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EXPERIENȚĂ PROFESIONALĂ

31/05/2005 – PREZENT – Voluntari, Romania

Cercetător Științific (CS II) – INSTITUTUL NAȚIONAL DE CERCETARE-DEZVOLTARE PENTRU MICROTEHNOLOGIE – IMT BUCUREȘTI

Din mai 2020: Director Tehnic

Din iunie 2019: Membru în comitetului de coordonare al EuroNanoLab, infrastructură de cercetare distribuită la nivel european

Din martie 2018: Șef al Laboratorului pentru Nanotehnologii și Nanostructuri pe Bază de Carbon.

31/07/2008 – 30/04/2009 – Singapore, Singapore

Ofițer de proiect – SCHOOL OF MECHANICAL AND AEROSPACE ENGINEERING, NANYANG TECHNOLOGICAL UNIVERSITY

Dezvoltarea și implementarea proceselor de microfabricare pentru sisteme microfluidice.

EDUCAȚIE ȘI FORMARE

31/08/2009 – 31/03/2014 – Bucharest, Romania

Doctorat în Inginerie Electrică – Facultatea de Inginerie Electrică, Universitatea Politehnica din București

31/08/2007 – 30/06/2009 – Bucharest, Romania

Masterat în Optică, Spectroscopie, Plasmă și Laseri – Facultatea de Fizică, Universitatea București

31/08/2003 – 30/06/2007 – Bucharest, Romania

Licențiat în Fizică – Facultatea de Fizică, Universitatea București

APTITUDINI

Limba Natală: **Română**

Alte limbi cunoscute: Engleză (nivel C2)

● PREMII ȘI REALIZĂRI

31/03/2017

Gold Medal with the Congratulations of the Jury – International Exhibition of Inventions of Geneva

Système micro fluidique de type „Y” et „T” pour l’assemblage de cellules bactériennes en gouttes de dimensions contrôlées

30/03/2017

Special Award for exceptional results & performance – Association of Portuguese Inventor’s Innovator’s Creatives

Microfluidic System with „Y” and „T” Junctions for the Assembly of Bacterial Cells in Drop of Controlled Dimensions

30/03/2017

Special Award for the Best Invention – First Institute Researcher and Inventors in Iran (FIRI)

Development of a Microfluidic System

03/2016

Gold Medal with the Congratulations of the Jury – International Exhibition of Inventions of Geneva

Procedure for realization of the dielectrophoretic device for electrical impedance spectroscopic study of self-assembled tumor cells in the microfluidic channels

03/2016

Outstanding Innovation Award – Institute for Entrepreneurship the Hong Kong Polytechnic University

03/2016

Special Award – First Institute Researcher and Inventors in Iran (FIRI)

03/2015

Gold Medal with the Congratulations of the Jury – International Exhibition of Inventions of Geneva

Réactif à base de nanoparticules d'or, procédé pour sa préparation et son utilisation pour la cartographie de l'architecture du tissu tumoral

03/2015

Special Award – Association of Polish Inventors and Rationalizers

03/2015

OSIM Special Award – Romanian State Office for Inventions and Trademarks

Gold nanoparticle reactive, preparation procedure and use for mapping tumor tissues

09/2014

Gold Medal – INVENTIKA 2014

Procedure for investigation the architecture of the tumour tissue based on Localized Surface Plasmon Resonance by using gold nanoparticle

● **Proiecte**

2018 – 2020

Nanostructured carbon-based materials for advanced industrial applications

Responsabil proiect

Dezvoltarea unor noi tipuri de senzori piezorezistivi bazați pe grafenă nanocristalină.

2017 – 2018

Graphene synthesized by Thermal Chemical Vapor Deposition and integrated in microfluidic devices for biomedical applications

Director de proiect

Sintetizarea grafenei CVD și integrarea în sisteme microfluidice pentru studiul proprietăților anti-bacteriene.

2016 – 2017

Technological processes for obtaining single layer graphene on copper substrate

Responsabil pachet de lucru

Dezvoltarea și implementarea proceselor de sintetizare a grafenei prin metoda termică.

2016 – 2017

Technological processes for obtaining single layer graphene on Si substrate mediated by a metal catalyst

Responsabil pachet de lucru.

Dezvoltarea și implementarea proceselor de sintetizare a grafenei prin metoda PECVD.

2016 – 2017

Investigation of CVD synthesis methods and characterization techniques for nanocrystalline diamond.

Responsabil pachet de lucru

Studiul proceselor PECVD pentru sinteza diamantului nanocristalin.

2012 – 2016

Lab-on-a-chip for cells apoptosis study - CELLIMUNOCHIP

Dezvoltarea unui sistem de tip laborator-pe-un-cip pentru studiul apoptozei celulare.

2008 – 2011

Development of a conceptual model of a lab-on-a-chip for continuous separation of particles by means of magnetophoresis and dielectrophoresis

Dezvoltarea sistemelor microfluidice pentru magnetoforeză și dielectroforeză.

2008 – 2011

Micro-electro-mechanical system with applications in peripheral nerves microsurgery reconstruction - RECONNECT

Dezvoltarea sistemelor mems pentru aplicații în reconstrucție neuronală.

2008 – 2011

Microfluidic biochip for the rheological characterization of non-Newtonian fluids with applications in medical diagnosis and treatment - MELANOCIHIP

Dezvoltarea unor dispozitive microfluidice noi pentru aplicații în bio-detectie.

2010 – 2015

Microfluidic factory for assisted self-assembly of nanosystems - MICRONANOFAB

Dezvoltarea unor procese tehnologice noi pentru fabricarea sistemelor microfluidice.

2010 – 2015

Research Center for Integrated Systems Nanotechnologies and Carbon Based Nanomaterials - CENASIC

Construcția unui centru dedicat pentru studiul materialelor carbonice.

Listă de publicații

Lucrări științifice publicate în jurnale internaționale cu factor de impact

1. B Tincu, M Avram, A Avram, V Tucureanu, G Mihai, M Popa, P Osiceanu, I Demetrescu, M Enachescu, *Investigation of plasma-assisted functionalization of pristine single layer graphene*, Chemical Physical Letters (2022) Volume: 789 Page: 139330 DOI: <https://doi.org/10.1016/j.cplett.2021.139330>
2. Angela Mihaela Baracu, Marius Andrei Avram, Carmen Breazu, Mihaela-Cristina Bunea, Marcela Socol, Anca Stanculescu, Elena Matei, Paul Conrad Vaagen Thrane, Christopher Andrew Dirdal, Adrian Dinescu, Oana Rasoga, *Silicon metalens fabrication from electron beam to UV-nanoimprint lithography*, Nanomaterials (2021) Volume: 11 Issue: 9 Page: 2329 DOI: 10.3390/nano11092329
3. Baracu, AM; Dirdal, CA; **Avram, AM**; Dinescu, A; Muller, R; Jense, GU; Thrane, PCV; Angelskar, H, *Metasurface Fabrication by Cryogenic and Bosch Deep Reactive Ion Etching*, Micromachines (2021) Volume: 12 Issue: 5 Article Number: 501 DOI: 10.3390/mi12050501
4. Martino Aldrigo, Mircea Dragoman, Sergiu Iordanescu, Andrei Avram, O-G Simionescu, Catalin Parvulescu, Hamza El Ghannudi, S Montori, Leonardo Nicchi, S Xavier, A Ziaei, *Tunable 24-GHz Antenna Arrays Based on Nanocrystalline Graphite*, IEEE Access (2021) Volume: 9 Pages: 122443-122456 DOI: 10.1109/ACCESS.2021.3109420
5. Tucureanu, V; Matei, A; **Avram, A**, *The effect of the polymeric matrix on the emission properties of YAG-based phosphors*, Journal of Alloys and Compounds (2020) Volume: 844 Article no: 156136 DOI: 10.1016/j.jallcom.2020.156136
6. Simionescu, OG; Popa, RC.; **Avram, A**; Dinescu, G, *Thin films of nanocrystalline graphene/graphite: An overview of synthesis and applications*, Plasma Processes and Polymers (2020) Volume: 17 Issue: 7 Article Number: e1900246 DOI: 10.1002/ppap.201900246
7. Tincu, B.; Avram, M.; **Avram, A.**; Tutunaru, O.; Tucureanu, V.; Matei, A.; Burinaru, T.; Comanescu, F.; Demetrescu, I., *Progress and control in development of single layer graphene membranes*, Vacuum (2020) Volume: 175 Article Number: UNSP 109269 DOI: 10.1016/j.vacuum.2020.109269
8. Simionescu, OG; Pachiu, C; Ionescu, O; Dumbravescu, N; Buiu, O; Popa, RC; **Avram, A**; Dinescu, G, *Nanocrystalline graphite thin layers for low-strain, high-sensitivity piezoresistive sensing*, Reviews on Advanced Materials Science (2020) Volume: 59 Issue: 1 Pages: 306-313 DOI: 10.1515/rams-2020-0031
9. Albu, C; Eremia, SAV.; Veca, ML; **Avram, A**; Popa, RC; Pachiu, C; Romanitan, C; Kusko, M; Gavrilă, R; Radoi, A, *Nano-crystalline graphite film on SiO₂: Electrochemistry and electroanalytical application*, Electrochimica Acta (2019) Volume: 303 Pages: 284-292 DOI: 10.1016/j.electacta.2019.02.093
10. Simionescu, OG; Romanitan, C; Tutunaru, O; Ion, V; Buiu, O; **Avram, A**, *RF Magnetron Sputtering Deposition of TiO₂ Thin Films in a Small Continuous Oxygen Flow Rate*, Coatings (2019) Volume: 9 Issue: 7 Article Number: 442 DOI: 10.3390/coatings9070442
11. Tincu, B; Demetrescu, I; **Avram, A**; Tucureanu, V; Matei, A; Tutunaru, O; Burinaru, T; Comanescu, F; Voitincu, C; Avram, M, *Performance of single layer graphene obtain by chemical vapor deposition on gold electrodes*, Diamond and Related Materials (2019) DOI: 10.1016/j.diamond.2019.107510
12. Vasilache, D; Iordanescu, S; **Avram, A**; Popescu, M; Avramescu, V, *Manufacturing and DC characterization of conductive through wafer via for MEMS applications*, Semiconductor Science and Technology (2019) Volume: 34 Issue: 3 Article Number: 035016 DOI: 10.1088/1361-6641/aafe9c

13. Burinaru, TA.; Avram, M; **Avram, A**; Marculescu, C; Tincu, B; Tucureanu, V; Matei, A; Militaru, M, *Detection of Circulating Tumor Cells Using Microfluidics*, ACS Combinatorial Science (2018) Volume: 20 Issue: 3 Pages: 107-126 DOI: 10.1021/acscombsci.7b00146
14. Popescu, MC.; Bitu, BI.; Tucureanu, V; Vasilache, D; Banu, MA.; **Avram, AM.**; GiurescuDumitrescu, RA., *Superficial and Inner Examination of a Microwave-Irradiated Dental Acrylic Resin and Its Metal-Polymer Interface*, Microscopy and Microanalysis (2018) Volume: 24 Issue: 1 Pages: 49-59 DOI: 10.1017/S1431927618000089
15. Pachiu, C.; Sandu, T.; Tibeica, C.; **Avram, A.**; Veca, L. M.; Popa, R.; Popescu, M.; Gavrilă, R.; Popov, C.; Avramescu, V., *Fabrication and characterization of suspended microstructures of ultrananocrystalline diamond*, Romanian Journal of Information Science and Technology (2018) Volume: 21 Issue: 1 Pages: 49-60
16. Tucureanu, V; Matei, A; **Avram, A**; Popescu, MC; Mihalache, I; Avram, M; Marculescu, CV; Tincu, BC; Volmer, M; Munteanu, D, *Structural and luminescence properties of yellow phosphors prepared by a modified sol-gel method*, MRS Communications (2017) Volume: 7 Issue: 3 Pages: 721-727 DOI: 10.1557/mrc.2017.84
17. Tucureanu, V; Matei, A; **Avram, AM**, *FTIR Spectroscopy for Carbon Family Study*, Critical Reviews in Analytical Chemistry (2016) 46 Issue: 6 Pages: 502-520 DOI: 10.1080/10408347.2016.1157013
18. Bunea, A. C.; Neculoiu, D.; **Avram, A. M.**; Muller, A., *W-Band receiver with Zero Bias Diode operated in the 23K-295 K temperature range*, Romanian Journal of Information Science And Technology (2016) Volume: 19 Issue: 3 Pages: 226-238
19. Tucureanu, V; Matei, A; **Avram, AM**, *Synthesis and characterization of YAG:Ce phosphors for white LEDs*, Opto-Electronics Review (2015) Volume: 23 Issue: 4 Pages: 239-251 DOI: 10.1515/oere-2015-0038
20. **Avram, A.**; Covlea, V.; Matei, A.; Bazavan, M.; Butoi, B.; Bitu, B.; Barna, E.; Jipa, A., *Impact of rf and dc plasma on wood structure*, Romanian Reports in Physics (2015) Volume: 67 Issue: 3 Pages: 1028-1039
21. Volmer, M; Avram, M; **Avram, AM**, *Detection of Magnetic Nanoparticles for Lab-on-a Chip Applications*, Romanian Journal of Information Science And Technology (2015) Volume: 18 Issue: 4 Pages: 343-355
22. **Avram, A**; Bunea, AC; Obreja, C; Avram, M; Bitu, B; Parvulescu, C; Popescu, M; Neculoiu, D, *Fabrication of thin dielectric membranes for microwave applications*, Digest Journal of Nanomaterials and Biostructures (2014) Volume: 9 Issue: 2 Pages: 475-481
23. Tudor, R; Kusko, M; Kusko, C; Craciunoiu, F; **Avram, A**; Vasilache, D; Dinescu, A, *Beam Shaping for Phase Singularities*, Romanian Journal of Information Science and Technology (2014) Volume: 17 Issue: 4 Pages: 389-404
24. Avram, M; Balan, CM; Petrescu, I; Schiopu, V; Marculescu, C; **Avram, A**, *Gold Nanoparticle Uptake by Tumour Cells of B16 Mouse Melanoma*, Plasmonics (2012) Volume: 7 Issue: 4 Pages: 717-724 DOI:10.1007/s11468-012-9363-3
25. Xu, G; Tay, FEH.; Tresset, G; Iliescu, FS.; **Avram, A**; Iliescu, C, *Recent trends in dielectrophoresis*, Informacije Midem-Journal of Microelectronics Electronic Components and Materials (2010) Volume: 40 Issue: 4 Pages: 253-262
26. Iliescu, C; Xu, G; Barbarini, E; Avram, M; **Avram, A.**, *Microfluidic device for continuous magnetophoretic separation of white blood cells*, Microsystem Technologies (2008) Volume: 15 Issue: 8 Pages: 1157-1162 DOI: 10.1007/s00542-008-0718-9

27. Avram, M; **Avram, AM**; Bragaru, A; Ghiu, A; Iliescu, C, *Plasma Surface Modification for Selective Hydrophobic Control*, Romanian Journal of Information Science and Technology (2008) Volume: 11 Issue: 4 Pages: 409-422
28. Bragaru, A; Simion, M; Miu, M; Ignat, T; Kleps, I; Schiopu, V; **Avram, A**; Craciunoiu, F, *Study of the Nanostructured Silicon Chemical Functionalization*, Romanian Journal of Information Science and Technology (2008) Volume: 11 Issue: 4 Pages: 397-407
29. Avram, M.; **Avram, A. M.**; Vasilco, R.; Volmer, M.; Popescu, A.; Ghiu, A., *The optimised spin-valve magnetotransistor*, Materials Science and Engineering B-Advanced Functional Solid-State Materials (2008) Volume: 152 Issue: 1-3 Special Issue: SI Pages: 72-75 DOI: 10.1016/j.mseb.2008.06.030
30. Avram, M; **Avram, A**; Iliescu, C, *Biodynamical analysis microfluidic system*, Microelectronic Engineering (2006) Volume: 83 Issue: 4-9 Pages: 1688-1691 DOI: 10.1016/j.mee.2006.01.158

Lucrări științifice publicate în jurnale internaționale fără factor de impact

1. Anghel, E; Simionescu, OG; Pachiu, C; Tutunaru, O; **Avram, A**; Demetrescu, I, *Preparation, raman spectroscopy and morphological analysis of vertically aligned graphene nanosheets*, University Politehnica Of Bucharest Scientific Bulletin Series B-Chemistry And Materials Science (2020) Volume: 82 Issue:3 Pages: 181-190
2. Tincu, B; **Avram, A**; Tucureanu, V; Mater, A; Marculescu, C; Burinaru, T; Comanescu, F; Gavrilă, R; Avram, M, *Study of the cvd graphene transferred from copper to gold substrate*, University Politehnica Of Bucharest Scientific Bulletin Series B-Chemistry And Materials Science (2019) Volume: 81 Issue: 2 Pages: 29-38
3. Albu, C; Eremia, SAV.; Veca, ML; **Avram, A**; Popa, RC; Pachiu, C; Romanitan, C; Kusko, M; Gavrilă, R; Radoi, A, *Dataset on large area nano-crystalline graphite film (NCG) grown on SiO₂ using plasma-enhanced chemical vapour deposition*, Data In Brief (2019) Volume: 24 Article Number: 103923 DOI:10.1016/j.dib.2019.103923
4. Gâjâilă, G; Gâjâilă, I; Taşbac, B; **Avram, A**; Țâncu, B; Burinaru, T, *Antibacterial Activity of Monolayer Graphene Film to Standardised Staphylococcus Aureus Strains*, Bulletin UASVM Veterinary Medicine (2018) Volume: 75 Article no: 1 DOI:10.15835/buasvmcn-vm:003017
5. Bunea, AC; Neculoiu, D; **Avram, A**, *Design and analysis of a membrane supported folded slot antenna for w-band applications*, University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science (2016) Volume: 78 Issue: 2
6. **Avram, A**; Tibeica, C; Marculescu, C; Volmer, M; Avram, M; Gavrilă, H, *Bipolar magnetophoretic system for the manipulation of magnetic particles*, University Politehnica Of Bucharest Scientific Bulletin Series C-Electrical Engineering And Computer Science (2015) Volume: 77 Issue: 3 Pages: 171-180

Studii publicate în proceedings-uri ale unor conferințe internaționale

1. Marius Volmer, Cristian Mușuroi, Mihai Oproiu, Andrei Avram, Marioara Avram, Elena Helerea, 2021 International Aegean Conference on Electrical Machines and Power Electronics (ACEMP) & 2021 International Conference on Optimization of Electrical and Electronic Equipment (OPTIM) Pages 1-6 DOI: 10.1109/OPTIM-ACEMP50812.2021.9590055
2. O Rasoga, C Thanner, O Semenova, AM Avram, LI Jinga, *Wafer-level fabrication of nanocones structures by UV-nanoimprint and cryogenic deep reactive ion process*, 44th Edition (2021) Pages: 39-42 DOI: 10.1109/CAS52836.2021.9604179

3. Mihai Kusko, Andrei Avram, *Design and Fabrication of Fresnel Lenses Array*, Proceedings of the International Semiconductor Conference, 44th Edition (2021) Pages: 75-78 DOI: 10.1109/CAS52836.2021.9604163
4. Rebigan, R; **Avram, A**; Tudor, R; Kusko, M; Vasilache, D; Ursu, D; Sorohan, G; Kusko, C, *Fabrication of Fresnel lenses operating in long infrared*, Proceedings of the International Semiconductor Conference, 43rd Edition (2020) Pages: 133-136 DOI:10.1109/CAS50358.2020.9267996
5. Tudor, R; Kusko, M; Kusko, C; **Avram, A**, *Multilevel axicon for perfect optical vortex generation*, EPJ Web Conferences, EOS Optical Technologies (2019) Volume 215 Article no: 02003 DOI:10.1051/epjconf/201921502003
6. Țucureanu, V; Matei, A; **Avram, A**; Țincu, B; Țucureanu, C; Munteanu, D, *Influence of the Polymeric Matrix Type on the Optical Properties of YAG: Ce, Gd Phosphor*, Proceedings of Priorities of Chemistry for a Sustainable Development-PRIOCHEM (2019) Volume: 29 Issue: 1 Article no: 3 DOI:10.3390/proceedings2019029003
7. Țincu, B; **Avram, A**; Țucureanu, V; Matei, A; Mărculescu, C; Burinaru, T; Comănescu, F; Popescu, M; Avram, M, *Graphene Post-Processing*, IOP Conference Series: Materials Science and Engineering (2019) Volume: 485 Issue: 1 Article No: 12027 DOI:10.1088/1757899X/485/1/012027
8. Burinaru, TA; Volmer, M; Avram, M; Țucureanu, V; **Avram, A**; Țincu, B; Mărculescu, C; Matei, A; Marinescu, R; Militaru, M, *Antibody functionalized magnetic nanoparticles for circulating tumor cells detection and capture using magnetophoresis*, IOP Conference Series: Materials Science and Engineering (2019) Volume: 485 Issue: 1 Article No: 12005 DOI:10.1088/1757-899X/485/1/012005
9. Simionescu, O. -G.; Anghel, E.; Popa, R.; Pachiu, C.; Gavrilă, R.; Comanescu, F.; **Avram, A.**; Dinescu, G., *Bulk nanocrystalline graphite thin films for piezoresistive sensing applications*, Proceedings of the International Semiconductor Conference, 42nd Edition (2019) Pages: 229232 DOI: 10.1109/SMICND.2019.8923644
10. Tincu, B; **Avram, A**; Avram, M; Tucureanu, V; Matei, A; Marculescu, C; Burinaru, TA; Comanescu, FI; Mihalache, I; Popescu, MC; Demetrescu, I, *Investigation of Graphene on Quartz Substrate*, AIP Conference Proceedings 2071, TIM18 Physics Conference (2019) Volume: 2071 Article Number: 040007 DOI:10.1063/1.5090074
11. Bunea, A. C.; Neculoiu, D.; **Avram, A.**; Iovea, M., *Archimedean Spiral Antenna with Coplanar Waveguide Feed*, Proceedings of the International Semiconductor Conference, 42nd Edition (2019) Pages: 65-68 DOI: 10.1109/SMICND.2019.8923699
12. Tucureanu, V; Matei, A; Popescu, MC; Mihalache, I; Romanitan, C; **Avram, A**; Tincu, B; Avram, M; Marculescu, C; Burinaru, T; Munteanu, D, *Modified solid-state process for yellow yttrium aluminum garnet synthesis*, AIP Conference Proceedings 2071, TIM18 Physics Conference (2019) Volume: 2071 Article Number: 030001 DOI:10.1063/1.5090062
13. Anghel, E; Simionescu, O; Pachiu, C; Tutunaru, O; Mihailescu, C; **Avram, A**, *Vertical graphene based biosensor for biological fluids analysis*, Proceedings of the International Semiconductor Conference, 42nd Edition (2019) Pages: 267-270 DOI: 10.1109/SMICND.2019.8923745
14. Voicu, RC; Pustan, M; Birleanu, C; Tibeica, C; Simionescu, O; **Avram, A**, *Design and Analyses of New Configured Vertical Electro-Thermal Microactuators*, 2019 Symposium on Design, Test, Integration & Packaging of MEMS and MOEMS (2019) DOI: 10.1109/DTIP.2019.8752781

15. Bunea, AC; Neculoiu, D; **Avram, A**; Iovea, M, *Wideband Micromachined Antenna for W-band Applications*, Proceedings of the 7th Asia-Pacific Conference On Antennas And Propagation (2018) Pages: 433-434 DOI: 10.1109/apcap.2018.8538286
16. Neculoiu, D; Bunea, AC; **Avram, A**, *Low-Profile Membrane Suspended Antenna for 60 GHz Applications*, Proceedings of the 7th Asia-Pacific Conference On Antennas And Propagation (2018) Pages: 431-432 DOI: 10.1109/APCAP.2018.8538051
17. Gajaila, G; Gajaila, I; Tasbac, B; Burinaru, T; **Avram, A**, *Antibacterial activity of monolayer graphene on different substrates to standardised Staphylococcus aureus and Escherichia coli strains*, Journal Of Biotechnology (2018) Volume: 280 Supplement: S Pages: S78-S78 DOI:10.1016/j.jbiotec.2018.06.255
18. Tincu, B; **Avram, A**; Avram, M; Tucureanu, V; Matei, A; Marculescu, C; Burinaru, TA; Comanescu, F; Mihalache, I; Popescu, MC; Demetrescu, I, *Spectroscopic investigation of CVD graphene*, Proceedings Volume 10977, Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IX (2018) Volume: 10977 Article Number: 109770C DOI: 10.1117/12.2323590
19. Tucureanu, V; Matei, A; Popescu, M; **Avram, A**; Tincu, B; Avram, M; Munteanu, D, *Embedding of yttrium based phosphors into polymeric matrix*, Proceedings Volume 10977, Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IX (2018) Volume: 10977 Article Number: 109770A DOI:10.1117/12.2323386
20. Vasilache, D.; **Avram, A.**; Stefanescu, A.; Boldeiu, G.; Iordanescu, S.; Bitu, B., *0-level encapsulation using thin films deposition for RF MEMS - demonstration on RF MEMS switch structures*, 2018 Asia-Pacific Microwave Conference Proceedings (APMC) (2018) Pages: 330-332 DOI: 10.23919/APMC.2018.8617129
21. Neculoiu, D; Bunea, A-C; **Avram, A M**, *Broadside 60 GHz Antenna with two Quasi-Yagi Radiators with Corrugated Directors and Reflector*, 2018 Proceedings of the Asia-Pacific Microwave Conference (2014) (2018) Pages: 1585-1587 DOI: 10.23919/APMC.2018.8617399
22. Pachiu, C.; Tibeica, C.; **Avram, A.**; Veca, M.; Sandu, T.; Popescu, M.; Popa, R., *Processing and Mechanical Characterization of Ultrananocrystalline Diamond films for MEMS applications*, Proceedings of the International Semiconductor Conference, 40th Edition (2017) Pages: 235-236 DOI: 10.1109/SMICND.2017.8101210
23. Marculescu, C; Tincu, B; **Avram, A**; Burinaru, T; Avram, M, *Computational prediction of capillary number impact on droplets formation in microchannels*, Energy Procedia, Special Issue EENVIRO-YRC 2015 - BUCHAREST (2016) Volume: 85 Pages: 339-349 DOI:10.1016/j.egypro.2015.12.260
24. Bunea, A. C.; Neculoiu, D.; **Avram, A. M.**; Mueller, A., *Hybrid integrated direct detection receiver for W-Band space applications operated in cryogenic conditions*, Proceedings of the International Semiconductor Conference, 39th Edition (2016) Pages: 67-70 DOI: 10.1109/SMICND.2016.7783041
25. Tudor, R; Kusko, C; Kusko, M; Mihailescu, M; **Avram, A**, *Independent optical vortices in freespace optical communications*, Proceedings of the International Semiconductor Conference, 39th Edition (2016) Pages: 37-40 DOI: 10.1109/SMICND.2016.7783032
26. Baracu, A; Voicu, R; Mueller, R; **Avram, A**; Pustan, M; Chiorean, R; Birleanu, C; Dudescu, C, *Design and fabrication of a MEMS chevron-type thermal actuator*, AIP Conference Proceedings (2015) Volume: 1646 Pages: 25-30 DOI:10.1063/1.4908578
27. Volmer, M.; Avram, M.; **Avram, A. M.**, *Simulation and Experimental Results on Manipulation and Detection of Magnetic Nanoparticles Using Planar Hall Effect Sensors*, Proceedings of the International Semiconductor Conference, 38th Edition (2015) Pages: 117-120 DOI: 10.1109/SMICND.2015.7355180

28. Popescu, M. C.; Bitu, B. I.; **Avram, A. M.**; Tucureanu, V.; Schiopu, P., *Morphological Alteration of Microwave Disinfected Acrylic Resins used for Dental Prostheses*, Proceedings Volume 9258, Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies VII (2015) Volume: 9258 Article Number: 92580I DOI:10.1117/12.2072210
29. Tudor, R; Kusko, M; Kusko, C; Craciunoiu, F; **Avram, A**; Vasilache, D, *Fabrication Of Spiral Phase Plates For Optical Vortices*, Proceedings of the International Semiconductor Conference, 37th Edition (2014) Pages: 139-142 DOI: 10.1109/SMICND.2014.6966416
30. Bunea, A-C; Neculoiu, D; **Avram, A**; Rusch, C, *Investigation of a Membrane Supported DBand. Antenna with a 3D Printed Polyamide Lens*, Proceedings of the Asia-Pacific Microwave Conference (2014) Pages: 471-473
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