

Lucrări științifice publicate în reviste de specialitate

1. M.Sanduloviciu, G. POPA - Studiul oscilațiilor generate de o descărcare în curent continuu, cuplată cu un oscilator de frecvență variabilă, *An. St.Univ. Iasi*, **X.F1** (1964) 71-76
2. M.Sanduloviciu, G. POPA, D.Vrajitoru - Elektrische Schwingungen einer Entladung bei sehr niedrigem Gasdruck, *An.St.Univ. Iasi*, **XIII, S1b** (1967) 77-82
3. G. POPA, M.Sanduloviciu - Schwingungseigenschaften einer Resonanz Hochfrequenzentladung, *An.St.Univ. Iasi*, **XIV, S1b** (1968) 135
4. Cr.Simionescu, N.Asandei, F.Denes, M.Sanduloviciu, G. POPA - Etudes sur la polimerisation dans la plasma, *European Polymer Journal*, **5** (1969) 427-433, citări **2**
5. M.Sanduloviciu, G. POPA, L.Biborosch - Zur Entstehung von nichtstationären Glimmentladungen bei vorhandensein einer Hilfselectrode, *An.St.Univ. Iasi*, **XV**, (1969) 65 - 70
6. M.Sanduloviciu, G. POPA - Einrichtung zur Erzeugung von Ionenraumladungen relativ hoher Dichte, *An.St.Univ. Iasi*, **XV, F1** (1969) 183 - 185
7. M.Sanduloviciu, G. POPA, L.Biborosch - Uber die Rolle einer Wand beim Auftreten von periodischen Vorgange in einer Glimmentladung, *Rev. Roum. Phys.*, **14** (1969) 987 - 994
8. M.Sanduloviciu, G. POPA, L.Biborosch - Uber electrischen Schwingungen einer Niederdruckgasentladung mit Gasenode, *J.Phys. D (Brit.J.Appl.Phys.)*, **3** (1970) 192-195
9. M.Sanduloviciu, G. POPA, L.Biborosch - Die Impedanzmesung einer Gleichstromgasentladung, *Rev. Roum. Phys.*, **15** (1970) 615 - 620
10. M.Sanduloviciu, G. POPA, L.Biborosch - Schwingungserscheinungen in Gleichstromgasentladungen mit Gasenode, *An.St.Univ. Iasi*, **XVI**, (1970) 41 - 46
11. M.Sanduloviciu, G. POPA, M.Toma, L.Biborosch - Der Einfluss der Sekundarelektronenemmission auf die Sondancharakteristik in negativen Glimmentlicht, *An.St.Univ. Iasi*, **XVI**, (1970) 77 - 79
12. M.Sanduloviciu, G. POPA, L.Biborosch - Uber die Impedanz einer Gleichstromgasentladung, *An.St.Univ. Iasi*, **XVI**, (1970) 127 - 130
13. M.Sanduloviciu, O.Petrus, G. POPA, L.Biborosch - Uber die laufenden und stehenden Schichten in einer Glimmentladung, *An.St.Univ. Iasi*, **XVI**, (1970) 19 - 21
14. M.Sanduloviciu, G. POPA, L.Biborosch, O.Petrus - On the impedance of d.c. Gas Discharge, *J.Phys. Appl.Phys.*, **D.4** (1971) 1965 - 1969
15. M.Sanduloviciu, G. POPA - Uber die Elektrischen Schwingungen in einer Gleichstromgasentladung, *J.Phys.*, **32** (1971) 157 - 159
16. L.Boghian, G. POPA, M.Sanduloviciu - Uber die Rolle verschieden Entladungsteile beim Erscheinen elektrischer Schwingungen in einer Gleichstromgasentladung, *An.St.Univ. Iasi*, **XVII**, (1971) 67 - 71
17. G. POPA, L.Biborosch, M.Sanduloviciu - Zur Frequenzcharacteristik der Impedanz einer Gleichstromgasentladung, *An.St.Univ. Iasi*, **XVII**, (1971) 73 - 77
18. M.Toma, G. POPA, M.Sanduloviciu - Uber den Einfluss eines transversalen Magnetfeldes auf einer Gleichstromgasentladung, *An.St.Univ. Iasi*, **XVII** (1971) 195-200
19. G. POPA, L.Biborosch, M.Sanduloviciu - Uber das Verhalten von Langmuir sonden in negativen Glimmlight einer Gleichstromgasentladung, *Ann.Phys.*, **26** (1971) 94-96
20. L.Biborosch, G. POPA, M.Sanduloviciu - Uber die selbsterregten laufenden Schichten in einer Glimmentladung, *Rev. Roum. Phys.* **16**, 9 (1971) 1059 - 1062
21. G. POPA, C.Ruset, M.Sanduloviciu - Electrical Probe Method in negative Glow Diagnostics, *An.St.Univ. Iasi*, **XVII** (1972) 197 - 200

22. V.Krejci, G. POPA - Local Transient Phenomena Induced in an Inert Gas by a short Pulse, *Czech.J.Phys.*, **B23** (1973) 161 - 167
23. G. POPA - Plane Probe in Negative Glow of a Glow Discharge, *An.St.Univ.Iasi* **XIX** (1973) 83 - 88
24. L.Biborosch, G. POPA, M.Sanduloviciu - Beeinflussung von Schwing und Wellenerscheinungen in Helium niederdrucksaeule durch die aussere kapazität des wechselstromkreises, *An. St.Univ.Iasi* **XIX** (1973) 175 - 179
25. M.Toma, G. POPA, M.Sanduloviciu - Influenta câmpului magnetic transversal asupra unei descărcări luminescente, *An.St.Univ.Iasi* **XIX** (1973) 189 - 194
26. G. POPA - Probe characteristics with Negative Slope, *An.St.Univ.Iasi* **XIX** (1973) 195 - 197
27. G. POPA - Contributii la metodele de diagnosticare a plasmei, *Teză de doctorat*, Universitatea Alexandru Ioan Cuza din Iasi, 1974
28. G.Bourceanu, V.Ababei, G. POPA, M.Sanduloviciu - Transformation on the Toluen-water mixture in the H.F discharge plasma. I. *Rev.Roum.Chem.*, **19** (1974) 207 - 211
29. G.Bourceanu, V.Ababei, G. POPA, M.Sanduloviciu - Transformation on the Toluen-water mixture in the H.F discharge plasma. II. *Rev.Roum.Chem.*, **20** (1975) 627 - 631,
30. G. POPA, N.Sato, E.Mark, R.Schrittwieser, E.Mravlag - Ion Space Charge Instability Induced by a Grid in a Q-machine Plasma, *Phys.Lett.*, **53A** (1975) 427 - 428,
31. G. POPA, N.Sato, E.Mark, R.Schrittwieser, E.Mravlag - Influence of a Negatively Biased Grid on the Plasma in single Ended Q-machine, *J.Phys.D.:Appl.Phys.*, **9** (1976) 397 - 405,
32. N.Sato, G. POPA, E.Mark, E.Mravlag, R.Schrittwieser, Instability as a source for traveling ion waves, *Phys. of Fluids*, **19** (1976) 70 - 73,
33. N.Sato, G. POPA, E.Mark, R.Schrittwieser, E.Mravlag - Test-Wave Propagation in the Presence of a Large Amplitude Electron Plasma Waves, *Phys.Rev.Lett.*, **37** (1976) 1684 - 1687,
34. N.Sato, E.Mark, G. POPA - Non-linear Mixing of Dispersive Waves, *Plasma Phys.*, **18** (1976) 897 - 904,
35. G.Bourceanu, G. POPA, M.Sanduloviciu, V.Ababei - Phenol obtention from benzene in Oxygen Plasma Generated by H.F. Discharge.I. *Rev.Roum.Chem.*, **21** (1976) 1405 - 1415,
36. G.Bourceanu, V.Ababei, G. POPA, M.Sanduloviciu - Phenol obtention from benzene in Oxygen Plasma Generated by H.F. Discharge. II. The Phenol Formation Mechanism, *Rev.Roum.Chem.*, **22** (1977) 459 - 465,
37. G.Bourceanu, V.Ababei, G. POPA, M.Sanduloviciu - Phenol obtention from benzene in Oxygen Plasma Generated by H.F. Discharge. III. CINETICS of the Process in Pulse and Steady-State Regime, *Rev.Roum.Chem.*, **22** (1977) 1390 - 1394
38. G. POPA - Dispersion curve and spatial amplification rate for ionization waves in a positive column plasma, *Rev.Roum.Phys.* **19** (1979) 467 - 470,
39. G. POPA The influence of the electron-neutral collisions on the ionization waves in helium plasma, *J.Physique*, **40** (1979) 189-190,
40. G. POPA, M.Sanduloviciu, P.Croitoru, C.Moldovan, Electron beam generation by a hollow cathode discharge, *J.Physique*, **40** (1979) 187-188,
41. G. POPA, R.Schrittwieser - Ion Acoustic Instability driven by an Electron Flux towards the Hot Plate in a single Ended Q-machine, *Phys.Lett.*, **75A** (1980) 285 - 287,
42. G. POPA, R. Schrittwieser, E. Mark - Stabilization of the Ion Acoustic Instability by an Ion Beam in a Single Ended, Q-machine, *Phys.Lett.*, **75A** (1980) 288 - 292,
43. O. Petrus, G. POPA, S. Kuhn - Experiment planing, mathematical modelling, nonlinear optimization of the ion-nitriding process in a glow discharge plasmas, *Plasma Chem. and Plasma Proces.*, **2** (1982) 167 - 183

44. G. POPA, M. Sanduloviciu, S. Kuhn, M. Oertl, R. Schrittwieser - About localization and suppression of the so-called ion-acoustic instability in a low-density single-ended Q-machine, *Phys.Lett.*, **87A** (1982) 175 – 178,
45. G. POPA, M. Oertl - Reflexion of an ion-acoustic soliton by a bipolar potential wall structure *Phys.Lett.*, **98A** (1983) 110 – 113,
46. M. Sanduloviciu, G. POPA, M. Oertl - A new possibility of suppression of ion-acoustic standing waves excited in a single ended Q-machine, *Plasma Phys. Contr. Fus.*, **26** (1984) 472 - 476
47. G. POPA, R. Schrittwieser, J.J. Rasmussen, P. Krumm - The electrostatic Ion-Cyclotron instability - a two dimensional potential relaxation instability, *Plasma Phys. Contr. Fusion.*, **27** (1985) 1063 – 1067,
48. V. Sahleanu, G. POPA, M. Sanduloviciu - Time constants of the relaxation anode oscillations versus discharge parameters. *An.St.Univ. Iasi*, **31** (1985) 12 - 17
49. G. POPA, M. Sanduloviciu, E. Lozneanu, R. Schrittwieser - Electrostatic ion-cyclotron instability and potential relaxation instability excited by a ring-button electrode, *Plasma Phys. Contr. Fus.* **29** (1987) 271 – 277,
50. L. Biborosch, G. POPA, M. Sanduloviciu - The influence of a local transverse magnetic field on the column head oscillations of a dc-glow discharge in helium, *An. St. Univ. Iasi*, **34** (1988) 131-136
51. D. Ruscanu, G. POPA, V. Anita, Ion acoustic wave-wave interactions and standing wave, *An. St. Univ. Iasi*, **34** (1988) 211-215
52. V. Sahlean, G. POPA, M. Sanduloviciu, Dependence of anode double layer dynamics on local discharge parameters, *An. St. Univ. Iasi*, **34** (1988) 149-153
53. M.Sanduloviciu, G.POPA, The double layer as an element of storing and releasing of energy in circuits containing gaseous conductors, *An. St. Univ. Iasi*, **34** (1988) 83 – 103.
54. M. Oertl, G. POPA - Single and Multiple Reflection of ion acoustic waves and solitons from a bipolar wall, *Plasma Phys. Contr. Fus.*, **30** (1988) 529 – 536,
55. G. POPA, N. Dumitrascu - So called echo phenomenon as an internal feedback for ionization instabilities, *An.St.Univ. Iasi*, **XXXIV**(1988) 77-83
56. N.Dumitrascu, G.POPA, On the consequences of the perturbation of double layer formed in a positive plasma column, *An.St.Univ. Iasi*, **XXXIV**(1988) 137 - 141
57. G. POPA, N. Dumitrascu, M. Sanduloviciu - Asupra mecanismului de perturbare a unei plame mărginite, *Bul.Inst.Pol.Iasi* (1988)
58. G. POPA, R. Schrittwieser, E. Mravlag - On the mechanism of the electrostatic ion-cyclotron instability, *Plasma Phys.Contr.Fus.*, **31**(1989) 1863 – 1877,
59. G. POPA, K. Ohe, N. Dumitrascu - On the detection of the ionization waves by Langmuir and capacitive probes, *J.Phys. D: Appl.Phys.*, **22** (1989) 1327 – 1332,
60. G. POPA and D. Ruscanu - On the flux of the particules in a D.P. machine plasma, *An.St.Univ.Iasi*, **XXXV** (1989) 41-47
61. M. Gheorghiu, G. POPA, O.C. Mungiu - Improving blood and tissue compatibility of poly(ethylene terephthalate) by ion beam treatment, *J.Bioact.Compat.Polym.*, **6**, 2 (1991) 164 – 177
62. M.Gheorghiu, G. POPA, M.Pascu and C.Vasile - Chemical and physical surface modifications of polymers by ion beam treatments, *Electrochemical J. Soc.* **93** (1993) 538 - 545
63. G. POPA and R. Schrittwieser - Resonant coupling between ion-bounce in a potential well and the potential relaxation instability, *Phys. Plasmas*, **1** (1994) 32 – 42
64. L. Sîrghi and G. POPA - Calibration of Langmuir probes and capacitive probe for their detection of periodical phenomena in a positive plasma column, *Romanian J. of Phys.*, **39**, (1994) 549 - 555

65. G. POPA and M. Gheorghiu - Plasma treatments of polymers, *Romanian Reports in Physics*, **46**, (1994) 307-333
66. M. Gheorghiu, Ioana Rusu, G. POPA - Surface modification of the poly(ethylene terephthalate) sample by reactive ion beam bombardment, *Vacuum* **47** (1996) 1093-1102,
67. V. Anitã, D. Luca, V. Hodoroabã, G. POPA - TiN thin layers deposition using the magnetron discharge, *Vacuum* **47** (1996) 1103-1104
68. G. POPA and R. Schrittwieser - The effect of the collector sheath on the potential relaxation instability, *Plasma Phys. Control. Fusion* **38** (1996) 2155-2162
69. M. Gheorghiu, J. Amouroux, G. Plãcintã and G. POPA - Surface cross - linking and functionalization of poly(ethylene terephthalate) in a He discharge, *An. Univ. "Al.I. Cuza" XL-XLII* (1994-1996) 125 - 130
70. M. Gheorghiu, F. Arefi, J. Amouroux, G. Plãcintã, G. POPA, M. Tatouliau – Surface cross linking and functionalization of poly(ethylene terephthalate) in a helium discharge, *Plasma Sources Sci. and Techn.*, **6** (1997) 8-19
71. G. Placinta, F. Arefi-Khonsari, M. Gheorghiu, J. Amouroux, G. POPA - Surface properties and the stability of poly(ethylene terephthalate) (PET) films treated in plasmas of He-O₂ mixture, *J. Appl. Polym Science.* **66** (1997) 1367 – 1375
72. G. Placinta, G. POPA, F. Arefi-Khonsari and J. Amouroux - Properties of the asymmetrical low frequency (70 kHz) discharge in helium - oxygen mixtures, *Rom. Reports in Phys.* **49** (1997) 507-521
73. N. Dumitrascu, G. Placinta, S. Surdu, D. Verdes and G. POPA - Some properties of nylon-6 treated by corona discharge in helium, *Rom. Reports in Phys.* **48** nr. 9-10 (1997)
74. C. Gavrilescu, G. POPA, T. Minea - Experimental results and M.C simulation of the lateral spreading of a DC discharge in coaxial structure, *Rom. Reports in Physics*, **49** (1997) 213 - 222
75. M. Gheorghiu, I. Rusu, G. POPA - Investigations on the molecular and atomic ion concentration and distribution functions in a beam-plasma system, *An. Univ. "Al. I. Cuza" XLIII* (1997)
76. Cornelia Vasile, A. Warshawsky, A. Stoleriu, Mihaela Pascu, Elena Costea and G. POPA – Polysulfone-based blends. II. Thermal and surface properties, *Academia Romana, Memoriile sectiilor stiintifice*, seria IV, Tomul XX, (1997) 71 - 88
77. Nicoleta Dumitrascu, G. Placinta, Stefania Surdu and G. POPA – Some Properties of nylon-6 treated by corona discharge in helium, *Rom. Reports in Physics*, **49** nov.3-4, (1997) 291-295
78. D. Ruscanu, G. POPA, V. Anita and V. Hodoroaba - Probe methode in the approximation of twop Maxwellian group of electrons, *Rom. Reports in Phys.* **49** (1997) 491-501
79. L. Sirghi, K. Ohe and G. POPA - Interaction between ionisation wave and the potential structure formed at a constriction of a dc He positive column, *J. Phys.D: Appl. Phys.* **30** (1997) 2431-2440
80. N. Dumitrascu, V. Stanciu, G. POPA - Some biological effects induced by corona discharge treatment of the polymeric surfaces, *Balkan Physics Letters*, **5** (1997) 1909 - 1913
81. D. Luca, A.W. Denier van der Gon. R.F.G.C. Schrauwen, M.W.G. Ponjee, V. Anita, G. POPA, H.H. Brongersma - Surface characterisation of magnetron sputtered TiN thin film, *Balkan Physics Letters*, **5** (1997) p. 2298-2302
82. M. Agop, D. Ruscanu, G. POPA, C. Stan, V. Melnig and V. Popescu - Analytical nonlinear model for iono-acoustic propagation mode. Iono-acoustic and solitones waves excitation in a DP plasma device, *Rom. Reports in Phys.*, **48**, nr. 9-10 (1997)

83. M. Gheorghiu, M.Pascu, G. POPA, C. Vasile, V. Mazur - Poly(Ethylene Terephthalate) Films with Different Content of Acid-Base Functionalities. I Surface modifications, *Intern. J. Polymeric Mater.*, **40** (1997), 229-256
84. M. Gheorghiu, M.Pascu, C. Vasile, G. POPA - Poly(Ethylene Terephthalate) Films with Different Content of Acid-Base Functionalities. II. Gas Phase Analysis and Proposed Mechanisms, *Intern. J. Polymeric Mater.*, **40** (1997), 257-275
85. L. Sirghi, K. Ohe and G. POPA - The role of the cathode region of a direct current helium discharge for origination of ionization wave. *J. Phys.D: Appl. Phys.* **31** (1998) 551-560
86. N. Dumitrascu, C. Agheorghiesei and G. POPA - Interfacial aspects of biomedical polymers after plasma treatment, *Entropie*, **214/215** (1998) 9-13
87. F. Arefi-Khonsari, G. Placinta, J. Amouroux and G. POPA - Study of plasmas in He-O₂ mixtures and their role on the stability of the surface properties of polymers, *Eur. Phys. J. AP.4* (1998) 193-201
88. E. Stamate, G. POPA and K. Ohe - Test function for the determination of plasma parameters by electric probes, *Rev. Sci. Instrum.* **70** (1999) 58 - 62
89. E. Stamate, K. Inagaki, K. Ohe, G. POPA - On energetic electrons in a multipolar magnetic-confined plasma, *J. Phys.D: Appl. Phys.* **32** (1999) 671 - 674
90. L. Sirghi, Kazuyuki Ohe and G. POPA - Electron kinetics of Ionization Waves in Helium Positive Columns, *Jpn. J. Appl. Phys.*, **38** (1999) 5251-5255
91. L. Sirghi, K. Fujii, K. Ohe and G. POPA - Spatiotemporal structure of ionization waves in a helium positive column, *Balkan Physics Letters*, **7** (2), (1999) 141-145
92. N. Dumitrascu, V. Vasilca, M. Tepelus, L. Padureanu, M. Voicu, G. POPA - Toxicity and cells proliferation on plastified PVC surfaces treated by corona discharge, *Physica Medica*, **XV**, n.3, (1999) 187 - 191
93. G. POPA - Phenomena related to excited mechanism of the ion-acoustic waves and solitons, *An. St. Univ. Iasi*, **XLV** (1999) 57-64
94. L. Sirghi, K. Ohe, C. Costin, G. POPA - Electron Kinetics in the Hot Cathode Negative Glow of a Helium Discharge, *Jpn. J. Appl. Phys.* **39** (2000) 1338-1342
95. I. Rusu, M. Morariu, G. POPA - Analysis of anode double layer self-oscillations, *An. Univ. "Al. I. Cuza"*, **XLVI**, (2000).61 - 66
96. C. Costin. L. Sirghi, G. POPA - Monte Carlo flux Method used for a Radial Model of Plasma Postive Column, *An.st. Univ. "Al. I. Cuza"*, **XLVI**, (2000).119 - 223
97. M. Agop, V. Melnig, D. Ruscanu, G. POPA - Compresiove and rarefactive solitons as a degeneration of cnoidal modes oscillations, *An.st Univ. "Al. I. Cuza"*, **XLVI**, (2000) 143 - 149
98. Mariana Gheorghiu, Dana Dorohoi and G. POPA - Reliability of Atomic Mixing Model in Gase of Poly(ethylene terephthalate) films treated with Low Energy Oxygen Ions, *An. St. Univ. "Al. I. Cuza"*, **XLVI**, (2000).189 - 194
99. Mihaela Pascu, Mariana Gheorghiu, Cornelia Vasile, G. POPA - Changes in polypropylene/expoxidized lignin mixtures by plasma treatment, *An. St. Univ. "Al. I. Cuza"*, **XLVI**, (2000)..185 - 188
100. V. Anita, D. Luca and G. POPA - TiN and *Tial)N thin films exposition in a reactive dc magnetron discharge, *An. St. Univ. "Al. I. Cuza"*, **XLVI**, (2000).195 - 200
101. Gabriela Placinta, F. Arefi-Khonsari, J. Amouroux, G. POPA - Study on the stability of surface properties of poly(ethylene terephthalate) films treated in plasmas of He-O₂ mixtures, *An. St. Univ. "Al. I. Cuza"*, **XLVI**, (2000)..201 - 207
102. D.Ruscanu, V.Anita and G. POPA,- Plasma Parameters in a Multipolar Plasma System, *Eur. Phys.J. D*, **10** (2000) 449 - 456
103. G. POPA and V.Anita - Transitory Phenomena in Reactive Magnetron Discharge, *J. Techn. Phys.*, **41** (2000) 421 - 438

104. Mariana Gheorghiu, Dana Dorohoi and G. POPA, Atomic mixing and erosion model applied to polymers, *Nucl. Instrum. Meth. in Phys. Resch.*, **B 171** (2000) 431-434
105. N. Dumitrascu, T.Balau, M.Tasca and G. POPA, Corona discharge treatment of the plastified PVC films obtained by chemical grafting, *Material Chemistry and Phys.* **65** (2000).339-344
106. L. Sirghi, G. POPA – Langmuir probe data processing for electron energy distribution measurements in negative glow plasma, *Acta Physica Universitatis Comenianae*, **XLI**, No.1, (2000) 81-86
107. N. Dumitrascu, G. Borcia, G. POPA, Corona discharge treatmentys of plastified PVC samples used in biological environment, *J. Appl. Polym. Sci.* **81** (2001) 2419 – 2425
108. D. Luca, A.W. Denier van der Gon, V. Anita, M.W.G. Ponjee, H.H. Brongersma, G. POPA – Surface nitridation processes and non-linear behavior of the reactive magnetron discharge with titanium target, *Vacuum*, **61**, (2001) 163 – 167
109. C.Aghiorghiesei, G. POPA, R. Schrittwieser, C.Avram, Ion space charge structures; formation and properties: experiment and similations, *J.Plasma Fusion Reserch*, **4** (2001) 555 – 560
110. L. Biborosch, U. Ernst, G. POPA, K. Frank, On the cathode sheath in microhollow cathode discharge, *J.Plasma and Fusion Research*, **4**, (2001) 297 - 300
111. L. Sirghi, Y. Hatanaka, G. POPA, Control of plasma parameters and wall sheath voltage in radio frequency magnetron discharge by grid bias. *J. Appl. Phys.***91**, (2002) 4026 – 4032, citări **2**
112. N. Dumitrascu, G.Borcea, N.Apetroaei and G. POPA, Roughness modification of surfaces treated by a pulsed dielectric barrier discharge, *Plasma Sources Sci. Technol.*, **11**, (2002) 127 – 132
113. C. Costin, G. Gousset, G. POPA, Modélisation d'une décharge magnétron dc dans l'Argon par un modèle fluide, *Le Vide*, **304** (2002) 308 - 315
114. I. Mihaila, G. POPA, V.Anita, C.Costin, L.Sirghi and I.Turcu - La fonction de distribution des electrons dans une decharge magnetron en argon avec une cible en Aluminium., *Le Vide*, **304**, (2002) 316 - 322
115. N. Dumitrascu, T. Luchian, N. Apetroei, V. Bancia, C. Pavel, G. POPA – Functionaalization of PMMA surfacess by dielectric barrier discharge treatments. *Entropie*. **239**, (2002) 1968 - 1973
116. I. A. Rusu, G. POPA, J.L. Sullivan, Electron plasma parameters and ion energy measurement at the grounded electrode in an rf discharge, *J. Phys.D: Appl. Phys.*, **35** (2002) 2808 – 2814
117. T. Luchian, B. Bancia, C. Pavel, G. POPA – Biomembrane excitability studied within a wide-frequency of an interacting exogenous electric, *Electromagnetic Biology and Medicine*, **21** (2002) 287-302
118. C.Aghiorghiesei, C.Chiorăscu, G. POPA, C.Ioniță and R.Schrittwieser, Ion beam generation in a DP system, *Rom. Rep. in Phys.*, **54** (2002) 229- 233
119. I.A.Rusu, G.POPA and J.L.Sullivan, Ar-O₂ RF plasma diagnostics by mass spectrometry, , *Rom. Rep. in Phys.*, **54** (2002) 295-300
120. I.Mihăilă, V.Anița, C.Costin, L.Sîrghi, G. POPA and I.Turcu, Electron distribution function in magnetron discharge, *Rom. Rep. in Phys.*, **54**, (2002) 301-308
121. S.Teodoru, C.Aghiorghiesei and G. POPA, Probe methods used in diagnostics of plasma with two groups of negative charged particles, *Rom. Rep. in Phys.*, **54**, (2002) 309-315
122. I.Topală, N.Apetroaei, N.Dumitrașcu and G. POPA, Interfacial aspects regarding PA-6 films in biological liquids, *Rom. Rep. in Phys* **54** (2002) 419-425

123. M.Gheorghiu, I.A.Rusu, C.Aghiorghiesei and G. POPA, On the propagation of a low energy oxygen ion beam, *Rom. Rep. in Phys* **54** (2002) 411-418
124. D.Luca, M.W.G.Ponjee, W:P.A. Jansen, V.Anita, G. POPA and H.H.Brongersma, Oxidation of TiN surface under a low-pressure O₂ atmosphere, *Rom. Rep. in Phys* **54**, (2002) 427-431
125. T. Gyergyek, M. Cercek, R. Schrittwieser, C. Ionita, G. POPA, V. Pohoata – Experimentaal Study of the Creation of a Fire-rod II. Emissive Probe Measurements, *Contrib. Plasma Phys.*, **43** (2003) 11-24
126. V.Pohoata, G.POPA, R.Schrittwieser, C.Ionita, M.Cercek, Properties and control of the anode double layer oscillations and related phenomena, *Phys. Rev.E* **68**, (2003) 016405
127. N. Dumitrascu, G.Borcia, N.Apetroaei, G. POPA, Immobilization of Biologically Active Species on PA-6 Foils Treated by a Dielectric Barrier Discharge, *J.Appl.Polymer Science*, **87** (2003) 1985-1990
128. S.Teodoru, D.Tskhakaya jr., S.Kuhn, D.D. Tskhakaya sr. and G. POPA, Analytic and PIC-simulation results for ionic sheath, *An. St. Univ. "Al. I. Cuza"*, **XLIX**, (2003) 43-54
129. I.Teliban, P.Balan, D.Luca, C.Ionita, R.Schrittwieser and G. POPA, Characterisation of a cavity-hollow cathode plasma assisted sputtering source, *An. Șt. ale Univ. "Al.I.Cuza"*, **XLIX**, (2003) 119-124
130. A.Bojovschi, I.A.Rusu, M.cak, S.O.Saied, J.L.Sullivan and G. POPA, A study of RF plasma treatment of polymer surface and factors affecting the adhesion of silicon thin films for large scale electronic, *An. Șt. ale Univ. "Al.I.Cuza"* **XLIX**, (2003) 125-130
131. Alina Chiper, V.Anita, C.Agheorghiesei, V.Pohoata, M.Anita, G. POPA – Spectroscopic Diagnostics for a DBD plasma in He/Air and He/N₂ gas mixtures- *Plasma Process.Polim.* **1** (2004), 57-62
132. M.T.Cotisel, Gh.Tomoaia, A.Mocanu, V.D.Pop, N.Apetroaei, G. POPA, Atomic Force Microscopy studies of Langmuir-Blodgett films. 1.Structures of colapsed stearic acid monolayers, *Studia Universitatis Babes-Bolyai, Chemia*, **XLIX**, 2, (2004) 167-181
133. M.Tomoaia-Cotisel, Gh.Tomoaia, D.V.Pop, A.Mocanu, O.Cozar, N.Apetroaei, G. POPA, Atomic force microscopy studies of Langmuir-Blodgett films. 2. The effect of some drugs on dipalmitoyl phosphatidyl choline, *Studia Universitatis Babes-Bolyai, Physica*, **49(3)** (2004) 141-152
134. M.Tomoaia-Cotisel, Gh.Tomoaia, A.Mocanu, D.V.Pop, N.Apetroaei, G. POPA, Atomic Force Microscopy Studies of Langmuir-Blodgett Films. 1.Structures of collapsed stearic acid monomers, *Studia Universitatis Babes-Bolyai, Chem.*, **49(3)** (2004) 167-181
135. M.Tomoaia-Cotisel, Gh.Tomoaia, D.V.Pop, A.Mocanu, N.Apetroaei, G.POPA, Atomic Force Microscopy Studies of Langmuir-Blodgett Films 2.Phase Behavoir of Stearic Acid Monolayers on Acid Suphases, *Rev Rom Chim*, **50 May** (2005) 381-390
136. M.Tomoaia-Cotisel, Gh.Tomoaia, D.V.Pop, A.Mocanu, O.Cozar, N.Apetroaei, G.POPA, Atomic Force Microscopy Studies of Langmuir-Blodgett Films 3.Phase behavior of dipalmitoyl phosphatidyl choline monolayers, *Rev Rom Chim*, **50 May** (2005) 471-478
137. A. Chiper, N. Apetroaei and G. POPA, Surface modification induced on the PET/TiO₂ sample by DBD, *An. Șt. ale Univ. "Al.I.Cuza"*, **L** (2004) 127-134
138. M. Gheorghiu, D.Dorohoi and G. POPA, Poly(ethylene terephthalate) films in low energy oxygen ion beam, *An. Șt. ale Univ. "Al.I.Cuza"*, **L** (2004) 159-164
139. I.Topală, R.Nistor, N.Dumitrașcu and G. POPA, Hemocompatibility of PA-6 films treated by a dielectric barrier discharge, *An. Șt. ale Univ. "Al.I.Cuza"*, **L** (2004) 197-202

140. M.Gheorghiu, M.Aflori, D.O.Dorohoi, G. POPA, Polyethyleneterephthalate (PET) films interaction with low energy oxygen ions, *JOAM*, **7** (2005) 841-844, citări 7
141. C. Costin, L. Marques, G. POPA and G. Gousset, Two-dimensional fluid approach to the dc magnetron discharge, *Plasma Sources Sci. Technol.* **14** (2005) 168-176
142. S. Teodoru, D. Tskhakaya jr., S. Kuhn, D.D. Tskhakaya sr., R. Schrittwieser, C. Ionita and G. POPA, "Kinetic (PIC) simulation for a plane probe in a collisional plasma", *J. Nucl. Mat*, **337-339**, 1 March (2005) 1111 – 1115
143. S. Gosav, M. Praisler, D.O.Dorohoi and G. POPA, Automated identification of novel amphetamines using a pure neural network and neural networks coupled with principal component analysis, *J.Mol. Structure*, **744-747** (2005) 821-825
144. G.I.Rusu, P.Prepeliță, N.Apetroaei and G. POPA, On the electronic transport and optical properties of ZnTe thin films, *J.Optoelectron Adv.Mater.* **7** (2005) 829-835
145. M.Gheorghiu, M.Aflori, D.Dorohoi and G. POPA, Polyethyleneterephthalate (PET) films interaction with low energy oxygen ions, *J.Mol. Structure*, **744-747** (2005) 841-844
146. N. Dumitrascu, I.Topala, G. POPA - DBD technique in improving the wettability and adhesion properties of polymer surface "- *IEEE Transactions on Plasma Sci.*, **33**, (2005) 1710 – 1714
147. P. C. Balan, R. Apetrei, D. Luca, C. Ioniță, R. Schrittwieser, G. POPA – "Electrical and optical diagnosis of a cavity hollow-cathode post-discharge used as a sputtering source", *JOAM*, **7**, no.5, (2005) 2459 – 2464
148. C. Costin, G. POPA, G. Gousset – "On the secondary electron emission in DC magnetron discharge", *JOAM*, **7**, no.5, (2005) 2465 – 2469
149. I. A. Rusu, G. POPA, S. O. Saied, J. L. Sullivan – "Argon rf plasma treatment of PET films for Silicon films adhesion improvement", *JOAM*, **7**, no.5, (Oct. 2005) 2529 – 2534
150. G. Borcia, N. Dumitrascu, G. POPA – "Influence of dielectric barrier discharge treatments on the surface properties of polyamide-6 films", *JOAM*, **7**, no.5, (Oct. 2005) 2535 – 2538
151. G. Borcia, N. Dumitrascu, G. POPA – Influence of helium DBD treatments on the adhesion properties of polyamide-6 surface, *Surface&Coating Technology*, **197** (2005) 316-321
152. A. S. Chiper, N. Apetroaei, G. POPA – "Correlation between surface modifications induced on PET/TiO₂ sample by DBD plasma produced in He/N₂ gas mixture and plasma parameters", *JOAM*, **7**, no.5, (2005) 2561 – 2570
153. M.Neagu, M.Dobromir, G. POPA, H.Chiriac, Gh.Singurel, C.Hison, The surface magnetism investigation of FeSiB amorphous thin film obtained by evaporation technique, *Sensors and Actuators, A- Physical* **129** (2006) 172-175
154. V.Tiron, C.Vitelaru, M.Solomom, F.Tufescu, G. POPA, Transitory phenomena in pulsed reactive magnetron discharge, *JOAM*, **8**, nr. 1 (2006) 66-70
155. G.Borcia, I.Rusu, G. POPA, Surface modification of polymethylmetacrylate films using dielectric barrier discharge, *JOAM*, **8**, nr. 3 (2006) 1048-1052
156. R. Schrittwieser, C. Ioniță, J.Adamek, J.Stockel, J.Brotankova, E,Martines, G. POPA, C.Costin, L.van de Peppel and G. van Oost, Direct measurements of the plasma potential by Katsumata-type probes, *Czechoslovak J. Phys.*, **56** (2006) B145-B150
157. R. Apetrei, D. Alexandroaei, D. Luca, P. Balan, C. Ionita, R. Schrittwieser, and G. POPA OES Diagnostic of the Discharge Plasma in a Hollow-Cathode Sputtering Source, *Jap.J. Appl. Phys.*, **45**, 10B (2006) 8128-8131

158. R. Apetrei, D. Alexandroaei, D. Luca, P. Balan, C. Ionita, R. Schrittwieser, and G. POPA, Pulsed Regime of a Hollow-Cathode Discharge Used in a Sputter Source, *Jap.J. Appl.Phys.***45**, nr. 10B (2006) 8132-8136
159. A.S.Chiper, N.B.Simirad, F. Jorand, M. Heninger, S. Pasquiers, G. POPA, Influence of water vapor on acetildelhyde removal efficiency by DBD, *JOAM*, **8** (2006) 208-211
160. M.Neagu, M.Dobromir, G.POPA, H.Chiriac, Gh.Singurel, Optical and magneto-optical studies of Fe-Cu-Nb-Si-B amorphous thin films deposited by pulsed laser ablation, *JOAM*, **8** (2006) 1755-1757
161. I. A. Rusu, G. POPA, S. O. Saied, J. L. Sullivan, Argon rf plasma treatment of PET films for Si films adhesion improvement, *JOAM* **8** (2006) 1935-1938
162. L. Sirghi, G. POPA, Y. Hatanaka, Heating of polymer substrate by discharge plasma in radiofrequency magnetron sputtering deposition, *Thin Solid Films*, **515** (2006) 1334 – 1339
163. S. Gosav, M.Praisler, D.O.Dorohoi and G. POPA, Structure-activity correlations for illicit amphetamines using ANN and constitutional descriptors, *Talanta*, **70** (2006) 922 – 928
164. J.Brotankova, J.Adamek, J.Stockel, E,Martines, G. POPA, C.Costin, R. Schrittwieser, C. Ioniță, G. van Oost, and L.van de Peppel, A probe-based methode for measuring the trasport coefficient in the tokamak edge region, *Czechoslovak J. Phys.*, **56** (2006) 1321 – 1327
165. C.Costin, T. Minea, G. POPA and G. Gousset, Fluid Modelling of DC Magnetrons – Low Pressure Extention and Experimenal Validation, *Plasma Process. Polym.* **4** (2007) S 960-S 964
166. AS. Chiper, V.A.Nastuta, G.B.Rusu, G POPA, Electrical characterisation of a double DBD in He at atmospheric pressure used for surface treatments, *JOAM* **9** (2007) 2926 – 2931
167. L. de Poucques, C. Vitelaru, T. M. Minea, J. Bretagne and G. POPA. On the anisotropy and thermalization of the metal sputtered atoms in a low-pressure magnetron discharge, *EPL*, **82** (2008) 15002 – 15011
168. J.Adamek, M.Kocan, R.Panek, J.P.Gunn, E.Martines, J.Stockel, C.Ionita, G. POPA, C.Costin, J.Brotankova, R.Schrittwieser, and G.van Oost, Simultaneous measuremnets of ion temperature by segmented tunnel and Katsumata probe, *Contr.Plasma Phys.* **48**, nr.5-7 (2008) 395-399
169. J. Brotankova, E. Martines, J. Adamek, J. Stockel, G. POPA, C. Costin, C. Ionita, R. Schrittwieser, and G. Van Oost, Novel Technique for Direct Measurement of the Plasma Diffusion Coefficient in Magnetized Plasma, *Contr.Plasma Phys.* **48**, nr.5-7 (2008) 418-423
170. R.Cazan, G.Borcia, A.S. Chiper and G POPA, Time–space resolved distribution of oxygen metastable atoms in an axially symmetrical atmospheric pressure barrier discharge, *Plasma Sources Sci. Technol.* **17** (2008) 035020
171. A. S. Chiper, R. Cazan, and G. POPA On the Secondary Discharge of an Atmospheric - Pressure Pulsed DBD in He with Impurities, *IEEE Trans. on Plasma Sci.* **36**, NO. 5, OCTOBER (2008) 2824-2830
172. A.S. Chiper, V.A. Nastuta, G.B. Rusu, V. Pohoata and G. POPA, Optical diagnosis of double discharges in pulsed DBD with different barrier materials, *JOAM* **10** (2008) 1976-1980
173. M. L. Solomon, Steluta Theodoru and G. POPA Secondary electron emission at Langmuir probe surface, *JOAM* **10** (2008) 2011 – 2014

174. I. Topala, M. Asandulesa, N. Dumitrascu, G. POPA and J. Durand, Application of dielectric barrier discharge for plasma polymerization processes, *JOAM* **10** (2008) 2028-2032
175. C. Vitelaru, V. Tiron, C. Andrei, S. Dobrea and G. POPA, On the density of argon metastables in a cylindrical magnetron discharge *JOAM* **10** (2008) 2003–2006
176. M. Dobromir, M. Neagu, V. Pohoată, Gh. Singurel, G. POPA, Magnetic properties of Fe-based amorphous thin films, *JOAM* **10** (2008) 410-412
177. V.A. Nastuta, G.B. Rusu, I. Topala, A.S. Chiper and G. POPA, Surface modification of polymer induced by atmospheric DBD plasma in different configurations *JOAM* **10** (2008) 2038-2042
178. A. S. Chiper, A. V. Nastuta, G. B. Rusu and G. POPA, On surface elementary processes and polymer surface modifications induced by double pulsed dielectric barrier discharge', *Nucl. Instrum. and Methods in Phys. Res. Sec. B* **267** (2009) 313–316
179. A. Anghel, C. Porosnicu, M. Badulescu, I. Mustata, C. P. Lungu, K. Sugiyama, S. Linding, K. Krieger, J. Roth, A. Nastuta, G. Rusu and G. POPA: Surface morphology influence on D retention in Be films prepared by thermionic vacuum arc method, *Nucl. Instrum. and Methods in Phys. Res. Sec. B* **267**, Issue 2, (2009) 426-429
180. C. Ursu, S. Gurlui, C. Focsa, G. POPA · Space- and time-resolved optical diagnosis for the study of laser ablation plasma dynamics, *Nucl. Instrum. and Methods in Phys. Res. Sec. B* **267** (2009) 446–450
181. V. Tiron, S. Dobrea, C. Costin and G. POPA, On the carbon and tungsten sputtering rate in a magnetron discharge, *Nucl. Instrum. and Methods in Phys. Res. Sec. B* **267** (2009) 434–437
182. I. Topala, Nicoleta Dumitrascu, G. POPA Properties of the acrylic acid polymers obtained by atmospheric pressure plasma polymerization *Nucl. Instrum. and Methods in Phys. Res. Sec. B* **267** (2009) 442–445
183. C. Vitelaru, Lde Poucques, T. Hytkova, T.M. Minea, C. Boisse-Laporte, J. Bretagne, G. POPA, Pressure effect on the velocity and flux distributions of sputtered metal species in magnetron discharge measured by space-resolved tunable diode laser induced fluorescence *Plasma Process. Polym.* **6**, (2009) DOI: 10.1002/ppap.200930801
184. A. S. Chiper, G. B. Rusu, A. V. Nastuta and G. POPA, 'On the discharge parameters of a glow mode DBD at medium and atmospheric pressure', *IEEE Transaction on Plasma Science, Special Issue Electrical Discharges in Vacuum*, **37**, Is. 10, Part 2 (2009) 2098-2102
185. V. Tiron, C. Andrei, A. V. Nastuta, G. B. Rusu, C. Vitelaru and G. POPA, 'Carbon and Tungsten Sputtering in a Helium Magnetron Discharge', *IEEE Transaction on Plasma Science, Special Issue Electrical Discharges in Vacuum*, **37**, August (2009); 1581-1585
186. I. Motrescu, T. Hara, A. Ogino, S. Tanaka, T. Fujiwara, H. Kawagishi, S. Kodani, G. POPA, M. Nagatsu *Investigation of low temperature plasma capabilities to modify the structure and function of bio-polymers* – Journal of Automation, Mobile Robotics & Intelligent Systems, **(3) no 4**, (2009) 150-152
187. A. S. Chiper, N. Blin-Simiand, M. Heninger, H. Mestdagh, P. Boissel, F. Jorand, J. Lemaire, J. Leprovost, S. Pasquiers, G. POPA and Ch. Poste, Detailed characterization of 2-heptanone conversion by Dielectric Barrier Discharge in N₂ and N₂/O₂ mixtures. *Journal of Physical Chemistry* **114** (2010) 307-407
188. I. Mihaila, C. Ursu, A. Gegiuc and G. POPA, Diagnostics of plasma plume produced by laser ablation using ICCD imaging and transient electrical probe technique, *Plasma Phys.* **207** 012005 (2010)

189. C. Vitelar, C. Aniculaesei, L. de Poucques, T.M. Minea, C. Boisse-Laporte, J. Bretagne, G. POPA Tunable diode laser induced fluorescence on Al and Ti atoms in low pressure magnetron discharges, *J.Phys.D: Appl.Phys*, **42** 124013.(2010)
190. A. Poiata, I. Motrescu, A. Nastuta, D. E. Creanga, G. POPA, 'Microorganism response to atmospheric pressure helium plasma DBD treatment', *Journal of Electrostatics*, **68**, Is. 2, , (2010) 128-131
191. M. L. Solomon, V. Anita, C. Costin, I. Mihaila, G. POPA, H. J. van der Meiden, R. S. Al, M. van der Pool, G. J. van Rooij, J. Rapp Multi-channel analyzer investigations of ion flux at the target surface in Pilot-PSI, *Contrib.Plasma Phys.*, **50** (2010) 898-902
192. I. Motrescu, A. Ogino, S. Tanaka, T. Fujiwara, S. Kodani, H. Kawagishi, G. POPA and M. Nagatsu, Modification of Peptide by Surface Wave Plasma Processing, *Thin Solid Films*, **518**, (2010) 3585-3589
193. C. Costin, T. M. Minea, G. POPA, G. Gousset, Plasma kinetics of Ar/O₂ magnetron discharge by two-dimensional multifluid modeling, *J. Vac. Sci. Technol. A*, **28**, No. 2, Mar/Apr, (2010) 322-328
194. V. Tiron and G. POPA, "Control of the thermionic vacuum arc plasma", 24th International Symposium on Discharges and Electrical Insulation in Vacuum, Book Series: **International Symposium on Discharges and Electrical Insulation in a Vacuum**, (2010) 390- 393
195. A. Nastuta, I. Topala, C. Grigoras, V. Pohoata, G. POPA, Stimulation of wound healing by helium atmospheric pressure plasma treatment, *J. Phys. D: Appl. Phys.* **44** 105204 (9pp) (2011)
196. C. Vitelar, L. de Poucques, T. M. Minea, and G. POPA, Time resolved metal line profile by near-UV tunable diode laser absorption, spectroscopy, *J. Appl. Phys.* **109**, 053307 (2011) 2,19
197. V. Tiron, M. Dobromir, V. Pohoata and G. POPA, Ion Energy Distribution in Thermionic Vacuum Arc, *IEEE Trans. on Plasma Sci.*, **39(6-39)**:. DOI: 10.1109/TPS.2011.2108671 (2011) 1403 – 1407
198. V. Tiron, L. Mihaescu, C.P. Lungu, G. POPA, Strong double layer structure in thermionic vacuum arc, *Rom. Journ. Phys.*, **56**, Supplement, (2011) 41–46
199. C. Vitelar, V. Pohoata, C. Aniculaesei, V. Tiron, and G. POPA, The break-down of hyperfine structure coupling induced by the Zeeman effect on aluminum 2S_{1/2}→2P_{1/2} transition, measured by tunable diode-laser induced fluorescence, *J. Appl. Phys.* **109**, 084911 (2011)
200. I. Motrescu, A. Ogino, S. Tanaka, T. Fujiwara, S. Kodani, H. Kawagishi, G. POPA and M. Nagatsu, Mechanism of peptide modification by low-temperature microwave plasma, *Soft Matter*, **7** (2011) 4845-4850. 4.15
201. C. Costin, V. Tiron, J. Faustin, and G. POPA, "Fast Imaging Investigation on Pulsed Magnetron Discharge", *IEEE Transactions on Plasma Science* **39** (2011) 2482-2483 DOI:10.1109/TPS.2011.2145005
202. I. Motrescu, A. Ogino, S. Tanaka, T. Fujiwara, S. Kodani, H. Kawagishi, G. POPA, M. Nagatsu, Effects of Nitrogen and Oxygen Radicals on Low-Temperature BioMolecule Processing, *Japanese Journal of Applied Physics* **50** 08/ (2011). DOI:10.1143/JJAP.50.08JF07
203. [C. Vitelar](#), [L. de Poucques](#), [T. M. Minea](#), G. POPA, Time resolved tunable diode laser absorption spectroscopy on Al and Ar.M atoms in high power pulsed magnetron sputtering, *Rom.J.Phys.*, **56** (2011) 47-53
204. [A. S. Chiper](#), [B. G. Rusu](#), C. Vițelaru, G. POPA, A comparative study of Helium and Argon DBD plasmas suitable for thermo sensitive materials, , *Rom.J.Phys.* **56** (2011) 126-131

205. G Borcia, R Cazan, G POPA, Investigation of Oxygen metastable distribution in atmospheric pressure DGD using TDLAS, *IEEE Transactions on Plasma Science* **39(11)** (2011) 2102-2103
206. [A. S. Chiper](#), G. POPA Temporal and Spatial Resolved Emission Spectroscopy of a Pulsed Atmospheric-Pressure DBD in Helium With Impurities, *IEEE Transactions on Plasma Science* **39(11)** (2011) 2196-2197. DOI:10.1109/TPS.2011.2163322 0.95
207. [A. S. Chiper](#), [B. G. Rusu](#), G. POPA, Influence of the Dielectric Surface Nonhomogeneities on the Dynamic of the Pulsed DBD Plasma, *IEEE Transactions on Plasma Science* **39(11)** (2011) 2200-2201. DOI:10.1109/TPS.2011.2150764 0.95
208. A. [Nastuta](#), I. [Topala](#), G. POPA, ICCD Imaging of Atmospheric Pressure Plasma Jet Behavior in Different Electrode Configurations, *IEEE Transactions on Plasma Science* **39(11)** (2011) 2310-2311. DOI:10.1109/TPS.2011.2158116, 0.95
209. [C. Vitelaru](#), [L. de Poucques](#), [T. M. Minea](#), G. POPA, Space-resolved velocity and flux distributions of sputtered Ti atoms in a planar circular magnetron discharge, *Plasma Sources Science and Technology* **20(4)** (2011) 045020 DOI:10.1088/0963-0252/20/4/045020 · 3.06
210. [V. Tiron](#), [C. Costin](#), [L. Sirghi](#), G. POPA, Reactive HIPIMS with auxiliary Al electrode for ZnO:Al thin film deposition, *IOP Conference Series Materials Science and Engineering* **39(1)** (2012). DOI:10.1088/1757-899X/39/1/012010
211. Focia Ramona, Poiata Antoniea, Motrescu Iuliana, Nastuta Andrei, Creanga Dorina, Popa Gheorghe, Bacteria response to non-thermal physical factors: A study on Staphylococcus aureus, *AFRICAN JOURNAL OF BIOTECHNOLOGY* 03/2012; 11(18)
212. V.Tiron, T. Coman, L.Sirghi, G. POPA, Atomic force microscopy investigation of piezoelectric response of ZnO thin films deposited by HIPIMS, *Journal of Optoelectronics and Advanced Materials* **15** (2013) 77-81
213. [V Tiron](#), [L Sirghi](#), G POPA, Control of aluminum doping of ZnO:Al thin films obtained by high-power impulse magnetron sputtering, *Thin Solid Films* **520(13)** 04/ (2012) 4305-4309. DOI:10.1016/j.tsf.2012.02.079 · 1.87
214. Chiper A., Rusu G., Vițelaru C., Mihalca I., Popa G., A comparative study of Helium and Argon DBD Plasmas suitable for thermosensitive Materials processing, *Romanian J. of Physics* **56**, (2012) 126-131
215. [A. S. Chiper](#), G. POPA Temporally, spatially, and spectrally resolved barrier discharge produced in trapped helium gas at atmospheric pressure, *Journal of Applied Physics* **113(21)** 06/(2013) 213302 DOI:10.1063/1.4809764
216. [I. Mihaila](#), [M. L. Solomon](#), [C. Costin](#), G. POPA, On Electrical Probes Used in Magnetized Plasma Diagnostics, *Contributions to Plasma Physics* **53(1)** 01/(2013) 96-101. DOI:10.1002/ctpp.201310017
217. R.S.Dobrea, I.Mihăilă, G.POPA, Plasma parameters of Argon and Argon/molecular gas mixture plasmas produced in microwave discharge, *Material Sci. and Engineering B-Advanced functional solid state materials* **178** (2013) 1311-1316

218. [I.L. Velicu](#), [V. Tiron](#), [G. POPA](#), Dynamics of the fast-HiPIMS discharge during FINEMET-type film deposition, *Surface and Coatings Technology* 250 07/ (2014)57–64. DOI:10.1016/j.surfcoat.2014.03.015
219. [I. Mihaila](#), [S. Costea](#), [C. Costin](#), [G. POPA](#), On Negative Slope of Probe Characteristics in Magnetized Plasmas, *Beiträge aus der Plasmaphysik* 54(3) 04/ (2014) DOI:10.1002/ctpp.201410075
220. [C Costin](#), [T M Minea](#), [G. POPA](#), Electron transport in magnetrons by a posteriori Monte Carlo simulations, *Plasma Sources Science and Technology* 23(1) 02/ (2014):015012. DOI:10.1088/0963-0252/23/1/015012
221. M.Osiac, V.Tiron, G.E.Iacobescu, G.POPA, A comparative study of GeSb₂Te₄ films deposited by radiofrequency and pulsed direct-current and magnetron sputtering high power impulse magnetron discharge, *Digest Journal of nanomaterial and Biostructures*, 9 (2014) 451-457
222. S. Dobrea, I. Mihaila, V. Tiron, G. POPA, Optical and mass spectrometry diagnosis of a CO₂ microwave plasma discharge, *Romanian Reports in Physics*, 66 (2014) 1147-1154
223. C.Costin, V.Anita, F.Gheorghiu, G. POPA, G. De Temmerman, M.A.van den Berg, J.Scholten and S.Brons, Cross-section analysis of the Magnum-psi plasma beam using 2D multi-probe system, *Plasma Source Science and Technology* 24(1) 02/ (2015) DOI:10.1088/0963-0252/24/1/015014
224. [O. Antonin](#), [V. Tiron](#), [C. Costin](#), [G. POPA](#), [T M Minea](#), On the HiPIMS benefits of multi-pulse operating mode, *Journal of Physics D Applied Physics* 48(1) 01/ (2015) 015202 (10pp). DOI:10.1088/0022-3727/48/1/015202
225. V. Tiron, I-L. Velicu, F. Ghiorghiu and G. POPA, The effect of the additional magnetic field and gas pressure on the sheath region of a high power impulse magnetron sputtering discharge, *Romanian Reports in Physics*, 67 (2015) 1004-1017
226. A. Poiata, A. V. Nastuta, D. Creanga, G. POPA, Bioeffects of Atmospheric Plasma Discharge on Gram-positive and Gram-negative Bacteria, *Journal of Science and Arts* 15, No. 3(32), (2015) 249-256 ISSN: 1844 – 9581
227. C Costin, V Anita, G POPA, J Scholten, G De Temmerman, Tailoring the charged particle fluxes across the target surface of Magnum-PSI, *Plasma Source Science and Technology*, 25 (2016) forma electronică
228. C. Costin, G POPA, V Anita, Electrical probe characteristic recovery by measuring only one time-dependent parameter, *Rev. Sci. Instruments*, 87 (2016) forma electronică
229. [Ioana-Laura Velicu](#), [V. Tiron](#), [B.G.Rusu](#), [G.POPA](#), Copper thin films deposited under different power delivery modes and magnetron configurations: A comparative study, *Surface and Coatings Technology* ·327 (2017) 192–199
230. [Ioana-Laura Velicu](#), [V. Tiron](#), [C. Porosnicu](#), [I. Burducea](#), N. Lupu, G. Stoian, G.POPA, D. Munteanu, Enhanced properties of tungsten thin films deposited with a novel HiPIMS approach, *Applied Surface Science* · 424 (2017) 397-406 DOI: 10.1016/j.apsusc.2017.01.067
231. Velicu I., Mihalca I., Popa G. Operating the HIPIMS discharge with ultra -short pulses: a solution to overcome the deposition, *Romanian Reports in Physics* 69.3, (2017) 411

232. S. Brezinsek, ... C. Costin, .. G. POPA, .. V. Tiron, ... I. L. Velicu, R. Zaplotnik (187 autori), Plasma-wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification”, *Nucl. Fusion* **57** (2017) 116041 (9pp)
233. V. Tiron, I.-L. Velicu, I. Mihăilă, G. POPA, Deposition rate enhancement in HiPIMS through the control of magnetic field and pulse configuration, *Surface & Coatings Technology* **337** (2018) 484–491
234. Tiron, V; Velicu, I-L; Nastuta, A., V; Costin, C.; POPA, G.; Kechidi, Z.; Ionita, C. Schrittwieser, R., Enhanced extraction efficiency of the sputtered material from a magnetically assisted high power impulse hollow cathode, *Plasma Sources Sci. Technol.*, (2018) WOS:000441041700001, 1361-6595
235. I-L. Velicu, V. Tiron, M-A. Petrea and G. POPA, New concept of metal ion thruster based on pulsed thermionic vacuum arc discharge, *Plasma Sources Sci. Technol.* 30 (2021) 015006 (8pp) <https://doi.org/10.1088/1361-6595>
236. C. Ursu, P. Nica, G. B. Rusu, C. Vitelaru, G. POPA and C. Focsa, *Laser absorption spectroscopy on a transient aluminium plasma generated by excimer laser ablation*, *Spectrochimica Acta Part B: Atomic Spectroscopy*, August 11, 2022
237. S. Popescu, G. POPA, Ștefan PROCOPIU – PIONEER OF PLASMA PHYSICS IN ROMANIA, *Romanian Reports in Physics*, 2023

Conform redactării autorului