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### Lista de lucrari stiintifice

#### 1. Articole în reviste cotate ISI, ca autor principal

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## 2. Articole în reviste cotate ISI, ca și contributor

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## 9. Participări la conferințe

### Comunicare orală

1. **HOLBAN**, Alina Maria; Host stress hormone noradrenaline interferes with Pseudomonas aeruginosa social behaviors in an iron dependent manner; FEBS 14th YSF; 27:08:2014-30:08:2014; Paris, Franta.
2. Alina Maria **Holban**, Mariana Carmen Chifiriuc, Veronica Lazăr. The role of catecholamine stress hormones in Pseudomonas aeruginosa-host communication. DIASPORA – Rom. Archiv. of Microbiol. and Immunol., 71(3):140-141.2013, Cantacuzino, Bucuresti, Romania. **(premiul I)**
3. Alina Maria **Holban**, Stephan Heeb, Mariana Carmen Chifiriuc, Paul Williams, Veronica Lazar. Impactul hormonului de stres catecholaminic noradrenalina asupra cresterii si virulentei Pseudomonas aeruginosa. Sesiunea de comunicare studenteasca a Facultatii de Biologie, Universitatea din Bucuresti, 2013. **(premiul I)**
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5. Gabriella Cincotti, Massimiliano Lucidi, Stefan G Stanciu, Denis E Tranca, Alina M **Holban**, Lorenzo Nichele, George A Stanciu. Correlative Multimodal Approach Based on Optical Near-Field and Topographic Imaging to Characterize the Morphology of ESKAPE Pathogen Bacteria at Nanoscale. 2019 21st International Conference on Transparent Optical Networks (ICTON).
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9. Marinescu Florica, Grumezescu Alexandru Mihai, Popovici Adelina, Lia Maria Ditu, Carmen Curutiu, Veronica Lazar, **Holban** Alina Maria. Inorganic nanoparticles modulate growth and anti-pathogenic potential of microbiota isolates with probiotic potential. 22nd Romanian International Conference on Chemistry and Chemical Engineering Sinaia/ ROMANIA 7 – 9. 09. 2022
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11. **Holban** Alina Maria. Functionalized Nanoparticles in Fighting Respiratory Pathogens. Taiwan-Thailand Joint Conference on Medical Technology (TTMT) Kaohsiung/Taiwan/online 08- 09.12.2022 **(Key note speaker)**
12. **Holban** Alina Maria, Alexandru Mihai Grumezescu. Cold Plasma Treatment of Enamel-like Hydroxyapatite Model: New Tool in Dental Medicine. Taiwan-Thailand Joint Conference on Medical Technology (TTMT) Kaohsiung/Taiwan/online 08-09.12.2022
13. Carmen Curutiu, Luc Tran Van, Iinca Hagi, Adelina Popovici, Florica Marinescu, Irina Gheorghe, Lia Mara Ditu, Alina-Maria **Holban**, Tatiana Eugenia Sesan, Veronica Lazar. Antimicrobial activity of essential oils against resistant Pseudomonas aeruginosa strains. 22nd Romanian International Conference on Chemistry and Chemical Engineering Sinaia/ ROMANIA 7 – 9. 09. 2022
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  59. **Holban**, A.M., Grumezescu, A.M., Capraru, P., Asaftei, M., Ditu, L.M., Curutiu, C., Puscas, N., Lazar, V., Interference of oxide nanoparticles with microbiota isolated Enterococcus sp. strains. E-MRS Spring Meeting 2022 Strasbourg/Franta/online 30.05.2022 – 03.06.2022

60. Alina Maria **Holban**, Maria Zarif, Sorin Vizireanu, Alexandru Titus Farcasiu, Alexandra Birca, Florica Marinescu, Nichita Puscas, Alexandru Mihai Grumezescu, Cold plasma treatment to remove bacterial biofilms: applications in dentistry and medical implants. 32nd European Congress of Clinical Microbiology & Infectious Diseases Lisabona/Portugalia
61. Alina Maria **Holban**, Alexandru Mihai Grumezescu, Lia Mara Ditu, Carmen Curutiu, Valentina Grumezescu, Van Luc Tran, Veronica Lazar, Irina Gheorghe. Inorganic nanoparticles functionalized with Eugenol to Modulate Virulence in Pseudomonas aeruginosa Clinical isolates. 32nd European Congress of Clinical Microbiology & Infectious Diseases Lisabona/Portugalia 22.04.2022 – 27.04.2022
62. **Holban**, A.M., Grumezescu., Ditu, L.M, Curutiu, C., Lazar, V., Chifiriuc M.C. Inorganic nanoparticles alter growth and antipathogenic effects of probiotic Lactobacillus sp. strains. FEMS 2022 conference. Belgrad/Serbia 29.06.2022 – 03.07.2022
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## 10. Lucrări publicate in extenso în volumele unor conferințe

1. Liliana Marinescu, Angela Spoiala, Ecaterina Andronescu, Anton Ficai, Denisa Ficai, Alina-Maria **Holban**, Ovidiu Oprea. The Antibacterial Action of Various Silver Nanoparticles Used for the Stone Treatment. Proceedings, 57, 81; doi:10.3390/proceedings2020057081, 2020.
2. Stan M.S.; Nica I.C.; Dinischiotu A.; Grumezescu V.; Stoica A.E.; **Holban** A.M.; Grumezescu A. Novel Coatings Based on Nanostructured Cefepime-Functionalized Magnetite for Implantable Devices. Mater. Proc., 2, 19, 2020.
3. Nica I.C.; Stan M.S.; Dinischiotu A.; Grumezescu V.; Stoica A.E.; **Holban** A.; Grumezescu A.M. New Advances in Fibroblast Growth Factor-Based Coatings for Hip Replacement Implants. Mater. Proc., 2, 9, 2020.
4. G.A. Stanciu; D. E. Tranca; R. Hristu; S. G. Stanciu; A. M. **Holban**; A. Toma; C. Stoichita. A New Technique in Scanning Near Field Optical Microscopy Used for Investigations on the Biological Samples," 20th International Conference on Transparent Optical Networks (ICTON), Bucharest, pp. 1-3, doi: 10.1109/ICTON.2018.8473723, 2018.

## 11. Participare la saloane de inventică

1. IDEA (IDEA, Novelty, Invention and craft) International Exhibition, Abony, Hungary – Innovative multifunctional composites for the protection of cultural heritage objects (InHeritage) – Radu Claudiu Fierascu, Alina Melinescu, Lia-Mara Ditu, Irina Fierascu, Denisa Ficai, Alina Maria **Holban**, Toma Fistos, Anton Ficai, Carmen Curutiu (Gold medal) 2022
2. International Exhibition of Inventions and Innovations “TRAIAN VUIA – 2022 Timisoara – Innovative multifunctional composites for the protection of cultural heritage objects (InHeritage) – Radu Claudiu Fierascu, Alina Melinescu, Lia-Mara Ditu, Irina Fierascu, Denisa Ficai, Alina Maria **Holban**, Toma Fistos, Anton Ficai, Carmen Curutiu (Gold medal)
3. 7th International Inventions Fair – ISIF’22 – Innovative multifunctional composites for the protection of cultural heritage objects (InHeritage) – Radu Claudiu Fierascu, Alina Melinescu, Lia-Mara Ditu, Irina Fierascu, Denisa Ficai, Alina Maria **Holban**, Toma Fistos, Anton Ficai, Carmen Curutiu (Gold medal)
4. EUROINVENT 2023 – Hydrophobic coating with self-cleaning and antimicrobial properties for artificial elements of vernacular constructions and method of obtaining it – Radu Claudiu Fierascu, Toma Fistos, Irina Fierascu, Alina Melinescu, Anton Ficai, Denisa Ficai, Lia Mara Ditu, Carmen Curutiu (Gold medal, awards from INOE 2000, Inventarium Science Portugal, special delegation award – ICPE-CA, EUROINVENT Grand Award)
5. INVENTICA 2023 – Hydrophobic coating with self-cleaning and antimicrobial properties for artificial elements of vernacular constructions and method of obtaining it – Radu Claudiu Fierascu, Toma Fistos, Irina Fierascu, Alina Melinescu, Anton Ficai, Denisa Ficai, Lia Mara Ditu, Carmen Curutiu (Gold medal, awards from CITT-UPT, Moldova Technical University)
6. International Exhibition Traian Vuia 2023, Timisoara – Hydrophobic coating with self-cleaning and antimicrobial properties for artificial elements of vernacular constructions and method of obtaining it – Radu Claudiu Fierascu,

Toma Fistos, Irina Fierascu, Alina Melinescu, Anton Ficai, Denisa Ficai, Lia Mara Ditu, Carmen Curutiu (Silver medal, Diploma of Excellence INOE 2000)

## 12. Brevete de inventie

1. RO134197 (A2) / 2020-06-30 - PROCEDEU DE OBTINERE A UNOR HIDROGELURI COMPOZITE PE BAZĂ DE COLAGEN ȘI NANOPARTICULE DE ARGINT PENTRU PREVENIREA INFECȚIILOR DE PLAGĂ. Inventatori: BLEOTU CORALIA [RO]; DRAGU LAURA DENISA [RO]; MATEI LILIA [RO]; DIACONU CARMEN CRISTINA [RO]; CHIVU-ECONOMESCU MIHAELA [RO]; ZURAC SABINA ANDRADA [RO]; NEAGU ANA IULIA [RO]; NECULA LAURA GEORGIANA [RO]; **HOLBAN** ALINA MARIA [RO]; DITU LIA MARA [RO]; CHIFIRIUC MARIANA-CARMEN [RO]; LAZĂR VERONICA [RO]; GRADISTEANU GRAȚIELA [RO]; NEACSU IONELA-ANDREEA [RO]; ENE VLADIMIR LUCIAN [RO]; ANDRONESCU ECATERINA [RO]; FICAI ANTON [RO]; BALAS CRISTINA [RO]; CIOBANU CRISTINA [RO]; IRIMIA LAURENȚIU CEZAR [RO]; DRAGAN STELA DANIELA [RO], Număr cerere de brevet RO20180001009 20181129, Clasificare: - internațional: A61K35/12
2. RO135653 (A0) / 2022-04-29 - SOLUȚII DE IMPREGNARE PE BAZĂ DE SILOXANI CU ROL DE CURĂȚARE ȘI CONSERVARE PENTRU SUBSTRATURI NATURALE ȘI SINTETICE. Inventatori: MARINESCU LILIANA [RO]; BOANȚĂ LAURA-FLORENTINA [RO]; FICAI ANTON [RO]; FICAI DENISA [RO]; ANDRONESCU ECATERINA [RO]; CHIFIRIUC CARMEN [RO]; **HOLBAN** ALINA-MARIA [RO], Număr cerere de brevet: RO20210000356 20210622, Clasificare: - internațional: C04B41/68; C09K3/18, [https://ro.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=ro\\_RO&FT=D&date=20220429&CC=RO&NR=135653A0&KC=A0](https://ro.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=ro_RO&FT=D&date=20220429&CC=RO&NR=135653A0&KC=A0)
3. RO A202200310 / 08-06-2022. METODĂ CU PLASMĂ LA PRESIUNE ATMOSFERICĂ PENTRU ÎNDEPĂRTAREA BIOFILMELOR MICROBIENE DEZVOLTATE PE DIFERITE SUBSTRATURI; Inventatori: Alina Maria **Holban**, Maria Elena Zarif, Sorin Vizireanu, Sasa Alexandra Yehia, Alexandra Birca, Alexandru Mihai Grumezescu, Alexandru Titus Farcasiu, Carmen Curutiu, Lia Mara Ditu, Mariana Carmen Chifiriuc, Gheorghe Dinescu; A100310, Link: <http://pub.osim.ro/publication-server/document?PN=RO136024%20RO%20136024&iDocId=16278&iPosition=0&iFormat=0>

## 13. Secvente genice depuse in GenBank

1. Magdalena G.L.M., Luca,C.M.N., **Holban**, A.M.M. and Savu,L.Y., ARP-like gene (CG7013) from Drosophila melanogaster, an ortholog of human ARP oncogene is an essential gene for normal development and viability/ Mutant Drosophila melanogaster ARP-like gene, ARP-like-delta1114 allele, partial sequence, <http://www.ncbi.nlm.nih.gov/nuccore/260101098> , GenBank id: GQ853677.
2. Magdalena Georgescu, L.M.G., Luca, C.M.N., **Holban**, A.M.M. and Savu, L.Y., ARP-like gene (CG7013) from Drosophila melanogaster, an ortholog of human ARP oncogene is an essential gene for normal development and viability/ Mutant Drosophila melanogaster strain C18.2 ARP-like gene, ARP-like-delta302 allele, partial sequence, <http://www.ncbi.nlm.nih.gov/nuccore/260101099>, GenBank id: GQ853678.

