

LISTA DE LUCRĂRI

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

a) Maximum 10 lucrări relevante pentru realizările profesionale proprii

1. C. Popovici, C. M. Pavel, V. Sunel, C. Cheptea, D. G. Dimitriu (autor corespondent), D. O. Dorohoi, D. David, V. Closca, M. Popa – Optimized synthesis of new thiosemicarbazide derivatives with tuberculostatic activity, *International Journal of Molecular Sciences* **22** (2021) 12139;
2. C. T. Konrad-Soare, F. Enescu, D. G. Dimitriu, M. Dobromir, E. G. Teodorescu-Soare, F. Mazzanti, S. A. Irimiciuc, C. Ionita, R. Schrittwieser – Concentric double hollow grid cathode discharges. Spectral investigation and phenomenological approach, *Plasma Sources Science and Technology* **30** (2021) 085006;
3. 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;
4. S. A. Irimiciuc, O. Vasilovici, D. G. Dimitriu (autor corespondent) – Chua's circuit: control and synchronization, *International Journal of Bifurcation and Chaos* **25** (2015) 1550050;
5. 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;
6. 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;
7. M. Agop, P. Nica, O. Niculescu, D. G. Dimitriu (autor corespondent) – 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;
8. 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;
9. 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;
10. 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;

b) Teza de doctorat

1. Fenomene spațio-temporale în dispozitive de tip mașină Q, conducător științific Prof. univ. dr. doc. Mircea Sanduloviciu, distincția Magna cum Laude

c) Brevete de invenție și alte titluri de proprietate intelectuală

Nu este cazul.

d) Cărți și capitole în cărți

1. M. Agop, A. Zala, D. Dimitriu, S. Irimiciuc, A. Gavrilut, C. M. Rusu, G. Crumpei, L. Eva – Statistical Methods and Nonlinear Dynamics for Analyzing Brain Activity. Theoretical and Experimental Aspects, in *13th Chaotic modeling and Simulation International Conference*, Eds. C. H. Skiadas, Y. Dimotikalis, Springer Nature Switzerland AG, Cham, 2021, ISBN 978-3-030-70794-1;
2. 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;

3. 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;
4. 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;
5. 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;
6. 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;
7. D. G. Dimitriu – Rezonanța magnetică nucleară în medicină și biologie – Note de curs, Editura PIM, Iași, 2008, ISBN 9789737168860;
8. G. Strat, M. Strat, S. Gurlui, C. Focsa, D. G. Dimitriu – Self-organization phenomena in polymer and plasma structures, in *Self-organization in nanomaterials*, Eds. P. Boolchand and G. Lucovsky, INOE Publishing House, București, 2008, ISBN 9789738810907;
9. 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;
10. D. G. Dimitriu – Instabilități electrostatice în plasma mașinii Q, Editura Demiurg, Iași, 2006, ISBN 9737603273;
11. S. Gurlui, D. G. Dimitriu – Straturi duble în plasmă, Editura Tehnopress, Iași, 2005, ISBN 973702155X;

e) Articole/studii publicate *in extenso* în reviste din circuitul științific internațional

e1) Articole indexate ISI

1. N. Melniciuc Puica, D. G. Dimitriu, G. Apreotesei, A. C. Morosanu, D. O. Dorohoi – Computational study of some 4'-aryl-1,2,4-triazol-1-ium-4-R₂-phenacylid derivatives in vacuum and dimethylformamide, *Symmetry* **14** (2022) 2099;
2. S. A. Irimiciuc, C. T. Konrad-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – On the interactions between three fireballs in low-temperature plasma, *Plasma Sources Science and Technology* **31** (2022) 084005;
3. D. Babusca, C. A. Morosanu, D. G. Dimitriu, C. Cheptea, D. O. Dorohoi – Combined solvatochromism and quantum mechanical computations in study regarding the solute-solvent interactions in solutions of some azo-derivatives, *Molecular Crystals and Liquid Crystals* **747** (2022) 103-119;
4. C. Cheptea, V. Sunel, C. Popovici, I. Dumitrascu, D. G. Dimitriu, D. O. Dorohoi – Synthesis and quantum mechanical characterization of three new 1-(5-nitro-benzimidazole-2'-yl-sulfonyl-acetyl)-4-aryl-thiosemicarbazide with biological potential, *Molecular Crystals and Liquid Crystals* **747** (2022) 72-80;
5. A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi, I. Hurjui, L. Hurjui – Investigation of 8-hydroxyquinoline by quantum-mechanical modelling and visible absorption spectroscopy, *Molecular Crystals and Liquid Crystals* **748** (2022) 99-111;
6. M. Dimitriu, D. Babusca, E. Angheluta, D. O. Dorohoi, D. G. Dimitriu – Spectral methods to estimate the strength of intermolecular interactions in liquids, *Molecular Crystals and Liquid Crystals* **747** (2022) 91-102;
7. D. O. Dorohoi, D. G. Dimitriu – Binary and ternary solutions of zwitterionic compounds: theoretical and spectral studies, *Molecular Crystals and Liquid Crystals* **748** (2022) 36-58;
8. N. Melniciuc-Puica, D. G. Dimitriu, V. Closca, L. Dumitrascu, D. O. Dorohoi – 1,2,4-triazol-1-ium-p-chloro-phenacylids in hydroxyl binary solvent mixtures. Computational and solvatochromic study, *Molecular Crystals and Liquid Crystals* **748** (2022) 112-121;
9. M. Postolache, D. G. Dimitriu, C. D. Nechifor, S. Condurache Bota, V. Closca, D. O. Dorohoi – Birefringence of thin uniaxial polymer films estimated using the light polarization ellipse, *Polymers* **14** (2022) 1063;
10. C. Popovici, C. M. Pavel, V. Sunel, C. Cheptea, D. G. Dimitriu, D. O. Dorohoi, D. David, V. Closca, M. Popa – Optimized synthesis of new thiosemicarbazide derivatives with tuberculostatic activity, *International Journal of Molecular Sciences* **22** (2021) 12139;
11. D. O. Dorohoi, D. G. Dimitriu, A. C. Morosanu, N. Puica-Melniciuc, I. Hurjui, M. Miron, G. G. Mariciuc, V. Closca, C. Cheptea – Some aryl-1,2,4-triazol-1-ium phenacylids in binary hydroxyl solvent mixtures. Computational and spectral study, *Symmetry* **13** (2021) 1656;
12. D. O. Dorohoi, D. G. Dimitriu, M. M. Dulcescu-Oprea, A. C. Morosanu, N. Puica-Melniciuc, E. Ardelean, A. Gritco-Todirascu, C. Cheptea – Solvatochromic study of two carbanion monosubstituted 4-tolyl-1,2,4-triazol-1-ium phenacylids in binary hydroxylsolvent mixtures, *Molecules* **26** (2021) 3910;

13. C. T. Konrad-Soare, F. Enescu, D. G. Dimitriu, M. Dobromir, E. G. Teodorescu-Soare, F. Mazzanti, S. A. Irimiciuc, C. Ionita, R. Schrittwieser – Concentric double hollow grid cathode discharges. Spectral investigation and phenomenological approach, *Plasma Sources Science and Technology* **30** (2021) 085006;
14. S. A. Irimiciuc, A. Zala, D. Dimitriu, L. M. Himiniuc, M. Agop, B. F. Toma, L. G. Gavril, D. Vasincu, L. Eva – Novel approach for EEG signal analysis in a multifractal paradigm of motions. Epileptic and eclamptic seizures as scale transitions, *Symmetry* **13** (2021) 1024;
15. A. Zala, D. Dimitriu, M. Agop, D. N. Tesloianu, M. L. Cobzeanu, B. M. Cobzeanu, M. C. Rusu, V. Ghizdovat – Evaluating atrial fibrillation through strange attractors, *General Physiology and Biophysics* **40** (2021) 377-386;
16. C. Cheptea, V. Sunel, A. C. Morosanu, D. G. Dimitriu, M. M. Dulcescu-Oprea, M. D. Angheluta, M. Miron, C. D. Nechifor, D. O. Dorohoi, R. N. Malancus – Optimized synthesis of new N-mustards based on 2-mercaptobenzoxazole derivatives with antitumor activity, *Biomedicines* **9** (5) (2021) 476;
17. 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;
18. 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;
19. D. O. Dorohoi, D. E. Creanga, D. G. Dimitriu, A. C. Morosanu, A. Gritco-Todirascu, G. G. Mariciuc, N. Puica Melniciuc, E. Ardelean, C. Cheptea – Computational and spectral means for characterizing intermolecular interactions in solutions and for estimating excited state dipole moment of solute, *Symmetry* **12** (8) (2020) 1299;
20. 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** (1) (2020) 87-97;
21. 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 PPMAECOB in TCM, interferometric assessment, *Molecular Crystals and Liquid Crystals* **698** (1) (2020) 78-86;
22. 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-phenylids estimated from solvatochromic study, *Spectroscopy Letters* **53** (1) (2020) 1-11;
23. 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;
24. 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;
25. 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, *International Journal of Mass Spectrometry* **436** (2019) 83-90;
26. 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;
27. 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;
28. 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;
29. V. B. Rusyn, L. Pribylova, D. G. Dimitriu – Control of the modified chaotic Chua's circuit using threshold method, *Visnik NTUU KPI Seriya – Radiotekhnika Radioaparaturbuduvannia (Bulletin of National Technical University of Ukraine "Kyiv Polytechnic Institute" Seriya Radiotechnique. Radioapparatus Building)* **75** (2018) 61-65;
30. 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;
31. 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;
32. 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;
33. A. C. Benchea, D. Babusca, C. Podlipnik, D. G. Dimitriu – Solvatochromic and quantum-mechanical characterization of Methyl Red, *Analytical Letters* **50** (2017) 2711-2724;
34. 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;
35. 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;
36. 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;

37. 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;
38. A. E. Scripa (Tudose), D. G. Dumitriu, 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;
39. M. Gaina, A. C. Benchea, Č. Podlipnik, D. G. Dumitriu – Quantum-mechanical characterization and spectral study of curcumin, *University Politehnica of Bucharest Scientific Bulletin Series B – Chemistry and Materials Science* **79** (2017) 133-142;
40. D. Babusca, A. C. Benchea, D. G. Dumitriu, D. O. Dorohoi – Solvatochromic characterization of Sudan derivatives in binary and ternary solutions, *Analytical Letters* **49** (16) (2016) 2615-2626;
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42. C. T. Teodorescu-Soare, D. G. Dumitriu, 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;
43. D. G. Dumitriu, 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;
44. D. O. Dorohoi, D. G. Dumitriu, 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;
45. V. Nedeff, G. Lazar, M. Agop, L. Eva, L. Ochiz, D. Dumitriu, L. Vrajitoriu, C. Popa – Solid components separation from heterogeneous mixtures through turbulence control, *Powder Technology* **284** (2015) 170-186;
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47. A. Barzic, D. Dumitriu, D. Dorohoi – New method for determining the optical rotatory dispersion of hydroxypropyl cellulose polymer solutions in water, *Polymer Engineering & Science* **55** (2015) 1077-1081;
48. S. A. Irimiciuc, O. Vasilovici, D. G. Dumitriu – Chua's circuit: control and synchronization, *International Journal of Bifurcation and Chaos* **25** (2015) 1550050;
49. I. A. Cosutchi, D. G. Dumitriu, 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;
50. D. G. Dumitriu, 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;
51. M. Agop, D. G. Dumitriu, 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;
52. S. Gurlui, O. Niculescu, D. G. Dumitriu, 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;
53. D. G. Dumitriu, 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;
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55. M. Aflori, M. Drobota, D. G. Dumitriu, 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;
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58. F. Unga, M. M. Cazacu, A. Timofte, D. Bostan, A. Mortier, D. G. Dumitriu, 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;
59. M. Agop, P. Nica, O. Niculescu, D. G. Dumitriu – 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;
60. I. Topala, N. Dumitrascu, D. G. Dumitriu – Experimental and theoretical investigations of dielectric-barrier plasma jet in helium, *IEEE Transactions on Plasma Science* **40(11)** Part 1 (2012) 2811-2816;
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4. R. Schrittwieser, C. Ionita, R. L. Stenzel, C. T. Konrad-Soare, D. G. Dimitriu, F. Enescu, S. A. Irimiciuc – Plasma fireballs, their creation and behaviour, *20th International Balkan Workshop on Applied Physics*, Constanta, Romania, 12-15 July 2022 (conferință invitată plenară, 13 July, 9.30-10.00);
5. F. Enescu, C. T. Konrad-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Spectral investigations of discharge plasma on complex structured cathodes, *14th Workshop on Frontiers in Low Temperature Plasma Diagnostics (FLTPD)*, Levico Terme, Italy, 1-5 May 2022, p. 38;
6. E. Ambrosi, D. G. Dimitriu, D. O. Dorohoi – Comparative estimation of the first solvation shell's composition of some aryl-1,2,4-triazol-1-ium phenacylids in ternary solutions by three theoretical models, *TIM 20-21 Physics Conference*, Timisoara, Romania, 11-13 November 2021;
7. I. D. C. Vizitiu, D. G. Dimitriu, D. O. Dorohoi – Estimation of the molecule-molecule interaction energy by using the statistical cell model of ternary solutions, *TIM 20-21 Physics Conference*, Timisoara, Romania, 11-13 November 2021;
8. C. M. Pavel, D. G. Dimitriu, D. O. Dorohoi – Solvatochromic study and quantum-mechanical modeling of some 1,2,4-triazol-1-ium ylids in ternary solutions, *TIM 20-21 Physics Conference*, Timisoara, Romania, 11-13 November 2021;
9. A. Cocean, C. Postolachi, S. Garofalde, D. Pata, M. Diaconu, F. Husanu, G. Bulai, B. Munteanu, N. Cimpoesu, D. G. Dimitriu, I. Cocean, S. Gurlui – Dual-pulse ns-laser-induced Raman and Breakdown spectroscopy to enhance performance on atoms and molecular detection, *13th International Conference on Advanced Materials (ICPAM-13)*, Sant Fei de Guixols, Spain, 24-30 September 2021 (conferință orală, 26 September, 17.15-17.30);
10. D. O. Dorohoi, D. G. Dimitriu – Binary and ternary solutions of zwitterionic compounds: Theoretical and spectral studies, *XXVth „Galyna Puchkovska” International School-Seminar „Spectroscopy of Molecules and Crystals” (ISSMC)*, Kyiv, Ukraine, 21-24 September 2021 (conferință invitată, 22 September 10.00-10.45);
11. D. Babusca, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Combined solvatochromism and quantum mechanical computations in study regarding the solute-solvent interactions in some azo-derivatives solutions, *XXVth „Galyna Puchkovska” International School-Seminar „Spectroscopy of Molecules and Crystals” (ISSMC)*, Kyiv, Ukraine, 21-24 September 2021 (conferință orală, 23 September 10.00-10.20);
12. A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi, I. Hurjui, L. Hurjui – Investigation of 8-Hydroxyquinoline by quantum-mechanical modeling and visible absorption spectroscopy, *XXVth „Galyna Puchkovska” International School-Seminar*

- „Spectroscopy of Molecules and Crystals” (ISSSMC), Kyiv, Ukraine, 21-24 September 2021 (conferință orală, 23 September 10.40-11.00);
13. N. Puica-Melniciuc, V. Closca, D. G. Dimitriu, D. O. Dorohoi – 1,2,4-Triazol-1-ium methylids in hydroxyl binary solvent mixtures. A solvatochromic study, XXVth „Galyna Puchkovska” International School-Seminar „Spectroscopy of Molecules and Crystals” (ISSSMC), Kyiv, Ukraine, 21-24 September 2021 (conferință orală, 23 September 11.00-11.20);
 14. C. Popovici, V. Sunel, D. G. Dimitriu, D. O. Dorohoi, M. Popa, C. Cheptea – Synthesis of 1-(5-nitro-benzimidazol-2'-yl-sulfonyl-acetyl)-4-aryl-thiosemicarbazide with biological potential, XXVth „Galyna Puchkovska” International School-Seminar „Spectroscopy of Molecules and Crystals” (ISSSMC), Kyiv, Ukraine, 21-24 September 2021;
 15. C. B. Zelinski, E. A. Angheluta, L. Dumitrascu, D. O. Dorohoi, D. G. Dimitriu – Spectral methods for estimating the excited state dipole moments of the spectrally active molecules, XXVth „Galyna Puchkovska” International School-Seminar „Spectroscopy of Molecules and Crystals” (ISSSMC), Kyiv, Ukraine, 21-24 September 2021;
 16. M. Dimitriu, V. Closca, D. Babusca, G. Mariciuc, D. O. Dorohoi, D. G. Dimitriu – Spectral methods to estimate the strength of intermolecular interactions in liquids, XXVth „Galyna Puchkovska” International School-Seminar „Spectroscopy of Molecules and Crystals” (ISSSMC), Kyiv, Ukraine, 21-24 September 2021;
 17. F. Enescu, C. T. Konrad-Soare, D. G. Dimitriu, C. Ionita, R. W. Schrittwieser – Spectral investigations on coaxial double transparent cathode discharges, *Joint Annual Meeting of the Austrian Physical Society and Swiss Physical Society*, Innsbruck, Austria, 30 August – 3 September 2021 (conferință orală, 2 September 18.45-19.00);
 18. R. Schrittwieser, C. T. Konrad-Soare, D. G. Dimitriu, F. Enescu, C. Ionita-Schrittwieser, S. Irimiciuc – Interaction between three fireballs in low temperature plasma, *Joint Annual Meeting of the Austrian Physical Society and Swiss Physical Society*, Innsbruck, Austria, 30 August – 3 September 2021;
 19. C. T. Konrad-Soare, C. Ionita, D. G. Dimitriu, F. Enescu, R. Schrittwieser – Nonlinear dynamics of a concentric double-grid cathode discharge, *Joint Meeting: International Conference on Electromagnetics in Advanced Applications, IEEE-APS Topical Conference on Antennas and Propagation in Wireless Communications, USNC-URSI Radio Science Meeting*, hybrid format, Honolulu, Hawaii, USA, 9-13 august 2021;
 20. D. G. Dimitriu, S. Popescu, M. Agop – Chaotic states of plasma triggered by the nonlinear dynamics of simple and multiple double layers, *13th Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
 21. D. G. Dimitriu, S. Popescu, M. Agop – Double layer in plasma as an interface generated through the interaction of two fractal fluids, *13th Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
 22. M. Agop, A. Zala, D. Dimitriu, S. Irimiciuc, A. Gavrilut, G. Crumpei, L. Eva – Statistical methods and nonlinear dynamics for analyzing brain activity. Theoretical and experimental aspects, *13th Chaotic Modeling and Simulation International Conference (CHAOS 2020)*, Florence, Italy, 9-12 June 2020 (conferință orală);
 23. R. Schrittwieser, C. T. Teodorescu-Soare, F. Enescu, C. Ionita, D. G. Dimitriu, S. Gurlui, F. Mazzanti, S. A. Irimiciuc, B. Hodoroaba, T. O'Hara, O. Vasilovici, L. Amarandi – Oscillatory behavior of hollow grid cathode discharge, *21st International Conference on Electromagnetics in Advanced Applications & 9th IEEE-APS Technical Conference on Antennas and Propagation in Wireless Communications*, Granada, Spain, 9-13 September 2019 (conferință invitată);
 24. R. Schrittwieser, C. T. Teodorescu-Soare, C. Ionita, D. G. Dimitriu, O. Vasilovici, S. Gurlui, S. A. Irimiciuc, B. Hodoroaba, T. O'Hara, L. Amarandi, F. Enescu, F. Mazzanti, R. Stenzel, J. Gruenwald – Inverted fireballs, *18th International Conference on Plasma Physics and Applications (CPPA)*, Iași, România, 20-22 June 2019 (conferință invitată);
 25. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Nonlinear dynamics of non-concentric multiple double layers as a source of low-temperature plasma instabilities, *18th International Conference on Plasma Physics and Applications*, Iași, România, 20-22 June 2019;
 26. S. Popescu, D. G. Dimitriu – Minimum entropy production in the process of fireball formation, *18th International Conference on Plasma Physics and Applications*, Iași, România, 20-22 June 2019;
 27. S. Popescu, D. G. Dimitriu – Nonlinear dynamics of complex space charge structures at the origin of low-frequency plasma instabilities, *12th CHAOS International Conference on Non Linear Analysis and Modeling: Theory and Applications*, Chania, Greece, 18-21 June 2019 (conferință orală);
 28. S. Popescu, D. G. Dimitriu – A dynamical model for plasma fireball, *12th CHAOS International Conference on Non Linear Analysis and Modeling: Theory and Applications*, Chania, Greece, 18-21 June 2019 (conferință orală);
 29. D. G. Dimitriu – On the instabilities of complex space charge structures in low-temperature plasma, *2nd EPS Conference on Statistical and Nonlinear Physics*, Stockholm, Sweden, 7-11 May 2019;
 30. 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;
 31. 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;
 32. V. Rusyn, L. Pribylova, D. Dimitriu, M. Guzan – Security information system based on chaotic system, *3rd International Scientific and Practical Conference “Information Security and Computer Technology”*, Kirovohrad, Ukraine, 19-20 April 2018;

33. 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;
34. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – Appearance and instability of non-concentric multiple double layers in low-temperature discharge plasma, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
35. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – A compact non-differential approach for modelling laser ablation plasma dynamics, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
36. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Self-modulated oscillation in the dynamics of a hollow grid cathode discharge plasma, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
37. M. Agop, S. A. Irimiciuc, D. G. Dimitriu – Transition to chaos through intermittency related to the nonlinear dynamics of non-concentric multiple double layers in low-temperature plasma, *11th Chaotic Modeling and Simulation International Conference*, Rome, Italy, 5-8 June 2018 (conferință orală);
38. 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;
39. 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;
40. S. A. Irimiciuc, D. G. Dimitriu, M. Agop – Self-modulation of the discharge current oscillations in the presence of a complex space charge configuration in low-temperature plasma, *17th International Conference on Plasma Physics and Applications*, Măgurele, București, România, 15-20 June 2017;
41. D. G. Dimitriu, M. Agop – Spontaneous symmetry breaking related to the onset of instabilities in low-temperature plasma, *1st International Conference on Symmetry*, Barcelona, Spain, 16-18 October 2017;
42. D. G. Dimitriu, M. Agop – Theoretical and experimental analysis of low-frequency instabilities in low-temperature magnetized plasma, *10th Chaotic Modeling and Simulation International Conference (CHAOS 2017)*, Barcelona, Spain, 30 May – 2 June 2017;
43. D. G. Dimitriu, S. A. Irimiciuc, M. Agop – Theoretical modeling of the interaction between two complex space charge structures in low-temperature plasma – Self-modulated oscillations, *10th Chaotic Modeling and Simulation International Conference (CHAOS 2017)*, Barcelona, Spain, 30 May – 2 June 2017;
44. R. Schrittwieser, C. T. Teodorescu-Soare, D. G. Dimitriu, S. Gurlui, C. Ionita, O. Vasilovici – Complex space charge structures excited by a spherical grid cathode, *16th International Balkan Workshop on Applied Physics (IBWAP)*, Constanța, România, 7-9 July 2016 (conferință invitată);
45. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Optical activity of glucose solutions, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
46. A. C. Benchea, M. Gaina, D. G. Dimitriu, D. O. Dorohoi – Spectral study on ternary solutions consisting of Rhodamines, Ethylene glycol and DMSO, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
47. C. A. Morosanu, V. Closca, D. G. Dimitriu, D. O. Dorohoi – Electric dipole moments in the excited states of some zwitterionic compounds estimated from a solvatochromic study, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
48. M. Gaina, A. C. Benchea, C. Podlipnik, D. G. Dimitriu – Quantum-mechanical characterization and spectral study of Curcumin, *5th International Colloquium "Physics of Materials" (PM5)*, București, România, 10-11 November 2016;
49. A. E. Tudose, D. G. Dimitriu, D. O. Dorohoi – Linear birefringence dispersion of PET (poly ethyleneterephthalate) foils determined from visible channelled spectra, *33rd European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
50. A. C. Benchea, D. Babusca, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral study of Rhodamine dyes in binary and ternary solutions, *33rd European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
51. A. C. Benchea, D. Babusca, C. A. Morosanu, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical study of some azo derivatives, *33rd European Congress on Molecular Spectroscopy (EUCMOS)*, Szeged, Hungary, 30 July – 4 August 2016;
52. S. Gurlui, C. T. Teodorescu-Soare, D. G. Dimitriu, R. Schrittwieser, C. Ionita – Optical and electrical investigations of a complex space charge structure excited by a spherical grid cathode with a hole, *27th Symposium on Plasma Physics and Technology (SPPT)*, Prague, Czech Republic, 20-23 June 2016;
53. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Spectral and quantum mechanical study of 3-(2-benzothiazolyl)-7-(diethylamino)-coumarin in binary solutions, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Brașov, România, 29 June – 1 July 2016;
54. A. C. Benchea, D. Babusca, D. G. Dimitriu, C. Podlipnik – Solvatochromic study and quantum-mechanical characterization of methyl red, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Brașov, România, 29 June – 1 July 2016;

55. C. A. Morosanu, A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum mechanical characterization and solvatochromic study of quercetine, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
56. A. E. Scripa (Tudose), D. G. Dimitriu, D. O. Dorohoi – Dispersion of visible rotatory power for aqueous glucose solutions, *4th International Conferences on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES 2016)*, Braşov, România, 29 June – 1 July 2016;
57. 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;
58. 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;
59. 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;
60. D. G. Dimitriu, A. E. Tudose, D. O. Dorohoi – Linear birefringence of polymer foils determined by optical means, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
61. A. E. Tudose, D. G. Dimitriu, D. O. Dorohoi – Optical activity of glucose solutions, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
62. A. C. Benchea, D. Babusca, D. G. Dimitriu, D. O. Dorohoi – Quantum-mecanical and spectral studies of Rhodamine B in ternary solutions, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
63. D. Babusca, A. C. Benchea, D. G. Dimitriu, D. O. Dorohoi – Solvatochromic studies of two Sudan derivatives in binary and ternary solutions, *10th International Conference Processes in Isotopes and Molecules*, Cluj-Napoca, România, 23-25 September 2015;
64. A. I. Barzic, D. G. Dimitriu, D. O. Dorohoi – Optical activity of polymer solutions studied by visible electron spectroscopy, *XXII Galyna Puchkovska International School-Seminar Spectroscopy of Molecules and Crystals*, Chynadiyovo, Ukraine, 27 September – 4 October 2015;
65. D. O. Dorohoi, D. G. Dimitriu, I. Dumitrascu, C. B. Zelinschi, I. Breaban – Interferential method to determine the optical rotatory dispersion of crystalline layers, *4th International Colloquium "Physics of Materials"*, Bucureşti, România, 13-14 November 2014 (conferinţă orală);
66. I. A. Cosutchi, D. G. Dimitriu, C. B. Zelinschi, I. Breaban, D. O. Dorohoi – Optical activity of transparent polymer foils characterized by spectral means, *32nd European Congress on Molecular Spectroscopy*, Düsseldorf, Germany, 24-29 August 2014 (conferinţă orală);
67. 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);
68. 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;
69. 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;
70. 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;
71. G. V. Focsanianu, 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;
72. 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;
73. 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;
74. 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;
75. 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);
76. I. A. Cosutchi, D. G. Dimitriu, D. O. Dorohoi – New method for determining optical rotatory dispersion of polymer solutions, *21st International School-Seminar of Galyna Puchkovska "Spectroscopy of Molecules and Crystals"*, Beregove, Ukraine, 22-29 September 2013 (conferinţă orală);
77. D. O. Dorohoi, D. G. Dimitriu – A new method for determining the dispersion of optical activity, *12th International Conference on Molecular Spectroscopy – From Molecules to Nano- and Biomaterials*, Krakow – Bialka Tatrzańska, Poland, 8-12 September 2013 (conferinţă orală);
78. D. G. Dimitriu, M. Agop – Competition of scenarios of transition to chaos in plasma – Experiment and theoretical modelling, *6th Chaotic Modeling and Simulation International Conference*, Istanbul, Turkey, 11-14 June 2013 (conferinţă orală);

79. 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);
80. D. G. Dimitriu – Scenarios of transition to chaos competition in low-temperature plasma, *Physics Conference TIM-12*, Timișoara, România, 27-30 November 2012;
81. 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;
82. F. Unga, M. M. Cazacu, A. Timofte, D. Bostan, D. Dimitriu, S. Gurlui, P. Goloub – Classification of tropospheric aerosols types during summer, over Iasi area, Romania. LIDAR, AERONET and meteorological consideration, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012 (conferință orală);
83. F. Unga, N. Ajtai, M. N. Danila, D. Dimitriu, A. Timofte, M. M. Cazacu, S. Gurlui – Grímsvötn volcanic ash intrusion: LIDAR and AERONET photometer observations at Iasi and Cluj-Napoca, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
84. O. Niculescu, M. M. Cazacu, M. N. Danila, D. G. Dimitriu, S. Gurlui, M. Agop – Magnetosphere double layers and aurora borealis. Acceleration mechanisms and instabilities, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
85. M. N. Danila, F. Unga, M. M. Cazacu, A. Timofte, D. G. Dimitriu, S. Gurlui – Eyjafjallajökull vs. Grímsvötn, *9th International Conference on Environmental Legislation, Safety Engineering and Disaster Management*, Cluj-Napoca, România, 25-27 October 2012;
86. M. Aflori, M. Drobota, D. G. Dimitriu, I. Titorencu, V. Harabagiu – Collagen immobilization on polyethylene terephthalate surface after helium plasma treatment, *9th International Conference on Physics of Advanced Materials*, Iași, România 20-23 September 2012 (conferință orală);
87. D. O. Dorohoi, D. G. Dimitriu, M. Dimitriu, V. Closca – Specific interactions in N-ylids solutions, studied by NMR and electron spectroscopy, *31st European Congress on Molecular Spectroscopy*, Cluj-Napoca, România, 26-31 August 2012 (conferință orală);
88. D. G. Dimitriu, E. Poll, O. Niculescu, P. Nica, M. Agop – Scale relativity theory applied to the modelling of the negative differential resistance in discharge plasma, *8th General Conference of Balkan Physical Union*, Constanța, România, 5-7 July 2012;
89. S. Gurlui, D. Dimitriu, M. Strat – Optical and spectral properties of polyurethane coumarine. Self-organization phenomena induces nanoaggregate formations, *8th General Conference of Balkan Physical Union*, Constanța, România, 5-7 July 2012;
90. I. S. Stratulat, A. Timofte, M. M. Cazacu, D. G. Dimitriu, S. O. Gurlui – Meteo-climatic factors influence and balneary-climatic potential studies – Cacica salt-mines, Suceava county, *38th ISMH World Congress "Medical Hydrology and Balneology: Environmental Aspects"*, Lanjaron, Granada, Spain, 20-23 June 2012;
91. S. Gurlui, D. G. Dimitriu, M. Agop, M. Osiac, O. Pompilian, C. Focsa – Patterns in laser ablation plasma plume through fractal space-time theory, *5th Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
92. M. Agop, D. G. Dimitriu, S. Gurlui – Negative differential resistance of the discharge plasma through fractal space-time theory, *5th Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
93. D. G. Dimitriu, S. Gurlui, M. Agop – Modeling of a scenario of transition to chaos in plasma through sub-harmonic bifurcations, *5th Chaotic Modeling and Simulation International Conference (CHAOS 2012)*, Athens, Greece, 12-15 June 2012;
94. M. Agop, P. E. Nica, O. Niculescu, D. G. Dimitriu – Multiple double layers evolution to chaos in plasma through a cascade of sub-harmonic bifurcations, *39th International Conference on Plasma Science (ICOPS)*, Edinburgh, UK, 8-12 July 2012;
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