

Holban Alina-Maria

Facultatea de Biologie, Universitatea din Bucuresti

alina.m.holban@bio.unibuc.ro

Lista de lucrari stiintifice

1. Articole în reviste cotate ISI, ca autor principal

1. Bîrcă AC, Gherasim O, Niculescu A-G, Grumezescu AM, Neacșu IA, Chircov C, Vasile BȘ, Oprea OC, Andronescu E, Stan MS, Curutiu C, Ditu LM, **Holban** AM. A Microfluidic Approach for Synthesis of Silver Nanoparticles as a Potential Antimicrobial Agent in Alginate–Hyaluronic Acid-Based Wound Dressings. *International Journal of Molecular Sciences*. 2023; 24(14):11466. <https://doi.org/10.3390/ijms241411466> AI = 0.8, citari = 1
2. Stoica AE, Albuleț D, Bîrcă AC, Iordache F, Fikai A, Grumezescu AM, Vasile BȘ, Andronescu E, Marinescu F, **Holban** AM. Electrospun Nanofibrous Mesh Based on PVA, Chitosan, and Usnic Acid for Applications in Wound Healing. *International Journal of Molecular Sciences*. 2023; 24(13):11037. <https://doi.org/10.3390/ijms241311037> AI = 0.8, citari = 1
3. Chircov C, Mincă M-A, Serban AB, Bîrcă AC, Dolete G, Ene V-L, Andronescu E, **Holban** A-M. Zinc/Cerium-Substituted Magnetite Nanoparticles for Biomedical Applications. *International Journal of Molecular Sciences*. 2023; 24(7):6249. <https://doi.org/10.3390/ijms24076249> AI = 0.8, citari = 1
4. Motelica L, Oprea O-C, Vasile B-S, Fikai A, Fikai D, Andronescu E, **Holban** AM. Antibacterial Activity of Solvothermal Obtained ZnO Nanoparticles with Different Morphology and Photocatalytic Activity against a Dye Mixture: Methylene Blue, Rhodamine B and Methyl Orange. *International Journal of Molecular Sciences*. 2023; 24(6):5677. <https://doi.org/10.3390/ijms24065677> AI = 0.8, citari = 13
5. Dorcioman G, Hudiță A, Gălățeanu B, Craciun D, Mercioniu I, Oprea OC, Neguț I, Grumezescu V, Grumezescu AM, Dițu LM, **Holban** AM. Magnetite-Based Nanostructured Coatings Functionalized with Nigella sativa and Dicloxacillin for Improved Wound Dressings. *Antibiotics*. 2023; 12(1):59. <https://doi.org/10.3390/antibiotics12010059> AI = 0.1, citari = 0
6. Motelica L, Vasile B-S, Fikai A, Surdu A-V, Fikai D, Oprea O-C, Andronescu E, Jinga DC, **Holban** AM. Influence of the Alcohols on the ZnO Synthesis and Its Properties: The Photocatalytic and Antimicrobial Activities. *Pharmaceutics*. 2022; 14(12):2842. <https://doi.org/10.3390/pharmaceutics14122842> AI=1.3 citari=21
7. Hudiță A, Grumezescu V, Gherasim O, Grumezescu AM, Dorcioman G, Neguț I, Oprea O-C, Vasile BȘ, Gălățeanu B, Curuțiu C, **Holban** AM. MAPLE Processed Nanostructures for Antimicrobial Coatings. *International Journal of Molecular Sciences*. 2022; 23(23):15355. <https://doi.org/10.3390/ijms232315355> AI = 0.8, citari = 0
8. **Holban** AM, Gregoire CM, Gestal MC. Conquering the host: Bordetella spp. and Pseudomonas aeruginosa molecular regulators in lung infection. *Front Microbiol*. 2022 Sep 26;13:983149. doi: 10.3389/fmicb.2022.983149. AI = 1.4, citari = 3
9. Lazar V, **Holban** AM*, Curutiu C, Ditu LM. Modulation of Gut Microbiota by Essential Oils and Inorganic Nanoparticles: Impact in Nutrition and Health. *Front Nutr*. 2022 Jul 8;9:920413. doi: 10.3389/fnut.2022.920413. PMID: 35873448; PMCID: PMC9305160. AI = 0.9, citari = 5
10. Georgeta Voicu, Georgiana-Andreea Tiuca, Alina-Ioana Badanoiu, Alina-Maria **Holban**. Nano and mesoscopic SiO₂ and ZnO powders to modulate hydration, hardening and antibacterial properties of portland cements. *Journal of Building Engineering*, Volume 57, 2022, 104862, ISSN 2352-7102, <https://doi.org/10.1016/j.jobe.2022.104862>. AI = 1.3, citari = 8
11. Marinescu L, Fikai D, Fikai A, Oprea O, Nicoara AI, Vasile BS, Boanta L, Marin A, Andronescu E, **Holban** A-M. Comparative Antimicrobial Activity of Silver Nanoparticles Obtained by Wet Chemical Reduction and Solvothermal Methods. *International Journal of Molecular Sciences*. 2022; 23(11):5982. <https://doi.org/10.3390/ijms23115982> AI = 0.8, citari = 9
12. Zarif ME, Yehia SA, Biță B, Sătulu V, Vizireanu S, Dinescu G, **Holban** AM*, Marinescu F, Andronescu E, Grumezescu AM, et al. Atmospheric Pressure Plasma Activation of Hydroxyapatite to Improve Fluoride Incorporation and Modulate Bacterial Biofilm. *International Journal of Molecular Sciences*. 2021; 22(23):13103. <https://doi.org/10.3390/ijms222313103> AI = 0.8, citari = 2

13. **Holban** AM, Farcasiu C, Andrei OC, Grumezescu AM, Farcasiu AT. Surface Modification to Modulate Microbial Biofilms-Applications in Dental Medicine. *Materials* (Basel). 2021 Nov 18;14(22):6994. doi: 10.3390/ma14226994. AI = 0.8, citari = 12
14. Motelica L, Fikai D, Oprea O-C, Fikai A, Ene V-L, Vasile B-S, Andronescu E, **Holban** A-M. Antibacterial Biodegradable Films Based on Alginate with Silver Nanoparticles and Lemongrass Essential Oil—Innovative Packaging for Cheese. *Nanomaterials*. 2021; 11(9):2377. <https://doi.org/10.3390/nano11092377> AI = 0.7, citari = 47
15. Lazar V, **Holban** AM*, Curutiu C, Chifiriuc MC. Modulation of Quorum Sensing and Biofilms in Less Investigated Gram-Negative ESKAPE Pathogens. *Front Microbiol*. 2021 Jul 29;12:676510. doi: 10.3389/fmicb.2021.676510. AI = 1.4, citari = 18
16. Motelica L, Fikai D, Oprea O, Fikai A, Trusca R-D, Andronescu E, **Holban** AM. Biodegradable Alginate Films with ZnO Nanoparticles and Citronella Essential Oil—A Novel Antimicrobial Structure. *Pharmaceutics*. 2021; 13(7):1020. <https://doi.org/10.3390/pharmaceutics13071020> AI = 1.3, citari = 56
17. Rayyif SMI, Mohammed HB, Curuțiu C, Bîrcă AC, Grumezescu AM, Vasile BŞ, Dițu LM, Lazăr V, Chifiriuc MC, Mihaescu G, **Holban** AM*. ZnO Nanoparticles-Modified Dressings to Inhibit Wound Pathogens. *Materials* (Basel). 2021 Jun 4;14(11):3084. doi: 10.3390/ma14113084. AI = 0.8, citari = 6
18. Mohammed HB, Rayyif SMI, Curutiu C, Birca AC, Oprea O-C, Grumezescu AM, Ditu L-M, Gheorghe I, Chifiriuc MC, Mihaescu G, **Holban** AM*. Eugenol-Functionalized Magnetite Nanoparticles Modulate Virulence and Persistence in *Pseudomonas aeruginosa* Clinical Strains. *Molecules*. 2021; 26(8):2189. <https://doi.org/10.3390/molecules26082189> AI = 0.1, citari = 22
19. Liliana Marinescu, Denisa Fikai, Ovidiu Oprea, Alexandru Marin, Anton Fikai, Ecaterina Andronescu and Alina-Maria **Holban**. Optimized Synthesis Approaches of Metal Nanoparticles with Antimicrobial Applications. *Journal of Nanomaterials*, 2020, 1-14, <https://doi.org/10.1155/2020/6651207> AI = 0.4, citari = 21
20. Mihai Antonio David; Chircov Cristina; Grumezescu Alexandru Mihai; **Holban** Alina Maria. Magnetite Nanoparticles and Essential Oils Systems for Advanced Antibacterial Therapies. *International Journal Of Molecular Sciences*, Volume: 21 Issue: 19, DOI: 10.3390/ijms21197355, 2020. AI = 0.8, citari = 20
21. Bogdan Stefan Vasile, Alexandra Catalina Birca, Mihaela Carmen Musat, Alina Maria **Holban**. Wound Dressings Coated with Silver Nanoparticles and Essential Oils for The Management of Wound Infections. *Materials*, 13, 1682; doi:10.3390/ma13071682, 2020. AI = 0.8 citari = 13
22. Georgeta Voicu, Dana Miu, Cristina-Daniela Ghitulica, Sorin-Ion Jinga, Adrian-Ionut Nicoara, Cristina Busuioc, Alina-Maria **Holban**. Co doped ZnO thin films deposited by spin coating as antibacterial coating for metallic implants. *Ceramics International* 46, 3904–3911, 2020. AI = 0.5 citari = 30
23. Oana Gherasim, Alexandru Mihai Grumezescu, Valentina Grumezescu, Florin Iordache, Bogdan Stefan Vasile, Alina Maria **Holban**. Bioactive Surfaces of Polylactide and Silver Nanoparticles for the Prevention of Microbial Contamination. *Materials*, 13, 768; doi:10.3390/ma13030768, 2020. AI = 0.8 citari = 19
24. Cristina Beiu, Calin Giurcaneanu, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Liliana Gabriela Popa, Mara Mădălina Mihai. Nanosystems for Improved Targeted Therapies in Melanoma. *J. Clin. Med.*, 9, 318; doi:10.3390/jcm9020318, 2020. AI = 0.1 citari = 18
25. Carmen Curutiu, Lia Mara Ditu, Alexandru Mihai Grumezescu, Alina Maria **Holban**. Polyphenols of Honeybee Origin with Applications in Dental Medicine. *Antibiotics*, 9, 856; doi:10.3390/antibiotics9120856, 2020. AI = 0.1 citari = 6
26. Ludmila Motelica, Aurelian Popescu, Anca-Gabriela Răzvan, Ovidiu Oprea, Roxana-Doina Truscă, Bogdan-Stefan Vasile, Florina Dumitru, Alina-Maria **Holban**. Facile Use of ZnO Nanopowders to Protect Old Manual Paper Documents. *Materials*, 13, 5452; doi:10.3390/ma13235452, 2020. AI = 0.8 citari = 16
27. Valentina Grumezescu, Irina Negut, Oana Gherasim, Alexandra Catalina Birca, Alexandru Mihai Grumezescu, Ariana Hudita, Bianca Galateanu, Marieta Costache, Ecaterina Andronescu, Alina Maria **Holban**. Antimicrobial applications of MAPLE processed coatings based on PLGA and lincomycin functionalized magnetite nanoparticles. *Applied Surface Science* 484, 587–599, 2019. AI = 0.6 citari=12
28. Cristina Chircov, Alexandru Mihai Grumezescu, Alina Maria **Holban**. Magnetic Particles for Advanced Molecular Diagnosis. *Materials*, 12, 2158; doi:10.3390/ma12132158, 2019. AI = 0.8 citari=13
29. Mara Madalina Mihai, Monica Beatrice Dima, Bogdan Dima, Alina Maria **Holban**. Nanomaterials for Wound Healing and Infection Control. *Materials*, 12, 2176; doi:10.3390/ma12132176, 2019. AI = 0.8 citari = 191
30. Ioannis L. Liakos, Florin Iordache, Riccardo Carzino, Alice Scarpellini, Michele Oneto, Paolo Bianchini, Alexandru Mihai Grumezescu, Alina Maria **Holban**. Cellulose acetate - essential oil nanocapsules with antimicrobial activity for biomedical applications. *Colloids and Surfaces B: Biointerfaces* 172, 471–479, 2018. AI=0.8 citari = 31

31. Valentina Grumezescu, Irina Negut, Alexandru Mihai Grumezescu, Anton Ficai, Gabriela Dorcioman, Gabriel Socol, Florin Iordache, Roxana Trusca, Bogdan Stefan Vasile, Alina Maria **Holban**. MAPLE fabricated coatings based on magnetite nanoparticles embedded into biopolymeric spheres resistant to microbial colonization. *Applied Surface Science* 448, 230–236, 2018. AI = 0.6 citari=11
32. Mara Mădălina Mihai, Mădălina Preda, Iulia Lungu, Monica Cartelle Gestal, Mircea Ioan Popa, Alina Maria **Holban**. Nanocoatings for Chronic Wound Repair—Modulation of Microbial Colonization and Biofilm Formation. *Int. J. Mol. Sci.*, 19, 1179; doi:10.3390/ijms19041179, 2018. AI = 0.8 citari=61
33. Madalina Mihalache, Ovidiu Oprea, Cornelia Guran, Alina M. **Holban**. Synthesis, characterization, and biological activity of some complex combinations of nickel with a-ketoglutaric acid and 1-(o-tolyl)biguanide. *C. R. Chimie* 21, 32e40, 2018. AI = 0.1 citari=1
34. **Holban** AM, Bleotu C, Chifiriuc MC, Lazar V. Phenotypic and Genetic Evaluation of the Influence of *Pseudomonas aeruginosa* Culture Fractions on the Human Mesenchymal Stem Cells Viability, Apoptotic Pathways and Cytokine Profile. *Curr Stem Cell Res Ther.*;12(2):175-180. doi: 10.2174/1574888X10666151026114817. PMID: 26496886, 2017. AI = 0.2 citari=2
35. Carmen Curutiu, Valentina Grumezescu, Mariana C. Chifiriuc, Keng-Shiang Huang, Florin Iordache, Yu-Mei Lin, Alina M. **Holban**. Nanostructured Approaches for the Targeted Delivery of Antibiotics in Difficult Infections. *Current Organic Chemistry*, Volume 21, Issue 1, DOI: 10.2174/1385272820666160510170450, 2017. AI=0.5 citari=3
36. Michail Karavolos and Alina **Holban**. Nanosized Drug Delivery Systems in Gastrointestinal Targeting: Interactions with Microbiota. *Pharmaceuticals*, 9, 62; doi:10.3390/ph9040062, 2016. AI=0.1 citari=27
37. **Holban** AM, Gestal MC, Grumezescu AM. Control of biofilm-associated infections by signaling molecules and nanoparticles. *Int J Pharm.* 2016 Aug 30;510(2):409-18. doi: 10.1016/j.ijpharm.2016.02.044. Epub, Mar 2. PMID: 26945736, 2016. AI=0.8 citari=23
38. Alexandra Elena Oprea, Loredana Mihaela Pandel, Ana Maria Dumitrescu, Ecaterina Andronescu, Valentina Grumezescu, Mariana Carmen Chifiriuc, Laurențiu Mogoantă, Tudor-Adrian Bălșeanu, George Dan Mogoșanu, Gabriel Socol, Alexandru Mihai Grumezescu, Florin Iordache, Horia Maniu, Mariana Chirea, Alina Maria **Holban**. Bioactive ZnO Coatings Deposited by MAPLE—An Appropriate Strategy to Produce Efficient Anti-Biofilm Surfaces. *Molecules*, 21(2), 220; doi:10.3390/molecules21020220, 2016. AI=0.6 citari =18
39. Alberto Ion, Ecaterina Andronescu, Dragoș Rădulescu, Marius Rădulescu, Florin Iordache, Bogdan Ștefan Vasile, Adrian Vasile Surdu, Madalina Georgiana Albu, Horia Maniu, Mariana Carmen Chifiriuc, Alexandru Mihai Grumezescu, Alina Maria **Holban**. Biocompatible 3D Matrix with Antimicrobial Properties. *Molecules*, 21(1), 115; doi:10.3390/molecules21010115, 2016. AI=0.6 citari=4
40. Marius Radulescu, Ecaterina Andronescu, Georgiana Dolete, Roxana Cristina Popescu, Oana Fufă, Mariana Carmen Chifiriuc, Laurențiu Mogoantă, Tudor-Adrian Bălșeanu, George Dan Mogoșanu, Alexandru Mihai Grumezescu, Alina Maria **Holban**. Silver Nanocoatings for Reducing the Exogenous Microbial Colonization of Wound Dressings. *Materials*, 9(5): 345; doi:10.3390/ma9050345, 2016. AI=0.8 citari=32
41. Alina Maria **Holban**, Alexey Iordanskii, Alexandru Mihai Grumezescu, Anna Bychkova, Ecaterina Andronescu, Laurențiu Mogoantă, George Dan Mogoșanu, Florin Iordache: Prosthetic devices with nanostructured surfaces for increased resistance to microbial colonization, *Current Pharmaceutical Biotechnology*, 02/2015; 16(2):112-120. IF = 1.802 AI=0.3 citari=3
42. Alina Maria **Holban**, Ecaterina Andronescu, Valentina Grumezescu, Alexandra Elena Oprea, Alexandru Mihai Grumezescu, Gabriel Socol, Mariana Carmen Chifiriuc, Veronica Lazar, Florin Iordache: Carvone functionalized iron oxide nanostructures thin films prepared by MAPLE for improved resistance to microbial colonization, *Journal of Sol-Gel Science and Technology*, 2015, 73, 3, pp 605-611. IF = 1.473 AI= 0.3 citari=11
43. Marius RADULESCU, Denisa FICAI, Ovidiu OPREA, Anton FICAI, Ecaterina ANDRONESCU, Alina Maria **HOLBAN**. Antimicrobial chitosan based formulations with impact on different biomedical applications. *Current pharmaceutical biotechnology*, 02/2015; 16(2):128-136, IF = 1.802 AI=0.3 citari=36
44. Alina Maria **Holban**; Magnetite Nanoshuttles for Fighting *Staphylococcus aureus* Infections: A Recent Review; *Current Topics in Medicinal Chemistry*; ISI; Volume 15, 24 Issues, 2015, 15(16), ISSN: 1873-5294 (Online) 1589-1595. IF = 2.9 AI=0.8 citari=6
45. Florin Iordache, Valentina Grumezescu, Alexandru Mihai Grumezescu, Carmen Curuțiu, Lia Mara Dițu, Gabriel Socol, Anton Ficai, Roxana Trușcă, Alina Maria **Holban**. Gamma-cyclodextrin/usnic acid thin film fabricated by MAPLE for improving the resistance of medical surfaces to *Staphylococcus aureus* colonization. *Applied Surface Science*, 336, 2015, Pag 407–412. IF = 3.15 AI=0.6 citari=14
46. **Holban** AM, Chifiriuc MC, Lazar V. Recognition and Impact of Host-derived Molecules on Bacterial Cell-to-cell Signalling Pathways. *Med Chem.* 2015; 11(7):610-7. AI = 0.1 citari=2

47. Ioannis Liakos, Alexandru Mihai Grumezescu, Alina Maria **Holban**: Magnetite nanostructures as novel strategies for anti-infectious therapy, *Molecules*, 19, 12710-12726, 2014. AI=0.8 citari=35
48. Denisa Ficai, Ovidiu Oprea, Anton Ficai and Alina Maria **Holban** – “Metal Oxide Nanoparticles: Potential Uses in Biomedical Applications” *Current Proteomics* 11 (2), 2014, p. 139 – 149. IF = 0.59 AI=0.1 citari=10
49. Bogdan Stefan Vasile, Ovidiu Oprea, Georgeta Voicu, Anton Ficai, Ecaterina Andronescu, Andrei Teodorescu, Alina **Holban**. Synthesis and characterization of a novel controlled release zinc oxide/gentamicin-chitosan composite with potential applications in wounds care. *International Journal of Pharmaceutics*, 463: 161–169, 2014. IF = 3.65 AI=0.8 citari=52
50. Alina Georgiana Anghel, Alexandru Mihai Grumezescu, Mariana Chirea, Valentina Grumezescu, Gabriel Socol, Florin Iordache, Alexandra Elena Oprea, Ion Anghel, Alina Maria **Holban**: MAPLE fabricated Fe₃O₄@Cinnamomum verum antimicrobial surface for improved gastrostomy tubes, *Molecules*, 19, 8981-8994, 2014. IF = 2.465 AI=0.8 citari=28
51. Alina Maria **Holban**, Valentina Grumezescu, Alexandru Mihai Grumezescu, Bogdan Ștefan Vasile, Roxana Trușcă, Rodica Cristescu, Gabriel Socol, Florin Iordache: Anti-microbial nanospheres thin coatings prepared by advanced pulsed laser technique, *Beilstein Journal of Nanotechnology*, 5, 872–880, 2014. IF = 2.778 AI=0.8 citari=16
52. Anicuta Stoica Guzun, Marta Stroescu, Sorin Ion Jinga, Georgeta Voicu, Alexandru Mihai Grumezescu, Alina Maria **Holban**: Plackett-Burman experimental design for bioactive bacterial cellulose-silica composites synthesis with antimicrobial adherence effect, *Materials Science and Engineering: C*, 42(1):280-288, 2014. IF = 3.420 AI=0.5 citari = 12
53. Alina Maria **Holban**, Alexandru Mihai Grumezescu, Monica Cartelle Gestal, Laurentiu Mogoanta, George Dan Mogosanu: Novel drug delivery magnetite nano-systems used in antimicrobial therapy. *Current Organic Chemistry*, 18(2): 185-191, 2013. IF = 2.157 AI=0.5 citari=22
54. Alina Maria **Holban**, Monica Cartelle Gestal, Alexandru Mihai Grumezescu: New Molecular Strategies for Reducing Implantable Medical Devices Associated Infections, *Current Medicinal Chemistry*, 21(29): 3375 – 3382, 2014. IF = 3.455 AI=0.9 citari=18
55. Alina-Maria **Holban**, Coralia Bleotu, Mariana Carmen Chifiriuc, Eugenia Bezirtzoglou, Veronica Lazar. Role of *Pseudomonas aeruginosa* quorum sensing (QS) molecules on the viability and cytokine profile of human mesenchymal stem cells. *Virulence* 2014; 5:303 – 310. IF = 5.418. AI=1.4 citari=25
56. Alexandru Mihai Grumezescu, Alina Maria **Holban***, Ecaterina Andronescu, George Dan Mogosanu, Bogdan Stefan Vasile, Mariana Carmen Chifiriuc, Veronica Lazar, Eugen Andrei, Andrei Constantinescu, Horia Maniu: Anionic polymers and 10 nm Fe₃O₄@UA wound dressings support human fetal stem cells normal development and exhibit great antimicrobial properties. *International Journal of Pharmaceutics*, 463 146–154, 2014. IF = 3.65 AI=0.8 citari=24
57. Alina-Maria **Holban**, Mariana Carmen Chifiriuc, Ani Ioana Cotar, Coralia Bleotu, Alexandru Mihai Grumezescu, Otilia Banu, Veronica Lazar: Virulence markers in *Pseudomonas aeruginosa* isolates from hospital-acquired infections occurred in patients with underlying cardiovascular disease. *Romanian Biotechnological Letters*, Vol. 18, No. 6, 8843- 8854, 2013. IF = 0.381 AI=0.1 citari=18
58. Alina Maria **Holban**, Alexandru Mihai Grumezescu, Ecaterina Andronescu, Valentina Grumezescu, Carmen Mariana Chifiriuc, Radu Radulescu: Magnetite-uscnic acid nanostructured bioactive material with antimicrobial activity. *Romanian Journal of Materials*, 43, 402-407, 2013. IF =0.612 AI=0.1 citari=18
59. Alina Maria **Holban**, Alexandru Mihai Grumezescu, Anton Ficai, Carmen Mariana Chifiriuc, Veronica Lazar, Radu Radulescu: Fe₃O₄@C18-carvone to prevent *Candida tropicalis* biofilm development. *Romanian Journal of Materials*, 43, 300-305, 2013. IF =0.612 AI=0.1 citari =11
60. Alina-Maria **Holban**, Ani Ioana Cotar, Mariana Carmen Chifiriuc, Coralia Bleotu, Otilia Banu and Veronica Lazar. Variation of virulence profiles in some *Staphylococcus aureus* and *Pseudomonas aeruginosa* strains isolated from different clinical patients. *African Journal of Microbiology Research*, Vol. 7(27), pp. 3453-3460, 2013. IF = 0.41 AI=0.1 citari=2
61. Alina Maria **Holban**, Mariana Carmen Chifiriuc, Veronica Lazăr. Host cells response in *Pseudomonas aeruginosa* infections – role of quorum sensing molecules. *African Journal of Microbiology Research*, Vol. 7(20), pp. 2140-2149, 2013. IF = 0.41 AI=0.1 citari=2

2. Articole în reviste cotate ISI, ca și contributor

1. Chircov C, Dumitru IA, Vasile BS, Oprea O-C, **Holban** AM, Popescu RC. Microfluidic Synthesis of Magnetite Nanoparticles for the Controlled Release of Antibiotics. *Pharmaceutics*. 2023; 15(9):2215. <https://doi.org/10.3390/pharmaceutics15092215> AI=1.3 citari=0
2. Stoica AE, Bîrcă AC, Mihaiescu DE, Grumezescu AM, Ficai A, Herman H, Cornel B, Roşu M, Gharbia S, **Holban** AM, et al. Biocompatibility and Antimicrobial Profile of Acid Usnic-Loaded Electrospun Recycled Polyethylene Terephthalate (PET)—Magnetite Nanofibers. *Polymers*. 2023; 15(15):3282. <https://doi.org/10.3390/polym15153282> AI=0.8 citari=0
3. Burdusel A-C, Neacsu IA, Birca AC, Chircov C, Grumezescu A-M, **Holban** AM, Curutiu C, Ditu LM, Stan M, Andronescu E. Microwave-Assisted Hydrothermal Treatment of Multifunctional Substituted Hydroxyapatite with Prospective Applications in Bone Regeneration. *Journal of Functional Biomaterials*. 2023; 14(7):378. <https://doi.org/10.3390/jfb14070378> AI=0.7 citari=1
4. Puiu RA, Bîrcă AC, Grumezescu V, Duta L, Oprea OC, **Holban** AM, Hudiță A, Gălăţeanu B, Balaure PC, Grumezescu AM, et al. Multifunctional Polymeric Biodegradable and Biocompatible Coatings Based on Silver Nanoparticles: A Comparative In Vitro Study on Their Cytotoxicity towards Cancer and Normal Cell Lines of Cytostatic Drugs versus Essential-Oil-Loaded Nanoparticles and on Their Antimicrobial and Antibiofilm Activities. *Pharmaceutics*. 2023; 15(7):1882. <https://doi.org/10.3390/pharmaceutics15071882> AI=1.3 citari=0
5. Asaftei M, Lucidi M, Cirtoaje C, **Holban** AM, Charitidis CA, Yang F, Wu A, Stanciu GA, Sağlam Ö, Lazar V, Visca P, Stanciu SG. Fighting bacterial pathogens with carbon nanotubes: focused review of recent progress. *RSC Adv*. 2023 Jun 29;13(29):19682-19694. doi: 10.1039/d3ra01745a. PMID: 37396836; PMCID: PMC10308885. AI=0.6 citari=0
6. Van LT, Hagiu I, Popovici A, Marinescu F, Gheorghe I, Curutiu C, Ditu LM, **Holban** AM, Sesan TE, Lazar V. Antimicrobial Efficiency of Some Essential Oils in Antibiotic-Resistant *Pseudomonas aeruginosa* Isolates. *Plants (Basel)*. 2022 Jul 31;11(15):2003. doi: 10.3390/plants11152003. AI=0.6 citari=8
7. Bucuresteanu R, Ionita M, Chihaiia V, Ficai A, Trusca R-D, Ilie C-I, Kuncser A, **Holban** A-M, Mihaescu G, Petcu G, et al. Antimicrobial Properties of TiO₂ Microparticles Coated with Ca- and Cu-Based Composite Layers. *International Journal of Molecular Sciences*. 2022; 23(13):6888. <https://doi.org/10.3390/ijms23136888> AI=0.8 citari=3
8. Caciandone M, Niculescu A-G, Grumezescu V, Bîrcă AC, Ghica IC, Vasile BŞ, Oprea O, Nica IC, Stan MS, **Holban** AM, et al. Magnetite Nanoparticles Functionalized with Therapeutic Agents for Enhanced ENT Antimicrobial Properties. *Antibiotics*. 2022; 11(5):623. <https://doi.org/10.3390/antibiotics11050623> AI=0.1 citari=9
9. Chircov C, Ştefan R-E, Dolete G, Andrei A, **Holban** AM, Oprea O-C, Vasile BS, Neacşu IA, Tihăuan B. Dextran-Coated Iron Oxide Nanoparticles Loaded with Curcumin for Antimicrobial Therapies. *Pharmaceutics*. 2022; 14(5):1057. <https://doi.org/10.3390/pharmaceutics14051057> AI=1.3 citari=16
10. Snapshot of resistance and virulence features in ESCAPE strains frequently isolated from surgical wound infections in a Romanian hospital. SMI Rayyif, WN Alwan, HB Mohammed, IC Barbu, AM **Holban**, I Gheorghe, O Banu, Omar S. Shalal, Mariana C. Chifiriuc, Grigore Mihaescu. *Revista Romana de Medicina de Laborator*, 2022, 30 (2), 215-226 AI=0.1 citari=2
11. Munteanu A, **Holban** A-M, Păuna M-R, Imre M, Farcaşiu A-T, Farcaşiu C. Review of Professionally Applied Fluorides for Preventing Dental Caries in Children and Adolescents. *Applied Sciences*. 2022; 12(3):1054. <https://doi.org/10.3390/app12031054> AI=0.4 citari=10
12. Caciandone M, Niculescu A-G, Roşu AR, Grumezescu V, Negut I, **Holban** AM, Oprea O, Vasile BŞ, Bîrcă AC, Grumezescu AM, et al. PEG-Functionalized Magnetite Nanoparticles for Modulation of Microbial Biofilms on Voice Prosthesis. *Antibiotics*. 2022; 11(1):39. <https://doi.org/10.3390/antibiotics11010039> AI=0.1 citari=15
13. David ME, Ion RM, Grigorescu RM, Iancu L, **Holban** AM, Iordache F, Nicoara AI, Alexandrescu E, Somoghi R, Teodorescu S, et al. Biocompatible and Antimicrobial Cellulose Acetate-Collagen Films Containing MWCNTs Decorated with TiO₂ Nanoparticles for Potential Biomedical Applications. *Nanomaterials*. 2022; 12(2):239. <https://doi.org/10.3390/nano12020239> AI=0.7 citari=8
14. Spirescu VA, Niculescu A-G, Slave Ş, Bîrcă AC, Dorcioman G, Grumezescu V, **Holban** AM, Oprea O-C, Vasile BŞ, Grumezescu AM, et al. Anti-Biofilm Coatings Based on Chitosan and Lysozyme Functionalized Magnetite Nanoparticles. *Antibiotics*. 2021; 10(10):1269. <https://doi.org/10.3390/antibiotics10101269> AI=0.1 citari=12
15. Spirescu VA, Şuhan R, Niculescu AG, Grumezescu V, Negut I, **Holban** AM, Oprea OC, Bîrcă AC, Vasile BŞ, Grumezescu AM, Bejenaru LE, Mogoşanu GD, Bejenaru C, Balaure PC, Andronescu E, Mogoantă L. Biofilm-Resistant Nanocoatings Based on ZnO Nanoparticles and Linalool. *Nanomaterials (Basel)*. 2021 Sep 29;11(10):2564. doi: 10.3390/nano11102564. AI=0.7 citari=9

16. Bucuresteanu R, Ditu L-M, Ionita M, Calinescu I, Raditoiu V, Cojocaru B, Cinteza LO, Curutiu C, **Holban** AM, Enachescu M, et al. Preliminary Study on Light-Activated Antimicrobial Agents as Photocatalytic Method for Protection of Surfaces with Increased Risk of Infections. *Materials*. 2021; 14(18):5307. <https://doi.org/10.3390/ma14185307> AI=0.8 citari=2
17. Cucu CI, Giurcăneanu C, Popa LG, Orzan OA, Beiu C, **Holban** AM, Grumezescu AM, Matei BM, Popescu MN, Căruntu C, et al. Electrochemotherapy and Other Clinical Applications of Electroporation for the Targeted Therapy of Metastatic Melanoma. *Materials*. 2021; 14(14):3985. AI=0.8 citari=1
18. David ME, Ion R-M, Grigorescu RM, Iancu L, **Holban** AM, Nicoara AI, Alexandrescu E, Somoghi R, Ganciarov M, Vasilievici G, et al. Hybrid Materials Based on Multi-Walled Carbon Nanotubes and Nanoparticles with Antimicrobial Properties. *Nanomaterials*. 2021; 11(6):1415. <https://doi.org/10.3390/nano11061415> AI=0.7 citari=21
19. Grumezescu V, Negut I, Cristescu R, Grumezescu AM, **Holban** AM, Iordache F, Chifiriuc MC, Narayan RJ, Chrisey DB. Isoflavonoid-Antibiotic Thin Films Fabricated by MAPLE with Improved Resistance to Microbial Colonization. *Molecules*. 2021; 26(12):3634. <https://doi.org/10.3390/molecules26123634> AI=0.6 citari=2
20. Gherasim O, Popescu RC, Grumezescu V, Mogoșanu GD, Mogoantă L, Iordache F, **Holban** AM, Vasile BȘ, Bîrcă AC, Oprea O-C, et al. MAPLE Coatings Embedded with Essential Oil-Conjugated Magnetite for Anti-Biofilm Applications. *Materials*. 2021; 14(7):1612. <https://doi.org/10.3390/ma14071612> AI=0.6 citari=23
21. Gherasim O, Grumezescu AM, Ficai A, Grumezescu V, **Holban** AM, Gălățeanu B, Hudiță A. Composite P(3HB-3HV)-CS Spheres for Enhanced Antibiotic Efficiency. *Polymers (Basel)*. 2021 Mar 23;13(6):989. doi: 10.3390/polym13060989. PMID: 33807077; PMCID: PMC8004896. AI=0.8 citari=1
22. Neacsu IA, Leau S-A, Marin S, **Holban** AM, Vasile B-S, Nicoara A-I, Ene VL, Bleotu C, Albu Kaya MG, Ficai A. Collagen-Carboxymethylcellulose Biocomposite Wound-Dressings with Antimicrobial Activity. *Materials*. 2021; 14(5):1153. <https://doi.org/10.3390/ma14051153> AI=0.8 citari=17
23. Preda M, Mihai MM, Popa LI, Dițu LM, **Holban** AM, Manolescu LSC, Popa GL, Muntean AA, Gheorghe I, Chifiriuc CM, Popa MI. Phenotypic and genotypic virulence features of staphylococcal strains isolated from difficult-to-treat skin and soft tissue infections. *PLoS One*. 2021 Feb 2;16(2):e0246478. doi: 10.1371/journal.pone.0246478. AI=1.1 citari=9
24. Gherasim O, Grumezescu AM, Grumezescu V, Negut I, Dumitrescu MF, Stan MS, Nica IC, **Holban** AM, Socol G, Andronescu E. Bioactive Coatings Based on Hydroxyapatite, Kanamycin, and Growth Factor for Biofilm Modulation. *Antibiotics*. 2021; 10(2):160. <https://doi.org/10.3390/antibiotics10020160> AI=0.1 citari=12
25. O Chirca, C Bicleșanu, A Florescu, L Motelică, AM **Holban**, A Burcea. STUDIU COMPARATIV PRIVIND ADEZIUNEA LA STRUCTURA DENTARĂ A COROANEI CERAMICE TOTALE CU CIMENTURI ADEZIVE DIFERITE. *Revista Romana de Materiale*, 2021, 51 (2), 309-318 AI=0.1 citari=1
26. Massimiliano Lucidi, Denis E Tranca, Lorenzo Nichele, Devrim Ünay, George A Stanciu, Paolo Visca, Alina Maria **Holban**, Radu Hristu, Gabriella Cincotti, Stefan G Stanciu. SSNOMBACTER: A collection of scattering-type scanning near-field optical microscopy and atomic force microscopy images of bacterial cells. *GigaScience*, 9(11), gaa129, <https://doi.org/10.1093/gigascience/gaa129>, 2020. AI=5.7 citari=8
27. Massimiliano Lucidi, Radu Hristu, Lorenzo Nichele, George A Stanciu, Denis E Tranca, Alina Maria **Holban**, Paolo Visca, Stefan G Stanciu, Gabriella Cincotti. STED nanoscopy of KK114-stained pathogenic bacteria. *J. Biophotonics*;13:e202000097, 2020. AI= 1 citari=8
28. Chun-Ting Lee, Keng-Shiang Huang, Jei-Fu Shaw, Jung-Ren Chen, Wen-Shuo Kuo, Gangxu Shen, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Yi-ting Wang, Jun-Sheng Wang, Yi-Ping Hsiang, Yu-Mei Lin, Hsiao-Han Hsu, Chih-Hui Yang. Trends in the Immunomodulatory Effects of Cordyceps militaris: Total Extracts, Polysaccharides and Cordycepin. *Frontiers in Pharmacology*, vol 11, <https://doi.org/10.3389/fphar.2020.575704>, 2020. AI=1.2 citari=25
29. Nicoara Adrian Ionut; Stoica Alexandra Elena; Ene Denisa-Ionela; Vasile Bogdan Stefan; **Holban** Alina Maria; Neacsu Ionela Andreea. In Situ and Ex Situ Designed Hydroxyapatite: Bacterial Cellulose Materials with Biomedical Applications. *MATERIALS* Volume: 13 Issue: 21 Article Number: 4793 DOI: 10.3390/ma13214793, 2020. AI=0.8 citari=13
30. Irina Negut, Valentina Grumezescu, Alexandru Mihai Grumezescu, Alexandra Cătălina Bîrcă, Alina Maria **Holban**, Iuliana Urzica, Sorin Marius Avramescu, Bianca Gălățeanu, Ariana Hudiță. Nanostructured Thin Coatings Containing Anthriscus sylvestris Extract with Dual Bioactivity. *Molecules*, 25, 3866; doi:10.3390/molecules25173866, 2020. AI=0.8 citari=4
31. Ludmila Motelica, Luciana Marinof, Alina **Holban**, Bogdan Stefan Vasile, Anton Ficai. Optical, Photocatalytic And Antibacterial Properties Of Zinc Oxide Nanoparticles Obtained By A Solvothermal Method. *U.P.B. Sci. Bull., Series B*, Vol. 82, Iss. 1, 2020. AI=0.1 citari=3

32. Michael E. Chirgwin, Margaret R. Dedloff, Alina Maria **Holban**, Monica C. Gestal. Novel Therapeutic Strategies Applied to *Pseudomonas aeruginosa* Infections in Cystic Fibrosis. *Materials*, 12, 4093; doi:10.3390/ma12244093, 2019. AI=0.8 citari=11
33. Valentina Grumezescu, Oana Gherasim, Irina Negut, Stefan Banita, Alina Maria **Holban**, Paula Florian, Madalina Icriverzi and Gabriel Socol. Nanomagnetite-embedded PLGA Spheres for Multipurpose Medical Applications. *Materials*, 12, 2521; doi:10.3390/ma12162521, 2019. AI=0.8 citari=7
34. Margaret R. Dedloff, Callie S. Effler, Alina Maria **Holban**, Monica C. Gestal. Use of Biopolymers in Mucosally-Administered Vaccinations for Respiratory Disease. *Materials*, 12, 2445; doi:10.3390/ma12152445, 2019. AI=0.8 citari=14
35. Alexandru Mihai Grumezescu, Alexandra Elena Stoica, Mihnea-Stefan Dima-Bălcescu, Cristina Chircov, Sami Gharbia, Cornel Baltă, Marcel Rosu 5, Hildegard Herman, Alina Maria **Holban**, Anton Ficai , Bogdan Stefan Vasile , Ecaterina Andronescu, Mariana Carmen Chifiriuc, Anca Hermenean. Electrospun Polyethylene Terephthalate Nanofibers Loaded with Silver Nanoparticles: Novel Approach in Anti-Infective Therapy. *J. Clin. Med.*, 8, 1039; doi:10.3390/jcm8071039, 2019. AI=0.1 citari=26
36. Andrei Paduraru, Cristina Ghitulica, Roxana Trusca, Vasile Adrian Surdu, Ionela Andreea Neacsu, Alina Maria **Holban**, Alexandra Catalina Birca, Florin Iordache, Bogdan Stefan Vasile. Antimicrobial Wound Dressings as Potential Materials for Skin Tissue Regeneration. *Materials*, 12, 1859; doi:10.3390/ma12111859, 2019. AI=0.8 citari=35
37. Eva Torres Sangiao, Alina Maria **Holban** and Mónica Cartelle Gestal. Applications of Nanodiamonds in the Detection and Therapy of Infectious Diseases. *Materials*, 12, 1639; doi:10.3390/ma12101639, 2019. AI=0.8 citari=20
38. Neacsu Ia, Ana Melente E, **Holban** An, Ficai A, Ditu Lm, Kamerzan Cm, Bianca Tihăuan M, Nicoara Ai, Bezirtzoglou E, Chifiriuc Mc, Pircalabioru Gg. Novel hydrogels based on collagen and ZnO nanoparticles with antibacterial activity for improved wound dressings. *Rom Biotechnol Lett.*; 24(2): 317-323. DOI: 10.25083/rbl/24.2/317.323, 2019. AI=0.1 citari=5
39. Paul Cătălin Balaure, Alina Maria **Holban**, Alexandru Mihai Grumezescu, George Dan Mogoșanu, Tudor Adrian Bălșeanu, Miruna S. Stan, Anca Dinischiotu, Adrian Volceanov, Laurențiu Mogoantă. In vitro and in vivo studies of novel fabricated bioactive dressings based on collagen and zinc oxide 3D scaffolds. *International Journal of Pharmaceutics* 557, 199–207, 2019. AI=0.8 citari=18
40. Anita Ioana Visan, Gianina Popescu-Pelin, Oana Gherasim, Valentina Grumezescu, Marcela Socol , Irina Zgura, Camelia Florica , Roxana C. Popescu, Diana Savu , Alina Maria **Holban**, Rodica Cristescu, Consuela E. Matei, Gabriel Socol. Laser Processed Antimicrobial Nanocomposite Based on Polyaniline Grafted Lignin Loaded with Gentamicin-Functionalized Magnetite. *Polymers*, 11, 283; doi:10.3390/polym11020283, 2019. AI=0.9 citari=10
41. Omar Sadik, Lia Mara Ditu, Irina Gheorghe, Alina Maria **Holban**, Carmen Curutiu, Gratiela Gradisteanu Pircalabioru, Ionela Avram, Otilia Banu, Othman Al-mahdawy, Dunya A. Alkurjia, Mariana Carmen Chifiriuc. Phenotypic and genotypic evaluation of adherence and biofilm development in *Candida albicans* respiratory tract isolates from hospitalized patients. *Revista Română de Medicină de Laborator Vol. 27, Nr. 1, Ianuarie, 2019.* AI=0.1 citari=1
42. Otilia-Ruxandra Vasile, Ecaterina Andronescu, Roxana Trușcă, Eugeniu Vasile, Alina-Maria **Holban**, Mariana-Carmen Chifiriuc, Florin Iordache, Horia Maniu, Coralia Bleotu, Ionela Andreea Neacsu, Bogdan-Ștefan Vasile. Structure–grain size–synthesis route of silver nanoparticles: a correlation with the cytotoxic effect. *Rom J Morphol Embryol*, 60(2):617–628, 2019. AI=0.1 citari=1
43. G. Popescu-Pelina, O. Fufă, R.C. Popescu, D. Savu, M. Socol, I. Zgură, A.M. **Holban**, B.Ș. Vasile, V. Grumezescu, G. Socol. Lincomycin-embedded PANI-based coatings for biomedical applications. *Applied Surface Science* 455, 653–666, 2018. AI=0.6 citari=6
44. Irina Negut, Valentina Grumezescu, Anton Ficai, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Roxana Cristina Popescu, Diana Savu, Bogdan Stefan Vasile, Gabriel Socol. MAPLE deposition of *Nigella sativa* functionalized Fe₃O₄ nanoparticles for antimicrobial coatings. *Applied Surface Science* 455, 513–521, 2018. AI=0.6 citari=16
45. Denisa Ficai, Valentina Grumezescu, Oana Mariana Fufă, Roxana Cristina Popescu, Alina Maria **Holban**, Anton Ficai, Alexandru Mihai Grumezescu, Laurentiu Mogoanta, George Dan Mogosanu, Ecaterina Andronescu. Antibiofilm Coatings Based on PLGA and Nanostructured Cefepime-Functionalized Magnetite. *Nanomaterials*, 8, 633; doi:10.3390/nano8090633, 2018. AI=0.7 citari=6
46. Veronica Lazar, Lia-Mara Ditu, Gratiela Gradisteanu Pircalabioru, Irina Gheorghe, Carmen Curutiu, Alina Maria **Holban**, Ariana Picu, Laura Petcu, Mariana Carmen Chifiriuc. Aspects of Gut Microbiota and Immune System

- Interactions in Infectious Diseases, Immunopathology, and Cancer. *Front. Immunol.*, <https://doi.org/10.3389/fimmu.2018.01830>, 2018. AI=1.4 citari=291
47. Mehmet Onur Aydogdu, Alexandra Elena Oprea, Roxana Trusca, Adrian Vasile Surdu, Anton Ficai, Alina Maria **Holban**, Florin Iordache, Andrei Viorel Paduraru, Diana Georgiana Filip, Esra Altun, Nazmi Ekren, Faik Nuzhet Oktar, Oguzhan Gunduz. Production and Characterization of Antimicrobial Electrospun Nanofibers Containing Polyurethane, Zirconium Oxide and Zeolite. *BioNanoScience* volume 8, pages154–165, 2018. AI=0.1 citari=4
 48. Denisa Ficai, Ioana Lavinia Ardelean, Alina Maria **Holban**, Lia Mara Dițu, Dragoș Gudovan, Maria Sönmez, Roxana Trușcă, Alpaslan Kaya, Anton Ficai, Ecaterina Andronescu. Manufacturing nanostructured chitosan-based 2D sheets with prolonged antimicrobial activity. *Rom J Morphol Embryol*, 59(2):517–525, 2018. AI=0.1 citari=3
 49. Grigore M.E.; Grumezescu A.M.; **Holban** A.M.; Mogoșanu G.D.; Andronescu E. Collagen-Nanoparticles Composites for Wound Healing and Infection Control. *Metals*, 7, 516, 2017. AI=0.3 citari=15
 50. Balaure PC, Boarca B, Popescu RC, Savu D, Trusca R, Vasile BȘ, Grumezescu AM, **Holban** AM, Bolocan A, Andronescu E. Bioactive mesoporous silica nanostructures with anti-microbial and anti-biofilm properties. *Int J Pharm.*; 531(1):35-46. doi: 10.1016/j.ijpharm.2017.08.062. Epub 2017 Aug 7. PMID: 28797969, 2017. AI=0.8 citari=26
 51. A. Visan, R. Cristescu, N. Stefan, M. Miroiu, C. Nita, M. Socol, C. Florica, O. Rasoga, I. Zgura, L.E. Sima, M. Chiritoiuc, M.C. Chifiriuc, A.M. **Holban**, I.N. Mihailescu, G. Socol. Antimicrobial polycaprolactone/polyethylene glycol embedded lysozyme coatings of Ti implants for osteoblast functional properties in tissue engineering. *Applied Surface Science* 417, 234–243, 2017. AI=0.6 citari=13
 52. Telcian A., Mohammed Dyia Hussien, Chifiriuc M.C.; Bleotu C.; **Holban** A.M.; Curutiu C.; Grosu E.; Ficai A.; Mihaescu G.; Grigore R., Ditu L.M. Assessment of the anti-biofilm activity and biocompatibility of novel PE and PVC polymers. *Romanian Biotechnological Letters* Vol. 22, No. 5, 2017. AI=0.1 citari=16
 53. V. Grumezescu, A.M. **Holban**, L.E. Sima, M.B. Chiritoiu, G.N. Chiritoiu, A.M. Grumezescu, L. Ivan, F. Safciuc, F. Antohe, C. Florica, C.R. Luculescu, M.C. Chifiriuc, G. Socol. Laser deposition of poly(3-hydroxybutyric acid-co-3-hydroxyvaleric acid) – lysozyme microspheres based coatings with anti-microbial properties. *International Journal of Pharmaceutics* 521, 184–195, 2017. AI=0.8 citari=12
 54. Liakos I.L.; **Holban** A.M.; Carzino R.; Lauciello S.; Grumezescu A.M. Electrospun Fiber Pads of Cellulose Acetate and Essential Oils with Antimicrobial Activity. *Nanomaterials* 7, 84, 2017. AI=0.7 citari=26
 55. Madalina Elena Grigore, Elena Ramona Biscu, Alina Maria **Holban**, Monica Cartelle Gestal, Alexandru Mihai Grumezescu. Methods of Synthesis, Properties and Biomedical Applications of CuO Nanoparticles. *Pharmaceuticals*, 9, 75; doi:10.3390/ph9040075, 2016. AI=0.9 citari=84
 56. Ioannis L. Liakos, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Iordache Florin, Francesca D’Autilia, Riccardo Carzino, Paolo Bianchini, Athanassia Athanassiou. Polylactic Acid—Lemongrass Essential Oil Nanocapsules with Antimicrobial Properties. *Pharmaceuticals* 9, 42; doi:10.3390/ph9030042, 2016. AI=0.9 citari=18
 57. Balaure PC, Popa RA, Grumezescu AM, Voicu G, Rădulescu M, Mogoantă L, Bălșeanu TA, Mogoșanu GD, Chifiriuc MC, Bleotu C, **Holban** AM, Bolocan A. Biocompatible hybrid silica nanobiocomposites for the efficient delivery of anti-staphylococcal drugs. *Int J Pharm.*, 510(2):532-42. doi: 10.1016/j.ijpharm.2016.03.037. PMID: 27032567, 2016. AI=0.8 citari=6
 58. Eva Torres-Sangiao, Alina Maria **Holban**, Monica Cartelle Gestal. Advanced Nanobiomaterials: Vaccines, Diagnosis and Treatment of Infectious Diseases. *Molecules*, 21, 867; doi:10.3390/molecules21070867, 2016. AI=0.8, citari=71
 59. Dragos Radulescu, Georgeta Voicu, Alexandra Elena Oprea, Ecaterina Andronescu, Valentina Grumezescu, Alina Maria **Holban**, Bogdan Stefan Vasile, Adrian Vasile Surdu, Alexandru Mihai Grumezescu, Gabriel Socol, Laurentiu Mogoanta, George Dan Mogosanu, Paul Catalin Balaure, Radu Radulescu, Mariana Carmen Chifiriuc. Mesoporous silica coatings for cephalosporin active release at the bone-implant interface. *Applied Surface Science* 374, 165–171, 2016. AI=0.6 citari=13
 60. Miruna Silvia Stan, Sabrina Constanda, Valentina Grumezescu, Ecaterina Andronescu, Ana Maria Ene, Alina Maria **Holban**, Bogdan Stefan Vasile, Laurentiu Mogoanta, Tudor-Adrian Balsteanu, George Dan Mogosanu, Gabriel Socol, Alexandru Mihai Grumezescu, Anca Dinischiotu, Veronica Lazar, Mariana Carmen Chifiriuc. Thin coatings based on ZnO@C18-usnic acid nanoparticles prepared by MAPLE inhibit the development of *Salmonella enterica* early biofilm growth. *Applied Surface Science* 374, 318–325, 2016. AI=0.6 citari=15
 61. Dragos Radulescu, Valentina Grumezescu, Ecaterina Andronescu, Alina Maria **Holban**, Alexandru Mihai Grumezescu, Gabriel Socol, Alexandra Elena Oprea, Marius Radulescu, Adrian Surdu, Roxana Trusca, Radu Radulescu, Mariana Carmen Chifiriuc, Miruna S. Stan, Sabrina Constanda, Anca Dinischiotu. Biocompatible

- cephalosporin-hydroxyapatite-poly(lactic-co-glycolic acid)-coatings fabricated by MAPLE technique for the prevention of bone implant associated infections. *Applied Surface Science* 374, 387–396, 2016. AI=0.6 citari=12
62. Rădulescu M, E Andronescu, A Cirja, AM **Holban**, L Mogoantă, TA Bălșeanu, B Cătălin, TP Neagu, I Lascăr, DA Florea, AM Grumezescu, B Ciubuca, V Lazăr, MC Chifiriuc, A Bolocan. Antimicrobial coatings based on zinc oxide and orange oil for improved bioactive wound dressings and other applications. *Romanian journal of morphology and embryology*, 2016; 57(1):107-14, 2016. AI=0.1 citari=21
 63. Marius Rădulescu, Alina Maria **Holban**, Laurențiu Mogoantă, Tudor-Adrian Bălșeanu, George Dan Mogoșanu, Diana Savu, Roxana Cristina Popescu, Oana Fufă, Alexandru Mihai Grumezescu, Eugenia Bezirtzoglou, Veronica Lazar, Mariana Carmen Chifiriuc. Fabrication, Characterization, and Evaluation of Bionanocomposites Based on Natural Polymers and Antibiotics for Wound Healing Applications. *Molecules*. 21, 6, pag. 761, 2016. AI=0.8 citari=12
 64. Marius Rădulescu, Ecaterina Andronescu, Alina Maria **Holban**, Bogdan Stefan Vasile, Florin Iordache, Laurențiu Mogoantă, George Dan Mogoșanu, Alexandru Mihai Grumezescu, Mihaela Georgescu, Mariana Carmen Chifiriuc. Antimicrobial Nanostructured Bioactive Coating Based on Fe₃O₄ and Patchouli Oil for Wound Dressing. *Metals*, 6(5): 103; doi:10.3390/met6050103, 2016. AI=0.3 citari=13
 65. Valentina Grumezescu, Ecaterina Andronescu, Alina Maria **Holban**, Laurențiu Mogoantă, George Dan Mogoșanu, Alexandru Mihai Grumezescu, Anca Stănculescu, Gabriel Socol, Florin Iordache, Horia Maniu, Carmen Mariana Chifiriuc: MAPLE fabrication of thin films based on kanamycin functionalized magnetite nanoparticles with anti-pathogenic properties, *Applied Surface Science*, 336, 188–195, 2015. AI=0.6 citari=20
 66. Alexandru Mihai Grumezescu, Ecaterina Andronescu, Alexandra Elena Oprea, Alina Maria **Holban**, Gabriel Socol, Valentina Grumezescu, Mariana Carmen Chifiriuc, Florin Iordache, Horia Maniu: MAPLE fabricated magnetite@*Melissa officinalis* and poly lactic acid – chitosan coated surfaces with anti-staphylococcal properties, *Journal of Sol-Gel Science and Technology*, 2015, 73, 3, pp 612-619. IF = 1.473 AI=0.2 citari=7
 67. Monica Cartelle Gestal, Alina Maria **Holban**, Santiago Escalante, Marcelo Cevallos. Epidemiology of Tropical Neglected Diseases in Ecuador in the Last 20 Years. *PLoS ONE* 10(9): e0138311. <https://doi.org/10.1371/journal.pone.0138311>, 2015. IF = 4.411 AI=1.1 citari=15
 68. Mara Mădălina Mihai, Alina Maria **Holban**, Călin Giurcăneanu, Liliana Gabriela Popa, Mariana Buzea, Marilena Filipov, Veronica Lazăr, Mariana Carmen Chifiriuc, Mircea Ioan Popa. Identification and phenotypic characterization of the most frequent bacterial etiologies in chronic skin ulcers. *Romanian journal of morphology and embryology* 12/2014; 55(4):1401-8. IF = 0.811 AI=0.1 citari=47
 69. Claudia Mihaela Istrate, Alina Maria **Holban**, Alexandru Mihai Grumezescu, Laurențiu Mogoantă, George Dan Mogoșanu, Tudor Savopol, Mihaela Moisescu, Minodora Iordache, Bogdan Ștefan Vasile, Eugenia Kovacs: Iron oxide nanoparticles modulate the interaction of different antibiotics with cellular membranes, *Romanian Journal of Morphology and Embryology*;55(3):849-56., 2014. IF = 0.811 AI=0.1 citari=21
 70. Valentina Grumezescu, Alina M **Holban**, Alexandru M Grumezescu, Gabriel Socol, Anton Ficai, Bogdan S Vasile, Roxana Trusca, Coralia Bleotu, Veronica Lazar, Carmen M Chifiriuc, George D Mogosanu: Usnic acid loaded biocompatible magnetic PLGA-PVA microspheres thin films fabricated by MAPLE with increased resistance to staphylococcal colonization, *Biofabrication*, 6, 035002, 2014. IF = 4.702 AI=1.2 citari=36
 71. Ion Anghel, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Irina Gheorghe, Mihaela Vlad, Georgiana Alina Anghel, Paul Catalin Balaure, Carmen Mariana Chifiriuc, Ioana Mihaiela Ciuca: Improved activity of aminoglycosides entrapped in silica networks against microbial strains isolated from otolaryngological infections. *Farmacia*, 62, 69-78, 2014. IF = 1.162 AI=0.1 citari=5
 72. Valentina Grumezescu, Alina Maria **Holban**, Florin Iordache, Gabriel Socol, George Dan Mogosanu, Alexandru Mihai Grumezescu, Anton Ficai, Bogdan Stefan Vasile, Roxana Trușcă, Carmen Mariana Chifiriuc, Horia Maniu: MAPLE fabricated magnetite@eugenol and (3-hydroxybutyric acid-co-3-hydroxyvaleric acid) – polyvinyl alcohol microspheres coated surfaces with anti-microbial properties. *Applied Surface Science*; 306:16-22, 2014. IF = 3.15 AI=0.6 citari=35
 73. Valentina Grumezescu, Gabriel Socol, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Anton Ficai, Roxana Trușcă, Coralia Bleotu, Paul Catalin Balaure, Rodica Cristescu, Mariana Carmen Chifiriuc: Functionalized antibiofilm thin coatings based on PLA-PVA microspheres loaded with usnic acid natural compounds fabricated by MAPLE. *Applied Surface Science*, 302(30):262–267, 2014. IF = 3.15 AI=0.6 citari=48
 74. Georgeta Voicu, Adrian Gabriel Anghel, Mihaela Badea, Emanoil Bordei, Georgiana Crantea, Raluca Ionela Gavrila, Alexandru Grecu, Denisa Ana-Maria Jercan, Bogdan Cristian Nicolae, Greta Cristina Vochitoaia, Kuete Tchinda, Alina Maria **Holban**, Coralia Bleotu, Alexandru Mihai Grumezescu: Silica network improve the effect of fludarabine and paclitaxel on HCT8 cell line, *Romanian Journal of Morphology and Embryology*, 2014;55(2 Suppl):545-51. IF = 0.811 AI=0.1 citari=4

75. Georgeta Voicu, Livia Elena Crică, Oana Fufă, Lavinia Iuliana Moraru, Roxana Cristina Popescu, Gabriela Purcel, Miruna Codruța Stoilescu, Alexandru Mihai Grumezescu, Coralia Bleotu, Alina Maria **Holban**, Ecaterina Andronescu: Magnetite nanostructures functionalized with cytostatic drugs exhibit great anti-tumoral properties without application of high amplitude alternating magnetic fields, *Romanian Journal of Morphology and Embryology*, 55(2), 357–362, 2014. IF = 0.811 AI=0.1 citari=7
76. Alexandru Mihai Grumezescu, Monica Cartelle Gestal, Alina Maria **Holban**, Valentina Grumezescu, Bogdan Ștefan Vasile, Laurențiu Mogoantă, Florin Iordache, Coralia Bleotu, George Dan Mogoșanu: Biocompatible Fe₃O₄ increases the efficacy of amoxicillin delivery against Gram-positive and Gram-negative bacteria, *Molecules*, 19, 5013-5027, 2014. AI=0.8 citari=45
77. Ion Anghel, Alexandru Mihai Grumezescu, Alina Maria **Holban**, Anton Ficai, Alina Georgiana Anghel, Mariana Carmen Chifiriuc: Biohybrid nanostructured iron oxide nanoparticles and *Satureja hortensis* to prevent fungal biofilm development. *International Journal of Molecular Science*, 14, 18110-18123, 2013. IF = 3.257 AI=0.8 citari=48
78. Alexandru Mihai Grumezescu, Ecaterina Andronescu, Alina Maria **Holban**, Anton Ficai, Denisa Ficai, Georgeta Voicu, Valentina Grumezescu, Paul Catalin Balaure, Carmen Mariana Chifiriuc: Water dispersible cross-linked magnetic chitosan beads for increasing the antimicrobial efficiency of different therapeutic agents. *International Journal of Pharmaceutics*, 454, 233-240, 2013. IF = 3.65 AI=0.8 citari=5
79. Crina Maria Saviuc, Alexandru Mihai Grumezescu, Coralia Bleotu, Alina Maria **Holban**, Mariana Carmen Chifiriuc, Paul Balaure, Veronica Lazar: Culture methods versus flow cytometry for the comparative assessment of antifungal activity of *Eugenia caryophyllata* (Myrtaceae) essential oil, *Farmacia*, 61(5):912-919, 2013. IF = 1.162 AI=0.1 citari=3
80. Valentina Grumezescu, Carmen Mariana Chifiriuc, Alina Maria **Holban**, Petruta Stoica, Alexandru Mihai Grumezescu, Georgeta Voicu, Gabriel Socol, Keng Shiang Huang, Coralia Bleotu, Radu Radulescu: Antimicrobial and biocompatibility assay of newly fabricated materials based copper or zinc alginate and SiO₂network: Digest *Journal of Nanomaterials and Biostructures*, 8(2):869-876, 2013. IF = 1.123 AI=0.2 citari=2
81. Ion Anghel, Alina Maria **Holban**, Ecaterina Andronescu, Alexandru Mihai Grumezescu, Mariana Carmen Chifiriuc: Efficient surface functionalization of wound dressings by a phytoactive nanocoating refractory to *Candida albicans* biofilm development. *Biointerphases*, 8:12, 2013. IF = 2.105 AI=0.7 citari=25
82. Ion Anghel, Alina Maria **Holban**, Alexandru Mihai Grumezescu, Ecaterina Andronescu, Anton Ficai, Alina Georgiana Anghel, Maria Maganu, Veronica Lazar, Mariana Carmen Chifiriuc: Modified wound dressing with phyto-nanostructured coating to prevent staphylococcal and pseudomonal biofilms development. *Nanoscale Research Letters*, 7:690, doi:10.1186/1556-276X-7-690, 2012. IF = 2.584 AI=0.6 citari=8

3. Articole în reviste indexate BDI ca autor principal

1. Alina Maria **Holban**, Crina Saviuc, Alexandru Mihai Grumezescu, Mariana Carmen Chifiriuc, Otilia Banu, Veronica Lazar: Phenotypic investigation of virulence profiles in some *Candida* Strains isolated from different clinical specimens. *Letters in Applied NanoBioScience*, 1(3):72-76, 2012. citari=0
2. Alina Maria **Holban** and Veronica Lazăr. Inter-kingdom cross-talk: the example of prokaryotes – eukaryotes communication. *Biointerf. Res. in appl. Chem.*, 2011, Volume 1, Issue 3, 2011, pg. 95-110. citari=0
3. Alexandru Mihai Grumezescu, Bogdan Ștefan Vasile, Alina Maria **Holban**: Eugenol functionalized magnetite nanostructures used in anti-infectious therapy. *Lett. in Appl. NanoBioScience*, 2, 120-123, 2013 citari=0
4. C. Curutiu, L.M. Ditu, F. Iordache, C. Bleotu, M.C. Chifiriuc, V. Lazar, D.N. Paduraru, A. M. **Holban**. Quorum Sensing molecules produced by *Pseudomonas aeruginosa* impair attachment and biofilm formation in *Candida albicans*. *Biointerface Research in Applied Chemistry*. 7, 2, 2017, 2016-2020. http://biointerfaceresearch.com/?page_id=2015 citari=1
5. Ioannis L Liakos, Charlotte Menager, Nathanael Guigo, Alina Maria **Holban**, Florin Iordache, Francesca Pignatelli, Alexandru Mihai Grumezescu, Barbara Mazzolai, Nicolas Sbirrazzuoli. Suberin/trans-Cinnamaldehyde Oil Nanoparticles with Antimicrobial Activity and Anticancer Properties When Loaded with Paclitaxel. *ACS Appl. Bio Mater.* 2019283484-3497. Citari=1

4. Articole în reviste indexate BDI ca și contribuitor

1. Roxana Elena Tiplea, Georgiana-Madalina Lemnaru, RD Trusca, Alina **Holban**, Madalina Georgiana Albu Kaya, Laura Denisa Dragu, Denisa Ficai, Anton Ficai, Coralia Bleotu. Antimicrobial films based on chitosan, collagen, and zno for skin tissue regeneration. *Biointerface Res. Appl. Chem.* 2021, 11: 11985-11995, Citari=24
2. Crina Saviuc, Ani Ioana Cotar, Alina Maria **Holban**, Otilia Banu, Alexandru Mihai Grumezescu, Mariana Carmen Chifiriuc: Phenotypic and molecular evaluation of *Pseudomonas aeruginosa* and *Staphylococcus aureus* virulence patterns in the presence of some essential oils and their major compounds. *Letters in Applied NanoBioScience*, 2(1):91-96, 2013. Citari=0
3. Alexandru Mihai Grumezescu, Alina Maria **Holban**, Ecaterina Andronescu, Anton Ficai, Coralia Bleotu, Mariana Carmen Chifiriuc: Water dispersible metal oxide nanobiocomposite as a potentiator of the antimicrobial activity of kanamycin. *Letters in Applied NanoBioScience*, 1(4):77-82, 2012. Citari=0
4. Alexandru Mihai Grumezescu, Alina **Holban**, Ecaterina Andronescu, Anton Ficai, Coralia Bleotu, Mariana Carmen Chifiriuc: Microbiological applications of a new water dispersible magnetic nanobiocomposite. *Letters in Applied NanoBioScience*, 1(4):83-90, 2012. Citari=0
5. Crina Saviuc, Alina Maria **Holban**, Alexandru Mihai Grumezescu, Coralia Bleotu, Otilia Banu, Veronica Lazar, Dan Eduard Mihaiescu, Mariana Carmen Chifiriuc: Testing antifungal activity of some essential oils using flow cytometry. *Letters in Applied Nanobioscience*, 1(3), 67-71, 2012. Citari=0
6. Alexandru Mihai Grumezescu, Crina Saviuc, Alina **Holban**, Radu Hristu, George Stanciu, Carmen Chifiriuc, Dan Mihaiescu, Paul Balaure, Veronica Lazar: Magnetic chitosan for drug targeting and in vitro drug delivery response. *Biointerface Research in Applied Chemistry*, 1(5):160, 2011. Citari=0
7. Crina Saviuc, Alexandru Mihai Grumezescu, Coralia Bleotu, Alina **Holban**, Carmen Chifiriuc, Paul Balaure, Veronica Lazar: Phenotypical studies for raw and nanosystem embedded *Eugenia carryophyllata* buds essential oil effect on *Pseudomonas aeruginosa* and *Staphylococcus aureus* strains. *Biointerface Research in Applied Chemistry*, 1(3):111, 2011. Citari=0
8. Crina Saviuc, Alexandru Mihai Grumezescu, Alina **Holban**, Carmen Chifiriuc, Dan Mihaiescu, Veronica Lazar: Hybrid nanostructured material for biomedical applications. *Biointerface Research in Applied Chemistry*, 1(2):64, 2011. Citari=0
9. Carmen Iordache, Coralia Bleotu, Alina **Holban**, Mariana Lixandru, Ani Cotar, Veronica Lazar, Felicia Antohe, Mariana Carmen Chifiriuc. Differential effects on caspase mediated apoptosis of HeLa cells induced by different *Pseudomonas aeruginosa* culture fractions. *IJABPT*, 2011, 2:1, 132-138. Citari=0
10. Ani Ioana Cotar, Mariana Carmen Chifiriuc, Alina Maria **Holban**, Otilia Banu, and Veronica Lazar: Prevalence of agr specificity groups among *Staphylococcus aureus* strains isolated from different clinical specimens patients with cardiovascular surgery associated infections. *Biointerface research in applied chemistry*. Volume 2, Issue 1, 2011, 264-270. Citari=0
11. Caplan M. E., Mateescu L. A., **Holban** A. M., Virulence features of *L. monocytogenes* strains isolated from meat products. *Veterinary Medicine*, Vol. LVIII ISSUE 3, PRINT ISSN 1222-5304, 270-279, 2012. Citari=0

5. Cărți în edituri internaționale

1. **Holban**, Alina Maria and Grumezescu, Alexandru Mihai. Novel molecular approaches to target microbial virulence. DE GRUYTER OPEN 2015, ISBN 978-3-11-044950-1. Citari=0

6. Cărți la Edituri Universitare

1. Mitache M.M., Curutiu C., Gheorghe I., Ditu LM, **Holban** A.M. 2019. Coloratii uzuale in laboratorul de microbiologie. Mic ghid practic. *Editura Universității „Titu Maiorescu”*, Editura Hamangiu. ISBN/ISSN: 978-606-27-1309-6. Citari=0
2. V Lazăr, C CHIFIRIUC, A **HOLBAN**, D BULAI, D STEWART-TULL. *Imunologie*, Editura Universității din București-Bucharest University Press, ISBN: 978-606-16-1308-3 Citari=1

7. Capitle în cărți/volume, în edituri internaționale

1. Alina Maria **Holban**, Coralia Bleotu, Mariana Carmen Chifiriuc and Veronica Lazar. Control of bacterial virulence by cell-to-cell signalling molecules. *Microbial pathogens and strategies for combating them: science,*

- technology and education. Ed. A. Méndez-Vilas, Formatex Research Center, 311-321, ISBN (13) Volume 1: 978-84-939843-9-7, 2013. Citari=0
2. Alexandru Mihai Grumezescu, Alina Maria **Holban**, Anton Ficai, Valentina Grumezescu, Veronica Lazar And Mariana Carmen Chifiriuc, *Biotechnology – Volume X: Nanobiotechnology, Nanosized Materials with Antibiofilm Activity*, 2014, ISBN: 1-62699-025-5, Studium Press LLC, Houston, USA. Citari=0
 3. Mariana Carmen Chifiriuc, Alexandru Mihai Grumezescu, Anton Ficai and Alina Maria **Holban**, *Biotechnology – Volume X: Nanobiotechnology, Applications of Nanotechnology for the Development of New Microbicidal and Microbiostatic Strategies*, 2014, ISBN: 1-62699-025-5, Studium Press LLC, Houston, USA. Citari=0
 4. Alina Maria **Holban**, Alexandru Mihai Grumezescu, Florin Iordache.; *Magnetite Nanostructures: Trends in Anti-Infectious Therapy*; 2015:05; Academic Press, Elsevier; ISBN 9780128013175. Citari=0
 5. Alina Maria **Holban**, Alexandru Mihai Grumezescu, Crina Maria Saviuc. *Magnetite Nanocomposites Thin Coatings Prepared by MAPLE to Prevent Microbial Colonization of Medical Surfaces*. Chapter in *Eco-friendly Polymer Nanocomposites*, Volume 74 of the series *Advanced Structured Materials*, Elsevier, pp 311-339. Citari=1
 6. Alina Maria **Holban**, Alexandru Mihai Grumezescu and Ecaterina Andronescu. *Inorganic nanoarchitectonics designed for drug delivery and anti-infective surfaces*. Chapter in *Surface Chemistry of Nanobiomaterials - Applications of Nanobiomaterials*, Editor Alexandru Mihai Grumezescu, ISBN: 978-0-323-42861-3, 2016 Elsevier. Citari=6
 7. Carmen Mariana Chifiriuc, Anton Ficai, Alexandru Mihai Grumezescu, Lia-Mara Ditu, Marcela Popa, Carmen Iordache, Alina Maria **Holban**, Serban Vifor Gabriel Beresteanu, Raluca Grigore and Veronica Lazar. *Soft tissue engineering and microbial infections: challenges and perspectives*, chapter in *Nanobiomaterials in Soft Tissue Engineering- Applications of Nanobiomaterials*, Editor Alexandru Mihai Grumezescu, ISBN: 978-0-323-42865-1, 2016 Elsevier. Citari=6
 8. Alina Maria **Holban**, Ecaterina Andronescu, Carmen Curutiu, Lia Mara Ditu, Mariana Carmen Chifiriuc and Veronica Lazar. *Bioactive nanomaterials for cartilage and muscle regeneration*. chapter in *Nanobiomaterials in Soft Tissue Engineering- Applications of Nanobiomaterials*, Editor Alexandru Mihai Grumezescu, ISBN: 978-0-323-42865-1, 2016 Elsevier. Citari=0
 9. Mariana Carmen Chifiriuc, Alina Maria **Holban**, Carmen Curutiu, Lia-Mara Ditu, Grigore Mihaescu, Alexandra Elena Oprea, Alexandru Mihai Grumezescu, Veronica Lazar. *Antibiotics drug delivery systems for the intracellular targeting of bacterial pathogens*. *Smart Drug Delivery System*, chapter 11, edited by Alexandru Grumezescu, 2016, ISBN 978-953-51-2247-0. Citari=0
 10. Florin Iordache, Irina Gheorghe, Veronica Lazar, Carmen Curutiu, Lia Mara Ditu, Alexandru Mihai Grumezescu, Ana Maria **Holban**. *Nanostructured materials for prolonged and safe food preservation*. *Food Preservation*, Chapter 9, p. 305-331, edited by Alexandru Grumezescu, 2016, ISBN 978-0-12-804303-5. Citari=0
 11. V. Grumezescu, A.M. **Holban**, I. Barbu, R.C. Popescu, A.E. Oprea, V. Lazar, A.M. Grumezescu and M.C. Chifiriuc. *Nanoarchitectonics used in antiinfective therapy*. ch 7 in: *Antibiotic Resistance: Mechanisms and New Antimicrobial Approaches*, eds. Kateryna Kon and Mahendra Rai. Elsevier, 2016. Citari=5
 12. Ecaterina Andronescu, Alexandru Mihai Grumezescu, Madalina-Ionela Gusa, Alina Maria **Holban**, Florina-Cristina Ilie, Alexandra Irimia, Irina-Florentina Nicoara, Mihaela Tone. *Nano-hydroxyapatite: novel approaches in biomedical applications*. Vol 4. *Nanobiomaterials in Hard Tissue Engineering: Applications of Nanobiomaterials*, ed. A M Grumezescu, eBook ISBN: 9780323428859, Pages 189–213, 2016. Citari=1
 13. Liakos I, Grumezescu A, **Holban** A. Ch 6 - *Consumer’s Health and Regulatory Organizations. Impact of Nanoscience in the Food Industry*, *Handbook of Food Bioengineering*, **Holban** AM, Grumezescu AM (Ed.), Elsevier, 2018, Pag 143-163. Citari=1
 14. Ditu L, Grigore M, Camen-Comanescu P, **Holban** A. Ch 1 - *Introduction in Nutraceutical and Medicinal Foods. Therapeutic, Probiotic, and Unconventional Foods*, **Holban** AM, Grumezescu AM (Ed.), Elsevier, 2018, Pages 1-12 <https://doi.org/10.1016/B978-0-12-814625-5.00001-7>. Citari=0
 15. Grigore E, Biscu R, **Holban** A. Chapter 4 - *Approved Genetically Engineered Foods: Types, Properties, and Economic Concerns*, in *Genetically Engineered Foods*, *Handbook of Food Bioengineering*, **Holban** AM, Grumezescu AM (Ed.), Elsevier, 2018, ISBN 978-0-12-811519-0, Pages 85-107. Citari=0
 16. Bianca Boarca, Iulia Lungu, Alina Maria **Holban**. *Bioactive Packaging for Modern Beverage Industry*. *Trends in Beverage Packaging*, Volume 16: *the Science of Beverages 2019*, Pages 51-71. Citari=0
 17. Mihaela Magdalena Mitache, Liliana Neagu, Carmen Curutiu, Alina **Holban**, Elena-Gabriela Pizamosca Iordache, Mariana Carmen Chifiriuc. Cap 8. *Microbiological and chemical characterization of bottled waters*. In *Bottled and Packaged Water*, Volume 4: *The Science of Beverages.*, editata de Alexandru Mihai Grumezescu si Alina Maria **Holban**, ISBN: 978-0-12-815272-0 (print), Elsevier, 2019. Citari=0

18. Veronica Lazăr, Lia-Mara Dițu, Carmen Curuțiu, Irina Gheorghe, Alina **Holban**, Marcela Popa and Carmen Chifiriuc. Impact of Dental Plaque Biofilms in Periodontal Disease: Management and Future Therapy. Chapter 2, Periodontitis, book edited by Pachiappan Arjunan, ISBN 978-953-51-3606-4, Print ISBN 978-953-51-3605-7, Published: November 15, 2017 under CC BY 3.0 license. Citari=0
19. V Lazar, IM Vasilescu, AM **Holban**, MC Chifiriuc. The Role of Intestinal Microbiota and Microbial Metabolites in the Development of Host Metabolic Syndrome. Nutritional Signaling Pathway Activities in Obesity and Diabetes, 191-209, 2020. Citari=0
20. Mara Mădălina Mihai, Alina-Maria **Holban**, Ana Ion, Beatrice Bălăceanu, Cristian-Dorin Gurău, Veronica Lazăr. Nano-targeted drug delivery approaches for biofilm-associated infections. Emerging Nanomaterials and Nano-Based Drug Delivery Approaches to Combat Antimicrobial Resistance, Elsevier, 2022, 97-138. Citari=0

8. Editor/redactor/coordonator cărți la edituri internaționale

- 1). Alina M **Holban**, Alexandru M Grumezescu (Ed). Materials for Biomedical Engineering - Hydrogels and Polymer-based Scaffolds. Elsevier, 537 pag, ISBN: 978-0-12-816901-8; 2019.
- 2). Alina M **Holban**, Alexandru M Grumezescu (Ed). Materials for Biomedical Engineering - Nanomaterials-based Drug Delivery. Elsevier, ISBN: 978-0-12-816913-1. 511 pag; 2019.
- 3). Alina M **Holban**, Alexandru M Grumezescu (Ed). Materials for Biomedical Engineering - Bioactive Materials for Antimicrobial, Anticancer, and Gene Therapy. Elsevier, ISBN: 978-0-12-818435-6; 442 pag; 2019.
- 4). Alina M **Holban**, Alexandru M Grumezescu (Ed). Materials for Biomedical Engineering - Nanobiomaterials in Tissue Engineering. Elsevier, ISBN: 978-0-12-816909-4, 494 pag; 2019.
- 5). Alina M **Holban**, Alexandru M Grumezescu (Ed). Materials for Biomedical Engineering - Organic Micro and Nanostructures. Elsevier, ISBN: 978-0-12-818433-2, 587 pag, 2019.
- 6). Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Safety and Preservation - Modern Biological Approaches to Improving Consumer Health. ISBN 978-0-12-814956-0, 671 pag, Academic Press-Elsevier, 2018.
- 7). Alexandru M Grumezescu, Alina M **Holban** (Ed). Therapeutic, Probiotic, and Unconventional Foods. ISBN: 978-0-12-814625-5, 465 pag, Academic Press-Elsevier, 2018.
- 8). Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Biosynthesis- Handbook of Food Bioengineering, Volume 1. ISBN: 978-0-12-811372-1; 463 pag, Academic Press-Elsevier, 2017.
- 9). Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Bioconversion - Handbook of Food Bioengineering, Volume 2. ISBN: 978-0-12-811413-1, 525 pag, Academic Press-Elsevier, 2017.
- 10). Alexandru M Grumezescu, Alina M **Holban** (Ed). Soft Chemistry and Food Fermentation - Handbook of Food Bioengineering, Volume 3, ISBN: 978-0-12-811412-4. 521 pag, Academic Press-Elsevier, 2017.
- 11) Alexandru M Grumezescu, Alina M **Holban** (Ed). Ingredients Extraction by Physicochemical Methods in Food - Handbook of Food Bioengineering, Volume 4, ISBN: 978-0-12-811521-3, 613, Academic Press-Elsevier, 2017.
- 12). Alexandru M Grumezescu, Alina M **Holban** (Ed). Microbial Production of Food Ingredients and Additives- Handbook of Food Bioengineering, Volume 5, ISBN: 978-0-12-811520-6, 494 pag, Academic Press-Elsevier, 2017.
- 13). Alexandru M Grumezescu, Alina M **Holban** (Ed). Genetically Engineered Foods - Handbook of Food Bioengineering, Volume 6, ISBN: 978-0-12-811519-0, 415 pag, Academic Press-Elsevier, 2017.
- 14). Alexandru M Grumezescu, Alina M **Holban** (Ed). Natural and Artificial Flavoring Agents and Food Dyes - Handbook of Food Bioengineering, Volume 7. ISBN: 978-0-12-811518-3, 542 pag, Academic Press-Elsevier, 2017.
- 15). Alexandru M Grumezescu, Alina M **Holban** (Ed). Therapeutic Foods - Handbook of Food Bioengineering, Volume 8. ISBN: 978-0-12-811517-6, 511 pag, Academic Press-Elsevier, 2018.
- 16). Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Packaging and Preservation - Handbook of Food Bioengineering, Volume 9. ISBN: 978-0-12-811516-9, 559 pag, Academic Press-Elsevier, 2018.
- 17). Alexandru M Grumezescu, Alina M **Holban** (Ed). Microbial Contamination and Food Degradation - Handbook of Food Bioengineering, Volume 10. ISBN: 978-0-12-811515-2, 487 pag, Academic Press-Elsevier, 2018.
- 18). Alexandru M Grumezescu, Alina M **Holban** (Ed). Diet, Microbiome and Health - Handbook of Food Bioengineering, Volume 11. ISBN: 978-0-12-811440-7, 499 pag, Academic Press-Elsevier, 2018.
- 19). Alexandru M Grumezescu, Alina M **Holban** (Ed). Impact of Nanoscience in the Food Industry Handbook of Food Bioengineering, Volume 12. ISBN: 978-0-12-811441-4, 459 pag, Academic Press-Elsevier, 2018.
- 20). Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Quality: Balancing Health and Disease - Handbook of Food Bioengineering, Volume 13. ISBN: 978-0-12-811442-1, 505 pag, Academic Press-Elsevier, 2018.

21. Alexandru M Grumezescu, Alina M **Holban** (Ed). Advances in Biotechnology for Food Industry - Handbook of Food Bioengineering, Volume 14. ISBN: 978-0-12-811443-8, 480 pag, Academic Press-Elsevier, 2018.
22. Alexandru M Grumezescu, Alina M **Holban** (Ed). Foodborne Diseases - Handbook of Food Bioengineering, Volume 15. ISBN: 978-0-12-811444-5, 542 pag, Academic Press-Elsevier, 2018.
23. Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Control and Biosecurity - Handbook of Food Bioengineering, Volume 16. ISBN: 978-0-12-811445-2. 589 pag, Academic Press-Elsevier, 2018.
24. Alexandru M Grumezescu, Alina M **Holban** (Ed). Alternative and Replacement Foods - Handbook of Food Bioengineering, Volume 17. ISBN: 978-0-12-811446-9, 472 pag, Academic Press-Elsevier, 2018.
25. Alexandru M Grumezescu, Alina M **Holban** (Ed). Food Processing for Increased Quality and Consumption - Handbook of Food Bioengineering, Volume 18. ISBN: 978-0-12-811447-6. 498 pag, Academic Press-Elsevier, 2018.
26. Alexandru M Grumezescu, Alina M **Holban** (Ed). Role of Materials Science in Food Bioengineering Handbook of Food Bioengineering, Volume 19. ISBN: 978-0-12-811448-3, 552 pag, Academic Press-Elsevier, 2018.
27. Alexandru M Grumezescu, Alina M **Holban** (Ed). Biopolymers for Food Design - Handbook of Food Bioengineering, Volume 20. ISBN: 978-0-12-811449-0, 513 pag, Academic Press-Elsevier, 2018.
28. Alexandru M Grumezescu, Alina M **Holban** (Ed). PRODUCTION AND MANAGEMENT OF BEVERAGES Volume 1: The Science of Beverages, ISBN: 978-0-12-815260-7, 484 pag , Woodhead Publishing- Elsevier, 2019.
29. Alexandru M Grumezescu, Alina M **Holban** (Ed). PROCESSING AND SUSTAINABILITY OF BEVERAGES Volume 2: The Science of Beverages. ISBN: 978-0-12-815259-1, 570 pag, Woodhead Publishing- Elsevier, 2019.
30. Alexandru M Grumezescu, Alina M **Holban** (Ed). ENGINEERING TOOLS IN THE BEVERAGE INDUSTRY Volume 3: The Science of Beverages. ISBN: 978-0-12-815258-4, 480 pag, Woodhead Publishing- Elsevier, 2019.
31. Alexandru M Grumezescu, Alina M **Holban** (Ed). BOTTLED AND PACKAGED WATER Volume 4: The Science of Beverages. ISBN: 978-0-12-815272-0, 464 pag, Woodhead Publishing- Elsevier, 2019.
32. Alexandru M Grumezescu, Alina M **Holban** (Ed). FERMENTED BEVERAGES Volume 5: The Science of Beverages. ISBN: 978-0-12-815271-3, 650 pag, Woodhead Publishing- Elsevier, 2019.
33. Alexandru M Grumezescu, Alina M **Holban** (Ed). NON-ALCOHOLIC BEVERAGES Volume 6: The Science of Beverages. ISBN 978-0-12-815270-6, 536 pag, Woodhead Publishing- Elsevier, 2019.
34. Alexandru M Grumezescu, Alina M **Holban** (Ed). ALCOHOLIC BEVERAGES Volume 7: The Science of Beverages. ISBN: 978-0-12-815269-0, 526 pag, Woodhead Publishing- Elsevier, 2019.
35. Alexandru M Grumezescu, Alina M **Holban** (Ed). CAFFEINATED AND COCOA BASED BEVERAGES Volume 8: The Science of Beverages. ISBN: 978-0-12-815864-7, 522 pag, Woodhead Publishing- Elsevier, 2019.
36. Alexandru M Grumezescu, Alina M **Holban** (Ed). MILK-BASED BEVERAGES Volume 9: The Science of Beverages. ISBN: 978-0-12-815504-2, 572 pag, Woodhead Publishing- Elsevier, 2019.
37. Alexandru M Grumezescu, Alina M **Holban** (Ed). SPORTS AND ENERGY DRINKS Volume 10: The Science of Beverages. ISBN 978-0-12-815851-7, 578 pag, Woodhead Publishing- Elsevier, 2019.
38. Alexandru M Grumezescu, Alina M **Holban** (Ed). FUNCTIONAL AND MEDICINAL BEVERAGES Volume 11: The Science of Beverages. ISBN 978-0-12-816397-9, 540 pag, Woodhead Publishing- Elsevier, 2019.
39. Alexandru M Grumezescu, Alina M **Holban** (Ed). NUTRIENTS IN BEVERAGES Volume 12: The Science of Beverages. ISBN 978-0-12-816842-4, 632 pag, Woodhead Publishing- Elsevier, 2019.
40. Alexandru M Grumezescu, Alina M **Holban** (Ed). NATURAL BEVERAGES Volume 13: The Science of Beverages. ISBN 978-0-12-816689-5, 454 pag, Woodhead Publishing- Elsevier, 2019.
41. Alexandru M Grumezescu, Alina M **Holban** (Ed). VALUE-ADDED INGREDIENTS AND ENRICHMENTS OF BEVERAGES Volume 14: The Science of Beverages. ISBN 978-0-12-816687-1, 536 pag, Woodhead Publishing- Elsevier, 2019.
42. Alexandru M Grumezescu, Alina M **Holban** (Ed). PRESERVATIVES FOR THE BEVERAGE INDUSTRY Volume 15: The Science of Beverages. ISBN 978-0-12-816685-7, 538 pag, Woodhead Publishing- Elsevier, 2019.
43. Alexandru M Grumezescu, Alina M **Holban** (Ed). TRENDS IN BEVERAGE PACKAGING Volume 16: The Science of Beverages. ISBN: 978-0-12-816683-3, 438 pag, Woodhead Publishing- Elsevier, 2019.
44. Alexandru M Grumezescu, Alina M **Holban** (Ed). QUALITY CONTROL IN THE BEVERAGE INDUSTRY Volume 17: The Science of Beverages. ISBN: 978-0-12-816681-9, 576 pag, Woodhead Publishing- Elsevier, 2019.
45. Alexandru M Grumezescu, Alina M **Holban** (Ed). SAFETY ISSUES IN BEVERAGE PRODUCTION Volume 18: The Science of Beverages. ISBN 978-0-12-816679-6, 528 pag, Woodhead Publishing- Elsevier, 2020.
46. Alexandru M Grumezescu, Alina M **Holban** (Ed). BIOTECHNOLOGICAL PROGRESS AND BEVERAGE CONSUMPTION Volume 19: The Science of Beverages. ISBN 978-0-12-816678-9, 522 pag, Woodhead Publishing- Elsevier, 2020.

47. Alexandru M Grumezescu, Alina M **Holban** (Ed). NANOENGINEERING IN THE BEVERAGE INDUSTRY Volume 20: The Science of Beverages. ISBN 978-0-12-816677-2, 474 pag, Woodhead Publishing- Elsevier, 2020.

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)**
4. GA Stanciu, DE Tranca, R Hristu, SG Stanciu, AM **Holban**, A Toma, C Stoichita. A new technique in scanning near field optical microscopy used for investigations on the biological samples. 2018, 20th International Conference on Transparent Optical Networks (ICTON)
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).
6. M Lucidi, SG Stanciu, DE Tranca, R Hristu, AM **Holban**, L Nchele, GA Stanciu, G Cincotti. Label-based and label-free optical nanoscopy of pathogenic bacterial species. International Conference on Advanced Laser Technologies (ALT), 2019.
7. **Holban**, A.M., Joia, A., Zarif, M., Vizireanu, S., Grumezescu, A.M., Birca, A., Farcasiu, A.T., Marinescu, F., Chifiriuc, M.C., Modulation of biofilm development in biomimetic hydroxyapatite and natural enamel by cold plasma treatment” E-MRS Spring Meeting 2022, Strasbourg/ Franta/ online, 30.05.2022 – 03.06.2022
8. **Holban** Alina Maria, Vizireanu Sorin, Zarif Maria, Grumezescu Alexandru Mihai, Birca Alexandra, Farcasiu Alexandru Titus, Marinescu Florica, Chifiriuc Mariana Carmen. Atmospheric plasma treatment to modulate biofilm formation and fluoridation of enamel-like hydroxyapatite model. 22nd Romanian International Conference on Chemistry and Chemical Engineering, Sinaia/ ROMANIA, 7 – 9. 09. 2022
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
10. **Holban** Alina Maria, Grumezescu Alexandru Mihai, Valentina Grumezescu, Lia Maria Ditu, Carmen Curutiu, Mariana Carmen Chifiriuc, Veronica Lazar. Wound dressings modified with ZnO nanoparticles to inhibit biofilm pathogens. 22nd Romanian International Conference on Chemistry and Chemical Engineering Sinaia/ ROMANIA 7 – 9. 09. 2022
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
14. Madalina Preda, Mara Mădălina Mihai, Alina Maria **Holban**, Alexandru Mihai Grumezescu, Gabriela Loredana Popa, Veronica Lazar, Ioan Mircea Popa. EP370 EFFECT OF SILVER NANOPARTICLES ON GROWTH AND BIOFILM PRODUCTION BY PSEUDOMONAS AERUGINOSA STRAINS ISOLATED FROM INFECTED WOUNDS. Journal of Wound Management, 2023.
15. Mara Mădălina Mihai, Veronica Lazar, Carmen Chifiriuc, Mircea Popa, Alina Maria **Holban**, Carmen Curutiu, Florica Marinescu, Boglarka Ifrim, Andreea Elena, Lia-Mara Ditu. EP365 THE STUDY OF THE

Poster

1. **Holban**, Alina, Maria; Heeb, Stephan; Chifiriuc, Mariana, Carmen; Williams, Paul, Lazar, Veronica.; Host stress hormone noradrenaline interferes with *Pseudomonas aeruginosa* social behaviors in an iron dependent manner; FEBS/EMBO 2014; 30.08.2014-04.09.2014; Paris, Franta.
2. Cristescu, V. Grumezescu, A. M. **Holban**, B.S. Vasile, L. Mogoanta, G. D. Mogosanu, A.M. Grumezescu, G. Socol, I.N. Mihailescu, A. Fikai, R. Trusca, F. Iordache, D.B. Chrisey, MAPLE-fabricated thin films composed of 5 nm antibiotics functionalized magnetite nanostructures with anti-pathogenic properties, E-MRS 2014 SPRING MEETING, Symposium J: Laser interaction with advanced materials: fundamentals and applications, May 26th-30th, 2014, Lille, France.
3. Grumezescu, E. Andronescu, G. Socol, A.M. **Holban**, A. M. Grumezescu, A. Fikai, R. Trusca, F. Iordache, Tetracycline local delivery from γ -aminobutyric acid-silica networks thin films for preventing microbial infections, E-MRS 2014 SPRING MEETING, Symposium J: Laser interaction with advanced materials: fundamentals and applications, May 26th-30th, 2014, Lille, France.
4. Grumezescu, A.M. **Holban**, A.M. Grumezescu, G. Socol, B.S. Vasile, A. Fikai, R. Trusca, F. Iordache, γ -cyclodextrine – usnic acid thin film prepared by MAPLE for improving medical surfaces resistance to *Staphylococcus aureus* colonization, E-MRS 2014 SPRING MEETING, Symposium J: Laser interaction with advanced materials: fundamentals and applications, May 26th-30th, 2014, Lille, France.
5. Socol, A.M. Grumezescu, A.M. **Holban**, B.S. Vasile, R. Cristescu, V. Grumezescu, D. Fikai, A. Fikai, R. Trusca, E. Grosu, F. Iordache, Fabrication and characterization of medical surfaces functionalized with silicon polymer for anti-infective therapy applications, E-MRS 2014 SPRING MEETING, Symposium J: Laser interaction with advanced materials: fundamentals and applications, May 26th-30th, 2014, Lille, France.
6. Grumezescu, E. Andronescu, G. Socol, A.M. **Holban**, L. Mogoanta, G.D. Mogosanu, A.M. Grumezescu, B.S. Vasile, A. Fikai, R. Trusca, F. Iordache. Poly(lactic-co-glycolic) acid/chitosan microsphere thin films functionalized with stabilized cinnamomi aetheroleum and magnetite nanoparticles for preventing the microbial colonization of medical surfaces: E-MRS 2014 SPRING MEETING, Symposium I: Solution processing and properties of functional oxide thin films and nanostructures, May 26th-30th, 2014, Lille, France.
7. M. Grumezescu, E. Andronescu, A. M. **Holban**, L. Mogoanta, G. D. Mogosanu, G. Socol, V. Grumezescu, B. S. Vasile, A. Fikai, R. Trusca, F. Iordache, MAPLE fabricated magnetite@eugenol and poly lactic acid – chitosan coated surfaces with anti-staphylococcal properties, E-MRS 2014 SPRING MEETING, Symposium I: Solution processing and properties of functional oxide thin films and nanostructures, May 26th-30th, 2014, Lille, France.
8. Grumezescu, E. Andronescu, A. M. **Holban**, L. Mogoanta, G. D. Mogosanu, A. M. Grumezescu, G. Socol, B. S. Vasile, A. Fikai, R. Trusca, F. Iordache, 7 nm natural products functionalized iron oxide nanostructures thin films prepared by MAPLE for improved resistance to microbial colonization of medical surfaces, E-MRS 2014 SPRING MEETING, Symposium I: Solution processing and properties of functional oxide thin films and nanostructures, May 26th-30th, 2014, Lille, France.
9. M. Dițu, Mariana Carmen Chifiriuc, Coralia Bleotu, Alina Maria **Holban**, Carmen Curutiu, Luminita Marutescu, Anton Fikai, Grigore Mihaescu. 2014. Assessment of the microbial and epithelial cells adherence to select new optimal biocompatible material with anti-biofilm properties, ESCMID Conferences, mai 2014, Barcelona, Spania – Poster.
10. Alina Maria **Holban**, Coralia Bleotu, Mariana Carmen Chifiriuc, Lia Mara Dițu, Luminita Marutescu, Carmen Curutiu, Veronica Lazar. The impact of the *Pseudomonas aeruginosa* culture fractions on mesenchymal stem cells morphophysiology, ESCMID Conferences, mai 2014, Barcelona, Spania – Poster.
11. Florin Iordache, Alina Maria **Holban**, Carmen Curutiu, Veronica Lazar, Lia Mara Dițu, Luminita Marutescu, Carmen Mariana Chifiriuc, Modulation of the expression of adhesion and inflammatory response in endothelial cells by *Pseudomonas aeruginosa* quorum-sensing molecules, ESCMID Conferences, mai 2014, Barcelona, Spania – Poster.
12. Alina Maria **Holban**, Stephan Heeb, Mariana Carmen Chifiriuc, Veronica Lazar, Paul Williams. The impact of the neuroendocrine stress hormone noradrenaline on the physiology of *Pseudomonas aeruginosa*. 23rd ECCMID/26-30.04.2013, Berlin, Germany. – **travel Grant**
13. A.M. **Holban**, C.M. Saviuc, A.M. Grumezescu, C. Bleotu, O. Banu, M.C. Chifiriuc, V. Lazar: Phenotypic investigation of virulence factors in *Candida* species isolated from different clinical specimens, FINSysB

- Conference, Candida Infection Biology – fungal armoury, battlefields and host defences, 10-14 October 2011, Acquafredda di Maratea, Italy – **travel Grant**
14. Grumezescu, A.M. **Holban**, G. Socol, G.D. Mogosanu, A.M. Grumezescu, A. Fikai, R. Cristescu, I. Mihailescu, C. Bleotu, C. Chifiriuc: MAPLE fabricated magnetite@eugenol and (3-hydroxybutyric acid-co-3-hydroxyvaleric acid) – polyvinyl alcohol coated surfaces with anti-staphylococcal properties, E-MRS 2013 FALL MEETING, Symposium B: Stress, structure, and stoichiometry effects on the properties of nanomaterials II, September 16-19, 2013, Warsaw, Poland.
 15. Grumezescu, A. Fikai, A.M. **Holban**, G. Socol, A.M. Grumezescu, D. Fikai, E. Grosu, I. Mihailescu, Coralia Bleotu, M.C. Chifiriuc: MAPLE deposition of silicon based polymer coatings on PVC with anti-adherent properties, E-MRS 2013 FALL MEETING, Symposium I: Multifunctional Bio-nanomaterials, September 16-19, 2013, Warsaw, Poland.
 16. Grumezescu, A.M. **Holban**, G. Socol, G.D. Mogosanu, A.M. Grumezescu, A. Fikai, R. Cristescu, I. Mihailescu, C. Bleotu, C. Chifiriuc: Anti-fungal surface based on stabilized *Cinnamomi aetheroleum* and poly(3-hydroxybutyric acid-co-3-hydroxyvaleric acid) – polyvinyl alcohol microspheres fabricated by MAPLE technique, E-MRS 2013 FALL MEETING, Symposium G: Bioinspired and Biointegrated Materials as Frontiers Nanomaterials III, September 16-19, 2013, Warsaw, Poland.
 17. M. Saviuc, A.M. Grumezescu, C. Bleotu, A.M. **Holban**, O. Banu, D. Mihaiescu, P. Balaure, M.C. Chifiriuc, V. Lazar: Dynamic assessment of the antifungal effect of different plant essential oils by flow cytometry. FINSysB Conference, Candida Infection Biology – fungal armoury, battlefields and host defences, 10-14 October 2011, Acquafredda di Maratea, Italy.
 18. Saviuc, A.M. Grumezescu, A.M. **Holban**, C. Chifiriuc, D. Mihaiescu, P. Catalin Balaure, R. Hristu, G. Stanciu, L. Olariu, V. Lazar: Hybrid nanomaterial for stabilizing *Rosmarinus officinalis* L. essential oils in biointerface applications. 42nd International Symposium on Essential Oils, 11-14 September, 2011, Maritim Pine Beach Resort Antalya – Turkey.
 19. M. Grumezescu, C. Bleotu, C. Saviuc, C. Chifiriuc, D. Mihaiescu, A. **Holban**, A. Cotar, M. Bucur, L. Dascalu, V. Lazar: Influence of Fe₃O₄/oleic acid – core/shell nanoparticles on the cellular cycle and adherence of different eukaryotic cell lines. 13th International Symposium Materials, Methods & Technologies, 7-10 June 2011, Sunny Beach, Bulgaria.
 20. Saviuc, A.M. Grumezescu, M.C. Chifiriuc, L. Dascalu, M. Popa, A. Cotar, A. **Holban**, C. Bleotu, E. Oprea, D. Mihaiescu, V. Lazar: *In vitro* assessment of the core/shell/extra-shell nanosystem influence on the antibiofilm effect of usnic acid. European Congress of Clinical Microbiology and Infectious Diseases, 7-10 May 2011, Milan, Italy.
 21. Magdalena Laura Monica, **Holban** Alina Maria, Luca Catalina Mariana, Savu Lorand, Gavrilă Lucian – Preliminary genetic analyses of ARP-like gene from *Drosophila melanogaster*, a structural ortholog of human ARP gene, mutated in early stage tumours. Barcelona BioMed Conferences, Modelling Cancer in *Drosophila*, 2009, Barcelona.
 22. Ani Ioana Cotar, Mariana Carmen Chifiriuc, Alina-Maria **Holban**, Marcela Popa, Otilia Banu, Veronica Lazar. Virulence patterns of *Pseudomonas aeruginosa* nosocomial strains associated with different clinical infections. 21st ECCMID/27th ICC: Milan, Italy 7 – 10 May 2011, P 1752.
 23. Ani Ioana Cotar, Mariana Carmen Chifiriuc, Alina-Maria **Holban**, Crina Saviuc, Coralia Bleotu, Veronica Lazar. Real-time qRT-PCR evaluation of HeLa cells apoptosis induced by *Pseudomonas aeruginosa* quorum-sensing molecules. 22rd ECCMID, 31 march-3 april, 2012, London, UK.
 24. Laura Monica Magdalena, Catalina Mariana Luca, Alina Maria **Holban**, Marieta Costache, Maria Daniela Usurelu, Lucian Gavrilă – Epigenetic investigations in *Drosophila* for identifying genes responsive to different stress conditions. Bulletin USAMV, Romania, 66 (1-2), Animal Sciences and Biotechnologies, 2009.
 25. Lucian GAVRILA, Daniela USURELU, Alexandru Filip VLADIMIRESCU, Claudia Elena COIPAN, Alina Maria **HOLBAN**, Laura Monica MAGDALENA, Daniel DEZMIREAN, Laura LASLO, Ioan PASCA, Alexandra MATEI. Cytogenetic and molecular analysis aspects on some local Romanian *Bombyx mori* races. The International Symposium “Prospects for the 3rd Millennium Agriculture” USAMV Cluj Napoca, 2009.
 26. Cauia, D. Usurelu, P. Apostol, D. Cimponeriu, A. Siceanu, Magdalena L. M., A. **Holban**. Preliminary results regarding the genetic and morphometric characterization of honeybees (*A.mellifera*) from Romania. XLVth Scientific Apicultural Conference- Poland, 2008, p54-55.
 27. Lazar, C. Chifiriuc, L. Dascalu, M. Popa, A. **Holban**, C. Saviuc, A. Grumezescu: Microbial biofilms studied by high-resolution imaging techniques, The 2012 Super-resolution and Life Sciences Workshop, 4-6 sept 2012, Brasov, Romania

28. Iordache C., Lixandru M., Iordache F., **Holban** A., Bleotu C., Chifiriuc C., Antohe F. Internalization of *Pseudomonas aeruginosa* by endothelial cell induces apoptosis, Conferinta Anuala Internationala a Societatii de Biochimie si Biologie Moleculara, 2010.
29. Iordache, M. Lixandru, F. Iordache, A. **Holban**, C. Bleotu, C. Chifiriuc, E. Andrei, F. Antohe. Morphological and molecular changes induced by apoptosis following a treatment with *P. aeruginosa* bacterial culture and with cell free culture in endothelial cells, The Anniversary Conference of the Institute of Biology, “50 Years of Academic Research in Biology”, 2010.
30. **Holban**, Alina Maria; Chifiriuc, Mariana; Grumezescu, Alexandru; Bleotu, Coralia; Lazar, Veronica; Andronescu, Ecaterina.; Nanoarchitectonics based on magnetite functionalized with plant-derived compounds alter the adherence, invasion and secretory features in *Pseudomonas aeruginosa*; 25th ECCMID; 25:04:2015 - 28:04:2015; Copenhagen, Danemarca;
31. **Holban**, Alina Maria; Grumezescu, Valentina; Chifiriuc, Mariana C; Grumezescu, Alexandru M; Bleotu, Coralia; Vasile, Otilia; Lazar, Veronica; Andronescu, Ecaterina; Antimicrobial effect of magnetite nanoarchitectonics functionalized with plant-derived compounds against methicillin resistant *Staphylococcus aureus*; EMRS; 11:05:2015-15:05:2015; Lille, Franta.
32. C. Curutiu, F. Iordache, A. **Holban**, L. Ditu, O. Bugnar, A. Stefan, C. Bleotu, V. Lazar, M. Chifiriuc. Influence of cell-to-cell interactions and QS molecules on *Candida albicans* and *Pseudomonas aeruginosa* growth and adherence features. 26th ECCMID Congress, the European Congress of Clinical Microbiology and Infectious Diseases, Amsterdam, Netherlands, April 9 – 12, 2016.
33. M. Hussien, A. **Holban**, G. Socol, M. Popa, C. Bleotu, N., Mihailescu, L. Duta, G. Stan, V. Lazar, C., Hapenciu, I. Negut, C. Ristoscu, I. Mihailescu, M. Chifiriuc. Titanium surfaces coated with carbon and silver nanoparticles inhibit colonization and biofilm formation of Gram positive bacteria. 26th ECCMID Congress, the European Congress of Clinical Microbiology and Infectious Diseases, Amsterdam, Netherlands, April 9 – 12, 2016.
34. **Holban**, E. Andronescu, A. Grumezescu, L. Ditu, C. Iordache, V. Lazar, V. Grumezescu, M. Chifiriuc. Magnetite nanoparticles functionalized with plant derived compounds reduce the resistance and persistence of opportunistic pathogens. 26th ECCMID Congress, the European Congress of Clinical Microbiology and Infectious Diseases, Amsterdam, Netherlands, April 9 – 12, 2016.
35. R. Cristescu, V. Grumezescu, G. Socol, A.M. **Holban**, R. Trusca, F. Iordache, M.C. Chifiriuc, R. Narayan, D.B. Chrisey. Isoflavonoid Thin Films Fabricated By MAPLE For Improved Resistance of Biomedical Surfaces to Microbial Colonization. 10TH INTERNATIONAL CONFERENCE ON PHOTOEXCITED PROCESSES AND APPLICATIONS (ICPEPA), AUGUST 29 – SEPTEMBER 2, 2016, BRASOV, ROMANIA
36. O. Fufă, G. Socol, A.M. Grumezescu, E. Andronescu, M. Socol, R.C. Popescu, A.M. **Holban**. Biocompatible HAp–Ag nanostructured coatings for titanium implants. 10TH INTERNATIONAL CONFERENCE ON PHOTOEXCITED PROCESSES AND APPLICATIONS (ICPEPA), AUGUST 29 – SEPTEMBER 2, 2016, BRASOV, ROMANIA.
37. V. Grumezescu, A.M. **Holban**, M.C. Chifiriuc, A.M. Grumezescu, R. Trusca, F. Iordache, M. Patachia, G. Socol. MAPLE fabricated thin coatings based on magnetite nanoparticles embedded into biopolymeric spheres with resistance to microbial colonization. 10TH INTERNATIONAL CONFERENCE ON PHOTOEXCITED PROCESSES AND APPLICATIONS (ICPEPA), AUGUST 29 – SEPTEMBER 2, 2016, BRASOV, ROMANIA.
38. A.M. **Holban**, E. Andronescu, A.M. Grumezescu, L.M. Ditu, C. Curutiu, V. Lazar, V. Grumezescu, B. Vasile, C.M. Chifiriuc. Magnetite nanoparticles functionalized with β -pinene modulate virulence, attachment and biofilm formation of opportunistic pathogens. 10TH INTERNATIONAL CONFERENCE ON PHOTOEXCITED PROCESSES AND APPLICATIONS (ICPEPA), AUGUST 29 – SEPTEMBER 2, 2016, BRASOV, ROMANIA.
39. Negut, V. Grumezescu, A.M. **Holban**, F. Iordache, R. Trusca, M. Petrus, G. Socol. MAPLE deposition of Fe₃O₄ nanoparticles functionalized with *Nigella sativa* for antimicrobial applications. 10TH INTERNATIONAL CONFERENCE ON PHOTOEXCITED PROCESSES AND APPLICATIONS (ICPEPA), AUGUST 29 – SEPTEMBER 2, 2016, BRASOV, ROMANIA.
40. Alina Maria **Holban**, Alexandru Grumezescu, Mariana Carmen Chifiriuc, Valentina Grumezescu, Lia Mara Ditu, Carmen Curutiu, Ani Cotar, Ecaterina Sarbu, Ecaterina Andronescu, Veronica Lazar. Fe₃O₄ nanoarchitectures functionalized with eugenol modulate virulence, biofilm formation and Quorum Sensing molecular signaling, Symposium X: New frontiers in laser interaction: from hard coatings to smart materials of the E-MRS 2017 Spring Meeting, Strasbourg (France), May 22 - 26, 2017- **best poster award**.
41. Grumezescu, A. **Holban**, R. Popescu, O. Fufa, P. Balaure. Chitin-based bionanocomposites for wound-healing applications. 27th ECCMID, 22-25 Aprilie 2017, Viena, Austria.
42. A M **Holban**, A M Grumezescu, M C Chifiriuc, V Grumezescu, L M Ditu, C Curutiu, AI Cotar, E Sarbu, E Andronescu, V Lazar. Fe₃O₄ nanoarchitectures functionalized with eugenol modulate virulence, biofilm

- formation and Quorum Sensing molecular signaling in *Pseudomonas aeruginosa*. EMRS, May 22 - 26, 2017, Strasbourg, Franta – BEST POSTER AWARD.
43. A.M. **Holban**, A.M. Grumezescu, L.M. Ditu, C. Curutiu, C. Bleotu, V. Grumezescu, C. Chifiriuc, V. Lazar. Limonene functionalized magnetite nanoparticles for improved antimicrobial and immunomodulatory therapy. 42nd FEBS Congress, 7-14 September 2017, Ierusalim, Israel.
 44. A M **Holban**, A M Grumezescu, M C Chifiriuc, L M Ditu, C Curutiu, V Grumezescu, C Bleotu and V Lazar. Magnetite nanoparticles as efficient nanoshuttles for the delivery of antimicrobial natural volatile compounds. ANM 2017, 19-21 iulie 2017, Aveiro, Portugalia.
 45. AM Grumezescu, A Fikai, D Fikai, AM **Holban**, BS Vasile, E Andronescu. Biomaterials based on functional graphene oxide and natural compounds with improved biocompatibility, biodistribution and low immunomodulatory effects. FEBS JOURNAL 284, 328-328. 42nd FEBS Congress, 7-14 September 2017, Ierusalim, Israel.
 46. **Holban** A., Grumezescu A., Oprea E., Birca A., Dima Balcescu M., Paun L., Ditu L., Iordache C., Gheorghe I., Fikai A.. Antimicrobial polymeric fibers prepared from recycled PET for medical textiles and food packaging applications, ECCMID 2018, 21-24 Apr, Madrid, Spain – Poster.
 47. **Holban** A, Neacsu I, Ditu L, Curutiu C, Moldoveanu G, Grumezescu A, Chifiriuc M, Lazar V, Bleotu C, Fikai A. Antimicrobial nanoparticles-collagen hydrogels for the management of wound infections. ECCMID 2018, 21-24 Apr, Madrid, Spain – Poster.
 48. **Holban** A M, Grumezescu A M, Ditu L M, Curutiu C, Gheorghe I, Grumezescu V, Lazar V, Andronescu E. Magnetic core-shell nanoparticles with antimicrobial and immunomodulatory effect. Annual International Conference of the RSBMB, 5-7 Sept 2018, Bucharest, Romania – Poster.
 49. **Holban** A M, Grumezescu A M, Bianca G, Denisa M, Mohammed H B, Mohsin S, Chifiriuc M C, Lazar V, Andronescu E. Core-shell nanoparticles functionalized with essential oils with antimicrobial activity. Joint ESENIAS and DIAS Scientific Conference and 8th ESENIAS Workshop, 26 – 28 September 2018, Bucharest, Romania – Poster.
 50. **Holban** A, Ditu L M, Grumezescu A, Curutiu C, Lazar V, Vasile B, Andronescu E. Impact of inorganic nanoparticles on the virulence of some microbiota isolates with probiotic effect. 6th World Congress on Targeting Microbiota, 28-30 October 2018, Porto, Portugal – Poster.
 51. Ludmila Motelica, Ovidiu Oprea, Alina **Holban**, Anton Fikai. Optical, Photocatalytic and Antibacterial Properties of Zinc Oxide Nanoparticles. 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE). 4-7.09.2019, Constanta, Romania.
 52. A.C. Bîrcă, A.M. Grumezescu, F. Iordache, A.M. **Holban**, A.O. Stoica, I.A. Neacșu, B.S. Vasile, V.A. Surdu, R. Trușcă. Nanostructured coatings based on silver nanoparticles with applications in anti-infectious therapy. Conference of the Romanian Electron Microscopy Society - C.R.E.M.S., 23-25.10.2019, Brasov, Romania.
 53. A.C. Bîrcă, A.M. Grumezescu, F. Iordache, A.M. **Holban**, A.O. Stoica, I.A. Neacșu, B.S. Vasile, V.A. Surdu, R. Trușcă. Composite hydrogels with application in wound healing. Conference of the Romanian Electron Microscopy Society - C.R.E.M.S., 23-25.10.2019, Brasov, Romania.
 54. I.A. Neacsu, I. C. Croitorescu, V.L. Ene, R. Trusca, B.S. Vasile, A.M. **Holban**, A.C. Birca, E. Andronescu. Bioactive antimicrobial SiO₂-Ag modified wound-dressings. Conference of the Romanian Electron Microscopy Society - C.R.E.M.S., 23-25.10.2019, Brasov, Romania.
 55. Paduraru, D. Ene, A.I. Nicoara, B.S. Vasile, R. Trusca, A.M. **Holban**. Bacterial cellulose- hydroxyapatite- silver based composites with applications in the field of hard tissue engineering. Conference of the Romanian Electron Microscopy Society - C.R.E.M.S., 23-25.10.2019, Brasov, Romania.
 56. A.E. Stoica, A.M. Grumezescu, C. Chircov, A.M. **Holban**, A. Fikai, B.S. Vasile, E. Andronescu. AgNPs-PET nanofibers with antimicrobial properties. Conference of the Romanian Electron Microscopy Society - C.R.E.M.S., 23-25.10.2019, Brasov, Romania.
 57. Alina M **Holban**, Alexandru M Grumezescu, Carmen Curutiu, Lia M Ditu, Irina Gheorghe, Bogdan S Vasile, Coralia Bleotu, Veronica Lazar, Ecaterina Andronescu. Anti-pathogenic effect of *Eugenia caryophyllata* essential oil functionalized core-shell magnetic nanoparticles. FEMS 2019, 07 - 12 July, Glasgow, Scotland – Poster.
 58. **Alina Maria Holban**, Lia-Mara Ditu, Alexandru Mihai Grumezescu, Carmen Curutiu, Coralia Bleotu, Valentina Grumezescu, Veronica Lazar, Bogdan Vasile, Ecaterina Andronescu. Antibacterial activity of functional Fe₃O₄-PEG SiO₂ nanoparticles on pathogenic and microbiota species. EMRS - Spring Meeting 2019, 27-31.05.2019, Nisa, Franta.
 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
63. Luc Tran Van, Ilinca Hagi, Florica Marinescu, Irina Gheorghe, Alina-Maria **Holban**, Tatiana Eugenia Sesan, Veronica Lazar. Antimicrobial activity and antibiotic synergism of some essential oils in multiresistant Pseudomonas aeruginosa strains. FEMS 2022 conference. Belgrad/Serbia, 29.06.2022 – 03.07.2022
64. Lia-Mara Ditu, Ionela Avram, Irinia Denisa, Carmen Curuțiu, Alina **Holban**, Carmen Chifiriuc, Petronela Ancuta, Veronica Lazar. Humoral immunity in response to SARS-COV-2 vaccines and natural infection in a cohort of healthy people. International SOMED Congress 2022 Greece 14-16 June 2022.

10. Lucrări publicate in extenso în volumele unor conferințe

1. Liliana Marinescu, Angela Spoiala, Ecaterina Andronescu, Anton Fikai, Denisa Fikai, 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 Fikai, Alina Maria **Holban**, Toma Fistos, Anton Fikai, 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 Fikai, Alina Maria **Holban**, Toma Fistos, Anton Fikai, 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 Fikai, Alina Maria **Holban**, Toma Fistos, Anton Fikai, 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 Fikai, Denisa Fikai, 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 Fikai, Denisa Fikai, 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
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.