

## Lista completă a lucrărilor publicate

### (1) Lista celor 10 lucrări considerate a fi cele mai relevante

1. **Iuliana Motrescu**, Mihai Alexandru Ciolan, Anca-Elena Calistru, Gerard Jitareanu, *Germination and Growth Improvement of Some Micro-Greens under the Influence of Reactive Species Produced in a Non-Thermal Plasma (NTP)*, **Agronomy**, 2023, 13(1), 150. <https://doi.org/10.3390/agronomy13010150> zona roșie
2. Constantin Lungoci, **Iuliana Motrescu**, F.Filipov, C.D.Jitareanu, G.C.Teliban, C.S.Ghitau, I.Puiu, T. Robu, "The impact of salinity stress on antioxidant response and bioactive compounds of *Nepeta cataria* L." **Agronomy**, 2022, 12(3), 562, DOI: 10.3390/agronomy12030562 zona roșie autor correspondent
3. Mihai Alexandru Ciolan, **Iuliana Motrescu**, *Pulsed laser ablation: a facile low-temperature fabrication of highly oriented n-type zinc oxide thin films*, **Applied Sciences-Basel**, 2022, 12(2), 917, ISSN: 2076-3417 <https://doi.org/10.3390/app12020917> zona galbenă – prim autor (specificat în articol)
4. C. Babii, M. Savu, **Iuliana Motrescu**, L.M. Birsă, L.G. Sarbu, M. Stefan, *The antibacterial synthetic flavonoid BrCl-Flav exhibits important anti-Candida activity by damaging cell membrane integrity*, **Pharmaceuticals** 14(11) 2021, 1130, <https://doi.org/10.3390/ph14111130>, ISSN 1424-8247 zona roșie
5. L.C. Trinca, D. Mareci, R.M. Souto, A.D. Lozano-Gorriñ, J. Izquierdo, L. Burtan, **Iuliana Motrescu**, V. Vulpe, G. Pavel, S. Strungaru, I. Stoleriu, A. L. Strat, C. Solcan, *Osseointegration evaluation of ZrTi alloys with hydroxyapatite-zirconia-silver layer in pig's tibiae*, **Applied Surface Science** 487 2019, 127-137, <https://doi.org/10.1016/j.apsusc.2019.05.003>, ISSN 0169-4332 zona roșie
6. **Iuliana Motrescu**, Mihai Alexandru Ciolan, Kazuya Sugiyama, Naohisa Kawamura, Masaaki Nagatsu, *Use of pre-ionization electrodes to produce large-volume, densely distributed filamentary dielectric barrier discharges for materials surface processing*, **Plasma Sources Science and Technology** 27, 2018, 115005, <https://doi.org/10.1088/1361-6595/aae8fd>, ISSN 0963-0252 (print); 1361-6595 (web) zona roșie
7. Mihai Alexandru Ciolan, **Iuliana Motrescu**, Kuniaki Sugiura, Dumitru Luca, Masaaki Nagatsu, *Tailoring the surface functionalities of radio frequency magnetron-sputtered ZnO thin films by Ar/NH3 gas mixture surface-wave plasmas*, **Langmuir**, 2018, 34(38), 11253-11263, Print Edition ISSN: 0743-7463, Web Edition ISSN: 1520-5827, <https://doi.org/10.1021/acs.langmuir.8b01183> zona roșie – prim autor (specificat în articol)
8. **Iuliana Motrescu**, Masaaki Nagatsu, "Nano-capillary atmospheric pressure plasma jet – A tool for ultrafine maskless surface modification at atmospheric pressure", 2016, **ACS Applied Materials & Interfaces**, 8 (19) ISSN 1944-8244, pp. 12528-12533, <http://dx.doi.org/10.1021/acsami.6b02483> zona roșie
9. **Iuliana Motrescu**, Akihisa Ogino, Shigeyasu Tanaka, Taketomo Fujiwara, Shinya Kodani, Hirokazu Kawagishi, Gheorghe Popa and Masaaki Nagatsu, "Mechanism of peptide modification by low-temperature microwave plasma", **Soft Matter**, vol. 7, pp. 4845-4850, 2011, ISSN 1744-683X, <http://dx.doi.org/10.1039/C0SM01412E> zona roșie
10. **Iuliana Motrescu**, Akihisa Ogino, Shigeyasu Tanaka, Taketomo Fujiwara, Shinya Kodani, Hirokazu Kawagishi, Gheorghe Popa and Masaaki Nagatsu "Effects of Nitrogen and Oxygen Radicals on Low-temperature Bio-molecule Processing", **Japanese Journal of Applied Physics**, vol. 50, 08JF07 – 5 p, 2011, ISSN 0021-4922, <http://dx.doi.org/10.1143/JJAP.50.08JF07>

Lista completă a lucrărilor - Iuliana MOTRESCU 1



## (2) Tezele de doctorat

1. Functional modification of small protein molecules by low-temperature plasma process 10.14945/00007641, 2011, 139 pagini, Japan National Library Bibliographic ID 023575882, Universitatea din Shizuoka, Japonia.
2. Study of the atomic oxygen in low temperature plasma produced in gas mixtures. Applications - teză de doctorat, 2011, 135 pagini, Universitatea Alexandru Ioan Cuza, Iași.

## (3) Cărți și capitole în cărți

1. Fizică pentru științele vieții, Editura Performantica, Iași, 2022, 186 pagini, echivalent 151, ISBN 978-606-685-954-7.
2. Motrescu I., Ciolan, M.A., Calistru, A.E., Jitareanu G., Miron, L.D. (2022) Evaluation of Heavy Metal Contamination in Mytilus sp. Shells. In: Khakhomov, S., Smechenko, I., Demidenko, O., Kovalenco, D. (eds) Research and Education: Traditions and Innovations. Lecture Notes in Networks and Systems, vol 422, 41-50. Springer, Singapore. [https://doi.org/10.1007/978-981-19-0379-3\\_5](https://doi.org/10.1007/978-981-19-0379-3_5) Online ISBN 978-981-19-0379-3 Print ISBN 978-981-19-0378-6.
3. Motrescu I., Filip M., Herciu F.P., Jitareanu G. (2020) Utilization of Atmospheric Plasmas for Agricultural Applications. In: Várkonyi-Kóczy A. (eds) Engineering for Sustainable Future. Lecture Notes in Networks and Systems, vol 101. 278-287, Springer, Cham. [https://doi.org/10.1007/978-3-030-36841-8\\_27](https://doi.org/10.1007/978-3-030-36841-8_27) Online ISBN 978-3-030-36841-8 Print ISBN 978-3-030-36840-1
4. Motrescu I., Calistru A.E., Jitareanu G., Miron L.D. (2020) Monitoring the Environmental Quality of Marine Waters Through the Analysis of Biomineralization in Bivalve Shells. In: Várkonyi-Kóczy A. (eds) Engineering for Sustainable Future. Lecture Notes in Networks and Systems, vol 101. 269-277. Springer, Cham. [https://doi.org/10.1007/978-3-030-36841-8\\_26](https://doi.org/10.1007/978-3-030-36841-8_26) Online ISBN 978-3-030-36841-8 Print ISBN 978-3-030-36840-1

## (4) Articole în reviste cotate ISI

1. Iuliana Motrescu, Mihai Alexandru Ciolan, Anca-Elena Calistru, Gerard Jitareanu, *Germination and Growth Improvement of Some Micro-Greens under the Influence of Reactive Species Produced in a Non-Thermal Plasma (NTP)*, **Agronomy**, 2023, 13(1), 150. <https://doi.org/10.3390/agronomy13010150>
2. C.Lungoci, Iuliana Motrescu, F.Filipov, C.D.Jitareanu, G.C.Teliban, C.S.Ghitau, I.Puiu, T. Robu, "The impact of salinity stress on antioxidant response and bioactive compounds of *Nepeta cataria* L." **Agronomy**, 2022, 12(3), 562, DOI: 10.3390/agronomy12030562
3. Teodora Arsenie, Irina Gabriela Cara, Maria Cristina Popescu, Iuliana Motrescu, Laura Bulgariu, *Evaluation of the Adsorptive Performances of Rapeseed Waste in the Removal of Toxic Metal Ions in Aqueous Media*, **Water**, 2022, 14(24), 4108, <https://doi.org/10.3390/w14244108>
4. Silvia Garofalide, Cristina Postolachi, Alexandru Cocean, Georgiana Cocean, Iuliana Motrescu, Iuliana Cocean, Bogdanel Silvestru Munteanu, Marius Prelipceanu, Silviu Gurlui, Liviu Leontie, *Saharan Dust Storm Aerosol Characterization of the Event (9 to 13 May 2020) over European AERONET Sites*, **Atmosphere**, 2022 13(3), 493, <https://doi.org/10.3390/atmos13030493>
5. Carmen Solcan, Bogdan Gabriel Slencu, Lucia Carmen Trinca, Iuliana Motrescu, Adriana Petrovici, Solcan Gheorghe, *Testicular injuries due to subacute combined exposure to cadmium and lead in rats*, **Farmacia**, 2022, 70(4), 690-703. <https://doi.org/10.31925/farmacia.2022.4.15>

Lista completă a lucrărilor - Iuliana MOTRESCU 2

6. Larisa Popescu-Lipan, Anda Les, Marian Grigoras, Gabriel Ababei, **Iuliana Motrescu**, Georgiana Bulai, Florin Brinza, Dorina Creanga, Maria Balasoiu, *Antioxidant molecule useful in the stabilization of nanoparticles in water suspension*, **Soft Materials**, 2022, 20, 576-590, <https://doi.org/10.1080/1539445X.2022.2028832>
7. Mihai Alexandru Ciolan, **Iuliana Motrescu**, *Pulsed laser ablation: a facile low-temperature fabrication of highly oriented n-type zinc oxide thin films*, **Applied Sciences-Basel**, 2022, 12(2), 917, ISSN: 2076-3417 <https://doi.org/10.3390/app12020917>
8. Chirila, S.D.; Cara, I.G., **Motrescu, I.** *Habitat preference of the endangered species Crambe tatarica (Brassicaceae) from Romania*, **Tuexenia**, 2022, 4, 275-296.
9. C. Babii, M. Savu, **Iuliana Motrescu**, L.M. Birsa, L.G. Sarbu, M. Stefan, *The antibacterial synthetic flavonoid BrCl-Flav exhibits important anti-Candida activity by damaging cell membrane integrity*, **Pharmaceuticals** 14(11) 2021, 1130, <https://doi.org/10.3390/ph14111130>, ISSN 1424-8247
10. P. Aelenei, C.M. Rimbu, C.E. Horhogeia, A. Lobiuc, A.N. Neagu, S.I. Dunca, **I. Motrescu**, G. Dimitriu, A.C. Aprotosoiaie, A. Miron, *Prenylated phenolics as promising candidates for combination antibacterial therapy: Morusin and kuwanon G*, **Saudi Pharmaceutical Journal**, 28(10) 2020, 1172-1181, DOI: 10.1016/j.jsps.2020.08.006, ISSN 1319-0164
11. L.G. Confederat, **Iuliana Motrescu**, M.I. Condurache, S. Constantin, A. Bujor, C.G. Tuchilus, L. Profire, *Chitosan-based delivery systems loaded with glibenclamide and lipoic acid: formulation, characterization, and kinetic release studies*, **Applied Sciences – Basel**, 10(21) 2020, 7532, ISSN 2076-3417, <https://doi.org/10.3390/app10217532>
12. Cara, I.G.; Topa, D.; Calistru, A.E.; **Motrescu, I.**; Bulgariu, L.; Jitareanu, G. *Agri-wastes as low-cost adsorbent for nicosulfuron herbicide*, **Environmental Engineering and Management Journal**, 19(2) 2020, 335-343 <https://eemj.eu/index.php/EEMJ/article/view/4056>
13. Mihai Alexandru Ciolan, **Iuliana Motrescu**, Kuniaki Sugiura, Dumitru Luca, Masaaki Nagatsu, *Tailoring the surface functionalities of radio frequency magnetron-sputtered ZnO thin films by Ar/NH3 gas mixture surface-wave plasmas*, **Langmuir**, 2018, 34(38), 11253-11263, Print Edition ISSN: 0743-7463, Web Edition ISSN: 1520-5827, <https://doi.org/10.1021/acs.langmuir.8b01183>
14. **Iuliana Motrescu**, Mihai Alexandru Ciolan, Kazuya Sugiyama, Naohisa Kawamura, Masaaki Nagatsu, *Use of pre-ionization electrodes to produce large-volume, densely distributed filamentary dielectric barrier discharges for materials surface processing*, **Plasma Sources Science and Technology** 27, 2018, 115005, <https://doi.org/10.1088/1361-6595/aae8fd>, ISSN 0963-0252 (print); 1361-6595 (web)
15. L. Confederat, **Iuliana Motrescu**, S. Constantin, F. Lupascu, L. Profire, *Biopolymers with medical applications optimized method for obtaining chitosan-based delivery systems*, **Revista de Chimie**, 69(7) 2018, 1756-1759, <https://doi.org/10.37358/RC.18.7.6411>, ISSN Print 0034-7752, ISSN Online 2668-8212
16. Masaaki Nagatsu, Kazuya Sugiyama, **Iuliana Motrescu**, Mihai Alexandru Ciolan, Akihisa Ogino, Naohisa Kawamura, *Surface modification of fluorine contained resins using an elongated parallel plate electrode type dielectric barrier discharge device*, **Journal of Photopolymer Science and Technology**, 31(3), 2018, pp. 379-383 [10.2494/photopolymer.31.379](https://doi.org/10.2494/photopolymer.31.379)
17. **Iuliana Motrescu**, Masaaki Nagatsu, *"Nano-capillary atmospheric pressure plasma jet – A tool for ultrafine maskless surface modification at atmospheric pressure"*, 2016, **ACS Applied Materials & Interfaces**, 8 (19) ISSN 1944-8244, pp. 12528-12533, <http://dx.doi.org/10.1021/acsami.6b02483>
18. R. Bekarevich, **Iuliana Motrescu**, A. Rahachou, M. Nagatsu, *"Mass spectrometric study of ammonia/methane surface-wave plasma applied to low-temperature growth of carbon nanomaterials"*, 2015, **Journal of Physics D: Applied Physics** vol. 48 (4), 045201, ISSN 0022-3727, <http://dx.doi.org/10.1088/0022-3727/48/4/045201>
19. Ciolan, M.A.; **Motrescu, I.**; Luca, D.; Nagatsu, M. *Low temperature plasma functionalization of ZnO with amine groups for bioapplications*, **Digest Journal of Nanomaterials and Biostructures** 9(2), 2014, 483-491

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20. Mihai Alexandru Ciolan, **Iuliana Motrescu**, Dumitru Luca, Masaaki Nagatsu, "Mass Spectrometric Study of Ar/NH<sub>3</sub> Surface Wave Plasma Utilized for Surface Functionalization of ZnO Nanoparticles", **Japanese Journal of Applied Physics**, vol. 53 (1), 010207, 2014, ISSN 0021-4922, <http://dx.doi.org/10.7567/JJAP.53.010207>
21. Masaaki Nagatsu, Ying Zhao, **Iuliana Motrescu**, Ryota Mizutani, Yuya Fujioka, Akihisa Ogino, "Sterilization Method for Medical Container using Microwave-Excited Volume-Wave Plasma", **Plasma Processes and Polymers**, vol. 9, pp. 590-596, June 2012, ISSN 1612-8850, <http://dx.doi.org/10.1002/ppap.201100111>
22. **Iuliana Motrescu**, Akihisa Ogino, Masaaki Nagatsu, "Micro-patterning of Functional Groups onto Polymer Surface Using Capillary Atmospheric Pressure Plasma Jet", **Journal of Photopolymer Science and Technology**, vol. 25, pp. 529-534, 2012 <http://dx.doi.org/10.2494/photopolymer.25.529>
23. **Iuliana Motrescu**, Akihisa Ogino, Shigeyasu Tanaka, Taketomo Fujiwara, Shinya Kodani, Hirokazu Kawagishi, Gheorghe Popa and Masaaki Nagatsu, "Mechanism of peptide modification by low-temperature microwave plasma", **Soft Matter**, vol. 7, pp. 4845-4850, 2011, ISSN 1744-683X, <http://dx.doi.org/10.1039/C0SM01412E>
24. **Iuliana Motrescu**, Akihisa Ogino, Shigeyasu Tanaka, Taketomo Fujiwara, Shinya Kodani, Hirokazu Kawagishi, Gheorghe Popa and Masaaki Nagatsu "Effects of Nitrogen and Oxygen Radicals on Low-temperature Bio-molecule Processing", **Japanese Journal of Applied Physics**, vol. 50, 08JF07 – 5 p, 2011, ISSN 0021-4922, <http://dx.doi.org/10.1143/JJAP.50.08JF07>
25. **Iuliana Motrescu**, Akihisa Ogino, Shigeyasu Tanaka, Taketomo Fujiwara, Shinya Kodani, Hirokazu Kawagishi, Gheorghe Popa and Masaaki Nagatsu, "Modification of Peptide by Surface Wave Plasma Processing", **Thin Solid Films**, vol. 518, pp. 3585-3589, April 2010, ISSN 0040-6090, <http://dx.doi.org/10.1016/j.tsf.2009.11.029>
26. A. Poiata, **Iuliana Motrescu**, C. Tuchilus, A. Nastuta, D.E. Creanga, G. Popa, "Microorganism Response to Atmospheric Pressure Helium Plasma DBD Treatment", **Journal of Electrostatics**, vol. 68 (2), pp.128-131, April 2010, ISSN 0304-3886, <http://dx.doi.org/10.1016/j.elstat.2009.11.008>

#### (5) Articole în reviste sau conferințe cotate ISI fără factor de impact

1. **Iuliana Motrescu**, A. Poiata, A. Nastuta, D. Creanga, G. Popa, "Bioeffects of atmospheric plasma discharge on gram-positive and gram-negative bacteria", **Journal of Science and Arts**, 3 (2015) pp. 249-256, ISSN 1844-9581. [http://www.icstm.ro/DOCS/josa/josa\\_2015\\_3/b\\_02\\_Motrescu.pdf](http://www.icstm.ro/DOCS/josa/josa_2015_3/b_02_Motrescu.pdf)
2. Focsa Ramona, Poiata Antoniea, **Iuliana Motrescu**, Nastuta Andrei, Creanga Dorina, and Popa Gheorghe "Bacteria response to non-thermal physical factors: A study on *Staphylococcus aureus*", **African Journal of Biotechnology**, 2012, vol. 11, pp. 4234-4240, 2012, ISSN 1684-5315. <https://doi.org/10.5897/AJB11.3783>; <https://www.ajol.info/index.php/ajb/article/view/101102>

#### (6) Articole publicate în reviste indexate BDI

1. C. Peres, A. Cazacu, **I. Motrescu**, N. Munteanu, C. Inulet, V. Stoleru, "Biometric indicators and yield of tomato under conventional and unconventional biostimulators", **Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca, Horticulture** 2019 76 (1) pp. 131-134. Print ISSN 1843-5254, Electronic ISSN 1843-5394.
2. A. Poiata, Iuliana Motrescu, A. Nastuta, Dorina Creanga, G. Popa "Plasma Jet Impact on Bacterial Cultures", **Romanian Journal of Biophysics**, 25(4) 2015 pp.259-265, ISSN 1220-515X <https://www.rjb.ro/plasma-jet-impact-on-bacterial-cultures/>

Lista completă a lucrărilor - Iuliana MOTRESCU 4



**3. Iuliana Motrescu**, Takuya Hara, Akihisa Ogino, Shigeyasu Tanaka, Taketomo Fujiwara, Hirokazu Kawagishi, Shinya Kodani, Gheorghe Popa, Masaaki Nagatsu, "Investigation of Low Temperature Plasma Capabilities to Modify the Structure and Function of Bio-polymers", **Journal of Automotion, Mobile Robotics and Intelligent Systems**, ISSN 1897-8649, vol. 3, pp. 150-152, **2009**

**4. Iuliana Motrescu**, C. Astefanoaei, C. Nadejde, D.E. Creanga, G. Stoian, "The influence of direct current discharges on vegetal organisms exposed during early ontogenetic stages", **Annals of the West University of Timisoara. Physics Series 2007** vol.51, pp. 137-140  
[http://quasar.physics.uvt.ro/anale\\_uvt\\_fizica/html\\_abstract/51/v51a35.html](http://quasar.physics.uvt.ro/anale_uvt_fizica/html_abstract/51/v51a35.html)

**5. Iuliana Motrescu**, Servilia Oancea, Alina Rapa and Anton Airinei, "Spectrophotometric analysis of the blood plasma for different mammals", **Romanian Journal of Biophysics**, vol.16, pp.215-220, **2006**, ISSN 1220-515X <https://www.rjb.ro/articles/158/imot.pdf>

**Lista completă a lucrărilor - Iuliana MOTRESCU 5**

