

LISTA LUCRĂRI
- Ionuț Cristian TOPALĂ-

Lista cărților/capitolelor de cărți publicate/editate

1. Nicoleta Dumitrascu, **Ionuț 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. **Ionuț 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. **Ionuț Topala**, Spectre de rezonanță magnetică: obținerea spectrelor de rezonanță electronică de spin (RES) și determinarea factorului giromagnetic de spin (pag 101-118)

în

„Lucrări de laborator fizica atomului și moleculei” (coordonator volum: Gabriela BORCIA), autori Alina Chiper, Catalin Borgia, Ionut Topala, Gabriela Borgia, Editura Universității Alexandru Ioan Cuza din Iași (UAIC), 2014 (200 pagini) ISBN: 978-606-714-090-3

Lista articolelor publicate în reviste cotate ISI

1. Constantinos Lazarou, Charalambos Anastassiou, **Ionuț Topala**, Alina Silvia Chiper, Ilarion Mihaila, Valentin Pohoata, George Elias Georghiou, The effect of Penning ionization reactions on the evolution of He with O₂ admixtures plasma jets, J. Phys. D: Appl. Phys., 56, 065203 (2023)
2. Cristina Elena Ciomaga, Nadejda Horchidan, Leontin Padurariu, Radu Stefan Stirbu, Vasile Tiron, Florin Mihai Tufescu, **Ionuț Topala**, Oana Condurache, Mihaela Botea, Ioana Pintilie, Lucian Pintilie, Aurelian Rotaru, Gabriel Caruntu, Liliana Mitoseriu, BaTiO₃ nanocubes-Gelatin composites for piezoelectric harvesting: Modeling and experimental study, Ceramics International, 48(18), 25880-25893 (2022)
3. Ion Sava, Iuliana Stoica, **Ionuț Topala**, Ilarion Mihaila, Andreea Irina Barzi, Photodesign and fabrication of surface relief gratings on films of polyimide-based supramolecular systems obtained using host-guest strategy, Polymer, 249, 124829 (2022)
4. Ion Sava, Iuliana Stoica, Ilarion Mihaila, **Ionuț Topala**, Investigation of surface relief gratings on azo-copolyimide films using atomic force microscopy, Revue Roumaine de Chimie, 66(2), 193 - 198 (2021)
5. Ioana Cristina Gerber, Ilarion Mihaila, Valentin Pohoata, **Ionuț Topala**, Evolution of Electrical and Optical Parameters of a Helium Plasma Jet in Interaction With Liquids, IEEE Transactions On Plasma Science, 49(2), 557 - 562 (2021)

6. Karolina Bujak, Ion Sava, Iuliana Stoica, Vasile Tiron, **Ionut Topala**, Rafał Węglowski, Ewa Schab-Balcerzak, Jolanta Konieczkowska, Photoinduced properties of “T-type” polyimides with azobenzene or azopyridine moieties, *European Polymer Journal* 126, 109563 (2020)
7. V. Chiriac, G. Bulai, L. Curecheriu, **I. Topala**, N. Dumitrascu, Synthesis and characterization of (co)polymeric films obtained under atmospheric plasma conditions, *Materials Letters*, 264, 127062 (2020)
8. Constantinos Lazarou, Alina Silvia Chiper, Charalambos Anastassiou, **Ionut Topala**, Ilarion Mihaila, Valentin Pohoata, George Elias Georghiou, Numerical simulation of a capillary helium and helium-oxygen atmospheric pressure plasma jet: propagation dynamics and interaction with dielectric, *J. Phys. D: Appl. Phys.* 52 (2019) 195203 (22pp)
9. Ion Sava, Iuliana Stoica, Ilarion Mihaila, Valentin Pohoata, **Ionut Topala**, George Stoian, Nicoleta Lupu, Nanoscale analysis of laser-induced surface relief gratings on azocopolyimide films before and after gold coating, *Polymer Testing* 72, 407–415 (2018)
10. Constantinos Lazarou, Charalambos Anastassiou, **Ionut Topala**, Alina Silvia Chiper, Ilarion Mihaila, Valentin Pohoata, George Elias Georghiou, Numerical simulation of a capillary helium and helium-oxygen atmospheric pressure plasma jet: propagation dynamics and interaction with dielectric, *Plasma Sources Science and Technology* 27, 105007 (25pp) (2018)
11. Bogdan-George Rusu, Vladut Postolache, Irina-Gabriela Cara, Valentin Pohoata, Ilarion Mihaila, **Ionut Topala**, Gerard Jitareanu, Method of Fungal Wheat Seeds Disease Inhibition Using Direct Exposure to Air Cold Plasma, *Romanian Journal of Physics* 63, 905 (2018)
12. Bianca Hodoroba, Ioana Cristina Gerber, Delia Ciubotaru, Ilarion Mihaila, Marius Dobromir, Valentin Pohoata, **Ionut Topala**, Carbon ‘fluffy’ aggregates produced by helium–hydrocarbon high-pressure plasmas as analogues to interstellar dust, *Monthly Notices of the Royal Astronomical Society*, 481(2), 2841–2850 (2018)
13. Roxana Jijie, Alexandre Barras, Teodora Teslaru, **Ionut Topala**, Valentin Pohoata, Marius Dobromir, Tetiana Dumych, Julie Boukaert, Sabine Szunerits, Nicoleta Dumitrascu, Rabah Boukherroub, Aqueous medium-induced micropore formation in plasma polymerized polystyrene: An effective route to inhibit bacteria adhesion, *Journal of Materials Chemistry B*, 6, 3674-3683 (2018)
14. A. V. Nastuta, V. Pohoata, I. Mihaila, **I. Topala**, Diagnosis of a short-pulse dielectric barrier discharge at atmospheric pressure in helium with hydrogen-methane admixtures, *Physics of Plasmas* 25, 043515 (2018)
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16. Ioana Cristina Gerber, Ilarion Mihaila, Dennis Hein, Andrei Vasile Nastuta, Roxana Jijie, Valentin Pohoata and **Ionut Topala**, Time Behaviour of Helium Atmospheric Pressure Plasma Jet Electrical and Optical Parameters, *Applied Sciences*, 7, 812 (2017)
17. A.V. Nastuta, **I. Topala**, V. Pohoata, I. Mihaila, C. Agheorghiesei, N. Dumitrascu, Atmospheric pressure plasma jets in inert gases: electrical, optical and mass spectrometry diagnosis, *Romanian Reports in Physics*, 69(1), 407, (2017)
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19. T. Teslaru, **I. Topala**, M. Dobromir, V. Pohoata, L. Curecheriu, N. Dumitrascu, Polythiophene films obtained by polymerization under atmospheric pressure plasma conditions, *Materials Chemistry and Physics*, 169, 120–127 (2016).
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Ionuț Topală