



## Curriculum vitae Europass

### Informații personale

Nume / Prenume **Dimitriu Dan-Gheorghe**  
Adresă(e) Șos. Ștefan cel Mare și Sfânt nr. 31, Iași, 700498  
Telefon(oane) +40-232-201183  
Fax(uri) +40-232-201150  
E-mail(uri) [dimitriu@uaic.ro](mailto:dimitriu@uaic.ro)  
Naționalitate(-tăți) Română  
Data nașterii 10.01.1972  
Sex Masculin

### Experiența profesională

#### Perioada 2008-prezent

Funcția sau postul ocupat Conferențiar universitar  
Numele și adresa angajatorului Universitatea „Alexandru Ioan Cuza” din Iași, Bd. Carol I nr. 11, Iași, 700506  
Tipul activității sau sectorul de activitate Educație și cercetare, învățământ superior

#### Perioada 2003-2008

Funcția sau postul ocupat Lector universitar  
Numele și adresa angajatorului Universitatea „Alexandru Ioan Cuza” din Iași, Bd. Carol I nr. 11, Iași, 700506  
Tipul activității sau sectorul de activitate Educație și cercetare, învățământ superior

#### Perioada 2002-2003

Funcția sau postul ocupat Lector universitar asociat  
Numele și adresa angajatorului Universitatea „Alexandru Ioan Cuza” din Iași, Bd. Carol I nr. 11, Iași, 700506  
Tipul activității sau sectorul de activitate Educație și cercetare, învățământ superior

### Educație și formare

Perioada 2020

Calificarea / diploma obținută Atestat de abilitare  
Disciplinele principale studiate / competențe profesionale dobândite Fizică  
Numele și tipul instituției de învățământ / furnizorului de formare Ministerul Educației și Cercetării, OM 6287/22.12.2020

Perioada 2013

Calificarea / diploma obținută Manager proiect  
Disciplinele principale studiate / competențe profesionale dobândite Managementul proiectelor  
Numele și tipul instituției de învățământ / furnizorului de formare S. C. Expert Aktiv Group S.R.L. Onești, acreditată de Ministerul Educației Naționale și de Ministerul Muncii, Familiei, Protecției Sociale și Persoanelor Vârstrnice

Perioada 1998-2002

Calificarea / diploma obținută Master în „Neliniaritate și Autoorganizare în Sisteme Complexe”

Disciplinele principale studiate / competențe profesionale dobândite Fizica sistemelor complexe, Autoorganizare, Haos  
 Numele și tipul instituției de învățământ / furnizorului de formare Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Fizică

Perioada 1996-2002

Calificarea / diploma obținută Doctor în Fizică, distincția „Magna cum Laudae”

Disciplinele principale studiate / competențe profesionale dobândite Fizica plasmei

Numele și tipul instituției de învățământ / furnizorului de formare Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Fizică

Perioada 1995-1996

Calificarea / diploma obținută Master în „Fizica plasmei și spectroscopie”

Disciplinele principale studiate / competențe profesionale dobândite Fizica plasmei, Spectroscopie

Numele și tipul instituției de învățământ / furnizorului de formare Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Fizică

Perioada 1990-1995

Calificarea / diploma obținută Licență în Fizică tehnologică

Disciplinele principale studiate / competențe profesionale dobândite Fizică

Numele și tipul instituției de învățământ / furnizorului de formare Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Fizică

### Aptitudini și competențe personale

Limba(i) maternă(e) Româna

Limba(i) străină(e) cunoscută(e) **Engleza, Franceza**

Autoevaluare Nivel european (*)	Înțelegere		Vorbire		Scriere
	Ascultare	Citire	Participare la conversație	Discurs oral	Exprimare scrisă
<b>Engleza</b>	C1	C1	C1	C1	C1
<b>Franceza</b>	B2	B2	B1	B1	B1

(\*) [Nivelul Cadrelor Europene Comune de Referință Pentru Limbi Străine](#)

Competențe și aptitudini organizatorice Managementul granturilor de cercetare (director de proiect a 2 granturi internaționale și 6 granturi naționale), organizator manifestări științifice (membru în Comitetul de organizare a 2 conferințe naționale și în Comitetul Științific a 2 conferințe naționale), membru al Senatului Universității „Alexandru Ioan Cuza” din Iași, membru al Comisiei de Etică a Universității „Alexandru Ioan Cuza” din Iași, membru al Consiliului Facultății de Fizică a Universității „Alexandru Ioan Cuza” din Iași, membru al Consiliului Departamentului de Fizică al Facultății de Fizică a Universității „Alexandru Ioan Cuza” din Iași, șef de laborator (Laboratorul de Autoorganizare, Laboratorul de Fizica sistemelor parțial ordonate), expert-evaluator proiecte de cercetare naționale și internaționale (INTAS/SEE-ERA.NET, CNCSIS, ANCS, UEFISCDI), membru în Comitetul Editorial (Editorial Board) al jurnalului „Chaos Theory and Applications” (<http://dergipark.org.tr/en/pub/chaos/board>), referent la jurnale științifice de specialitate (Scientific Reports, Plasma Sources Science and Technology, Plasma Physics and Controlled Fusion, Physics of Plasmas, Nonlinear Dynamics, New Journal of Physics, Physics Letters A, Physica Scripta, IEEE Transactions on Plasma Science, IEEE Access, Chaos Solitons and Fractals, Optics Express, Spectrochimica Acta A, Journal of Molecular Structure, Meteorology and Atmospheric Physics, Physica A, Polymer Engineering and Science, Measurement Science and Technology, Czechoslovak Journal of Physics, Revista de Chimie).

- Activități de cercetare
1. Fenomene neliniare în plasma de temperatură joasă
    - structuri autoorganizate în plasmă
    - instabilități ale plasmei
    - fenomene haotice în plasmă
    - interacțiuni colective în plasmă
    - surse de plasmă
  2. Structuri parțial ordonate în lichide
    - solvatocromism
    - interacțiuni intermoleculare în lichide
    - spectroscopie moleculară
    - modele de lichid
    - scări empirice de solvent

Activități de predare Fenomene haotice și metode de control (curs și laborator, în limba engleză și în limba română), Rezonanța magnetică nucleară în medicină și biologie (curs și laborator, în limba engleză și în limba română), Imagistica medicală de rezonanță magnetică (curs și laborator), Haos și autoorganizare (curs și laborator), Fizica fenomenelor neliniare (curs și laborator, în limba engleză), Fizica sistemelor parțial ordonate (curs și laborator), Fizica lichidului (curs și laborator), Metode de investigare a sistemelor complexe (curs și laborator), Fenomene neliniare în plasma (curs și laborator), Metode de investigare a fenomenelor neliniare în plasma (curs și laborator), Achiziția și analiza semnalelor haotice. Aplicații (curs și laborator), Introducere în fizica sistemelor autoorganizate (curs și laborator), Probleme actuale ale fizicii sistemelor autoorganizate (curs și laborator), Bazele experimentale ale fizicii sistemelor autoorganizate (curs și laborator), Mecanică și acustică (seminar și laborator), Oscilații și unde (seminar și laborator), Fizică nucleară (laborator), Dozimetrie și radioprotecție (laborator).

În calitate de profesor invitat, respectiv în cadrul programului Erasmus, am predate la Universitatea din Innsbruck, Austria, următoarele cursuri în limba engleză: Chaos and self-organization in plasma, Complex structures in low-temperature plasma, Nonlinear potential structures in plasma, Labcourse in plasma diagnosis, Complex space charge structures in plasma, Nonlinear dynamics techniques for time series analysis.

Rezultatele activității științifice Anexa 1 – Lista rezultatelor activității științifice

### Informații suplimentare

Stagii de cercetare la Universitatea din Innsbruck, Austria, în cadrul unor granturi de cercetare sau a unor programe internaționale (ERASMUS, CEEPUS) (2017, 2014, 2013, 2012, 2010, 2009, 2007, 2006, 2005, 2004, 2002, 2001, 2000, 1999);

Profesor invitat la Universitatea din Innsbruck, Austria (2011)

Stagii de cercetare la Universitatea de Științe și Tehnologii Lille 2, Franța, în cadrul unor granturi de cercetare (2010, 2009, 2008);

Stagii de cercetare la Universitatea Politehnică din Madrid, Spania, în cadrul unor granturi de cercetare (2006, 2009);

Stagiu de cercetare la Universitatea Paris-Sud XI Orsay, Franța, în cadrul programului TEMPUS (1995);

Specializare prin participarea la școli internaționale: Workshop and School „Physics and Chemistry of Atmospheres: From Laboratory Experiments to Field Campaigns”, Iași (2006); International Workshop and School „Towards Fusion Energy – Plasma Physics, Diagnostics, Spin-offs”, Kudowa Zdroj, Polonia (2005); Autumn College on Plasma Physics, „Abdus Salam” International Centre for Theoretical Physics, Trieste, Italia (2005); International Workshop and School „Towards Fusion Energy – Plasma Physics, Diagnostics, Applications”, Kudowa Zdroj, Polonia (2004); Autumn College on Plasma Physics „Long-Lived Structures and Self Organization in Plasmas”, „Abdus Salam” International Centre for Theoretical Physics, Trieste, Italia (2003); Summer School on Plasma Physics and Applications, Iași (2003); Romanian-French Summer School on Plasma Physics and Applications, Iași (1995).

Participare cu lucrări invitate, orale sau poster la numeroase conferințe naționale și internaționale.

Afilieri: Societatea Română de Fizică (din 2002), European Physical Society (din 2002), American Physical Society (din 2007), IEEE Nuclear and Plasma Science Society (din 2007), Complex Systems Society (fostă European Complex Systems Society) (din 2007), The New York Academy of Sciences (din 2011), Chaotic Modeling and Simulation International Society (din 2017).

Anexa 2 – Lista granturilor de cercetare coordonate în calitate de director de proiect

## Anexe

### ANEXA 1 – Lista rezultatelor activității științifice

#### 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. Lučovský, 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. M. Agop, S. Irimiciuc, D. Dimitriu, C. M. Rusu, A. Zala, L. Dobreci, A. V. Cotirlet, T. C. Petrescu, V. Ghizdovat, L. Eva, D. Vasincu – Novel approach for EKG signals analysis based on Markovian and non-Markovian fractalization type in scale relativity theory, *Symmetry* **13** (2021) 456;
2. M. M. Dulcescu-Oprea, A. C. Morosanu, D. G. Dimitriu, A. Gritco-Todirascu, D. O. Dorohoi, C. Cheptea – Solvatochromic study of pyridinium-acetyl-benzoyl methylid (PABM) in ternary protic solutions, *Journal of Molecular Structure* **1227** (2021) 129539;
3. 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 the intermolecular interactions in solutions and for estimating excited state dipole moment of solute, *Symmetry* **12** (2020) 1299;
4. 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;
5. 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;
6. 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;
7. 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;
8. 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;
9. C. T. Teodorescu-Soare, S. A. Irimiciuc, C. Ionita, D. G. Dimitriu, B. Hodoroaba, T. O'Hara, O. Vasilovicu, L. Amarandi, R. W. Schrittwieser – Concentric double hollow grid cathode discharges, *International Journal of Mass Spectrometry* **436** (2019) 83-90;
10. 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;
11. 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;
12. 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;

13. V. B. Rusyn, L. Pribylova, D. G. Dimitriu – Control of the modified chaotic Chua's circuit using threshold method, *Visnik NTU KPI Serii – Radiotekhnika Radioaparaturubuduvannia (Bulletin of National Technical University of Ukraine "Kyiv Polytechnic Institute" Seria Radiotekhnika. Radioapparatus Building)* **75** (2018) 61-65;
14. 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;
15. 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;
16. 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;
17. A. C. Benchea, D. Babusca, C. Podlipnik, D. G. Dimitriu – Solvatochromic and quantum-mechanical characterization of Methyl Red, *Analytical Letters* **50** (2017) 2711-2724;
18. 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;
19. 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;
20. 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;
21. 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;
22. 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;
23. M. Gaina, A. C. Benchea, C. 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;
24. 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;
25. 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;
26. 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;
27. 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;
28. 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;
29. 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;
30. 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;
31. 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;
32. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Chua's circuit: control and synchronization, *International Journal of Bifurcation and Chaos* **25** (2015) 1550050;
33. 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;
34. 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;
35. 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;
36. 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;
37. 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;
38. 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;
39. 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;
40. 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;
41. 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;
42. 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;
43. 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;
44. 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;

45. M. M. Cazacu, A. Timofte, C. Talianu, D. Nicolae, M. N. Danila, F. Unga, D. G. Dimitriu, S. Gurlui – Grimsvötn 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;
46. 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;
47. 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;
48. 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;
49. 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;
50. 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;
51. 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;
52. 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;
53. 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;
54. 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;
55. 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;
56. 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;
57. 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;
58. 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;
59. 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;
60. 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;
61. 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;
62. 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;
63. 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;
64. 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;
65. 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;
66. 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;
67. 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;
68. 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;
69. 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;
70. D. G. Dimitriu – Plasma fusion torus as a complex space charge structure, *Journal of Optoelectronics and Advanced Materials* **8 (1)** (2006) 128-131;
71. 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;
72. 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;
73. 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;
74. 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;
75. 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;

76. 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;
77. 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;
78. 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;
79. 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;
80. 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;
81. 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. Hodoroaba, T. O'Hara, O. Vasilovici, L. Amarandei – Oscillatory behavior of hollow grid cathode discharge, *21<sup>st</sup> International Conference on Electromagnetics in Advanced Applications & 9<sup>th</sup> 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, *6<sup>th</sup> 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, *2<sup>nd</sup> 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, *12<sup>th</sup> 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, *12<sup>th</sup> 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, *24<sup>th</sup> 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) / 4<sup>th</sup> German-Polish Conference on Plasma Diagnostics for Fusion and Applications / 6<sup>th</sup> 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) / 4<sup>th</sup> German-Polish Conference on Plasma Diagnostics for Fusion and Applications / 6<sup>th</sup> 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) / 4<sup>th</sup> German-Polish Conference on Plasma Diagnostics for Fusion and Applications / 6<sup>th</sup> 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 în 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 ferofluide, *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 Babeş-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 Babeş-Bolyai, Physica* **46** special issue PIM 2002, 332-335;
34. E. Lozneau, C. Borcia, S. Popescu, M. Sanduloviciu, C. Avram, D. G. Dimitriu, V. Ignatescu, R. Schrittwieser – On the origin of flicker noise in various plasma, *Journal of Plasma and Fusion Research SERIES 4* (2001) 331-334;
35. M. Sanduloviciu, R. Schrittwieser, C. Avram, E. Lozneau, D. G. Dimitriu, V. Ignatescu – On the stimulation mechanism of low-frequency instabilities in magnetized plasma, *Journal of Plasma and Fusion Research SERIES 4* (2001) 317-321;
36. D. Dorohoi, M. Postolache, D. Ionescu, D. G. Dimitriu, M. Postolache – Dipole moments and polarizabilities in the excited states of some carbanion disubstituted pyridinium ylids, *Studia Universitatis Babeş-Bolyai, Physica* **45**, special issue PIM 2000, 241-244;
37. N. B. Mandache, A. M. Pointu, D. G. Dimitriu, M. Ganciu, G. Musa, I. I. Popescu, E. Dewald, M. Nistor – Transient electron beams created by dielectric hollow cathode as a tool for applications, *Le Vide: science, technique et applications* **275** (Suppl. Jan.-Fev.-Mars) (1995) 337-340;

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

1. V. Ghizdovat, C. Stefanescu, I. C. Grierosu, D. Dimitriu, A. I. Saviuc, M. Frasila, S. A. Irimiciuc, R. Iacob, M. Agop – A statistical interpretation of the classical action with implications in the dynamics of non-linear growth biostructures, *8<sup>th</sup> International Conference on e-Health and Bioengineering*, Iași, 29-30 octombrie 2020 (conferință orală);
2. D. G. Dimitriu, S. Popescu, M. Agop – Chaotic states of plasma triggered by the nonlinear dynamics of simple and multiple double layers, *13<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
3. D. G. Dimitriu, S. Popescu, M. Agop – Double layer in plasma as an interface generated through the interaction of two fractal fluids, *13<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
4. 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, *13<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
5. 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, *21<sup>st</sup> International Conference on Electromagnetics in Advanced Applications & 9<sup>th</sup> IEEE-APS Technical Conference on Antennas and Propagation in Wireless Communications*, Granada, Spain, 9-13 September 2019 (conferință invitată);
6. 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, *18<sup>th</sup> International Conference on Plasma Physics and Applications (CPPA)*, Iași, România, 20-22 June 2019 (conferință invitată);
7. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Nonlinear dynamics of non-concentric multiple double layers as a source of low-temperature plasma instabilities, *18<sup>th</sup> International Conference on Plasma Physics and Applications*, Iași, România, 20-22 June 2019;
8. S. Popescu, D. G. Dimitriu – Minimum entropy production in the process of fireball formation, *18<sup>th</sup> International Conference on Plasma Physics and Applications*, Iași, România, 20-22 June 2019;
9. S. Popescu, D. G. Dimitriu – Entropy production during the fireball formation in discharge plasma, *34<sup>th</sup> International Conference on Phenomena in Ionized Gases (ICPIG) & 10<sup>th</sup> International Conference on Reactive Plasmas (ICRP)*, Sapporo, Japan, 14-19 July 2019 (conferință orală);
10. D. G. Dimitriu, S. Popescu – Low-temperature plasma instabilities related to the nonlinear dynamics of fireballs and multiple double layers, *34<sup>th</sup> International Conference on Phenomena in Ionized Gases (ICPIG) & 10<sup>th</sup> International Conference on Reactive Plasmas (ICRP)*, Sapporo, Japan, 14-19 July 2019;
11. S. Popescu, D. G. Dimitriu – Nonlinear dynamics of complex space charge structures at the origin of low-frequency plasma instabilities, *12<sup>th</sup> CHAOS International Conference on Non Linear Analysis and Modeling: Theory and Applications*, Chania, Greece, 18-21 June 2019 (conferință orală);
12. S. Popescu, D. G. Dimitriu – A dynamical model for plasma fireball, *12<sup>th</sup> CHAOS International Conference on Non Linear Analysis and Modeling: Theory and Applications*, Chania, Greece, 18-21 June 2019 (conferință orală);
13. 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, *46<sup>th</sup> EPS Conference on Plasma Physics*, Milan, Italy, 8-12 July 2019 (conferință orală);
14. 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, *46<sup>th</sup> EPS Conference on Plasma Physics*, Milan, Italy, 8-12 July 2019;
15. D. G. Dimitriu – On the instabilities of complex space charge structures in low-temperature plasma, *2<sup>nd</sup> EPS Conference on Statistical and Nonlinear Physics*, Stockholm, Sweden, 7-11 May 2019;
16. 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;
17. 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;
18. V. Rusyn, L. Pribylova, D. Dimitriu, M. Guzan – Security information system based on chaotic system, *3<sup>rd</sup> International Scientific and Practical Conference "Information Security and Computer Technology"*, Kirovohrad, Ukraine, 19-20 April 2018;
19. 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;

20. 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;
21. 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;
22. 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, *19<sup>th</sup> International Congress on Plasma Physics*, Vancouver, Canada, 4-8 June 2018;
23. 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;
24. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – Appearance and instability of non-concentric multiple double layers in low-temperature discharge plasma, *11<sup>th</sup> Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
25. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – A compact non-differential approach for modelling laser ablation plasma dynamics, *11<sup>th</sup> Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
26. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Self-modulated oscillation in the dynamics of a hollow grid cathode discharge plasma, *11<sup>th</sup> Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
27. 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, *11<sup>th</sup> Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
28. 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;
29. 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;
30. A. C. Morosanu, A. Gritco (Todirascu), D. G. Dimitriu, D. O. Dorohoi, C. Cheptea – Quantum mechanical and spectral study of fluorescein, *6<sup>th</sup> IEEE International Conference on E-Health and Bioengineering (EHB 2017)*, Sinaia, România, 22-24 June 2017;
31. 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, *17<sup>th</sup> International Conference on Plasma Physics and Applications*, Măgurele, București, România, 15-20 June 2017;
32. D. G. Dimitriu, M. Agop – Spontaneous symmetry breaking related to the onset of instabilities in low-temperature plasma, *1<sup>st</sup> International Conference on Symmetry*, Barcelona, Spain, 16-18 October 2017;
33. D. G. Dimitriu, M. Agop – Theoretical and experimental analysis of low-frequency instabilities in low-temperature magnetized plasma, *10<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2017)*, Barcelona, Spain, 30 May – 2 June 2017;
34. 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, *10<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2017)*, Barcelona, Spain, 30 May – 2 June 2017;
35. S. Gurlui, M. M. Cazacu, A. Timofte, G. Bulai, D. G. Dimitriu – Space- and time-resolved RAMN and breakdown spectroscopy: advanced LIDAR techniques, *28<sup>th</sup> International Laser Radar Conference (ILRC)*, București, România, 25-30 June 2017;
36. 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, *16<sup>th</sup> International Balkan Workshop on Applied Physics (IBWAP)*, Constanța, România, 7-9 July 2016 (conferință invitată);
37. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Optical activity of glucose solutions, *5<sup>th</sup> International Colloquium “Physics of Materials” (PM5)*, București, România, 10-11 November 2016;
38. A. C. Benchea, M. Gaina, D. G. Dimitriu, D. O. Dorohoi – Spectral study on ternary solutions consisting of Rhodamines, Ethylene glycol and DMSO, *5<sup>th</sup> International Colloquium “Physics of Materials” (PM5)*, București, România, 10-11 November 2016;
39. 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, *5<sup>th</sup> International Colloquium “Physics of Materials” (PM5)*, București, România, 10-11 November 2016;
40. M. Gaina, A. C. Benchea, C. Podlipnik, D. G. Dimitriu – Quantum-mechanical characterization and spectral study of Curcumin, *5<sup>th</sup> International Colloquium “Physics of Materials” (PM5)*, București, România, 10-11 November 2016;
41. A. E. Tudose, D. G. Dimitriu, D. O. Dorohoi – Linear birefringence dispersion of PET (poly ethyleneterephthalate) foils determined from visible channelled spectra, *33<sup>rd</sup> 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 study of Rhodamine dyes in binary and ternary solutions, *33<sup>rd</sup> European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
43. A. C. Benchea, D. Babusca, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical study of some azo derivatives, *33<sup>rd</sup> European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
44. 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, *27<sup>th</sup> Symposium on Plasma Physics and Technology (SPPT)*, Prague, Czech Republic, 20-23 June 2016;
45. 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, *4<sup>th</sup> International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Brașov, România, 29 June – 1 July 2016;
46. A. C. Benchea, D. Babusca, D. G. Dimitriu, C. Podlipnik – Solvatochromic study and quantum-mechanical characterization of methyl red, *4<sup>th</sup> International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Brașov, România, 29 June – 1 July 2016;

47. C. A. Morosanu, A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum mechanical characterization and solvatochromic study of quercetine, *4<sup>th</sup> International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
48. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Dispersion of visible rotatory power for aqueous glucose solutions, *4<sup>th</sup> International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
49. 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;
50. 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;
51. 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;
52. D. G. Dimitriu, A. E. Tudose, D. O. Dorohoi – Linear birefringence of polymer foils determined by optical means, *10<sup>th</sup> International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
53. A. E. Tudose, D. G. Dimitriu, D. O. Dorohoi – Optical activity of glucose solutions, *10<sup>th</sup> International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
54. A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum-mechanical and spectral studies of Rhodamine B in ternary solutions, *10<sup>th</sup> International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
55. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Solvatochromic studies of two Sudan derivatives in binary and ternary solutions, *10<sup>th</sup> International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
56. C. T. Teodorescu-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Complex space-charge configuration inside and around a grid cathode with hole, *42<sup>nd</sup> EPS Conference on Plasma Physics*, Lisbon, Portugal, 22-26 June 2015;
57. D. O. Dorohoi, D. G. Dimitriu, I. Dumitrascu, C. B. Zelinschi, I. Breaban – Interferential method to determine the optical rotatory dispersion of crystalline layers, *4<sup>th</sup> International Colloquium "Physics of Materials"*, Bucureşti, România, 13-14 November 2014 (conferinţă orală);
58. 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, *14<sup>th</sup> European Meteorological Society (EMS) Annual Meeting & 10<sup>th</sup> European Conference on Applied Climatology (ECAC)*, Prague, Czech Republic, 6-10 October 2014;
59. I. A. Cosutchi, D. G. Dimitriu, C. B. Zelinschi, I. Breaban, D. O. Dorohoi – Optical activity of transparent polymer foils characterized by spectral means, *32<sup>nd</sup> European Congress on Molecular Spectroscopy*, Düsseldorf, Germany, 24-29 August 2014 (conferinţă orală);
60. 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, *17<sup>th</sup> International Congress on Plasma Physics*, Lisbon, Portugal, 15-19 September 2014;
61. 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, *41<sup>st</sup> EPS Conference on Plasma Physics*, Berlin, Germany, 23-27 June 2014;
62. 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);
63. 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);
64. 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;
65. 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;
66. 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;
67. G. V. Focsianianu, D. G. Dimitriu – Diffusion-weighted whole-body magnetic resonance imaging with background body signal suppression, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013;
68. S. A. Irimiciuc, S. Popescu, D. G. Dimitriu – Nonlinear dynamics of multiple fireballs in low-temperature plasma, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013;
69. 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*, Timişoara, România, 21-24 November 2013;
70. 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*, Timişoara, România, 21-24 November 2013;
71. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu – Study of chaotic systems with applications to secure communications, *International Physics Conference TIM-13*, Timişoara, România, 21-24 November 2013 (conferinţă orală);
72. I. A. Cosutchi, D. G. Dimitriu, D. O. Dorohoi – New method for determining optical rotatory dispersion of polymer solutions, *21<sup>st</sup> International School-Seminar of Galyna Puchkovska "Spectroscopy of Molecules and Crystals"*, Beregove, Ukraine, 22-29 September 2013 (conferinţă orală);
73. D. O. Dorohoi, D. G. Dimitriu – A new method for determining the dispersion of optical activity, *12<sup>th</sup> International Conference on Molecular Spectroscopy – From Molecules to Nano- and Biomaterials*, Krakow – Bialka Tatrzańska, Poland, 8-12 September 2013 (conferinţă orală);
74. M. Strat, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Aerosol detection and ranging: fast laser imaging optical emission spectroscopy (DARLIOES), *European Aerosol Conference*, Prague, Czech Republic, 1-6 September 2013;
75. M. M. Cazacu, F. Unga, A. Timofte, I. Popovici, A. I. Pascaru, D. G. Dimitriu, S. Gurlui – Mixture of biomass-burning and urban aerosols analysis: a case study, *European Aerosol Conference*, Prague, Czech Republic, 1-6 September 2013;

76. 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;
77. M. M. Cazacu, F. Unga, N. Ajtai, H. I. Stefanie, A. Timofte, D. Dimitriu, S. Gurlui – Monitoring and analyses of Grimsvötn volcanic dust intrusion over Northern Romania. LIDAR and AERONET considerations, *International Conference “Advances in Environmental Sciences”, 6<sup>th</sup> Workshop on Optoelectronic Techniques for Environmental Monitoring (OTEM)*, Timișoara, România, 11-12 June 2013 (conferință orală);
78. 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”, 6<sup>th</sup> Workshop on Optoelectronic Techniques for Environmental Monitoring (OTEM)*, Timișoara, România, 11-12 June 2013 (conferință orală);
79. O. Niculescu, D. G. Dimitriu – Experimental evidence of competing scenarios of transition to chaos in low-temperature plasma, *31<sup>st</sup> International Conference on Phenomena in Ionized Gases (ICPIG)*, Granada, Spain, 14-19 July 2013;
80. 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, *31<sup>st</sup> International Conference on Phenomena in Ionized Gases (ICPIG)*, Granada, Spain, 14-19 July 2013;
81. D. G. Dimitriu, M. Agop – Competition of scenarios of transition to chaos in plasma – Experiment and theoretical modelling, *6<sup>th</sup> Chaotic Modeling and Simulation International Conference*, Istanbul, Turkey, 11-14 June 2013 (conferință orală);
82. 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);
83. D. G. Dimitriu – Scenarios of transition to chaos competition in low-temperature plasma, *Physics Conference TIM-12*, Timișoara, România, 27-30 November 2012;
84. 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;
85. 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, *9<sup>th</sup> International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012 (conferință orală);
86. F. Unga, N. Ajtai, M. N. Danila, D. Dimitriu, A. Timofte, M. M. Cazacu, S. Gurlui – Grimsvötn volcanic ash intrusion: LIDAR and AERONET photometer observations at Iasi and Cluj-Napoca, *9<sup>th</sup> International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
87. 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, *9<sup>th</sup> International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
88. M. N. Danila, F. Unga, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Eyjafjallajökull vs. Grimsvötn, *9<sup>th</sup> International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
89. M. Aflori, M. Drobotă, D. G. Dimitriu, I. Titorencu, V. Harabagiu – Collagen immobilization on polyethylene terephthalate surface after helium plasma treatment, *9<sup>th</sup> International Conference on Physics of Advanced Materials*, Iași, România 20-23 September 2012 (conferință orală);
90. D. O. Dorohoi, D. G. Dimitriu, M. Dimitriu, V. Closca – Specific interactions in N-ylids solutions, studied by NMR and electron spectroscopy, *31<sup>st</sup> European Congress on Molecular Spectroscopy*, Cluj-Napoca, România, 26-31 August 2012 (conferință orală);
91. 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, *8<sup>th</sup> General Conference of Balkan Physical Union*, Constanța, România, 5-7 July 2012;
92. S. Gurlui, D. Dimitriu, M. Strat – Optical and spectral properties of polyurethane coumarine. Self-organization phenomena induces nanoaggregate formations, *8<sup>th</sup> General Conference of Balkan Physical Union*, Constanța, România, 5-7 July 2012;
93. 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, *38<sup>th</sup> ISMH World Congress “Medical Hydrology and Balneology: Environmental Aspects”*, Lanjaron, Granada, Spain, 20-23 June 2012;
94. S. Gurlui, D. G. Dimitriu, M. Agop, M. Osiac, O. Pompilian, C. Focsa – Patterns in laser ablation plasma plume through fractal space-time theory, *5<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
95. M. Agop, D. G. Dimitriu, S. Gurlui – Negative differential resistance of the discharge plasma through fractal space-time theory, *5<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
96. D. G. Dimitriu, S. Gurlui, M. Agop – Modeling of a scenario of transition to chaos in plasma through sub-harmonic bifurcations, *5<sup>th</sup> Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
97. 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, *39<sup>th</sup> International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
98. O. Niculescu, M. Agop, P. E. Nica, D. G. Dimitriu – Experimental investigations and theoretical study of the negative differential resistance in a discharge plasma, *39<sup>th</sup> International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
99. O. Niculescu, M. Agop, D. G. Dimitriu – On the self-structuring of plasma in simple and multiple double layers, *39<sup>th</sup> International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
100. O. Niculescu, D. G. Dimitriu, M. Danila, F. Unga, M. Agop – Experimental and theoretical studies on plasma fireballs interactions, *39<sup>th</sup> EPS Conference on Plasma Physics & 16<sup>th</sup> International Congress on Plasma Physics*, Stockholm, Sweden, 2-6 July 2012;
101. 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 Grimsvötn volcano eruption in May 2011, *International Student Conference on Photonics*, Sinaia, România, 8-11 May 2012;
102. A. Timofte, M. M. Cazacu, D. G. Dimitriu, S. O. Gurlui, M. Agop – A new approach of atmospheric vortex dynamics by non-differentiability, *1<sup>st</sup> International Conference on Moldavian Risks – From global to local scale*, Bacău, România, 16-19 May 2012 (conferință orală);

103. 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;
104. 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;
105. 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;
106. 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);
107. 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, *5<sup>th</sup> International Workshop on Optoelectronic Techniques for Environmental Monitoring*, București-Măgurele, România, 28-30 September 2011;
108. 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, *5<sup>th</sup> International Workshop on Optoelectronic Techniques for Environmental Monitoring*, București-Măgurele, România, 28-30 September 2011 (conferință orală);
109. 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, *5<sup>th</sup> International Workshop on Optoelectronic Techniques for Environmental Monitoring*, București-Măgurele, 28-30 September 2011;
110. 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, *12<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 6-8 July 2011;
111. I. Topala, D. G. Dimitriu, N. Dumitrascu – Analysis of helium atmospheric pressure plasma jet in the bullet mode, *30<sup>th</sup> International Conference on Phenomena in Ionized Gases*, Belfast, Northern Ireland, UK, 28 August – 2 September 2011;
112. 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);
113. D. G. Dimitriu – On the transition to chaos in low-temperature plasma, *11<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2010 (conferință invitată);
114. O. Niculescu, D. G. Dimitriu, M. Agop – Scale relativity model applied to the plasma fireball dynamics, *11<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2010;
115. C. Stan, C. P. Cristescu, D. G. Dimitriu – Nonlinear dynamics analysis of intermittent phenomena in low-temperature discharge plasma, *11<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2010;
116. J. Gruenwald, C. Maszl, C. Ionita, R. Stenzel, D. G. Dimitriu, J. Laimer, R. Schrittwieser – Fireball research at the University of Innsbruck reviewed, *37<sup>th</sup> EPS Conference on Plasma Physics*, Dublin, Ireland, 21-25 June 2010;
117. J. Gruenwald, C. Maszl, C. Ionita, R. Stenzel, D. G. Dimitriu, J. Laimer, R. Schrittwieser – Investigations on fireballs, *37<sup>th</sup> EPS Conference on Plasma Physics*, Dublin, Ireland, 21-25 June 2010;
118. M. M. Cazacu, A. Timofte, D. Dimitriu, S. Gurlui – Experimental validation of MAP 3D environmental data in NE region of Romania – Iasi area, *4<sup>th</sup> International Workshop on Optoelectronic Techniques for Environmental Monitoring*, Cluj-Napoca, România, 19-21 October 2010;
119. A. Timofte, M. M. Cazacu, R. Radulescu, C. Talianu, D. Dimitriu, S. Gurlui – First Romanian LIDAR investigation of the EYJAFJALLAJOKULL volcanic ash, *4<sup>th</sup> International Workshop on Optoelectronic Techniques for Environmental Monitoring*, Cluj-Napoca, România, 19-21 October 2010;
120. 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;
121. D. G. Dimitriu – Experimental transition to chaos in low-temperature plasma, *11<sup>th</sup> Experimental Chaos and Complexity Conference*, Lille, France, 1-4 June 2010;
122. C. Stan, C. P. Cristescu, D. G. Dimitriu – Multifractal analysis of intermittency in a discharge plasma, *15<sup>th</sup> International Conference on Plasma Physics and Applications*, Iași, România, 1-4 July 2010;
123. D. G. Dimitriu, C. Stan, C. P. Cristescu – Recurrence plot analysis of transient phenomena in low-temperature discharge plasma, *15<sup>th</sup> International Conference on Plasma Physics and Applications*, Iași, România, 1-4 July 2010;
124. L. M. Ivan, D. G. Dimitriu – Scenarios of transition to chaos in plasma related to the non-concentric multiple double layers formations, *15<sup>th</sup> International Conference on Plasma Physics and Applications*, Iași, România, 1-4 July 2010;
125. 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);
126. 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;
127. O. Niculescu, A. R. Stana, D. G. Dimitriu – Patterns formation and transition to chaos in low-temperature plasma, *10<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 6-8 July 2009;
128. 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;
129. D. G. Dimitriu, L. M. Ivan, O. Niculescu – Spatio-temporal period-doubling bifurcations in low-temperature plasmas, *17<sup>th</sup> International Conference on Gas Discharge and Their Applications*, Cardiff, UK, 7-12 September 2008 (conferință orală);
130. D. G. Dimitriu – On the spatio-temporal patterns formation in low-temperature plasmas, *17<sup>th</sup> International Conference on Gas Discharge and Their Applications*, Cardiff, UK, 7-12 September 2008 (conferință orală);
131. 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, *24<sup>th</sup> Summer School and International Symposium on the Physics of Ionized Gases*, Novi Sad, Serbia, 25-29 August 2008;

132. D. G. Dimitriu, L. M. Ivan – Transition to chaos of multiple fireballs dynamics by cascade of period-doubling bifurcations, *19<sup>th</sup> Europhysics Conference on Atomic and Molecular Physics of Ionized Gases*, Granada, Spain, 15-19 July 2008 (conferință orală);
133. C. Ionita, D. G. Dimitriu, R. W. Schrittwieser – Complex space charge structures at the origin of certain plasma instabilities, *19<sup>th</sup> Europhysics Conference on Atomic and Molecular Physics of Ionized Gases*, Granada, Spain, 15-19 July 2008;
134. S. Gurlui, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Spectral investigation of fireballs in argon plasma, *19<sup>th</sup> Europhysics Conference on Atomic and Molecular Physics of Ionized Gases*, Granada, Spain, 15-19 July 2008;
135. O. Niculescu, D. G. Dimitriu – On the generation of stable complex oscillations in low-temperature plasma, *9<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2008;
136. L. M. Ivan, A. R. Stana, D. G. Dimitriu – Chaotic spatio-temporal phenomenon in low-temperature plasma, *9<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2008;
137. S. Gurlui, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Spectral investigation of a complex space charge structure in plasma, *9<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 7-9 July 2008;
138. C. Ionita, R. Stenzel, D. G. Dimitriu, R. Schrittwieser – Creation and dynamics of plasma fireballs, *3<sup>rd</sup> International Workshop and Summer School on Plasma Physics*, Kiten, Bulgaria, 30 June – 5 July 2008 (conferință orală);
139. D. G. Dimitriu – On the generation and dynamics of complex space charge structures in low-temperature plasma, *35<sup>th</sup> IEEE International Conference on Plasma Science*, Karlsruhe, Germany, 15-19 June 2008 (conferință orală);
140. O. Niculescu, D. G. Dimitriu – Complex oscillations induced by the nonlinear dynamics of the fireballs in plasma, *35<sup>th</sup> IEEE International Conference on Plasma Science*, Karlsruhe, Germany, 15-19 June 2008;
141. S. O. Gurlui, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Spectral investigation of a fireball in low-temperature argon plasma, *35<sup>th</sup> IEEE International Conference on Plasma Science*, Karlsruhe, Germany, 15-19 June 2008;
142. 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;
143. R. Schrittwieser, D. G. Dimitriu, C. Ionita, O. Niculescu, L. Conde, J. M. Donoso – Anode double layers, *9<sup>th</sup> International Workshop on the Interrelationship between Plasma Experiments in Laboratory and Space*, Cairns, Australia, 5-10 August 2007 (conferință invitată);
144. 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);
145. 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);
146. 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;
147. 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;
148. L. M. Ivan, D. G. Dimitriu, M. Sanduloviciu, O. Niculescu – On the complex self-organized systems created in laboratory, *14<sup>th</sup> International Conference on Plasma Physics and Applications*, Brașov, România, 14-18 September 2007 (conferință orală);
149. 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, *14<sup>th</sup> International Conference on Plasma Physics and Applications*, Brașov, România, 14-18 September 2007;
150. D. G. Dimitriu, M. Aflori, L. M. Ivan, C. Ionita, R. Schrittwieser – Transition to chaos by a cascade of period-doubling bifurcations in plasma, *16<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 20-25 January 2007 (conferință orală);
151. M. Aflori, D. G. Dimitriu – Mass-spectrometry investigations in Ar-H<sub>2</sub> radio-frequency discharges, *16<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 20-25 January 2007;
152. 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);
153. 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;
154. 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;
155. 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;
156. M. Dimitriu, D. G. Dimitriu – Intermolecular interactions in liquids, *12<sup>th</sup> International Conference "The Knowledge Based Organization"*, Sibiu, România, 11-14 June 2007 (conferință orală);
157. 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;
158. 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;
159. 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;
160. 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 28<sup>th</sup> International Conference of Phenomena in Ionized Gases*, Prague, Czech Republic, 15-20 July 2007;
161. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Analysis of three simultaneously excited instabilities in low-temperature magnetized plasma, *Proceedings of the 28<sup>th</sup> International Conference of Phenomena in Ionized Gases*, Prague, Czech Republic, 15-20 July 2007;
162. 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 28<sup>th</sup> International Conference of Phenomena in Ionized Gases*, Prague, Czech Republic, 15-20 July 2007;

163. M. Aflori, O. Niculescu, D. G. Dimitriu, D. O. Dorohoi – Mass-spectrometry investigations of hydrogen positive ions in Ar-H<sub>2</sub> and H<sub>2</sub> radio-frequency discharges, *34<sup>th</sup> EPS Conference on Plasma Physics*, Warsaw, Poland, 2-6 July 2007;
164. S. Chiriac, O. Niculescu, D. G. Dimitriu, M. Sanduloviciu – Type I intermittency related to the double layer dynamics in filament type discharge plasma, *34<sup>th</sup> EPS Conference on Plasma Physics*, Warsaw, Poland, 2-6 July 2007;
165. O. Niculescu, S. Chiriac, D. G. Dimitriu – On the interaction between complex space charge structures in plasma, *34<sup>th</sup> EPS Conference on Plasma Physics*, Warsaw, Poland, 2-6 July 2007;
166. C. Ionita, D. G. Dimitriu, R. Schrittwieser – Complex space charge structures in laboratory and natural plasmas, *7<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006 (conferință invitată);
167. 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, *7<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
168. D. Mihailescu, D. G. Dimitriu – Monte Carlo calculation of backscattering coefficients for 8-32 keV electrons, *7<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
169. 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, *7<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
170. 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, *7<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2006;
171. D. G. Dimitriu, C. Ionita, M. Aflori, L. M. Ivan, R. Schrittwieser – Generation and dynamics of multiple double layers in plasma, *33<sup>rd</sup> EPS Conference on Plasma Physics*, Rome, Italy, 19-23 June 2006;
172. M. Sanduloviciu, D. G. Dimitriu, S. Chiriac, E. Lozneau – The ball lightning as a self-organized complex system, *9<sup>th</sup> International Symposium on Ball Lightning*, Eindhoven, The Netherlands, 16-19 August 2006;
173. 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, *2<sup>nd</sup> International Symposium on Unconventional Plasmas*, Eindhoven, The Netherlands, 14-16 August 2006 (conferință orală);
174. D. G. Dimitriu, M. Aflori, C. Ionita, R. Schrittwieser – Feigenbaum scenario of transition to chaos related to multiple double layer dynamics, *2<sup>nd</sup> International Symposium on Unconventional Plasmas*, Eindhoven, The Netherlands, 14-16 August 2006 (conferință orală);
175. E. Lozneau, D. G. Dimitriu, L. M. Ivan, M. Sanduloviciu – Functional double layers emerged in plasma by self-organization, *2<sup>nd</sup> International Symposium on Unconventional Plasmas*, Eindhoven, The Netherlands, 14-16 August 2006;
176. M. Aflori, C. Ionita, S. Chiriac, D. G. Dimitriu, R. Schrittwieser – Transition to chaos through a cascade of period doubling bifurcations in plasmas, *12<sup>th</sup> International Congress on Plasma Physics*, Kiev, Ukraine, 22-26 May 2006;
177. L. M. Ivan, M. Aflori, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Complex dynamics of a multiple double layer structure in plasma, *18<sup>th</sup> European Conference on the Atomic and Molecular Physics of Ionised Gases*, Lecce, Italy, 12-16 July 2006;
178. M. Aflori, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Excitation and ionization reactions in an asymmetric RF capacitive discharge, *18<sup>th</sup> European Conference on the Atomic and Molecular Physics of Ionised Gases*, Lecce, Italy, 12-16 July 2006;
179. M. Dimitriu, D. G. Dimitriu, D. O. Dorohoi – Polarizabilities and electric dipole moments in the excited states of some cycloadducts, *6<sup>th</sup> International Conference of the Balkan Physical Union*, Istanbul, Turkey, 22-26 August 2006 (conferință orală);
180. L. M. Ivan, S. A. Chiriac, M. Aflori, D. G. Dimitriu – On the chaotic dynamics of multiple double layers in plasma, *6<sup>th</sup> International Conference of the Balkan Physical Union*, Istanbul, Turkey, 22-26 August 2006;
181. R. Schrittwieser, D. G. Dimitriu, C. Ionita, P. C. Balan, G. Amarandei – Multiple double layers in laboratory experiments relevant for space plasma phenomena, *8<sup>th</sup> International Workshop on the Interrelationship between Plasma Experiments in Laboratory and Space*, Tromsø, Norvegia, 4-9 July 2005 (conferință invitată);
182. D. G. Dimitriu – Plasma fusion torus as a complex space charge structure, *6<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2005 (conferință invitată);
183. S. Chiriac, M. Aflori, D. G. Dimitriu – Nonlinear investigation of the bistable behavior of multiple anodic structures in dc discharge plasma, *6<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2005;
184. M. Mihai-Plugaru, L. M. Ivan, D. G. Dimitriu – Space charge configuration formed in weakly magnetized diffusion plasma, *6<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2005;
185. S. Gurlui, M. Strat, G. Strat, D. G. Dimitriu – Plasma complex structures and bio-plasmas, *13<sup>th</sup> General Meeting of the European Physical Society "Beyond Einstein – Physics for the 21<sup>st</sup> Century"*, Bern, Switzerland, 11-15 July 2005;
186. 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;
187. M. Sanduloviciu, D. G. Dimitriu, C. Furtuna, G. Amarandei, E. Lozneau – On the bistable behavior of electrical current conductors, *15<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
188. 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, *15<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
189. G. Amarandei, D. G. Dimitriu, C. Ionita, R. Schrittwieser – Cold plasma phenomenon similar with the L-H transition in hot fusion plasma, *15<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
190. 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, *15<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;
191. 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, *15<sup>th</sup> Symposium on Applications of Plasma Processes*, Podbanske, Slovakia, 15-20 January 2005;



192. 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, *5<sup>th</sup> International Workshop and Summer School “Towards Fusion Energy – Plasma Physics, Diagnostics, Spin-offs”*, Kudowa Zdroj, Poland, 6-10 June 2005 (conferință orală);
193. D. G. Dimitriu, E. Lozneanu, M. Sanduloviciu – Plasma experiments with relevance for nano-science, *13<sup>th</sup> Conference on Plasma Physics and Applications*, Iași, România, 27-29 October 2005 (conferință orală);
194. 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, *13<sup>th</sup> Conference on Plasma Physics and Applications*, Iași, România, 27-29 October 2005;
195. M. Aflori, S. Chiriac, D. G. Dimitriu, M. Sanduloviciu – Period doubling route to chaos in argon dc glow discharge, *13<sup>th</sup> Conference on Plasma Physics and Applications*, Iași, România, 27-29 October 2005;
196. 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);
197. 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);
198. 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;
199. 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;
200. 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 5<sup>th</sup> EUROMECH Nonlinear Dynamics Conference*, Eindhoven, The Netherlands, 7-12 August 2005 (conferință orală);
201. D. G. Dimitriu, C. Ionita, R. Schrittwieser – Experimental control of chaos in plasma, *Proceedings of the 5<sup>th</sup> EUROMECH Nonlinear Dynamics Conference*, Eindhoven, The Netherlands, 7-12 August 2005 (conferință orală);
202. 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, *32<sup>nd</sup> EPS Plasma Physics Conference*, Tarragona, Spain, 27 June – 1 July 2005;
203. 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;
204. M. Aflori, D. G. Dimitriu, J. L. Sullivan – Comparison between the IEDs of positive ions Ar<sup>+</sup>, Ar<sup>++</sup> and Ar<sub>2</sub><sup>+</sup> in an asymmetric capacitive argon discharge and argon-oxygen discharge, *31<sup>st</sup> EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
205. M. Aflori, D. G. Dimitriu, D. Dorohoi – Characterization of an argon-oxygen discharge by using Langmuir probe and optical emission spectroscopy measurements, *31<sup>st</sup> EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
206. M. Mihai-Plugaru, M. Aflori, D. G. Dimitriu – Analysis of a complex space charge configuration formed in weakly magnetized diffusion plasma, *31<sup>st</sup> EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
207. 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, *31<sup>st</sup> EPS Conference on Plasma Physics*, London, England, 28 June – 2 July 2004;
208. 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, *12<sup>th</sup> International Congress on Plasma Physics*, Nice, France, 25-29 October 2004;
209. D. G. Dimitriu – L-H transition in fusion plasma as a self-organization phenomenon, *14<sup>th</sup> International Toki Conference on Plasma Physics and Controlled Nuclear Fusion*, Toki, Japan, 5-8 October 2004;
210. M. Aflori, C. Gaman, L. M. Ivan, M. Mihai-Plugaru, D. G. Dimitriu – Mass-spectrometry measurements in an rf asymmetric capacitively-coupled oxygen discharge, *57<sup>th</sup> Annual Gaseous Electronic Conference*, Bunratty, Ireland, 26-29 September 2004;
211. 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;
212. D. G. Dimitriu – Low-temperature plasma experiments with relevance for the L-H transition in fusion plasma, *4<sup>th</sup> International Workshop and School “Towards Fusion Energy – Plasma Physics, Diagnostics, Applications”*, Kudowa Zdroj, Poland, 7-13 June 2004 (conferință orală);
213. L. M. Ivan, C. Gaman, M. Aflori, M. Mihai-Plugaru, D. G. Dimitriu, E. Lozneanu, M. Sanduloviciu – Experimental investigation of multiple self-organized structures in plasma, *5<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
214. 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, *5<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
215. 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, *5<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
216. M. Aflori, L. M. Ivan, D. G. Dimitriu – Estimating electrons and ions energies in an rf capacitively-coupled discharge, *5<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 5-7 July 2004;
217. M. Sanduloviciu, D. G. Dimitriu, L. M. Ivan, M. Aflori, C. Furtuna, S. Popescu, E. Lozneanu – Self-organization scenario relevant for nanoscale science and technology, *7<sup>th</sup> International Conference on Physics of Advanced Materials*, Iași, România, 10-12 June 2004;
218. D. G. Dimitriu – Physical processes related to the onset of low-frequency instabilities in magnetized plasma, *21<sup>st</sup> Symposium on Plasma Physics and Technology*, Prague, Czech Republic, 14-17 June 2004;
219. M. Sanduloviciu, D. G. Dimitriu, E. Lozneanu – Violation of the second law of thermodynamics by “engines” emerged by self-organization in nature and laboratory, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003 (conferință invitată);
220. D. G. Dimitriu, E. Lozneanu, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Chaos control in experimental and industrial plasma devices, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;

221. D. G. Dimitriu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – Flicker noise related to uncorrelated dynamics of multiple double layers in plasma, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
222. D. G. Dimitriu, L. M. Ivan, M. Mihai-Plugaru, G. Amarandei, C. Gaman – Nonlinear dynamics analysis of complex phenomena in plasma, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
223. 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, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
224. 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, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
225. M. Strat, S. Gurlui, G. Strat, D. G. Dimitriu – Double layer with ionic deep, *4<sup>th</sup> International Balkan Workshop on Applied Physics*, Constanța, România, 25-27 September 2003;
226. 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 26<sup>th</sup> International Conference on Phenomena in Ionized Gases*, Greifswald, Germany, 15-20 July 2003;
227. 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 26<sup>th</sup> International Conference on Phenomena in Ionized Gases*, Greifswald, Germany, 15-20 July 2003;
228. 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 14<sup>th</sup> Symposium on Applications of Plasma Processes*, Liptovsky Mikulas, Slovakia, 12-18 January 2003;
229. 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 14<sup>th</sup> Symposium on Applications of Plasma Processes*, Liptovsky Mikulas, Slovakia, 12-18 January 2003;
230. 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 14<sup>th</sup> Symposium on Applications of Plasma Processes*, Liptovsky Mikulas, Slovakia, 12-18 January 2003;
231. 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;
232. 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;
233. 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;
234. 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;
235. 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;
236. 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;
237. C. Ionita, D. G. Dimitriu, M. Sanduloviciu, E. Lozneau, R. Schrittwieser – Relevant experiments concerning the dynamics of complex space charge configurations in plasma, *53<sup>rd</sup> Annual Meeting of the Austrian Physical Society*, Salzburg, Austria, 1-2 October 2003;
238. D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Generation and control of oscillations in plasma, *12<sup>th</sup> Conference on Plasma Physics and Applications*, Iași, România, 1-3 September 2003 (conferință orală);
239. D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – Generation and analysis of a multiple double layer in plasma, *12<sup>th</sup> Conference on Plasma Physics and Applications*, Iași, România, 1-3 September 2003;
240. C. Gaman, D. G. Dimitriu, M. Sanduloviciu – Basic mechanism of plasma self-confinement and expansion in low-pressure gases, *12<sup>th</sup> Conference on Plasma Physics and Applications*, Iași, România, 1-3 September 2003;
241. G. Strat, M. Strat, S. Gurlui, D. G. Dimitriu – Free double layers in argon glow discharges, *5<sup>th</sup> General Conference of the Balkan Physical Union*, Vrnjacka Banja, Serbia and Montenegro, 25-29 August 2003 (conferință orală);
242. G. Strat, M. Strat, S. Gurlui, D. G. Dimitriu – Optogalvanic effect in nonlinear systems, *5<sup>th</sup> General Conference of the Balkan Physical Union*, Vrnjacka Banja, Serbia and Montenegro, 25-29 August 2003;
243. 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, *30<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics*, St. Petersburg, Russia, 7-11 July 2003;
244. D. G. Dimitriu, V. Ignatescu, C. Ionita, E. Lozneau, R. Schrittwieser, M. Sanduloviciu – On the origin of bistabilities in a DP machine, *29<sup>th</sup> 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 – Phase space reconstruction of current-driven instabilities in a magnetized plasma column, *29<sup>th</sup> EPS Conference on Plasma Physics and Controlled Fusion*, Montreux, Switzerland, 17-21 June 2002;
246. 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, *11<sup>th</sup> International Congress on Plasma Physics*, Sydney, Australia, 15-19 July 2002;

247. 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, *16<sup>th</sup> European Conference on Atomic and Molecular Physics of Ionized Gases*, Grenoble, France, 14-18 July 2002;
248. D. G. Dimitriu, V. Ignatescu, E. Lozneau, M. Sanduloviciu, C. Ionita, R. Schrittwieser – Nonlinear effects of the current-driven electrostatic ion-cyclotron instability, *28<sup>th</sup> EPS Conference on Controlled Fusion and Plasma Physics*, Funchal, Portugal, 18-22 June 2001;
249. D. G. Dimitriu, V. Ignatescu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – New features of the electrostatic ion-cyclotron instability in a Q-machine plasma, *Proceedings of the 25<sup>th</sup> International Conference on Phenomena in Ionized Gases*, Nagoya, Japan, 17-22 July 2001;
250. D. G. Dimitriu, S. Popescu, P. C. Balan, C. Ionita, E. Lozneau, R. Schrittwieser, M. Sanduloviciu – Self-organized anode structure acting as stimulators of oscillations in double plasma machine, *11<sup>th</sup> Conference on Plasma Physics and Applications*, Constanța, România, 6-8 September 2001;
251. 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, *11<sup>th</sup> Conference on Plasma Physics and Applications*, Constanța, România, 6-8 September 2001;
252. 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, *11<sup>th</sup> Conference on Plasma Physics and Applications*, Constanța, România, 6-8 September 2001;
253. D. Dorohoi, D. G. Dimitriu – Microscopic parameters in the excited states of some anthracene derivatives, *2<sup>nd</sup> Conference on Isotopic and Molecular Processes*, Cluj-Napoca, România, 27-29 September 2001;
254. D. Creanga, D. G. Dimitriu, D. Dorohoi – Electric dipole moments of some benzo-[f]-quinolinium cycloadducts, *2<sup>nd</sup> Conference on Isotopic and Molecular Processes*, Cluj-Napoca, Romania, 27-29 September 2001;
255. P. C. Balan, V. Pohoata, V. Ignatescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser, M. Sanduloviciu, C. Hidalgo – Flicker noise at the edge of a magnetized alkali plasma column, *Proceedings of the 10<sup>th</sup> International Congress on Plasma Physics*, Quebec, Canada, 23-27 October 2000;
256. D. G. Dimitriu, V. Ignatescu, C. Ionita, R. Schrittwieser, M. Sanduloviciu – Interaction between low-frequency instabilities in a magnetized plasma, *Proceedings of the 10<sup>th</sup> International Congress on Plasma Physics*, Quebec, Canada, 23-27 October 2000;
257. M. Sanduloviciu, R. Schrittwieser, C. Avram, E. Lozneau, D. G. Dimitriu, V. Ignatescu – On the stimulation mechanism of low-frequency instabilities in magnetized plasma, *11<sup>th</sup> International Toki Conference on Plasma Physics and Controlled Nuclear Fusion*, Toki, Japan, 5-8 December 2000;
258. E. Lozneau, C. Borcia, S. Popescu, M. Sanduloviciu, C. Avram, D. G. Dimitriu, V. Ignatescu, R. Schrittwieser – On the origin of flicker noise in various plasma, *11<sup>th</sup> International Toki Conference on Plasma Physics and Controlled Nuclear Fusion*, Toki, Japan, 5-8 December 2000;
259. D. G. Dimitriu, V. Ignatescu, C. Ionita, G. Popa, M. Sanduloviciu, R. Schrittwieser – Simultaneous excitation of low-frequency instabilities in a magnetized plasma, *50<sup>th</sup> Annual Meeting of the Austrian Physical Society*, Graz, Austria, 26-29 September 2000 (conferință orală);
260. D. Dorohoi, M. Postolache, D. Ionescu, D. G. Dimitriu, M. Postolache – Dipole moments and polarizabilities in the excited states of some carbanion disubstituted pyridinium ylids, *1<sup>st</sup> Conference on Isotopic and Molecular Processes*, Cluj-Napoca, România, 23-25 September 1999;
261. N. B. Mandache, A. M. Pointu, D. G. Dimitriu, M. Ganciu, G. Musa, I. I. Popescu, E. Dewald, M. Nistor – Transient electron beams created by dielectric hollow cathode as a tool for applications, *10<sup>th</sup> International Colloquium on Plasma Processes*, Antibes Juan-les-Pins, France, 11-15 June 1995;

## 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, *6<sup>th</sup> 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, *6<sup>th</sup> 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, *6<sup>th</sup> 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, *6<sup>th</sup> National Conference of Applied Physics (CNFA)*, Iași, 2016;
11. M. Gaina, A. C. Benchea, D. G. Dimitriu – Quantum-mechanical and spectral study of ketoprofen, *6<sup>th</sup> 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, *6<sup>th</sup> National Conference of Applied Physics (CNFA)*, Iași, 2016 (conferință orală);
13. A. C. Benchea, C. A. 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 electroencefalogramme 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, *4<sup>th</sup> 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, *5<sup>th</sup> National Conference of Applied Physics*, Iași, 2013 (conferință orală);
48. M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. O. Gurlui, I. S. Stratul – 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. Mitrea, 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. Drobota, I. Stoica, D. Dimitriu, M. Afiori – 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 polimere, *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. Closca, 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. Closca, 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 Comunicări Științifice a Administrației Naționale de Meteorologie*, București, 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 ferofluide, *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, *2<sup>nd</sup> 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, *2<sup>nd</sup> 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, *2<sup>nd</sup> 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, *2<sup>nd</sup> 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. Dorhoi – 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. Lozneau, 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. Lozneau, 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. Lozneau, 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. Lozneau, 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. 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, *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. Lozneau, 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. Lozneau, 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. 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, *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. Lozneau, 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. Lozneau, 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. Lozneau, 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. Lozneau, 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;

128. D. G. Dimitriu, S. Popescu, P. C. Balan, C. Ionita, E. Lozneau, R. Schrittwieser, M. Sanduloviciu – Plasma ball of fire as a stimulator of oscillations in a double plasma machine, *Conferința Națională de Fizică*, Iași, 2001;
129. V. Ignatescu, D. G. Dimitriu, C. Ionita, E. Lozneau, M. Sanduloviciu, R. Schrittwieser – On the negative differential resistance of the Q-machine plasma during the potential relaxation instability phenomenon, *Conferința Națională de Fizică*, Iași, 2001;
130. V. Ignatescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser –  $C_{60}$  deposition in a Q machine, *Conferința Națională de Fizică*, Iași, 2001;
131. D. G. Dimitriu, P. C. Balan, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – The influence of a negatively biased ring electrode on the appearance and dynamics of a ball of fire created on a central disk in a DP machine plasma, *Conferința Națională de Fizică*, Iași, 2001;
132. D. G. Dimitriu, V. Ignatescu, E. Lozneau, C. Ionita, M. Sanduloviciu, R. Schrittwieser – On the dynamics of low-frequency instabilities in Q machine plasma, *Conferința Națională de Fizică*, Iași, 2001;
133. D. G. Dimitriu, V. Ignatescu, C. Ionita, R. Schrittwieser, M. Sanduloviciu – Interaction between low-frequency instabilities in a magnetized plasma, *Sesiunea științifică poster "Cercetări fundamentale și aplicative în domeniul fizicii"*, Iași, 2000;
134. P. C. Balan, V. Pohoata, V. Ignatescu, D. G. Dimitriu, C. Ionita, R. Schrittwieser, M. Sanduloviciu, C. Hidalgo – Flicker noise at the edge of a magnetized alkali plasma column, *Sesiunea științifică poster "Cercetări fundamentale și aplicative în domeniul fizicii"*, Iași, 2000;



## ANEXA 2 – Lista granturilor de cercetare coordonate în calitate de director de proiect

1. Instabilități electrostatice în plasmă magnetizată și nemagnetizată de temperatură joasă (acronim INSTAPLAS), grant PNCDI III – IDEI, nr. 193/2017, 2017-2019, valoare 775700 RON;
2. Structuri autoorganizate în plasmă, grant PNCDI II – CAPACITĂȚI, bilateral România – Austria, nr. 747/2014, 2014-2015, valoare 28400 RON;
3. Studiul interacțiunii plasmei cu sisteme complexe, grant PNCDI II – CAPACITĂȚI, bilateral România – Austria, nr. 557/2012, 2012-2013, valoare 44000 RON;
4. Identificarea mecanismelor fizice aflate la originea apariției structurilor spațiale și spațio-temporale în plasmă. Aplicații, grant PNCDI II – IDEI, nr. 56/2007, 2007-2010, valoare 1000000 RON;
5. Instabilități electrostatice în plasmă. Metode de control, grant CEEEX modulul II tip ET, nr. 5912/2006, 2006-2008, valoare 140000 RON;
6. Structuri complexe de sarcini spațiale în plasmă. Modele fizice. Aplicații, grant CEEEX modulul II tip ET, nr. 1499/2006, 2006-2008, valoare 140000 RON;
7. Dezvoltarea unui model fizic pentru straturile duble multiple din plasmă, grant CNCSIS tip AT, nr. 60GR/2006, 2006-2007, valoare 69000 RON;
8. Dezvoltarea unor metode experimentale de control a haosului în dispozitive cu plasmă, grant CNCSIS tip AT, nr. 33373/2004, 2004-2005, 25000 RON;

Data: 12 martie 2021

Conf. univ. dr. habil. Dan-Gheorghe DIMITRIU

