



Personal information

First name(s) / Surname(s) Anton FICAI
Address(es) Home: 30-32, Rahovei st, Bragadiru, Ilfov, ROMANIA
 Work: 1-7 Gh Polizu St, District 1, 011061 Bucharest, Romania
Telephone(s) +4 021 402 3852 **Mobile** +4 0766 257 852
Fax(es) +4 021 402 3815
E-mail anton.ficai@upb.ro
anton_ficai81@yahoo.com
Nationality Romanian
Date of birth 12.11.1981
Gender male

Current employment / Occupational field

Assoc. professor, Ph.D.

Work experience

Dates	February. 2015 – present
Occupation or position held	Assoc. prof. PHD
Main activities and responsibilities	Teaching activities (classes and/or applications): Composite Materials for Medicine, General Chemistry, Drug Delivery Systems, Bioceramics; Research activities
Name and address of employer	POLITEHNICA University of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Oxide Materials and Nanomaterials
Type of business or sector	Education
Dates	Oct. 2011 – present
Occupation or position held	Lecturer, PHD
Main activities and responsibilities	Teaching activities: Composite Materials for Medicine, Chemistry and Drug Delivery Systems; Research activities
Name and address of employer	POLITEHNICA University of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Oxide Materials and Nanomaterials
Type of business or sector	Education
Dates	2006 – 2011
Occupation or position held	Assistant professor
Main activities and responsibilities	Teaching & research activities
Name and address of employer	POLITEHNICA University of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Analytical Chemistry and Instrumental Analysis
Type of business or sector	Education

Dates	14-20 July 2014
Occupation or position held	Invited professor
Main activities and responsibilities	Teaching activities in the field of composite materials and biomaterials
Name and address of employer	5 national and international conferences
Type of business or sector	Education

Education and training

Dates	May 2010 – March 2013
Title of qualification awarded	Postdoctoral fellow
Principal subjects/occupational skills covered	Nanomaterials - Biomaterials
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Oxide Materials and Nanomaterials
Level in national or international classification	Postdoctoral studies

Dates	2006-2009
Title of qualification awarded	PhD. Eng.
Principal subjects/occupational skills covered	Chemical Engineering
Name and type of organisation providing education and training	POLITEHNICA University of Bucharest, Faculty of Applied Chemistry and Materials Science
Level in national or international classification	PhD studies

Dates	2005-2007
Title of qualification awarded	Master of Science degree
Principal subjects/occupational skills covered	Materials, Substances and Biocompatible Systems
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Department of Bioengineering and Biotechnology
Level in national or international classification	PhD studies

Dates	2000-2005
Title of qualification awarded	Chemical Engineer
Principal subjects/occupational skills covered	Organic Chemistry
Name and type of organisation providing education and training	University POLITEHNICA of Bucharest, Faculty of Applied Chemistry and Materials Science, Department of Organic Chemistry
Level in national or international classification	Academic degree

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

Understanding	Speaking	Writing
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European level (*)

ENGLISH

ITALIAN

FRENCH

Listening		Reading		Spoken interaction		Spoken production			
B2	Independent User	B2	Independent User	B2	Independent User	B2	Independent User	B1	Independent User
A1	Basic user	A2	Basic user	A1	Basic user	A2	Basic user	A1	Basic user
A1	Basic user	A2	Basic user	A1	Basic user	A2	Basic user	A1	Basic user

(*) [Common European Framework of Reference for Languages](#)

Social skills and competences

Team work: I was employed as researcher or as manager in 15 national or international research projects (4 as project manager)

Organisational skills and competences

During the faculty's years I was involved in most of the student activities (chief of the student hostel) acquiring good organizational skills
I was involved in the organizing committee of the "CD Neîţescu Days"

Technical skills and competences

Technical skills was obtained and continuous improved due to the various attended training courses: chromatography, IR, AAS and ICP-MS spectroscopy

Computer skills and competences

Independent USER of WINDOWS XP and Windows 7, MS Office, Macromedia Firefox, Fireworks, Origin etc..

Additional information

Fields with specific interests:

Bone, Bone grafts, Biomaterials, Nanomaterials and Technologies, Chemistry; Prosthetic Tubular Devices, Drug Delivery System; Materials for Environmental Applications, etc.

Publications

- 100 published works (over 85 ISI ranked papers); cumulative impact factor >100; Hirsh index 13 (Scopus); No. of citations > 400;
- 12 Books and Chapters of books;
- 1 patent issued by OSIM and 6 pending Patent Applications

Editorial Boards

Editorial board:

- **Scientific Bulletin of University „POLITEHNICA” of Bucharest** – Serie B: Chemistry and Materials Sciences (2010-present);
- **Biointerface Research in Applied Chemistry** (2011-present);
- **Journal of Nanomaterials, Nanotechnology and Nanomedicine**, (2015-onward)

Guest editor:

- **Engineered Biomaterials for Tissue Regeneration**, The Science World Journal (2014).
- **Engineered Magnetic Core@Shell Structures**, Current Pharmaceutical Design 2015;
- **Smart Drug Delivery Systems**, Current Drug Targets (2015).

Reviewer

- **Journal of Cellular and Molecular Medicine** (Wiley, ISI factor 5,6);
- **Journal of Molecular Structure** (Elsevier, ISI factor 1,594);
- **Materials Letters** (Elsevier, ISI factor 1,94);
- **Materials Chemistry and Physics** (Elsevier, ISI factor 2,353);
- **Materials Science and Engineering B** (Elsevier, ISI factor 1,56);
- **Journal of Applied Polymer Science** (Wiley, ISI factor 1,24);
- **Journal of Nanoparticle Research** (Springer, ISI factor 3.287);
- **Chemical paper** (Springer, ISI factor 1.076);
- **Current Nanoscience** (Bentham, ISI factor 1,776);
- **Romanian Journal of Materials** (ISI factor 0.378);
- **Iranian Polymer Journal** (Springer, ISI factor 0.936);
- **Journal of Research in Environmental Science and Toxicology**;
- **Journal of Nanoscience and Nanotechnology**.

Research Projects

22 research project with national and international financing (4 of them being project manager)

1. **ERA.Net RUS Plus initiative and its call for "Innovation projects"; "Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology-TiOxTech-Bio"; Role: Responsible of UPB; Period of implementation: 2015-2016**
2. **MANUNET ERA-NET Project; "Multiphase elasto-plastic architectures dynamically vulcanized and reinforced with nanoparticles for specific products**

- used in food and pharmaceutical industries - ARHNOTPV"* **Role: Researcher/ Responsible of UPB; Period of implementation: 2015-2016;**
3. „Installations of National Interest / Instalatii de Interes National: *Crearea Centrului National de Micro si Nanomateriale / Creation of the National Centre of Micro- and Nanomaterials*” Role: project manager; Period of implementation: 2014-2019
 4. **PNCDI II – Partnership: Ligaments reconstruction by using advanced materials based on synthetic and natural polymers / Reconstrucția ligamentelor utilizand materiale structurate avansate pe baza de polimeri sintetici si naturali; Ctr. Nr. PN-II-PT-PCCA-2013-4-0891; Role: Researcher/ Responsible of UPB; Period of implementation: 2014-2016;**
 5. PNCDI II – Partnership: Inovative dental products with multiple applications/ Produse inovative de uz dentar cu aplicatii multiple – LavEndo; Ctr. Nr. PN-II-PT-PCCA-2013-4-0891; Role Cercetător; Period of implementation: 2014-2016;
 6. POSSCE-A2-O2.2.1.-2013-1 - *Crearea Centrului Național de Cercetări Științifice pentru Siguranța Alimentară; Nr 1970, Cod SMIS – CSNR 48652; Role: Scientific Responsible; Period of implementation: 2014-2016;*
 7. MPNS COST Action MP1301: New Generation Biomimetic and Customized Implants for Bone Engineering; Role: member of the Romania team; 2013-2017
 8. TD COST Action TD1305: Improved Protection of Medical Devices Against Infection (IPROMEDAD); Role: member of the Romania team; 2013-2017
 9. ADER 8.1.4 - Integrated tracking and control systems of animal and non-animal food to identify potential carcinogenic risk factors in relation to environmental, farm, processing, transport, consumption / Sisteme integrate de trasabilitate și control ale unor alimente de origine animală și nonanimală pentru identificarea unor factori de risc potențial cancerigeni în relația mediu, fermă, procesare, transport, consum; Ctr. Nr. 67/ADER 8.1.4; Role Researcher; Period of implementation: 2013-2014;
 10. **PNCDI II – Partnership: Novel nanostructured prosthetic tubular devices with antibacterial and antibiofilm properties induced by physico-chemical and morphological changes – AntiBioTube; Ctr. Nr.43_094; Role: Project manager; Period of implementation: 2012-2015;**
 11. PNCDI II – Partnership: Hybrid composite materials with thermoplastic matrices doped with fibres and disperse nano fillings for materials with special purposes – HybridMat; Ctr. Nr.73-168; Role: Researcher; 2012-2015;
 12. PNCDI II – CAPACITATI (Modulul II) Perspective Studies „NanoProspect”; Role: Researcher; Period of implementation: 2010-2011;
 13. PNCDI II – CAPACITATI (Modulul III) - Bilateral Romania-Germania/Natural nanoparticles in soil as possible environmental vectors for contaminants; Ctr. Nr.327/18.08.2009; Role: Researcher; Period of implementation: 2009;
 14. PNCDI II – Partnership: Multifunctional nanobiocomposites used as regenerative and drug delivery support–SIMAC; Ctr. Nr.72_198; Role: Researcher; Period of implementation: 2008– 2011;
 15. PNCDI II – Partnership: Lead-free piezoelectric materials chemically processed from aqueous solution / Materiale piezoelectrice fara plumb procesate prin metode chimice in solutie – MPPC; Ctr. Nr. 72_153; Role: Researcher; Period of implementation: 2008 – 2011;
 16. PNCDI II – Partnership: Miniaturized biosensor, micro technology, organophosphorous insecticides, acetylcholinesterase (AChE), acetylthiocholine (ACh) / Microtehnologia obtinerii de biosenzori miniaturizati pentru detectare rapida a contaminantilor din produsele alimentare; Ctr. Nr. 52_173; Role: Researcher; Period of implementation: 2008 – 2011;
 17. PNCDI II – Partnership: Experimental and Epidemiological study related to the action of Persistent Organic Pollutants on growing, development, function of tiroidian immunity and estrogenic secretion / Studiu epidemiologic si experimental privind actiunea poluantilor organici persistenti (POP) pe cresterea, dezvoltarea, functia si imunitatea tiroidiana si pe secretia estrogenica; Ctr. Nr.32_176/01.10.2008; Role: Researcher; Period of implementation: 2008–2011;
 18. **Proiect PN II_MC – Electric field influence on collagen mineralization process; Role: Project manager; Period of implementation: 2008;**
 19. PNCDI II– Partnership: The achievement of new biomaterials with collagenic, supramolecular doped structures with piezoelectrical, liquid crystals, electrical and magnetical properties used for biotechnology; Ctr. Nr.71_147; Role: Researcher; Period of implementation: 2007 – 2010;
 20. **PN II_TD – Collagen/Hydroxyapatite Composite Materials; Role: Project manager; Period of implementation: 2007 – 2009;**
 21. **PN II_BD – Composite Biomaterials based on Collagen and Hydroxyapatite; Role: Project manager; Period of implementation: 2006 – 2009;**

22. P-CD CEEX: Combinatorial library for the synthesis of neutral receptors of inorganic anions; from project to potential applications; Role: Researcher; Period of implementation: 2006–2008;
23. PNCDI I-CERES type PED/Hybrid membranar materials with polyphosphazenic backbone; Role: Researcher; Period of implementation: 2002- 2004.

Prizes and Awards:

- 2015: **“Gold medal”** awarded by European Exhibition of Creativity and Innovation - EUROINVENT (for patent application **“Layered Composite Based on Polypropylene Reinforced with Treated Glass Fibre Fabric”**)
- 2012: **“Gold medal”** awarded by BRUSSELS INNOVA - The World Exhibition on Inventions, Research and New Technologies (for bone cancer treatment)
- 2012: Prize: **“Best Published Paper–2009”** awarded by Syscomm–“Materiale Plastice”
- 2011: Prize: **“In tempore opportuno”** awarded by University POLITEHNICA of Bucharest
- 2005: Valedictorian diploma awarded by University POLITEHNICA of Bucharest/ Faculty of Applied Chemistry and Materials Science
- 2005: 2nd Prize: Annual Session of Scientific Communications - Analytic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2005: 2nd Prize: Annual Session of Scientific Communications – Organic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2004: 2nd Prize: Annual Session of Scientific Communications – CD Nenitzescu Days awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2004: Special Prize: Annual Session of Scientific Communications – CD Nenitzescu Days awarded by prof. dr. eng. Claude Matasa, general manager of OrthoCycle Company, Hollywood, Florida, USA
- 2002: 2nd Prize: Annual Session of Scientific Communications - Inorganic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2001: 1st Prize: Annual Session of Scientific Communications - Inorganic Chemistry Section awarded by University POLITEHNICA of Bucharest– Faculty of Applied Chemistry and Materials Science
- 2001: 1st Prize: Petru Spacu Analytical Chemistry Contest awarded by University POLITEHNICA of Bucharest–Faculty of Applied Chemistry and Materials Science
- 2000: Honorary Citizen of Baia Mare issued by Local Council and Municipality of Baia Mare, Romania
- 2000: Special Prize: Selection for the “Romanian National Chemistry Team” awarded by Romanian Ministry of Education
- 1999: 3rd Prize: III Chemistry National Olympiad, Brasov awarded by Romanian Ministry of Education
- 1998: 3rd Prize: Chemistry National Olympiad, Baia Mare awarded by Romanian Ministry of Education

Specializations:

- 25-26 June 2009: How to write scientific papers: organized by CNCSIS-UPB
- 12-16 June 2009: ESF Summer School in Nanomedicine, Lisbon, Portugal
- June – August 2004 Research stage at Università degli Studi di Modena e Reggio Emilia, Italy; New electrochemical sensors; (3 months)
- September – December 2005 Research stage at OrtoCycle Co. Hollywood, Florida, USA; Improving dental adhesives
- Graduation certificate of the courses for operation and use of GC, HPLC, GC-MS, LC-MS, UV-Vis, FTIR spectroscopy and microscope, ICP-OES, ICP-MS, AAS

01.07.2015

Anton FICAI

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PHD THESIS: Composite Biomaterials based on Collagen and Hydroxyapatite

POSTDOCTORAL THESIS: Composite Biomaterials

BOOKS AND CHAPTERS

1. **A. Ficai**, M. Yetmez, N. Ozkalayci, O.B. Agrali, Y.M. Sahin, F.N. Oktar; NANOTECHNOLOGY IN DENTISTRY; Elsevier, 2015, accepted chapter (**English**);
2. DENISA FICAI, **ANTON FICAI**, ECATERINA ANDRONESCU; Advances in Cancer Treatment; Role of Nanoparticles; INTECH, 2015, 1-21 (**English**);
3. Alexandru Mihai Grumezescu, Alina Maria Holban, **Anton Ficai**, Valentina Grumezescu, Veronica Lazar and Mariana Carmen Chifiriuc: Nanosized Materials with Antibiofilm Activity. Recent Developments in Biotechnology Vol. 10: Nano-Biotechnology, Studium Press LLC, Houston, USA, 2013 (**English**);
4. Mariana Carmen Chifiriuc, Alexandru Mihai Grumezescu, **Anton Ficai**, Alina Maria Holban: Applications of Nanotechnology for the Development of New Microbicidal and Microbiostatic Strategies. Recent Developments in Biotechnology Vol. 10: Nano-Biotechnology, Studium Press LLC, Houston, USA, 2013 (**English**);
5. Ecaterina ANDRONESCU, Alexandru Mihai GRUMEZESCU, Cristina GHITULICA, **Anton FICAI**, Denisa FICAI and Mariana Carmen CHIFIRIUC; Novel Approach to Fabricate Magnetic Nanostructures for Biomedical Applications; Nanotechnology – Vol. 5 Drug Delivery & Nanomedicine; STUDIUM PRESS LLC, 38pages, (**English**);
6. Denisa FICAI, **Anton FICAI**, Alexandru Mihai GRUMEZESCU; Organic Chemistry; Workbook of theoretical Applications; SITECH Publishing House, Craiova 2012; ISBN 978-606-11-2343-8 (340 pages, Romanian);
7. **Anton FICAI**, Ecaterina ANDRONESCU; Biomateriale compozite pe bază de colagen și hidroxiapatită utilizate în reconstrucția osoasă (*Collagen and hydroxyapatite based composite biomaterials for bony tissue reconstruction*); Politehnica Press, 2011; ISBN: 978-606-515-257-1 (180 pages, Romanian);
8. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU and Denisa FICAI; "Advances in Collagen/Hydroxyapatite Composite Materials" in "Advances in composite materials for medicine and nanotechnology" Editura INTECH, 2011, ISBN 978-953-307-235-7 pg. 3-32 (**English**);
9. **Anton FICAI**, Denisa Mânzu, Volumetrie. De la teorie la aplicații de laborator, Editura Politehnica Press, 2009 ISBN 978-606-515-037-9 (170 pg) (Romanian);
10. Ion ION, Alina Catrinel ION și **Anton FICAI**, **Probleme de chimie analitică**, Ed.a II-a (revizuită și îmbunătățită), Ed. Printech, 2005, ISBN: 973-718-394-0 (Romanian);
11. Ion ION, Alina Catrinel ION și **Anton FICAI**, **Probleme de chimie analitică**, Ed. Cartea Universitară, 2003, ISBN: 973-7956-11-7(Romanian);
12. Alina Catrinel ION, Ion ION, **Anton FICAI**, Dragos ȘTEFAN; Environmental analytical chemistry. Applications of nanosensors. Chemically modified electrode for NO₂ determination in environmental applications; Seria - Micro and nanoengineering, Volume 11 - "Progress in nanoscience and nanotechnologies", Editori: Dan Dascalu, Irina Kleps și Alina Catrinel ION; 2007:231-239 (**English**).

ISSUED PATENTS:

1. **A. FICAI**, E. ANDRONESCU, C. D. GHITULICA, D. FICAI, G. VOICU, M. G. ALBU; Procedeu de obtinere a unor materiale compozite cu potentiale aplicatii în tratarea cancerului osos, Patent No. 127725/30.03.2015 issued by OSIM;

PATENT APPLICATIONS:

1. Denisa Ficai, **Anton Ficai**, Cornelia Guran, Ecaterina Andronescu, Functionalized magnetic systems for environmental applications Tehnologie de obținere a unor sisteme magnetice funcționalizate pentru aplicații de mediu, A00164/2011.
2. Denisa FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, **Anton FICAI**, Ovidiu OPREA, Bogdan Stefan VASILE, Magnetite/thioacids@Ag or Au multifunctional systems used for diagnosis and targeted delivery in cancer - Sisteme multifuncționale de tip

magnetita/tioacizi/Ag sau Au, utilizate pentru diagnoza și tratamentul dirijat al cancerului, A/00238/2013

3. **Anton FICAI**, Ecaterina ANDRONESCU, Madalina Georgiana ALBU; Denisa FICAI, Maria SONMEZ; Osteoconductive and osteoinductive bone grafts (Grefe osoase osteoinductive si osteoconductive si procedeu de obținere a acestora); OSIM A00239/23.03.2013
4. **Anton FICAI**, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELICU; Madalina Georgiana ALBU; Grefe osoase pe bază de colagen, fosfat de calciu și zinc si procedeu de obținere a acestora; OSIM A00240/23.03.2013;
5. Maria SÖNMEZ, Laurenția ALEXANDRESCU, Mihai GEORGESCU, Mihaela NITUICA, Denisa FICAI, **Anton FICAI**, Lidia AVADANEI; Stratified composite materials based on functionalized glass fibre reinforced with polypropylene - Compozit stratificat pe bază de polipropilenă armată cu țesătură din fibră de sticlă tratată; OSIM A/00793/27.10.2014
6. GROSU Elena, **Anton FICAI**, RAPA Maria, Sorin ULINICI, Denisa FICAI, Ecaterina ANDRONESCU, Carmen BALOTESCU, Lia Mara DITU; Prosthetic stratified tubular devices with antimicrobial activity - Dispozitiv protetic tubular stratificat cu proprietati antimicrobiene; national patent application OSIM A/00904/25.11.2014

PAPERS (SELECTION)

over 100 papers from which 80 in ISI rated journals from which 17 as corresponding author; cumulated ISI factor >100; citations >300 (except self-citation); Hirsh index 10.

1. Alexandra BOLOCAN, Dan Eduard MIHAIESCU, Ecaterina ANDRONESCU, Georgeta VOICU, Alexandru Mihai GRUMEZESCU, **Anton FICAI**, Bogdan Ștefan VASILE, Coralia BLEOTU, Mariana Carmen CHIFIRIUC, Corina Silvia POP; Biocompatible hydrodispersible magnetite nanoparticles used as antibiotic drug carriers; Romanian Journal Morphology and Embryology 2015, 56(2):365-370
2. Gozde UNSOY, Ufuk Gunduz, Ovidiu OPREA, Denisa FICAI, Maria SONMEZ, Marius RADULESCU, Mihaela ALEXIE, **Anton FICAI**; Magnetite: from synthesis to applications; Current Topics in Medicinal Chemistry; 2015,15(24):1622-1640
3. Oguzhan Gunduz, Mehmet Yetmez, Maria SONMEZ, Mihai GEORGESCU, Laura ALEXANDRESCU, **Anton FICAI**, Denisa FICAI, Ecaterina ANDRONESCU; Mesoporous materials used in medicine and for environmental applications; Current Topics in Medicinal Chemistry; 2015,15(24):1501-1515
4. Faik N. OKTAR, Mehmet YETMEZ, Denisa FICAI, **Anton FICAI**, Florica DUMITRU, Alexandra PICA; Molecular mechanism and targets of the antimicrobial activity of metal nanoparticles; Current Topics in Medicinal Chemistry; 2015,15(24):1583-1588;
5. Jenel Marian PATRASCU, Ioan Avram NEDELICU, Maria SÖNMEZ, Denisa FICAI, **Anton FICAI**, Bogdan Stefan VASILE, Camelia UNGUREANU, Madalina G. ALBU, Bogdan Andor, Ecaterina ANDRONESCU and Laura Cristina RUSU; Composite Scaffolds based on Silver Nanoparticles for Biomedical Applications; Journal of Nanomaterials; 2015: Article ID 587989; 1-9
6. Denisa Ficai, Maria Sonmez, Madalina Georgiana Albu, Dan Eduard Mihaiescu, **Anton Ficai**, Coralia Bleotu; Antitumoral materials with regenerative function obtained using a layer-by-layer technique; Drug Design, Development and Therapy; 2015: 2(9):1269-79.
7. Marius Radulescu, Denisa Ficai, Ovidiu Oprea, **Anton Ficai**, Ecaterina Andronescu, Alina M Holban; Antimicrobial Chitosan based formulations with impact on different biomedical applications; Current Pharmaceutical Biotechnology 2015; 16(2):128-36;
8. Alexandru Mihai Grumezescu, Rodica Cristescu, Carmen Chifiriuc, Gabriela Dorcioman, Gabriel Socol, Ion Mihaiescu, Dan Eduard Mihaiescu, **Anton Ficai**, Otilia Vasile, Monica Enculescu, Douglas Chrisey: Fabrication of Magnetite-Based Core-Shell Coated Nanoparticles With Antibacterial Properties, Biofabrication, 2015:7(1), Art. No. 015014 - Impact Factor₂₀₁₃ = 4.302
9. Florin Iordache, Valentina Grumezescu, Alexandru Mihai Grumezescu, Carmen Curuțiu, Lia Mara Dițu, Gabriel Socol, **Anton Ficai**, Roxana Trușcă, Alina Maria Holban: Gamma-cyclodextrin/usnic acid thin film fabricated by MAPLE for improving the resistance of medical surfaces to Staphylococcus aureus colonization, Applied Surface Science, 2015:336:407-412; Impact Factor₂₀₁₃ = 2.538
10. Valentina Grumezescu Ecaterina Andronescu Alina Maria Holban Gabriel Socol Alexandru Mihai Grumezescu; **Anton Ficai** Veronica Lazar Mariana Carmen Chifiriuc; Roxana Trusca Florin Iordache; Fabrication and characterization of functionalized surfaces with 3-amino

- propyltrimethoxysilane films for anti-infective therapy applications; Applied Surface Science; 2015:336:401-406, <http://dx.doi.org/10.1016/j.apsusc.2015.01.080>
11. Maria Sonmez, Mihai Georgescu, Mihaela Valsan, Marius Radulescu, Denisa Ficai, Georgeta Voicu, **Anton Ficai**, Laurentia Alexandrescu; Design and characterization of polypropylene matrix/glass fibers composite materials; J. Appl. Polym. Sci. 2015, 132, 42163 (10 pages).
 12. Grumezescu, V.; Holban, AM; Grumezescu, AM; Socol, G; **Ficai, A**; Vasile, BS; Trusca, R; Bleotu, C; Lazar, V; Chifiriuc, CM; Mogosanu, GD; Usnic acid-loaded biocompatible magnetic PLGA-PVA microsphere thin films fabricated by MAPLE with increased resistance to staphylococcal colonization; BIOFABRICATION; 2014: 6(3) Article Number: 035002
 13. Alexandru Mihai Grumezescu, Cristina Daniela Ghitulica, Georgeta Voicu, Keng-Shiang Huang, Chih-Hui Yang, **Anton Ficai**, Bogdan Stefan Vasile, Valentina Grumezescu, Coralia Bleotu, Mariana Carmen Chifiriuc; New silica nanostructure for the improved delivery of topical antibiotics used in the treatment of staphylococcal cutaneous infections; International Journal of Pharmaceutics; 2014: 463(2): 170-176
 14. Yesim Muge SAHIN, Mehmet YETMEZ, Faik N. OKTAR, O. GUNDUZ, Simeon AGATHOPOULOS, Ecaterina ANDRONESCU, Denisa FICAI, Maria SONMEZ, **Anton FICAI**; Nanostructured biomaterials with antimicrobial properties; Current Medicinal Chemistry; 2014;21(29):3391-3404; (ISI₂₀₁₃= 3.715)
 15. Catarina MARQUES, José M.F. FERREIRA, Ecaterina ANDRONESCU, Denisa FICAI, Maria SONMEZ, **Anton FICAI**; Multifunctional materials for bone cancer treatment; International Journal of Nanomedicine; 2014:9:2713-2725 (ISI₂₀₁₃= 4.195)
 16. Ovidiu Oprea, Ecaterina Andronescu, Denisa Ficai, **Anton Ficai**, Faik N. Oktar and Mehmet Yetmez; ZnO Applications and Challenges; Current Organic Chemistry; 2014;18:192-203 (ISI₂₀₁₃= 2.537)
 17. Ioan-Avram Nedelcu, **Anton Ficai**, Maria Sonmez, Denisa Ficai, Ovidiu Oprea and Ecaterina Andronescu; Silver Based Materials for Biomedical Applications; Current Organic Chemistry; 2014;18:173-182 (ISI₂₀₁₃= 2.537)
 18. Vlad M, Andronescu E, Grumezescu AM, **Ficai A**, Voicu G, Bleotu C, Chifiriuc, C. Carboxymethyl-cellulose/Fe₃O₄ nanostructures for antimicrobial substances delivery. Bio-Medical Materials and Engineering. 2014;24:1639-146 (ISI₂₀₁₃= 0.847)
 19. Valentina Grumezescu; Gabriel Socol, Alexandru Mihai Grumezescu, Alina Maria Holban, **Anton Ficai**, Roxana Trusca, Coralia Bleotu, Paul Catalin Balaure, Rodica Cristescu, Mariana Carmen Chifiriuc; Functionalized antibiofilm thin coatings based on PLA-PVA microspheres loaded with usnic acid natural compounds fabricated by MAPLE; Applied Surface Science; 2014;302:262-267 (ISI₂₀₁₃= 2.538)
 20. Grumezescu V, Holban AM, Iordache F, Socol G, Mogosanu GD, Grumezescu AM, et al. MAPLE fabricated magnetite@eugenol and (3-hidroxybutyric acid-co-3-hidroxyvaleric acid)-polyvinyl alcohol microspheres coated surfaces with anti-microbial properties. Applied Surface Science. 2014;306:16-22 (ISI₂₀₁₃= 2.538)
 21. Ruxandra Irina Iliescu, Ecaterina Andronescu, Cristina Daniela Ghitulica, Georgeta Voicu, **Anton Ficai**, Mihai Hotetueu; Montmorillonite-alginate nanocomposite as a drug delivery system - incorporation and in vitro release of irinotecan; International Journal of Pharmaceutics; 2014;463:184-192 (ISI₂₀₁₃= 3.785)
 22. Ficai, D., Oprea, O., **Ficai, A.**, Holban A. M.; Metal oxide nanoparticles: Potential uses in biomedical applications; Current Proteomics. 2014: 11(2):139-149 (ISI₂₀₁₃ factor 0.44);
 23. Vaja F, Oprea O, Ficai D, **Ficai A**, Guran C. Synthesis of CeO₂ nanoparticles on the mesoporous silica support via nanocasting. Digest Journal of Nanomaterials and Biostructures. 2014;9:187-95 (ISI₂₀₁₃= 1.123);
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Anton FICAI