



Curriculum vitae Europass

Informații personale

Nume / Prenume	FICAI, Anton
Adresă(e)	Acasa: Str. Rahovei 30-32, Bragadiru, Ilfov, ROMANIA Servici: Str. Gh Polizu 1-7, Sector 1, 011061 Bucuresti, Romania
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Fax(uri)	+4 021 402 3815
E-mail(uri)	anton.ficai@upb.ro anton_ficai81@yahoo.com
Naționalitate(-tăți)	romana
Data nașterii	12.11.1981
Sex	barbatesc

Locul de muncă ocupat / Domeniul ocupațional

Prof. Dr. Habil. ing.

Experiența profesională

Perioada	Octombrie 2017 – prezent
Funcția sau postul ocupat	Profesor
Activități și responsabilități principale	Predare cursuri (Chimie, Materiale Compozite pentru Medicina; Sisteme cu eliberare Controlata de Biosubstante Active, Chimia si Caracterizarea Materialelor; Nanobiomaterials for Tissue Engineering) Cercetare științifică
Numele și adresa angajatorului	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată și Știința Materialelor, Departamentul Știința si Ingineria Materialelor Oxidice si Nanomateriale
Tipul activității sau sectorul de activitate	Învățământ
Perioada	Decembrie 2015 (Februarie 2016) – prezent
Funcția sau postul ocupat	Abilitare în inginerie chimică
Activități și responsabilități principale	Conducere de teze de doctorat în domeniile: inginerie tisulară; sisteme cu eliberare controlată; materiale cu aplicații industriale; etc.
Numele și adresa angajatorului	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată și Știința Materialelor, Departamentul Știința si Ingineria Materialelor Oxidice si Nanomateriale
Tipul activității sau sectorul de activitate	Învățământ

Perioada	2015 (Februarie) – 2017 (septembrie)
Funcția sau postul ocupat	Conferențiar dr.
Activități și responsabilități principale	Predare cursuri (Chimie, materiale compozite pentru medicina; sisteme cu eliberare controlata de biosubstante active) precum si conducerea ședințelor de lucrări practice de laborator Cercetare științifică
Numele și adresa angajatorului	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată și Știința Materialelor, Departamentul Știința si Ingineria Materialelor Oxidice si Nanomateriale
Tipul activității sau sectorul de activitate	Învățământ
Perioada	2011 –2015
Funcția sau postul ocupat	Sef lucrari; director de proiect
Activități și responsabilități principale	Conducerea ședințelor de lucrări practice de laborator Cercetare științifică
Numele și adresa angajatorului	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată și Știința Materialelor, Departamentul Știința si Ingineria Materialelor Oxidice si Nanomateriale
Tipul activității sau sectorul de activitate	Învățământ
Perioada	14-20 Iulie 2014
Funcția sau postul ocupat	Profesor invitat
Activități și responsabilități principale	Activități de predare în domeniul materialelor compozite si a biomaterialelor
Numele și adresa angajatorului	Universitatea Beira Interior; “Summer Scholl on Composite Materials: From BASIC to NANO”
Tipul activității sau sectorul de activitate	
Perioada	2006 – 2011
Funcția sau postul ocupat	Asistent suplinitor, asistent titular
Activități și responsabilități principale	Conducerea ședințelor de lucrări practice de laborator Cercetare științifică
Numele și adresa angajatorului	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată și Știința Materialelor, Departamentul Chimie Analitică și Analiză Instrumentală
Tipul activității sau sectorul de activitate	Învățământ
Educație și formare	
Perioada	2010-2013
Calificarea / diploma obținută	Certificat de absolvire stagiu postdoctoral
Disciplinele principale studiate / competențe profesionale dobândite	Biomateriale compozite
Numele și tipul instituției de învățământ / furnizorului de formare	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată Și Știința Materialelor
Nivelul în clasificarea națională sau internațională	Studii postuniversitare/Studii postdoctorale
Perioada	2006-2009
Calificarea / diploma obținută	Diploma de DOCTOR INGINER
Disciplinele principale studiate / competențe profesionale dobândite	INGINERIE CHIMICĂ
Numele și tipul instituției de învățământ / furnizorului de formare	Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată Și Știința Materialelor
Nivelul în clasificarea națională sau internațională	Studii postuniversitare/Studii doctorale

Perioada 2005-2007
 Calificarea / diploma obținută Diploma de master
 Disciplinele principale studiate / competențe profesionale dobândite Specializarea Materiale, Substanțe și Sisteme Biocompatibile
 Numele și tipul instituției de învățământ / furnizorului de formare Universitatea POLITEHNICA Bucuresti, Facultatea de Energetică, Departamentul de Bioinginerie și Biotehnologii
 Nivelul în clasificarea națională sau internațională Studii postuniversitare

Perioada 2000-2005
 Calificarea / diploma obținută Diploma de inginer chimist; diploma de șef de promoție
 Disciplinele principale studiate / competențe profesionale dobândite Tehnologia substantelor organice
 Numele și tipul instituției de învățământ / furnizorului de formare Universitatea POLITEHNICA Bucuresti, Facultatea de Chimie Aplicată Și Știința Materialelor
 Nivelul în clasificarea națională sau internațională Studii universitare

Aptitudini și competențe personale

Limba(i) maternă(e) **Romana**

Limba(i) străină(e) cunoscută(e)

Autoevaluare
 Nivel european (*)

Limba Engleza

Limba Italiană

Limba franceza

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral		Exprimare scrisă	
B2	Utilizator independent	B2	Utilizator independent	B2	Utilizator independent	B2	Utilizator independent	B1	Utilizator independent
B1	Utilizator independent	B1	Utilizator independent	B1	Utilizator independent	B1	Utilizator independent	A1	Utilizator elementar
A1	Utilizator elementar	A2	Utilizator elementar	A1	Utilizator elementar	A2	Utilizator elementar	A1	Utilizator elementar

(*) [Nivelul Cadrului European Comun de Referință Pentru Limbi Străine](#)

Competențe și abilități sociale Spirit de echipă, sociabil, bune aptitudini de comunicare

Competențe și aptitudini organizatorice Pe parcursul anilor de facultate am fost implicat în activitățile studentești iar în calitate de șef de cămin (2003-2006) am dobândit bune competențe și aptitudini organizatorice. În perioada 2004-2005 am fost membru în consiliul profesoral al FCAȘM și al Senatului UPB și ulterior între 2005-2007 membru în consiliul Departamentului de Bioinginerie și Biotehnologii.

Competențe și aptitudini tehnice Competențele tehnice au fost dobândite și îmbunătățite ca urmare a trainingurilor la care am participat: cromatografie, spectroscopie de absorbție în infraroșu, spectroscopie de masă (inclusiv ICP-MS)

Competențe și aptitudini de utilizare a calculatorului	Bună stăpânire a sistemului de operare WINDOWS XP, a aplicațiilor Office, Macromedia Firefox și Mathcad.
Permis(e) de conducere	Categoria B
Proiecte de cercetare	<ol style="list-style-type: none"> 1. PN-III-P2-2.1-PED-2016-0427; Realizare demonstrator in tehnologia planara de tranzistor cu tunelare a izolatorilor ultrasubtiri - ca promotor al unei serii de nano-dispozitive si evidentierea utilitatii in industrie; Role: Researcher; Period of implementation: 2017-2018 2. PN-III-P2-2.1-PED-2016-0952 “Structuri poroase biomimetice obținute prin printare 3D pentru ingineria țesutului osos” Role: Researcher; Period of implementation: 2017-2018 3. 63/10.04.2017/IUCN DUBNA; Nanostructured magnetic colloids for targeted cancer therapy; Role: project manager; Period of implementation: 2017 4. PN-III-P2-2.1-PTE-2016-0146; Noi compozite polimerice nanostructurate pentru garnitură crapodină, placă de legătură și alte componente destinate industriei feroviare; Rol: Responsabil partener UPB; Perioada de implementare: 2016-2018; 5. PN-III-P2-2.1-PTE-2016-0156; Valorificarea polimerilor termoplastici reciclati prin armare cu fibre naturale functionalizate pentru obtinerea de noi produse cu valoare adaugata; Rol: membru echipa; Perioada de implementare: 2016-2018; 6. PN-III-P2-2.1-PTE-2016-0174; Tehnologie și echipament pentru obținerea prin electrofilare a substraturilor colagenice nanofibrilare, destinate pansamentelor resorbabil Rol: Responsabil partener UPB; Perioada de implementare: 2016-2018; 7. POC-D; Prototip pentru validare nanotehnologie inovatoare și linie de producție (P_39_240), manager de proiect 8. Proiect de tip Era Net Rus Plus, „Titanium Oxynitride Coatings for the Improvement of Biocompatibility and Long-Term Functionality of Cardiovascular Stents: Development of Novel Deposition Technology-TIOXTECH-BIO”; Role: Responsabil UPB; Perioada de implementare: 2016-2018 9. MANUNET ERA-NET Project; "Multiphase elasto-plastic architectures dynamically vulcanized and reinforced with nanoparticles for specific products used in food and pharmaceutical industries - ARHNANOTPV" Role: Responsabil UPB; Perioada de implementare: 2015-2016; 10. „Installations of National Interest / Instalatii de Interes National: Creerea Centrului National de Micro si Nanomateriale / Creation of the National Centre of Micro- and Nanomaterials” Rol: director de proiect; Perioada de implementare: 2014-2019 11. „Produse inovative de uz dentar cu aplicații multiple – LavEndo”; Funcția: Responsabil științific; Perioada: 2014 - 2016 12. Reconstrucția ligamentelor utilizand materiale structurate avansate pe baza de polimeri sintetici si naturali – LigaSint; Funcția: Responsabil P1; Perioada: 2014 - 2016 13. POSCCE-A2-O2.2.1-2013-1 - OPERAȚIUNEA 2.2.1: Crearea centrului național de cercetări științifice pentru siguranța alimentară – CNpSA; Funcția: Responsabil științific; Perioada: 2014-2015 14. MPNS COST Action MP1301: New Generation Biomimetic and Customized Implants for Bone Engineering; Rol: Cercetător; 2013-2017 15. TD COST Action TD1305: Improved Protection of Medical Devices Against Infection (IPROMEDAI); Rol: Cercetător; 2013-2017 16. ADER 8.1.4.: Sisteme integrate de trasabilitate și control ale unor ali-mente de origine animală și nonanimală pentru identificarea unor factori de risc potențial cancerigeni în relația mediu, fermă, procesare, transport, consum; Funcția: cercetător; Perioada de implementare: 2013-2015

Proiecte de cercetare

17. **PNCDI II – Parteneriate/ Novel nanostructured prosthetic tubular devices with antibacterial and antibiofilm properties induced by physico-chemical and morphological changes – AntiBioTube 43_094; Funcția: Director de proiect; Perioada de implementare: 2012-2016**
18. PNCDI II – Parteneriate/ Hybrid composite materials with thermoplastic matrices doped with fibres and disperse nano fillings for materials with special purposes – hybridmat 73-168; Funcția: Cercetător; Perioada de implementare: 2012-2016
19. PNCDI II – CAPACITATI (Modulul II) Studii prospective „Nanoprospect”; Funcția: Cercetător; Perioada de implementare: 2010-2011
20. PNCDI II – CAPACITATI (Modulul III) - Bilaterală România-Germania/Natural nanoparticle in soil as possible environmental vectors for contaminants-327/18.08.2009; Funcția: Cercetător; Perioada de implementare: 2009
21. PNCDI II – Parteneriate/Nanobiocompozite multi-funcționale utilizate ca suporturi regenerative și medicamentoase – SIMAC 72_198; Funcția: Cercetător; Perioada de implementare: 2008 – 2011
22. PNCDI II – Parteneriate/Materiale piezoelectrice fără plumb procesate prin metode chimice în soluție – MPPC 72_153; Funcția: Cercetător; Perioada de implementare: 2008 - 2011
23. **Proiect PN II_MC – Electric field influence on collagen mineralization process; Funcția: Director de proiect; Perioada de implementare: 2008**
24. PNCDI II– Parteneriate/ Realizarea de noi biomateriale cu structuri colagenice supramoleculare dopate, cu proprietăți piezoelectrice, de cristale lichide, electrice și magnetice, utilizate în bioinginerie 71_147; Funcția: Cercetător; Perioada de implementare: 2007 – 2010
25. **PN II_TD – Biomateriale compozite pe baza de colagen și hidroxiapatită; Funcția: Director de proiect; Perioada de implementare: 2007 - 2009**
26. **PN II_BD – Biomateriale compozite pe baza de colagen și hidroxiapatită; Funcția: Director de proiect; Perioada de implementare: 2006 – 2009**
27. P-CD CEE: Combinatorial library for the synthesis of neutral receptors of inorganic anions; from project to potential applications; Role: Researcher; Perioada de implementare: 2006–2008;
28. PNCDI I-CERES type PED/Hybrid membranar materials with polyphosphazenic backbone; Funcția: membru în colectiv; Perioada de implementare: 2002- 2004.

Informații suplimentare

Premii și distincții

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.

2017 Best paper awarded by WASET during 19th International Conference on Nanotechnology and Nanomedicine the - ICNN 2017: held at Prague, Czech Republic.

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 NEDELICU; Madalina Georgiana ALBU);

“Gold medal” (for the invention “Compositions and process for obtaining innovative enzymatic formulations for root canal lavage” authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)

“Gold medal” (for the project “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)

Premii si distinctii - continuare

"Gold medal" (for the project "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. NEDELUCU, M.G. ALBU)

"Special prize" awarded by Romanian Association for alternative Technologies – ARTA Sibiu (for the invention "*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*" authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU);

"Special prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemițanu", 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);

"Special prize" awarded by State University of Medicine and Pharmacy "Nicolae Testemițanu", Moldova (for the invention "*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*" authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)".

2017: 9th European Exhibition of Creativity and Innovation-EuroInvent 2017, 25-27.05.2017; Iași, 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 NEDELUCU; Madalina Georgiana ALBU);

"Special prize" awarded by Institutul de Chimie al Academiei de Științe 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 NEDELUCU; 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 Anton FICAI, Ecaterina ANDRONESCU, Maria SONMEZ, Denisa FICAI, Ioan Avram NEDELUCU; Madalina Georgiana ALBU);

"Silver medal" (for the invention "*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*" authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)

"Special prize" awarded by Universitatea de Stat din Tiraspol (for the invention "*Compositions and process for obtaining innovative enzymatic formulations for root canal lavage*" authors Anton FICAI, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU)

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 multi-functional 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; Iași, 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; 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 osteo-inductive 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: European Exhibition of Creativity and Innovation - EUROINVENT

“**Gold medal**” (for patent application “*Layered Composite Based on Polypropylene Reinforced with Treated Glass Fibre Fabric*”)

1. Premiul Atestat de Reviewer
Anul acordarii premiului: 2014
Institutiile care a acordat premiul: M.A.R.E.
2. Premiul “**Gold medal**”
Anul acordarii premiului: 2012
Institutiile care a acordat premiul: The Belgian and International Trade Fair for Technological Innovation Brussels - Eureka
3. Premiul “**In tempore opportuno**”
Anul acordarii premiului: 2011
Institutiile care a acordat premiul: UPB – Facultatea de Chimie Industrială
4. Premiul “**Cea mai buna lucrare publicata in Materiale Plastice – 2009**”
Anul acordarii premiului: 2012
Institutiile care a acordat premiul: Syscomm – Revista “Materiale Plastice”
5. Premiul: II - Sesiunea anuala de comunicari stiintifice studentesti; sectiunea Chimie Analitica
Anul acordarii premiului: 2005
Institutiile care a acordat premiul: UPB – Facultatea de Chimie Industrială
6. Premiul: II – Sesiunea anuala de comunicari stiintifice studentesti; sectiunea Chimie Organica
Anul acordarii premiului: 2005
Institutiile care a acordat premiul: UPB – Facultatea de Chimie Industrială
7. Premiul: II – Sesiunea nationala de comunicari studentesti C.D.Nenitescu
Anul acordarii premiului: 2004
Institutiile care a acordat premiul: UPB – Facultatea de Chimie Industrială
8. Premiul: II – Sesiunea nationala de comunicari studentesti C.D.Nenitescu
Anul acordarii premiului: 2004
Institutiile care a acordat premiul: UPB – Societatea de Chimie din Romania

Informații suplimentare

9. Premiul: II – Sesiunea anuala de comunicari stiintifice studentesti; sectiunea Chimie Anorganica
Anul acordarii premiului: 2002
Institutia care a acordat premiul: UPB – Facultatea de Chimie Industriala
10. Premiul: I – Sesiunea anuala de comunicari stiintifice studentesti; sectiunea Chimie Anorganica
Anul acordarii premiului: 2001
Institutia care a acordat premiul: UPB – Facultatea de Chimie Industriala
11. Premiul: I – Concursul studentesc de chimie analitica Petru Spacu
Anul acordarii premiului: 2001
Institutia care a acordat premiul: UPB – Facultatea de Chimie Industriala
12. Premiul: Premiu special pentru chimie; Selectionat lotul olimpic largit - sectiunea Chimie
Anul acordarii premiului: 2000
Institutia care a acordat premiul: Ministerul Educatiei Nationale
13. Premiul: III Olimpiada Nationala de Chimie, Brasov
Anul acordarii premiului: 1999
Institutia care a acordat premiul: Ministerul Educatiei Nationale
14. Premiul: III Olimpiada Nationala de Chimie, Baia Mare
Anul acordarii premiului: 1998
Institutia care a acordat premiul: Ministerul Educatiei Nationale

Editor invitat:

- **Nanobiosensors in Food Industry**, Sensors (2017)
- **Sustainability of Nanotechnology: Novel Approaches**; Sustainability (2017);
- **Design and performances of medical devices: from bulk to surface modification**, Current Medicinal Chemistry (2016);
- **New challenges in cancer treatment, from novel agents to innovative administration**, Anti-Cancer Agents in Medicinal Chemistry (2016);
- **Smart Drug Delivery Systems**, Current Drug Targets (2015);
- **Engineered Magnetic Core@Shell Structures**, Current Pharmaceutical Design (2015);
- **Engineered Biomaterials for Tissue Regeneration**, The Science World Journal (2014).

Informații suplimentare

Specializări și calificări:

1. Autorat științific organizat de CNCIS-UPB, 25-26 iunie 2009
2. ESF Summer School in Nanomedicine, 12-16 iunie 2009, Lisabona, Portugalia
3. Stagiul de cercetare la Universitatea de studii din Modena si Reggio Emilia, Italia; Elaborarea de noi biosenzori electrochimici; durata 3 luni
4. Stagiul de cercetare la OrtoCycle Co. Hollywood, Florida, USA; Imbunatatirea unor adezivi dentari; durata 2 luni

Membru al asociațiilor profesionale: Societatea Romana de Biomateriale; Societatea de Chimie din Romania

Membru colegii de redactie

- **Revista Romana de Materiale - Romanian Journal of Materials (2017-prezent) – ISI Indexed**
- **Jacobs Journal of Materials Science (Remedy Publications) (2016- prezent)**
- **Resource-Efficient Technologies (2016-prezent)**
- **Dovepress (2015 – onwards) – consulting editor**
- **Materials Science and Engineering Journal (2017- prezent)**
- **Quantitative Imaging in Medicine and Surgery (2015 – prezent) – indexat SCOPUS**
- **Journal of Nanomaterials, Nanotechnology and Nanomedicine, (2015- prezent)**
- **Biointerface Research in Applied Chemistry (2011- prezent – indexat ISI)**
- **Scientific Bulletin of University „POLITEHNICA” of Bucharest – Serie B: Chemistry and Materials Sciences (2010- prezent) – indexat ISI.**

Anexe

Anton FICAI

Teza de doctorat: Biomateriale compozite pe bază de Collagen și Hydroxyapatite

Teza de POST-DOCTORAT: Composite Biomaterials

Cărți și capitole de cărți

1. **Anton Ficai**, Alexandru Grumezescu (Editors); Nanostructures for Antimicrobial Therapy; Elsevier Science Publishing Co Inc; 722pages; ISBN 0323461522; 2017
2. *Alexandru Mihai Grumezescu, **Anton Ficai** (Editors); Nanostructures for Cancer Therapy; Elsevier Science Publishing Co Inc; 9pages; ISBN 0323461522; 2017*
3. Ficai D, **Ficai A.** Prevention of biofilm formation by material modification. Biofilms and Implantable Medical Devices: Infection and Control: Elsevier Inc.; 2016. p. 160-180.
4. Mariana Carmen Chifiriuc, **Anton Ficai**, Alexandru Mihai Grumezescu, Lia-Mara Ditu, Marcela Popa, Carmen Iordache, Alina Maria Holban, Șerban Vifor Gabriel Beresteanu, Raluca Grigore, Veronica Lazar; Chapter 1 - Soft tissue engineering and microbial infections: Challenges and perspectives; in *Nanobiomaterials in Soft Tissue Engineering, 2016, 1-29*
5. Denisa Ficai, Madalina Georgiana Albu, Maria Sonmez, **Anton Ficai**, Ecaterina Andronescu; Chapter 13 - Advances in the field of soft tissue engineering: From pure regenerative to integrative solutions in *Nanobiomaterials in Soft Tissue Engineering Applications of Nanobiomaterials Volume 5; Alexandru Grumezescu (Ed); Elsevier, 2016; 355-386*
6. **A. Ficai**, M. Yetmez, N. Ozkalayci, O.B. Agrali, Y.M. Sahin, F.N. Oktar; NANOTECHNOLOGY IN DENTISTRY; Elsevier, 2015, accepted chapter (**English**);
7. DENISA FICAI, **ANTON FICAI**, ECATERINA ANDRONESCU; Advances in Cancer Treatment; Role of Nanoparticles; INTECH, 2015, 1-21 (**English**);
8. 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**);
9. 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**);
10. 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, ISBN: 1-62699-007-751-89 (38pages, **English**);
11. 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);
12. **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);
13. **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**);
14. **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);
15. 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);
16. Ion ION, Alina Catrinel ION și **Anton FICAI**, **Probleme de chimie analitică**, Ed. Cartea Universitară, 2003, ISBN: 973-7956-11-7(Romanian);
17. 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**).

Brevete emise:

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;
2. 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, Cerere Numar: A00164/2011; RO 127889.

Aplicatii de brevet:

3. Anton FICAI, Denisa FICAI, Ovidiu OPREA, Ecaterina ANDRONESCU, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Ludmila MOTELICA; Compoziție inovativă pentru aplicații dentare; Cerere Numar înregistrare OSIM: A00734/27.09.2017
4. **Anton FICAI**, Denisa FICAI, Ovidiu OPREA, Stefan MANEA, Anna-Maria PANGICĂ, Petru BODOGA, Camelia AGAPESCU; Compositions and process for obtaining innovative enzymatic formulations for root canal lavage; Patent application No. A/00472/2016
5. SONMEZ Maria, NITUICA Mihaela, ALEXANDRESCU Laura, STELESCU Daniela Maria, GEORGESCU Mihai, FICAI Denisa, **FICAI Anton**, CONSTANTINESCU Doina, CONSTANTINESCU Murariu Bogdan; "Materiale compozite hibride pe bază de polipropilenă armată cu whiskersuri din carbură de siliciu și fibre de sticlă funcționalizate și procedeu de obținere a acestora"; OSIM A/00613/06/09/2016;
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;
7. 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;
8. 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;
9. **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;
10. **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;

Articole, selecții

Peste 150 lucrări publicate; 17 in calitate de corresponding author; cumulated ISI factor >200; citari >757 (dupa eliminarea citarilor proprii); Hirsh index 16.

- Ris1. Yetmez M, Erkmén ZE, Kalkandelen C, **Ficai A**, Oktar FN. Sintering effects of mullite-doping on mechanical properties of bovine hydroxyapatite. *Materials Science and Engineering C*. 2017;77: 470-5.
- Ris2. Georgescu M, Stelescu DM, Ficai A, Trusca. The influence of functionalizing agents on the properties of fibreglass polymer composites. 17th International Multidisciplinary Scientific Geoconference, SGEM 2017. 61 ed: International Multidisciplinary Scientific Geoconference; 2017. p. 445-52.
- Ris3. Ardelean IL, Stoencea LBN, Ficai D, Ficai A, Trusca R, Vasile BS, et al. Development of Stabilized Magnetite Nanoparticles for Medical Applications. *Journal of Nanomaterials* 2017;2017.
- Ris4. Ficai D, Sandulescu M, Ficai A, Andronescu E, Yetmez M, Agrali OB, et al. Drug delivery systems for dental applications. *Current Organic Chemistry* 2017;21:64-73.
- Ris5. Inan AT, Komur B, Ekren N, Aydogdu MO, Gokce H, Ficai A, et al. Physical

- characterization of turbot (*Psetta maxima*) originated natural hydroxyapatite. *Acta Physica Polonica A* 2017;131:397-9.
- Ris6. Komur B, Ozturk ER, Ekren N, Inan AT, Gunduz O, Andronescu E, et al. Characterization of Cu/Ag/Eu/hydroxyapatite composites produced by wet chemical precipitation. *Acta Physica Polonica A* 2017;131:392-6.
- Ris7. Pelin G, Pelin CE, Ștefan A, Dincă I, Andronescu E, Ficai A, et al. Mechanical and tribological properties of nanofilled phenolic-matrix laminated composites. *Mater Tehnol* 2017;51:569-75.
- Ris8. Sava OR, Sava DF, Radulescu M, Albu MG, Ficai D, Veloz-Castillo MF, et al. Trends in materials science for ligament reconstruction. *Current Stem Cell Research and Therapy* 2017;12:145-54.
- Ris9. Radulescu M, Popescu S, Ficai D, Sonmez M, Oprea O, et al. Advances in drug delivery systems, from 0 to 3D superstructures. *Current Drug Targets*. 2016;17 (16).
- Ris10. Yipel M, Ghica MV, Kaya MGA, Spoiala A, Radulescu M, Ficai D, et al. Multifunctional Materials for Cancer Therapy: From Antitumoral Agents to Innovative Administration. *Current Organic Chemistry* 2016;20:2934-48.
- Ris11. Teodor ED, Gatea F, **Ficai A**, Radu GL. Functionalized magnetic nanostructures for anticancer therapy. *Current Drug Targets*. 2016;17 (16).
- Ris12. Popescu S, Ardelean IL, Gudovan D, Radulescu M, Ficai D, **Ficai A**, et al. Multifunctional materials such as MCM-41/Fe₃O₄/folic acid as drug delivery system. *Rom J Morphol Embryo* 2016;57:483-9.
- Ris13. Pelin G, Andronescu E, Pelin CE, 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;46:444-52.
- Ris14. Pelin CE, Pelin G, Stefan A, Andronescu E, Dinca I, **Ficai A**, et al. Mechanical Properties of Polyamide/Carbon-Fiber-Fabric Composites. *Mater Tehnol* 2016;50:723-8.
- Ris15. Colie M, Mihaiescu D, Surdu A, **Ficai A**, Istrati D, Andronescu E. Synthesis of YBa₂Cu₃O₇-delta by a modified autocombustion method. *Revista Romana De Materiale-Romanian Journal of Materials* 2016;46:369-74.
- Ris16. Colie M, Mihaiescu D, Surdu A, Trusca R, Vasile B, et al. High temperature superconducting materials based on Graphene / YBCO nanocomposite. *Materials Today: Proceedings*. 8 ed: Elsevier Ltd.; 2016. p. 2628-34.
- Ris17. Sonmez M, Verisan C, Voicu G, Ficai D, **Ficai A**, Oprea AE, et al. Extended release of vitamins from magnetite loaded polyanionic polymeric beads. *Int J Pharmaceut.* 2016;510:457-64
- Ris18. Pica A, Guran C, Ficai D, **Ficai A**, Dumitru F. Acrylic polymer influence on the structure and morphology of AgNPs obtained by chemical method for antimicrobial applications. *J Coat Technol Res*. 2016;13:53-61.
- Ris19. Pica A, Ficai D, **Ficai A**, Guran C, Dumitru F, Pica M. Studies on morphological and structural stability of some antimicrobial film-forming materials, in time. *Journal of Optoelectronics and Advanced Materials*. 2016;18:179-84.
- Ris20. Pica A, **Ficai A**. A New Generation of Antibacterial Film Forming Materials. *Revista De Chimie*. 2016;67:34-7.
- Ris21. Pelin G, Pelin CE, Stefan A, Dinca I, **Ficai A**, Andronescu E, et al. Influence of nanometric silicon carbide on phenolic resin composites properties. *Bulletin of Materials Science*. 2016;39:769-75.
- Ris22. Paunica-Panea G, **Ficai A**, Marin MM, Marin S, Albu MG, Constantin VD, et al. New Collagen-Dextran-Zinc Oxide Composites for Wound Dressing. *Journal of Nanomaterials*. 2016.
- Ris23. Mihaiescu DE, Gudovan D, Traistaru V, Ionescu P, Fudulu A, Voicu G, et al. Synthesis of silver secondary shell magnetic nanoparticles. *Revue Roumaine De Chimie*. 2016;61:105-+.
- Ris24. Komur B, Lohse T, Can HM, Khalilova G, Gecimli ZN, Aydogdu MO, et al. Fabrication of naturel pumice/hydroxyapatite composite for biomedical engineering. *Biomedical Engineering Online*. 2016;15.
- Ris25. Ilie A, Ghitulica C, Andronescu E, Cucuruz A, **Ficai A**. New composite materials based on alginate and hydroxyapatite as potential carriers for ascorbic acid. *Int J Pharmaceut.* 2016;510:501-7.
- Ris26. Cucuruz AT, 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. *Int J Pharmaceut.* 2016;510:516-23
- Ris27. Ban CE, Stefan A, Dinca I, Pelin G, **Ficai A**, Andronescu E, et al. Multi-Walled Carbon Nanotubes Effect in Polypropylene Nanocomposites. *Mater Tehnol.* 2016;50:11-6.
- Ris28. 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 (2): 165-76.
- Ris29. Sahin YM, Gunduz O, **Ficai A**, Ekren N, Tuna A, et al. Can European sea bass (*Dicentrarchus labrax*) scale be a good candidate for nano-bioceramics production? In: Ana ID, Triyana K, editors. 27th Symposium and Annual Meeting of the International Society for Ceramics in Medicine, 2015: Trans Tech Publications Ltd; 2016. p. 60-5.
- Ris30. Unsoy G, Gunduz U, Oprea O, Ficai D, Sonmez M, Radulescu M, et al. Magnetite: From Synthesis to Applications. *Current Topics in Medicinal Chemistry.* 2015;15:1622-40.
- Ris31. Sonmez M, Gudovan D, Trusca R, **Ficai A**, Ficai D, Andronescu E, et al. Synthesis, Characterization and Testing of Mcm-41/Tio2 Catalyst for Organic Dye Degradation. *Digest Journal of Nanomaterials and Biostructures.* 2015;10:1329-41.
- Ris32. Sonmez M, Georgescu M, Valsan M, Radulescu M, Ficai D, Voicu G, et al. Design and characterization of polypropylene matrix/glass fibers composite materials. *Journal of Applied Polymer Science.* 2015;132.
- Ris33. Sonmez M, Georgescu M, Alexandrescu L, Gurau D, **Ficai A**, Ficai D, et al. Synthesis and Applications of Fe3O4/SiO2 Core-Shell Materials. *Current Pharmaceutical Design.* 2015;21:5324-35.
- Ris34. Rusu LC, Nedelcu IA, Albu MG, Sonmez M, Voicu G, Radulescu M, et al. Tetracycline Loaded Collagen/Hydroxyapatite Composite Materials for Biomedical Applications. *Journal of Nanomaterials.* 2015.
- Ris35. Radulescu M, Ficai D, Oprea O, **Ficai A**, Andronescu E, Holban AM. Antimicrobial Chitosan based Formulations with Impact on Different Biomedical Applications. *Current Pharmaceutical Biotechnology.* 2015;16:128-36.
- Ris36. Pica A, Pica M, Ficai D, **Ficai A**, Dumitru F. Incorporation of Silver Nanoparticles in Film Forming Materials for Long Term Antimicrobial Action. *Current Nanoscience.* 2015;11:760-9.
- Ris37. Pica A, **Ficai A**, Ficai D, Guran C, Dumitru F. Polymeric films and coatings for antimicrobial applications. *UPB Scientific Bulletin, Series B: Chemistry and Materials Science.* 2015;77:115-30.
- Ris38. Pelin CE, Stefan A, Dinca I, **Ficai A**, Pelin G, Andronescu E, et al. Polyamide 6/carbon fiber laminated composites. *Journal of Optoelectronics and Advanced Materials.* 2015;17:750-6.
- Ris39. Patrascu JM, Nedelcu IA, Sonmez M, Ficai D, **Ficai A**, Vasile BS, et al. Composite Scaffolds Based on Silver Nanoparticles for Biomedical Applications. *Journal of Nanomaterials.* 2015.
- Ris40. Oktar FN, Yetmez M, Ficai D, **Ficai A**, Dumitru F, Pica A. Molecular Mechanism and Targets of the Antimicrobial Activity of Metal Nanoparticles. *Current Topics in Medicinal Chemistry.* 2015;15:1583-8.
- Ris41. Nitipir C, Albu MG, Voicu G, **Ficai A**, Barbu MA, Popa LG, et al. Collagen - vinblastine Delivery Systems as a New Treatment for Kaposi's Sarcoma. *Revista De Chimie.* 2015;66:1169-72.
- Ris42. Nedelcu IA, **Ficai A**, Ficai D, Voicu G, Albu MG, 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.
- Ris43. Iordache F, Grumezescu V, Grumezescu AM, Curuțiu C, Dițu LM, Socol G, et al. Gamma-cyclodextrin/usnic acid thin film fabricated by MAPLE for improving the resistance of medical surfaces to *Staphylococcus aureus* colonization. *Applied Surface Science.* 2015;336:407-12.
- Ris44. Gunduz O, Yetmez M, Sonmez M, Georgescu M, Alexandrescu L, **Ficai A**, et al. Mesoporous Materials Used in Medicine and Environmental Applications. *Current Topics in Medicinal Chemistry.* 2015;15:1501-15.
- Ris45. Grumezescu V, Andronescu E, Holban AM, Socol G, Grumezescu AM, **Ficai A**, et al. Fabrication and characterization of functionalized surfaces with 3-amino

- propyltrimethoxysilane films for anti-infective therapy applications. *Applied Surface Science*. 2015;336:401–6.
- Ris46. Grumezescu AM, Cristescu R, Chifiriuc MC, Dorcioman G, Socol G, Mihailescu IN, et al. Fabrication of magnetite-based core-shell coated nanoparticles with antibacterial properties. *Biofabrication*. 2015;7 Art No: 015014 Impact Factor₂₀₁₃ = 4.302.
- Ris47. Grosu E, **Ficai A**, Rapa M, Zaharia C, Chifiriuc C, Ulinici S, et al. Plastified polyvinyl chloride for antimicrobial medical device applications. *Journal of Optoelectronics and Advanced Materials*. 2015;17:1139-45.
- Ris48. Ghica MV, **Ficai A**, Marin S, Marin M, Ene AM, Patrascu JM. Collagen/Bioactive Glass Ceramic/Doxycycline Composites for Bone Defects. *Revista Romana De Materiale-Romanian Journal of Materials*. 2015;45:307-14.
- Ris49. Ficai D, Sonmez M, Albu MG, Mihaiescu DE, **Ficai A**, Bleotu C. Antitumoral materials with regenerative function obtained using a layer-by-layer technique. *Drug Des Dev Ther*. 2015;9:1269-79.
- Ris50. Ficai D, **Ficai A**, Dinu E, Oprea O, Sonmez M, Keler MK, et al. Magnetic Core Shell Structures: From 0D to 1D Assembling. *Current Pharmaceutical Design*. 2015;21:5301-11.
- Ris51. **Ficai A**. Engineered Magnetic Core@Shell Structures. *Current Pharmaceutical Design*. 2015;21:5299-300.
- Ris52. Denis CV, Carap A, Socea B, **Ficai A**, Albu MG, Paunica-Panea G. Influenta Plaselor Textile Sintetice Asupra Reconstructiei Chirurgicale a Defectelor Peretelui / Abdominal the Influence of Synthetic Material Meshes on the Surgical Repair of the Abdominal Wall Defects. *Revista Romana De Materiale-Romanian Journal of Materials*. 2015;45:290-7.
- Ris53. Bolocan A, Mihaiescu DE, Andronescu E, Voicu G, Grumezescu AM, **Ficai A**, et al. Biocompatible hydrodispersible magnetite nanoparticles used as antibiotic drug carriers. *Rom J Morphol Embryo*. 2015;56:365-70
- Ris54. 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
- Ris55. 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)
- Ris56. 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)
- Ris57. 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)
- Ris58. 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)
- Ris59. 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)
- Ris60. 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)
- Ris61. 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)
- Ris62. Ruxandra Irina Iliescu, Ecaterina Andronescu, Cristina Daniela Ghitulica, Georgeta Voicu, **Anton Ficai**, Mihai Hoteteu; 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)
- Ris63. Fikai, D., Oprea, O., **Fikai, A.**, Holban A. M.; Metal oxide nanoparticles: Potential uses in biomedical applications; Current Proteomics. 2014: 11(2):139-149 (ISI₂₀₁₃ factor 0.44);
- Ris64. Vaja F, Oprea O, Fikai D, **Fikai 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);
- Ris65. Sonmez M, Fikai D, **Fikai 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 (ISI₂₀₁₃= 0.538);
- Ris66. Mihaiescu DE, Tamas D, Andronescu E, **Fikai A**. Controlled Release Study of Aztreonam from MCM-41 Mesoporous Material. Digest Journal of Nanomaterials and Biostructures. 2014;9:379-83 (ISI₂₀₁₃= 1.123);
- Ris67. Vasile BS, Oprea O, Voicu G, **Fikai A**, Andronescu E, Teodorescu A, et al. 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 (ISI₂₀₁₃=3.785);
- Ris68. Angela SPOIALA; Ioan-Avram NEDELCU, Denisa FICAI, **Anton FICAI**, Ecaterina ANDRONESCU; Zinc based antibacterial formulations for cosmetic applications; Digest Journal of Nanomaterials and Biostructures: 2013;8(3),1235-1242 (ISSN 1842-3582; ISI₂₀₁₀ 1.2);
- Ris69. Alina Maria Holban, Alexandru Mihai Grumezescu, **Anton Fikai**, Carmen Mariana Chifiriuc, Veronica Lazar, Radu Radulescu; Fe₃O₄@C₁₈-carvone to prevent Candida tropicalis biofilm development. Romanian Journal of Materials, 2013;43(3):300-305
- Ris70. Voicu G, Geanaliu RE, Ghitulica CD, **Fikai A**, Grumezescu AM, Bleotu C. Synthesis, characterization and bioevaluation of irinotecan-collagen hybrid materials for biomedical applications as drug delivery systems in tumoral treatments. Central European Journal of Chemistry 2013;11(12):2134-2143
- Ris71. Ion Anghel, Alexandru Mihai Grumezescu, Alina Maria Holban, **Anton Fikai**, Alina Georgiana Anghel, Mariana Carmen Chifiriuc; Biohybrid Nanostructured Iron Oxide Nanoparticles and *Satureja hortensis* to Prevent Fungal Biofilm Development; International Journal of Molecular Sciences; 2013;14(9): 18110-18123
- Ris72. AM. GRUMEZESCU, E. ANDRONESCU, AM. HOLBAN, **A. FICAI**, D. FICAI, G. VOICU, V. GRUMEZESCU, PC. BALAURE, CM. CHIFIRIUC; Water dispersible cross-linked magnetic chitosan beads for increasing the antimicrobial efficiency of different therapeutic agents; International Journal of Pharmaceutics; 2013;454(1):233-240 (ISI₂₀₁₂= 3.039)
- Ris73. E. GROSU, **A. FICAI**, M. RAPA, G. VLAD, L. JECU; Selecting medical grade polymers and testing for achieving antibacterial devices tubular prosthetic; Journal of Optoelectronics and Advanced Materials 2013;15(7-8):905-910
- Ris74. AM. GRUMEZESCU, AI. COTAR, E. ANDRONESCU, **A. FICAI**, CD. GHITULICA, V. GRUMEZESCU, BS. VASILE, MC. CHIFIRIUC; In vitro activity of the new water-dispersible Fe₃O₄@usnic acid nanostructure against planktonic and sessile bacterial cells; Journal of Nanoparticle Research; 2013;5:1766-1776 (ISI₂₀₁₂= 2.175)
- Ris75. M.C. CHIFIRIUC, A.M. GRUMEZESCU, E. ANDRONESCU, **A. FICAI**, A.I. COTAR, V. GRUMEZESCU, E. BEZIRTZOGLU, V. LAZAR, R. RADULESCU; Water dispersible magnetite nanoparticles influence the efficacy of antibiotics against planktonic and biofilm embedded *Enterococcus faecalis* cells; Anaerobe; 2013: 22: 14–19 (ISI₂₀₁₂= 2.022)
- Ris76. AM. GRUMEZESCU, CD. GHITULICA, G. VOICU, K-S. HUANG, C-H. YANG, **A. FICAI**, BS. VASILE, V. GRUMEZESCU, C. BLEOTU, MC CHIFIRIUC; New silica nanostructure for the improved delivery of topical antibiotics used in the treatment of staphylococcal cutaneous infections; International Journal of Pharmaceutics; 2013;463(2):170-176 (ISI₂₀₁₂= 3.039)
- Ris77. Vaja Dumitru, F., Oprea, O., Fikai, D., **Fikai, A.**, Guran, C., Synthesis of CeO₂ nanoparticles on the mesoporous silica support via nanocasting, Digest Journal of Nanomaterials and Biostructures, 9(1), pp. 187-195
- Ris78. MG. FLOREA, I-A. NEDELCU, C. UNGUREANU, **A. FICAI**, D. FICAI, C. GURAN, E. ANDRONESCU; Alginate and sulfanilamide based DDS with antibacterial activity;

- International Journal of Polymeric Materials and Polymeric Biomaterials, 2013:63(2):92-96 (ISSN: 0091-4037; ISI₂₀₁₂=1.204)
- Ris79. Grumezescu, A.M., Andronescu, E., **Ficai, A.**, Voicu, G., Cocos, O., Chifiriuc, M.C.; Structură biohibridă bazată pe ulei esențial de Eugenia caryophyllata și SiO₂ pentru potențarea activității antibioticelor/[Eugenia caryophyllata essential oil-SiO₂ biohybrid structure for the potentiation of antibiotics' activity]; *Revista Romana de Materiale/Romanian Journal of Materials*; 2013: 43(2): 160-166
- Ris80. Alexandru Mihai Grumezescu, Ecaterina Andronescu, Madalina Georgiana Albu, **Anton Ficai**, Coralia Bleotu, Denisa Dragu and Veronica Lazar; Wound Dressing Based Collagen Biomaterials Containing Usnic Acid as Quorum Sensing Inhibitor Agent: Synthesis, Characterization and Bioevaluation; *Current Organic Chemistry*, 2013, 17, 125-131
- Ris81. Grumezescu, AM; Andronescu, E; **Ficai, A**; Grumezescu, V; Bleotu, C; Saviuc, C; Mihaiescu, DE; Chifiriuc, CM; Biocompatible Magnetic Hollow Silica Microspheres for Drug Delivery; *Current Organic Chemistry*; 2013:17(10): 1029-1033;
- Ris82. Voicu, G; Andronescu, E; Grumezescu, AM; Huang, KS; **Ficai, A**; Yang, CH; Bleotu, C; Chifiriuc, MC; Antitumor Activity of Magnetite Nanoparticles: Influence of Hydrocarbonated Chain of Saturated Aliphatic Monocarboxylic Acids; *Current Organic Chemistry*: 2013:17(8):831-840
- Ris83. Dan Eduard Mihaiescu, Alexandru Mihai Grumezescu, Ecaterina Andronescu, Georgeta Voicu, **Anton Ficai**, Otilia Ruxandra Vasile, Coralia Bleotu and Crina Saviuc; Prosthetic Devices with Functionalized Anti-biofilm Surface Based NanoAg@C18; *Current Organic Chemistry*, 2013, 17, 105-112 (ISI₂₀₁₂= 3.039)
- Ris84. Voicu, G; Andronescu, E; Grumezescu, AM; Huang, KS; **Ficai, A**; Yang, CH; Bleotu, C; Chifiriuc, MC; 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(1-2): 63-69 (ISI₂₀₁₂= 3.458)
- Ris85. Ecaterina ANDRONESCU, **Anton FICAI**, Madalina Georgiana ALBU, Valentina MITRAN, Maria SONMEZ, Denisa FICAI, Raluca ION, Anisoara CIMPEAN; Collagen-hydroxyapatite/cisplatin drug delivery systems for locoregional treatment of bone cancer; *Technology in Cancer Research and Treatment*; 2013:12(4):275-84 (ISSN: 1533-0346; **ISI₂₀₁₁=1.692**);
- Ris86. Denisa FICAI, **Anton FICAI**, Roxana TRUSCA, Bogdan Stefan VASILE, Georgeta VOICU, Cornelia GURAN, Ecaterina ANDRONESCU; Synthesis and characterization of magnetite-polysulfone micro- and nanobeads with improved chemical stability in acidic media; *Current Nanoscience*; 2013:9(2): 271-277 (ISSN: 1573-4137; **ISI₂₀₁₁=1.776**);
- Ris87. Cornelia GURAN, Alexandra PICA, Denisa FICAI, **Anton FICAI**, Cezar COMANESCU; Antimicrobial coatings-obtaining and characterization; *Bulletin of Materials Science*; 2013:36(2):183-188 (ISSN 0250-4707; ISI₂₀₁₁=**0.880**);
- Ris88. **Anton FICAI**; Madalina Georgiana ALBU; Mihaela BIRSAN; Maria SONMEZ; Denisa FICAI; Viorica TRANDAFIR; Ecaterina ANDRONESCU; Collagen hydrolysate based collagen/hydroxyapatite composite materials; *Journal of Molecular Structure*;2013:1037:154-159, (ISSN:0022-2860; **ISI₂₀₁₁=1.634**)
- Ris89. Florica. VAJA (DUMITRU), Denisa FICAI, **Anton FICAI**, Ovidiu OPREA, Cornelia GURAN; Multifunctional advanced coatings based on ZnO/M obtained by nanocasting method; *Journal of Optoelectronics and Advanced Materials* 2013:15(1- 2):107-113
- Ris90. Balaure, PC; Andronescu, E; Grumezescu, AM; **Ficai, A**; Huang, KS; Yang, CH; Chifiriuc, CM; Lin, YS; Fabrication, characterization and in vitro profile based interaction with eukaryotic and prokaryotic cells of alginate-chitosan-silica biocomposite; *International Journal of Pharmaceutics*; 2013:441(1-2): 555-561
- Ris91. COMANESCU, C.; FICAI, D.; **FICAI, A.**; OPREA, O.; LACATUSU, I.; GURAN, C.; Lipase immobilisation on new silica-based supports; *Journal of Environmental Protection and Ecology*; 2012:13(4):2302-2309 (ISSN 1311-5065)
- Ris92. Ion ANGHEL, Alina Maria HOLBAN, Alexandru Mihai GRUMEZESCU, Ecaterina ANDRONESCU, **Anton FICAI**, Alina Georgiana ANGHEL, Maria MAGANU, Veronica LAZĂR and Mariana Carmen CHIFIRIUC; Modified wound dressing with phytonanostructured coating to prevent staphylococcal and pseudomonal biofilm development; *Nanoscale Research Letters*: 2012;7:690-698; (ISSN 1556-276X; **ISI₂₀₁₁=2.726**);

- Ris93. A.M. GRUMEZESCU, **Anton FICAI**, D. FICAI, G. Predan, M.C. CHIFIRIUC; Polymeric magnetic silica microspheres as a drug loader for antimicrobial delivery substances; Digest Journal of Nanomaterials and Biostructures: 2012;**7**(4), 1891-1896 (ISSN 1842-3582; **ISI₂₀₁₀ 1.2**);
- Ris94. Alexandra PICA, Cornelia GURAN, Ecaterina ANDRONESCU, Ovidiu OPREA, Denisa FICAI, **Anton FICAI**; Antimicrobial performances of some film forming materials based on silver nanoparticles; Journal of Optoelectronics and Advanced Materials, 2012:**14**(9-10):863 – 868;
- Ris95. Denisa Ficai, Ecaterina Andronescu, **Anton Ficai**, Georgeta Voicu, Bogdan Vasile, Valentin IONITA, Cornelia Guran; Synthesis and characterization of mesoporous magnetite based nanoparticles; Current Nanoscience; 2012:**8**(6): 875-879; (ISSN: 1573-4137; **ISI₂₀₁₁=1.776**);
- Ris96. Alexandra PICA, Cornelia GURAN, Ecaterina ANDRONESCU, Ovidiu OPREA, Denisa FICAI, **Anton FICAI**; Antimicrobial performances of some film forming materials based on silver nanoparticles; Journal of Optoelectronics and Advanced Materials, 2012:**14**(9-10):863 – 868;
- Ris97. Ion Anghel, Alexandru Mihai Grumezescu, Ecaterina Andronescu, Alina Georgiana Anghel, **Anton Ficai**, Crina Saviuc, Valentina Grumezescu, Bogdan Stefan Vasile, Mariana Carmen Chifiriuc; Magnetite nanoparticles for functionalized textile dressing to prevent fungal biofilms development; Nanoscale Research Letters: 2012;**7**(1):501-506; (ISSN 1556-276X; **ISI₂₀₁₁=2.726**);
- Ris98. Alexandru Mihai GRUMEZESCU, Ecaterina ANDRONESCU, **Anton FICAI**, Coralia BLEOTU, Dan Eduard MIHAIESCU, Mariana Carmen CHIFIRIUC; 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 (ISSN 0378-5173; **ISI₂₀₁₁=3.350**);
- Ris99. **Anton FICAI**, Ecaterina ANDRONESCU, Denisa FICAI, Maria SONMEZ, Madalina Georgiana ALBU, Georgeta VOICU; Mimicking the morphology of long bone, Central European Journal Of Chemistry; 2012:**10**(6):1949-1953 (ISSN 1895-1066; **ISI₂₀₁₁=1.073**);
- Ris100. Mădălina Georgiana FLOREA, **Anton FICAI**, Ovidiu OPREA, Cornelia GURAN, Denisa FICAI, Liv PALL, Ecaterina ANDRONESCU; Drug delivery systems based on silica with prolonged delivery of folic acid; Revista Română de Materiale / Romanian Journal of Materials 2012, **42**(3), 313–316 (ISSN 1583-3186; **ISI₂₀₁₁ 0.378**);
- Ris101. Mihail SCURTU, Ecaterina ANDRONESCU, Cornelia GURAN, Maria SONMEZ, Alexandru GRUMEZESCU, Liv PALL, **Anton FICAI**, Denisa FICAI; Colloidal silica use as dyes removing system; Revista de Chimie; 2012, **63**(10) 1013-1015 (ISSN 0034-7752; **ISI₂₀₁₁=0.693**);
- Ris102. Maria SONMEZ, Denisa FICAI, Ana STAN, Coralia BLEOTU, Lilia MATEI, **Anton FICAI**, Ecaterina ANDRONESCU; Synthesis and characterization of hybrid PVA/Al₂O₃ thin film; Materials Letters 2012:**74C**:132-136 (ISSN 0167-577X; **ISI₂₀₁₀ 2.117**);
- Ris103. Irina Titorencu, Madalina Georgiana Albu, **Ficai Anton**, Adriana Georgescu, Victor V. Jinga; Collagen-dexamethasone and collagen-D₃ scaffolds for bone tissue engineering; Molecular Crystals and Liquid Crystals:2012:**555**:1,208-217 (ISSN 1542-1406; **ISI₂₀₁₀ = 0.580**);
- Ris104. M. DUMITRAȘCU, V. MELTZER, E. ȘIMA, M. VÎRGOLICI, M.G.ALBU, **A. FICAI**, V. MOISE, R. MINEA, C. VANCEA, A.SCĂRIȘOREANU, F. SCARLAT; Characterization of electron beam irradiated collagen/ polyvinylpyrrolidone (PVP) and collagen-dextran (DEX) blends; Digest Journal of Nanomaterials and Biostructures 2011: **6**(4): 1793-1803 (ISSN 1842-3582; **ISI₂₀₁₀ 2.078**);
- Ris105. **Anton FICAI**, Denisa FICAI, Ecaterina ANDRONESCU, Maria MAGANU, Georgeta VOICU, Maria SONMEZ; Biomimetic mineralization of the human nasal septum cartilage; Digest Journal of Nanomaterials and Biostructures; 2011:**6**(3):1377-1383 (ISSN 1842-3582; **ISI₂₀₁₀ 2.078**)
- Ris106. Denisa Ficai, **Anton Ficai**, Mihaela Alexie, Maria Maganu, Cornelia Guran, Ecaterina Andronescu; Amino-functionalized Fe₃O₄/SiO₂/APTMS nanoparticles with core-shell structure as potential materials for heavy metals removal; Revista de Chimie, 2011:**62**(6):622-625 (ISSN 0034-7752; **ISI₂₀₁₀ 0.552**);

- Ris107. Denisa FICAI, **Anton FICAI**, Bogdan Stefan VASILE, Maria FICAI, Ovidiu OPREA, Cornelia GURAN, Ecaterina ANDRONESCU; Synthesis of rod-like magnetite by using low magnetic field; Digest Journal of Nanomaterials and Biostructures; 2011:6(3):943-951 (ISSN 1842-3582; **ISI₂₀₁₀ 2.078**);
- Ris108. Ruxandra Irina Ilescu, Ecaterina Andronescu, Georgeta Voicu, **Anton Ficai**, Cristina Ileana Covaliu; Hybrid materials based on montmorillonite and citostatic drugs: Preparation and characterization; Applied Clay Science; 2011:52(1-2): 62-68 (ISSN 0169-1317; **ISI₂₀₀₉ 2.784**);
- Ris109. I. Titorencu, M.G. Albu, M.V. Ghica, L. Popa, **A. Ficai**, V. Jinga, Collagen-doxycycline matrices used in tissue engineering; Farmacia; 2011,59(6),794-802 (ISSN 1842-3582; **ISI₂₀₀₉ 0.144**);
- Ris110. Ecaterina ANDRONESCU, Georgeta VOICU, Maria FICAI, Ioana Anita MOHORA, Roxana Trusca, **Anton FICAI**; Collagen/hydroxyapatite composite materials with desired ceramic properties; Journal of Electron Microscopy; 2011:60(3): 253-259 (ISSN 0022-0744; **ISI₂₀₀₉ 1.047**);
- Ris111. Andreia ILIE, Ecaterina ANDRONESCU, Denisa FICAI Georgeta VOICU, Maria FICAI, Maria MAGANU, **Anton FICAI**; New approaches in LAYER BY LAYER synthesis of collagen/hydroxyapatite composite materials; Central European Journal of Chemistry; 2011:9(2):283-289 (ISSN 1895-1066; **ISI₂₀₁₀ 0.991**);
- Ris112. Maria FICAI, Ioan-Avram NEDELCU, Denisa FICAI, Bogdan Stefan VASILE, **Anton FICAI**, Ecaterina ANDRONESCU; The influence of ultrasonication on the formation of COLL/HA composite materials; Rev. Mat. Plastice; 2011:47(1):23-26 (**ISSN 1542-1406**);
- Ris113. Maria FICAI, Ecaterina ANDRONESCU, Denisa FICAI, Georgeta VOICU, **Anton FICAI**; Synthesis and characterization of COLL-PVA/HA hybrid materials with stratified morphology; Colloids and Surfaces B: Biointerfaces; 2010:**81**(2): 614-619 (ISSN 0927-7765; **ISI₂₀₁₀ 2.303**);
- Ris114. M.G.ALBU, M.V. GHICA, **A. Ficai**, I. TITORENCU, L. POPA, The influence of freeze-drying proces on porosity and kinetics release of collagen-doxycycline matrices, Proceedings of the 3rd International Conference on Advanced Materials and Systems, Bucuresti, 2010, 181-186 (ISSN 2068-0783);
- Ris115. Maria FICAI, Ecaterina ANDRONESCU, Georgeta VOICU, Denisa FICAI, Madalina Georgiana ALBU, **Anton FICAI**; Mollusc shell/collagen composite as potential biomaterial for bone substitutes; Romanian Journal of Materials; 2010:40(4): 359-364 (ISSN 1583-3186; **ISI₂₀₀₉ 0.242**);
- Ris116. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU, Cristina GHITULICA, Bogdan Stefan VASILE, Denisa FICAI, Viorica TRANDAFIR; Self assembled collagen/hydroxyapatite composite materials; Chemical Engineering Journal, DOI: 10.1016/j.cej.2010.03.088: 2010;**160**(2):794-800 (ISSN: 1385-8947; **ISI₂₀₁₀=3.074**);
- Ris117. Ecaterina ANDRONESCU, Maria FICAI, Georgeta VOICU, Denisa MANZU, **Anton FICAI**; Synthesis and characterization of collagen / hydroxyapatite- magnetite composite material for bone cancer treatment; Journal of Materials Sciences-Materials in Medicine; DOI: 10.1007/s10856-010-4076-7; 2010:21(7): 2237-2242 (ISSN: 0957-4530; **ISI₂₀₁₀=2.325**);
- Ris118. Denisa MÂNZU, Florina DUMITRU, **Anton FICAI**, Anca RAZVAN, Cornelia GURAN; Organocyclophosphazenes/silica hybrid materials I. synthesis and characterization of siloxane monomers and of cyclophosphazene/SiO₂ composites; Materiale Plastice, 2010: 47(3): 292-298 (ISSN 1542-1406);
- Ris119. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU, Cristina GHITULICA, Denisa FICAI; The influence of collagen support and ionic species on the morphology of collagen/hydroxyapatite composite materials; Materials Characterization 2010:**61**(4):402-407 (ISSN 1044-5803; DOI: 10.1016/j.matchar.2010.01.003) (**ISI₂₀₁₀ 1.496**);
- Ris120. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU, Madalina Georgiana ALBU, Andreia ILIE; Biomimetically synthesis of collagen/hydroxyapatite composite materials. Materiale Plastice 2010:**47**(2):205-208 (**ISSN 1542-1406**);
- Ris121. Denisa MANZU, Liliana PASARE, Daniela RATA, Bujor Gabriel ALBU, **Anton FICAI**, Cornelia GURAN; Synthesis and characterization of the new hybrid composite membranes based on the organo-substituted phosphazene and SiO₂ network;

- Romanian Journal of Materials; 2010:**40**(1),337-345 (**ISSN: 1583-3186; ISI₂₀₀₉ 0.242**);
- Ris122. Denisa MANZU, **Anton FICAI**, Georgeta VOICU Bogdan Stefan VASILE, Cornelia GURAN, Ecaterina ANDRONESCU; Polysulfone based membranes with desired pores characteristics; Materiale Plastice 2010:**47**(1):24-27 (**ISSN 1542-1406**);
- Ris123. **Anton FICAI**, Ecaterina ANDRONESCU, Viorica TRANDAFIR, Cristina GHITULICA, Georgeta VOICU. Collagen/hydroxyapatite composite obtained by electric field orientation. Materials Letters 2010;**64**(4);541-544 (ISSN 0167-577X; **ISI₂₀₁₀2.117**);
- Ris124. Nicoleta Doriană STANCIU, Victor Valentin JERCA, Dumitru Mircea VULUGA, Paul STANESCU, **Anton FICAI**, Mircea TEODORESCU; Synthesis and characterization of composites from layered silicates and homo- and copolymers of 2-hydroxyethyl methacrylate and p-chloromethyl styrene obtained by in situ radical (co)polymerization; Molecular Crystals and Liquid Crystals, 2010; **521**(1):204-213 (ISSN 1542-1406; **ISI₂₀₀₉ 0.451**);
- Ris125. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU, Denisa MANZU, Maria FICAI; Layer by layer deposition of hydroxyapatite onto the collagen matrix; Materials Science and Engineering C 2009:**29**(7):2217–2220 (ISSN 0928-4931; **ISI₂₀₀₉ 1.816**);
- Ris126. **Anton FICAI**, Ecaterina ANDRONESCU, Cristina GHITULICA, Georgeta VOICU, Viorica TRANDAFIR, Denisa MANZU, Maria FICAI, St. PALL; Colagen/Hydroxyapatite Interactions in Composite Biomaterials; Rev. Mat. Plastice; 2009:46(1):11-15, (**ISSN 1542-1406**);
- Ris127. Stelian LUPU, **Anton FICAI**; Layer by layer deposition of redox polymers/ enzymes assemblies onto electrodes surface for nitrate electrochemical sensing; Revue Roumaine de Chimie, 2007, **52**(12),1137-1143 (ISSN 0035-3930; **ISI 0,262**).
- Ris128. Florica Vaja (Dumitru), Cornelia Guran, Denisa Fikai, **Anton Fikai**, Ovidiu Oprea; Cytotoxic effects of ZnO nanoparticles incorporated in mesoporous silica; U.P.B. Sci. Bull., Series B, Vol. 76, Iss. 3, 55-66, 2013, (ISSN 1454-2331)
- Ris129. Alexandra Pică, Cornelia Guran, Denisa Fikai, **Anton Fikai**, Ovidiu Oprea, Decorative antimicrobial coating materials based on silver nanoparticles, U.P.B. Sci. Bull., Series B, Vol. 75, Iss. 1, 35 -42, 2013, (ISSN 1454-2331)
- Ris130. Anton Fikai, Maria Sonmez, Denisa Fikai, Ecaterina Andronescu; Synthesis Of Collagen/Hydroxyapatite Composite Materials With Oriented Microstructure Induced By The Interaction Of The Flowing Mineralised Collagen Gel With The Support; ChemXpress, 2014:3(3), 107-110
- Ris131. Cristina BAN, Adriana STEFAN, Ion DINCA, George PELIN, Anton FICAI, Ecaterina ANDRONESCU, Ovidiu OPREA; Effect of nanoclay and carbon nanotubes addition in polypropylene nanocomposites; International Conference of Aerospace Sciences "AEROSPATIAL 2014" Bucharest, 18 - 19 September, 2014
- Ris132. Ani Ioana Cotar, Alexandru Mihai Grumezescu, Ecaterina Andronescu, Georgeta Voicu, **Anton Fikai**, Keng-Liang Ou, Keng-Shiang Huang, Mariana Carmen Chifiriuc; Nanotechnological solution for improving the antibiotic efficiency against biofilms developed by gram-negative bacterial strains; Letters in Applied NanoBioScience, 2013:**2**(1),97-104 (ISSN 2284-6808);
- Ris133. Alexandra PICA, Cornelia GURAN, Denisa FICAI, Anton FICAI, Oprea OVIDIU; Decorative antimicrobial coating materials based on silver nanoparticles; UPB Bull. Sci.B-Chemistry 2013:75(1),35-42 (ISSN 1454-2331);
- Ris134. Alexandru Mihai GRUMEZESCU, Alina Maria HOLBAN, Ecaterina ANDRONESCU, **Anton FICAI**, Coralia BLEOTU, Mariana Carmen CHIFIRIUC; Water dispersible metal oxide nanobiocomposite as a potentiator of the antimicrobial activity of kanamycin; Letters in Applied NanoBioScience, 2012:**1**(4),77-82 (ISSN 2284-6808);
- Ris135. Alexandru Mihai Grumezescu, Alina Maria Holban, Ecaterina Andronescu, Maria Tomoiaga, **Anton Fikai**, Coralia Bleotu, Mariana Carmen Chifiriuc; Microbiological applications of a new water dispersible magnetic nanobiocomposite; Letters in Applied NanoBioScience, 2012:**1**(4),83-90 (ISSN 2284-6808);
- Ris136. Alexandru Mihai Grumezescu, Ecaterina Andronescu, **Anton Fikai**, Denisa Fikai, Keng-Shiang Huang, Irina Gheorghe, Carmen Mariana Chifiriuc; Water soluble magnetic biocomposite with potential applications for the antimicrobial therapy; Biointerface

- Research in Applied Chemistry, 2012:**2**(6),469-475 (ISSN 2069-5837);
- Ris137. Alexandru Mihai Grumezescu, Ecaterina Andronescu, **Anton Ficai**, Coralia Bleotu, Mariana Carmen Chifiriuc: Chitin based biomaterial for antimicrobial therapy: fabrication, characterization and *in vitro* profile based interaction with eukaryotic and prokaryotic cells; Biointerface Research in Applied Chemistry, 2012:**2**(5), 438-445 (ISSN 2069-5837);
- Ris138. Ecaterina Andronescu, Alexandru Mihai Grumezescu, **Anton Ficai**, Irina Gheorghe, Mariana Chifiriuc, Dan Eduard Mihaiescu, Veronica Lazar, In vitro efficacy of antibiotic magnetic dextran microspheres complexes against *Staphylococcus aureus* and *Pseudomonas aeruginosa* strains, Biointerface Research in Applied Chemistry, 2012: **2**(3), 332-338 (ISSN 2069-5837);
- Ris139. Alexandru Mihai Grumezescu, Ecaterina Andronescu, **Anton Ficai**, Dan Eduard Mihaiescu, Bogdan Stefan Vasile, Coralia Bleotu, Syntehsis, Characterization and biological evaluation of Fe₃O₄/C₁₂ core/shell nanosystem, Letters in Applied NanoBioScience, 2012:**1**(2),31-35(ISSN 2284-6808);
- Ris140. Dan Eduard Mihaiescu, Mariana Horja, Irina Gheorghe, **Anton Ficai**, Alexandru Mihai Grumezescu, Coralia Bleotu, Carmen Mariana Chifiriuc, Water soluble magnetite nanoparticles for antimicrobial drugs delivery, Letters in Applied NanoBioScience, 2012: **1**(2), 45-49 (ISSN 2284-6808);
- Ris141. Ruxandra Irina ILIESCU, Ecaterina ANDRONESCU, Cristina Daniela, GHIȚULIȚĂ, Daniela BERGER, **Anton FICAI**; Montmorillonite-alginate nanocomposite beads as drug carrier for oral administration of carboplatin–preparation and characterization; UPB Bull. Sci.B-Chemistry 2011:73(3),2-16 (ISSN 1454-2331);
- Ris142. Maria FICAI, Ecaterina ANDRONESCU, **Anton FICAI**, Georgeta VOICU, Bogdan Stefan VASILE; Poly Bis-GMA/HA based hybrid composite materials; UPB Bull Sci. 2011:73(1), 75-84 (ISSN 1454-2331);
- Ris143. Alina Catrinel ION, Ion ION, Anton FICAI; Graphenes and some of their promising environmental application in the detection of environmental contaminants. Environmental Nano Technologies 2010;**1**:42-48;
- Ris144. Madalina Georgiana ALBU, **Anton FICAI**, Adriana LUNGU; Preparation and characterization of collagen matrices obtained at different freezing temperatures; Leather and Footwear Journal; 2010:10(3);11pg (ISSN 1583-4433);
- Ris145. **Anton FICAI**, Ecaterina ANDRONESCU, Georgeta VOICU, Stefan PALL; Methodology of *in vitro* characterization of human uroliths; UPB Bull Sci. 2010:**72**(1):47-56 (ISSN 1454-2331);
- Ris146. Alina Catrinel ION, Ion ION, Dragos STEFAN, **Anton FICAI**; Improving Mercury speciation in urine samples using potentiometric methods; Biomedical Engineering Conference, 2006, Part.I, pag 77–81.
- Ris147. **FICAI Anton**, TRANDAFIR Viorica, ANDRONESCU Ecaterina. Collagen/hydroxyapatite composite materials for bone tissue repairing. Roumanian International Chemistry Conference on Chemical Engineering; Sinaia, Romania: Printech. 2007; p. S653-S655 (ISSN 2068-0783).
- Ris148. Claude MATASA, **Anton FICAI**, „Acrilics-solvent: A promising interaction”, *The orthodontic materials; INSIDER*, 2005, **17**(4);
- Ris149. Florina Dumitru, Mihaela Alexie, Liliana Pasăre, Daniela Rață, Alina Nicolescu, Calin Deleanu, Denisa Mânzu, **Anton Ficai**, Anca Răzvan, Cornelia Guran, New membranes with anion recognition fixed sites, Conference "Excellence research – a way to innovation", Brasov 27-29 iulie, 2008, Editura Tehnica (ISSN: 1844-7090) L245, 6 pg;
- Ris150. Ion Ion, Alina Catrinel Ion, Elena Ruse, **Anton FICAI**, "Simultaneous spectrophotometric determination of iron (II) and iron (III) in natural water", *Science and Technology of Environmental Protection*; 2005; **11**(2);
- Ris151. Alina Catrinel ION, Ion ION, Luminița BARBU, **Anton FICAI**; "Potentiometric measurement of Cadmium from fertilizers and soil", *Science and Technology of Environmental Protection*; 2003; **10**(21);

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