

Dosar Gradație de Merit – Decembrie 2021



CS dr. Strungaru-Jijie Roxana

CRITERII	DESCRIPTORI	PUNCTAJE ACORDATE
1,	1. Articole științifice publicat in extenso în reviste cotate <i>Web of Science, Clarivate Analytics</i>	633.63
	(60 puncte x AIS) + 25 prim autor sau autor corespondent 6 lucrări	564.84
	(60 puncte x AIS + 25)/număr autori co-autor 8 lucrări	68.79
2.	3. Contracte de cercetare științifică obținute prin competiție derulate în ultimii 5 ani prin Uiversitate	4
	membru echipa proiect: 25 puncte x (valoare grant în euro)/ 100.000 euro/nr membri echipă	
3.	6. Citări și recenzii ale creației de autori obținute în ultimii 5 ani (exclus autocitări/o citare se va cuantifica o singură dată)	
	în reviste de specialitate indexate Web of Science, Clarivate Analytics (10 + 20 x AIS)/număr autori	1565.16
	R. Jijie , G. Mihalache, M. Balmus, S. Strungaru, E. Baltag, A. Ciobica, M. Nicoara and C. Faggio, <i>Zebrafish as a Screening Model to Study the Single and Joint Effects of Antibiotics</i> , Pharmaceuticals 14(6) (2021) 578, 10.3390/ph14060578 . (7 citări)	25.842
	S. Strungaru, C. Pohontiu, M. Nicoară, C. Teodosiu, E. Baltag, R. Jijie , G. Plavan, O. Pacioglu and C. Faggio, <i>Response of aquatic macroinvertebrates communities to multiple anthropogenic stressors in a lowland tributary river</i> , Environmental Toxicology and Pharmacology (2021) 87:103687, 10.1016/j.etap.2021.103687 . (6 citări)	14.155
	I. A. Simionov, D. S. Cristea, S. M. Petrea, A. Mogodan, M. Nicoara, G. Pavan, E. S. Baltag, R. Jijie , S. A. Strungaru, <i>Preliminary investigation of lower Danube pollution caused by potentially toxic metals</i> , Chemosphere 264 (2021) 128496; 10.1016/j.chemosphere.2020.128496 . (5 citări)	12.651
	R. Jijie , G. Solcan, M. Nicoara, D. Micu, S. A. Strungaru, <i>Antagonistic effects in zebrafish (Danio rerio) behavior and oxidative stress induced by toxic metals and deltamethrin acute exposure</i> , Science of The Total Environment 698 (2020) 134299, 10.1016/j.scitotenv.2019.134299 . (25 citări)	127.952
	M. A. Robea, R. Jijie , M. Nicoara, G. Plavan, A. S. Ciobica, C. Solcan, G. Audira, C. Hsiao, S. A. Strungaru, <i>Vitamin C Attenuates Oxidative Stress and Behavioral Abnormalities Triggered by Fipronil and Pyriproxyfen Insecticide</i>	5.564

	<i>Chronic Exposure on Zebrafish Juvenile, Antioxidants</i> 9(10) (2020) 944; https://doi.org/10.3390/antiox9100944 . (4 citari)	
	M. Balmus, R. O. Cojocariu, A. Ciobica, S. Strungaru, R. Strungaru-Jijie , A. Cantemir, C. Galatanu, L. Gorgan, <i>Preliminary Study on the Tears Oxidative Stress Status and Sleep Disturbances in Irritable Bowel Syndrome Patients, Oxidative Medicine and Cellular Longevity</i> 2020, (2020) 4690713, 10.1155/2020/4690713. (8 citari)	10.212
	S. Strungaru¹, R. Jijie¹ , M. Nicoara, G. Plavan and C. Faggio, <i>Micro-(nano) plastics in freshwater ecosystems: Abundance, toxicological impact and quantification methodology</i> , <i>TrAC Trends in Analytical Chemistry</i> , 110 (2019) 116-128, 10.1016/j.trac.2018.10.025 . (173 citari)	1066.05
	R. Jijie , A. Barras, T. Teslaru, I. Topala, V. Pohata, M. Dobromir, T. Dumych, J. Bouckaert, S. Szunerits, N. Dumitrascu, R. Boukherroub, <i>Aqueous Medium-Induced Micropore Formation in Plasma Polymerized Polystyrene: An effective route to Inhibit Bacteria Adhesion</i> , <i>Journal of Materials Chemistry B</i> 6(2018) 3674-3683, 10.1039/c7tb02964k . (1 citari)	1.412
	R. Jijie , A. Barras, J. Bouckaert, N. Dumitrascu, S. Szunerits and R. Boukherroub, <i>Enhanced antibacterial activity of carbon dots functionalized with ampicillin combined with visible light triggered photodynamic effects</i> , <i>Colloids and Surfaces B: Biointerfaces</i> 170 (2018) 347-354, 10.1016/j.colsurfb.2018.06.040 . (50 citari)	259.376
	C. Gerber, I. Mihaila, D. Hein, A. Nastuta, R. Jijie, V. Pohoata and I. Topala, <i>Time Behaviour of Helium Atmospheric Pressure Plasma Jet Electrical and Optical Parameters</i> . <i>Applied Sciences</i> 7(8) 2017, p.812, 10.3390/app7080812 . (11 citari)	32.494
	I. Mihaila, V. Pohoata, R. Jijie , A.V. Nastuta, I. Rusu and I. Topala, <i>Formation of positive ions in hydrocarbon containing dielectric barrier discharge plasma</i> , <i>Advances in Space Research</i> 58 (11) (2016) 2416-2423; /10.1016/j.asr.2016.08.010 . (2 citari)	9.45
	citare în cărți din străinătate: 1 puncte/ numărul de autori	1.566
	S. Strungaru¹, R. Jijie¹ , M. Nicoara, G. Plavan and C. Faggio, <i>Micro-(nano) plastics in freshwater ecosystems: Abundance, toxicological impact and quantification methodology</i> , <i>TrAC Trends in Analytical Chemistry</i> , 110 (2019) 116-128, 10.1016/j.trac.2018.10.025 . (5 autori) 7 cărți	1.4
	R. Jijie , A. Barras, J. Bouckaert, N. Dumitrascu, S. Szunerits and R. Boukherroub, <i>Enhanced antibacterial activity of carbon dots functionalized with ampicillin combined with visible light triggered photodynamic effects</i> , <i>Colloids and Surfaces B: Biointerfaces</i> 170 (2018) 347-354, 10.1016/j.colsurfb.2018.06.040 . (6 autori) 1 carte	0.166
	13. Referent (peer-reviewer) reviste de specialitate indexate <i>Web of Science</i> , <i>Clarivate Analytics</i> 0.1 puncte /activitate	
	13 articole (MDPI & Royal Society of Chemistry)	1.3
	TOTAL	2205.656

CRITERIUL	DESCRIPTORI	PUNCTAJUL ACORDAT
I. ACTIVITATEA DE CERCETARE (80%)	1. Articole științifice publicat în extenso în reviste cotate <i>Web of Science, Clarivate Analytics</i>	(60 puncte x AIS) + 25 Pentru articole publicate în calitate de autor principal (prim autor sau autor corespondent) (60 puncte x AIS + 25)/număr autori Pentru articole publicate în calitate de co-autor
		633.6318

2021 - autor corespondent/prim autor

1. E. Paduraru, E. –I. Flocea, C. C. Lazado, I.-A. Simionov, M. Nicoară, A. Ciobica, C. Faggio , **R. Jijie** , *Vitamin C Mitigates Oxidative Stress and Behavioral Impairments Induced by Deltamethrin and Lead Toxicity in Zebrafish*, **International Journal of Molecular Sciences**, 2021 22(23), 12714; [10.3390/ijms222312714](https://doi.org/10.3390/ijms222312714). (AIS: 1.123)

92.38



International Journal of
Molecular Sciences



Article

Vitamin C Mitigates Oxidative Stress and Behavioral Impairments Induced by Deltamethrin and Lead Toxicity in Zebrafish

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2. R. Jijie , G. Mihalache, M. Balmus, S. Strungaru, E. Baltag, A. Ciobica, M. Nicoara and C. Faggio, *Zebrafish as a Screening Model to Study the Single and Joint Effects of Antibiotics*, **Pharmaceuticals** 14(6) (2021) 578, 10.3390/ph14060578. (AIS: 1.111)

91.66







pharmaceuticals



Review

Zebrafish as a Screening Model to Study the Single and Joint Effects of Antibiotics [†]

Roxana Jijie ^{1,2,*}, Gabriela Mihalache ^{3,4,‡}, Ioana-Miruna Balmus ², Stefan-Adrian Strungaru ² , Emanuel Stefan Baltag ¹ , Alin Ciobica ⁵, Mircea Nicoara ^{5,6}  and Caterina Faggio ^{7,*} 

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[†] This paper is dedicated to the memory of Stefan-Adrian Strungaru, colleague, researcher and friend, who prematurely passed away in April 2021.

[‡] These authors contributed equally.



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2021 – co-autor

3. O. D. Ilie, E. Paduraru, M. A. Robea, I. M. Balmus, R. Jijie, M. Nicoara, A. Ciobica, I. B. Nita, R. Dobrin and B. Doroftei, The Possible Role of Bifidobacterium longum BB536 and Lactobacillus rhamnosus HN001 on Locomotor Activity and Oxidative Stress in a Rotenone-Induced Zebrafish Model of Parkinson’s Disease, Oxidative Medicine and Cellular Longevity (2021) 9629102; 10.1155/2021/9629102. (AIS: 1.203, n : 10)

9.718

Research Article

The Possible Role of *Bifidobacterium longum* BB536 and *Lactobacillus rhamnosus* HN001 on Locomotor Activity and Oxidative Stress in a Rotenone-Induced Zebrafish Model of Parkinson's Disease

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4. I. A. Simionov, D. S. Cristea, S.M. Petrea, A. Mogodan, **R. Jijie**, E. Ciornea, M. Nicoara, M. Rahoveanu, V. Cristea, *Predictive Innovative Methods for Aquatic Heavy Metals Pollution based on Bioindicators in Support of Blue Economy in the Danube River Basin*, SUSTAINABILITY 13(16) (2021) 896; [10.3390/su13168936](https://doi.org/10.3390/su13168936). (AIS: 0.462, n : 9)

5.857

Article

Predictive Innovative Methods for Aquatic Heavy Metals Pollution Based on Bioindicators in Support of Blue Economy in the Danube River Basin

Ira-Adeline Simionov ^{1,*}, Dragoş Sebastian Cristea ², Ştefan-Mihai Petrea ^{3,*}, Alina Mogodan ³, Roxana Jijie ⁴, Elena Ciornea ⁵, Mircea Nicoară ⁵, Maria Magdalena Turek Rahoveanu ⁶ and Victor Cristea ¹

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Citation: Simionov, I.-A.; Cristea, D.S.; Petrea, Ş.-M.; Mogodan, A.; Jijie, R.; Ciornea, E.; Nicoară, M.; Turek

5. S. Strungaru, C. Pohontiu, M. Nicoară, C. Teodosiu, E. Baltag, **R. Jijie**, G. Plavan, O. Pacioglu and C. Faggio, *Response of aquatic macroinvertebrates communities to multiple anthropogenic stressors in a lowland tributary river*, **Environmental Toxicology and Pharmacology** (2021) 87:103687, [10.1016/j.etap.2021.103687](https://doi.org/10.1016/j.etap.2021.103687). (AIS: 0.707, n : 9)

7.491

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Response of aquatic macroinvertebrates communities to multiple anthropogenic stressors in a lowland tributary river

Stefan-Adrian Strungaru ^a, Corneliu Mihaita Pohontiu ^b, Mircea Nicoara ^{c,e,*}, Carmen Teodosiu ^d, Emanuel Stefan Baltag ^f, Roxana Jijie ^a, Gabriel Plavan ^c, Octavian Pacioglu ^g, Caterina Faggio ^{h,*}

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9.597



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Chemosphere



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GRAPHICAL ABSTRACT

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7. R. Jijie. G. Solcan, M Nicoara, D. Micu, S. A. Strungaru, *Antagonistic effects in zebrafish (Danio rerio) behavior and oxidative stress induced by toxic metals and deltamethrin acute exposure*, **Science of The Total Environment** 698 (2020) 134299, [10.1016/j.scitotenv.2019.134299](https://doi.org/10.1016/j.scitotenv.2019.134299).
(AIS: 1.304)

103.2



Antagonistic effects in zebrafish (*Danio rerio*) behavior and oxidative stress induced by toxic metals and deltamethrin acute exposure

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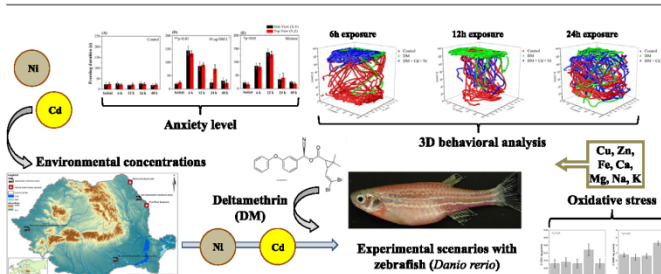
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HIGHLIGHTS

- The acute combined effects of Cd, Ni and DM on zebrafish
- Cd and Ni had no effects for the studied concentrations.
- DM induced oxidative stress and behavior impairment.
- DM in mixture with heavy metals was less toxic for the studied variables.

GRAPHICAL ABSTRACT



2020 – co-autor

8. M. A. Robea, **R. Jijie**, M. Nicoara, G. Plavan, A. S. Ciobica, C. Solcan, G. Audira, C. Hsiao, S. A. Strungaru, *Vitamin C Attenuates Oxidative Stress and Behavioral Abnormalities Triggered by Fipronil and Pyriproxyfen Insecticide Chronic Exposure on Zebrafish Juvenile*, **Antioxidants** 9(10) (2020) 944; <https://doi.org/10.3390/antiox9100944>.

(AIS: 0.910, n : 9)

8.844



Article

Vitamin C Attenuates Oxidative Stress and Behavioral Abnormalities Triggered by Fipronil and Pyriproxyfen Insecticide Chronic Exposure on Zebrafish Juvenile

Madalina Andreea Robea ^{1,†}, Roxana Jijie ², Mircea Nicoara ¹, Gabriel Plavan ¹, Alin Stelian Ciobica ^{2,*}, Carmen Solcan ³, Gilbert Audira ^{4,5}, Chung-Der Hsiao ^{4,5,*} and Stefan-Adrian Strungaru ^{6,†}

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† These authors contributed equally for this work.

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9. M. Balmus, R. O. Cojocariu, A. Ciobica, S. Strungaru, **R. Strungaru-Jijie**, A. Cantemir, C. Galatanu, L. Gorgan, *Preliminary Study on the Tears Oxidative Stress Status and Sleep Disturbances in Irritable Bowel Syndrome Patients*, **Oxidative Medicine and Cellular Longevity** **2020**, (2020) 4690713, [10.1155/2020/4690713](https://doi.org/10.1155/2020/4690713). (AIS: 1.203, n : 8)

12.147

Research Article

Preliminary Study on the Tears Oxidative Stress Status and Sleep Disturbances in Irritable Bowel Syndrome Patients

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2019 - prim autor

10. S. Strungaru¹, R. Jijie¹, M. Nicoara, G. Plavan and C. Faggio, *Micro-(nano) plastics in freshwater ecosystems: Abundance, toxicological impact and quantification methodology*, *TrAC Trends in Analytical Chemistry*, 110 (2019) 116-128, [10.1016/j.trac.2018.10.025](https://doi.org/10.1016/j.trac.2018.10.025). (AIS: 1.772)

131.32



Micro- (nano) plastics in freshwater ecosystems: Abundance, toxicological impact and quantification methodology

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ABSTRACT

Plastics entering the environment will persist and continue to degrade and fragment to smaller particles under the action of various environmental factors. These microplastics (MP) and nanoplastics (NP) are likely to pose a higher environmental impact, as well as they are more prone to adsorb organic contaminants and pathogens from the surrounding media, due to their higher surface area to volume ratio. Little known on their characteristics, fragmentation, distribution and impact on freshwater ecosystems. In order to respond to these open questions concerning the plastic particles dynamics and their environmental effects, detailed sampling strategies as well as an automated, rapid, cheap and reliable analytical technique suitable for routine analysis need to be developed. The review outlines the recent advances made on examination of the potential toxicological effects of MP and NP on freshwater biota, as well as the available analytical methods employed to identify and quantify them in environmental samples.

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1. Introduction

In recent years, the aquatic contaminants resulted from anthropogenic activities, especially contamination of marine and freshwater environments with plastic debris have drawn the scientific community and the public attention [1–12]. Due to the high production of plastics coupled with their physico-chemical properties such as buoyancy and very slow (bio)degradation rate, as well as with the ineffective and irresponsible waste collection and recycling, it is only a question of time when synthetic polymers became a global ecological and environmental problem [13–15]. Therefore, the huge quantity of different plastic types deposited in garbage landfills without any recycling plan can be easily transported in aquatic environments as plastic debris where is fragmented in smaller pieces under different degradation factors [16]. While, the plastic litter composed from large pieces can be easily removed from environment and sent to recycling process, the small

plastic particles (<5 mm) are almost impossible to be removed from environmental medium. Consequently, a more serious and widespread ecological impact is expected for the small plastic particles (<5 mm).

In spite of large number, approximately 30,000 different polymers registered for use in the European Union, the most common plastics, which account for about 81% of European plastic demand in 2016, are polystyrene (PS), poly(ethylene terephthalate) (PET), polyurethane (PUR), poly(vinyl chloride) PVC, polyethylene (PE) and polypropylene (PP) (Fig. 1). The polymeric materials have been designed to cover the different needs of thousands of end products, like packaging materials (39.9%), in building and construction (19.7%), automotive components (10%), electronic appliances (6.2%), household appliances and sporting equipment (4.2%) and agricultural materials (3.3%), with the remainder including furniture components, medical supplies etc. [17–19].

As a result of a great variety of polymeric materials, the chemical composition, density, size and shape of observed plastic debris in the environments varies significantly. The plastic particles can be classified by their shape into pellet, fragment, fiber, film and styrofoam and by their size in macroplastics (>25 mm), mesoplastics

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¹ These authors contributed equally.

2018 - prim autor

11. R. Jijie, A Barras, T. Teslaru, I. Topala, V. Pohata, M. Dobromir, T. Dumych, J. Bouckaert, S. Szunerits, N. Dumitrascu, R. Boukherroub, *Aqueous Medium-Induced Micropore Formation in Plasma Polymerized Polystyrene: An effective route to Inhibit Bacteria Adhesion*, **Journal of Materials Chemistry B** 6(2018) 3674-3683, 10.1039/c7tb02964k. (AIS: 0.916)

79.96

Journal of Materials Chemistry B



PAPER



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Aqueous medium-induced micropore formation in plasma polymerized polystyrene: an effective route to inhibit bacteria adhesion†

Roxana Jijie,^{a,b} Alexandre Barras,^b Teodora Teslaru,^a Ionut Topala,^a Valentin Pohoata,^b Marius Dobromir,^c Tetiana Dumych,^{b,d} Julie Bouckaert,^{b,d} Sabine Szunerits,^b Nicoleta Dumitrascu^a and Rabah Boukherroub^{b,*}

Plasma polymerized styrene (pPS) films were successfully synthesized by means of an atmospheric pressure plasma technique, using a mixture of argon gas and styrene vapor. The morphology and film thickness of the pPS films, deposited on 1 min argon plasma pre-treated glass substrates, were smooth and uniform without any visible features across the whole length of the substrates, and the films displayed a water contact angle of $\sim 83^\circ$. X-ray photoelectron spectroscopy (XPS) and Fourier transform infrared (FTIR) analysis confirmed the presence of oxygen-containing groups and the intact aromatic ring in the pPS coating. The obtained pPS films were stable for at least 30 days in air without any visible morphological degradation or chemical changes. However, the formation of a topographical pattern with micrometer lateral size and nanometer depth level was observed upon immersion in aqueous media for 72 hours. Micropore formation was believed to originate from the solubility of low cross-linked oligomers and their subsequent extraction in aqueous media. The influence of the microstructured pPS surface in mediating the attachment of eukaryotic and prokaryotic cells was further investigated. The micro-structured pPS surface influenced the adhesion and proliferation of mammalian cells. Furthermore, we could demonstrate that these films were efficient in the prevention of Gram-negative *Escherichia coli* (*E. coli*) and Gram-positive *Staphylococcus epidermidis* (*S. epidermidis*) adhesion and biofilm formation. Importantly, the viability of non-adherent cells and of planktonic bacteria was not affected. Post-coating of the microstructured pPS with biocompatible polydopamine did not impact on the antibacterial properties of the surface, suggesting that the polymer topography was the dominant factor. The non-biocidal pPS coating can be useful in applications where micro-organism colonization and biofilm formation need to be prevented, such as food packaging and medical equipment.

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rsc.li/materials-b

1. Introduction

The adhesion and retention of unwanted biological species onto surfaces is a serious concern in many areas, including biomedicine, food packaging and in different domains of industrial engineering, leading to hygienic and economic problems.

There is thus an urgent need for new coatings for preventing micro-organism adhesion and colonization of materials.

It is well-established that cell adhesion to a surface takes place in a number of steps and depends on the surface chemical composition and topography. In addition, compared with planktonic bacteria, bacteria living as a structured community of micro-organisms enclosed in a self-produced polymeric matrix that adheres to a surface are more resistant to the action of antibacterial agents and consequently difficult to eradicate.^{1–4}

In recent years, plasma polymerization of various organic compounds has become particularly attractive for the deposition of thin coatings on complex substrates under dry conditions.^{4–10} Plasma polymerization is a facile and versatile technique that has the advantage of changing the surface chemical functionality without affecting the bulk properties of the material. The surface properties such as chemical composition, roughness or wettability can be tailored, however,

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† Electronic supplementary information (ESI) available. See DOI: 10.1039/c7tb02964k

12. **R. Jijie**, A. Barras, J. Bouckaert, N. Dumitrascu, S. Szunerits and R. Boukherroub, *Enhanced antibacterial activity of carbon dots functionalized with ampicillin combined with visible light triggered photodynamic effects*, **Colloids and Surfaces B: Biointerfaces** 170 (2018) 347-354, [10.1016/j.colsurfb.2018.06.040](https://doi.org/10.1016/j.colsurfb.2018.06.040). (AIS: 0.688)

66.28



Enhanced antibacterial activity of carbon dots functionalized with ampicillin combined with visible light triggered photodynamic effects



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ABSTRACT

In the last years, carbon-based nanomaterials have attracted considerable attention in a wide range of fields, particularly in biomedicine, owing to their remarkable photo-physical and chemical properties. In this study, we demonstrate that amine-terminated carbon dots (CDs-NH₂) functionalized with ampicillin (AMP) offer a new perspective for antibacterial treatment. The amine-functionalized carbon dots were used as a carrier for immobilization and delivery of ampicillin (CDs-AMP) and as a visible light-triggered antibacterial material. Additionally, AMP immobilization on the CDs-NH₂ surface improves its stability in solution as compared to free AMP. The AMP conjugated CDs platform combines the antibacterial function of AMP and conserves the intrinsic theranostic properties of CDs-NH₂. Therefore, the AMP immobilized onto CDs-NH₂ surface together with the generation of moderate quantities of reactive oxygen species under visible light illumination are very effective to inactivate the growth of *Escherichia coli*.


2017 – co-autor

13. C. Gerber, I. Mihaila, D. Hein, A. Nastuta, **R. Jijie**, V. Pohoata and I. Topala, *Time Behaviour of Helium Atmospheric Pressure Plasma Jet Electrical and Optical Parameters*. **Applied Sciences** 7(8) 2017, p.812, [10.3390/app7080812](https://doi.org/10.3390/app7080812). (AIS: 0.338, n= 7)

6.468

Article

Time Behaviour of Helium Atmospheric Pressure Plasma Jet Electrical and Optical Parameters

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Roxana Jijie ¹, Valentin Pohoata ¹ and Ionut Topala ^{1,*}

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14. I. Mihaila, V. Pohoata, **R. Jijie**, A.V. Nastuta, I. Rusu and I. Topala, *Formation of positive ions in hydrocarbon containing dielectric barrier discharge plasma*, **Advances in Space Research** 58 (11) (2016) 2416–2423; /10.1016/j.asr.2016.08.010. (AIS: 0.45, n= 6)

8.666

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Advances in Space Research xxx (2016) xxx–xxx

**ADVANCES IN
SPACE
RESEARCH**
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Formation of positive ions in hydrocarbon containing dielectric barrier discharge plasmas

Ilarion Mihaila ^{a,1}, Valentin Pohoata ^{a,*,1}, Roxana Jijie ^{a,1}, Andrei Vasile Nastuta ^{a,b,1},
Ioana Alexandra Rusu ^{a,1}, Ionut Topala ^{a,1}

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Received 28 April 2016; received in revised form 26 July 2016; accepted 9 August 2016

Dedicated to the memory of Ioana Alexandra Rusu, colleague, teacher, and friend, who passed away on December 2015.

	3. Contracte de cercetare științifică obținute prin competiție derulate în ultimii 5 ani prin Uiversitate	Finanțare Internațională sau Națională membru echipa proiect: 25 puncte x (valoare grant în euro)/ 100.000 euro/nr membri echipă
		4

oct 2018 – feb 2021 (Cercetător științific – Post-DOC) - Procese integrate si sustenabile de depoluare a mediului, reutilizare a apelor uzate si valorificare a deseurilor (SUSTENVPRO); Proiect complex realizat in consortii CDI: PN-III-P1-1.2-PCCDI-2017-0245; Contract 26PCCDI/2018; Coordonator: prof. dr. habil. Mircea Nicoara; Valoare grant: **663.750 lei (144.293 euro)** ; Nr. membri echipa : 9.



CONTRACT INDIVIDUAL DE MUNCĂ
încheiat și înregistrat sub nr. **9810/28-09-2018**
în registrul general de evidență a salariaților sub numărul **5825**

A. Părțile contractului:

Angajator - UNIVERSITATEA "ALEXANDRU IOAN CUZA" IAȘI, cu sediul în Iași, B-dul Carol I nr.11, cod fiscal 4701126, telefon 40 232 201010, reprezentată legal prin **prof. univ. dr. Mihaela ONOFREI** în calitate de **Ordonator de Credite și, salariați - D-na. Jijie Roxana**, CNP 2890711226728, cetățenia **RO**, țara de proveniență **România -U.E.**, domiciliată în localitatea IAȘI, str. PLANTELOR, nr. 1, bloc 754, scara A, etaj 1, ap. 6, județul IAȘI, cod - posesor al actului de identitate C.I. seria **MZ** nr. **188969** eliberată de SPCLEP IAȘI la data de **27-06-2013**, având ca pregătire profesională **FACULTATEA DE FIZICA, UNIVERSITATEA "ALEXANDRU IOAN CUZA" din IAȘI**, am încheiat prezentul contract individual de muncă în baza dispozițiilor legale și în următoarele condiții asupra cărora am convenit:

B. Obiectul contractului:

desfășurarea, de către angajat și sub autoritatea angajatorului, a activităților stabilite conform prezentului contract și fișei postului, în condițiile stabilite conform prezentului contract individual de muncă, a regulamentului de ordine interioară și în cadrul Proiectului complex de cercetare cu titlul **„Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor”, acronim SUSTENVPRO, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 1: Evaluări complexe ale poluanților prioritari din diverse matrici de utilizare a apei și identificarea riscurilor asupra ecosistemelor și sănătății umane.**

C. Durata contractului:

b) determinată de **19 luni**, pe perioada cuprinsă între data **01-10-2018** și data de **30-04-2020** inclusiv, salariați, **Jijie Roxana** - urmând să înceapă activitatea la data de 01-10-2018;

D. Locul de muncă:

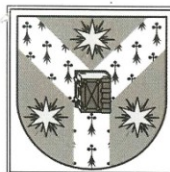
1. Activitatea se desfășoară la **DEPARTAMENTUL DE CERCETARE AL FACULTĂȚII DE BIOLOGIE** din sediul social, organizat al angajatorului Universitatea "Alexandru Ioan Cuza" din Iași.
2. În lipsa unui loc de muncă fix salariatul va desfășura activitatea astfel:

E. Felul muncii:

Funcția/meseria: CERCETĂTOR ȘTIINȚIFIC (S) / codul funcției **211102** conform Clasificării Ocupațiilor din România.

F. Atribuțiile postului:

Atribuțiile postului sunt prevăzute în fișa postului, anexă la Contractul Individual de Muncă și în cadrul Proiectului complex de cercetare cu titlul **„Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor”, acronim SUSTENVPRO, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 1: Evaluări complexe ale poluanților prioritari din diverse matrici de utilizare a apei și identificarea riscurilor asupra ecosistemelor și sănătății umane.**



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CONTRACT INDIVIDUAL DE MUNCĂ
încheiat și înregistrat sub nr. **9811/28-09-2018**
în registrul general de evidență a salariaților sub numărul **5825**

A. Părțile contractului:

Angajator - UNIVERSITATEA "ALEXANDRU IOAN CUZA" IAȘI, cu sediul în Iași, B-dul Carol I nr.11, cod fiscal 4701126, telefon 40 232 201010, reprezentată legal prin **prof. univ. dr. Mihaela ONOFREI** în calitate de **Ordonator de Credite** și, **salariata - D-na. Jijie Roxana**, CNP 2890711226728, cetățenia RO, țara de proveniență România -U.E., domiciliată în localitatea IAȘI, str. PLANTELOR, nr. 1, bloc 754, scara A, etaj 1, ap. 6, județul IAȘI, cod - posesor al actului de identitate C.I. seria **MZ** nr. **188969** eliberată de SPCLEP IAȘI la data de **27-06-2013**, având ca pregătire profesională **FACULTATEA DE FIZICA, UNIVERSITATEA "ALEXANDRU IOAN CUZA" din IAȘI**, am încheiat prezentul contract individual de muncă în baza dispozițiilor legale și în următoarele condiții asupra cărora am convenit:

B. Obiectul contractului:

desfășurarea, de către angajat și sub autoritatea angajatorului, a activităților stabilite conform prezentului contract și fișei postului, în condițiile stabilite conform prezentului contract individual de muncă, a regulamentului de ordine interioară și în cadrul Proiectului complex de cercetare cu titlul „*Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor*“, acronim *SUSTENVPRO*, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 3: *Valorificarea resurselor de biomasă pentru dezvoltarea de procese inovative de epurare a apelor uzate și eliminare a poluanților prioritari (organici și metale toxice).*

C. Durata contractului:

b) determinată de **27 luni**, pe perioada cuprinsă între data **01-10-2018** și data de **31-12-2020** inclusiv, salaria, **Jijie Roxana** - urmând să înceapă activitatea la data de 01-10-2018;

D. Locul de muncă:

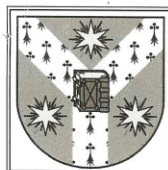
1. Activitatea se desfășoară la **DEPARTAMENTUL DE CERCETARE AL FACULTĂȚII DE BIOLOGIE** din sediul social, organizat al angajatorului Universitatea "Alexandru Ioan Cuza" din Iași.
2. În lipsa unui loc de muncă fix salariatul va desfășura activitatea astfel:

E. Felul muncii:

Funcția/meseria: **CERCETĂTOR ȘTIINȚIFIC (S)** / codul funcției **211102** conform Clasificării Ocupațiilor din România.

F. Atribuțiile postului:

Atribuțiile postului sunt prevăzute în fișa postului, anexă la Contractul Individual de Muncă și în cadrul Proiectului complex de cercetare cu titlul „*Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor*“, acronim *SUSTENVPRO*, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 3: *Valorificarea resurselor de biomasă pentru dezvoltarea de procese inovative de epurare a apelor uzate și eliminare a poluanților prioritari (organici și metale toxice).*



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CONTRACT INDIVIDUAL DE MUNCĂ
încheiat și înregistrat sub nr. **9812/28-09-2018**
în registrul general de evidență a salariaților sub numărul **5825**

A. Părțile contractului:

Angajator - UNIVERSITATEA "ALEXANDRU IOAN CUZA" IASI, cu sediul în Iasi, B-dul Carol I nr.11, cod fiscal 4701126, telefon 40 232 201010, reprezentată legal prin **prof. univ. dr. Mihaela ONOFREI** în calitate de **Ordonator de Credite** și,
salariata - D-na. Jijie Roxana, CNP 2890711226728, cetățenia RO, țara de proveniență România -U.E., domiciliată în localitatea IASI, str. PLANTELOR, nr. 1, bloc 754, scara A, etaj 1, ap. 6, județul IASI, cod - posesor al actului de identitate C.I. seria MZ nr. 188969 eliberată de SPCLEP IASI la data de 27-06-2013, având ca pregătire profesională **FACULTATEA DE FIZICA, UNIVERSITATEA "ALEXANDRU IOAN CUZA" din IASI**,
am încheiat prezentul contract individual de muncă în baza dispozițiilor legale și în următoarele condiții asupra cărora am convenit:

B. Obiectul contractului:

desfășurarea, de către angajat și sub autoritatea angajatorului, a activităților stabilite conform prezentului contract și fișei postului, în condițiile stabilite conform prezentului contract individual de muncă, a regulamentului de ordine interioară și în cadrul Proiectului complex de cercetare cu titlul *„Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor”, acronim SUSTENVPRO, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 5: Evaluarea sustenabilității proceselor de tratare/epurare a apei și valorificare a deșeurilor prin analiza ciclului de viață.*

C. Durata contractului:

b) determinată de **27 luni**, pe perioada cuprinsă între data **01-10-2018** și data de **31-12-2020** inclusiv, salariata, **Jijie Roxana** - urmând să înceapă activitatea la data de 01-10-2018;

D. Locul de muncă:

1. Activitatea se desfășoară la **DEPARTAMENTUL DE CERCETARE AL FACULTĂȚII DE BIOLOGIE** din sediul social, organizat al angajatorului Universitatea "Alexandru Ioan Cuza" din Iasi.
2. În lipsa unui loc de muncă fix salariatul va desfășura activitatea astfel:

E. Felul muncii:

Funcția/meseria: CERCETĂTOR ȘTIINȚIFIC (S) / codul funcției **211102** conform Clasificării Ocupațiilor din România.

F. Atribuțiile postului:

Atribuțiile postului sunt prevăzute în fișa postului, anexă la Contractul Individual de Muncă și în cadrul Proiectului complex de cercetare cu titlul *„Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor”, acronim SUSTENVPRO, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 5: Evaluarea sustenabilității proceselor de tratare/epurare a apei și valorificare a deșeurilor prin analiza ciclului de viață.*



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ACT ADITIONAL Nr. 4 / 30-12-2020
la CONTRACTUL INDIVIDUAL DE MUNCA Nr. 9810/28-09-2018
înregistrat la ITM sub numărul 5825

A. Partile contractului:

Angajator - UNIVERSITATEA "ALEXANDRU IOAN CUZA" din IASI, cu sediul în Iasi, B-dul Carol I nr.11, cod fiscal 4701126, telefon 40 232 201010, reprezentata legal prin **prof. univ. dr. Tudorel TOADER** în calitate de **Rector** și,

salariata - D-na. Strungaru-Jijie Roxana domiciliata în localitatea IASI, str. PLANTELOR, nr. 1, bloc 754, scara A, etaj 1, ap. 6, judetul IASI, cod - posesor al actului de identitate C.I. seria **MZ nr. 188969** eliberata de SPCLEP IASI la data de **27-06-2013**, CNP **2890711226728**, având funcția **CERCETATOR STIINTIFIC (S)**, am încheiat prezentul act aditional privind modificarile intervenite la contractul individual de munca după încheierea acestuia, asupra carora am convenit:

Art. 1. Având în vedere referatul nr. 21264 din 16.12.2020, aprobat prin Hotărârea Biroului Executiv al Consiliului de Administrație nr. C20 din data de 18.12.2020, privind modificarea duratei contractului, a normei de muncă și salariului pentru doamna Strungaru-Jijie Roxana, Cercetător științific în cadrul Proiectului complex de cercetare cu titlul „Procese integrate și sustenabile de depoluare a mediului, reutilizare a apelor uzate și valorificare a deșeurilor”, acronim *SUSTENVPRO*, contract de finanțare nr. 26PCCDI/01.03.2018 – Proiect component nr. 1: *Evaluări complexe ale poluanților prioritari din diverse matrici de utilizare a apei și identificarea riscurilor asupra ecosistemelor și sănătății umane, în perioada 01.01.2021- 31.03.2021*, art. C, art. H și art. J din contract se modifică după cum urmează:

C. Durata contractului:

Contractul individual de muncă se prelungește până la data de **31.03.2021**.

H. Durata muncii:

1. O normă întreagă, durata timpului de lucru fiind de **8 ore /zi, 40 ore/săptămână**.

a) Repartizarea programului de lucru se face după cum urmează: **8 ore/ zi**.

J. Salariul:

1. Salariul lunar brut: **3000 lei**

Art. 2. Celelalte clauze ale contractului individual de muncă rămân valabile. Prezentul act adițional face parte integrantă din contractul individual de muncă.

Prezentul act aditional s-a încheiat azi, **30-12-2020**, în **2 (doua) exemplare** fiecare fiind considerat ca original.

Angajator
Universitatea "Alexandru Ioan Cuza" din Iasi
Reprezentant legal,
Rector: **Prof. univ. dr. Tudorel TOADER**

Angajat:
Nume: **Strungaru-Jijie**
Prenume: **Roxana**
Semnatura
Data **30-12-2020**

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	6. Citări și recenzii ale creației de autori obținute în ultimii 5 ani (exclus autocitări/o citare se va cuantifica o singură dată)	în reviste de specialitate indexate <i>Web of Science</i> , <i>Clarivate Analytics</i> : (10 + 20 x AIS)/număr autori AIS-ul este al revistei care citează
<p>1. R. Jijie, G. Mihalache, M. Balmus, S. Strungaru, E. Baltag, A. Ciobica, M. Nicoara and C. Faggio, <i>Zebrafish as a Screening Model to Study the Single and Joint Effects of Antibiotics</i>, Pharmaceuticals 14(6) (2021) 578, 10.3390/ph14060578.</p> <p style="text-align: right;">(25.842)</p> <p><input type="checkbox"/> Zebrafish as a Screening Model to Study the Single and Joint Effects of Antibiotics 7 2021 R Jijie, G Mihalache, IM Balmus, SA Strungaru, ES Baltag, A Ciobica, ... Pharmaceuticals 14 (6), 578</p> <p>1. Hubená, P., Horký, P., Grabic, R., Grabicová, K., Douda, K., Slavík, O., Randák, T., <i>Prescribed aggression of fishes: Pharmaceuticals modify aggression in environmentally relevant concentrations</i> (2021) Ecotoxicology and Environmental Safety, 227, art. no. 112944, 10.1016/j.ecoenv.2021.112944. (AIS = 0.907, n =8) 3.517</p> <p>2. Blahova, J., Doubkova, V., Plhalova, L., Lakdawala, P., Medkova, D., Vecerek, V., Svobodova, Z., Faggio, C, <i>Embryotoxicity of selective serotonin reuptake inhibitors—comparative sensitivity of zebrafish (<i>Danio rerio</i>) and african clawed frog (<i>xenopus laevis</i>) embryos</i>, (2021) Applied Sciences (Switzerland), 11 (21), art. no. 10015, 10.3390/app112110015. (AIS = 0.409, n =8) 2.272</p> <p>3. Gallego-Ríos, S.E., Peñuela, G.A., Martínez-López, E., <i>Updating the use of biochemical biomarkers in fish for the evaluation of alterations produced by pharmaceutical products</i>, (2021) Environmental Toxicology and Pharmacology, 88, art. no. 103756, 10.1016/j.etap.2021.103756 (AIS = 0.706, n =8) 3.015</p> <p>4. Zhang, X.-Y., Liu, Y.-H., Liu, D.-Z., Xu, J.-Y., Zhang, Q., <i>Insulin-mimic components in acer truncatum leaves: Bio-guided isolation, annual variance profiling and regulating pathway investigated by omics</i>, (2021) Pharmaceuticals, 14 (7), art. no. 662, 10.3390/ph14070662. (AIS = 1.110, n =8) 4.025</p> <p>5. Li, Z., Junaid, M., Chen, G., Wang, J., <i>Interactions and associated resistance development mechanisms between microplastics, antibiotics and heavy metals in the aquaculture environment</i>, (2021) Reviews in Aquaculture, 10.1111/raq.12639. (AIS = 1.773, n =8) 5.682</p> <p>6. Medkova, D., Lakdawala, P., Hodkovicova, N., Blahova, J., Faldyna, M., Mares, J., Vaclavik, J., Doubkova, V., Hollerova, A., Svobodova, Z., <i>Effects of different pharmaceutical residues on embryos of fish species native to Central Europe</i>, (2021) Chemosphere, art. no. 132915, 10.1016/j.chemosphere.2021.132915. (AIS = 1.025, n =8) 3.812</p> <p>7. Li, Shengri, et al. "Integrative effects based on behavior, physiology and gene expression of tritiated water on zebrafish." Ecotoxicology and Environmental Safety 225 (2021): 112770, 0.1016/j.ecoenv.2021.112770. (AIS = 0.907, n =8) 3.517</p>		

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(14.155)

☐ **Zebrafish as a Screening Model to Study the Single and Joint Effects of Antibiotics**

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2021

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Pharmaceuticals 14 (6), 578

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☐ 5 **Preliminary investigation of lower Danube pollution caused by potentially toxic metals**

Simionov, I.A; Cristea, D.S; (...); Strungaru, S.A
Feb 2021 | CHEMOSPHERE 264

The current study aims to assess the pollution status of the European river-sea system lower Danube River-Danube Delta-North West Black Sea, through an integrated analysis of metal concentrations in water, sediments and fish community. The Danube flows through numerous industrial cities and receives a significant amount of pollutants due to the re ... [Show more](#)

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☐ 7
 Antagonistic effects in zebrafish (Danio rerio) behavior and oxidative stress induced by toxic metals and deltamethrin acute exposure

Jijie, R; Solcan, G; (...); Strungaru, SA
 Jan 1 2020 | SCIENCE OF THE TOTAL ENVIRONMENT 698

In natural environments, the aquatic organisms are exposed to complex mixtures of chemicals which may originate from natural sources or from anthropogenic activities. In this context, the aim of the study was to assess the potential effects that might occur when aquatic organisms are simultaneously exposed to multiple chemicals. For that, we ... [Show more](#)

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Citations
Robea, MA; Jijie, R; (-); Strungaru, SA
Oct 2020 | **ANTIOXIDANTS** 9 (10) **87**
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Enriched Cited References
Chronic exposure to synthetic insecticides in the early life of a child can lead to a series of disorders. Several causes as parental age, maternal smoking, birth complications, and exposure to toxins such as insecticides on childhood can lead to Autism spectrum disorder (ASD) occurrence. The aim of this study was to evaluate the potential protective ro ... [Show more](#)
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Aqueous medium-induced micropore formation in plasma polymerized polystyrene: an effective route to inhibit bacteria adhesion

[Jijie, R; Barras, A; \(...\); Boukherroub, R](#)
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Plasma polymerized styrene (pPS) films were successfully synthesized by means of an atmospheric pressure plasma technique, using a mixture of argon gas and styrene vapor. The morphology and film thickness of the pPS films, deposited on 1 min argon plasma pre-treated glass substrates, were smooth and uniform without any visible features across th ... [Show more](#)

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(259.376)

☐ 17

Enhanced antibacterial activity of carbon dots functionalized with ampicillin combined with visible light triggered photodynamic effects

[Jijie, R; Barras, A; \(...\); Boukherroub, R](#)
 Oct 1 2018 | [COLLOIDS AND SURFACES B-BIOINTERFACES](#) 170 , pp.347-354

In the last years, carbon-based nanomaterials have attracted considerable attention in a wide range of fields, particularly in biomedicine, owing to their remarkable photo-physical and chemical properties. In this study, we demonstrate that amine-terminated carbon dots (CDs-NH2) functionalized with ampicillin (AMP) offer a new perspective for a ... [Show more](#)

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Time Behaviour of Helium Atmospheric Pressure Plasma Jet Electrical and Optical Parameters

Gerber, I.C; Mihaila, I.; (...); Topala, I

Aug 2017 | APPLIED SCIENCES-BASEL 7 (8)

Low temperature plasma jets gained increased interest in the last years as a potential device in many life science applications, including here human or veterinary medicine. Standardisation of plasma sources and biological protocols are necessary for quality assurance reasons, due to the fact that this type of atmospheric pressure plasma source is av: ... [Show more](#)

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☐ 30 Formation of positive ions in hydrocarbon containing dielectric barrier discharge plasmas

[Mihaila, I.; Pohoata, V.; \(-\); Topala, I.](#)
 Dec 1 2016 | [ADVANCES IN SPACE RESEARCH](#) 58 (11) , pp.2416-2423

Low temperature atmospheric pressure plasma devices are suitable experimental solutions to generate transitory molecular environments with various applications. In this study we present experimental results regarding the plasma chemistry of dielectric barrier discharges (DBD) in helium - hydrogen (0.1%) - hydrocarbons (1.2%) mixtures. Four ... [Show more](#)

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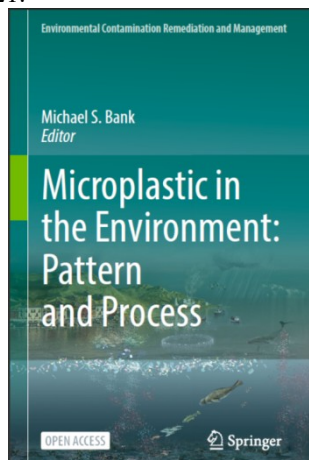
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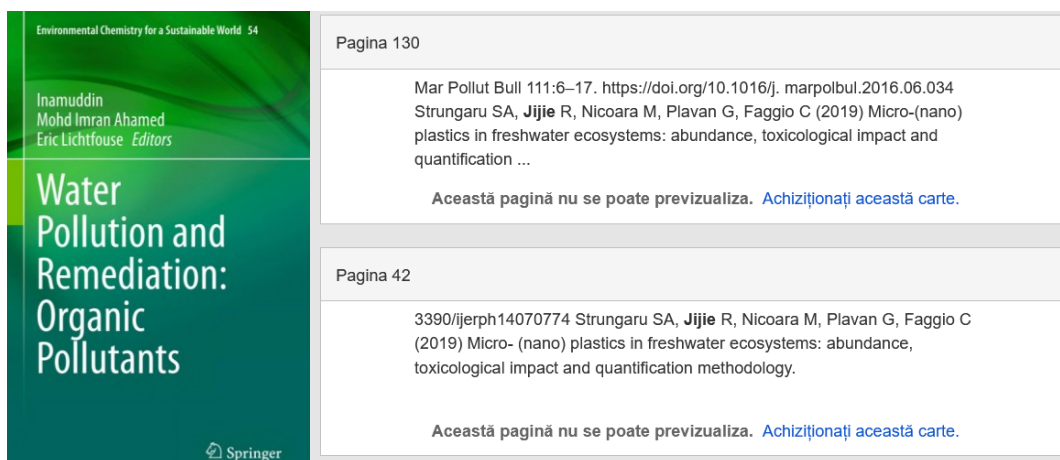
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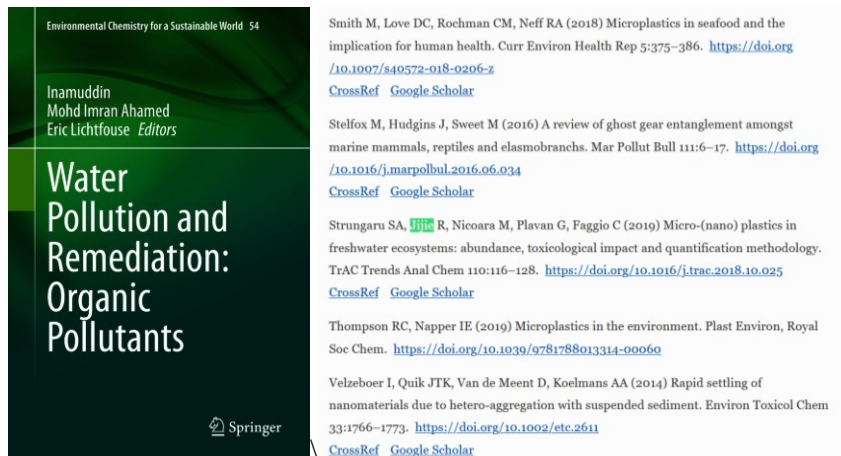
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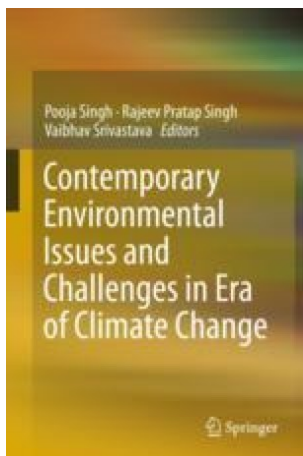


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