europass Curriculum vitae

PERSONAL INFORMATION ANDRONESCU Ecaterina

WORK EXPERIENCE

2020–Present
Member in the University Senate
National University of Science and Technology POLITEHNICA Bucharest, Bucharest (Romania)

Management of Education and Research

2016–2020
Senator in the Romanian Parliament
Romanian Parliament, Bucharest (Romania)

Public Administration, Management of Education and Research, President of the Commission for Education, Science, Youth and Sports (2012-2018)

1972–Present
Assistant professor, Lecturer, Associate Professor, Full Professor, Department of Science and Engineering of Oxide Materials and Nanomaterials, Faculty of Applied Chemistry and Materials Science
University Politehnica of Bucharest, Bucharest (Romania)

Courses: Solid State Physical-Chemistry Of Silicates, Oxide Materials Science, Thermal equilibrium in oxidic systems, Ceramic Materials With Electric And Magnetic Properties, Ceramics With Thermo-Mechanic Properties, Nanomaterials and Nanotechnologies; Correlations between composition, structure and properties in advanced oxide materials at both micro ad nanolevel

2018–2019
Minister
Ministry of National Education

2012–2020
President of the University Senate
University Politehnica of Bucharest, Bucharest (Romania)

Management of Education and Research

2012–2016
Senator in the Romanian Parliament
Romanian Parliament, Bucharest (Romania)

Senator in the Romanian Parliament, President of the Commission for Education, Science, Youth and Sports (2012-2018)

2004–2013
President of the National Council of Rectors
National Council of Rectors, Bucharest (Romania)

Management of Education and Research

06/2012–12/2012
Minister of Education and Research
Ministry of Education and Research, Bucharest (Romania)

Management of Education and Research, Public Administration

2008–2012 **Rector of University Politehnica of Bucharest**
University Politehnica of Bucharest, Bucharest (Romania)
Management of Education and Research

2008–2012 **Senator in the Romanian Parliament**
Romanian Parliament, Bucharest (Romania)
Vice President of the Commission for Education, Science, Youth and Sports (2008-2012)

12/2008–09/2009 **Minister of Education and Research**
Ministry of Education and Research, Bucharest (Romania)
Management of Education and Research, Public Administration

2004–2008 **Rector of University Politehnica of Bucharest**
University Politehnica of Bucharest, Bucharest (Romania)
Management of Education and Research

2004–2008 **Deputy in the Romanian Parliament, Secretary and Member of the Commission for Education, Science, Youth and Sports**
Romanian Parliament, Deputy Chamber, Bucharest (Romania)
Public Administration, Legislation Development and Certification in Education and Research Domain

2000–2004 **Deputy in the Romanian Parliament, Secretary and Member of the Commission for Education, Science, Youth and Sports**
Romanian Parliament, Deputy Chamber, Bucharest (Romania)
Public Administration, Legislation Development and Certification in Education and Research Domain

1992–2004 **Dean, Faculty of Industrial Chemistry**
University Politehnica of Bucharest, Bucharest (Romania)
Management of Education and Research

2001–2003 **Minister of Education and Research**
Ministry of Education and Research, Bucharest (Romania)
Management of Education and Research, Public Administration

1996–2000 **Deputy in the Romanian Parliament, Secretary and Member of the Commission for Education, Science, Youth and Sports**
Romanian Parliament, Deputy Chamber, Bucharest (Romania)
Public Administration, Legislation Development and Certification in Education and Research Domain

1995–1996 **State Secretary for Higher Education**
Ministry of Education, Bucharest (Romania)
Public Administration, Management of Education and Research

1989–1992 **Vice-Dean, Faculty of Industrial Chemistry**
University Politehnica of Bucharest, Bucharest (Romania)

Management of Education and Research

EDUCATION AND TRAINING

1983 **Ph.D.**

University Politehnica of Bucharest, Faculty of Industrial Chemistry, Bucharest (Romania)

Thermal Phase Equilibrium Diagrams for Quaternary System CaO- MgO-CaO-Al2O3-SiO2

1972 **Engineer Degree / Diploma**

University Politehnica of Bucharest, Bucharest (Romania)

Science and Engineering of Oxide Materials

PERSONAL SKILLS

Mother tongue(s) Romanian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
French	C2	C2	C2	C2	C2
English	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages - Self-assessment grid

Organisational / managerial skills Excellent organisational skills, considering the experience and knowledge gained through various positions involving team and organisational coordination and management.

Job-related skills Assessment, monitoring and quality assurance, regarding the learning programs in the fields of chemistry, chemical engineering, and oxide materials science, nanobiomaterials.
Assessment, monitoring and scientific project management.
Review of scientific papers with the purpose of national or international publication.
The organisation and coordination of research laboratories in the field of Material Sciences.
Analysis and material characterization.

ADDITIONAL INFORMATION

Publications over 400 published articles in the following fields: Solid State Physical-Chemistry Of Silicates, Thermal Phase Equilibrium Diagrams, Oxide Materials Science, Ceramic Materials With Electric And Magnetic Properties, Ceramics With Thermo-Mechanic Properties, Biomaterials, Porous Ceramic Materials, Nanomaterials and Nanotechnologies, Unconventional Synthesizing Methods of Ceramic Materials.

21 Books and chapter of books;
4 University Level Courses;
3 Laboratory guidance handbooks;
9 issued patents or patent applications.

Conferences Over 460 papers and presentations at Scientific Conferences in Romania or abroad (more than 200 in ISI indexed/quoted journals); Hirsch index 42; over 9000 citations

Scopus			Google Scholar			Web of Science		
Nr. lucrari	h-index	Nr. Citari	Nr. lucrari	h-index	Nr. Citari	Nr. lucrari	h-index	Nr. Citari
461	53	11149	648	61	14348	464	50	9804

Projects Coordinator of over 80 research project contracts with national and international financing

Honours and awards **Honours**

2015 Doctor Honoris Causa – Technical University of Moldavia; Chişinău, Moldavia;

2011 Doctor Honoris Causa – National Technical University "Kharkiv Polytechnic Institute" of Ukraine;
2010 Doctor Honoris Causa – University "Valahia" of Târgovişte;
2010 Doctor Honoris Causa – University "Petru Maior" of Târgu Mureş;
2007 Doctor Honoris Causa – University of Reşiţa;
2006 Doctor Honoris Causa – University "Ovidius" of Constanţa;
2005 Doctor Honoris Causa – University "Andrei Şaguna" of Constanţa;
2004 Doctor Honoris Causa – University "POLITEHNICA" of Timişoara, University of Bacău, University „Ştefan cel Mare" of Suceava, University of Petroşani;
2003 Doctor Honoris Causa – technical University „Gh. Asachi" of Iaşi, University „Aurel Vlaicu" of Arad.

Awards

2019: International Specialized Exhibition "INFOINVENT2019"- XVIth Edition, 20-23 November 2019, Chisinau, Republic of Moldova

Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU "Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", A 01055/05.12.2018 înregistrată la OSIM

"**Gold medal**" awarded by the International Jury of InfoInvent 2019

"**Excellence diploma with gold medal**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU

"**Gold medal**" awarded by the International Jury of InfoInvent 2019

"**Gold medal**" awarded by Technical University of Moldova

"**Excellence diploma and Mechatron Group Trophy"** awarded by Mecatronic & Cyber - MixMecatronic for Future Group

"**Excellence diploma**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

2019: 4th International Invention Innovation Competition in Canada – Ican 2019; August 23-24, Toronto, Canada

"*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A FICAI, E ANDRONESCU, C. D. GHITULICA, D. FICAI, Georgeta VOICU, G. M. ALBU

"**Gold medal**" awarded by the International Jury of ICan 2019

"Special Prize and Excellence diploma" awarded by the delegate of Thailand

"*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer",* Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE A/00238/2013)

"**Gold medal**" awarded by the International Jury of ICan 2019

"Special Prize and Excellence diploma" awarded by the Moroccan Delegation

2019: 11^{h} European Exhibition of Creativity and Innovation-EuroInvent 2019, 16-18 May 2019, Iasi, Romania

*"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU**- A 01054/05.12.2018***

"**Gold medal and Excellence diploma**" awarded by the international Jury of Euroinvent 2019

Gold medal and Excellence diploma" awarded by "Carol Davila" University of Medicine and Pharmacy Bucharest

Excelence award and Gold medal and Excellence diploma" awarded by ICECHIM Bucharest

Gold medal and Excellence diploma, awarded by "Romanian Association of Pteridology, Bucharest

Special Prize awarded by "Alexandru Ioan Cuza" University of Iasi

"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU; ***National patent application A 01055/05.12.2018***

"**Gold medal and Excellence diploma**" awarded by the international Jury of Euroinvent 2019

Gold medal and Excellence diploma" awarded by NIRD URBAN-INCERC

2019: 23rd International Exhibition of Inventics – Inventica 2019, 26-18 June 2019, Iasi, Romania

"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", ***Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU; National patent application A 01055/05.12.2018***

"**Diploma of honour and Gold Medal**" awarded by the International Jury of Inventica 2019

"**Special Prize**" awarded by SodinExpo, Russia

"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", ***Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- A 01054/05.12.2018***

"**Diploma of honour and Gold Medal**" awarded by the International Jury of Inventica 2019

"**Special Prize**" awarded by SodinExpo, Russia

"**Excellence diploma**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

Gold Medal Award for Excellence awarded to Anton FICAI; awarded by "Carol Davila" University of Medicine and Pharmacy, Bucharest

"Gold medal and Excellence diploma, awarded by "Romanian Association of Pteridology, Bucharest to Anton FICAI

2019: International Salon for Scientific Research, Innovation and Inventions, "ProInvent", 20-22 March 2019, Cluj Napoca, Romania

"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", ***Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- A 01054/05.12.2018***

Diplomă de excelență și medalia de aur awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"**Excellence diploma and Gold medal**" awarded by Technical University of Moldova

"**Excellence diploma**" awarded by Iustin Capra Association

"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU; National patent application ***A 01055/05.12.2018***

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"**Excellence diploma**" awarded by University of Agronomic Science and Veterinary Medicine, "King Mihai I of Romania", Timisoara

"Special Prize" awarded by Romanian Association for Alternative Technologies – ARTA Sibiu

Special Award awarded by Corneliu Group; Special Award awarded by Romanian Association for Alternative Technologies;

"**Excellence diploma and INCDMTM Trophy"** awarded by INCDMTM

"*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A FICAI, E ANDRONESCU, C. D. GHITULICA, D. FICAI, Georgeta VOICU, G. M. ALBU

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer",* Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE **A/00238/2013)**

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

"Special Prize and Excellence diploma" awarded by University of Agronomic Science and Veterinary Medicine, Bucharest

"**Excellence diploma with special mention**" awarded by State University of Medicine and Pharmacy „Nicolae Testemițanu", Moldova

"Functionalized magnetic systems for environmental applications; Denisa FICAI, Ecaterina ANDRONESCU, Cornelia GURAN, Anton FICAI**, A00164/2011***"*

"**Excellence diploma and Gold medal**" awarded by the International Jury of ProInvent

2019: IDEA-EXPO 2019 IDEA, Novelty, Invention, Art and Crafts International Exhibition and Fair, 06-07 April 2019, Szolnok, Hungary

"Functionalized magnetic systems for environmental applications; Denisa FICAI, Ecaterina ANDRONESCU, Cornelia GURAN, Anton FICAI**, A00164/2011***"*

"**Excellence diploma**" awarded by the International Jury of IDEA

"Polymer vesicles and tubes and technology of manufacturing / Vezicule și tuburi polimerice și tehnologie de obținere a acestora", ***Denisa FICAI; Andreea ILIEV; Anton FICAI; Violeta Georgeta TRUSCA; Anca Violeta GAFENCU; Sanda-Maria BUCATARIU; Gheorghe FUNDUEANU-CONSTANTIN; Maya SIMIONESCU; Ecaterina ANDRONESCU- A 01054/05.12.2018***

"**Excellence diploma**" awarded by the International Jury of IDEA

"Vertical electromagnetic separator of the isomagnetic nanoparticles / Separator (electro)magnetic vertical a nanoparticulelor izomagnetice", ***Denisa FICAI, Ioana ARDELEAN, Cornelia ILIE, Manuela CĂLIN, Elena-Valeria FUIOR, Adrian FIFERE, Mariana PINTEALĂ, Gheorghe FUNDUEANU-CONSTANTIN, Anton FICAI, Maya SIMIONESCU, Ecaterina ANDRONESCU; National patent application A 01055/05.12.2018***

"**Excellence diploma**" awarded by the International Jury of IDEA

"*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A Ficai, E Andronescu, C. D. Ghitulica, D. Ficai, G Voicu, G. M. Albu

"**Excellence diploma**" awarded by the International Jury of IDEA

"*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"* authors A. Ficai, E. Andronescu, M.G. Albu, D. Ficai, M. Sonmez

"**Excellence diploma**" awarded by the International Jury of IDEA

"Functionalized magnetic systems for environmental applications; Denisa Ficai, Ecaterina Andronescu, Cornelia Guran, Anton Ficai, **A00164/2011***"*

"**Excellence diploma**" awarded by the International Jury of IDEA

2019: Bangkok International Intellectual Property, Invention, Innovation and Technology Exposition - Thailand Inventors' Day 2019" 2-6 February 2019

"Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment" authors: A FICAI, E ANDRONESCU, C.D. GHITULICA, D. FICAI, Georgeta VOICU, G.M. ALBU

"**Gold medal**" awarded by the International Jury of IPITEX

"*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in*

cancer", Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE **A/00238/2013)**

"**Gold medal**" awarded by the International Jury of IPITEX

"**Special Award**" awarded by Advanced Tech Smart

2018: World Competition of Chemical Inventions IWIS2018_15-17Oct 2018, Warsaw, Poland

"Bronze medal" awarded for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"* authors A. Ficai, E. Andronescu, M.G. Albu, D. Ficai, M. Sonmez;

"Silver Medal" for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A FICAI, E ANDRONESCU, C. D. GHITULICA, D. FICAI, Georgeta VOICU, G. M. ALBU

"Silver Medal" for the patent "*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer",* Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Anton FICAI, Ovidiu OPREA, Bogdan Stefan VASILE A/00238/2013)

"Bronze medal" awarded for "Functionalized magnetic systems for environmental applications", Denisa Ficai, Anton Ficai, Cornelia Guran, Ecaterina Andronescu, A00164/2011; (RO127889 (A2); RO127889 (B1))

2018 20th International Conference on Synthetic Polymer Chemistry, Nanoscience and Nanotechnology - ICSPCNN 2018:

Certificate of **Best Presentation Award** for the paper „Synthesis and Characterization of Some Alginate Hollow Fibres Using Co-Axial Needles" authored by Anton Ficai, Ioana Lavinia Ardelean, Roxana Doina Trusca, Bogdan Stefan Vasile, Denisa Ficai, Ecaterina Andronescu

2018 International Salon for Scientific Research, innovation and Inventions, "ProInvent", Cluj Napoca, Romania

"Gold medal with special mention" (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Excellence diploma" awarded by Justin Capra Association (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: A FICAI, D FICAI, O OPREA, E ANDRONESCU, S MANEA, A-M PANGICĂ, P BODOGA, L MOTELICA);

"Gold medal and Excellence diploma" awarded by "Nicolae Testemiţeanu" Medicine and Pharmacy State University, Moldavia (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Gold medal with special mention" (for the patent application A01045/07.12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: A FICAI, MG ALBU-KAYA, D FICAI, V MITRAN, A CIMPEAN, E ANDRONESCU)

"Excelence diploma" awarded by Justin Capra Association (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: A FICAI, MG ALBU-KAYA, D FICAI, V MITRAN, A CIMPEAN, E ANDRONESCU)

"Excellence Diploma" awarded by "Nicolae Testemiţeanu" Medicine and Pharmacy State University, Moldavia (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: A FICAI, MG ALBU-KAYA, D FICAI, V MITRAN, A CIMPEAN, E ANDRONESCU).

2018 Salonul Internaţional de Invenţii şi Inovaţii "Traian VUIA", Timişoara, Romania

"Gold Medal" for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A FICAI, E ANDRONESCU, C. D. GHITULICA, D. FICAI, Georgeta VOICU, G. M. ALBU

"Bronze Medal" (for the patent application "Bone grafts based on collagen, calcium phosphate and zinc and process for their manufacturing" authors A. FICAI, E. ANDRONESCU, D. FICAI, M. SONMEZ, I. A. NEDELCU, M. G. ALBU);

"Gold Medal" (for the patent application "Grefe osoase osteoinductive si osteoconductive si procedeu de obţinere a acestora" A00239/23. 03. 2013);

"Gold Medal" (for the invention "*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer"* A/00238/2013)

"Gold Medal" (for the invention "Functionalized magnetic systems for environmental applications*"*

RO 127889)

"Special Award" awarded by Otlet Club 13 for the series of the presented inventions

"Special Prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the patent application "Bone grafts based on collagen, calcium phosphate and zinc and process for their manufacturing" authors A. Ficai, E. Andronescu, D. Ficai, M. Sonmez, I.A. Nedelcu, M.G. Albu);

"Special Prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"* authors A. Ficai, E. Andronescu, M.G. Albu, D. Ficai, M. Sonmez);

"Special Prize + Gold Medal" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: AFicai, E Andronescu, C.D. Ghitulica, D. Ficai, G. Voicu, G.M. Albu);

"Special Prize" awarded by Universitatea de Medicină şi Farmacie "Victor Babeş" din Timişoara (for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A Ficai, E Andronescu, C.D. Ghitulica, D. Ficai, G. Voicu, G.M. Albu);

"Excellence Diploma" awarded by Banat's University of Agricultural Sciences and Veterinary Medicine "King Michael I of Romania", Timişoara (for the researches in the medical field for the authors A. Ficai, D. Ficai, M Sonmez, O Oprea, BS Vasile, S Manea, AM Pangica, P Bodoga, C Agapescu, C.D. Ghitulica, E Andronescu;

2018: 22th International Exhibition of Inventics - Inventica; 27-29. 06. 2018, Iasi, Romania

"Gold medal" (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: Anton FICAI, Mădălina Georgiana ALBU-KAYA, Denisa FICAI, Valentina MITRAN, Anișoara CIMPEAN, Ecaterina ANDRONESCU);

"Gold medal" (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology-TIOXTECH-BIO" authors: A Ficai, OR Duta, D Ficai, E. Andronescu, et al.)

"Excelence diploma and Gold Medal" awarded by ICECHIM (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Excelence diploma and Gold Medal" awarded by ICECHIM (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO" authors: AFicai, OR Duta, D Ficai, E. Andronescu, et al.);

"Special Prize + Gold Medal" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO" authors: AFicai, OR Duta, D Ficai, E. Andronescu, et al.);

"Special Prize" awarded by "Lucian Blaga" University of Sibiu (for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA);

"Innovation Award" awarded by "Carol Davila" University of Medicine and Pharmacy, Bucharest (for the project "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology- TIOXTECH-BIO" authors: A Ficai, OR Duta, D Ficai, E. Andronescu, et al.);

2018: 10th European Exhibition of Creativity and Innovation-EuroInvent 2017, 17-19 may 2018, Iasi, Romania

"Gold Medal" for the patent application A00734/27. 09. 2017 "Innovative formulations for dental applications" authors: Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA;

"Silver medal" (for the patent application A01045/07. 12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: Anton FICAI, Mădălina Georgiana ALBU-KAYA, Denisa FICAI, Valentina MITRAN, Anișoara CIMPEAN, Ecaterina ANDRONESCU);

"Special Prize" awarded by Universitatea Tehnica a Moldovei (for the patent application A01045/07.

12. 2017 "Polymer/Ceramic Composite Materials and Process for their Manufacturing" authors: Anton FICAI, Mădălina Georgiana ALBU-KAYA, Denisa FICAI, Valentina MITRAN, Anișoara CIMPEAN, Ecaterina ANDRONESCU);

2017 Best paper awarded by WASET during 19th International Conference on Environmental, Biomedical and Biotechnology – ICEBB 2017: held at Venice, Italy for the paper "Collagen/Hydroxyapatite Compositions doped with Transitional Metals for bone tissue Engineering Applications" authors; Denisa FICAI, Anton FICAI, Dragos GUDOVAN, Iulia GUDOVAN, Ioana ARDELEAN, Roxana TRUSCA, Ecaterina ANDRONESCU, Valentina MITRAN, Anisoara CIMPEAN.

2017 Best paper awarded by ASET during 8TH International Conference on Nanotechnology: Fundamentals and Applications - ICNFA'17 held at Rome, Italy for the paper Design of TiO_xN_y for coating technology, Anton Ficai, Denisa Ficai, Bogdan Stefan Vasile, Roxana Doina Trusca, Dragos Gudovan, Ovidiu Oprea, Motelica Ludmila, Ecaterina Andronescu.

2017 Best paper awarded by WASET during 19th International Conference on Nanotechnology and Nanomedicine the - ICNN 2017: held at Prague, Czech Republic for the paper: Nanostructured Wound Dressings for Prevention and Treatment of Skin Infections, Anton FICAI, Roxana Doina TRUSCA, Alina Holban, Denisa FICAI, Ecaterina ANDRONESCU.

2017: 21th International Exhibition of Inventics - Inventica; 28-30. 06. 2017, Iasi, Romania

"Gold medal" (for the project "Cellulose fibers functionalization in order to design the properties of the finite products" authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELCU; Madalina Georgiana ALBU);

"Gold medal" (for the patent "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: A FICAI, E ANDRONESCU, C. D. GHITULICA, D. FICAI, Georgeta VOICU, G. M. ALBU)

"Gold medal" (for the patent application "Bone grafts based on collagen, calcium phosphate and zinc and process for their manufacturing" authors A. FICAI, E. ANDRONESCU, D. FICAI, M. SONMEZ, I. A. NEDELCU, M. G. ALBU)

"Special prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemiţanu", Moldova (for the project "*Synthesis procedure of some multifunctional composite materials with potential applications in bone cancer treatment"* authors: Anton FICAI, Ecaterina ANDRONESCU, Cristina Daniela GHITULICA, Denisa FICAI, Georgeta VOICU, Georgiana Madalina ALBU);

2017: 9th European Exhibition of Creativity and Innovation-EuroInvent 2017, 25-27. 05. 2017; Iaşi, Romania

"Gold medal" (for the invention "Bone grafts based on collagen, calcium phosphates and zinc and process for their manufacturing" authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELCU; Madalina Georgiana ALBU);

"Special prize" awarded by Institutul de Chimie al Academiei de Ştiinţe din Moldova (for the invention "Bone grafts based on collagen, calcium phosphates and zinc and process for their manufacturing" authors Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELCU; Madalina Georgiana ALBU);

"Special prize" awarded by Universitatea Lucian Blaga din Sibiu (for the invention "Bone grafts based on collagen, calcium phosphates and zinc and process for their manufacturing" authors A FICAI, E ANDRONESCU, M SONMEZ, D FICAI, IA NEDELCU; MG ALBU);

2016: BRUSSELS INNOVA- The World Exhibition on Inventions, Research and New Technologies, 17 – 19. 11. 2016; Bruxelles, Belgium

"Gold medal" (for the invention "*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer"*)

"Special prize" awarded by Taiwan during the Award Ceremony

2016: 8th European Exhibition of Creativity and Innovation-EuroInvent 2016, 19-21. 05. 2016; Iaşi, Romania

"Gold medal" (for the invention "*Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer"*)

"Gold medal" (for the invention "*Synthesis procedure of some multifunctional composite materials with potential application in bone cancer treatment"*)

"Silver medal" (for the invention "*Osteoconductive and osteoinductive bone grafts and process for*

their manufacturing")

"Silver medal" (for the invention "Functionalized magnetic systems for environmental applications, A00164/2011*"*);

"Special prize" (for the invention "*Synthesis procedure of some multifunctional composite materials with potential application in bone cancer treatment"*) awarded by iSentinel – Mircea MANOLESCU

2016: XXth International Salon of Research, Innovation and Technological Transfer - Inventica 2016; 29. 06-01. 07. 2016, Iasi, Romania

Gold medal – The Hamangia Thinker (for the invention "Functionalized magnetic systems for environmental applications, A00164/2011*"*);

"Gold medal" (for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"*)

"Gold medal" (for the invention "Multifunctional system based on *Magnetite/thioacids@Ag or Au used for diagnosis and targeted delivery in cancer"*)

2016: 44th International Exhibition of Inventions, 13–17. 04. 2016; Geneva, Switzerland

"Gold medal" (for the invention "*Osteoconductive and osteoinductive bone grafts and process for their manufacturing"*)

"Best Invention Award – Special Prize" awarded by Hong-Kong Science and Technology Parks Corporation

"Honorable mention – Special Prize" awarded by China Delegation of Inventions and Innovation

"Special prize" awarded by Turkish Patent Institute.

2015: 7th European Exhibition of Creativity and Innovation-EuroInvent 2015, Iaşi, Romania

"Gold medal" (for patent application "Layered Composite Based on Polypropylene Reinforced with Treated Glass Fibre Fabric").

2012: Prize: "Best Published Paper–2009" awarded by Syscomm–"Materiale Plastice"

2012: BRUSSELS INNOVA- The World Exhibition on Inventions, Research and New Technologies (for bone cancer treatment)

"Gold medal" (Procedeu de obtinere a unor materiale compozite cu potentiale aplicatii în tratarea cancerului osos, Patent No. 127725/30. 03. 2015)

Memberships

2018 - Present: Member in the Tiberina già Pontificia Academy, in Rome

1996 – 2004: Member in the Commission for Chemistry and Material Sciences, the National Council for the Certification of Academic Degrees and Titles
2004 – 2005: President of the Commission for Chemistry and Material Sciences, the National Council for the Certification of Academic Degrees and Titles
2013 – 2018: President in the Commission for Chemical Engineering, the National Council for the Certification of Academic Degrees and Titles
1994 – 2000, 2004 – 2005: Member in the Engineering Sciences Commission, the National Council for the Certification of Academic Degrees and Titles
• Founding Member of Romanian Society for Biomaterials
• Founding Member of Romanian Ceramic Society
• Founding Member of Romanian Society of Chemistry
• Founding Member of the Romanian Society of Chemical Engineering
• Member of European Ceramic Society
• Member of the Romanian Academy of Scientists
• Member of the Technical Sciences Academy
• Founding Member in the Romanian Electron Microscopy Society
• Member of the European Microscopy Society
• Member of the Board Revista Română de Materiale – Romanian Journal of Materials
• Lead Guest Editor of Journal of Nanomaterials, Hindawi Publishing House
• Editor, Elsevier

Lead Editor of UPB Scientific Bulletin

Lead Editor of Romanian Journal of Materials

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Lista de lucrari

1 Zarif, M.E.; Groza, A.; Yehia-alexe, S.A.; Bita, B.; **Andronescu, E.** THE INFLUENCE OF THE SUBSTRATE TEMPERATURE ON THE PHISICOCHEMICAL PROPERTIES OF CALCIUM PHOSPHATE LAYERS DEPOSITED BY LOW POWER RADIO-FREQUENCY MAGNETRON SPUTTERING DISCHARGE. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2025**, *87*, 5-20.

2 Vladu, A.F.; Kaya, M.G.A.; Trusca, R.D.; Motelica, L.; Surdu, V.A.; Oprea, O.C.; Constantinescu, R.R.; Cazan, B.; Ficai, D.; **Andronescu, E.;** Ficai, A. The Role of Crosslinking Agents in the Development of Collagen-Hydroxyapatite Composite Materials for Bone Tissue Engineering. *MATERIALS* **2025**, *18*, doi:10.3390/ma18050998.

3 Radulescu, D.M.; Vasile, B.S.; Surdu, V.A.; Trusca, R.D.; Ilie, C.I.; Popescu, R.C.; **Andronescu, E.;** Drumea, V.; Ditu, L.M. Antimicrobial chitosan-silk fibroin scaffolds with green-synthesized metal oxide nanoparticles. *JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY* **2025**, *114*, doi:10.1016/j.jddst.2025.107463.

4 Radulescu, D.M.; Neacsu, I.A.; Vasile, B.S.; Surdu, V.A.; Oprea, O.C.; Trusca, R.D.; Chircov, C.; Popescu, R.C.; Ilie, C.I.; Ditu, L.M.; Drumea, V.; **Andronescu, E.** Orange Peel-Mediated Green Synthesis of ZnO and CuO Nanoparticles: Evaluation for Antimicrobial Activity and Biocompatibility in Tissue Engineering. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES* **2025**, *26*, doi:10.3390/ijms26188781.

5 Radulescu, D.M.; Neacsu, I.A.; Vasile, B.S.; Surdu, V.A.; Oprea, O.C.; Trusca, R.D.; Chircov, C.; Popescu, R.C.; Ilie, C.I.; Ditu, L.M.; Drumea, V.; **Andronescu, E.** Green-Synthesized MgO Nanoparticles: Structural Insights and Antimicrobial Applications. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES* **2025**, *26*, doi:10.3390/ijms26189021.

6 Radulescu, D.M.; Neacsu, I.A.; Vasile, B.S.; Surdu, V.A.; **Andronescu, E.** GREEN SYNTHESIS OF COPPER, ZINC, AND MAGNESIUM OXIDE NANOPARTICLES USING ORANGE PEEL EXTRACT. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2025**, *87*, 103-114.

7 Radulescu, D.E.; Vasile, B.S.; Vasile, O.R.; Neacsu, I.A.; Trusca, R.D.; Surdu, V.A.; Birca, A.C.; Dolete, G.; Ilie, C.I.; **Andronescu, E.** Microwave-Assisted Hydrothermal Synthesis of Cu/Sr-Doped Hydroxyapatite with Prospective Applications for Bone Tissue Engineering. *JOURNAL OF COMPOSITES SCIENCE* **2025**, *9*, doi:10.3390/jcs9080427.

8 Radulescu, D.E.; Vasile, B.S.; Neacsu, I.A.; Surdu, A.V.; Birca, A.C.; Trusca, R.D.; **Andronescu, E.** SYNTHESIS AND DEVELOPMENT OF Mg-SUBSTITUTED HYDROXYAPATITE OBTAINED FROM NATURAL SOURCES. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2025**, *87*, 3-14.

9 Musat, D.N.; Burdusel, A.C.; Gaftonianu, S.; Ficai, A.; Oprea, O.; Popescu, R.; Trusca, R.; **Andronescu, E.** BIOGLASS FUNCTIONALISED WITH ESSENTIAL OILS FOR BIOMEDICAL APPLICATIONS. *REVISTA ROMANA DE MATERIALE-ROMANIAN JOURNAL OF MATERIALS* **2025**, *55*, 11-24.

10 Mihaila, M.O.; Ficai, D.; Damian, O.; Vasile, B.S.; Burdusel, A.C.; Paduraru, A.; **Andronescu, E.** THE SCULPTURAL AND POLYCHROME DECORATIONS IN ANCIENT CERAMIC. *REVISTA ROMANA DE MATERIALE-ROMANIAN JOURNAL OF MATERIALS* **2025**, *55*, 116-123.

11 Geana, E.I.; Ciucure, C.T.; Niculescu, V.C.; Marinas, I.C.; Pircalabioru, G.G.; Dutu, D.; Trusca, R.; Oprea, O.C.; Ficai, A.; **Andronescu, E.** Valorization of apple pomace by obtaining some bioactive ingredients with antioxidant, antimicrobial and prebiotic activities. *FOOD AND BIOPRODUCTS PROCESSING* **2025**, *150*, 182-197, doi:10.1016/j.fbp.2025.01.006.

12 Dumitru, C.D.; Neacsu, I.A.; Oprea, O.C.; Motelica, L.; Balasea, B.V.; Ilie, C.I.; Marinescu, F.; Ripszky, A.; Pituru, S.M.; **Andronescu, E.** Biomaterials Based on Bee Products and Their Effectiveness in Soft Tissue Regeneration. *MATERIALS* **2025**, *18*, doi:10.3390/ma18122689.

13 Dumitru, C.D.; Ilie, C.I.; Neacsu, I.A.; Motelica, L.; Oprea, O.C.; Ripszky, A.; Pituru, S.M.; Balasea, B.V.; Marinescu, F.; **Andronescu, E.** Antimicrobial Composite Films Based on Alginate-Chitosan with Honey, Propolis, Royal Jelly and Green-Synthesized Silver Nanoparticles. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES* **2025**, *26*, doi:10.3390/ijms26146809.

14 Dumitru, C.D.; **Andronescu, E.;** Neacsu, I.A.; Grumezescu, A.M. COLLAGEN-BASED SYSTEMS WITH PROPOLIS TINCTURE FOR DERMAL TISSUE REGENERATION. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2025**, *87*, 3-16.

15 Ciupina, V.; Vladoiu, R.; Prodan, G.C.; Porosnicu, C.; Lungu, C.; Satulu, V.; Mandes, A.; Dinca, V.; **Andronescu, E.;** Vasile, B.; Nicolescu, V.; Polosan, S.; Matei, E. N-DOPED C/Ti/C/Al/C/Si MULTILAYER AND N-DOPED C plus Ti/C plus Al/C plus Si COMPOSITE THIN FILMS: SYNTHESIS AND CHARACTERIZATION. *ROMANIAN*

REPORTS IN PHYSICS **2025**, *77*, doi:10.59277/RomRepPhys.2025.77.503.
16 Alexe, A.C.; Burdusel, A.C.; Gaftonianu, S.; Oprea, O.; Popescu, R.; Trusca, R.; Ficai, A.; **Andronescu, E.** BIOMATERIALS BASSED ON HYDROXYAPATITE, CERIUM OXIDE AND ESSENTIAL OILS. *REVISTA ROMANA DE MATERIALE-ROMANIAN JOURNAL OF MATERIALS* **2025**, *55*, 25-38.
17 Zarif, M.E.; Bita, B.; Yehia-Alexe, S.A.; Negut, I.; Pircalabioru, G.G.; **Andronescu, E.;** Groza, A. Biological and Physicochemical Analysis of Sr-Doped Hydroxyapatite/Chitosan Composite Layers. *POLYMERS* **2024**, *16*, doi:10.3390/polym16131922.
18 Stoica, A.E.; Bîrca, A.C.; Pitigoi, M.L.; Grumezescu, A.M.; Vasile, B.S.; Iordache, F.; Ficai, A.; **Andronescu, E.** NANOSTRUCTURED ZINC OXIDE FOR WOUND DRESSINGS. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2024**, *86*, 159-172.
19 Radulescu, D.M.; **Andronescu, E.;** Vasile, O.R.; Ficai, A.; Vasile, B.S. Silk fibroin-based scaffolds for wound healing applications with metal oxide nanoparticles. *JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY* **2024**, *96*, doi:10.1016/j.jddst.2024.105689.
20 Motelica, L.; Ficai, D.; Petrisor, G.; Oprea, O.C.; Trusca, R.D.; Ficai, A.; **Andronescu, E.;** Hudita, A.; Holban, A.M. Antimicrobial Hydroxyethyl-Cellulose-Based Composite Films with Zinc Oxide and Mesoporous Silica Loaded with Cinnamon Essential Oil. *PHARMACEUTICS* **2024**, *16*, doi:10.3390/pharmaceutics16091225.
21 Marinescu, L.; Motelica, L.; Ficai, D.; Ficai, A.; Oprea, O.C.; **Andronescu, E.;** Holban, A.M. A Two-Step Surface Modification Methodology for the Advanced Protection of a Stone Surface. *NANOMATERIALS* **2024**, *14*, doi:10.3390/nano14010068.
22 Marinescu, L.; Ilie, C.I.; Ficai, D.; Ficai, A.; Trusca, R.; **Andronescu, E.;** Holban, A.M. INFLUENCE OF NANOTECHNOLOGY FOR THE TREATMENT AND PROTECTION OF NATURAL STONE AGAINST BIODETERIORATION. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2024**, *86*, 35-50.
23 Lungu, II; **Andronescu, E.;** Dumitrache, F.; Gavrila-Florescu, L.; Morjan, I.; Banici, A.M.; Fleaca, C.; Criveanu, A.; Prodan, G. LASER PYROLYSIS SYNTHESIZED IRON OXIDE NANOPARTICLES. A STUDY ON THE INFLUENCE OF THE SENSITIZER USED. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2024**, *86*, 109-118.
24 Gaftonianu, S.A.; Chifiriuc, C.; **Andronescu, E.;** Surdu, A.; Burdusel, A.C.; Trusca, R. FUNCTIONALIZED MAGNETITE AND CERIUM OXIDE NANOSTRUCTURES: MORPHOSTRUCTURAL PROPERTIES AND BIOMEDICAL APPLICABILITY. *REVISTA ROMANA DE MATERIALE-ROMANIAN JOURNAL OF MATERIALS* **2024**, *54*, 198-204.
25 Doicin, I.E.; Preda, M.D.; Neacsu, I.A.; Ene, V.L.; Birca, A.C.; Vasile, B.S.; **Andronescu, E.** Tailoring Zinc Oxide Nanoparticles via Microwave-Assisted Hydrothermal Synthesis for Enhanced Antibacterial Properties. *APPLIED SCIENCES-BASEL* **2024**, *14*, doi:10.3390/app14177854.
26 Doicin, I.E.; Neacsu, I.A.; Ene, V.L.; Birca, A.C.; **Andronescu, E.** DEVELOPMENT AND CHARACTERIZATION OF SODIUM ALGINATE-ZnO NANOPARTICLE REINFORCED COMPOSITES FOR BIOMEDICAL APPLICATIONS. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2024**, *86*, 157-168.
27 Doicin, I.E.; Golea, A.D.; Neacsu, I.A.; Ene, V.L.; Bîrca, A.C.; Holban, A.M.; **Andronescu, E.** SPIN-COATING DEPOSITION OF ANTIMICROBIAL ZnO NANOPARTICLES ON COTTON FABRICS FOR MEDICAL APPLICATIONS. *REVISTA ROMANA DE MATERIALE-ROMANIAN JOURNAL OF MATERIALS* **2024**, *54*, 189-197.
28 Burdusel, A.C.; Sarchizian, D.; Niculescu, A.G.; Holban, A.M.; Popescu, R.C.; Trusca, R.; **Andronescu, E.** Synthesis and characterization of hydroxyapatite-zinc oxide nanocomposites incorporating rosemary and thyme essential oils for enhanced bone regeneration and antimicrobial activity. *ROMANIAN JOURNAL OF MORPHOLOGY AND EMBRYOLOGY* **2024**, *65*, 409-419, doi:10.47162/RJME.65.3.03.
29 Birca, A.C.; Gherasim, O.; Niculescu, A.G.; Grumezescu, A.M.; Vasile, B.S.; Mihaiescu, D.E.; Neacsu, I.A.; **Andronescu, E.;** Trusca, R.; Holban, A.M.; Hudita, A.; Croitoru, G.A. Infection-Free and Enhanced Wound Healing Potential of Alginate Gels Incorporating Silver and Tannylated Calcium Peroxide Nanoparticles. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES* **2024**, *25*, doi:10.3390/ijms25105196.
30 Bajeu, I.T.; Niculescu, A.G.; Scafa-Udriste, A.; **Andronescu, E.** Intrastent Restenosis: A Comprehensive Review. *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES* **2024**, *25*, doi:10.3390/ijms25031715.
31 Apostol, M.; Enache, A.; Diculescu, V.; Tite, T.; Onea, M.; Enculescu, I.; Matei, E.; **Andronescu, E.** GRAPHENE FOR ELECTRONIC DEVICES - SYNTHESIS AND CHARACTERIZATION. *UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN SERIES B-CHEMISTRY AND MATERIALS SCIENCE* **2024**, *86*.
32 Stoica, A.E.; Bîrcă, A.C.; Mihaiescu, D.E.; Grumezescu, A.M.; Ficai, A.; Herman, H.; Cornel, B.; Roșu, M.; Gharbia, S.; Holban, A.M.; Vasile, B.Ú.; **Andronescu, E.;** Hermenean, A.O. Biocompatibility and Antimicrobial Profile of Acid Usnic-Loaded Electrospun Recycled Polyethylene Terephthalate (PET)—Magnetite Nanofibers. *Polymers* **2023**,

15, doi:10.3390/polym15153282
33 Stoica, A.E.; Bîrcă, A.C.; Gherasim, O.; Ficai, A.; Grumezescu, A.M.; Oprea, O.C.; Vasile, B.Ș.; Balta, C.; **Andronescu, E.;** Hermenean, A.O. Electrospun Fibrous Silica for Bone Tissue Engineering Applications. *Pharmaceutics* **2023**, *15*, doi:10.3390/pharmaceutics15061728
34 Stoica, A.E.; Albuleț, D.; Bîrcă, A.C.; Iordache, F.; Ficai, A.; Grumezescu, A.M.; Vasile, B.Ú.; **Andronescu, E.;** Marinescu, F.; Holban, A.M. Electrospun Nanofibrous Mesh Based on PVA, Chitosan, and Usnic Acid for Applications in Wound Healing. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms241311037
35 Spoială, A.; Ilie, C.I.; Ficai, D.; Ficai, A.; **Andronescu, E.** Synergic Effect of Honey with Other Natural Agents in Developing Efficient Wound Dressings. *Antioxidants* **2023**, *12*, doi:10.3390/antiox12010034
36 Radulescu, D.M.; Surdu, V.A.; Ficai, A.; Ficai, D.; Grumezescu, A.M.; **Andronescu, E.** Green Synthesis of Metal and Metal Oxide Nanoparticles: A Review of the Principles and Biomedical Applications. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms242015397
37 Radulescu, D.E.; Vasile, O.R.; **Andronescu, E.;** Ficai, A. Latest Research of Doped Hydroxyapatite for Bone Tissue Engineering. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms241713157
38 Puiu, R.A.; Florea, D.A.; Burdușel, A.C.; Surdu, V.A.; **Andronescu, E.** METALLIC NANOPARTICLES AND METAL OXIDE USED IN BIOMEDICAL APPLICATIONS. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2023**, *85*, 111-132,
39 Puiu, R.A.; Bîrcă, A.C.; Grumezescu, V.; Duta, L.; Oprea, O.C.; Holban, A.M.; Hudiță, A.; Gălățeanu, B.; Balaure, P.C.; Grumezescu, A.M.; **Andronescu, E.** 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*, doi:10.3390/pharmaceutics15071882
40 Popescu, R.C.; Kopatz, V.; **Andronescu, E.;** Savu, D.I.; Doerr, W. Nanoparticle-Mediated Drug Delivery of Doxorubicin Induces a Differentiated Clonogenic Inactivation in 3D Tumor Spheroids In Vitro. *International Journal of Molecular Sciences* **2023**, *24*, doi:10.3390/ijms24032198
41 Păun, C.; Motelică, L.; Ficai, D.; Ficai, A.; **Andronescu, E.** Metal-Organic Frameworks: Versatile Platforms for Biomedical Innovations. *Materials* **2023**, *16*, doi:10.3390/ma16186143
42 Paduraru, A.V.; Musuc, A.M.; Oprea, O.C.; Trusca, R.; Surdu, V.A.; Vasile, B.S.; **Andronescu, E.** STRUCTURAL AND MORPHOLOGICAL CHARACTERIZATION OF ERBIUM DOPED HYDROXYAPATITE FOR MEDICAL IMAGING. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2023**, *85*, 187-200,
43 Motelica, L.; Vasile, B.S.; Ficai, A.; Surdu, A.V.; Ficai, D.; Oprea, O.C.; **Andronescu, E.;** Mustățea, G.; Ungureanu, E.L.; Dobre, A.A. Antibacterial Activity of Zinc Oxide Nanoparticles Loaded with Essential Oils. *Pharmaceutics* **2023**, *15*, doi:10.3390/pharmaceutics15102470
44 Motelica, L.; Oprea, O.C.; Vasile, B.S.; Ficai, A.; Ficai, D.; **Andronescu, E.;** Holban, A.M. 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*, doi:10.3390/ijms24065677
45 Lungu, I.I.; **Andronescu, E.;** Dumitrache, F.; Gavrila-Florescu, L.; Banici, A.M.; Morjan, I.; Criveanu, A.; Prodan, G. Laser Pyrolysis of Iron Oxide Nanoparticles and the Influence of Laser Power. *Molecules* **2023**, *28*, doi:10.3390/molecules28217284
46 Dumitrescu, C.R.; Neacsu, I.A.; Trusca, R.; Popescu, R.C.; Raut, I.; Constantin, M.; **Andronescu, E.** Piezoelectric Biocomposites for Bone Grafting in Dentistry. *Polymers* **2023**, *15*, doi:10.3390/polym15112446
47 Dolete, G.; Ilie, C.I.; Chircov, C.; Purcăreanu, B.; Motelica, L.; Moroșan, A.; Oprea, O.C.; Ficai, D.; **Andronescu, E.;** Dițu, L.M. Synergistic Antimicrobial Activity of Magnetite and Vancomycin-Loaded Mesoporous Silica Embedded in Alginate Films. *Gels* **2023**, *9*, doi:10.3390/gels9040295
48 Ciupina, V.; Vladoiu, R.; Prodan, G.C.; Porosnicu, C.; Satulu, V.; **Andronescu, E.;** Vasile, B.; Nicolescu, V. C/Ti/C/Al/C/Si multilayer and C+Ti/C+Al/C+Si composite thin films: synthesis and characterization. In Proceedings of the Proceedings of SPIE - The International Society for Optical Engineering, 2023.
49 Chircov, C.; Mincă, M.A.; Serban, A.B.; Bîrcă, A.C.; 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*, doi:10.3390/ijms24076249
50 Chircov, C.; Bîrcă, A.C.; Dănciulescu, L.A.; Neacșu, I.A.; Oprea, O.C.; Trușcă, R.D.; **Andronescu, E.** Usnic Acid-Loaded Magnetite Nanoparticles—A Comparative Study between Synthesis Methods. *Molecules* **2023**, *28*, doi:10.3390/molecules28135198
51 Burdusel, A.C.; Neacsu, I.A.; Birca, A.C.; Chircov, C.; Grumezescu, A.M.; Holban, A.M.; Curutiu, C.; Ditu, L.M.; Stan, M.; **Andronescu, E.** Microwave-Assisted Hydrothermal Treatment of Multifunctional Substituted Hydroxyapatite with Prospective Applications in Bone Regeneration. *Journal of Functional Biomaterials* **2023**, *14*,

doi:10.3390/jfb14070378
52 Bîrcă, A.C.; Gherasim, O.; Niculescu, A.G.; Grumezescu, A.M.; Neacșu, I.A.; Chircov, C.; Vasile, B.Ú.; Oprea, O.C.; **Andronescu, E.;** Stan, M.S.; Curuțiu, C.; Dițu, L.M.; Holban, A.M. 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*, doi:10.3390/ijms241411466
53 Bîrcă, A.C.; Chircov, C.; Niculescu, A.G.; Hildegard, H.; Baltă, C.; Roșu, M.; Mladin, B.; Gherasim, O.; Mihaiescu, D.E.; Vasile, B.Ú.; Grumezescu, A.M.; **Andronescu, E.;** Hermenean, A.O. H2O2-PLA-(Alg)2Ca Hydrogel Enriched in Matrigel® Promotes Diabetic Wound Healing. *Pharmaceutics* **2023**, *15*, doi:10.3390/pharmaceutics15030857
54 Spoiala, A.; Ilie, C.I.; Trusca, R.D.; Ficai, D.; Motelica, L.; Oprea, O.C.; Ficai, A.; **Andronescu, E.** Nanocomposite Membranes Based on Chitosan Embedded with Antimicrobial Nanoparticles for Water Purification Applications. In Proceedings of the Proceedings of the World Congress on New Technologies, 2022.
55 Spoială, A.; Ilie, C.I.; Ficai, D.; Ficai, A.; **Andronescu, E.** From Biomedical Applications of Alginate towards CVD Implications Linked to COVID-19. *Pharmaceuticals* **2022**, *15*, doi:10.3390/ph15030318
56 Spoială, A.; Ilie, C.I.; Dolete, G.; Trușcă, R.D.; Motelică, L.; Oprea, O.C.; Ficai, D.; Ficai, A.; **Andronescu, E.;** Dițu, L.M. THE DEVELOPMENT OF ANTIMICROBIAL CHITOSAN/ZnO NANOCOMPOSITE MEMBRANES FOR WATER PURIFICATION. *Revista Romana de Materiale/ Romanian Journal of Materials* **2022**, *52*, 17-25,
57 Spoială, A.; Ilie, C.I.; Dolete, G.; Croitoru, A.M.; Surdu, V.A.; Trușcă, R.D.; Motelica, L.; Oprea, O.C.; Ficai, D.; Ficai, A.; **Andronescu, E.;** Dițu, L.M. Preparation and Characterization of Chitosan/TiO2 Composite Membranes as Adsorbent Materials for Water Purification. *Membranes* **2022**, *12*, doi:10.3390/membranes12080804
58 Radulescu, D.M.; Neacsu, I.A.; Grumezescu, A.M.; **Andronescu, E.** New Insights of Scaffolds Based on Hydrogels in Tissue Engineering. *Polymers* **2022**, *14*, doi:10.3390/polym14040799
59 Radulescu, D.E.; Neacsu, I.A.; Grumezescu, A.M.; **Andronescu, E.** Novel Trends into the Development of Natural Hydroxyapatite-Based Polymeric Composites for Bone Tissue Engineering. *Polymers* **2022**, *14*, doi:10.3390/polym14050899
60 Popescu, R.C.; Vasile, B.Ş.; Savu, D.I.; Mogoşanu, G.D.; Bejenaru, L.E.; **Andronescu, E.;** Grumezescu, A.M.; Mogoantă, L. Influence of Polymer Shell Molecular Weight on Functionalized Iron Oxide Nanoparticles Morphology and In Vivo Biodistribution. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14091877
61 Petrisor, G.; Motelica, L.; Ficai, D.; Trusca, R.D.; Surdu, V.A.; Voicu, G.; Oprea, O.C.; Ficai, A.; **Andronescu, E.** New Mesoporous Silica Materials Loaded with Polyphenols: Caffeic Acid, Ferulic Acid and p-Coumaric Acid as Dietary Supplements for Oral Administration. *Materials* **2022**, *15*, doi:10.3390/ma15227982
62 Movileanu, C.; Anghelache, M.; Turtoi, M.; Voicu, G.; Neacsu, I.A.; Ficai, D.; Trusca, R.; Oprea, O.; Ficai, A.; **Andronescu, E.;** Calin, M. Folic acid-decorated PEGylated magnetite nanoparticles as efficient drug carriers to tumor cells overexpressing folic acid receptor. *International Journal of Pharmaceutics* **2022**, *625*, doi:10.1016/j.ijpharm.2022.122064
63 Motelica, L.; Vasile, B.S.; Ficai, A.; Surdu, A.V.; Ficai, D.; Oprea, O.C.; **Andronescu, E.;** Jinga, D.C.; Holban, A.M. Influence of the Alcohols on the ZnO Synthesis and Its Properties: The Photocatalytic and Antimicrobial Activities. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14122842
64 Marinescu, L.; Ficai, D.; Ficai, A.; Oprea, O.; Nicoara, A.I.; Vasile, B.S.; 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*, doi:10.3390/ijms23115982
65 Ilie, C.I.; Spoială, A.; Ficai, D.; Nicoară, A.I.; Oprea, O.C.; Surdu, V.A.; Trușcă, R.D.; **Andronescu, E.;** Dițu, L.M.; Ficai, A. MAGNETIC PLATFORMS BASED ON MAGNETITE AND POLYPHENOLS WITH ANTIMICROBIAL ACTIVITY. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2022**, *84*, 45-58,
66 Ilie, C.I.; Oprea, E.; Geana, E.I.; Spoiala, A.; Buleandra, M.; Pircalabioru, G.G.; Badea, I.A.; Ficai, D.; **Andronescu, E.;** Ficai, A.; Ditu, L.M. Bee Pollen Extracts: Chemical Composition, Antioxidant Properties, and Effect on the Growth of Selected Probiotic and Pathogenic Bacteria. *Antioxidants* **2022**, *11*, doi:10.3390/antiox11050959
67 Florea, D.A.; Grumezescu, V.; Bîrcă, A.C.; Vasile, B.Ú.; Mușat, M.; Chircov, C.; Stan, M.S.; Grumezescu, A.M.; **Andronescu, E.;** Chifiriuc, M.C. Design, Characterization, and Antibacterial Performance of MAPLE-Deposited Coatings of Magnesium Phosphate-Containing Silver Nanoparticles in Biocompatible Concentrations. *International Journal of Molecular Sciences* **2022**, *23*, doi:10.3390/ijms23147910
68 Florea, D.A.; Grumezescu, V.; Bîrcă, A.C.; Vasile, B.Ú.; Iosif, A.; Chircov, C.; Stan, M.S.; Grumezescu, A.M.; **Andronescu, E.;** Chifiriuc, M.C. Bioactive Hydroxyapatite-Magnesium Phosphate Coatings Deposited by MAPLE for Preventing Infection and Promoting Orthopedic Implants Osteointegration. *Materials* **2022**, *15*, doi:10.3390/ma15207337
69 Filip, D.G.; Surdu, V.A.; Paduraru, A.V.; **Andronescu, E.** Current Development in Biomaterials—Hydroxyapatite and Bioglass for Applications in Biomedical Field: A Review. *Journal of Functional Biomaterials* **2022**, *13*, doi:10.3390/jfb13040248

70 Ficai, D.; Gheorghe, M.; Dolete, G.; Mihailescu, B.; Svasta, P.; Ficai, A.; Constantinescu, G.; **Andronescu, E.** Microelectromechanical Systems Based on Magnetic Polymer Films. *Micromachines* **2022**, *13*, doi:10.3390/mi13030351
71 Dumitru, C.D.; Neacsu, I.A.; Grumezescu, A.M.; **Andronescu, E.** Bee-Derived Products: Chemical Composition and Applications in Skin Tissue Engineering. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14040750
72 Dumitrescu, C.R.; Surdu, V.A.; Stroescu, H.; Nicoara, A.I.; Neacsu, I.A.; Trusca, R.; **Andronescu, E.;** Ciocan, L.T. Alkali Niobate Powder Synthesis Using an Emerging Microwave-Assisted Hydrothermal Method. *Materials* **2022**, *15*, doi:10.3390/ma15155410
73 Dumitrescu, C.R.; Neacsu, I.A.; Surdu, V.A.; Nicoara, A.I.; Codrea, C.I.; Pop, C.E.; Trusca, R.; **Andronescu, E.** MATURATION OF HYDROXYAPATITE FROM BIOGENIC CALCIUM SOURCE – A COMPARATIVE STUDY. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2022**, *84*, 19-30,
74 Dolete, G.; Purcăreanu, B.; Mihaiescu, D.E.; Ficai, D.; Oprea, O.C.; Bîrcă, A.C.; Chircov, C.; Vasile, B.Ú.; Vasilievici, G.; Ficai, A.; **Andronescu, E.** A Comparative Loading and Release Study of Vancomycin from a Green Mesoporous Silica. *Molecules* **2022**, *27*, doi:10.3390/molecules27175589
75 Dolete, G.; Ficai, D.; Ficai, A.; Bîrcă, A.C.; Motelica, L.; Trușcă, R.; Oprea, O.C.; Gheorghe, M.; **Andronescu, E.** EX-SITU METHOD FOR FABRICATION OF NANOCOMPOSITE THICK-FILMS BASED ON MAGNETITE. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2022**, *84*, 99-110,
76 Dolete, G.; Chircov, C.; Motelica, L.; Ficai, D.; Oprea, O.C.; Gheorghe, M.; Ficai, A.; **Andronescu, E.** Magneto-Mechanically Triggered Thick Films for Drug Delivery Micropumps. *Nanomaterials* **2022**, *12*, doi:10.3390/nano12203598
77 Chircov, C.; Pîrvulescu, D.C.; Bîrcă, A.C.; **Andronescu, E.;** Grumezescu, A.M. Magnetite Microspheres for the Controlled Release of Rosmarinic Acid. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14112292
78 Burdușel, A.C.; Gherasim, O.; **Andronescu, E.;** Grumezescu, A.M.; Ficai, A. Inorganic Nanoparticles in Bone Healing Applications. *Pharmaceutics* **2022**, *14*, doi:10.3390/pharmaceutics14040770
79 Burdușel, A.C.; **Andronescu, E.** Lipid Nanoparticles and Liposomes for Bone Diseases Treatment. *Biomedicines* **2022**, *10*, doi:10.3390/biomedicines10123158
80 Zarif, M.E.; Yehia, S.A.; Biță, B.; Sătulu, V.; Vizireanu, S.; Dinescu, G.; Holban, A.M.; Marinescu, F.; **Andronescu, E.;** Grumezescu, A.M.; Bîrcă, A.C.; Farcașiu, A.T. Atmospheric pressure plasma activation of hydroxyapatite to improve fluoride incorporation and modulate bacterial biofilm. *International Journal of Molecular Sciences* **2021**, *22*, doi:10.3390/ijms222313103
81 Surdu, V.A.; **Andronescu, E.** The role of configurational entropy in fluorite oxides systems: A mini-review. *Revista Romana de Materiale/ Romanian Journal of Materials* **2021**, *51*, 327-334,
82 Surdu, V.A.; **Andronescu, E.** Phase formation in heterovalent equimolar quinary oxide systems of zro2-hfo2-ceo2-nb2o5-re2o3 type (Re = y, yb, nd, gd). *Ceramics* **2021**, *4*, 476-485, doi:10.3390/ceramics4030035
83 Spoială, A.; Ilie, C.I.; Truscă, R.D.; Oprea, O.C.; Surdu, V.A.; Vasile, B.S.; Ficai, A.; Ficai, D.; **Andronescu, E.;** Dit, L.M. Zinc oxide nanoparticles forwater purification. *Materials* **2021**, *14*, doi:10.3390/ma14164747
84 Spoială, A.; Ilie, C.I.; Ficai, D.; Ficai, A.; **Andronescu, E.** Chitosan-based nanocomposite polymeric membranes for water purification—a review. *Materials* **2021**, *14*, doi:10.3390/ma14092091
85 Spoială, A.; Ilie, C.I.; Crăciun, L.N.; Ficai, D.; Ficai, A.; **Andronescu, E.** Magnetite-silica core/shell nanostructures: From surface functionalization towards biomedical applications—a review. *Applied Sciences (Switzerland)* **2021**, *11*, doi:10.3390/app112211075
86 Spirescu, V.A.; Șuhan, R.; Niculescu, A.G.; Grumezescu, V.; Negut, I.; Holban, A.M.; Oprea, O.C.; Bîrcă, A.C.; Vasile, B.Ș.; Grumezescu, A.M.; Bejenaru, L.E.; Mogoșanu, G.D.; Bejenaru, C.; Balaure, P.C.; **Andronescu, E.;** Mogoantă, L. Biofilm-resistant nanocoatings based on ZnO nanoparticles and linalool. *Nanomaterials* **2021**, *11*, doi:10.3390/nano11102564
87 Spirescu, V.A.; Niculescu, A.G.; Slave, Ș.; Bîrcă, A.C.; Dorcioman, G.; Grumezescu, V.; Holban, A.M.; Oprea, O.C.; Vasile, B.Ș.; Grumezescu, A.M.; Nica, I.C.; Stan, M.S.; **Andronescu, E.** Anti-biofilm coatings based on chitosan and lysozyme functionalized magnetite nanoparticles. *Antibiotics* **2021**, *10*, doi:10.3390/antibiotics10101269
88 Spirescu, V.A.; Chircov, C.; Grumezescu, A.M.; Vasile, B.Ș.; **Andronescu, E.** Inorganic nanoparticles and composite films for antimicrobial therapies. *International Journal of Molecular Sciences* **2021**, *22*, doi:10.3390/ijms22094595
89 Spirescu, V.A.; Chircov, C.; Grumezescu, A.M.; **Andronescu, E.** Polymeric nanoparticles for antimicrobial therapies: An up-to-date overview. *Polymers* **2021**, *13*, 1-27, doi:10.3390/polym13050724
90 Puiu, R.A.; Balaure, P.C.; Constantinescu, E.; Grumezescu, A.M.; **Andronescu, E.;** Oprea, O.C.; Vasile, B.S.; Grumezescu, V.; Negut, I.; Nica, I.C.; Stan, M.S. Anti-cancer nanopowders and maple-fabricated thin coatings based on spions surface modified with paclitaxel loaded β-cyclodextrin. *Pharmaceutics* **2021**, *13*, doi:10.3390/pharmaceutics13091356

91 Popescu, R.C.; Savu, D.I.; Bierbaum, M.; Grbenicek, A.; Schneider, F.; Hosser, H.; Vasile, B.Ș.; **Andronescu, E.;** Wenz, F.; Giordano, F.A.; Herskind, C.; Veldwijk, M.R. Intracellular delivery of doxorubicin by iron oxide-based nano-constructs increases clonogenic inactivation of ionizing radiation in hela cells. *International Journal of Molecular Sciences* **2021**, *22*, doi:10.3390/ijms22136778
92 Paduraru, A.V.; Oprea, O.; Musuc, A.M.; Vasile, B.S.; Iordache, F.; **Andronescu, E.** Influence of terbium ions and their concentration on the photoluminescence properties of hydroxyapatite for biomedical applications. *Nanomaterials* **2021**, *11*, doi:10.3390/nano11092442
93 Păduraru, A.V.; Oprea, O.; Mușuc, A.M.; Vasile, B.Ș.; Ficai, A.; **Andronescu, E.** Photoluminescent nanomaterials based on europium doped hydroxyapatite. *Revista Romana de Materiale/ Romanian Journal of Materials* **2021**, *51*, 353-360,
94 Paduraru, A.V.; Musuc, A.M.; Oprea, O.C.; Trusca, R.; Iordache, F.; Vasile, B.S.; **Andronescu, E.** Synthesis and characterization of photoluminescent ce(Iii) and ce(iv) substituted hydroxyapatite nanomaterials by co-precipitation method: Cytotoxicity and biocompatibility evaluation. *Nanomaterials* **2021**, *11*, doi:10.3390/nano11081911
95 Nistorescu, S.; Udrea, A.M.; Badea, M.A.; Lungu, I.; Boni, M.; Tozar, T.; Dumitrache, F.; Maraloiu, V.A.; Popescu, R.G.; Fleaca, C.; **Andronescu, E.;** Dinischiotu, A.; Staicu, A.; Balas, M. Low blue dose photodynamic therapy with porphyrin-iron oxide nanoparticles complexes: In vitro study on human melanoma cells. *Pharmaceutics* **2021**, *13*, doi:10.3390/pharmaceutics13122130
96 Neacșu, I.A.; Matei, L.; Bîrcă, A.C.; Nicoară, A.I.; Ene, V.L.; Dragu, L.D.; Ficai, A.; Bleotu, C.; **Andronescu, E.** CURCUMIN-HYDROXYAPATITE SYSTEMS USED FOR BONE CANCER TREATMENT. *Revista Romana de Materiale/ Romanian Journal of Materials* **2021**, *51*, 505-513,
97 Motelica, L.; Ficai, D.; Oprea, O.C.; Ficai, 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*, doi:10.3390/nano11092377
98 Motelica, L.; Ficai, D.; Oprea, O.; Ficai, A.; Trusca, R.D.; **Andronescu, E.;** Holban, A.M. Biodegradable alginate films with zno nanoparticles and citronella essential oil-a novel antimicrobial structure. *Pharmaceutics* **2021**, *13*, doi:10.3390/pharmaceutics13071020
99 Maximov, M.; Maximov, O.C.; Craciun, L.; Ficai, D.; Ficai, A.; **Andronescu, E.** Bioactive glass—an extensive study of the preparation and coating methods. *Coatings* **2021**, *11*, doi:10.3390/coatings11111386
100 Gherasim, O.; Popescu, R.C.; Grumezescu, V.; Mogoșanu, G.D.; Mogoantă, L.; Iordache, F.; Holban, A.M.; Vasile, B.Ș.; Bîrcă, A.C.; Oprea, O.C.; Grumezescu, A.M.; **Andronescu, E.** MAPLE coatings embedded with essential oil-conjugated magnetite for anti-biofilm applications. *Materials* **2021**, *14*, doi:10.3390/ma14071612
101 Gherasim, O.; Grumezescu, A.M.; Grumezescu, V.; Negut, I.; Dumitrescu, M.F.; Stan, M.S.; Nica, I.C.; Holban, A.M.; Socol, G.; **Andronescu, E.** Bioactive coatings based on hydroxyapatite, kanamycin, and growth factor for biofilm modulation. *Antibiotics* **2021**, *10*, 1-19, doi:10.3390/antibiotics10020160
102 Gherasim, O.; Grumezescu, A.M.; Grumezescu, V.; **Andronescu, E.;** Negut, I.; Bîrcă, A.C.; Gălățeanu, B.; Hudiță, A. Bioactive coatings loaded with osteogenic protein for metallic implants. *Polymers* **2021**, *13*, doi:10.3390/polym13244303
103 Geanaliu-Nicolae, R.E.; Nicoară, A.; **Andronescu, E.;** Trușcă, R. Mesoporous silica-based drug delivery systems with irinotecan and thyme oil with potential biomedical applications. *Revista Romana de Materiale/ Romanian Journal of Materials* **2021**, *51*, 137-150,
104 Geană, E.I.; Ciucure, C.T.; Ionete, R.E.; Ciocârlan, A.; Aricu, A.; Ficai, A.; **Andronescu, E.** Profiling of phenolic compounds and triterpene acids of twelve apple (Malus domestica borkh.) cultivars. *Foods* **2021**, *10*, doi:10.3390/foods10020267
105 Dumitrescu, C.R.; Neacsu, I.A.; Surdu, V.A.; Nicoara, A.I.; Iordache, F.; Trusca, R.; Ciocan, L.T.; Ficai, A.; **Andronescu, E.** Nano-hydroxyapatite vs. Xenografts: Synthesis, characterization, and in vitro behavior. *Nanomaterials* **2021**, *11*, doi:10.3390/nano11092289
106 Chircov, C.; Matei, M.F.; Neacșu, I.A.; Vasile, B.S.; Oprea, O.C.; Croitoru, A.M.; Trușcă, R.D.; **Andronescu, E.;** Sorescu, I.; Bărbuceanu, F. Iron oxide–silica core–shell nanoparticles functionalized with essential oils for antimicrobial therapies. *Antibiotics* **2021**, *10*, doi:10.3390/antibiotics10091138
107 Chircov, C.; Bîrcă, A.C.; Grumezescu, A.M.; Vasile, B.S.; Oprea, O.; Nicoară, A.I.; Yang, C.H.; Huang, K.S.; **Andronescu, E.** Synthesis of magnetite nanoparticles through a lab-on-chip device. *Materials* **2021**, *14*, doi:10.3390/ma14195906
108 Stoica, A.E.; Grumezescu, A.M.; Hermenean, A.O.; **Andronescu, E.;** Vasile, B.S. Scar-free healing: Current concepts and future perspectives. *Nanomaterials* **2020**, *10*, 1-18, doi:10.3390/nano10112179
109 Popescu, R.C.; Straticiuc, M.; Mustăciosu, C.; Temelie, M.; Trușcă, R.; Vasile, B.Ș.; Boldeiu, A.; Mirea, D.; Andrei, R.F.; Cenușă, C.; Mogoantă, L.; Mogoșanu, G.D.; **Andronescu, E.;** Radu, M.; Veldwijk, M.R.; Savu, D.I. Enhanced internalization of nanoparticles following ionizing radiation leads to mitotic catastrophe in MG-63 human osteosarcoma

cells. *International Journal of Molecular Sciences* **2020**, *21*, 1-17, doi:10.3390/ijms21197220
110 Popescu, R.C.; Savu, D.I.; Olarescu, A.D.; Gherasim, O.; Banita, S.; Straticiuc, M.; Mirea, D.; Andrei, R.F.; Truscă, R.; Vasile, B.S.; Socol, G.; **Andronescu, E.** In vitro magnetic targeted delivery of doxorubicin using iron oxide nanoparticles leads to enhanced cell death in glioblastoma. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2020**, *82*, 73-84,
111 Popescu, R.C.; Savu, D.; Dorobantu, I.; Vasile, B.S.; Hosser, H.; Boldeiu, A.; Temelie, M.; Straticiuc, M.; Iancu, D.A.; **Andronescu, E.;** Wenz, F.; Giordano, F.A.; Herskind, C.; Veldwijk, M.R. Efficient uptake and retention of iron oxide-based nanoparticles in HeLa cells leads to an effective intracellular delivery of doxorubicin. *Scientific Reports* **2020**, *10*, doi:10.1038/s41598-020-67207-y
112 Motelica, L.; Ficai, D.; Oprea, O.C.; Ficai, A.; **Andronescu, E.** Smart food packaging designed by nanotechnological and drug delivery approaches. *Coatings* **2020**, *10*, doi:10.3390/COATINGS10090806
113 Motelica, L.; Ficai, D.; Ficai, A.; Truşcă, R.D.; Ilie, C.I.; Oprea, O.C.; **Andronescu, E.** Innovative antimicrobial chitosan/zno/ag nps/citronella essential oil nanocomposite—potential coating for grapes. *Foods* **2020**, *9*, 1-26, doi:10.3390/foods9121801
114 Motelica, L.; Ficai, D.; Ficai, A.; Oprea, O.C.; Kaya, D.A.; **Andronescu, E.** Biodegradable antimicrobial food packaging: Trends and perspectives. *Foods* **2020**, *9*, doi:10.3390/foods9101438
115 Marinescu, L.; Ficai, D.; Oprea, O.; Marin, A.; Ficai, A.; **Andronescu, E.;** Holban, A.M. Optimized Synthesis Approaches of Metal Nanoparticles with Antimicrobial Applications. *Journal of Nanomaterials* **2020**, *2020*, doi:10.1155/2020/6651207
116 Lungu, I.I.; Nistorescu, S.; Badea, M.A.; Petre, A.M.; Udrea, A.M.; Banici, A.M.; Fleacă, C.; **Andronescu, E.;** Dinischiotu, A.; Dumitrache, F.; Staicu, A.; Balaş, M. Doxorubicin-conjugated iron oxide nanoparticles synthesized by laser pyrolysis: In vitro study on human breast cancer cells. *Polymers* **2020**, *12*, 1-18, doi:10.3390/polym12122799
117 Ioachim, A.; Toacsan, M.I.; Banciu, M.G.; Nedelcu, L.; Dutu, C.A.; Alexandru, H.V.; Antohe, S.; **Andronescu, E.;** Jinga, S.; Nita, P. Retraction notice to: "Synthesis and properties of Ba(Zn1/3Ta2/3)O3 for microwave and millimeter-wave applications" [TSF 516/7 (2007) 1558-1562](S0040609007003884)(10.1016/j.tsf.2007.03.151). *Thin Solid Films* **2020**, *698*, doi:10.1016/j.tsf.2020.137898
118 Iacob, A.T.; Drăgan, M.; Ionescu, O.M.; Profire, L.; Ficai, A.; **Andronescu, E.;** Confederat, L.G.; Lupaşcu, D. An overview of biopolymeric electrospun nanofibers based on polysaccharides for wound healing management. *Pharmaceutics* **2020**, *12*, 1-49, doi:10.3390/pharmaceutics12100983
119 Gherasim, O.; Grumezescu, A.M.; Mogoşanu, G.D.; Vasile, B.Ş.; Bejenaru, C.; Bejenaru, L.E.; **Andronescu, E.;** Mogoantă, L. Biodistribution of essential oil-conjugated silver nanoparticles. *Romanian Journal of Morphology and Embryology* **2020**, *61*, 1099-1109, doi:10.47162/RJME.61.4.12
120 Geanaliu-Nicolae, R.E.; **Andronescu, E.** Blended natural support materials—collagen based hydrogels used in biomedicine. *Materials* **2020**, *13*, 1-31, doi:10.3390/ma13245641
121 Fundueanu, G.; Constantin, M.; Bucatariu, S.; Nicolescu, A.; Ascenzi, P.; Moise, L.G.; Tudor, L.; Trusca, V.G.; Gafencu, A.V.; Ficai, D.; Ficai, A.; **Andronescu, E.** Simple and dual cross-linked chitosan millicapsules as a particulate support for cell culture. *International Journal of Biological Macromolecules* **2020**, *143*, 200-212, doi:10.1016/j.ijbiomac.2019.12.045
122 Florea, D.A.; Albuleț, D.; Grumezescu, A.M.; **Andronescu, E.** Surface modification – A step forward to overcome the current challenges in orthopedic industry and to obtain an improved osseointegration and antimicrobial properties. *Materials Chemistry and Physics* **2020**, *243*, doi:10.1016/j.matchemphys.2019.122579
123 Ene, V.L.; Neacsu, I.A.; Oprea, O.; Surdu, V.A.; Trusca, R.D.; Ficai, A.; **Andronescu, E.** Single step synthesis of glutamic/tartaric acid-stabilised Fe3O4 nanoparticles for targeted delivery systems. *Revista de Chimie* **2020**, *71*, 230-238, doi:10.37358/RC.20.2.7920
124 Ene, V.L.; Dinescu, D.; Djourelov, N.; Zai, I.; Vasile, B.S.; Serban, A.B.; Leca, V.; **Andronescu, E.** Defect structure determination of GaN films in GaN/AlN/Si heterostructures by HR-TEM, XRD, and slow positrons experiments. *Nanomaterials* **2020**, *10*, doi:10.3390/nano10020197
125 Duta, O.C.; Ţîţu, A.M.; Marin, A.; Ficai, A.; Ficai, D.; **Andronescu, E.** Surface modification of poly(Vinylchloride) for manufacturing advanced catheters. *Current Medicinal Chemistry* **2020**, *27*, 1616-1633, doi:10.2174/0929867327666200227152150
126 Duţă, O.C.; Ficai, A.; Ficai, D.; Truşcă, R.D.; Grosu, E.; Ditu, L.M.; Mihăescu, G.; Chifiriuc, M.C.; **Andronescu, E.** PVC modification by incorporating silver nanoparticles on the surface. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2020**, *82*, 85-100,
127 Croitoru, A.M.; Ficai, D.; Ficai, A.; Mihailescu, N.; **Andronescu, E.;** Turculet, C.F. Nanostructured fibers containing natural or synthetic bioactive compounds in wound dressing applications. *Materials* **2020**, *13*, doi:10.3390/ma13102407
128 Croitoru, A.M.; Ficai, A.; Ficai, D.; Trusca, R.; Dolete, G.; **Andronescu, E.;** Turculet, S.C. Chitosan/graphene

oxide nanocomposite membranes as adsorbents with applications in water purification. *Materials* **2020**, *13*, 1-13, doi:10.3390/ma13071687
129 Chircov, C.; Spoială, A.; Păun, C.; Crăciun, L.; Ficai, D.; Ficai, A.; **Andronescu, E.;** Turculeţ, S.C. Mesoporous Silica Platforms with Potential Applications in Release and Adsorption of Active Agents. *Molecules* **2020**, *25*, doi:10.3390/molecules25173814
130 Chircov, C.; Bîrcă, A.C.; Grumezescu, A.M.; **Andronescu, E.** Biosensors-on-Chip: An Up-to-Date Review. *Molecules* **2020**, *25*, doi:10.3390/MOLECULES25246013
131 Beshchasna, N.; Saqib, M.; Kraskiewicz, H.; Wasyluk, Ł.; Kuzmin, O.; Duta, O.C.; Ficai, D.; Ghizdavet, Z.; Marin, A.; Ficai, A.; Sun, Z.; Pichugin, V.F.; Opitz, J.; **Andronescu, E.** Recent advances in manufacturing innovative stents. *Pharmaceutics* **2020**, *12*, doi:10.3390/pharmaceutics12040349
132 Vasile, O.R.; **Andronescu, E.;** Truşcă, R.; Vasile, E.; Holban, A.M.; Chifiriuc, M.C.; Iordache, F.; Maniu, H.; Bleotu, C.; Neacşu, I.A.; Vasile, B.Ş. Structure–grain size–synthesis route of silver nanoparticles: A correlation with the cytotoxic effect. *Romanian Journal of Morphology and Embryology* **2019**, *60*, 617-628,
133 Tanasa, E.; Zaharia, C.; Radu, I.C.; Surdu, V.A.; Vasile, B.S.; Damian, C.M.; **Andronescu, E.** Novel nanocomposites based on functionalized magnetic nanoparticles and polyacrylamide: Preparation and complex characterization. *Nanomaterials* **2019**, *9*, doi:10.3390/nano9101384
134 Tanasă, E.; Radu, I.C.; Galateanu, B.; Hudita, A.; **Andronescu, E.;** Zaharia, C. Complex morphostructural and in vitro biological investigation of nanocomposite hydrogels tailored with magnetic nanoparticles. *Revista de Chimie* **2019**, *70*, 4420-4425, doi:10.37358/RC.19.12.7769
135 Tanasă, E.; **Andronescu, E.;** Cernea, M.; Oprea, O.C. Fe3O4/BaTiO3 composites with core-shell structure. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2019**, *81*, 171-180,
136 Surdu, V.A.; Wang, Y.; Bîrcă, A.C.; Tanasă, E.; **Andronescu, E.** Bismuth ferrite powders prepared by microwave-assisted hydrothermal method. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2019**, *81*, 3-14,
137 Surdu, V.A.; Truşcă, R.D.; Vasile, B.Ş.; Oprea, O.C.; Tanasă, E.; Diamandescu, L.; **Andronescu, E.;** Ianculescu, A.C. Bi1−xeuxfeo3 powders: Synthesis, characterization, magnetic and photoluminescence properties. *Nanomaterials* **2019**, *9*, doi:10.3390/nano9101465
138 Spoiala, A.; Ilie, C.I.; Moise, L.; Ardelean, I.L.; Trusca, R.D.; Vasile, B.S.; Ficai, D.; Calin, M.; Gafencu, A.; Ficai, A.; **Andronescu, E.** Drug delivery platforms for cardiovascular applications based on alginate-based hollow structures. In Proceedings of the Proceedings of the World Congress on New Technologies, 2019.
139 Sonmez, M.; Ficai, D.; Ardelean, I.L.; Trusca, R.; Alexandrescu, L.; Constantinescu, D.; Ghizdavet, Z.; Oprea, O.; Ficai, A.; **Andronescu, E.** Flax Fibres Fabric Surface Decoration with Nanoparticles - A Promising Tool for Developing Hybrid Reinforcing Agent of Thermoplastic Polymers. *Fibers and Polymers* **2019**, *20*, 2407-2415, doi:10.1007/s12221-019-8942-8
140 Șerban, A.B.; Ene, V.L.; Gheorghiu, C.C.; Balabanski, D.; **Andronescu, E.;** Leca, V. RF magnetron sputtering of gallium nitride (GaN) on sapphire substrate. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2019**, *81*, 11-18,
141 Popescu, R.C.; **Andronescu, E.;** Vasile, B.S. Recent advances in magnetite nanoparticle functionalization for nanomedicine. *Nanomaterials* **2019**, *9*, doi:10.3390/nano9121791
142 Popescu, R.; **Andronescu, E.;** Grumezescu, M.A. In vitro and in vivo technologies: An up to date overview in tissue engineering. In *Materials for Biomedical Engineering: Nanobiomaterials in Tissue Engineering*; 2019; pp. 463-484.
143 Nicoara, A.I.; Neacsu, I.A.; Ene, V.L.; Vasile, B.S.; Ficai, A.; **Andronescu, E.** Hydroxyapatite/carbon based biocomposite scaffolds as prospective materials for bone tissue engineering. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2019**, *81*, 107-120,
144 Nicoară, A.I.; Geanaliu-Nicolae, R.E.; **Andronescu, E.;** Truşcă, R. A novel method of synthesis for nanoporous silica materials. *Revista Romana de Materiale/ Romanian Journal of Materials* **2019**, *49*, 461-467,
145 Neacsu, I.A.; Stoica, A.E.; Vasile, B.S.; **Andronescu, E.** Luminescent hydroxyapatite doped with rare earth elements for biomedical applications. *Nanomaterials* **2019**, *9*, doi:10.3390/nano9020239
146 Neacsu, I.A.; Arsenie, L.V.; Trusca, R.; Ardelean, I.L.; Mihailescu, N.; Mihailescu, I.N.; Ristoscu, C.; Bleotu, C.; Ficai, A.; **Andronescu, E.** Biomimetic collagen/Zn2+-substituted calcium phosphate composite coatings on titanium substrates as prospective bioactive layer for implants: A comparative study spin coating vs. MAPLE. *Nanomaterials* **2019**, *9*, doi:10.3390/nano9050692
147 Lungu, I.I.; Grumezescu, A.M.; Volceanov, A.; **Andronescu, E.** Nanobiomaterials used in cancer therapy: An up-to-date overview. *Molecules* **2019**, *24*, doi:10.3390/molecules24193547
148 Ilie, C.I.; Spoiala, A.; Moise, L.; Anghelache, M.; Ficai, D.; Ardelean, I.L.; Trusca, R.D.; Ficai, A.; Calin, M.; Gafencu, A.; **Andronescu, E.** Smart alginate-based magnetic platforms for drug delivery. In Proceedings of the Proceedings of the World Congress on New Technologies, 2019.

149 Grumezescu, V.; Negut, I.; Gherasim, O.; Birca, A.C.; Grumezescu, A.M.; Hudita, A.; Galateanu, B.; Costache, M.; **Andronescu, E.;** Holban, A.M. Antimicrobial applications of MAPLE processed coatings based on PLGA and lincomycin functionalized magnetite nanoparticles. *Applied Surface Science* **2019**, *484*, 587-599, doi:10.1016/j.apsusc.2019.04.112
150 Grumezescu, A.M.; Stoica, A.E.; Dima-Bălcescu, M.Ș.; Chircov, C.; Gharbia, S.; Baltă, C.; Roșu, M.; Herman, H.; Holban, A.M.; Ficai, A.; Vasile, B.S.; **Andronescu, E.;** Chifiriuc, M.C.; Hermenean, A. Electrospun polyethylene terephthalate nanofibers loaded with silver nanoparticles: Novel approach in anti-infective therapy. *Journal of Clinical Medicine* **2019**, *8*, doi:10.3390/jcm8071039
151 Gherasim, O.; Popescu, R.C.; Gherasim, T.G.; Grumezescu, V.; **Andronescu, E.** Pharmacotherapy and nanotechnology. In *Nanoparticles in Pharmacotherapy*; 2019; pp. 1-21.
152 Florea, D.A.; Grumezescu, V.; Grumezescu, A.M.; **Andronescu, E.** Clinical applications of bioactive materials. In *Materials for Biomedical Engineering: Bioactive Materials, Properties, and Applications*; 2019; pp. 527-543.
153 Ene, V.L.; Dinescu, D.; Zai, I.; Djourelov, N.; Vasile, B.S.; Serban, A.B.; Leca, V.; **Andronescu, E.** Study of edge and screw dislocation density in GaN/Al2O3 heterostructure. *Materials* **2019**, *12*, doi:10.3390/ma1224205
154 ElenaOprea, A.; Ficai, A.; **Andronescu, E.** Electrospun nanofibers for tissue engineering applications. In *Materials for Biomedical Engineering: Nanobiomaterials in Tissue Engineering*; 2019; pp. 77-95.
155 Duta, O.C.; Maximov, M.; Trusca, R.; Ficai, A.; Ficai, D.; Ilie, C.I.; Ditu, L.M.; **Andronescu, E.** Advanced drug-eluting poly (Vinyl chloride) surfaces deposited by spin coating. *Medicina (Lithuania)* **2019**, *55*, doi:10.3390/medicina55080421
156 Cucuruz, A.T.; **Andronescu, E.;** Cucuruz, A.; Pelin, G. The effect of silanization on alumina - poly(methacrylic acid) composites with applications as denture base materials. *Revista Romana de Materiale/ Romanian Journal of Materials* **2019**, *49*, 3-11,
157 Croitoru, A.; Oprea, O.; Nicoara, A.; Trusca, R.; Radu, M.; Neacsu, I.; Ficai, D.; Ficai, A.; **Andronescu, E.** Multifunctional platforms based on graphene oxide and natural products. *Medicina (Lithuania)* **2019**, *55*, doi:10.3390/medicina55060230
158 Croitoru, A.; Ficai, D.; Craciun, L.; Ficai, A.; **Andronescu, E.** Evaluation and exploitation of bioactive compounds of walnut, Juglans regia. *Current Pharmaceutical Design* **2019**, *25*, 119-131, doi:10.2174/1381612825666190329150825
159 Beshchasna, N.; Ho, A.Y.K.; Saqib, M.; Kraśkiewicz, H.; Wasyluk, Ł.; Kuzmin, O.; Duta, O.C.; Ficai, D.; Trusca, R.D.; Ficai, A.; Pichugin, V.F.; Opitz, J.; **Andronescu, E.** Surface evaluation of titanium oxynitride coatings used for developing layered cardiovascular stents. *Materials Science and Engineering C* **2019**, *99*, 405-416, doi:10.1016/j.msec.2019.01.131
160 Ardelean, I.L.; Ficai, D.; Sonmez, M.; Oprea, O.; Nechifor, G.; **Andronescu, E.;** Ficai, A.; Titu, M.A. Hybrid magnetic nanostructures for cancer diagnosis and therapy. *Anti-Cancer Agents in Medicinal Chemistry* **2019**, *19*, 6-16, doi:10.2174/1871520618666181109112655
161 **Andronescu, E.;** Predoi, D.; Neacsu, I.A.; Paduraru, A.V.; Musuc, A.M.; Trusca, R.; Oprea, O.; Tanasa, E.; Vasile, O.R.; Nicoara, A.I.; Surdu, A.V.; Iordache, F.; Birca, A.C.; Iconaru, S.L.; Vasile, B.S. Photoluminescent hydroxylapatite: Eu3+ doping effect on biological behaviour. *Nanomaterials* **2019**, *9*, doi:10.3390/nano9091187
162 Sönmez, M.; Ficai, D.; Ficai, A.; Alexandrescu, L.; Georgescu, M.; Trusca, R.; Gurau, D.; Titu, M.A.; **Andronescu, E.** Applications of mesoporous silica in biosensing and controlled release of insulin. *International Journal of Pharmaceutics* **2018**, *549*, 179-200, doi:10.1016/j.ijpharm.2018.07.037
163 Radulescu, M.; Popescu, S.; Ficai, D.; Sonmez, M.; Oprea, O.; Spoială, A.; Ficai, A.; **Andronescu, E.** Advances in drug delivery systems, from 0 to 3D superstructures. *Current Drug Targets* **2018**, *17*, doi:10.2174/1389450117666160401122926
164 Pelin, G.; Pelin, C.E.; Ştefan, A.; Dincă, I.; **Andronescu, E.;** Oprea, O.; Ficai, D.; Truşcă, R. Development and properties of advanced composites based on cork and nanometric silicon carbide-filled phenolic resin. *Bulletin of Materials Science* **2018**, *41*, doi:10.1007/s12034-017-1536-4
165 Moukbil, Y.; Oktar, F.N.; Ozbek, B.; Ficai, D.; Ficai, A.; **Andronescu, E.;** Eroglu, M.S.; Gunduz, O. Biohydrogels for medical applications: A short review. *Organic Communications* **2018**, *11*, 123-141, doi:10.25135/acg.oc.49.18.06.108
166 Lemnaru, M.; Albu-Kaya, M.G.; Sonmez, M.; Mitran, V.; Ficai, D.; Ficai, A.; Dragos, G.; Campean, A.; **Andronescu, E.** Collagen/hydroxyapatite bio-compatible scaffolds obtained through 3D printing. In Proceedings of the Proceedings of the World Congress on New Technologies, 2018.
167 Ficai, D.; Grumezescu, V.; Fufă, O.M.; Popescu, R.C.; Holban, A.M.; Ficai, A.; Grumezescu, A.M.; Mogoanta, L.; Mogosanu, G.D.; **Andronescu, E.** Antibiofilm coatings based on PLGA and nanostructured cefepime-functionalized magnetite. *Nanomaterials* **2018**, *8*, doi:10.3390/nano8090633
168 Ficai, D.; Ardelean, I.L.; Holban, A.M.; Dițu, L.M.; Gudovan, D.; Sönmez, M.; Truşcă, R.; Kaya, A.; Ficai, A.;

Andronescu, E. Manufacturing nanostructured chitosan-based 2D sheets with prolonged antimicrobial activity. *Romanian Journal of Morphology and Embryology* **2018**, *59*, 517-525,
169 Duta, O.C.; Ficai, D.; Ficai, A.; **Andronescu, E.;** Beshchasna, N.; Saqib, M.; Opitz, J.; Kraśkiewicz, H.; Wasyluk, Ł.; Kuzmin, O.; Pichugin, V. Titanium oxynitride coatings deposited by magnetron sputtering for improvement of cardiovascular stent design. In Proceedings of the Proceedings of the World Congress on New Technologies, 2018.
170 Dumitrescu, E.; **Andronescu, E.;** Mares, A.M. Optimization of waste inertization systems based on chemically bonded phosphate ceramics. *Revista de Chimie* **2018**, *69*, 2987-2990, doi:10.37358/rc.18.11.6667
171 Colie, M.; Mihaiescu, D.E.; Istrati, D.; Surdu, A.V.; Vasile, B.; Stanica, N.; Fudulu, A.; **Andronescu, E.** Synthesis and characterization of a core-shell material using YBa2Cu3O7-δand cobalt ferrite nanoparticles. *Revista de Chimie* **2018**, *69*, 3345-3348, doi:10.37358/rc.18.12.6746
172 Burdușel, A.C.; Gherasim, O.; Grumezescu, A.M.; Mogoantă, L.; Ficai, A.; **Andronescu, E.** Biomedical applications of silver nanoparticles: An up-to-date overview. *Nanomaterials* **2018**, *8*, doi:10.3390/nano8090681
173 Ardelean, I.L.; Gudovan, D.; Ficai, D.; Ficai, A.; **Andronescu, E.;** Albu-Kaya, M.G.; Neacsu, P.; Ion, R.N.; Cimpean, A.; Mitran, V. Collagen/hydroxyapatite bone grafts manufactured by homogeneous/heterogeneous 3D printing. *Materials Letters* **2018**, *231*, 179-182, doi:10.1016/j.matlet.2018.08.042
174 Tiplea, R.; Albu-Kaya, M.G.; Sonmez, M.; Ghica, M.; Ficai, D.; Ficai, A.; Ardelean, I.L.; Dragos, G.; **Andronescu, E.** Collagen/hydroxyapatite composite supports for bone tissue engineering. In Proceedings of the Proceedings of the World Congress on New Technologies, 2017.
175 Popescu, R.C.; Fufa, O.; Apostol, A.I.; Popescu, D.; Grumezescu, A.M.; **Andronescu, E.** Antimicrobial Thin Coatings Prepared by Laser Processing. In *Nanostructures for Antimicrobial Therapy: Nanostructures in Therapeutic Medicine Series*; 2017; pp. 223-236.
176 Popescu, R.C.; **Andronescu, E.;** Vasile, B.Ș.; Truşcă, R.; Boldeiu, A.; Mogoantă, L.; Mogoşanu, G.D.; Temelie, M.; Radu, M.; Grumezescu, A.M.; Savu, D. Fabrication and cytotoxicity of gemcitabine-functionalized magnetite nanoparticles. *Molecules* **2017**, *22*, doi:10.3390/molecules22071080
177 Pelin, G.; Pelin, C.E.; Ştefan, A.; Dincă, I.; **Andronescu, E.;** Ficai, A.; Truşcă, R. Mechanical and tribological properties of nanofilled phenolic-matrix laminated composites. *Materiali in Tehnologije* **2017**, *51*, 569-575, doi:10.17222/mit.2016.013
178 Pelin, G.; Pelin, C.E.; **Andronescu, E.;** Ficai, D.; Ştefan, A.; Truşcă, R. Mechanical, thermo-mechanical and tribological properties of silicon carbide nanoparticles filled epoxy composites. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2017**, *79*, 51-60,
179 Komur, B.; Ozturk, E.R.; Ekren, N.; Inan, A.T.; Gunduz, O.; **Andronescu, E.;** Ficai, A.; Oktar, F.N. Characterization of Cu/Ag/Eu/hydroxyapatite composites produced by wet chemical precipitation. *Acta Physica Polonica A* **2017**, *131*, 392-396, doi:10.12693/APhysPolA.131.392
180 Iosub, C.S.; Olaret, E.; Grumezescu, A.M.; Holban, A.M.; **Andronescu, E.** Toxicity of nanostructures-a general approach. In *Nanostructures for Novel Therapy: Synthesis, Characterization and Applications*; 2017; pp. 793-809.
181 Grumezescu, A.M.; **Andronescu, E.** Preface. *Nanostructures for Drug Delivery* **2017**, xxxiii-xxxvii, doi:10.1016/B978-0-323-46143-6.00036-1
182 Grumezescu, A.M.; **Andronescu, E.** *Nanostructures for oral medicine*; 2017; pp. 1-994.
183 Grumezescu, A.M.; **Andronescu, E.** Preface. *Nanostructures for Oral Medicine* **2017**, xxxv-xxxix, doi:10.1016/B978-0-323-47720-8.00035-3
184 Grigore, M.E.; Grumezescu, A.M.; Holban, A.M.; Mogoşanu, G.D.; **Andronescu, E.** Collagen-nanoparticles composites for wound healing and infection control. *Metals* **2017**, *7*, doi:10.3390/met7120516
185 Fufă, O.; Popescu, R.C.; Gherasim, T.G.; Grumezescu, A.M.; **Andronescu, E.** Silver-based nanostructures for cancer therapy. In *Nanostructures for Cancer Therapy*; 2017; pp. 405-428.
186 Ficai, D.; Sonmez, M.; Ficai, A.; Ardelean, I.L.; **Andronescu, E.** Harnessing PET wastes by compounding with functionalized flax. In Proceedings of the World Congress on Recent Advances in Nanotechnology, 2017.
187 Ficai, D.; Sandulescu, M.; Ficai, A.; **Andronescu, E.;** Yetmez, M.; Agrali, O.B.; Elemek, E.; Gunduz, O.; Sahin, Y.M.; Oktar, F.N. Drug delivery systems for dental applications. *Current Organic Chemistry* **2017**, *21*, 64-73, doi:10.2174/1385272820666160511104145
188 Ficai, D.; Ficai, A.; Melinescu, A.; **Andronescu, E.** Nanotechnology: A challenge in hard tissue engineering with emphasis on bone cancer therapy. In *Nanostructures for Cancer Therapy*; 2017; pp. 513-539.
189 Ficai, A.; Sonmez, M.; Trusca, R.D.; Vasile, B.S.; Ficai, D.; **Andronescu, E.** Design of TiOxNy for developing layered stent technology. In Proceedings of the World Congress on Recent Advances in Nanotechnology, 2017.
190 Ficai, A.; Ficai, D.; Vasile, B.S.; Trusca, R.D.; Gudovan, D.; Oprea, O.; Ludmila, M.; **Andronescu, E.** Design of TiOxNy for coating technology. In Proceedings of the Proceedings of the World Congress on New Technologies, 2017.
191 Ciucă, A.G.; Grecu, C.I.; Rotărescu, P.; Gheorghe, I.; Bolocan, A.; Grumezescu, A.M.; Holban, A.M.; **Andronescu, E.** Nanostructures for drug delivery: pharmacokinetic and toxicological aspects. In *Nanostructures for Drug Delivery*;

2017; pp. 941-957.
192 Balaure, P.C.; Boarca, B.; Popescu, R.C.; Savu, D.; Trusca, R.; Vasile, B.Ş.; Grumezescu, A.M.; Holban, A.M.; Bolocan, A.; **Andronescu, E.** Bioactive mesoporous silica nanostructures with anti-microbial and anti-biofilm properties. *International Journal of Pharmaceutics* **2017**, *531*, 35-46, doi:10.1016/j.ijpharm.2017.08.062
193 Ardelean, I.L.; Stoencea, L.B.N.; Ficai, D.; Ficai, A.; Trusca, R.; Vasile, B.S.; Nechifor, G.; **Andronescu, E.** Development of Stabilized Magnetite Nanoparticles for Medical Applications. *Journal of Nanomaterials* **2017**, *2017*, doi:10.1155/2017/6514659
194 **Andronescu, E.;** Grumezescu, A.M. *Nanostructures for Drug Delivery*; 2017; pp. 1-985.
195 Albulet, D.; Florea, D.A.; Boarca, B.; Ditu, L.M.; Chifiriuc, M.C.; Grumezescu, A.M.; **Andronescu, E.** Nanotechnology for personalized medicine: Cancer research, diagnosis, and therapy. In *Nanostructures for Cancer Therapy*; 2017; pp. 1-21.
196 Voicu, G.; Geanaliu-Nicolae, R.E.; Pîrvan, A.A.; **Andronescu, E.;** Iordache, F. Synthesis, characterization and bioevaluation of drug-collagen hybrid materials for biomedical applications. *International Journal of Pharmaceutics* **2016**, *510*, 474-484, doi:10.1016/j.ijpharm.2015.11.054
197 Voicu, G.; Bădănoiu, A.I.; **Andronescu, E.** Biocements with potential endodontic use. In *Nanobiomaterials in Dentistry: Applications of Nanobiomaterials*; 2016; Volume 11, pp. 79-106.
198 Vlăsceanu, G.M.; Marin, S.; Ţiplea, R.E.; Bucur, I.R.; Lemnaru, M.; Marin, M.M.; Grumezescu, A.M.; **Andronescu, E.** Silver nanoparticles in cancer therapy. In *Nanobiomaterials in Cancer Therapy: Applications of Nanobiomaterials*; 2016; pp. 29-56.
199 Stoica, A.O.; **Andronescu, E.;** Ghitulica, C.D.; Voicu, G.; Grumezescu, A.M.; Popa, M.; Chifiriuc, M.C. Preparation and characterization of undoped and cobalt doped ZnO for antimicrobial use. *International Journal of Pharmaceutics* **2016**, *510*, 430-438, doi:10.1016/j.ijpharm.2015.09.043
200 Stan, M.S.; Constanda, S.; Grumezescu, V.; **Andronescu, E.;** Ene, A.M.; Holban, A.M.; Vasile, B.S.; MogoantĂ, L.; BĂlşeanu, T.A.; Mogoşanu, G.D.; Socol, G.; Grumezescu, A.M.; Dinischiotu, A.; Lazar, V.; Chifiriuc, M.C. Thin coatings based on ZnO@C 18 -usnic acid nanoparticles prepared by MAPLE inhibit the development of Salmonella enterica early biofilm growth. *Applied Surface Science* **2016**, *374*, 318-325, doi:10.1016/j.apsusc.2015.12.063
201 Sonmez, M.; Verisan, C.; Voicu, G.; Ficai, D.; Ficai, A.; Oprea, A.E.; Vlad, M.; **Andronescu, E.** Extended release of vitamins from magnetite loaded polyanionic polymeric beads. *International Journal of Pharmaceutics* **2016**, *510*, 457-464, doi:10.1016/j.ijpharm.2015.11.041
202 Sönmez, M.; Ficai, A.; Ficai, D.; Trusca, R.; **Andronescu, E.** Alginate/cellulose composite beads for environmental applications. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2016**, *78*, 165-176,
203 Şerb, M.D.; Vasile, E.; Răzvan, A.; Dumitru, F.; Andronescu, C.; Oprea, O.; Vasile, O.R.; Holban, A.M.; **Andronescu, E.** Fe3O4 nanoparticles coated with Zn(II)-carboxylato complexes. *Digest Journal of Nanomaterials and Biostructures* **2016**, *11*, 495-505,
204 Rădulescu, M.; **Andronescu, E.;** Holban, A.M.; Vasile, B.S.; Iordache, F.; Mogoantă, L.; Dan Mogoșanu, G.; Grumezescu, A.M.; Georgescu, M.; Chifiriuc, M.C. Antimicrobial nanostructured bioactive coating based on Fe3O4 and patchouli oil for wound dressing. *Metals* **2016**, *6*, doi:10.3390/met6050103
205 Radulescu, M.; **Andronescu, E.;** Dolete, G.; Popescu, R.C.; Fufă, O.; Chifiriuc, M.C.; Mogoantă, L.; Bălşeanu, T.A.; Mogoşanu, G.D.; Grumezescu, A.M.; Holban, A.M. Silver nanocoatings for reducing the exogenous microbial colonization of wound dressings. *Materials* **2016**, *9*, doi:10.3390/ma9050345
206 Rădulescu, M.; **Andronescu, E.;** Cirja, A.; Holban, A.M.; Mogoantă, L.; Bălşeanu, T.A.; Cătălin, B.; Neagu, T.P.; Lascăr, I.; Florea, D.A.; Grumezescu, A.M.; Ciubuca, B.; Lazăr, V.; Chifiriuc, M.C.; Bolocan, A. 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*, 107-114,
207 RĂdulescu, D.; Voicu, G.; Oprea, A.E.; **Andronescu, E.;** Grumezescu, V.; Holban, A.M.; Vasile, B.S.; Surdu, A.V.; Grumezescu, A.M.; Socol, G.; MogoantĂ, L.; Mogoşanu, G.D.; Balaure, P.C.; RĂdulescu, R.; Chifiriuc, M.C. Mesoporous silica coatings for cephalosporin active release at the bone-implant interface. *Applied Surface Science* **2016**, *374*, 165-171, doi:10.1016/j.apsusc.2015.10.183
208 RĂdulescu, D.; Grumezescu, V.; **Andronescu, E.;** Holban, A.M.; Grumezescu, A.M.; Socol, G.; Oprea, A.E.; RĂdulescu, M.; Surdu, A.; Trusca, R.; RĂdulescu, R.; Chifiriuc, M.C.; Stan, M.S.; Constanda, S.; Dinischiotu, A. Biocompatible cephalosporin-hydroxyapatite-poly(lactic-co-glycolic acid)-coatings fabricated by MAPLE technique for the prevention of bone implant associated infections. *Applied Surface Science* **2016**, *374*, 387-396, doi:10.1016/j.apsusc.2016.02.072
209 Purcel, G.; Meliţă, D.; **Andronescu, E.;** Grumezescu, A.M. Collagen-based nanobiomaterials: Challenges in soft tissue engineering. In *Nanobiomaterials in Soft Tissue Engineering: Applications of Nanobiomaterials*; 2016; pp. 173-200.
210 Popescu, S.; Ardelean, I.L.; Gudovan, D.; Rădulescu, M.; Ficai, D.; Ficai, A.; Vasile, B.Ş.; **Andronescu, E.**

Multifunctional materials such as MCM-41/Fe3O4/folic acid as drug delivery system. *Romanian Journal of Morphology and Embryology* **2016**, *57*, 483-489,
211 Popescu, R.C.; Fufă, M.O.M.; **Andronescu, E.;** Grumezescu, A.M. Specifically targeted imaging using functionalized nanoparticles. In *Nanobiomaterials in Medical Imaging: Applications of Nanobiomaterials*; 2016; pp. 1-44.
212 Popescu, R.C.; **Andronescu, E.;** Oprea, A.E.; Grumezescu, A.M. Toxicity of inorganic nanoparticles against prokaryotic cells. In *Nanobiomaterials in Antimicrobial Therapy: Applications of Nanobiomaterials*; 2016; pp. 29-65.
213 Pelin, G.; Pelin, C.E.; Stefan, A.; Dinca, I.; Ficai, A.; **Andronescu, E.;** Trusca, R. Influence of nanometric silicon carbide on phenolic resin composites properties. *Bulletin of Materials Science* **2016**, *39*, 769-775, doi:10.1007/s12034-016-1185-z
214 Pelin, G.; **Andronescu, E.;** Pelin, C.E.; Oprea, O.; Ficai, A. Ablative type composites based on phenolic resin/nano-silicon carbide matrix reinforced by carbon fiber felt. *Revista Romana de Materiale/ Romanian Journal of Materials* **2016**, *46*, 444-452,
215 Pelin, C.E.; Pelin, G.; Ştefan, A.; **Andronescu, E.;** Dincă, I.; Ficai, A.; Truşcă, R. Mechanical properties of polyamide/carbon-fiber-fabric composites. *Materiali in Tehnologije* **2016**, *50*, 723-728, doi:10.17222/mit.2015.171
216 Pelin, C.E.; Ficai, D.; **Andronescu, E.;** Pelin, G.; Ştefan, A.; Truşcă, R. Effect of carbon fiber fabric oxidation in polyamide 6 based composites. *Current Nanoscience* **2016**, *12*, 357-364, doi:10.2174/1573413712999151217150957
217 Pelin Ban, C.E.; Pelin, G.; **Andronescu, E.;** Ficai, A.; Ştefan, A.; Truşcə, R.; Vasile, E. Effect of layered silicates on mechanical properties of carbon fiber fabric epoxy laminated composites. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2016**, *78*, 27-38,
218 Oprea, A.E.; Pandel, L.M.; Dumitrescu, A.M.; **Andronescu, E.;** Grumezescu, V.; Chifiriuc, M.C.; MogoantĂ, L.; BĂlşeanu, T.A.; Mogoşanu, G.D.; Socol, G.; Grumezescu, A.M.; Iordache, F.; Maniu, H.; Chirea, M.; Holban, A.M. Bioactive ZnO coatings deposited by MAPLE - An appropriate strategy to produce efficient anti-biofilm surfaces. *Molecules* **2016**, *21*, doi:10.3390/molecules21020220
219 Mihaiescu, D.E.; Gudovan, D.; Traistaru, V.; Ionescu, P.; Fudulu, A.; Voicu, G.; Ficai, A.; TruşcĂ, R.; Istrati, D.; Marton, A.; Buteica, S.A.; Vasile, B.; **Andronescu, E.** Synthesis of silver secondary shell magnetic nanoparticles. *Revue Roumaine de Chimie* **2016**, *61*, 105-110,
220 Ion, A.; **Andronescu, E.;** Ŗadulescu, D.; Ŗadulescu, M.; Iordache, F.; Vasile, B.S.; Surdu, A.V.; Albu, M.G.; Maniu, H.; Chifiriuc, M.C.; Grumezescu, A.M.; Holban, A.M. Biocompatible 3d matrix with antimicrobial properties. *Molecules* **2016**, *21*, doi:10.3390/molecules21010115
221 Ilie, A.; Ghiţulică, C.; **Andronescu, E.;** Cucuruz, A.; Ficai, A. New composite materials based on alginate and hydroxyapatite as potential carriers for ascorbic acid. *International Journal of Pharmaceutics* **2016**, *510*, 501-507, doi:10.1016/j.ijpharm.2016.01.025
222 Holban, A.M.; Grumezescu, A.M.; **Andronescu, E.** Inorganic nanoarchitectonics designed for drug delivery and anti-infective surfaces. In *Surface Chemistry of Nanobiomaterials: Applications of Nanobiomaterials*; 2016; pp. 301-327.
223 Holban, A.M.; **Andronescu, E.;** Curutiu, C.; Ditu, L.M.; Chifiriuc, M.C.; Lazar, V. Bioactive nanomaterials for cartilage and muscle regeneration. In *Nanobiomaterials in Soft Tissue Engineering: Applications of Nanobiomaterials*; 2016; pp. 261-297.
224 Gionea, A.; **Andronescu, E.;** Voicu, G.; Surdu, V.A.; Ilie, A. ZrO2-CaO ceramics - A comparative study. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2016**, *78*, 3-12,
225 Gionea, A.; **Andronescu, E.;** Voicu, G.; Bleotu, C.; Surdu, V.A. Influence of hot isostatic pressing on ZrO2–CaO dental ceramics properties. *International Journal of Pharmaceutics* **2016**, *510*, 439-448, doi:10.1016/j.ijpharm.2015.10.044
226 Gionea, A.; **Andronescu, E.;** Surdu, V.A.; Voicu, G.; Pelin, G. Influence of sintering conditions on properties of dental zirconia ceramics. *Revista de Chimie* **2016**, *67*, 1547-1550,
227 Geanaliu-Nicolae, R.E.; Pîrvan, A.A.; **Andronescu, E.;** Truşcă, R. Synthesis and characterization of drug - Mineral clay hybrid materials for biomedical applications as drug delivery systems – Part I. *Revista Romana de Materiale/ Romanian Journal of Materials* **2016**, *46*, 133-141,
228 Geanaliu-Nicolae, R.E.; Pîrvan, A.A.; **Andronescu, E.;** Truşcă, R. Bioevaluation of drug - mineral clay hybrid materials for biomedical applications as drug delivery systems - Part II. *Revista Romana de Materiale/ Romanian Journal of Materials* **2016**, *46*, 361-368,
229 Fufă, O.; **Andronescu, E.;** Grumezescu, A.M.; Rădulescu, D. Metallic nanosystems in hard tissue implants. In *Nanobiomaterials in Hard Tissue Engineering: Applications of Nanobiomaterials*; 2016; pp. 381-412.
230 Ficai, D.; Albu, M.G.; Sonmez, M.; Ficai, A.; **Andronescu, E.** Advances in the field of soft tissue engineering: From pure regenerative to integrative solutions. In *Nanobiomaterials in Soft Tissue Engineering: Applications of Nanobiomaterials*; 2016; pp. 355-386.

231 Ficai, A.; Ficai, D.; **Andronescu, E.;** Yetmez, M.; Ozkalayci, N.; Agrali, O.B.; Sahin, Y.M.; Gunduz, O.; Oktar, F.N. Nanotechnology in dentistry. In *Nanobiomaterials in Dentistry: Applications of Nanobiomaterials*; 2016; Volume 11, pp. 187-210.
232 Dumitrescu, E.; **Andronescu, E.** Liquid waste inertization in chemically bonded phosphate ceramic (CBPC). *Revista Romana de Materiale/ Romanian Journal of Materials* **2016**, *46*, 175-184,
233 Cucuruz, A.T.; **Andronescu, E.;** Ficai, A.; Ilie, A.; Iordache, F. Synthesis and characterization of new composite materials based on poly(methacrylic acid) and hydroxyapatite with applications in dentistry. *International Journal of Pharmaceutics* **2016**, *510*, 516-523, doi:10.1016/j.ijpharm.2016.01.061
234 Colie, M.; Mihaiescu, D.E.; Istrati, D.; Surdu, A.; **Andronescu, E.** Microwave assisted, liquid phase synthesis of superconducting material. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2016**, *78*, 121-128,
235 Colie, M.; Mihaiescu, D.; Surdu, A.; Trusca, R.; Vasile, B.; Istrati, D.; Ficai, A.; Plapcianu, C.; **Andronescu, E.** High temperature superconducting materials based on Graphene / YBCO nanocomposite. In Proceedings of the Materials Today: Proceedings, 2016; pp. 2628-2634.
236 Colie, M.; Mihăiescu, D.; Surdu, A.; Ficai, A.; Istrati, D.; **Andronescu, E.** Synthesis of YBa2cu3o7-δ by a modified autocombustion method. *Revista Romana de Materiale/ Romanian Journal of Materials* **2016**, *46*, 369-374,
237 Chifiriuc, M.C.; Fufă, O.M.; Grumezescu, V.; **Andronescu, E.;** Grumezescu, A.M.; Holban, A.M. PLA and PLGA nanoarchitectonics for improving anti-infective drugs efficiency. In *Nanobiomaterials in Antimicrobial Therapy: Applications of Nanobiomaterials*; 2016; pp. 451-482.
238 Ban, C.E.; Stefan, A.; Dinca, I.; Pelin, G.; Ficai, A.; **Andronescu, E.;** Oprea, O.; Voicu, G. Multi-walled carbon nanotubes effect in polypropylene nanocomposites. *Materiali in Tehnologije* **2016**, *50*, 11-16, doi:10.17222/mit.2014.142
239 Ardelean, I.L.; Popa, M.; Ficai, D.; Ficai, A.; Vasile, B.; Sonmez, M.; Nechifor, G.; **Andronescu, E.** MCM41/Fe3O4/EDTA materials from removal different cation from waste water. In Proceedings of the Proceedings of the World Congress on New Technologies, 2016.
240 **Andronescu, E.;** Grumezescu, A.M.; Guşă, M.I.; Holban, A.M.; Ilie, F.C.; Irimia, A.; Nicoară, I.F.; Ţone, M. Nano-hydroxyapatite: Novel approaches in biomedical applications. In *Nanobiomaterials in Hard Tissue Engineering: Applications of Nanobiomaterials*; 2016; pp. 189-213.
241 **Andronescu, E.;** Brown, J.M.; Oktar, F.N.; Agathopoulos, S.; Chou, J.; Obata, A. Nanomaterials for Medical Applications: Benefits and Risks. *Journal of Nanomaterials* **2016**, *2016*, doi:10.1155/2016/8284319
242 **Andronescu, E.** Preface of the series. *Surface Chemistry of Nanobiomaterials: Applications of Nanobiomaterials* **2016**, xxi-xxii, doi:10.1016/B978-0-323-42861-3.00020-0
243 **Andronescu, E.** Preface of the series. *Fabrication and Self-Assembly of Nanobiomaterials: Applications of Nanobiomaterials* **2016**, xxi-xxii, doi:10.1016/B978-0-323-41533-0.00019-2
244 **Andronescu, E.** Preface of the Series. *Engineering of Nanobiomaterials: Applications of Nanobiomaterials* **2016**, xxi-xxii, doi:10.1016/B978-0-323-41532-3.00019-1
245 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Hard Tissue Engineering: Applications of Nanobiomaterials* **2016**, xxi-xxii, doi:10.1016/B978-0-323-42862-0.00020-1
246 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Soft Tissue Engineering: Applications of Nanobiomaterials* **2016**, xxi-xxii, doi:10.1016/B978-0-323-42865-1.00020-9
247 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Antimicrobial Therapy: Applications of Nanobiomaterials* **2016**, xix-xx, doi:10.1016/B978-0-323-42864-4.00021-X
248 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Cancer Therapy: Applications of Nanobiomaterials* **2016**, xxiii-xxiv, doi:10.1016/B978-0-323-42863-7.00020-7
249 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Medical Imaging: Applications of Nanobiomaterials* **2016**, xxi-xxii, doi:10.1016/B978-0-323-41736-5.00019-4
250 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Drug Delivery: Applications of Nanobiomaterials* **2016**, xxiii-xxiv, doi:10.1016/B978-0-323-42866-8.00019-8
251 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Galenic Formulations and Cosmetics: Applications of Nanobiomaterials* **2016**, xxiii-xxiv, doi:10.1016/B978-0-323-42868-2.00019-X
252 **Andronescu, E.** Preface of the series. *Nanobiomaterials in Dentistry: Applications of Nanobiomaterials* **2016**, *11*, xxiii-xxiv, doi:10.1016/B978-0-323-42867-5.00019-9
253 Vasile, O.R.; Serdaru, I.; **Andronescu, E.;** Truşcə, R.; Surdu, V.A.; Oprea, O.; Ilie, A.; Vasile, B.Ş. Influence of the size and the morphology of ZnO nanoparticles on cell viability. *Comptes Rendus Chimie* **2015**, *18*, 1335-1343, doi:10.1016/j.crci.2015.08.005
254 Stanciu, G.; Achim, A.; Scarisoreanu, N.D.; Ion, V.; Birjega, R.; **Andronescu, E.;** Dinescu, M. Synthesis of calcium doped strontium barium niobate ceramic samples. *Optoelectronics and Advanced Materials, Rapid Communications* **2015**, *9*, 720-723,

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255 Spoiala, A.; Voicu, G.; Ficai, D.; Ungureanu, C.; Albu, M.G.; Vasile, B.S.; Ficai, A.; **Andronescu, E.** Collagen/TiO2-Ag composite nanomaterials for antimicrobial applications. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2015**, *77*, 275-290,
256 Sönmez, M.; Gudovan, D.; Trusca, R.; Ficai, A.; Ficai, D.; **Andronescu, E.;** Vasile, B.S. Synthesis, characterization and testing of MCM-41/TiO2 catalyst for organic dye degradation. *Digest Journal of Nanomaterials and Biostructures* **2015**, *10*, 1329-1341,
257 Sonmez, M.; Georgescu, M.; Alexandrescu, L.; Gurau, D.; Ficai, A.; Ficai, D.; **Andronescu, E.** Synthesis and applications of Fe3O4/SiO2 core-shell materials. *Current Pharmaceutical Design* **2015**, *21*, 5324-5335, doi:10.2174/1381612821666150917094031
258 Sonmez, M.; Ficai, A.; Ficai, D.; Voicu, G.; **Andronescu, E.;** Alexandrescu, L.; Sonmez, M. Synthesis and characterization of the anatase loaded mesoporous photocatalyst. In Proceedings of the Proceedings of the World Congress on New Technologies, 2015.
259 Sonmez, M.; Ficai, A.; Ficai, D.; **Andronescu, E.;** Sonmez, M.; Alexandrescu, L.; Stelescu, D.M. Organic/inorganic adsorbents based on chitosan/MCM-48 for removal of heavy metal ions. In Proceedings of the Proceedings of the World Congress on New Technologies, 2015.
260 Rogojan, R.; **Andronescu, E.;** Hoteteu, M. Nano calcium phosphate doped with Cu2+ ions - Possible carrier for drug delivery systems. *Revista Romana de Materiale/ Romanian Journal of Materials* **2015**, *45*, 324-330,
261 Rogojan, R.; **Andronescu, E.;** Dinu, E.; Gheorghe, S. Nanostructure processing of calcium phosphates doped with zinc ions. *Journal of Optoelectronics and Advanced Materials* **2015**, *17*, 884-888,
262 Rogojan, R.; **Andronescu, E.** Influence of sol-gel, precipitation and pirosol synthesis methods on the shape, size and physicochemical properties of hydroxyapatite. In Proceedings of the International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM, 2015; pp. 107-112.
263 Radulescu, M.; Ficai, D.; Oprea, O.; Ficai, A.; **Andronescu, E.;** Holban, A.M. Antimicrobial Chitosan based formulations with impact on different biomedical applications. *Current Pharmaceutical Biotechnology* **2015**, *16*, 128-136, doi:10.2174/1389201016021501121511 57
264 Popescu, S.; Ardelean, I.L.; Ficai, D.; Ficai, A.; Vasile, B.S.; **Andronescu, E.;** Sonmez, M. New multifunctional materials such as MCM – 41/ Fe3O4/ folic acid as drug delivery system. In Proceedings of the Proceedings of the World Congress on New Technologies, 2015.
265 Popa, C.L.; **Andronescu, E.;** Turculet, C.; Beuran, M.; Le Coustomer, P.; Badea, M.L.; Surugiu, A.; Prodan, A.M. Preliminary histological studies on the influence of glycerol-iron-oxide nanoparticles. *Journal of Optoelectronics and Advanced Materials* **2015**, *17*, 1572-1576,
266 Pelin, C.E.; Stefan, A.; Dinc, I.; Ficai, A.; Pelin, G.; **Andronescu, E.;** Constantinescu, D.; Voicu, G. Polyamide 6/carbon fiber laminated composites. *Journal of Optoelectronics and Advanced Materials* **2015**, *17*, 750-756,
267 Patrascu, J.M.; Nedelcu, I.A.; Sonmez, M.; Ficai, D.; Ficai, A.; Vasile, B.S.; Ungureanu, C.; Albu, M.G.; Andor, B.; **Andronescu, E.;** Rusu, L.C. Composite Scaffolds Based on Silver Nanoparticles for Biomedical Applications. *Journal of Nanomaterials* **2015**, *2015*, doi:10.1155/2015/587989
268 Nedelcu, I.A.; Ficai, A.; Ficai, D.; Voicu, G.; Albu, M.G.; **Andronescu, E.** Hybrid collagen-carboxymethylcellulose/ hydroxyapatite composite materials for bone tissue regeneration. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2015**, *77*, 3-14,
269 Mihaiescu, D.E.; Gudovan, D.; **Andronescu, E.** Controlled release study of ceftriaxone from MCM-41-NH2 mesoporous material. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2015**, *77*, 19-28,
270 Iordache, F.; Oprea, A.E.; Grumezescu, V.; **Andronescu, E.;** Socol, G.; Grumezescu, A.M.; Popa, M.; Mogoşanu, G.D.; Holban, A.M.; Maniu, H. Poly(lactic-co-glycolic) acid/chitosan microsphere thin films functionalized with Cinnamomi aetheroleum and magnetite nanoparticles for preventing the microbial colonization of medical surfaces. *Journal of Sol-Gel Science and Technology* **2015**, *73*, 679-686, doi:10.1007/s10971-015-3659-7
271 Holban, A.M.; Iordanskii, A.; Grumezescu, A.M.; Bychkova, A.; **Andronescu, E.;** Mogoantă, L.I.; Mogo Ș Anu, G.D.; Iordache, F. Prosthetic devices with nanostructurated surfaces for increased resistance to microbial colonization. *Current Pharmaceutical Biotechnology* **2015**, *16*, 112-120, doi:10.2174/1389201016021501121503 03
272 Holban, A.M.; **Andronescu, E.;** Grumezescu, V.; Oprea, A.E.; Grumezescu, A.M.; Socol, G.; Chifiriuc, M.C.; Lazar, V.; Iordache, F. 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*, 605-611, doi:10.1007/s10971-014-3552-9
273 Gunduz, O.; Yetmez, M.; Sonmez, M.; Georgescu, M.; Alexandrescu, L.; Ficai, A.; Ficai, D.; **Andronescu, E.** Mesoporous materials used in medicine and environmental applications. *Current Topics in Medicinal Chemistry* **2015**, *15*, 1501-1515, doi:10.2174/1568026615666150414121010
274 Grumezescu, V.; **Andronescu, E.;** Holban, A.M.; Socol, G.; Grumezescu, A.M.; Ficai, A.; Lazar, V.; Chifiriuc, M.C.; Trusca, R.; Iordache, F. Fabrication and characterization of functionalized surfaces with 3-amino

propyltrimethoxysilane films for anti-infective therapy applications. *Applied Surface Science* **2015**, *336*, 401-406, doi:10.1016/j.apsusc.2015.01.080
275 Grumezescu, V.; **Andronescu, E.;** Holban, A.M.; Mogoantə, L.; Mogoşanu, G.D.; Grumezescu, A.M.; Stənculescu, A.; Socol, G.; Iordache, F.; Maniu, H.; Chifiriuc, M.C. MAPLE fabrication of thin films based on kanamycin functionalized magnetite nanoparticles with anti-pathogenic properties. *Applied Surface Science* **2015**, *336*, 188-195, doi:10.1016/j.apsusc.2014.10.177
276 Grumezescu, A.M.; **Andronescu, E.;** Oprea, A.E.; Holban, A.M.; Socol, G.; Grumezescu, V.; Chifiriuc, M.C.; Iordache, F.; Maniu, H. 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*, 612-619, doi:10.1007/s10971-014-3558-3
277 Gionea, A.; **Andronescu, E.;** Surdu, V.A.; Truşcă, R.; Ilie, A.; Stoleriu, Ş. Influence of Y2O3 dopant concentration on zirconia ceramics characteristics sintered through hot isostatic pressing. *Revista Romana de Materiale/ Romanian Journal of Materials* **2015**, *45*, 348-353,
278 Colie, M.; Mihaiescu, D.E.; Surdu, A.; Ficai, A.; TruşcĂ, R.; Istrati, D.; **Andronescu, E.** Obtaining YBa2Cu3O7-d through a modified auto-combustion reaction with and without addition of organic fuel. *Revue Roumaine de Chimie* **2015**, *60*, 1117-1123,
279 Bolocan, A.; Mihaiescu, D.E.; **Andronescu, E.;** Voicu, G.; Grumezescu, A.M.; Ficai, A.; Vasile, B.Ş.; Bleotu, C.; Chifiriuc, M.C.; Pop, C.S. Biocompatible hydrodispersible magnetite nanoparticles used as antibiotic drug carriers. *Romanian Journal of Morphology and Embryology* **2015**, *56*, 365-370,
280 **Andronescu, E.;** Iordache, F.M.; Ciobanu, C.S.; Badea, M.L.; Costescu, A.; Prodan, A.M. Optical properties of bioactive europium doped hydroxyapatite (HAp:Eu3+). *Optoelectronics and Advanced Materials, Rapid Communications* **2015**, *9*, 1155-1159,
281 Vlad, M.; **Andronescu, E.;** Grumezescu, A.M.; Ficai, A.; Voicu, G.; Bleotu, C.; Chifiriuc, M.C. Carboxymethyl-cellulose/Fe3O4 nanostructures for antimicrobial substances delivery. *Bio-Medical Materials and Engineering* **2014**, *24*, 1639-1646, doi:10.3233/BME-140967
282 Vasile, O.R.; **Andronescu, E.;** Ghiţulică, C.; Vasile, B.S.; Vasile, E. Grain size effect on photocatalytic properties of nanocrystalline ZnO. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2014**, *76*, 3-12,
283 Vasile, B.S.; Oprea, O.; Voicu, G.; Ficai, A.; **Andronescu, E.;** Teodorescu, A.; Holban, A. Synthesis and characterization of a novel controlled release zinc oxide/gentamicin-chitosan composite with potential applications in wounds care. *International Journal of Pharmaceutics* **2014**, *463*, 161-169, doi:10.1016/j.ijpharm.2013.11.035
284 Spoiala, A.; Albu, M.G.; Ficai, A.; **Andronescu, E.;** Voicu, G.; Ungureanu, C. The SiO2/ZnO composite materials for cosmetic creams. *Digest Journal of Nanomaterials and Biostructures* **2014**, *9*, 1729-1737,
285 Sonmez, M.; Ficai, D.; Ficai, A.; Alexandrescu, L.; Voicu, G.; **Andronescu, E.** Functionalization of glass fibers for obtaining polypropylene based composite materials. *Revista Romana de Materiale/ Romanian Journal of Materials* **2014**, *44*, 88-94,
286 Sahin, Y.M.; Yetmez, M.; Oktar, F.N.; Gunduz, O.; Agathopoulos, S.; **Andronescu, E.;** Ficai, D.; Sonmez, M.; Ficai, A. Nanostructured biomaterials with antimicrobial properties. *Current Medicinal Chemistry* **2014**, *21*, 3391-3404, doi:10.2174/09298673216661403041049 50
287 Popescu, R.C.; **Andronescu, E.;** Grumezescu, A.M. In vivo evaluation of Fe3O4nanoparticles. *Romanian Journal of Morphology and Embryology* **2014**, *55*, 1013-1018,
288 Popa, C.L.; **Andronescu, E.;** Stoicea, M.; Le Coustumer, P.; Galaup, S.; Beuran, M.; Iordache, F.M.; Telcian, A.; Bleotu, C.; Prodan, A.M. Fabrication, characterization, toxicity and biocompatibility evaluation of iron oxide nanoparticles. *Digest Journal of Nanomaterials and Biostructures* **2014**, *9*, 19-25,
289 Oprea, O.; **Andronescu, E.;** Ficai, D.; Ficai, A.; Oktar, F.N.; Yetmez, M. ZnO applications and challenges. *Current Organic Chemistry* **2014**, *18*, 192-203, doi:10.2174/13852728113176660143
290 Nedelcu, I.A.; Ficai, A.; Sonmez, M.; Ficai, D.; Oprea, O.; **Andronescu, E.** Silver based materials for biomedical applications. *Current Organic Chemistry* **2014**, *18*, 173-184, doi:10.2174/13852728113176660141
291 Mihaiescu, D.E.; Tamas, D.; **Andronescu, E.;** Ficai, A. Fcontroled release study of Aztreonam from MCM-41 mesoporous material. *Digest Journal of Nanomaterials and Biostructures* **2014**, *9*, 379-383,
292 Marques, C.; Ferreira, J.M.F.; **Andronescu, E.;** Ficai, D.; Sonmez, M.; Ficai, A. Multifunctional materials for bone cancer treatment. *International journal of nanomedicine* **2014**, *9*, 2713-2725, doi:10.2147/IJN.S5594
293 Iliescu, R.I.; **Andronescu, E.;** Ghitulica, C.D.; Voicu, G.; Ficai, A.; Hoteteu, M. Montmorillonite-alginate nanocomposite as a drug delivery system - Incorporation and in vitro release of irinotecan. *International Journal of Pharmaceutics* **2014**, *463*, 184-192, doi:10.1016/j.ijpharm.2013.08.043
294 Ilie, A.; **Andronescu, E.;** Ghiţulică, C.D.; Cucuruz, A.T. Antiseptic composite material for biomedical applications. *Revista Romana de Materiale/ Romanian Journal of Materials* **2014**, *44*, 66-73,
295 Hup, L.; Nedelcu, I.A.; Ungureanu, C.; Sonmez, M.; **Andronescu, E.** Methylene blue based antiseptic

chitosan/hydroxyapatite composite materials. *Revista de Chimie* **2014**, *65*, 521-524,
296 Grumezescu, A.M.; Holban, A.M.; **Andronescu, E.;** Mogoşanu, G.D.; Vasile, B.S.; Chifiriuc, M.C.; Lazar, V.; Andrei, E.; Constantinescu, A.; Maniu, H. Anionic polymers and 10 nm Fe3O4@UA wound dressings support human foetal stem cells normal development and exhibit great antimicrobial properties. *International Journal of Pharmaceutics* **2014**, *463*, 146-154, doi:10.1016/j.ijpharm.2013.08.026
297 Cucuruz, A.T.; **Andronescu, E.;** Ghiţulică, C.D.; Ilie, A. Synthesis and characterization of a new composite material based on poly(methyl methacrylate) and silica for dental applications. *Revista Romana de Materiale/ Romanian Journal of Materials* **2014**, *44*, 54-59,
298 Voicu, G.; Oprea, O.; Vasile, B.S.; **Andronescu, E.** Photoluminescence and photocatalytic activity of Mn- doped ZnO nanoparticles. *Digest Journal of Nanomaterials and Biostructures* **2013**, *8*, 667-675,
299 Voicu, G.; Oprea, O.; Vasile, B.S.; **Andronescu, E.** Antibacterial activity of zinc oxide - Gentamicin hybrid material. *Digest Journal of Nanomaterials and Biostructures* **2013**, *8*, 1191-1203,
300 Voicu, G.; Grumezescu, V.; **Andronescu, E.;** Grumezescu, A.M.; Ficai, A.; Ficai, D.; Ghitulica, C.D.; Gheorghe, I.; Chifiriuc, M.C. Caprolactam-silica network, a strong potentiator of the antimicrobial activity of kanamycin against Gram-positive and Gram-negative bacterial strains. *International Journal of Pharmaceutics* **2013**, *446*, 63-69, doi:10.1016/j.ijpharm.2013.02.011
301 Voicu, G.; Bădănoiu, A.I.; **Andronescu, E.;** Chifiruc, C.M. Synthesis, characterization and bioevaluation of partially stabilized cements for medical applications. *Central European Journal of Chemistry* **2013**, *11*, 1657-1667, doi:10.2478/s11532-013-0297-1
302 Voicu, G.; **Andronescu, E.;** Grumezescu, A.M.; Huang, K.S.; Ficai, A.; Yang, C.H.; Bleotu, C.; Chifiriuc, M.C. Antitumor activity of magnetite nanoparticles: Influence of hydrocarbonated chain of saturated aliphatic monocarboxylic acids. *Current Organic Chemistry* **2013**, *17*, 831-840, doi:10.2174/1385272811317080008
303 Vasile, B.S.; **Andronescu, E.;** Ghitulica, C.; Vasile, O.R.; Curechiu, L.; Scurtu, R.; Vasile, E.; Trusca, R.; Pall, L.; Aldica, V. Microstructure and electrical properties of zirconia and composite nanostructured ceramics sintered by different methods. *Ceramics International* **2013**, *39*, 2535-2543, doi:10.1016/j.ceramint.2012.09.013
304 Stoleriu, S.; Puia, A.; Jinga, S.I.; **Andronescu, E.** Gas sensors in SnO2 - ZrO2 binary system. *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 445-452,
305 Stoleriu, Ş.; Constantinescu, A.; **Andronescu, E.** Yttria-stabilized ZrO2 - Al2O3 dense composite ceramics. obtaining and characterization. *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 24-31,
306 Stanciu, G.; Filipescu, M.; Ion, V.; **Andronescu, E.;** Dinescu, M. Optical properties of Tantalum oxide thin films obtained by laser deposition tehniques. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2013**, *75*, 15-22,
307 Spoiala, A.; Nedelcu, I.A.; Ficai, D.; Ficai, A.; **Andronescu, E.** Zinc based antibacterial formulations for cosmetic applications. *Digest Journal of Nanomaterials and Biostructures* **2013**, *8*, 1235-1242,
308 Pavel, E.; Jinga, S.; **Andronescu, E.;** Vasile, B.S.; Kada, G.; Sasahara, A.; Tosa, N.; Matei, A.; Dinescu, M.; Dinescu, A.; Vasile, O.R. 2 nm Quantum Optical Lithography. *Optics Communications* **2013**, *291*, 259-263, doi:10.1016/j.optcom.2012.10.079
309 Pall, L.; Bobet, J.L.; **Andronescu, E.** Influence of al content on the pseudo-ternary compounds RENi4-xALBx (RE = Gd, Y). *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 19-23,
310 Oprea, O.; Vasile, O.R.; Voicu, G.; **Andronescu, E.** The influence of the thermal treatment on luminescence properties of ZnO. *Digest Journal of Nanomaterials and Biostructures* **2013**, *8*, 747-756,
311 Mihaiescu, D.E.; Grumezescu, A.M.; **Andronescu, E.;** Voicu, G.; Ficai, A.; Vasile, O.R.; Bleotu, C.; Saviuc, C. Prosthetic devices with functionalized anti-biofilm surface based NanoAg@C18. *Current Organic Chemistry* **2013**, *17*, 105-112, doi:10.2174/1385272811317020005
312 Ioachim, A.; Toacsan, M.I.; Banciu, M.G.; Nedelcu, L.; Dutu, C.A.; Alexandru, H.V.; Antohe, S.; **Andronescu, E.;** Jinga, S.; Nita, P. Erratum: Synthesis and properties of Ba(Zn1/3Ta 2/3)O3 for microwave and millimeter-wave applications (Thin Solid Films (2007) (1558-1562)). *Thin Solid Films* **2013**, *548*, 663, doi:10.1016/j.tsf.2013.10.132
313 Holban, A.M.; Grumezescu, A.M.; **Andronescu, E.;** Grumezescu, V.; Chifiriuc, C.M.; Rădulescu, R. Magnetite - Usnic acid nanostructured bioactive material with antimicrobial activity. *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 402-407,
314 Grumezescu, A.M.; Cotar, A.I.; **Andronescu, E.;** Ficai, A.; Ghitulica, C.D.; Grumezescu, V.; Vasile, B.S.; Chifiriuc, M.C. In vitro activity of the new water-dispersible Fe3O 4@usnic acid nanostructure against planktonic and sessile bacterial cells. *Journal of Nanoparticle Research* **2013**, *15*, doi:10.1007/s11051-013-1766-3
315 Grumezescu, A.M.; **Andronescu, E.;** Holban, A.M.; Ficai, A.; Ficai, D.; Voicu, G.; Grumezescu, V.; Balaure, P.C.; Chifiriuc, C.M. Water dispersible cross-linked magnetic chitosan beads for increasing the antimicrobial efficiency of aminoglycoside antibiotics. *International Journal of Pharmaceutics* **2013**, *454*, 233-240, doi:10.1016/j.ijpharm.2013.06.054

316 Grumezescu, A.M.; **Andronescu, E.;** Ficai, A.; Voicu, G.; Cocoş, O.; Chifiriuc, M.C. Eugenia caryophyllata essential oil-SiO2 biohybrid structure for the potentiation of antibiotics' activity. *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 160-166,
317 Grumezescu, A.M.; **Andronescu, E.;** Ficai, A.; Grumezescu, V.; Bleotu, C.; Saviuc, C.; Mihaiescu, D.E.; Chifiriuc, C.M. Biocompatible magnetic hollow silica microspheres for drug delivery. *Current Organic Chemistry* **2013**, *17*, 1029-1033, doi:10.2174/1385272811317100005
318 Grumezescu, A.M.; **Andronescu, E.;** Albu, M.G.; Ficai, A.; Bleotu, C.; Dragu, D.; Lazar, V. Wound dressing based collagen biomaterials containing usnic acid as quorum sensing inhibitor agent: Synthesis, characterization and bioevaluation. *Current Organic Chemistry* **2013**, *17*, 125-131, doi:10.2174/1385272811317020007
319 Ghitulica, C.; Cernea, M.; Stefan Vasile, B.; **Andronescu, E.;** Ruxandra Vasile, O.; Dragoi, C.; Trusca, R. Structural and electrical properties of NBT-BT0.08 ceramic prepared by the pyrosol method. *Ceramics International* **2013**, *39*, 5925-5930, doi:10.1016/j.ceramint.2013.01.015
320 Florea, M.G.; Nedelcu, I.A.; Ungureanu, C.; Ficai, A.; Ficai, D.; Guran, C.; **Andronescu, E.** Alginate and sulfanilamide based dds with antibacterial activity. *International Journal of Polymeric Materials and Polymeric Biomaterials* **2013**, *63*, 92-96, doi:10.1080/00914037.2013.769253
321 Ficai, D.; Ficai, A.; Trusca, R.; Vasile, B.S.; Voicu, G.; Guran, C.; **Andronescu, E.** Synthesis and characterization of magnetite-polysulfone micro- and nanobeads with improved chemical stability in acidic media. *Current Nanoscience* **2013**, *9*, 271-277, doi:10.2174/1573413711309020017
322 Ficai, A.; Albu, M.G.; Birsan, M.; Sonmez, M.; Ficai, D.; Trandafir, V.; **Andronescu, E.** Collagen hydrolysate based collagen/hydroxyapatite composite materials. *Journal of Molecular Structure* **2013**, *1037*, 154-159, doi:10.1016/j.molstruc.2012.12.052
323 Dinu, E.; Ghiţulică, C.; Voicu, G.; Bîrsan, M.; **Andronescu, E.** The influence of the pyrosol synthesis temperature on the hydroxyapatite powders' characteristics. *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 61-67,
324 Dinu, E.; Bîrsan, M.; Ghiţulică, C.; Voicu, G.; **Andronescu, E.** Synthesis and characterization of hydroxyapatite obtained by sol - Gel method. *Revista Romana de Materiale/ Romanian Journal of Materials* **2013**, *43*, 55-60,
325 Ciobanu, C.S.; **Andronescu, E.;** Prodan, A.M.; Pall, L.; Costescu, A.; Le Coustumer, P.; Huneau, F.; Marutescu, L.; Ene, N.I.; Trusca, R.; Barna, E.S.; Iconaru, S.L. Physico-chemical and antibacterial studies on silver doped nano-hydroxyapatite. *Journal of Optoelectronics and Advanced Materials* **2013**, *15*, 918-922,
326 Chifiriuc, M.C.; Grumezescu, A.M.; Saviuc, C.; Hristu, R.; Grumezescu, V.; Bleotu, C.; Stanciu, G.; Mihaiescu, D.E.; **Andronescu, E.;** Lazar, V.; Radulescu, R. Magnetic nanoparticles for controlling in vitro fungal biofilms. *Current Organic Chemistry* **2013**, *17*, 1023-1028, doi:10.2174/1385272811317100004
327 Chifiriuc, M.C.; Grumezescu, A.M.; **Andronescu, E.;** Ficai, A.; Cotar, A.I.; Grumezescu, V.; Bezirtzoglou, E.; Lazar, V.; Radulescu, R. Water dispersible magnetite nanoparticles influence the efficacy of antibiotics against planktonic and biofilm embedded enterococcus faecalis cells. *Anaerobe* **2013**, *22*, 14-19, doi:10.1016/j.anaerobe.2013.04.013
328 Balaure, P.C.; **Andronescu, E.;** Grumezescu, A.M.; Ficai, A.; Huang, K.S.; Yang, C.H.; Chifiriuc, C.M.; Lin, Y.S. Fabrication, characterization and in vitro profile based interaction with eukaryotic and prokaryotic cells of alginate-chitosan-silica biocomposite. *International Journal of Pharmaceutics* **2013**, *441*, 555-561, doi:10.1016/j.ijpharm.2012.10.045
329 Anghel, I.; Holban, A.M.; **Andronescu, E.;** Grumezescu, A.M.; Chifiriuc, M.C. Efficient surface functionalization of wound dressings by a phytoactive nanocoating refractory to Candida albicans biofilm development. *Biointerphases* **2013**, *8*, 1-8, doi:10.1186/1559-4106-8-12
330 **Andronescu, E.;** Ficai, A.; Albu, M.G.; Mitran, V.; Sonmez, M.; Ficai, D.; Ion, R.; Cimpean, A. Collagen-hydroxyapatite/cisplatin drug delivery systems for locoregional treatment of bone cancer. *Technology in Cancer Research and Treatment* **2013**, *12*, 275-284, doi:10.7785/tcrt.2012.500331
331 Voicu, G.; Ghiţulică, C.D.; **Andronescu, E.** Modified Pechini synthesis of tricalcium aluminate powder. *Materials Characterization* **2012**, *73*, 89-95, doi:10.1016/j.matchar.2012.08.002
332 Voicu, G.; Bădănoiu, A.I.; Ghiţulică, C.D.; **Andronescu, E.** Sol-gel synthesis of white mineral trioxide aggregate with potential use as biocement. *Digest Journal of Nanomaterials and Biostructures* **2012**, *7*, 1639-1646,
333 Voicu, G.; Badanoiu, A.I.; **Andronescu, E.;** Bleotu, C. Binding properties and biocompatibility of accelerated Portland cement for endodontic use. *Revista de Chimie* **2012**, *63*, 1031-1034,
334 Vasile, O.R.; **Andronescu, E.;** Ghitulica, C.; Vasile, B.S.; Oprea, O.; Vasile, E.; Trusca, R. Synthesis and characterization of nanostructured zinc oxide particles synthesized by the pyrosol method. *Journal of Nanoparticle Research* **2012**, *14*, doi:10.1007/s11051-012-1269-7
335 Stoleriu, S.; Netoiu, C.; Carabat, A.; **Andronescu, E.** The influence of infiltration parameters on mullite matrix composites. In Proceedings of the 12th International Multidisciplinary Scientific GeoConference and EXPO - Modern

Management of Mine Producing, Geology and Environmental Protection, SGEM 2012, 2012; pp. 507-514.
336 Stoleriu, S.; **Andronescu, E.;** Carabat, A.; Netoiu, C. Zirconia toughened alumina composites obtained by infiltration. In Proceedings of the NANOCON 2012 - Conference Proceedings, 4th International Conference, 2012; pp. 106-111.
337 Stanciu, G.; Scarisoreanu, N.D.; Ion, V.; Moldovan, A.; **Andronescu, E.;** Dinescu, M. YBa2Cu3O7-δ thin films deposited by pulsed laser deposition and radio-frequency assisted pulsed laser deposition. *Journal of Optoelectronics and Advanced Materials* **2012**, *14*, 852-857,
338 Stanciu, G.; Scarisoreanu, N.D.; Birjega, R.; Dinescu, M.; **Andronescu, E.** Role of the oxygen on the initial growth mechanism and microstructure of YBa2Cu3O7-δ thin films. *Optoelectronics and Advanced Materials, Rapid Communications* **2012**, *6*, 1192-1196,
339 Sonmez, M.; Ficai, D.; Stan, A.; Bleotu, C.; Matei, L.; Ficai, A.; **Andronescu, E.** Synthesis and characterization of hybrid PVA/Al 2O 3 thin film. *Materials Letters* **2012**, *74*, 132-136, doi:10.1016/j.matlet.2012.01.062
340 Scurtu, M.; **Andronescu, E.;** Guran, C.; Sonmez, M.; Grumezescu, A.; Ficai, U.A.; Ficai, D. Colloidal silica use as dyes removing system. *Revista de Chimie* **2012**, *63*, 1013-1015,
341 Rogojan, R.; **Andronescu, E.;** Voicu, G.; Vasile, B.S. Nanoalumina obtained by pyrosol method. *Materials Science-Poland* **2012**, *30*, 368-374, doi:10.2478/s13536-012-0045-9
342 Rogojan, R.; **Andronescu, E.;** Ghitulica, C.; Birsan, M.; Voicu, G.; Stoleriu, S.; Melinescu, A.; Ianculescu, A. Analysis of the structure and morphology of hydroxyapatite nanopowder obtained by sol-gel and pirosol methods. *Advanced Materials Research* **2012**, *590*, 63-67, https://doi.org/10.4028/www.scientific.net/AMR.590.63.
343 Pica, A.; Guran, C.; **Andronescu, E.;** Oprea, O.; Ficai, D.; Ficai, A. Antimicrobial performances of some film forming materials based on silver nanoparticles. *Journal of Optoelectronics and Advanced Materials* **2012**, *14*, 863-868,
344 Pall, L.; Bobet, J.L.; **Andronescu, E.** Effect of reactive grinding with MgO on the properties of magnesium. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2012**, *74*, 171-176,
345 Pall, L.; Bobet, J.L.; **Andronescu, E.** A study of ternary intermetallic borides in the RE-TM-B ternary systems (RE = La, Gd, Y; TM = Ni, Co, Fe). *Revista Romana de Materiale/ Romanian Journal of Materials* **2012**, *42*, 425-432,
346 Oprea, O.; Vasile, O.R.; Voicu, G.; Craciun, L.; **Andronescu, E.** Photoluminescence, magnetic properties and photocatalytic activity of Gd3+ doped Zno nanoparticles. *Digest Journal of Nanomaterials and Biostructures* **2012**, *7*, 1757-1766,
347 Iconaru, S.L.; **Andronescu, E.;** Ciobanu, C.S.; Prodan, A.M.; le Coustumer, P.; Predoi, D. Biocompatible magnetic iron oxide nanoparticles doped dextran thin films produced by spin coating deposition solution. *Digest Journal of Nanomaterials and Biostructures* **2012**, *7*, 399-409,
348 Grumezescu, A.M.; Chifiriuc, M.C.; Saviuc, C.; Grumezescu, V.; Hristu, R.; Mihaiescu, D.E.; Stanciu, G.A.; **Andronescu, E.** Hybrid nanomaterial for stabilizing the antibiofilm activity of eugenia carryophyllata essential oil. *IEEE Transactions on Nanobioscience* **2012**, *11*, 360-365, doi:10.1109/TNB.2012.2208474
349 Grumezescu, A.M.; **Andronescu, E.;** Ficai, A.; Bleotu, C.; Mihaiescu, D.E.; Chifiriuc, M.C. Synthesis, characterization and in vitro assessment of the magnetic chitosan-carboxymethylcellulose biocomposite interactions with the prokaryotic and eukaryotic cells. *International Journal of Pharmaceutics* **2012**, *436*, 771-777, doi:10.1016/j.ijpharm.2012.07.063
350 Florea, M.G.; Ficai, A.; Oprea, O.; Guran, C.; Ficai, D.; Pall, L.; **Andronescu, E.** Drug delivery systems based on silica with prolonged delivery of folic acid. *Revista Romana de Materiale/ Romanian Journal of Materials* **2012**, *42*, 313-316,
351 Ficai, A.; **Andronescu, E.;** Ficai, D.; Sonmez, M.; Albu, M.G.; Voicu, G. Mimicking the morphology of long bone. *Central European Journal of Chemistry* **2012**, *10*, 1949-1953, doi:10.2478/s11532-012-0120-4
352 Ficai, A.; **Andronescu, E.;** Albu, M.G.; Grumezescu, A.; Sonmez, M.; Ficai, D. Synthesis and characterization of dense COLL/HA composite materials. In Proceedings of the Proceedings of the 4th International Conference on Advanced Materials and Systems, ICAMS 2012, 2012; pp. 249-253.
353 Chifiriuc, C.; Grumezescu, V.; Grumezescu, A.M.; Saviuc, C.; Lazăr, V.; **Andronescu, E.** Hybrid magnetite nanoparticles/rosmarinus officinalis essential oil nanobiosystem with antibiofilm activity. *Nanoscale Research Letters* **2012**, *7*, doi:10.1186/1556-276X-7-209
354 Busuioc, C.; Jinga, S.I.; Stoleriu, S.; Nedelcu, L.; **Andronescu, E.** Ba(Zn1/3Ta2/3)O3 perovskite ceramics doped with Nb5+, Ce4+ or Yb[p3+. *Journal of Optoelectronics and Advanced Materials* **2012**, *14*, 238-244,
355 Busuioc, C.; Jinga, S.I.; **Andronescu, E.** Barium magnesium tantalate thin films obtained by sol-gel processing. *Revista Romana de Materiale/ Romanian Journal of Materials* **2012**, *42*, 299-305,
356 Anghel, I.; Holban, A.M.; Grumezescu, A.M.; **Andronescu, E.;** Ficai, A.; Anghel, A.G.; Maganu, M.; Lazăr, V.; Chifiriuc, M.C. Modified wound dressing with phytonanostructured coating to prevent staphylococcal and pseudomonal biofilm development. *Nanoscale Research Letters* **2012**, *7*, 1-8, doi:10.1186/1556-276X-7-690
357 Anghel, I.; Grumezescu, V.; **Andronescu, E.;** Anghel, G.A.; Grumezescu, A.M.; Mihaiescu, D.E.; Chifiriuc, M.C.

Protective effect of magnetite nanoparticle/Salvia officinalis essential oil hybrid nanobiosystem against fungal colonization on the provox® voice section prosthesis. *Digest Journal of Nanomaterials and Biostructures* **2012**, *7*, 1205-1212,
358 Anghel, I.; Grumezescu, A.M.; **Andronescu, E.;** Anghel, A.G.; Ficai, A.; Saviuc, C.; Grumezescu, V.; Vasile, B.S.; Chifiriuc, M.C. Magnetite nanoparticles for functionalized textile dressing to prevent fungal biofilms development. *Nanoscale Research Letters* **2012**, *7*, doi:10.1186/1556-276X-7-501
359 **Andronescu, E.;** Puşcaşu, D.V. Releases of dioxins and furans in the cement industry. *Revista Romana de Materiale/ Romanian Journal of Materials* **2012**, *42*, 237-241,
360 **Andronescu, E.;** Grumezescu, A.; Ficai, A.; Vasile, B.S.; Grumezescu, V.; Vasile, E.; Ficai, D. Fabrication of iron oxide nanospheres using pyrosol technique. In Proceedings of the Proceedings of the 4th International Conference on Advanced Materials and Systems, ICAMS 2012, 2012; pp. 231-236.
361 Voicu, G.; Ghiţulică, C.D.; Dinu, E.; **Andronescu, E.** In-vitro behavior of dicalcium silicate obtained through the sol-gel method. *Revista Romana de Materiale/ Romanian Journal of Materials* **2011**, *41*, 229-233,
362 Vasilescu, C.; Calderon Moreno, J.M.; Cimpean, A.; Cojocaru, D.; Cinca, I.; **Andronescu, E.;** Grigore, F.; Galateanu, B.; Drob, S.I. Synthesis, mechanical and structural properties and biological activity of some nanostructured bone scaffolds. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 523-534,
363 Stoleriu, S.; **Andronescu, E.;** Carabăţ, A.L.; Vasile, B.S. Influence of preparation conditions on nanometric characteristics of zirconia and alumina powders. *Revista Romana de Materiale/ Romanian Journal of Materials* **2011**, *41*, 255-261,
364 Rogojan, R.; **Andronescu, E.;** Iliescu, I.; Truşcă, R.; Vasile, B.S. Synthesis and characterization of calcia stabilized zirconia nano-powder, obtained by sol - gel method. *Revista Romana de Materiale/ Romanian Journal of Materials* **2011**, *41*, 240-247,
365 Rogojan, R.; **Andronescu, E.;** Ghiţulică, C.; Ştefan Vasile, B. Synthesis and characterization of alumina nano-powder obtained by sol-gel method. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2011**, *73*, 67-76,
366 Pavel, E.; Mihailescu, M.; Nicolae, V.B.; Jinga, S.; **Andronescu, E.;** Rotiu, E.; Ionescu, L.; Mazilu, C. Holographic testing of fluorescent photosensitive glass-ceramics. *Optics Communications* **2011**, *284*, 930-933, doi:10.1016/j.optcom.2010.10.023
367 Pavel, E.; Jinga, S.; **Andronescu, E.;** Vasile, B.S.; Rotiu, E.; Ionescu, L.; Mazilu, C. 5 nm structures produced by direct laser writing. *Nanotechnology* **2011**, *22*, doi:10.1088/0957-4484/22/2/025301
368 Oprea, O.; **Andronescu, E.;** Vasile, B.S.; Voicu, G.; Covaliu, C. Synthesis and characterization of ZnO nanopowder by non-basic route. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 1393-1401,
369 Leca, V.; **Andronescu, E.** Improved surface morphology of (110) NdGao3 substrates by thermal and chemical treatments. *Revista Romana de Materiale/ Romanian Journal of Materials* **2011**, *41*, 127-131,
370 Iliescu, R.I.; **Andronescu, E.;** Voicu, G.; Ficai, A.; Covaliu, C.I. Hybrid materials based on montmorillonite and citostatic drugs: Preparation and characterization. *Applied Clay Science* **2011**, *52*, 62-68, doi:10.1016/j.clay.2011.01.031
371 Iliescu, R.I.; **Andronescu, E.;** Ghiţulică, C.D.; Berger, D.; Ficai, A. Montmorillonite-alginate nanocomposite beads as drug carrier for oral administration of carboplatin-preparation and characterization. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2011**, *73*, 3-16,
372 Ilie, A.; **Andronescu, E.;** Ficai, D.; Voicu, G.; Ficai, M.; Maganu, M.; Ficai, A. New approaches in layer by layer synthesis of collagen/hydroxyapatite composite materials. *Central European Journal of Chemistry* **2011**, *9*, 283-289, doi:10.2478/s11532-011-0002-1
373 Grumezescu, A.M.; **Andronescu, E.;** Ficai, A.; Saviuc, C.; Mihăiescu, D.; Chifiriuc, M.C. Deae-cellulose/Fe3O4/cephalosporins hybrid materials for targeted drug delivery. *Revista Romana de Materiale/ Romanian Journal of Materials* **2011**, *41*, 383-387,
374 Ficai, M.; Nedelcu, I.A.; Ficai, D.; Vasile, B.S.; Ficai, A.; **Andronescu, E.** The influence of ultrasonication on the formation of COLL/HA composite materials. *Materiale Plastice* **2011**, *48*, 23-26,
375 Ficai, M.; **Andronescu, E.;** Ficai, A.; Voicu, G.; Vasile, B.S. Poly Bis-GMA/HA based hybrid composite materials. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2011**, *73*, 75-84,
376 Ficai, D.; Ficai, A.; Vasile, B.S.; Ficai, M.; Oprea, O.; Guran, C.; **Andronescu, E.** Synthesis of rod-like magnetite by using low magnetic field. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 943-951,
377 Ficai, D.; Ficai, A.; Alexie, M.; Maganu, M.; Guran, C.; **Andronescu, E.** Fe3O4/SiO2/APTMS nanoparticles with core-shell structure as potential materials for cooper removal. *Revista de Chimie* **2011**, *62*, 622-625,
378 Ficai, A.; Ficai, D.; **Andronescu, E.;** Maganu, M.; Voicu, G.; Sonmez, M. Biomimetic mineralization of the human nasal septum cartilage. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 1377-1383,
379 Dinu, E.; Ghiţulică, C.D.; Voicu, G.; **Andronescu, E.** Calcium phosphate powders obtained through the pyrosol method. *Revista Romana de Materiale/ Romanian Journal of Materials* **2011**, *41*, 248-254,

380 Ciobanu, C.S.; Massuyeau, F.; **Andronescu, E.;** Stan, M.S.; Dinischiotu, A.; Predoi, D. Biocompatibility study of europium doped crystalline hydroxyapatite bioceramics. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 1639-1647,
381 Ciobanu, C.S.; **Andronescu, E.;** Vasile, B.S.; Truşcă, R.; Predoi, D. Preliminary studies on hydroxyapatite doped with europium. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2011**, *73*, 63-70,
382 Ciobanu, C.S.; **Andronescu, E.;** Stoicu, A.; Florea, O.; le Coustumer, P.; Galaup, S.; Djouadi, A.; Mevellec, J.Y.; Musa, I.; Massuyeau, F.; Prodan, A.M.; Lafdi, K.; Trusca, R.; Pasuk, I.; Predoi, D. Influence of annealing treatment of nano-hydroxyapatite bioceramics on the vibrational properties. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 609-624,
383 Ciobanu, C.S.; **Andronescu, E.;** Predoi, D. Bet and XRD studies on the hydroxyapatite and europium doped hydroxyapatite. *Digest Journal of Nanomaterials and Biostructures* **2011**, *6*, 1239-1244,
384 Ciobanu, C.S.; **Andronescu, E.;** Predoi, D. BET and XRD studies on the hydroxyapatite and europium doped hydroxyapatite. *Journal of Optoelectronics and Advanced Materials* **2011**, *13*, 821-824,
385 **Andronescu, E.;** Voicu, G.; Ficai, M.; Mohora, I.A.; Trusca, R.; Ficai, A. Collagen/hydroxyapatite composite materials with desired ceramic properties. *Journal of Electron Microscopy* **2011**, *60*, 253-259, doi:10.1093/jmicro/dfr010
386 Vasile, B.S.; Vasile, O.R.; Ghitulica, C.; **Andronescu, E.;** Dobranis, R.; Dinu, E.; Trusca, R. Yttria totally stabilized zirconia nanoparticles obtained through the pyrosol method. *Physica Status Solidi (A) Applications and Materials Science* **2010**, *207*, 2499-2504, doi:10.1002/pssa.200925623
387 Vasile, B.S.; **Andronescu, E.;** Florea, D.; Ghiţulică, C. Structural investigations of scandia - doped zirconia nanopowders obtained by sol-gel method. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2010**, *72*, 81-92,
388 Stoleriu, S.; **Andronescu, E.;** Carabat, A.; Netoiu, C. Zirconia toughened alumina composites obtained by infiltration. In Proceedings of the NANOCON 2010 - 2nd International Conference, Conference Proceedings, 2010; pp. 106-111.
389 Predoi, D.; **Andronescu, E.;** Radu, M.; Munteanu, M.C.; Dinischiotu, A. Synthesis and characterization of bio-compatible maghemite nanoparticles. *Digest Journal of Nanomaterials and Biostructures* **2010**, *5*, 779-786,
390 Leca, V.; Neagu, D.; Ştefan, E.; **Andronescu, E.** Growth mechanism and properties of YBa2Cu3O7-αthin films deposited by laser ablation on (001) SrTiO3. *Revista Romana de Materiale/ Romanian Journal of Materials* **2010**, *40*, 365-369,
391 Leca, V.; **Andronescu, E.** Properties of BaTiO3 thin films grown by laser ablation. *Revista Romana de Materiale/ Romanian Journal of Materials* **2010**, *40*, 149-152,
392 Jinga, C.; Berger, D.; Matei, C.; Jinga, S.; **Andronescu, E.** Characterization of BaMg1/3(Ta1-xNbx)2/3O3 ceramics obtained by a modified Pechini method. *Journal of Alloys and Compounds* **2010**, *497*, 239-243, doi:10.1016/j.jallcom.2010.03.019
393 Jinga, C.; **Andronescu, E.;** Jinga, S.; Ioachim, A.; Nedelcu, L.; Toacsan, M.I. Synthesis and characterization of doped Ba(Mg1/3Ta 2/3)O3 ceramics. *Journal of Optoelectronics and Advanced Materials* **2010**, *12*, 282-287,
394 Jinga, C.; **Andronescu, E.;** Berger, D.; Matei, C.; Jinga, S. Characterization of BaMg1/3(Ta1-xVx) 1/2O3 (x = 0.1, 0.2) ceramics prepared by modified Pechini method. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2010**, *72*, 3-10,
395 Ficai, M.; **Andronescu, E.;** Voicu, G.; Ficai, D.; Albu, M.G.; Ficai, A. Mollusc shell/collagen composite as potential biomaterial for bone substitutes. *Revista Romana de Materiale/ Romanian Journal of Materials* **2010**, *40*, 359-364,
396 Ficai, M.; **Andronescu, E.;** Ficai, D.; Voicu, G.; Ficai, A. Synthesis and characterization of COLL-PVA/HA hybrid materials with stratified morphology. *Colloids and Surfaces B: Biointerfaces* **2010**, *81*, 614-619, doi:10.1016/j.colsurfb.2010.08.009
397 Ficai, A.; **Andronescu, E.;** Voicu, G.; Pall, S. Methodology of in vitro characterization of human uroliths. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2010**, *72*, 47-56,
398 Ficai, A.; **Andronescu, E.;** Voicu, G.; Ghitulica, C.; Vasile, B.S.; Ficai, D.; Trandafir, V. Self-assembled collagen/hydroxyapatite composite materials. *Chemical Engineering Journal* **2010**, *160*, 794-800, doi:10.1016/j.cej.2010.03.088
399 Ficai, A.; **Andronescu, E.;** Voicu, G.; Ghitulica, C.; Ficai, D. The influence of collagen support and ionic species on the morphology of collagen/hydroxyapatite composite materials. *Materials Characterization* **2010**, *61*, 402-407, doi:10.1016/j.matchar.2010.01.003
400 Ficai, A.; **Andronescu, E.;** Voicu, G.; Albu, M.G.; Ilie, A. Biomimetically synthesis of collagen / hydroxyapatite composite materials. *Materiale Plastice* **2010**, *47*, 205-208,
401 Ficai, A.; **Andronescu, E.;** Trandafir, V.; Ghitulica, C.; Voicu, G. Collagen/hydroxyapatite composite obtained by electric field orientation. *Materials Letters* **2010**, *64*, 541-544, doi:10.1016/j.matlet.2009.11.070
402 Denisa, F.; Ficai, A.; Voicu, G.; Vasile, B.S.; Guran, C.; **Andronescu, E.** Polysulfone based membranes with desired

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pores characteristics. *Materiale Plastice* **2010**, *47*, 24-27,
403 Ciobanu, C.S.; **Andronescu, E.;** Vasile, B.S.; Valsangiacom, C.M.; Ghita, R.V.; Predoi, D. Looking for new synthesis of hydroxyapatite doped with europium. *Optoelectronics and Advanced Materials, Rapid Communications* **2010**, *4*, 1515-1519,
404 Ciobanu, C.S.; **Andronescu, E.;** Pall, L.; Iconaru, S.L.; Gyorgy, E.; Predoi, D. Physico-chemical properties of iron-oxide-dextnn thin films. *Revista de Chimie* **2010**, *61*, 1207-1211,
405 Cernea, M.; **Andronescu, E.;** Radu, R.; Fochi, F.; Galassi, C. Sol-gel synthesis and characterization of BaTiO3-doped (Bi0.5Na0.5)TiO3 piezoelectric ceramics. *Journal of Alloys and Compounds* **2010**, *490*, 690-694, doi:10.1016/j.jallcom.2009.10.140
406 **Andronescu, E.;** Ficai, M.; Voicu, G.; Ficai, D.; Maganu, M.; Ficai, A. Synthesis and characterization of collagen/hydroxyapatite: Magnetite composite material for bone cancer treatment. *Journal of Materials Science: Materials in Medicine* **2010**, *21*, 2237-2242, doi:10.1007/s10856-010-4076-7
407 **Andronescu, E.;** Costache, M.; Ciobanu, C.S.; Prodan, A.M.; Predoi, D. Biocompatibility studies of iron-oxide-dextrin thin films. *Revista de Chimie* **2010**, *61*, 925-928,
408 **Andronescu, E.;** Ciobanu, C.S.; Pall, L.; Costache, M.; Predoi, D. Preliminary biocompatibility studies of hydroxyapatite coated iron oxide. *Revista Romana de Materiale/ Romanian Journal of Materials* **2010**, *40*, 242-249,
409 Stan, C.; **Andronescu, E.;** Couillaud, S.; Bobet, J.L. Study of the structural properties and hydridation of the Gd 0.5Y0.5Ni3.75Al0.25Mg compound deriving from Laves phases. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2009**, *71*, 3-12,
410 Jinga, S.; **Andronescu, E.;** Jinga, C.; Ionescu, L.; Mazilu, C.; Pavel, E.; Hodorogea, S. Fluorosilicate glass-ceramics with rare earths for 3D optical data storage media. *Revista Romana de Materiale/ Romanian Journal of Materials* **2009**, *39*, 25-30,
411 Grigore, F.; **Andronescu, E.;** Gavriliu, S.; Lungu, M.; Tardei, C. Characterizations of the β-TCP suspensions. *Revista de Chimie* **2009**, *60*, 1107-1109,
412 Ficai, A.; **Andronescu, E.;** Voicu, G.; Manzu, D.; Ficai, M. Layer by layer deposition of hydroxyapatite onto the collagen matrix. *Materials Science and Engineering C* **2009**, *29*, 2217-2220, doi:10.1016/j.msec.2009.05.005
413 Ficai, A.; **Andronescu, E.;** Ghitulica, C.; Voicu, G.; Trandafir, V.; Manzu, D.; Ficai, M.; Pall, S. Colagen / hydroxyapatite interactions in composite biomaterials. *Materiale Plastice* **2009**, *46*, 11-15,
414 Alexandru, H.V.; Ioachim, A.; Toacsan, M.I.; Nedelcu, L.; Banciu, M.G.; Berbecaru, C.; Voicu, G.; Jinga, S.; **Andronescu, E.** Ba(Zn1/3Ta2/3)O3 Ceramics for microwave and millimeter-wave applications. *Annals of the New York Academy of Sciences* **2009**, *1161*, 549-553, https://doi.org/10.1111/j.1749-6632.2008.04077.x.
415 Stan, C.; **Andronescu, E.;** Predoi, D.; Bobet, J.L. Structural and hydrogen absorption/desorption properties of YNi4-xAlxMg compounds (with $0 \leq x \leq 1.5$). *Journal of Alloys and Compounds* **2008**, *461*, 228-234, doi:10.1016/j.jallcom.2007.07.064
416 Stan, C.; **Andronescu, E.;** Asano, K.; Sakaki, K.; Bobet, J.L. In situ X-ray diffraction under H2 of the pseudo-AB2 compounds: YNi3.5Al0.5Mg. *International Journal of Hydrogen Energy* **2008**, *33*, 2053-2058, doi:10.1016/j.ijhydene.2008.02.009
417 Nicola, O.; Ghitulica, C.; **Andronescu, E.;** Visan, C.; Vasile, B.S. Composite ceramics reinforced with zirconia nanopowders. *Advanced Materials Research* **2008**, *47-50 PART 2*, 1059-1062, https://doi.org/10.4028/www.scientific.net/amr.47-50.1059.
418 Nicola, O.; **Andronescu, E.;** Ghitulica, C.; Birsan, M.; Dinu, E. Preparation and characterization of a nanostructured dental composite. *Physica Status Solidi (A) Applications and Materials Science* **2008**, *205*, 1494-1499, doi:10.1002/pssa.200778144
419 Moisin, A.M.; Dumitru, A.I.; **Andronescu, E.;** Ghitulica, C. Three steps columbite method used to prepare PMN-PT. *Revista de Chimie* **2008**, *59*, 628-630, doi:10.37358/rc.08.6.1842
420 Jinga, S.; **Andronescu, E.;** Jinga, C.; Ionescu, L.; Mazilu, C.; Pavel, E. Fluorescent photosensitive glass ceramic for information 3D optical data storage media. In Proceedings of the A Global Road Map for Ceramic Materials and Technologies: Forecasting the Future of Ceramics, International Ceramic Federation - 2nd International Congress on Ceramics, ICC 2008, Final Programme, 2008.
421 Jinga, S.; **Andronescu, E.;** Jinga, C.; Ioachim, A.; Toacsăn, M.I.; Nedelcu, L.; Banciu, M.G. Synthesis, characterization and microwave dielectric properties of doped BA(ZN1/3TA2/3)O3 ceramics. In Proceedings of the A Global Road Map for Ceramic Materials and Technologies: Forecasting the Future of Ceramics, International Ceramic Federation - 2nd International Congress on Ceramics, ICC 2008, Final Programme, 2008.
422 Ioachim, A.; Toacsan, M.I.; Banciu, M.G.; Nedelcu, L.; Dutu, C.A.; Alexandru, H.V.; Antohe, S.; **Andronescu, E.;** Jinga, S.; Nita, P. Synthesis and properties of Ba(Zn1/3Ta2/3)O3 for microwave and millimeter wave applications. *Thin Solid Films* **2008**, *516*, 1558-1562, doi:10.1016/j.tsf.2007.03.151
423 Ioachim, A.; Nedelcu, L.; **Andronescu, E.;** Jinga, S.; Toacsăn, M.I.; Banciu, M.G.; Lörinczi, A.; Popescu, M. The

effects of thermal treatments on microwave dielectric properties of Ba(Zn1/3Ta2/3)O3 ceramics. *Journal of Optoelectronics and Advanced Materials* **2008**, *10*, 209-212,
424 Grigore, F.; Tardei, C.; **Andronescu, E.;** Lungu, M.; Patroi, D. Preparation of macroporous ceramic based on beta - Ca3(PO 4)2. Preliminary results. *Journal of Optoelectronics and Advanced Materials* **2008**, *10*, 975-977,
425 Ghitulica, C.; **Andronescu, E.;** Nicola, O.; Birsan, M. Porous ceramics for high temperature filters. *Advanced Materials Research* **2008**, *47-50 PART 2*, 960-963, https://doi.org/10.4028/www.scientific.net/amr.47-50.960.
426 Ficai, A.; Trandafir, V.; **Andronescu, E.** Electric field influence on collagen mineralization process. In Proceedings of the 8th World Biomaterials Congress 2008, 2008; p. 243.
427 Dinu, E.; **Andronescu, E.;** Ghitulica, C.D.; Siebert, E.; Djurado, E.; Dessemond, L. Nanocrystallites obtained through the pyrosol method. *Physica Status Solidi (A) Applications and Materials Science* **2008**, *205*, 1488-1493, doi:10.1002/pssa.200778150
428 Birsan, C.; Ghitulica, C.; **Andronescu, E.;** Ionita, C.; Birsan, M. Bioglasses in the SiO2-CaO-P2O5 system. *Advanced Materials Research* **2008**, *47-50 PART 2*, 1063-1066.
429 **Andronescu, E.;** Jinga, S.; Rotiu, E.; Ionescu, L.; Mazilu, C.; Pavel, E.; Patroi, D.; Davidescu, M.; Vulpe, V. Fluorescent photosensitive glass-ceramics - A novel media for optical data storage. *Journal of Optoelectronics and Advanced Materials* **2008**, *10*, 294-297,
430 **Andronescu, E.;** Ghitulica, C.; Dinu, E. R&D and innovation policies in Romania. In Proceedings of the A Global Road Map for Ceramic Materials and Technologies: Forecasting the Future of Ceramics, International Ceramic Federation - 2nd International Congress on Ceramics, ICC 2008, Final Programme, 2008.
431 Vasile, B.S.; Ghitulica, C.; Popescu-Pogrion, N.; Constantinescu, S.; Mercioniu, I.; Stan, R.; **Andronescu, E.** Structural investigations on yttria - Doped zirconia nanopowders obtained by sol-gel method. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 3774-3780,
432 Predoi, D.; Barsan, M.; **Andronescu, E.;** Vatasescu-Balcan, R.A.; Costache, M. Hydroxyapatite-iron oxide bioceramic prepared using nano-size powders. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 3609-3613,
433 Ioachim, A.; Toacsăn, M.I.; Nedelcu, L.; Banciu, M.G.; Duţu, C.A.; **Andronescu, E.;** Jinga, S.; Nita, P.; Alexandru, H.V. Dielectric properties of BZT ceramics for microwave applications. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 1833-1838,
434 Ghitulica, C.; **Andronescu, E.;** Nicola, O.; Dicea, A.; Birsan, M. Preparation and characterization of cordierite powders. *Journal of the European Ceramic Society* **2007**, *27*, 711-713, doi:10.1016/j.jeurceramsoc.2006.04.089
435 Birsan, M.; Predoi, D.; Birsan, C.; Secu, C.E.; **Andronescu, E.** Characterisation of magnetic iron oxide in hydroxyapatite. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 1829-1832,
436 Birsan, M.; **Andronescu, E.;** Birsan, C.; Ghitulica, C.; Pall, G. Alumina based composites with possible medical applications. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 2634-2637,
437 Birsan, C.; Predoi, D.; **Andronescu, E.** IR and thermal studies of iron oxide nanoparticles in a bioceramic matrix. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 1821-1824,
438 **Andronescu, E.;** Bancu, L.; Jitaru, I.; Neamtu, J.; Malaeru, T. Low temperature synthesis of LaNiO3 perovskite via a dinuclear complex. *Journal of Optoelectronics and Advanced Materials* **2007**, *9*, 1286-1289,
439 Moisin, A.M.; Dumitru, A.I.; **Andronescu, E.;** Ghitulica, C. Studies on PZT - Nb modified piezoceramic materials. *Journal of Optoelectronics and Advanced Materials* **2006**, *8*, 553-554,
440 Ioachim, A.; Toacsăn, M.I.; Banciu, M.G.; Nedelcu, L.; Duţu, C.A.; **Andronescu, E.;** Jinga, S. Annealing effects on properties of Ba(Zn1/3Ta 2/3)O3 dielectric materials. In Proceedings of the Proceedings of the International Semiconductor Conference, CAS, 2006; pp. 253-256.
441 **Andronescu, E.;** Grigore, F.; Tardei, C.; Stefan, E. Natural zeolites with medical applications--preliminary preparation and characterization. *Revista medico-chirurgicală a Societăţii de Medici şi Naturalişti din Iaşi* **2006**, *110*, 236-241,
442 Ghiţulică, C.; Boretto, G.M.; **Andronescu, E.** Processing and characterization of zirconia reinforced composite ceramic foams. *Revista de Chimie* **2005**, *56*, 1218-1221,
443 Ghitulica, C.; **Andronescu, E.;** Dumitru, G.; Stoleriu, S. Preparation of alumina and cordierite based porous ceramic materials. *Key Engineering Materials* **2004**, *264-268*, 2247-2250, https://doi.org/10.4028/www.scientific.net/kem.264-268.2247.
444 Birsan, M.; **Andronescu, E.;** Birsan, C.; Ghitulica, C.; Stefan, E. Ferromagnetic biocomposites with improved bioactivity. *Key Engineering Materials* **2004**, *264-268*, 2043-2046, https://doi.org/10.4028/www.scientific.net/kem.264-268.2043.
445 Nechifor, A.C.; **Andronescu, E.;** Nechifor, G. Membrane materials. III. Ferrofluid and magnetic particles. *Revista de Chimie* **2003**, *54*, 655-660,
446 **Andronescu, E.;** Ştefan, E.; Dinu, E.; Ghiţulică, C. Hydroxyapatite synthesis. *Key Engineering Materials* **2001**, 1595-1598.

447 **Andronescu, E.;** Năstase, M.; Ghiţulică, C.; Ştefan, E. Composite bioceramics. *Key Engineering Materials* **2001**, 1591-1594.
448 **Andronescu, E.;** Jinga, S.; Onose, C. Zinc oxide semiconductor ceramic with non-linear electric properties obtained by the co-precipitation method. In Proceedings of the Proceedings of the International Semiconductor Conference, CAS, 2001; pp. 13-14.
449 Jitaru, I.; Guran, C.; **Andronescu, E.;** Matei, C. Lanthanide oxocuprates doped with divalent metals. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science* **2000**, *62*, 3-12,
450 Teoreanu, I.; **Andronescu, E.;** Ianculescu, A. Ba(Ti, Nb)O3 and (Ba, La)(Ti, Nb)O3-type ceramic dielectrics. *InterCeram: International Ceramic Review* **1999**, *48*,
451 Teoreanu, I.; **Andronescu, E.;** Ianculescu, A. Ba(Ti, Nb)O3 and (Ba, La)(Ti, Nb)O3-Type Ceramic Dielectrics. *InterCeram: International Ceramic Review* **1999**, *48*, 90-96,
452 Brezeanu, M.; Antoniu, A.; Jitaru, I.; Guran, C.; **Andronescu, E.;** Matei, C.; Georgescu, G. Preparation of copper ferrite by the "hydrolysis" method. *Revue Roumaine de Chimie* **1998**, *43*, 487-491,
453 Jitaru, I.; Guran, C.; Stoica, L.; Berger, D.; **Andronescu, E.;** Fruth, V.; Danescu, M.; Novac, A.; Magureanu, M.; Mosteanu, T. Heteropolynuclear complex compounds as precursors of LaCrO3. *Key Engineering Materials* **1997**, 1361-1364.
454 Guran, C.; Jitaru, I.; **Andronescu, E.;** Berger, D.; Matei, C.; Fruth, V. Heteropolynuclear complex precursors used in M(III)M(II)2Cu3O7-δ mixed oxides synthesis (M(III)=La, Ce, Y; M(II)=Sr, Ba). *Key Engineering Materials* **1997**, 1273-1276.
455 **Andronescu, E.;** Ianculescu, A.; Parlog, C.; Vasiliu, F.; Pencea, I. Formation and characteristics of some cerium-doped Ba(Ti,Sn)O3 solid solutions. *Key Engineering Materials* **1997**, 1183-1186.
456 Teoreanu, I.; **Andronescu, E.;** Folea, A. Microwave processing of Ba2Ti9O20 ceramic. *Ceramics International* **1996**, *22*, 305-307, doi:10.1016/0272-8842(95)00107-7

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