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
95. D. G. Dimitriu, S. Gurlui, M. Agop – Modeling of a scenario of transition to chaos in plasma through sub-harmonic bifurcations, *5th Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
96. M. Agop, P. E. Nica, O. Niculescu, D. G. Dimitriu – Multiple double layers evolution to chaos in plasma through a cascade of sub-harmonic bifurcations, *39th International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
97. O. Niculescu, M. Agop, P. E. Nica, D. G. Dimitriu – Experimental investigations and theoretical study of the negative differential resistance in a discharge plasma, *39th International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
98. O. Niculescu, M. Agop, D. G. Dimitriu – On the self-structuring of plasma in simple and multiple double layers, *39th International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
99. O. Niculescu, D. G. Dimitriu, M. Danila, F. Unga, M. Agop – Experimental and theoretical studies on plasma fireballs interactions, *39th EPS Conference on Plasma Physics & 16th International Congress on Plasma Physics*, Stockholm, Sweden, 2-6 July 2012;
100. F. Unga, M. N. Danila, S. Gurlui, D. Dimitriu, N. Ajtai, A. Timofte, M. M. Cazacu – Optical parameters characterization of a volcanic ash intrusion over Northern Romania following the Grimsvotn volcano eruption in May 2011, *International Student Conference on Photonics*, Sinaia, România, 8-11 May 2012;
101. A. Timofte, M. M. Cazacu, D. G. Dimitriu, S. O. Gurlui, M. Agop – A new approach of atmospheric vortex dynamics by non-differentiability, *1st International Conference on Modavian Risks – From global to local scale*, Bacău, România, 16-19 May 2012 (conferință orală);
102. F. Unga, M. N. Danila, A. Timofte, M. M. Cazacu, I. S. Stratulat, D. G. Dimitriu, S. Gurlui – Dust particle measurements over the Cacica area: environmental model and experimental approach discussions, *Physics Conference TIM-11*, Timișoara, România, 24-27 November 2011;
103. S. Gurlui, I. Lihtetchi, V. Hurduc, D. G. Dimitriu, M. Strat – Nanostructured polymer surfaces and nanoagregates of some diazobenzene polymers in film state, *Physics Conference TIM-11*, Timișoara, România, 24-27 November 2011;
104. R. Cimpoesu, O. Pompilian, N. Cimpoesu, D. G. Dimitriu, S. Gurlui, C. Focsa – UV-pulsed laser deposition of polymer thin films: fundament and applications, *Physics Conference TIM-11*, Timișoara, România, 24-27 November 2011;
105. M. N. Danila, F. Unga, M. M. Cazacu, A. Timofte, M. Strat, D. G. Dimitriu, S. Gurlui – LIDAR measurements comparison of two volcanic eruptions: environmental influences upon the Romania territory, *Physics Conference TIM-11*, Timișoara, România, 24-27 November 2011 (conferință orală);
106. I. S. Stratulat, A. Timofte, M. M. Cazacu, D. G. Dimitriu, S. Gurlui – Cacica salt-mines, Suceava county: meteorological factors and balneary-climatic potential studies, *5th International Workshop on Optoelectronic Techniques for Environmental Monitoring*, București-Măgurele, România, 28-30 September 2011;
107. I. S. Stratulat, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Meteo-climatic factors influence upon Cacica salt-mines, Suceava county – natural climatic areal for medical rehabilitation treatment, *5th International Workshop on Optoelectronic Techniques for Environmental Monitoring*, București-Măgurele, România, 28-30 September 2011 (conferință orală);
108. M. M. Cazacu, A. Timofte, C. Talianu, D. Nicolae, D. G. Dimitriu, S. Gurlui – Iasi county: Atmospheric volcanic ash cloud investigations. Modeling-forecast and experimental environmental approach, *5th International Workshop on Optoelectronic Techniques for Environmental Monitoring*, București-Măgurele, 28-30 September 2011;
109. O. G. Tudose, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – North east region of Romania: 3D atmospheric pollution studies. Modeling-forecast and experimental environmental approach, *12th International Balkan Workshop on Applied Physics*, Constanța, România, 6-8 July 2011;

110. I. Topala, D. G. Dimitriu, N. Dumitrascu – Analysis of helium atmospheric pressure plasma jet in the bullet mode, *30th International Conference on Phenomena in Ionized Gases*, Belfast, Northern Ireland, UK, 28 August – 2 September 2011;
111. R. Schrittwieser, C. Ionita, R. Stenzel, D. G. Dimitriu, J. Gruenwald – Fireballs, *International Advanced Workshop on the Frontiers of Plasma Physics*, “Abdus Salam” International Centre for Theoretical Physics, Trieste, Italy, 5-16 July 2010 (conferință invitată);
112. D. G. Dimitriu – On the transition to chaos in low-temperature plasma, *11th International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2010 (conferință invitată);
113. O. Niculescu, D. G. Dimitriu, M. Agop – Scale relativity model applied to the plasma fireball dynamics, *11th International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2010;
114. C. Stan, C. P. Cristescu, D. G. Dimitriu – Nonlinear dynamics analysis of intermittent phenomena in low-temperature discharge plasma, *11th International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2010;
115. J. Gruenwald, C. Maszl, C. Ionita, R. Stenzel, D. G. Dimitriu, J. Laimer, R. Schrittwieser – Fireball research at the University of Innsbruck reviewed, *37th EPS Conference on Plasma Physics*, Dublin, Ireland, 21-25 June 2010;
116. J. Gruenwald, C. Maszl, C. Ionita, R. Stenzel, D. G. Dimitriu, J. Laimer, R. Schrittwieser – Investigations on fireballs, *37th EPS Conference on Plasma Physics*, Dublin, Ireland, 21-25 June 2010;
117. M. M. Cazacu, A. Timofte, D. Dimitriu, S. Gurlui – Experimental validation of MAP 3D environmental data in NE region of Romania – Iasi area, *4th International Workshop on Optoelectronic Techniques for Environmental Monitoring*, Cluj-Napoca, România, 19-21 October 2010;
118. A. Timofte, M. M. Cazacu, R. Radulescu, C. Talianu, D. Dimitriu, S. Gurlui – First Romanian LIDAR investigation of the EYJAFJALLAJOKULL volcanic ash, *4th International Workshop on Optoelectronic Techniques for Environmental Monitoring*, Cluj-Napoca, România, 19-21 October 2010;
119. J. Gruenwald, C. Maszl, C. Ionita, R. Stenzel, D. G. Dimitriu, R. Schrittwieser – A review on fireball research at the University of Innsbruck, *Summer School and Workshop “Self-organization in Turbulent Plasmas and Fluids”*, Dresden, Germany, 3-14 May 2010;
120. D. G. Dimitriu – Experimental transition to chaos in low-temperature plasma, *11th Experimental Chaos and Complexity Conference*, Lille, France, 1-4 June 2010;
121. C. Stan, C. P. Cristescu, D. G. Dimitriu – Multifractal analysis of intermittency in a discharge plasma, *15th International Conference on Plasma Physics and Applications*, Iași, România, 1-4 July 2010;
122. D. G. Dimitriu, C. Stan, C. P. Cristescu – Recurrence plot analysis of transient phenomena in low-temperature discharge plasma, *15th International Conference on Plasma Physics and Applications*, Iași, România, 1-4 July 2010;
123. L. M. Ivan, D. G. Dimitriu – Scenarios of transition to chaos in plasma related to the non-concentric multiple double layers formations, *15th International Conference on Plasma Physics and Applications*, Iași, România, 1-4 July 2010;
124. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Nonlinear effects related to the simultaneous excitation of three instabilities in magnetized plasma, *International Workshop “50 Years Plasma Physics in Innsbruck”*, Innsbruck, Austria, 2009 (conferință invitată);
125. O. Niculescu, D. G. Dimitriu – Experimental and theoretical study of nonlinear phenomena related to the double layer dynamics in plasma, *Physics Conference TIM-09*, Timișoara, România, 27-28 November 2009;
126. O. Niculescu, A. R. Stana, D. G. Dimitriu – Patterns formation and transition to chaos in low-temperature plasma, *10th International Balkan Workshop on Applied Physics*, Constanța, România, 6-8 July 2009;
127. C. Ionita, S. Gurlui, D. G. Dimitriu, R. Schrittwieser – Spectral investigations of fireballs, *International Interdisciplinary-Symposium on Gaseous and Liquid Plasmas*, Sendai, Japan, 5-6 September 2008;
128. D. G. Dimitriu, L. M. Ivan, O. Niculescu – Spatio-temporal period-doubling bifurcations in low-temperature plasmas, *17th International Conference on Gas Discharge and Their Applications*, Cardiff, UK, 7-12 September 2008 (conferință orală);
129. D. G. Dimitriu – On the spatio-temporal patterns formation in low-temperature plasmas, *17th International Conference on Gas Discharge and Their Applications*, Cardiff, UK, 7-12 September 2008 (conferință orală);
130. S. Mijovic, M. Vuceljic, I. Vojvodic, R. Schrittwieser, M. Maljkov, D. G. Dimitriu, C. Ionita – Determination of plasma space potential from a Langmuir probe by Tikhonov’s regularization method, *24th Summer School and International Symposium on the Physics of Ionized Gases*, Novi Sad, Serbia, 25-29 August 2008;
131. D. G. Dimitriu, L. M. Ivan – Transition to chaos of multiple fireballs dynamics by cascade of period-doubling bifurcations, *19th Europhysics Conference on Atomic and Molecular Physics of Ionized Gases*, Granada, Spain, 15-19 July 2008 (conferință orală);
132. C. Ionita, D. G. Dimitriu, R. W. Schrittwieser – Complex space charge structures at the origin of certain plasma instabilities, *19th Europhysics Conference on Atomic and Molecular Physics of Ionized Gases*, Granada, Spain, 15-19 July 2008;
133. S. Gurlui, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Spectral investigation of fireballs in argon plasma, *19th Europhysics Conference on Atomic and Molecular Physics of Ionized Gases*, Granada, Spain, 15-19 July 2008;
134. O. Niculescu, D. G. Dimitriu – On the generation of stable complex oscillations in low-temperature plasma, *9th International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2008;
135. L. M. Ivan, A. R. Stana, D. G. Dimitriu – Chaotic spatio-temporal phenomenon in low-temperature plasma, *9th International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2008;
136. S. Gurlui, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Spectral investigation of a complex space charge structure in plasma, *9th International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2008;

137. C. Ionita, R. Stenzel, D. G. Dimitriu, R. Schrittwieser – Creation and dynamics of plasma fireballs, *3rd International Workshop and Summer School on Plasma Physics*, Kiten, Bulgaria, 30 June – 5 July 2008 (conferință orală);
138. D. G. Dimitriu – On the generation and dynamics of complex space charge structures in low-temperature plasma, *35th IEEE International Conference on Plasma Science*, Karlsruhe, Germany, 15-19 June 2008 (conferință orală);
139. O. Niculescu, D. G. Dimitriu – Complex oscillations induced by the nonlinear dynamics of the fireballs in plasma, *35th IEEE International Conference on Plasma Science*, Karlsruhe, Germany, 15-19 June 2008;
140. S. O. Gurlui, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Spectral investigation of a fireball in low-temperature argon plasma, *35th IEEE International Conference on Plasma Science*, Karlsruhe, Germany, 15-19 June 2008;
141. D. G. Dimitriu – Complex space charge structures in plasma, *Solvay Workshop – A Tribute to Professor Radu Balescu (The Physics of Charged Particles: Radu Balescu's Life Passion)*, Brussels, Belgium, 6-8 March 2008;
142. R. Schrittwieser, D. G. Dimitriu, C. Ionita, O. Niculescu, L. Conde, J. M. Donoso – Anode double layers, *9th International Workshop on the Interrelationship between Plasma Experiments in Laboratory and Space*, Cairns, Australia, 5-10 August 2007 (conferință invitată);
143. D. G. Dimitriu – Complex structures in laboratory and natural plasmas, *International Workshop on Complex Systems and Networks, Transylvanian Summer School Series*, Sovata, România, 15-20 July 2007 (conferință orală);
144. D. G. Dimitriu, S. Chiriac – Intermittency scenario of transition to chaos in plasma in connection with the nonlinear dynamics of a double layer structure, *International Conference "Chaos, Complexity and Transport: Theory and Applications"*, Marseille, France, 4-8 June 2007 (conferință orală);
145. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Complex nonlinear double layer dynamics at the origin of certain plasma instabilities, *International Conference "Chaos, Complexity and Transport: Theory and Applications"*, Marseille, France, 4-8 June 2007;
146. D. G. Dimitriu, M. Aflori – Spatio-temporal Feigenbaum scenario of transition to chaos in plasma, *International Conference "Chaos, Complexity and Transport: Theory and Applications"*, Marseille, France, 4-8 June 2007;
147. L. M. Ivan, D. G. Dimitriu, M. Sanduloviciu, O. Niculescu – On the complex self-organized systems created in laboratory, *14th International Conference on Plasma Physics and Applications*, Brașov, România, 14-18 September 2007 (conferință orală);
148. O. Niculescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Nonlinear dynamics of a complex space charge structure in plasma under the influence of a transversal magnetic field, *14th International Conference on Plasma Physics and Applications*, Brașov, România, 14-18 September 2007;
149. D. G. Dimitriu, M. Aflori, L. M. Ivan, C. Ionita, R. Schrittwieser – Transition to chaos by a cascade of period-doubling bifurcations in plasma, *16th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 20-25 January 2007 (conferință orală);
150. M. Aflori, D. G. Dimitriu – Mass-spectrometry investigations in Ar-H₂ radio-frequency discharges, *16th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 20-25 January 2007;
151. L. M. Ivan, D. G. Dimitriu – On the transition to chaos by cascade of spatio-temporal period-doubling bifurcations in plasma, *International Conference on Fundamental and Applied Research in Physics (FARPhys)*, Iași, România, 25-28 October 2007 (conferință orală);
152. D. G. Dimitriu, L. M. Ivan, M. Aflori – Physical model for the multiple double layers in plasma, *International Conference on Fundamental and Applied Research in Physics (FARPhys)*, Iași, România, 25-28 October 2007;
153. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Interaction of certain instabilities in magnetized plasma, *International Conference on Fundamental and Applied Research in Physics (FARPhys)*, Iași, România, 25-28 October 2007;
154. O. Niculescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Nonlinear dynamics of a fireball in transversal magnetic field, *International Conference on Fundamental and Applied Research in Physics (FARPhys)*, Iași, România, 25-28 October 2007;
155. M. Dimitriu, D. G. Dimitriu – Intermolecular interactions in liquids, *12th International Conference "The Knowledge Based Organization"*, Sibiu, România, 11-14 June 2007 (conferință orală);
156. D. G. Dimitriu, L. M. Ivan – Cascade of spatio-temporal period-doubling bifurcations in connection with the appearance and dynamics of non-concentric multiple double layers in plasma, *PLASMA 2007 – International Conference on Research and Applications of Plasmas*, Greifswald, Germany, 16-19 October 2007;
157. D. G. Dimitriu, S. A. Chiriac – Transition to chaos by type I intermittency in plasma, *PLASMA 2007 – International Conference on Research and Applications of Plasmas*, Greifswald, Germany, 16-19 October 2007;
158. D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Simultaneous excitation and analysis of three instabilities in magnetized plasma, *PLASMA 2007 – International Conference on Research and Applications of Plasmas*, Greifswald, Germany, 16-19 October 2007;
159. M. Aflori, D. G. Dimitriu – Comparative study between the IEDs of positive ions in an RF argon discharge and argon-hydrogen discharge, *Proceedings of the 28th International Conference of Phenomena in Ionized Gases*, Prague, Czech Republic, 15-20 July 2007;
160. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Analysis of three simultaneously excited instabilities in low-temperature magnetized plasma, *Proceedings of the 28th International Conference of Phenomena in Ionized Gases*, Prague, Czech Republic, 15-20 July 2007;

161. O. Niculescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser – On the dynamics of a complex space charge structure in a transversal magnetic field, *Proceedings of the 28th International Conference of Phenomena in Ionized Gases*, Prague, Czech Republic, 15-20 July 2007;
162. M. Aflori, O. Niculescu, D. G. Dimitriu, D. O. Dorohoi – Mass-spectrometry investigations of hydrogen positive ions in Ar-H₂ and H₂ radio-frequency discharges, *34th EPS Conference on Plasma Physics*, Warsaw, Poland, 2-6 July 2007;
163. S. Chiriac, O. Niculescu, D. G. Dimitriu, M. Sanduloviciu – Type I intermittency related to the double layer dynamics in filament type discharge plasma, *34th EPS Conference on Plasma Physics*, Warsaw, Poland, 2-6 July 2007;
164. O. Niculescu, S. Chiriac, D. G. Dimitriu – On the interaction between complex space charge structures in plasma, *34th EPS Conference on Plasma Physics*, Warsaw, Poland, 2-6 July 2007;
165. C. Ionita, D. G. Dimitriu, R. Schrittwieser – Complex space charge structures in laboratory and natural plasmas, *7th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006 (conferință invitată);
166. M. Dimitriu, L. M. Ivan, D. G. Dimitriu, D. O. Dorohoi – Electro-optical parameters of some benzene's derivatives obtained from the molecular orbital calculation, *7th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
167. D. Mihailescu, D. G. Dimitriu – Monte Carlo calculation of backscattering coefficients for 8-32 keV electrons, *7th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
168. O. Niculescu, L. Mihaescu, A. Stavar, L. M. Ivan, S. Chiriac, D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Control of chaos generated by complex systems emerged by self-organization in a plasma diode by connecting passive circuit elements, *7th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
169. S. Chiriac, D. G. Dimitriu, M. Sanduloviciu – Scenario of transition to chaos by intermittency revealed by space charge configurations emerged by self-organization in plasma, *7th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
170. D. G. Dimitriu, C. Ionita, M. Aflori, L. M. Ivan, R. Schrittwieser – Generation and dynamics of multiple double layers in plasma, *33rd EPS Conference on Plasma Physics*, Rome, Italy, 19-23 June 2006;
171. M. Sanduloviciu, D. G. Dimitriu, S. Chiriac, E. Lozneau – The ball lightning as a self-organized complex system, *9th International Symposium on Ball Lightning*, Eindhoven, The Netherlands, 16-19 August 2006;
172. D. G. Dimitriu, L. M. Ivan, M. Aflori, C. Ionita, R. Schrittwieser – Towards a common physical model for the appearance and dynamics of concentric and non-concentric multiple double layers in plasmas, *2nd International Symposium on Unconventional Plasmas*, Eindhoven, The Netherlands, 14-16 August 2006 (conferință orală);
173. D. G. Dimitriu, M. Aflori, C. Ionita, R. Schrittwieser – Feigenbaum scenario of transition to chaos related to multiple double layer dynamics, *2nd International Symposium on Unconventional Plasmas*, Eindhoven, The Netherlands, 14-16 August 2006 (conferință orală);
174. E. Lozneau, D. G. Dimitriu, L. M. Ivan, M. Sanduloviciu – Functional double layers emerged in plasma by self-organization, *2nd International Symposium on Unconventional Plasmas*, Eindhoven, The Netherlands, 14-16 August 2006;
175. M. Aflori, C. Ionita, S. Chiriac, D. G. Dimitriu, R. Schrittwieser – Transition to chaos through a cascade of period doubling bifurcations in plasmas, *12th International Congress on Plasma Physics*, Kiev, Ukraine, 22-26 May 2006;
176. L. M. Ivan, M. Aflori, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Complex dynamics of a multiple double layer structure in plasma, *18th European Conference on the Atomic and Molecular Physics of Ionised Gases*, Lecce, Italy, 12-16 July 2006;
177. M. Aflori, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Excitation and ionization reactions in an asymmetric RF capacitive discharge, *18th European Conference on the Atomic and Molecular Physics of Ionised Gases*, Lecce, Italy, 12-16 July 2006;
178. M. Dimitriu, D. G. Dimitriu, D. O. Dorohoi – Polarizabilities and electric dipole moments in the excited states of some cycloadducts, *6th International Conference of the Balkan Physical Union*, Istanbul, Turkey, 22-26 August 2006 (conferință orală);
179. L. M. Ivan, S. A. Chiriac, M. Aflori, D. G. Dimitriu – On the chaotic dynamics of multiple double layers in plasma, *6th International Conference of the Balkan Physical Union*, Istanbul, Turkey, 22-26 August 2006;
180. R. Schrittwieser, D. G. Dimitriu, C. Ionita, P. C. Balan, G. Amarandei – Multiple double layers in laboratory experiments relevant for space plasma phenomena, *8th International Workshop on the Interrelationship between Plasma Experiments in Laboratory and Space*, Tromsø, Norvegia, 4-9 July 2005 (conferință invitată);
181. D. G. Dimitriu – Plasma fusion torus as a complex space charge structure, *6th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2005 (conferință invitată);
182. S. Chiriac, M. Aflori, D. G. Dimitriu – Nonlinear investigation of the bistable behavior of multiple anodic structures in dc discharge plasma, *6th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2005;
183. M. Mihai-Plugaru, L. M. Ivan, D. G. Dimitriu – Space charge configuration formed in weakly magnetized diffusion plasma, *6th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2005;
184. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu – Plasma complex structures and bio-plasmas, *13th General Meeting of the European Physical Society "Beyond Einstein – Physics for the 21st Century"*, Bern, Switzerland, 11-15 July 2005;
185. D. G. Dimitriu – Plasma experiments with relevance for the physical mechanism of multiple double layers, *Autumn College on Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 5-30 September 2005;
186. M. Sanduloviciu, D. G. Dimitriu, C. Furtuna, G. Amarandei, E. Lozneau – On the bistable behavior of electrical current conductors, *15th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;

187. L. M. Ivan, G. Amarandei, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Physical processes at the origin of appearance and dynamics of multiple double layers, *15th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
188. G. Amarandei, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Cold plasma phenomenon similar with the L-H transition in hot fusion plasma, *15th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
189. M. Aflori, G. Amarandei, L. M. Ivan, D. Dorohoi, D. G. Dimitriu – Estimating plasma temperature for an argon-oxygen discharge by using Langmuir probe and optical emission spectroscopy, *15th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
190. M. Aflori, G. Amarandei, L. M. Ivan, M. Mihai-Plugaru, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Experimental control of the generation and dynamics of a complex space charge structure in DP machine plasma, *15th Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
191. D. G. Dimitriu – Qualitative similarities between the dynamics of a complex space charge structure in low-temperature plasma and edge localized modes in fusion plasma, *5th International Workshop and Summer School "Towards Fusion Energy – Plasma Physics, Diagnostics, Spin-offs"*, Kudowa Zdroj, Poland, 6-10 June 2005 (conferință orală);
192. D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Plasma experiments with relevance for nano-science, *13th Conference on Plasma Physics and Applications*, Iași, România, 27-29 October 2005 (conferință orală);
193. D. G. Dimitriu, L. M. Ivan, M. Aflori, M. Sanduloviciu, C. Ionita, R. Schrittwieser – Simultaneous emergence of concentric and non-concentric multiple double layers in plasma, *13th Conference on Plasma Physics and Applications*, Iași, România, 27-29 October 2005;
194. M. Aflori, S. Chiriac, D. G. Dimitriu, M. Sanduloviciu – Period doubling route to chaos in argon dc glow discharge, *13th Conference on Plasma Physics and Applications*, Iași, România, 27-29 October 2005;
195. M. Aflori, L. M. Ivan, D. G. Dimitriu – Experimental investigation of multiple anodic structures in DC discharges, *Conferința Internațională Interdisciplinară "Creativitate în Știință și Tehnică"*, București, România, 25-26 February 2005 (conferință orală);
196. M. Aflori, D. G. Dimitriu, M. Sanduloviciu – Nonlinear analysis of signals generated by complex anodic structures in DC discharges, *Conferința Internațională Interdisciplinară "Creativitate în Știință și Tehnică"*, București, România, 25-26 February 2005 (conferință orală);
197. D. G. Dimitriu, S. Gurlui, M. Aflori, L. M. Ivan – On the physical mechanism at the origin of multiple double layer appearance in plasma, *International Conference PLASMA 2005 on Research and Applications of Plasma*, Opole, Poland, 6-9 September 2005;
198. S. Gurlui, D. G. Dimitriu, G. Strat, M. Strat – Study of the anode plasma double layers: optogalvanic detectors, *International Conference PLASMA 2005 on Research and Applications of Plasma*, Opole, Poland, 6-9 September 2005;
199. D. G. Dimitriu, L. M. Ivan, M. Aflori, C. Ionita, R. Schrittwieser – Experimental investigation of the emergence and dynamics of multiple double layers in plasma, *Proceedings of the 5th EUROMECH Nonlinear Dynamics Conference*, Eindhoven, The Netherlands, 7-12 August 2005 (conferință orală);
200. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Experimental control of chaos in plasma, *Proceedings of the 5th EUROMECH Nonlinear Dynamics Conference*, Eindhoven, The Netherlands, 7-12 August 2005 (conferință orală);
201. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Qualitative similarities between edge localized modes (ELMs) in fusion plasmas and complex space charge configurations (CSCCs) in low-temperature plasmas, *32nd EPS Plasma Physics Conference*, Tarragona, Spain, 27 June – 1 July 2005;
202. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu – Double layers and the influence of the external radiation, *International Conference on Nonlinear Problems in Aviation and Aerospace*, Timișoara, România, 2-4 June 2004;
203. M. Aflori, D. G. Dimitriu, J. L. Sullivan – Comparison between the IEDs of positive ions Ar⁺, Ar⁺⁺ and Ar₂⁺ in an asymmetric capacitive argon discharge and argon-oxygen discharge, *31st EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
204. M. Aflori, D. G. Dimitriu, D. Dorohoi – Characterization of an argon-oxygen discharge by using Langmuir probe and optical emission spectroscopy measurements, *31st EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
205. M. Mihai-Plugaru, M. Aflori, D. G. Dimitriu – Analysis of a complex space charge configuration formed in weakly magnetized diffusion plasma, *31st EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
206. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Similarities between the L-H transition in fusion plasma and the appearance of a self-organized structure in low-temperature plasma, *31st EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
207. G. Amarandei, C. Gaman, D. G. Dimitriu, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Similarities between the generation and dynamics of concentric and non-concentric multiple double layers, *12th International Congress on Plasma Physics*, Nice, France, 25-29 October 2004;
208. D. G. Dimitriu – L-H transition in fusion plasma as a self-organization phenomenon, *14th International Toki Conference on Plasma Physics and Controlled Nuclear Fusion*, Toki, Japan, 5-8 October 2004;
209. M. Aflori, C. Gaman, L. M. Ivan, M. Mihai-Plugaru, D. G. Dimitriu – Mass-spectrometry measurements in an rf asymmetric capacitively-coupled oxygen discharge, *57th Annual Gaseous Electronic Conference*, Bunratty, Ireland, 26-29 September 2004;

210. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Cold plasma experiments relevant for a self-organization model of the L-H transition in fusion plasma, *Workshop on Theoretical Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 5-16 July 2004;
211. D. G. Dimitriu – Low-temperature plasma experiments with relevance for the L-H transition in fusion plasma, *4th International Workshop and School "Towards Fusion Energy – Plasma Physics, Diagnostics, Applications"*, Kudowa Zdroj, Poland, 7-13 June 2004 (conferință orală);
212. L. M. Ivan, C. Gaman, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Experimental investigation of multiple self-organized structures in plasma, *5th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
213. L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, M. Aflori, D. G. Dimitriu – The dynamic current-voltage characteristic as a powerful tool to analyze fast phenomena in plasma, *5th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
214. M. Aflori, L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, D. G. Dimitriu – Controlling the appearance and dynamics of a plasma ball of fire by using an additional electrode, *5th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
215. M. Aflori, L. M. Ivan, D. G. Dimitriu – Estimating electrons and ions energies in an rf capacitively-coupled discharge, *5th International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
216. M. Sanduloviciu, D. G. Dimitriu, L. M. Ivan, M. Aflori, C. Furtuna, S. Popescu, E. Lozneau – Self-organization scenario relevant for nanoscale science and technology, *7th International Conference on Physics of Advanced Materials*, Iași, România, 10-12 June 2004;
217. D. G. Dimitriu – Physical processes related to the onset of low-frequency instabilities in magnetized plasma, *21st Symposium on Plasma Physics and Technology*, Prague, Czech Republic, 14-17 June 2004;
218. M. Sanduloviciu, D. G. Dimitriu, E. Lozneau – Violation of the second law of thermodynamics by "engines" emerged by self-organization in nature and laboratory, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003 (conferință invitată);
219. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Chaos control in experimental and industrial plasma devices, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
220. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Flicker noise related to uncorrelated dynamics of multiple double layers in plasma, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
221. D. G. Dimitriu, L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, C. Gaman – Nonlinear dynamics analysis of complex phenomena in plasma, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
222. L. M. Ivan, C. Gaman, G. Amarandei, M. Mihai-Plugaru, D. G. Dimitriu – On the application of the Lorenz model to the fluids convection analysis, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
223. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – The study of the influence of the external optical radiation upon the stability of the double layers, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
224. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – Double layer with ionic deep, *4th International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
225. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Mihai-Plugaru, G. Amarandei, C. Gaman, M. Sanduloviciu, R. Schrittwieser – Simple method to control the nonlinear dynamics of a ball of fire in a DP machine plasma, *Proceedings of the 26th International Conference on Phenomena in Ionized Gases*, Greifswald, Germany, 15-20 July 2003;
226. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Mihai-Plugaru, G. Amarandei, C. Gaman, M. Sanduloviciu, R. Schrittwieser – Control of chaotic states in DP machine plasma by using external circuit elements, *Proceedings of the 26th International Conference on Phenomena in Ionized Gases*, Greifswald, Germany, 15-20 July 2003;
227. C. Gaman, D. G. Dimitriu, M. Mihai-Plugaru, E. Lozneau, C. Ionita, M. Sanduloviciu – The anode glow of a dc gas discharge as an illustrative example of a cascading scenario of self-organization, *Proceedings of the 14th Symposium on Applications of Plasma Processes*, Liptovsky Mikulas, Slovakia, 12-18 January 2003;
228. E. Lozneau, D. G. Dimitriu, C. Gaman, C. Furtuna, E. Filep, M. Sanduloviciu – Self-organization at the origin of different states of plasma produced in dc and hf electric field, *Proceedings of the 14th Symposium on Applications of Plasma Processes*, Liptovsky Mikulas, Slovakia, 12-18 January 2003;
229. D. G. Dimitriu, C. Gaman, M. Mihai-Plugaru, G. Amarandei, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Simple experimental methods to control the chaos in DP machine plasma, *Proceedings of the 14th Symposium on Applications of Plasma Processes*, Liptovsky Mikulas, Slovakia, 12-18 January 2003;
230. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu, C. Agheorghiesei – XOOPI simulation of multiple double layers in plasma, *Autumn College in Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 13 October – 7 November 2003;
231. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – Experimental investigation of the potential structures in the contact region of two negative glow discharges, *Autumn College in Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 13 October – 7 November 2003;

232. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu – The influence of the external optical radiation on the appearance and dynamics of a self-organized structure in plasma, *Autumn College in Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 13 October – 7 November 2003;
233. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Analysis of the multiple double layers dynamics in DP-machine plasma, *Autumn College in Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 13 October – 7 November 2003;
234. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Complex interaction between low-frequency instabilities in Q machine plasma, *Autumn College in Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 13 October – 7 November 2003;
235. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Experimental method to control the dynamics of a self-organized structure in plasma, *Autumn College in Plasma Physics, "Abdus Salam" International Centre for Theoretical Physics*, Trieste, Italy, 13 October – 7 November 2003;
236. C. Ionita, D. G. Dimitriu, M. Sanduloviciu, E. Lozneau, R. Schrittwieser – Relevant experiments concerning the dynamics of complex space charge configurations in plasma, *53rd Annual Meeting of the Austrian Physical Society*, Salzburg, Austria, 1-2 October 2003;
237. D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Generation and control of oscillations in plasma, *12th Conference on Plasma Physics and Applications*, Iași, România, 1-3 September 2003 (conferință orală);
238. D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Generation and analysis of a multiple double layer in plasma, *12th Conference on Plasma Physics and Applications*, Iași, România, 1-3 September 2003;
239. C. Gaman, D. G. Dimitriu, M. Sanduloviciu – Basic mechanism of plasma self-confinement and expansion in low-pressure gases, *12th Conference on Plasma Physics and Applications*, Iași, România, 1-3 September 2003;
240. G. Strat, M. Strat, S. Gurlui, D. G. Dimitriu – Free double layers in argon glow discharges, *5th General Conference of the Balkan Physical Union*, Vrnjacka Banja, Serbia and Montenegro, 25-29 August 2003 (conferință orală);
241. G. Strat, M. Strat, S. Gurlui, D. G. Dimitriu – Optogalvanic effect in nonlinear systems, *5th General Conference of the Balkan Physical Union*, Vrnjacka Banja, Serbia and Montenegro, 25-29 August 2003;
242. R. Schrittwieser, D. G. Dimitriu, C. Ionita, E. Lozneau, M. Mihai-Plugaru, G. Amarandei, C. Gaman, M. Sanduloviciu – Passive control of the nonlinear dynamics of a ball of fire in a DP-machine by external circuit elements, *30th EPS Conference on Controlled Fusion and Plasma Physics*, St. Petersburg, Russia, 7-11 July 2003;
243. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, R. Schrittwieser, M. Sanduloviciu – On the origin of bistabilities in a DP machine, *29th EPS Conference on Plasma Physics and Controlled Fusion*, Montreux, Switzerland, 17-21 June 2002;
244. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Phase space reconstruction of current-driven instabilities in a magnetized plasma column, *29th EPS Conference on Plasma Physics and Controlled Fusion*, Montreux, Switzerland, 17-21 June 2002;
245. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Nonlinear dynamical analysis of two current-driven low-frequency instabilities in a magnetized plasma column, *11th International Congress on Plasma Physics*, Sydney, Australia, 15-19 July 2002;
246. D. G. Dimitriu, S. Popescu, P. C. Balan, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – On the mechanism of S-type negative differential resistance in a DP-machine plasma, *16th European Conference on Atomic and Molecular Physics of Ionized Gases*, Grenoble, France, 14-18 July 2002;

VI. Lucrări prezentate la conferințe naționale (invitate, orale, poster)

1. P. C. Constantin, C. M. Croitoriu, R. Ciobanu, A. Constantin, D. G. Dimitriu, O. F. Caltun – Susceptibilitatea magnetică: tehnică și artefact în imagistica de rezonanță magnetică nucleară, *A XLVIII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2019;
2. A. Cocean, I. Cocean, F. Enescu, D. G. Dimitriu, S. Gurlui – Study of air flow through a vertical pipe of different geometry in COMSOL simulation for environmental approach, *Concursul Național de Referate și Comunicări Științifice cu participare internațională "Ștefan Procopiu"*, Piatra-Neamț, 2018 (conferință orală);
3. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Intermittent transition to chaos in low-temperature plasma, related to the nonlinear dynamics of multiple double layers, *Concursul Național de Referate și Comunicări Științifice cu participare internațională "Ștefan Procopiu"*, Piatra-Neamț, 2018 (conferință orală);
4. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – On the instability of multiple double layers in low-temperature discharge plasma, *Concursul Național de Referate și Comunicări Științifice cu participare internațională "Ștefan Procopiu"*, Piatra-Neamț, 2018 (conferință orală);
5. M. Agop, S. A. Irimiciuc, D. G. Dimitriu – Theoretical modeling of the self-modulation mechanism of oscillations in low-temperature discharge plasma, *Concursul Național de Referate și Comunicări Științifice cu participare internațională "Ștefan Procopiu"*, Piatra-Neamț, 2018 (conferință orală);
6. C. T. Teodorescu-Soare, O. Vasilovici, C. Ionita, R. Schrittwieser, S. A. Irimiciuc, D. G. Dimitriu – Diagnosis and nonlinear dynamics investigations of a hollow grid electrodes discharge plasma, *Concursul Național de Referate și Comunicări Științifice cu participare internațională "Ștefan Procopiu"*, Piatra-Neamț, 2018 (conferință orală);

7. A. R. Fanaru, S. C. Coman, D. G. Dimitriu – Prediction of epileptic seizures by fast complex analysis of electroencephalogram time series, *6th National Conference of Applied Physics (CNFA)*, Iași, 2016;
8. S. C. Coman, A. R. Fanaru, D. G. Dimitriu – Nonlinear dynamics analysis of time series corresponding to electrocardiograms, *6th National Conference of Applied Physics (CNFA)*, Iași, 2016;
9. A. C. Morosanu, D. Babusca, C. A. Benchea, D. G. Dimitriu, D. O. Dorohoi – Method for estimating the domain of variation of the excited electric dipole moment from electronic absorption spectra, *6th National Conference of Applied Physics (CNFA)*, Iași, 2016;
10. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Testing method for determining dispersion birefringence of aqueous glucose solution, *6th National Conference of Applied Physics (CNFA)*, Iași, 2016;
11. M. Gaina, A. C. Benchea, D. G. Dimitriu – Quantum-mechanical and spectral study of ketoprofen, *6th National Conference of Applied Physics (CNFA)*, Iași, 2016;
12. A. C. Benchea, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Quantum-mechanical and spectral study of 8-hydroxyquinoline, *6th National Conference of Applied Physics (CNFA)*, Iași, 2016 (conferință orală);
13. A. C. Benchea, A. C. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectrele electronice de absorbție ale unor azo-derivați, *Concursul Național de Referate și Comunicări Științifice “Ștefan Procopiu”*, Piatra-Neamț, 2016 (conferință orală);
14. D. G. Dimitriu, M. Agop – Analiza teoretică și experimentală a unor instabilități de joasă frecvență ale plasmei magnetizate, *Concursul Național de Referate și Comunicări Științifice “Ștefan Procopiu”*, Piatra-Neamț, 2016 (conferință orală);
15. A. R. Fanaru, S. C. Coman, C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Metode ale dinamicii neliniare aplicate în analiza fenomenului de intermitență în plasma de temperatură joasă, *Concursul Național de Referate și Comunicări Științifice “Ștefan Procopiu”*, Piatra-Neamț, 2016 (conferință orală);
16. S. C. Coman, A. R. Fanaru, D. G. Dimitriu – Analiza statistică a unor electroencefalograme conținând episoade epileptice, *Concursul Național de Referate și Comunicări Științifice “Ștefan Procopiu”*, Piatra-Neamț, 2016 (conferință orală);
17. S. C. Coman, A. R. Fanaru, D. G. Dimitriu, C. T. Teodorescu-Soare, C. Ionita, R. Schrittwieser – Nonlinear dynamics analysis of the intermittent dynamics of a complex space charge structure in low-temperature plasma, *A XLV-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2016;
18. A. R. Fanaru, S. C. Coman, D. G. Dimitriu – Statistical and nonlinear dynamics analysis of the time series corresponding to electroencefalograms recorded during an epileptic seizure, *A XLV-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2016;
19. D. O. Dorohoi, F. Severcan, D. G. Dimitriu – Influența factorilor externi asupra anizotropiei cristalelor lichide liotrope, *Concursul Național de Referate și Comunicări Științifice “Ștefan Procopiu”*, Piatra-Neamț, 2015 (conferință orală);
20. C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Structură multiplă complexă de plasmă în jurul catodului sferic sub formă de grilă al unei descărcări electrice în gaze, *Concursul Național de Referate și Comunicări Științifice “Ștefan Procopiu”*, Piatra-Neamț, 2015 (conferință orală);
21. A. Cocean, S. Irimiciuc, J. H. Tchami, G. Dascalu, M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Laser ablation in non-homogeneous environments. Technological applications, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
22. S. Teodoroff-Onesim, L. Hrostea, M. M. Cazacu, G. Dascalu, A. Timofte, D. G. Dimitriu, L. Leontie, S. O. Gurlui – Development and characterization of solar cells based on semiconductor ferromagnetic materials, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
23. N. M. Olaru, S. Teodoroff-Onesim, M. M. Cazacu, G. Dascalu, A. Timofte, D. G. Dimitriu, S. O. Gurlui – Optical and electrical techniques for aerosol investigation environment sensors obtained by PLD, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
24. M. Iftime, L. Hrostea, B. Albina, M. M. Cazacu, A. Timofte, J. H. Tchami, G. Dascalu, D. G. Dimitriu, S. O. Gurlui – Physical and chemical characteristics of saharan dust events. Biological effects, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
25. S. Irimiciuc, C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Interaction between three simultaneously produced fireballs in low-temperature plasma, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
26. L. Hrostea, M. Iftime, B. Albina, J. H. Tchami, M. M. Cazacu, G. Dascalu, D. G. Dimitriu, L. Leontie, S. Gurlui – Studies of troposphere micro-sized particles health relevance, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
27. G. Palade, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. O. Gurlui – Characterization of ground military radars, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014;
28. B. Albina, M. M. Cazacu, A. Timofte, G. Dascalu, J. H. Tchami, D. G. Dimitriu, S. O. Gurlui – Transport of saharan dust mixed with urban industrial pollutants. Preliminary results, *A XLIII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2014 (conferință orală);
29. I. S. Stratulat, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Analiza unui areal natural pentru activități de reabilitare medicală de la trecut la prezent, *Zilele Medicale Felix*, ediția a XV-a, Băile Felix (conferință orală);
30. M. N. Danila, M. M. Cazacu, A. Timofte, D. G. Dimitriu, L. Leontie, S. Gurlui – Atmospheric aerosols – Importance and modern study methods, *A XLII-a Conferință Națională “Fizica și Tehnologiile Educaționale Moderne”*, Iași, 2013;

31. M. N. Danila, M. M. Cazacu, A. Timofte, D. G. Dimitriu, L. Leontie, S. Gurlui – Preliminary studies of tropospheric aerosols using Python, *A XLII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2013;
32. J. A. Gabor, G. Dascalu, D. G. Dimitriu, C. Focsa, S. Gurlui – Laser ablation plasma (LAP): Techniques and applications, *A XLII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2013;
33. B. Albina, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. O. Gurlui – Infrared thermal processing imagery developed for complementary studies of planetary boundary layer, *A XLII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2013;
34. S. A. Irimiciuc, D. G. Dimitriu – Experimental investigation of the interaction between two fireballs in plasma, *A XLII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2013;
35. O. Vasilovici, S. A. Irimiciuc, D. G. Dimitriu – Signal encryption using Chua's chaotic circuits, *A XLII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2013;
36. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Synchronization of two chaotic systems, *A XLII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2013 (conferință orală);
37. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – The dynamics of Chua's chaotic circuit. Chaos control, *4th Iasi IEEE Student Branch Scientific Meeting*, Iași, 2013;
38. V. Closca, D. G. Dimitriu – Evaluarea la fizică prin proiecte, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
39. F. Unga, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. O. Gurlui, P. Goloub – Studiul parametrilor optici ai unor aerosoli atmosferici. Iași-LOASL, punct de monitorizare internațional în rețeaua AERONET-NASA, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
40. C. T. Teodorescu-Soare, D. G. Dimitriu – Dinamica unor structuri complexe de sarcini spațiale în plasmă, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
41. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Oscilatorul Chua, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
42. D. G. Dimitriu, S. Gurlui, O. Niculescu, C. Ionita, R. Schrittwieser – Structuri complexe în plasmă – investigații spectrale, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
43. D. G. Dimitriu, M. Agop – Competiție între scenarii de tranziție spre haos. Experiment și modelare teoretică, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
44. D. G. Dimitriu – Haos și autoorganizare, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință invitată);
45. M. N. Danila, A. Pascaru, M. M. Cazacu, D. G. Dimitriu, S. O. Gurlui – Procesarea grafică interactivă a semnalelor LIDAR cu ajutorul limbajului de programare Python, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
46. V. Closca, L. M. Ciobanu, D. G. Dimitriu – Stratul dublu electric ca structură autoorganizată în plasmă, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2013 (conferință orală);
47. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Chua's circuit: Chaotic dynamics and control of oscillations, *5th National Conference of Applied Physics*, Iași, 2013 (conferință orală);
48. M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. O. Gurlui, I. S. Stratulat – Tehnici moderne utilizate pentru influențele factorilor meteo-climatici și studii ale potențialului balneo-climatic la minele de sare Cacica, județul Suceava, *Al 35-lea Congres Național de Medicină Fizică și de Recuperare*, Poiana Brașov, 2012 (conferință orală);
49. V. Closca, D. G. Dimitriu – Studiul proprietăților lichidelor pe baza coeficientului de vâscozitate, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2012 (conferință orală);
50. V. Closca, D. G. Dimitriu – Miniprograma opțional: Experiențe epocale în fizică, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2012 (conferință orală);
51. V. Closca, L. Mițea, M. Dimitriu, D. G. Dimitriu, D. O. Dorohoi – Procedee regresionale în studierea efectelor solvatocromice. Aplicații, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2012 (conferință orală);
52. I. E. Popovici, M. M. Cazacu, A. Timofte, F. Unga, M. N. Danila, A. Madon, D. Dimitriu, S. Gurlui – Studiul proceselor de transport al aerosolilor troposferici. Rezultate preliminare privind intruziunile de praf saharian, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2012 (conferință orală);
53. C. T. Teodorescu-Soare, V. Closca, D. G. Dimitriu, E. Poll, M. Agop – Multiple double layers in plasma – experiments and theoretical modelling, *A XLI-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2012;
54. V. Closca, D. G. Dimitriu – Proiectarea unui opțional "Experimente epocale în fizică", adresat elevilor de liceu, *A XLI-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2012;
55. M. Droboța, I. Stoica, D. Dimitriu, M. Aflori – Plasma treatments influence of polyester films surfaces for collagen immobilisation, *Conference on Dynamics of Complex Fluids*, Iași, 2011;
56. T. L. Teslaru, D. G. Dimitriu – Interacțiunea plasmei cu suprafețele polimerice, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2011 (conferință orală);
57. M. Dimitriu, D. G. Dimitriu, D. O. Dorohoi – Contribuții ale interacțiunilor universale la deplasările spectrale înregistrate în soluțiile unor derivați benzenici, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2011 (conferință orală);

58. V. Cloșca, D. G. Dimitriu – Rolul experimentului în predarea-învățarea fizicii, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2011 (conferință orală);
59. M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Utilizarea laserului pentru studiul atmosferei terestre. Sistemul LIDAR, *Concursul Național de Referate și Comunicări Științifice "Ștefan Procopiu"*, Piatra-Neamț, 2011 (conferință orală);
60. A. Damoc, V. Cloșca, T. Teslaru, O. Niculescu, D. G. Dimitriu – Influence of a transversal magnetic field on a fireball dynamics in low-temperature discharge plasma, *A XL-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2011;
61. F. Unga, M. N. Danila, M. M. Cazacu, A. Timofte, M. Strat, D. G. Dimitriu, S. Gurlui – Metode de teledetecție pentru investigarea aerosolilor troposferei, *Sesiunea de Comunicări Științifice Studențești – FARPHYS 2011*, Iași, 2011;
62. M. N. Danila, F. Unga, M. M. Cazacu, A. Timofte, M. Strat, D. G. Dimitriu, S. Gurlui – Influența dimensiunilor microparticulelor din aer asupra sănătății și a poluării mediului. Instrumente și modele atmosferice de diagnoză, *Sesiunea de Comunicări Științifice Studențești – FARPHYS 2011*, Iași, 2011;
63. A. Timofte, M. M. Cazacu, D. Dimitriu, S. Gurlui, R. Radulescu, C. Talianu – Utilizarea sistemelor LIDAR în România pentru investigarea norului de cenusa provenit de la vulcanul Eyjafjallajokull, *Sesiunea Anuala de Comunicari Stiintifice a Administratiei Nationale de Meteorologie*, Bucuresti, 10-11 noiembrie 2010;
64. A. Timofte, M. M. Cazacu, D. Dimitriu, S. Gurlui, R. Dumitrescu, C. Talianu – Importance of using LIDAR systems for investigations of volcanic ash (EYJAFJALLAJOKULL) over Romanian territory, *Conferința Națională de Fizică*, Iași, 2010 (conferință orală);
65. A. Timofte, M. M. Cazacu, D. Dimitriu, S. Gurlui, R. Dumitrescu, C. Talianu – First Romanian investigation of the EYJAFJALLAJOKULL volcanic ash using LIDAR tools and satellite data imagery, *A XXXVIII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2010;
66. M. M. Cazacu, A. Timofte, O. G. Tudose, D. Dimitriu, S. Gurlui, I. Balin – mESY LIDAR – a new configuration for 3D monitoring of atmospheric aerosols and clouds, *A XXXVIII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2010;
67. L. M. Ivan, D. G. Dimitriu – Particles acceleration in plasma at the origin of certain natural phenomena, *A XXXVIII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2010;
68. C. Stan, C. P. Cristescu, S. Chiriac, D. G. Dimitriu – Noise induced change in the dynamics of anodic double layers, *Conferința Națională de Fizică*, București-Măgurele, 2008;
69. A. R. Stana, L. M. Ivan, D. G. Dimitriu – Feigenbaum scenario of transition to chaos in plasma, *A XXXVII-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2008;
70. L. M. Ivan, D. G. Dimitriu – Nonlinear spatio-temporal phenomena in plasma, *Sesiunea Cercurilor Științifice pe Centrul Universitar Iași*, Iași, 2007;
71. L. M. Ivan, D. G. Dimitriu – On certain phenomena in nature involving particle acceleration in plasma, *Sesiunea Cercurilor Științifice pe Centrul Universitar Iași*, Iași, 2007;
72. L. M. Ivan, O. Niculescu, D. G. Dimitriu, M. Sanduloviciu – Potential applications of plasma multiple double layers in nanoscience and nanotechnologies, *Workshop on Fundamental and Applied Research in Physics*, Iași, 2006;
73. S. Chiriac, D. G. Dimitriu, M. Sanduloviciu – Intermittent onset of ion-acoustic instability related to double layer dynamics, *Workshop on Fundamental and Applied Research in Physics*, Iași, 2006;
74. S. Gurlui, D. G. Dimitriu, C. Agheorghiesei, C. Vrabie, M. Saramet, S. Stratulat – XOOPIC code sources to study the plasma double layers, *National Conference of Applied Physics*, Iași, 2006;
75. S. Chiriac, D. G. Dimitriu, M. Sanduloviciu – Intermittent onset of ion-acoustic instability related to double layer dynamics, *National Conference of Applied Physics*, Iași, 2006;
76. O. Niculescu, L. M. Ivan, D. G. Dimitriu – The influence of a transversal magnetic field on the nonlinear dynamics of a complex space charge structure in plasma, *National Conference of Applied Physics*, Iași, 2006;
77. L. M. Ivan, O. Niculescu, D. G. Dimitriu, M. Sanduloviciu – Multiple double layers in plasma related with nanoscience and nanotechnologies applications, *National Conference of Applied Physics*, Iași, 2006;
78. M. Mihai-Plugaru, L. M. Ivan, D. G. Dimitriu – On the formation of a firerod in a weakly magnetized diffusion plasma, *National Conference of Applied Physics*, Iași, 2006;
79. S. Chiriac, O. Niculescu, D. G. Dimitriu – Interaction between complex space charge structures in low-temperature, unmagnetized diffusion plasma, *National Conference of Applied Physics*, Iași, 2006;
80. D. G. Dimitriu – Simultaneous excitation and analysis of three low-frequency instabilities in magnetized plasma, *National Conference of Applied Physics*, Iași, 2006;
81. S. Chiriac, D. G. Dimitriu, M. Sanduloviciu – On the chaotic evolution of ion-acoustic instability driven by the nonlinear dynamics of the plasma double layers, *National Conference of Applied Physics*, Iași, 2006 (conferință orală);
82. A. Cantaragiu, D. G. Dimitriu, D. Mihailescu – Monte Carlo calculations of water-to-air stopping power ratios for degraded electron beams, *A 35-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2006;
83. R. Valicu, L. M. Ivan, D. G. Dimitriu – Structuri autoorganizate în ferofluid, *A 35-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2006;
84. L. M. Ivan, S. A. Chiriac, G. Amarandei, D. G. Dimitriu – Experimental basis of a common physical mechanism for the concentric and non-concentric multiple double layers in plasma, *2nd National Conference on Applied Physics*, Galați, 2006 (conferință orală);

85. G. Amarandei, D. G. Dimitriu, T. Klinger, O. Grulke, C. Ionita, R. Schrittwieser – Studies on suitable materials for a laser-heated electron-emissive plasma probe, *2nd National Conference on Applied Physics, Galați, 2006* (conferință orală);
86. S. Chiriac, L. M. Ivan, D. G. Dimitriu – Intermittency scenario of transition to chaos in plasma related to the non-concentric multiple double layers, *2nd National Conference on Applied Physics, Galați, 2006* (conferință orală);
87. M. Mihai-Plugaru, L. M. Ivan, D. G. Dimitriu – Experimental investigation of a firerod in weakly magnetic diffusion plasma, *2nd National Conference on Applied Physics, Galați, 2006* (conferință orală);
88. L. M. Ivan, M. Aflori, D. G. Dimitriu – Edge localised modes (ELMs) of fusion plasma as a spatio-temporal self-organized phenomenon, *Sesiunea Științifică de Comunicări în Fizică Aplicată, Galați, 2005* (conferință orală);
89. M. Aflori, L. M. Ivan, D. G. Dimitriu – Experimental investigation of a transition to chaos scenario by torus breakdown in plasma, *Sesiunea Științifică de Comunicări în Fizică Aplicată, Galați, 2005* (conferință orală);
90. M. Aflori, L. M. Ivan, D. G. Dimitriu, M. Sanduloviciu – Nonlinear analysis of temporal series generated by multiple anodic structures in dc discharges, *Sesiunea Științifică de Comunicări în Fizică Aplicată, Galați, 2005* (conferință orală);
91. M. Aflori, D. G. Dimitriu, S. Popescu, L. M. Ivan, E. Lozneau, M. Sanduloviciu – Current filamentation in a dc gas discharge, *Sesiunea Științifică de Comunicări în Fizică Aplicată, Galați, 2005* (conferință orală);
92. M. Aflori, D. G. Dimitriu, D. O. Dorohoi – Chaos and oscillations at the anode surface in a dc gas discharge, *Sesiunea Științifică de Comunicări în Fizică Aplicată, Galați, 2005* (conferință orală);
93. M. Aflori, L. M. Ivan, M. Dimitriu, M. Antohe, L. Mihaescu, S. A. Chiriac, D. G. Dimitriu - Scenario of transition to chaos by torus breakdown in DP machine plasma, related to the non-concentric multiple double layers, *A 34-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne", Iași, 2005*;
94. P. Niga, M. Aflori, L. M. Ivan, D. G. Dimitriu, N. Murphy, L. Gaynor, G. O'Sullivan - Photoabsorption spectra of laser produced plasma, *A 34-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne", Iași, 2005*;
95. M. Aflori, L. M. Ivan, D. G. Dimitriu - Utilizarea metodei graficului de recurență în studiul formațiunilor anodice care apar în descărcări de curent continuu, *A 34-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne", Iași, 2005* (conferință orală);
96. M. Aflori, D. G. Dimitriu – Measurements of electron energy distribution function in an asymmetric radio-frequency capacitively coupled discharge, *Conferința Națională de Fizică Aplicată, Iași, 2004*;
97. M. Aflori, L. M. Ivan, D. G. Dimitriu – Mass-spectrometry measurements for neutral particles in an asymmetric capacitive oxygen discharge, *Conferința Națională de Fizică Aplicată, Iași, 2004*;
98. M. Mihai-Plugaru, L. M. Ivan, M. Aflori, D. G. Dimitriu – Qualitative similarities between self-organization phenomena in cold and very hot (fusion) plasma, *Conferința Națională de Fizică Aplicată, Iași, 2004*;
99. L. M. Ivan, M. Mihai-Plugaru, M. Aflori, D. G. Dimitriu – How can we investigate fast phenomena in plasma, *Conferința Națională de Fizică Aplicată, Iași, 2004*;
100. M. Mihai-Plugaru, M. Aflori, L. M. Ivan, D. G. Dimitriu – Controlling complex space charge configurations in DP-machine plasma, *Conferința Națională de Fizică Aplicată, Iași, 2004*;
101. L. M. Ivan, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu – Experimental investigation of multiple double layers in plasma, *Conferința Națională de Fizică Aplicată, Iași, 2004* (conferință orală);
102. L. M. Ivan, M. Aflori, D. G. Dimitriu, S. Popescu, E. Lozneau, M. Sanduloviciu – Self-organization scenario explaining the appearance of micro-discharges spots, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
103. L. M. Ivan, C. Gaman, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu, E. Lozneau, M. Sanduloviciu – Experimental investigation of multiple complex space charge configurations in plasma, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
104. M. Aflori, L. M. Ivan, D. G. Dimitriu – Langmuir probe measurements at grounded electrode in an rf argon discharge, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
105. M. Mihai-Plugaru, L. M. Ivan, M. Aflori, L. Mihaescu, D. G. Dimitriu – Fusion plasma torus as a self-organized structure, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
106. L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, M. Aflori, D. G. Dimitriu – Complex investigation technique to analyze fast phenomena in plasma, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
107. M. Aflori, L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, D. G. Dimitriu – Efficient method to control a self-organized structure in plasma, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
108. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu, C. Agheorghiesei, S. I. Stratulat – Ordered structures plasma in glow discharges, *Workshop on Fundamental and Applied Research in Physics, Iași, 2004*;
109. S. Gurlui, D. G. Dimitriu, G. Strat, M. Strat – Multiple double layers in the interspace of two independently working discharges, *Physics Conference TIM-03, Timișoara, 2003* (conferință orală);
110. S. Gurlui, D. G. Dimitriu, G. Strat, M. Strat – Instability of a double layer under the influence of the external optical radiation, *Physics Conference TIM-03, Timișoara, 2003* (conferință invitată);
111. M. Mihai-Plugaru, L. M. Ivan, C. Gaman, D. G. Dimitriu, E. Lozneau, M. Sanduloviciu, M. Aflori, R. Marguta, G. Amarandei, S. Gramaticu – Complex analysis of plasma oscillations, *Workshop on Fundamental and Applied Research in Physics, Iași, 2003*;
112. L. M. Ivan, C. Gaman, M. Mihai-Plugaru, M. Aflori, D. G. Dimitriu, R. Marguta, E. Lozneau, M. Sanduloviciu, G. Amarandei – Experimental and simulation analysis of Rayleigh-Benard convection, *Workshop on Fundamental and Applied Research in Physics, Iași, 2003*;

113. M. Aflori, D. G. Dimitriu, M. Mihai-Plugaru, L. M. Ivan, C. Gaman, R. Marguta, S. Lupu, G. Amarandei, E. Lozneanu, M. Sanduloviciu – Controlling chaotic phenomena in complex plasmas, *Workshop on Fundamental and Applied Research in Physics*, Iași, 2003;
114. D. G. Dimitriu, L. M. Ivan, C. Gaman, M. Mihai-Plugaru, M. Aflori, R. Marguta, G. Amarandei, E. Lozneanu, M. Sanduloviciu, L. Mihaescu – Nonlinear dynamics of multiple double layers in plasma, *Workshop on Fundamental and Applied Research in Physics*, Iași, 2003;
115. C. Gaman, L. M. Ivan, M. Mihai-Plugaru, M. Aflori, R. Marguta, D. G. Dimitriu, E. Lozneanu, M. Sanduloviciu, G. Amarandei – Low-frequency instabilities in Q-machine plasma, *Workshop on Fundamental and Applied Research in Physics*, Iași, 2003;
116. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – Double layers. New spectral and electrical investigations, *Workshop on Fundamental and Applied Research in Physics*, Iași, 2003 (conferință orală);
117. M. Mihai-Plugaru, C. Gaman, M. Ivan, G. Amarandei, M. Dimitriu, D. G. Dimitriu, E. Lozneanu, M. Sanduloviciu – Procesele fizice care stau la baza mecanismului de generare a oscilațiilor într-o descărcare electrică în gaze, *A 31-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2003;
118. M. Ivan, G. Amarandei, M. Mihai-Plugaru, C. Gaman, D. G. Dimitriu, C. Ionita, M. Dimitriu, E. Lozneanu, R. Schrittwieser, M. Sanduloviciu – The influence of the external circuit inductance on the nonlinear dynamics of a ball of fire in DP-machine plasma, *A 31-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2003;
119. C. Gaman, M. Ivan, G. Amarandei, M. Mihai-Plugaru, D. G. Dimitriu, C. Ionita, M. Dimitriu, R. Schrittwieser, E. Lozneanu, M. Sanduloviciu – Experimental method to replace a chaotic behavior of a plasma system with an oscillatory one, *A 31-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2003;
120. G. Amarandei, S. Popescu, C. Borcia, D. G. Dimitriu, C. Gaman, M. Mihai-Plugaru, E. Lozneanu, M. Sanduloviciu – On convective pattern formation in liquids, *A 31-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2003;
121. G. Amarandei, M. Mihai-Plugaru, C. Gaman, M. Ivan, E. Lozneanu, C. Ionita, M. Dimitriu, D. G. Dimitriu, R. Schrittwieser, M. Sanduloviciu – On the physical basis of the negative differential resistance which appears at the onset of low-frequency instabilities in magnetized plasma, *A 31-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2003;
122. D. G. Dimitriu – Applying the modern methods of the nonlinear dynamics to describe some complex states of plasma, *A 31-a Conferință Națională "Fizica și Tehnologiile Educaționale Moderne"*, Iași, 2003 (conferință orală);
123. D. Dorohoi, D. Creanga, D. G. Dimitriu – Determination of the electric dipole moment and polarizability for some molecules in the excited states by spectral methods, *Sesiunea științifică ocazională de împlinirea a 40 de ani de la înființarea Facultății de Fizică a Universității "Al. I. Cuza" din Iași*, Iași, 2002;
124. C. Gaman, M. Mihai-Plugaru, G. Amarandei, C. Furtuna, D. G. Dimitriu, S. Popescu, E. Lozneanu, M. Sanduloviciu, C. Ionita, R. Schrittwieser – On the possibility to generate oscillations in the presence of a stable ball of fire in a DP machine plasma, *Sesiunea științifică ocazională de împlinirea a 40 de ani de la înființarea Facultății de Fizică a Universității "Al. I. Cuza" din Iași*, Iași, 2002;
125. M. Mihai-Plugaru, G. Amarandei, C. Gaman, C. Borcia, C. Furtuna, D. G. Dimitriu, E. Lozneanu, M. Sanduloviciu – On the mechanism of oscillations sustaining and the oscillant circuit of a glow discharge, *Sesiunea științifică ocazională de împlinirea a 40 de ani de la înființarea Facultății de Fizică a Universității "Al. I. Cuza" din Iași*, Iași, 2002;
126. G. Amarandei, C. Gaman, M. Mihai-Plugaru, C. Furtuna, D. G. Dimitriu, E. Lozneanu, M. Sanduloviciu, C. Ionita, R. Schrittwieser – Onset of low-frequency instabilities in Q machine plasma, *Sesiunea științifică ocazională de împlinirea a 40 de ani de la înființarea Facultății de Fizică a Universității "Al. I. Cuza" din Iași*, Iași, 2002;
127. D. G. Dimitriu, C. Gaman, M. Mihai-Plugaru, G. Amarandei, C. Furtuna, E. Lozneanu, M. Sanduloviciu, C. Ionita, R. Schrittwieser – Experimental control of chaos in DP machine plasma, *Sesiunea științifică ocazională de împlinirea a 40 de ani de la înființarea Facultății de Fizică a Universității "Al. I. Cuza" din Iași*, Iași, 2002;

4 august 2020

Conf. univ. dr. Dan-Gheorghe DIMITRIU