Mircea Daniel Nicolaescu

DESPRE MINE

Aici puteți să vă descrieți pe scurt...

EXPERIENȚA PROFESIONALĂ

[29/02/2016 – 28/02/2017]

Voluntariat

Universitatea Politehnica Timișoara

Localitatea: Timisoara

Țara: România

Pregătirea probelor metalografice;
- Microscopia optică;
- Microscopie electronică cu scanare (SEM);
- Elaborarea diferitelor piese prin sinterizarea pulberilor;
- Proiectarea diferitelor piese în programe CAD;
- Elaborarea tratamentelor termice;

[02/04/2017 – 19/11/2017]

Voluntariat

Institutul Național de Cercetare-Dezvoltare în Sudură și Încercări de Materiale (ISIM)

Localitatea: Timisoara

Țara: România

Sudarea cu ultrasunete a materialelor polimerice și metalice
- Simularea părții active a instalației de sudare
- Măsurarea amplitudinii și frecvenței sonotrodelor
- Încercări de întindere a probelor sudate
- Examinări micro și macroscopice ale probelor sudate

[19/11/2017 – 29/12/2017]

Stagiu de practică

University of Science and Technology Beijing

Localitatea: Beijing

Țara: China
- Proiectarea la scară micro și nanometrică a sistemelor de acționare termică
- Sinterizarea selectivă cu laser a pulberilor metalice
- Obținerea pulberilor metalice prin eroziune LASER

[18/03/2018 – 18/06/2018]

Stagiu de practică

Graz University of Technology (TU Graz)

Localitatea: Graz

Țara: Austria
- Sudarea cu fascicul de electroni a benzilor amorfe
- Pregătirea probelor pentru investigații
- Analiza macro și microscopică
- Lucrare de disertație

[30/11/2018 – În curs]

Scientific research assistant

National Institute for Research and Develpment in Electrochemistry and Condensed Matter

Localitatea: Timisoara

Țara: România

- Sinteza oxizilor metalici semiconductori
- Senzori de gaz pe bază de oxizi metalici semiconductori
- Senzori de UV pe bază de heterojoncțiuni oxidice
- Senzori de CO_2 pe bază de heterojoncțiuni oxidice
- Testarea senzorilor obținuți
- Depunerea straturilor oxidice
- Creșterea de nanostructuri oxidice pe substrat metalic
- Pregătire si interpretare probe difracție de raze x
- Proiectarea si fabricarea instalațiilor de testare
- Obținerea de pasta oxidica folosind moara planetara cu bile
- Obținerea de electrozi flexibili decorați cu cu particole oxidice
- Sinteza de materiale nanoporoase pe baza de cupru
- Scriere, editare articole, abstracte, drafturi, raportari, editare bibliografii conform cerintelor cerute de conferinta/jurnal, raspuns la review-uri.

[28/02/2019 – 31/03/2019]

Stagiu de practică Erasmus

Westphalian University

Localitatea: Gelsenkirchen

Țara: Germania

Analizarea morfo-structurală a probelor experimentale

[30/11/2019 – 13/12/2019]

Stagiu de practică

University of Science and Technology Beijing

Localitatea: Beijing

Țara: China

Experimentări legate de sinterizarea cu laser a straturilor oxidice

EDUCAȚIE ȘI FORMARE PROFESIONALĂ

[2012 – 2016]

Licență - Știința si Ingineria Materialelor

Universitatea Politehnica Timișoara

Localitatea: Timisoara

Țara: România

[08/2016 – 07/2018]

Diploma Master Materiale si Tehnologi Avansate

Universitatea Politehnica Timișoara

Adresă: P-ta Victoriei, no. 2, 300006, Timisoara, România

[30/09/2018 – În curs]

PhD - Ingineria Materialelor

Universitatea Politehnica Timișoara

Adresă: P-ta Victoriei, no. 2, 300006, Timisoara, România

COMPETENȚE LINGVISTICE

Limbă(i) maternă(e): română

Altă limbă (Alte limbi):

engleză

COMPREHENSIUNE ORALĂ B2 **CITIT** B2 **SCRIS** B1

EXPRIMARE SCRISĂ B1 **CONVERSAȚIE** B1

Niveluri: A1 și A2 Utilizator de bază B1 și B2 Utilizator independent C1 și C2 Utilizator experimentat

COMPETENȚE DIGITALE

Microsoft Office | X'Pert Highscore Plus | Origin software | EndNote Software

PERMIS DE CONDUCERE

Autoturism: B

PROIECTE

[2014 – 2017]

Proiect international PIRSES GA-2013-612585 MARIE CURIE ACTIONS, "International Research Staff Exchange Scheme" Micro and nanoscale design of thermally actuating systems – MIDAS

Membru proiect

[2018 – 2019]

Proiect national PN- | | | - P3- 3.1- PM RO-CN-2018-0027 Cooperare Europeana si internațională, Subprogramul 3.1- Proiect de mobilități Romania - China 2018, Sintering of novel structures for alloys with increased functionality.

Membru proiect

[2018 – 2021]

Proiect National 40 PCCDI/2017 PN-III-P1-1.2-PCCDI -2017-0428 "Nanotehnologii inovative pe baza de polimeri pentru obtinerea de noi materiale avansate - NAPOLI 19

Membru proiect

[2020 – 2022]

Proiect national - PN-III-P2-2.1-PED2019-3646 "Validarea Experimentala A Propulsiei Ionice In Conditii De Laborator. Demonstrator: Sistem De Zbor Cu Motor Ionic Rotativ"

Membru proiect

[2020 – 2022]

Proiect national - PN-III-P2-2.1-PED2019-4492 "Sistem tridimensional de filtrare electrochimică pe bază de anod poros cu dimensiuni stabile si electrod particulat integrat pentru tratarea avansată a apei cu conținut de citostatice"

Membru proiect

[2022 – 2024]

Proiect national - PN-III-P1-1.1-TE-2021-0963 „Electrozi hibrizi pentru detectia si degradarea electrochimica a citostaticelor din apa"

Membru proiect

PUBLICAȚII

Lucrări științifice publicate în reviste cotate ISI:

1. Carmen Lazau, Maria Poienar, Corina Orha, Daniel Ursu, **Mircea Nicolaescu**, Melinda Vajda, Cornelia Bandas. Development of a new "n-p" heterojunction based

on TiO2 and CuMnO2 synergy materials , Materials Chemistry and Physics, Vol. 272, 124999, DOI10.1016/j.matchemphys.2021.124999, 2021 Journal Impact Factor: 4.6.

2. **Mircea Nicolaescu** , Cornelia Bandas , Corina Orha, Viorel Serban , Carmen Lazău and Simona Căprărescu, Fabrication of a UV Photodetector Based on n-TiO2/p-CuMnO2 Heterostructures, Coatings, 11(11), 1380; https://doi.org/10.3390/coatings11111380, 2021, Journal Impact Factor: 3.4.
3. Carmen Lazau, **Mircea Nicolaescu**, Corina Orha, Viorel Șerban and Cornelia Bandas, Self-Powered Photodetector Based on FTO/n-TiO2/p-CuMnO2 Transparent Thin Films, Materials, 2022, 15, 5229. https://doi.org/10.3390/ma15155229, Journal Impact Factor: 3.4
4. Petru Hididis , **Mircea Nicolaescu**, Carmen Opriș, Dragoș Buzdugan , Cosmin Codrean, Victor Geantă, Viorel-Aurel Șerban, ultrasonic welding on Cu-Zr based glassy ribbons, U.P.B. Sci. Bull., Series B, Vol. 84, pp 1454-2331, 2022. Journal Impact Factor: 0.5.
5. **Mircea Nicolaescu**, Cornelia Bandas, Corina Orha, Violeta Purcar, Carmen Lazau, Development of the Zn-ZnO(Nw)@CuMnO2 Heterojunction by Low Temperature Zn Foil Oxidation for Gas Sensor Fabrication, Coatings, 2022, 12, 1630. https://doi.org/10.3390/coatings12111630 Journal Impact Factor: 3.4.
6. Carmen Lazau, **Mircea Nicolaescu**, Corina Orha, Aniela Pop, Simona Căprărescu, Cornelia Bandas, In Situ Deposition of Reduced Graphene Oxide on Ti Foil by a Facile, Microwave-Assisted Hydrothermal Method, Coatings, 2022, 12, 1805. https://doi.org/10.3390/coatings12121805. Journal Impact Factor: 3.4
7. **Mircea Nicolaescu**, Melinda Vajda, Carmen Lazau, Corina Orha, Cornelia Bandas , Viorel-Aurel Serban, Cosmin Codrean, Fabrication of flexible supercapacitor electrode materials by chemical oxidation of iron-based amorphous ribbons, Materials 2023, 16, 2820, https:/doi.org/10.3390/ma16072820. Journal Impact Factor: 3.4
8. Anamaria Baciu, Corina Orha, Radu Nicolae, **Mircea Nicolaescu**, Sorina Ilies, Florica Manea, Advanced electrochemical degradation of organic pollutants from water using Sb-doped SnO2/Ti anode and assisted by granular activated carbon, Coatings 2023, 13(6), 1127; https://doi.org/10.3390/coatings13061127. Journal Impact Factor: 3.4
9. Cornelia Bandas, **Mircea Nicolaescu**, Mina Ionela Popescu, Corina Orha, Simona Căprărescu, Carmen Lazau, One-step microwave-assisted hydrothermal preparation of Zn-ZnO(Nw)-rGO electrodes for supercapacitor applications, Materials 2023, 16, 4536. https://doi.org/10.3390/ma16134536. Journal Impact Factor: 3.4
10. Cornelia Bandas, Mina Ionela Popescu, Corina Orha, **Mircea Nicolaescu**, Aniela Pop, Carmen Lazau, Development of hybrid electrodes based on a Ti/TiO_2 mesoporous/reduced graphene oxide structure for enhanced electrochemical applications, Coatings 2023, 13, 1359. https://doi.org/10.3390/coatings13081359, Journal Impact Factor: 3.4

Lucrări științifice publicate în reviste ISI Proceedings

1. **Mircea Nicolaescu** , Corina Orha, Anamaria Dabici, Petru Hididis, Cosmin Codrean, Viorel-Aurel Șerban, Production of Cu-Zr mixed metal oxides by thermal oxidation of amorphous ribbons, Materials Today-Proceedings, Vol. 45, pp 4337-4343, DOI10.1016/j.matpr.2020.12.1157, 2021.
2. **Mircea Nicolaescu**, Petru Hididis, Cosmin Codrean, Iosif Hulka, Melinda Vajda, Corina Orha, Cornelia Bandas, Carmen Lazau, Viorel Aurel Serban, Synthesis of nanoporous copper by dealloying CuZrAl and CuZrAlAg amorphous ribbons in acidic solution, Materials Today-Proceedings, Volume 72, Part 2, DOI/10.1016/j.matpr.2022.10.050, 2023.
3. Corina Orha, **Mircea Nicolaescu**, Cornelia Bandas, Carmen Lazau, Anamaria Baciu, Florica Manea, Comparative Morpho-Structural and Electrochemical Characterization of the La and F Doped Porous Ti/SnO2 Dimensionally Stable Anodes, International Semiconductor Conference (CAS), DOI: 10.1109/CAS56377.2022.9934122, 2022.
4. Carmen Lazau, Cornelia Bandas, **Mircea Nicolaescu**, Corina Orha, Aniela Pop, A Facile Dip-Coating Process Graphene-TiO2 on Titanium Foil for Hybrid Electrode

Fabrication, International Semiconductor Conference (CAS), DOI:10.1109/CAS56377.2022.9934754, 2022.

Lucrări științifice publicate în reviste indexate SCOPUS

1. P. Hididis, **M.Nicolaescu**, C. Codrean , D. Buzdugan , I.Vida-Simiti , V-A. Șerban, Comparative study between Solid State Welding and Radiant Energy Welding processes for joining glassy ribbons, Annals of Dunarea de Jos University of Galati Vol. 32, pp 71-76 ,2021.
2. Emilia Binchiciu, Cosmin Codrean, Lia Nicoleta Botila, **Mircea Nicolaescu**, Răzvan Ionuț Iacobici, Fracture Characteristics of AZ31B and Cu 99 Tensile Test Specimens Joined by FSW and FSW-IG Processes, Defect and Diffusion Forum 416, pp 55-65, DOI:10.4028/p-4p60q4, 2022.
3. **Mircea Nicolaescu,** Viorel Aurel Serban, Carmen Lazau, Cornelia Bandas, Corina Orha, Melinda Vajda, Emilia Florina Binchiciu, Morphology Changes in the One-Step Synthesis of Cu2O/ CuO by Dealloying Amorphous Ribbons in Alkaline Solution, Key Engineering Materials, Vol. 952, pp 35-41, 2023.
4. Emilia Florina Binchiciu, Lia Nicoleta Botila, **Mircea Nicolaescu**, Gabriela Victoria Mnerie, Fracture Characteristics of EN AW 1200 Tensile Test Specimens Joined with FSW and SFSW Processes, Materials Science Forum ,Vol 1096, pp163-173, 2023.

Lucrări științifice publicate în reviste indexate BDI

1. **Nicolaescu Mircea** , Codrean Cosmin, Stutz Markus , Sîrbu Nicușor-Alin, Serban Viorel-Aurel, Research on Welding with Electron Beam of Ni Based Amorphous Ribbons, Advanced, Materials Research, 1662-8985, Vol. 1153, pp 108-112, 2019.
2. **Nicolaescu Mircea** , Codrean Cosmin , Emilia Binchiciu, Bogdan Radu, Production of bulk metallic glasses by ultrasonic welding of Nickel based amorphous ribbons, Advanced Materials Research, Vol. 1157, pp 123-129, 2020.
3. **Nicolaescu Mircea** , Codrean Cosmin, Gabriela Merie, Mina Popescu, Research on welding with electron beam of multiple overlapping nickel based amorphous ribbons, Advanced Materials Research Vol. 1157, pp 136-141, 2020.
4. Corina Orha, Mina Ionela Popescu, Cornelia Bandas, **Mircea Nicolaescu**, Carmen Lazau, Florica Manea, Porous SnO_2/Ti dimensionally stable anode for degradation of pollutants from water: Synthesis and morphostructural characterization, Proceedings of the International Symposium on Analytical and Environmental Problem, VOL. 26, PP 216-220, 2020.
5. Corina Orha, Mina Ionela Popescu, Cornelia Bandas, Mircea Nicolaescu, Carmen Lazau, Florica Manea, Comparative morphostructural characterization of porous Ti/SnO2 correlated with the synthesis method, Proceedings of the International Symposium on Analytical and Environmental Problem, VOL. 27, PP 261-263, 2021.

CAPITOL CARTE

BP International

1. Cornelia Bandas, Carmen Lazau, **Mircea Nicolaescu,** Corina Orha, Aniela Pop, Simona Căprărescu, "Microwave-assisted hydrothermal deposition of reduced graphene oxide on Ti foil" , Progress in Chemical Science Research, book chapter, Chapter 2, Print ISBN: 978-81-19217-34-2, DOI: 10.9734/bpi/cteims/v1/18639D, Current Topics and Emerging Issues in Materials Sciences Vol. 1, Page 19-47, 2023.

DISTINCȚII ONORIFICE ȘI PREMII

Premii

1. Gold medal INVENTCOR 2021 invention salon for patent: Development of „n-p” heterojunctions based on n-type Tio2 and p-type CuMnO2, integrated in sensitive modules. Nr brevet A/00087/09.06.2020.
2. Gold medal INVENTCOR 2021 invention salon for patent: Development of sensor for ultraviolet radiation detection based on Ti-n-TiO_2/p-$CuMnO_2$ heterostructure, Nr brevet A/00474/11.08.2021.
3. Gold medal EUROINVENT 2022, First Rotary Ionic Engine with Contra-Rotating Propellers.

4. Silver medal EUROINVENT 2022 invention salon for patent: Development of „n-p" heterojunctions based on n-type ZnO and p-type CuMnO2, integrated in sensitive modules, Nr brevet A/00671/27.10.2020.
5. Bronze medal EUROINVENT 2022, Fabrication of a UV Photodetector Based on n-TiO2 /p-CuMnO2 Heterostructures.
6. Special Prize from "Lucian Blaga" University of Sibiu, for recognition and appreciation of scientific creativity and originality of Fabrication of a UV Photodetector Based on n-TiO2 /p-CuMnO2 Heterostructures, EUROINVENT 2022.
7. Gold medal INVENTCOR 2022 invention salon for patent OSIM A/00482/09.09.2022.: In-situ deposition process of rGO films on Ti-TiO2 support by microwave-assisted hydrothermal method.
8. Gold medal INVENTCOR 2022 invention salon for patent A/00298/02.06.2022: Development of self-powered photodetector based on transparent FTO/n-TiO2/p-CuMnO2 thin films.
9. Gold medal EUROINVENT 2023, The development of environmental monitoring sensors based on n-TiO2/p-CuMnO2 oxide heterojunctions.

CERERI DE BREVETE

Naționale

1. Lazau Carmen, Maria Poienar, Orha Corina, Bandas Cornelia, Ursu Daniel, Vajda Melinda, **Nicolaescu Mircea** „Dezvoltarea de heterojonctiuni "n-p" pe baza de TiO_2, componenta "n" si $CuMnO_2$, componenta "p", integrabile in module senzitive", cerere de brevet de inventie A/00087/09.06.2020. RO135182-A2.
2. Lazau Carmen, Poienar Maria, Vlazan Paulina, Orha Corina, Bandas Cornelia, Vajda Melinda, **Nicolaescu Mircea** „Dezvoltarea de heterojoncțiuni "n-p" pe bază de ZnO /$CuMnO_2$ integrabile in module senzitive de tip senzor", cerere de brevet de inventie A/00671/27.10.2020.RO135677-A2.
3. Lazau Carmen, **Nicolaescu Mircea**, Bandas Cornelia, Orha Corina, Poienar Maria"Dezvoltarea de senzori pe baza de heterostructure de tipul Ti-TiO_2-$CuMnO_2$ pentru detectia radiatilor ultraviolet" cerere de brevet de inventie A/ 00474/11.08.2021. RO137307A2
4. **Nicolaescu Mircea,** Lazau, Carmen, Bandas Cornelia, Orha Corina, Vajda Melinda, Electrod flexibil pentru supercapacitori pe baza de aliaj amorf de fier decorat cu particule de Fe_2O_3 , A/00299/02.06.2022
5. **Nicolaescu Mircea,** Lazau, Carmen, Bandas Cornelia, Orha Corina, Dezvoltarea de senzori cu autoalimentare pe baza de heterojonctiuni oxidice transparente FTO-TiO_2-$CuMnO_2$ pentru detectia radiatiilor ultraviolet. A/00298/02.06.2022
6. **Nicolaescu Nircea,** Viorel Aurel Srerban, Cosmin Codrean, Senzor flexibil pe baza de heterojonctiuni oxidice de tip n-n pentru detecția compusilor organici volatili și procedeu de fabricație. OSIM A/00422 din 18.07.2022-UPT
7. Bandas Cornelia, Lazau Carmen, **Nicolaescu Mircea**, Orha Corina " Procedeu de depunere "in-situ" a filmelor de rGO pe support de Ti-TiO2 prin metoda hidrotermala in camp de microunde" OSIM A/00482/09.09.2022.
8. Cornelia Bandas, **Mircea Nicolaescu**, Carmen Lazău, Corina Orha, Cristian Casut, Procedeu de obtinere in conditii hidrotermale in camp de microunde a unui electrod hibrid de rGO/Zn-ZnO, OSIM A/00164/03.04.2023.

MENȚIONĂRI IN ZIARE

Naționale

1. https://www.impactpress.ro/2022/06/01/pentru-al-doilea-an-consecutiv-medalie-de-aur-la-incemc-timisoara-pentru-marius-chirita-si-pentru-grupul-condus-de-el-la-euroinvent-2022-cea-mai-mare-competitie-de-profil-care-se-desfasoara-in-est/
2. https://www.impactpress.ro/2022/06/06/gold-medal-at-incemc-timisoara-for-marius-chirita-and-his-group-at-14th-european-exhibition-of-creativity-and-innovation-euroinvent-2022-the-biggest-profile-competition-from-eastern-europe-p/
3. https://www.impactpress.ro/2022/08/08/o-noua-realizare-remarcabila-la-incemc-timisoara-contraelectrodul-toroidal-pentru-propulsia-ionica-inovatie-a-grupului-condus-de-fiz-dr-marius-chirita-p/

4. https://www.impactpress.ro/2022/08/09/disruptive-technology-at-incemc-timisoara-romania-p/
5. https://www.impactpress.ro/2023/05/03/video-premiera-mondiala-la-timisoara-primul-zbor-cu-propulsie-ionica-al-unui-dispozitiv-de-tip-drona-dotat-cu-contraelectrozi-toroidali/
6. https://www.impactpress.ro/2023/05/12/video-the-first-flight-of-a-drone-type-device-with-toroidal-ion-thrusters/
7. https://www.ziuadevest.ro/premiera-mondiala-la-incemc-timisoara-primul-zbor-cu-propulsie-ionica-al-unui-dispozitiv-de-tip-drona-dotat-cu-contraelectrozi-toroidali/

CONFERINȚE ȘI SEMINARE

Manifestări științifice naționale și internaționale

1. **Nicolaescu Mircea** , Codrean Cosmin, Stutz Markus , Sîrbu Nicușor-Alin, Serban Viorel-Aurel, Research on Welding with Electron Beam of Ni Based Amorphous Ribbons,nnovative, Technologies for Joining Advanced Materials, TIMA, Timisoara, Romania, 2018.
2. **Nicolaescu Mircea** , Codrean Cosmin , Emilia Binchiciu, Bogdan Radu, Production of bulk metallic glasses by ultrasonic welding of Nickel based amorphous ribbons, Tec hnologies for Joining Advanced Materials, TIMA, Timisoara, Romania, 2019.
3. **Nicolaescu Mircea** , Codrean Cosmin, Gabriela Merie, Mina Popescu, Research on welding with electron beam of multiple overlapping nickel based amorphous ribbons, Technologies for Joining Advanced Materials, TIMA, Timisoara, Romania, 2019.
4. Carmen Lazau, Corina Orha, Cornelia Bandas, **Mircea Nicolaescu**, Melinda Vajda, Mina Popescu, Synthesis and characterization of mesoporous TiO2 , Physics Conference TIM 19, Timisoara, Romania, 2019.
5. **Mircea Nicolaescu**, Carmen Lazau, Corina Orha, Cornelia Bandas, Daniel Ursu, Melinda Vajda, Mina Ionela Popescu, Synthesis and structural characterization of black TiO2, New trends and strategies in the chemistry of advanced materials with relevance in biological systems technique and environmental protection, Timisoara, Romania, 2019.
6. Mina Ionela Popescu, Carmen Lazau, Corina Orha, Cornelia Bandas, Daniel Ursu, Melinda Vajda, **Mircea Nicolaescu**, Synthesis and structural characterization of black TiO ,Workshop ICER, 2019, Romania Timisoara.
7. **Nicolaescu Mircea**, Mina Popescu, Corina Orha, Emilia Florina Binchiciu, Cosmin Codrean, Preliminary research on laminate ultrasonic welding for fabrication of sandwich composite from amorphous ribbons and crystalline cooper foils, 25 rd International Symposium on Analytical and Environmental Problems ,Szeged, Hungary, 2019.
8. Emilia Florina Binchiciu, Gabriela-Victoria Mnerie, **Mircea Nicolaescu**, Dumitru Mnerie, Preliminary research on thin ribbons made of copper and aluminum welded through ultrasonic micro vibrations in order to develop laminated composites used in battery applications, 20^{th} International conference of nonconventional technologies, Bucuresti, Romania, 2019.
9. **Mircea Nicolaescu**, Paulina Vlazan, Cornelia Bandas, Corina Orha, Carmen Lazau, Viorel Serban, Synthesis and characterization of “n-n” heterojunction based on TiO_2-ZnO materials, International conference on emerging technologies in materials engineering EmergeMAT, Bucharest, Romania, 2020.
10. **Mircea Nicolaescu**, Cosmin Codrean, Viorel-Aurel Șerban, Fabrication of nanoporos copper decorate with CuO/Cu_2O unidimensional structure by dealloyng and thermal oxidation of amorphous ribbons, International conference on emerging technologies in materials engineering EmergeMAT, Bucharest, Romania, 2020.

Manifestări științifice naționale și internaționale

1. **Nicolaescu Mircea**, Carmen Lazau, Corina Orha, Bandas Cornelia, Mina Popescu, Viorel Aurel Serban, Obtaining TiO_2 with nanoporous structure by chemical

corrosion and thermal oxidation of Ti foils. 26 rd International Symposium on Analytical and Environmental Problems , din Szeged, Hungary, 2020.

2. Corina Orha,Mina Ionela Popescu, Cornelia Bandas, **Mircea Nicolaescu**, Carmen Lazau, Florica Manea, Porous SnO_2/Ti dimensionally stable anode for degradation of pollutants from water: Synthesis and morphostructural characterization, 26 rd International Symposium on Analytical and Environmental Problems, Szeged, Hungary, 2020.
3. Petru Hididis, **Mircea Nicolaescu**, Roxana Muntean, Norbert Kazamer, Cosmin Codrean, Viorel-Aurel Serban, Nitrogen impact on Cu-Zr-Al(-Ag) based master alloys, 26 rd International Symposium on Analytical and Environmental Problems, din Szeged, Hungary, 2020.
4. Lazau Carmen, Poienar Maria, Orha Corina-Ileana, Bandas Cornelia-Elena, Ursu Daniel-Horatiu, Vajda Melinda, **Nicolaescu Mircea-Daniel**, Development of „n-p" heterojunctions based on n-type TiO_2 and p-type $CuMnO_2$, integrated in sensitive modules, INVENTCOR, Deva, Romania, 2020.
5. **Mircea Nicolaescu** , Corina Orha, Anamaria Dabici, Petru Hididis, Cosmin Codrean, Viorel-Aurel Șerban, Production of Cu-Zr mixed metal oxides by thermal oxidation of amorphous ribbons, Advanced Materials and Structures (AMS 20), Timisoara, Romania, 2020.
6. **Mircea Nicolaescu**. Viorel Aurel Serban, Cosmin Codrean, Petru Hididis,, Mina Popescu, Corina Orha, Carmen Opris, Synthesis of nanoporous copper by dealloying CuZrAl amorphous ribbons in acidic solution, 8th International Conference on Materials Science and Technologies – RoMat, Bucuresti, Romania, 2020.
7. Petru Hididis , **Mircea Nicolaescu**, Carmen Opriș, Dragoș Buzdugan , Cosmin Codrean, Victor Geantă, Viorel-Aurel Șerban, Ultrasonic welding on Cu-Zr based glassy ribbons, 8th International Conference on Materials Science and Technologies – RoMat, Bucuresti, Romania, 2020.
8. P. Hididis, **M.Nicolaescu**, C. Codrean , D. Buzdugan , I.Vida-Simiti , V-A. Șerban, Comparative study between Solid State Welding and Radiant Energy Welding processes for joining glassy ribbons, ASR International Conference "Welding 2021",Resita, Romania, 2021.
9. Marius Chirita, Adrian Ieta, **Mircea Nicolaescu**, Virgil Rotaru, Empirical Optimization of Rotary Ionic Engines, Electrostatics Society of America ESA , Oklahoma, SUA, 2021.
10. Corina Orha, Cornelia Bandas, Carmen Lazau, Mina Ionela Popescu, **Mircea Nicolaescu**, Sorina Negrea, Aniela Pop, Florica Manea, Tin oxide onto titanium substrate for advanced degradation of cytostatics from water, 11th International Conference on Environmental Engineering and Management ICEEM11, Muttenz,Switzerland, 2021.

Manifestări științifice naționale și internaționale

1. **Mircea Nicolaescu**, Melinda Vajda, Mina Popescu, Carmen Lazau, Corina Orha, Cornelia Bandas, Viorel-Aurel Șerban, One-step synthesis of Cu_2O/CuO with different morphologies by dealloying of amorphous ribbons in alkaline solution, International conference on emerging technologies in materials engineering EmergeMAT, Bucharest, Romania, 2021.
2. Mina-Ionela Popescu, Narcis-Mihai Duțeanu, **Mircea Nicolaescu**, Melinda Vajda, Corina Orha, Structural characterization of Al_2O_3 obtainined by two different processes using $Al(OH)_3$ as starting material, International conference on emerging technologies in materials engineering EmergeMAT, Bucharest, Romania 2021.
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