

**LISTA LUCRĂRI**  
**- Ionut Cristian TOPALA-**

**Lista cărților/capitolelor de cărți publicate/editate**

1. Nicoleta Dumitrascu, Ionut Topala, "Medical applications of dielectric barrier discharge" (pp. 103-136) in "Biomaterials and Plasma Processing" edited by Nicoleta Dumitrașcu, Ionuț Topală, Alexandru Ioan Cuza University Press, Iasi, 2011 (328 pages) ISBN: 978-973-703-543-1

2. Ionut Topala, Andrei Nastuta, " Helium atmospheric pressure plasma jet: diagnostics and application for burned wounds healing" (pp. 335-345) in "Plasma for bio-decontamination, medicine and food security" edited by Zdenko Machala, Karol Hensel, Yuri Akishev, NATO Science for Peace and Security Series, Springer Publishing, Heidelberg 2012, (499 pages) ISBN 978-94-007-2851-6

3. Alina Chipper, Catalin Borgia, Gabriela Borgia, Ionut Topala, Lucrări de laborator. Fizica atomului și moleculei, Editura Universității Alexandru Ioan Cuza din Iași (UAIC), in curs de aparitie

**Lista articolelor publicate în reviste cotate ISI**

1. Mihai Asandulesa, Ionut Topala, Yves-Marie Legrand, Stephanie Roualdes, Vincent Rouessac, Valeria Harabagiu, Chemical Investigation on Various Aromatic Compounds Polymerization in low Pressure Helium Plasma, Plasma Chemistry and Plasma Processing, 34(5), 1219-1232 (2014).

2. G.B. Rusu, M. Asandulesa, I. Topala, V. Pohoata, N. Dumitrascu, M. Barboiu, Atmospheric pressure plasma polymers for tuned QCM detection of protein adhesion, Biosensors and Bioelectronics, 53, 154–159, (2014).

3. Andrei V. Nastuta, Valentin Pohoata, Ionut Topala, Atmospheric pressure plasma jet - living tissue interface: electrical, optical and spectral characterization, Journal of Applied Physics, 113, 183302, (2013).

4. Mihai Asandulesa, Ionut Topala, Valentin Pohoata, Yves Marie Legrand, Marius Dobromir, Marian Totolin, Nicoleta Dumitrascu, Chemically polymerization mechanism of aromatic compounds under atmospheric pressure plasma conditions, Plasma Processes and Polymers, 10(5), 469–480, (2013).

5. Roxana Jijie, Valentin Pohoata, Ionut Topala, Thermal behavior of bovine serum albumin after exposure to barrier discharge helium plasma jet Applied Physics Letters, 101, 144103, (2012).

6. Roxana Jijie, Cristina Luca, Valentin Pohoata, Ionut Topala, Effects of Atmospheric-Pressure Plasma Jet on Pepsin Structure and Function, IEEE Transactions on Plasma Science, 40(11), 2980 - 2985, (2012).

7. Ionut Topala, Nicoleta Dumitrascu, Dan-Gheorghe Dimitriu, Experimental and Theoretical Investigations of Dielectric-Barrier Plasma Jet in Helium, IEEE Transactions on Plasma Science, 40(11), 2811 - 2816, (2012).

8. Andrei V. Nastuta, Ionut Topala, Gheorghe Popa, ICCD Imaging Of Atmospheric Pressure Plasma Jet Behavior In Different Electrodes Configurations, IEEE Transactions on Plasma Science, 39(11), 2310 - 2311, (2011).

9. Jorge Gonzalez Vazquez, Mihai Asandulesa, Ionut Topala, Nicoleta Dumitrascu, Fast imaging study of polymerization plasmas at atmospheric pressure, *IEEE Transactions on Plasma Science*, 39(11), 2170 - 2171, (2011).
10. Ionut Topala, Nicoleta Dumitrascu, Evolution of bullets in helium atmospheric pressure plasma jet, *IEEE Transactions on Plasma Science*, 39(11), 2342 - 2343, (2011).
11. Andrei Nastuta, Ionut Topala, Constantin Grigoras, Valentin Pohoata, Gheorghe Popa, Stimulation of wound healing by helium atmospheric pressure plasma treatment, *Journal of Physics D: Applied Physics*, 44(10), 105204 (9 pages) (2011)
12. Mihai Asandulesa, Ionut Topala, Valentin Pohoata, Nicoleta Dumitrascu, Influence of operational parameters on plasma polymerization process at atmospheric pressure, *Journal of Applied Physics*, 108, 093310 (6 pages) (2010)
13. Mihai Asandulesa, Ionut Topala, Nicoleta Dumitrascu, Effects of plasma treatments on the surface of wood samples, *Holzforschung*, 64(2), 223-227, (2010).
14. Ionut Topala, Mihai Asandulesa, Delia Spridon, Nicoleta Dumitrascu, Hydrophobic Coatings Obtained in Atmospheric Pressure Plasma, *IEEE Transaction on Plasma Science*, 37(6), 946-950, (2009).
15. Ionut Topala, Nicoleta Dumitrascu, Gheorghe Popa. Properties of the acrylic acid polymers obtained by atmospheric pressure plasma polymerization. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 267(2), 442–445, (2009).
16. Ionut Topala, Nicoleta Dumitrascu, Gheorghe Popa, Jean Durand. A comparative study of plasma effects on the PET surfaces. *Revista de Chimie*, 59(11), 1263 – 1265, (2008).
17. A.V. Nastuta, G.B. Rusu, I. Topala, A.S. Chipser, G. Popa, Surface modifications of polymer induced by atmospheric DBD plasma in different configurations, *Journal of Optoelectronics and Advanced Materials* 10(8), 2038 - 2042, (2008).
18. Ionut Topala, Mihai Asandulesa, Nicoleta Dumitrascu, Gheorghe Popa, Jean Durand, Application of dielectric barrier discharge for plasma polymerization processes, *Journal of Optoelectronics and Advanced Materials* 10(8), 2028 - 2032, (2008).
19. Ionut Topala, Nicoleta Dumitrascu, Dynamics of the wetting process on dielectric barrier discharge (DBD) treated wood surfaces, *Journal of Adhesion Science and Technology*, 21(11), 1089 - 1096, (2007).
20. Ionut Topala, Nicoleta Dumitrascu, Valentin Pohoata, Influence of plasma treatments on PET and PET+TiO<sub>2</sub> hemocompatibility, *Plasma Chemistry and Plasma Processing*, 27(1), 95-112, (2007).
21. Stephanie Roualdes, Ionut Topala, Habiba Mahdjoub, Vincent Rouessac, Philippe Sibat, Jean Durand, Sulfonated polystyrene-type plasma-polymerized membranes for miniature direct methanol fuel cells, *Journal of Power Sources*, 158(2), 1270-1281, (2006).
22. Nicoleta Dumitrascu, Ionut Topala, Gheorghe Popa, Dielectric Barrier Discharge Technique in Improving the Wettability and Adhesion Properties of Polymer Surfaces, *IEEE Transaction on Plasma Science*, 33(5), 1710-1714, (2005).

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