

**INFORMAȚII
PERSONALE**

FIERĂSCU IRINA
Dr. Habil., Cercetator Stiintific 1

Institutul National pentru Cercetare si Dezvoltare in Chimie si Petrochimie - ICECHIM, Bucuresti, Splaiul Independentei 202, Bucuresti, Romania

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<http://orcid.org/0000-0002-1834-9812>

Data nasterii: 29.12.1978 | Casatorita / Cetatenie Romana

**EXPERIENȚA
PROFESIONALĂ**
2019-prezent
Abilitare in Domeniul Horticultura
**UNIVERSITATEA DE
ȘTIINȚE AGRONOMICE
ȘI MEDICINĂ
VETERINARĂ DIN
BUCUREȘTI**

Coordonarea tezelor de doctorat în Școala doctorala de Inginerie și gestionarea resurselor vegetale și animale

Mai 2017- prezent Cercetator Stiintific gradul 1
ICECHIM Bucuresti

Activități de cercetare în domeniile tematiche: Sinteză, caracterizare și posibile aplicații ale nanoparticulelor metalice fitosintetizate; Dezvoltarea de noi formulări „verzi” cu aplicații practice în depoluarea apelor contaminate cu poluanți organici și anorganici; Dezvoltarea de noi formulări „verzi” cu aplicații practice în sectorul agroalimentar și farmaceutic; Sinteză și caracterizarea materialelor apatitice, precum și utilizarea acestora în aplicații precum: protecția mediului și restaurarea patrimoniului cultural; Aplicarea tehnicilor analitice pentru caracterizarea altor tipuri de nanomateriale, aplicații de mediu.

- Dezvoltarea, coordonarea și implementarea proiectelor științifice naționale și internaționale (din domeniile prioritare "Energie, mediu și schimbări climatice" și "Bioeconomie"
- Publicarea rezultatelor cercetării
- Diseminarea rezultatelor activității științifice

**Iulie 2014 –
Mai 2017**
ICECHIM Bucuresti
Cercetator Stiintific gradul 2

Activități de cercetare în domeniile tematiche: Sinteză, caracterizare și posibile aplicații ale nanoparticulelor metalice fitosintetizate; Dezvoltarea de noi formulări „verzi” cu aplicații practice în depoluarea apelor contaminate cu poluanți organici și anorganici; Dezvoltarea de noi formulări „verzi” cu aplicații practice în sectorul agroalimentar și farmaceutic; Sinteză și caracterizarea materialelor apatitice, precum și utilizarea acestora în aplicații precum: protecția mediului și restaurarea patrimoniului cultural; Aplicarea tehnicilor analitice pentru caracterizarea altor tipuri de nanomateriale, aplicații de mediu.

- Dezvoltarea, coordonarea și implementarea proiectelor științifice naționale și internaționale
- Publicarea rezultatelor cercetării
- Diseminarea rezultatelor activității științifice

**Ianuarie 2008 – Iulie
2014**
ICECHIM Bucuresti
Cercetator Stiintific gradul 3

Activități de cercetare în domeniile tematiche: Sinteză și caracterizarea materialelor apatitice, precum și utilizarea acestora în aplicații precum: protecția mediului și/sau conservarea / restaurarea patrimoniului cultural; Aplicarea tehnicilor analitice pentru caracterizarea altor tipuri de nanomateriale

- Dezvoltarea și implementarea proiectelor științifice naționale și internaționale
- Publicarea rezultatelor cercetării
- Diseminarea rezultatelor activității științifice

Decembrie 2001- Ianuarie 2008 **Cercetator Stiintific, Asistent de Cercetare**
ICECHIM Bucuresti Cercetări analitice în spectrometrie cu emisie atomica cu plasmă cuplată inductiv (ICP-AES);
 Cercetare și dezvoltare în domeniul științei materialelor, arheometrie, nanomateriale

**ABILITATI
 MANAGERIALE SI
 ORGANIZATIONALE**

Iunie 2020 – prezent

ICECHIM Bucuresti

Lider Echipa Nanotehnologii Emergente

- Dezvoltarea, coordonarea și implementarea proiectelor științifice naționale și internaționale
- Coordonarea administrativă și organizarea grupului de cercetare
- Creșterea productivității științifice
- Indrumarea tinerilor angajați

2010-2013

ICECHIM Bucuresti

Responsabil Departament ICP-AES

- Laborator de testare substante periculoase, deseuri si ape reziduale (acreditat RENAR conform EN ISO 17025)

2008-2010

ICECHIM Bucuresti

Responsabil Departament ICP-AES

- Laborator testare ape (acreditat RENAR conform EN ISO 17025)

2008-2009

ICECHIM Bucuresti

Manager Laborator testare calitatea apei

- acreditat RENAR conform EN ISO 17025

EDUCATIE SI FORMARE

2015 PROGRAM POSTUNIVERSITAR

Universitatea de Științe Agronomice si Medicină Veterinară din București

Enterprise business and intellectual property in life sciences și Sustainable life sciences applications

2013 PROGRAM POSTUNIVERSITAR

Universitatea Politehnica din Bucuresti

Inginerie de mediu

2012 PROGRAM POSTDOCTORAL

Universitatea Politehnica din Bucuresti

Biotehnologii Industriale

2007-2010 DOCTORAT

Universitatea Valahia din Targoviste, Facultatea de Ingineria Materialelor, Mecatronică și Robotică

Ingineria Materialelor

2007-2008 DIPLOMA DE MASTER

Universitatea Valahia din Targoviste, Facultatea de Ingineria Materialelor, Mecatronică și Robotică

Materiale Avansate

1997-2001 DIPLOMA DE LICENTA

Universitatea din Bucuresti, Facultatea de Chimie

Chimie-Fizica

**COMPETENTE
 PERSONALE**

Limba materna

Romana

Alte limbi straine cunoscute

INTELEGERE

VORBIRE

SCRIS

	Ascultare	Citire	Participare la conversație	Discurs oral	
English	C1	C1	C1	C1	C1
French	C1	C1	B2	B1	B1

CURSURI DE INSTRUIRE

Formare formatori, cod COR 242401, CRFPA Telorman, 2019
 Process Safety Management, Siemens Romania, 2013
 Project Management - EuroBestTeam – 2010
 Proficiency Testing Seminar”- LGC Standards – 2008
 European and national harmonized legislation in the field of dangerous chemical substances and preparations - ICECHIM – 2008
 Training of auditors in the laboratory quality system - FiaTest – 2008
 Work hygiene and safety - SC Principio Consulting Ltd – 2007
 Presentation of the technical requirements of ISO / IEC 17025:2005 - referential for accrediting testing laboratories and ensuring metrological traceability through reference materials” organized by RENAR – 2006
 Quality assurance in testing laboratories according to ISO / IEC 17025:2005” - SC SEMQ MANAGEMENT SRL - 2006

COMPETENTE INFORMATICE

Buna cunoastere a Microsoft Office TM, Adobe Professional, Origin TM, Chemskech TM, etc., si alte produse Google: Docs, Calendar, Analytics, App Engine, Scholar, Library
 Buna cunoastere și utilizare a soft-urilor echipamentelor

PROIECTE DE CERCETARE

Responsabil de proiect si membru în echipele de implementare a peste 25 de proiecte de cercetare, nationale si internationale, din care:

- ✚ Study of support materials with applications in restoration and conservation, CNCSIS Grant type BD, **Director de Proiect**
- ✚ Innovative core-shell nanocomposites based on ferrite / beta-cyclodextrin for the removal of organic and inorganic pollutants from aqueous effluents, PN-III-P2-2.1-PED-2016-0251 – **Responsabil de proiect**
- ✚ Depollution of waters containing hardly biodegradable organic compounds (endocrine disruptors) by advanced oxidation processes using innovative catalysts - PN-III-P2-2.1-PTE-2016-0063 – **Persoana cheie**
- ✚ Determining the methodology and specific coefficients to Romania in order to quantify GHG emissions and absorptions in order to quantify climate change - Sectorial Project 4PS/2019 – **Responsabil de proiect**
- ✚ Treatment of water from contaminated sources with nitates and chlorinated organic compounds using integrated catalytic reduction/oxidation and biofiltration processes - PN-III-P2-2.1-PTE-2019-0222 – **Persoana cheie**
- ✚ Green technology for the removal of pharmaceutical compounds from water using environmentally friendly oxidation catalysts - PN-III-P2-2.1-PED2019-3166 - **Responsabil de proiect**
- ✚ Multidisciplinary Complex Project for Monitoring, Preservation, Protection and Promotion of Romanian Cultural Heritage - PN-III-P1-1.2-PCCDI-2017-0413 – **Director de Proiect, Proiectul Component nr. 2**
- ✚ Enhancing the institutional capacity of bioeconomic research for the innovative exploitation of indigenous vegetal resources in order to obtain horticultural products with high added value - PN-III-P1-1.2-PCCDI2017-0332 - **Responsabil de proiect**
- ✚ Comprehensive approach in support of precision agriculture and environmental management through satellite technologies and classical methods of investigation - PN-III-P2-2.1-PED2019-3495 - **Responsabil de proiect**

BREVETE SI CERERI DE BREVETE

- ✚ Core-shell adsorbents based on cyclodextrine and their application in environment protection - A00385/30.05.2018, Sorin Marius Avramescu, Irina Fierascu, Radu Claudiu Fierascu, Alina Elena Olaru, Corina Bradu
- ✚ Antimicrobial pulverisable solution for treating, consolidation and protection of anorganic surfaces of buildings and/or historical monuments - A00919/09.11.2017; Fierăscu Radu Claudiu, Fierăscu Irina, Moanță Adriana, Petre Ionela;
- ✚ Mortars with antimicrobial properties, for protection of buildings and/or historical monuments – A0026/28.03.2018; Adriana Moanță, Radu Claudiu Fierăscu, Ionela Petre, Mohanu Ileana, Paceagiu Jenica, Irina Fierăscu;
- ✚ Composition for conservation and restauration of chalk monuments' s surfaces and procedere for obtaining it - A 00071/02.02.2015; Rodica-Mariana Ion, Radu-Claudiu Fierascu, Irina Fierascu, Nelu Ion, Ioana-Raluca Bunghez
- ✚ Adhesives with antimicrobial properties for restoration ceramic support from artefacts cultural heritage and its method of obtaining - A/00914/20.11.2018 - Radu Claudiu Fierascu, Irina Fierascu, Petronela Fotea, Alina-Ruxandra-Eugenia Ortan, Ioana Popitiu, Mihaela Beceanu
- ✚ Bonding agent antimicrobial properties to restore for restoration paper artefacts from artefacts cultural heritage and its method of obtaining - A/00915/20.11.2018 - Alexandru Stirban, Radu Claudiu Fierascu, Irina Fierascu, Petronela Fotea, Alina-Ruxandra-Eugenia Ortan, Maria-Similia Zgarcu, Ioan Constantin Inel
- ✚ Natural fungicidal composition for combating grapevine downy mildew and method of obtaining it, A00073/2020, Irina Fierascu, Radu Claudiu Fierascu, Toma Fistos, Liliana Cristina Soare , Camelia Ungureanu, Diana Vizitiu
- ✚ Antimicrobial coating and with protective role for the natural stone surfaces with cultural value and method of obtaining it, A00072/2020, Radu Claudiu Fierascu, Irina Fierascu, Roxana Ioana Brazdis, Anda Maria Baroi, Alina Ortan
- ✚ Adsorbent with magnetic properties based on apatitic material for treatment of impurified waters with organic and inorganic compounds and the method of obtaining it, A00380/2019 Radu Claudiu Fierascu, Irina Fierascu, Valentin Raditoiu
- ✚ Antimicrobial pulverisable solution for restoration / conservation of leather supports and method of obtaining it, A00074/2020, Radu Claudiu Fierascu, Irina Fierascu, Roxana-Ioana Brazdis, Anda Maria Baroi, Alexandru Stirban, Ariana Codruta Leahu, Alina Ortan

MEMBRU AL ASOCIAȚIILOR PROFESIONALE

- Membru asociat al Asociației Conservatorilor și Restauratorilor din România
 Membru al următoarelor asociații profesionale:
- Societatea de Chimie din Romania
 - Eurachem Romania
 - Asociația Romana de Pteridologie

INFORMATII SUPLIMENTARE

- | | |
|---|---|
| Publicatii | Indice Hirsch (Scopus): 12
Lucrări științifice indexate în baza de date SCOPUS - 98
Factor cumulat de impact - mai mare de 80;
Autor a 10 carti/capitole de carte si 4 carti editate |
| Prezentari si Conferinte | Mai mult 150 de participari la manifestari internationale stiintifice si lucrari indexate in alte baze de date |
| Premii | Premii obtinute la Saloanele Internationale de Inventica si Inovatii (peste 50 de premii din partea delegațiilor naționale și internaționale)
Premii obtinute din Competitia UEFISCDI, „Premierea rezultatelor” |
| Recenzor si membru in comitete editoariale | Caryologia, Journal of Functional Foods, Journal of Thermal Analysis and Calorimetry, Metallography, Microstructure, and Analysis, Applied Surface Science, Arabian Journal of |

Chemistry, Journal of Hazardous Materials, Journal of Cluster Science, Instrumentation Science & Technology, Heritage Science, Cellulose; 2015 - present "Current Trends in Natural Sciences. ISSN (online) 2284-953X, ISSN (CD-ROM) 2284-9521, ISSN-L 2284-9521 - member in Editorial Board; 2017, Current Trends In Natural Sciences International Symposium, University of Pitesti, Romania

INFORMATII SUPLIMENTARE

Selectie lucrari ISI publicate

1. R. C. Fierascu, E. Sieniawska, A.Ortan, I. Fierascu, J. Xiao Fruits By-Products – A Source of Valuable Active Principles. A Short Review, *Front. Bioeng. Biotechnol.*, 2020, 8, 319
2. R. C. Fierascu, I. C. Fierascu, C. E. Dinu-Pirvu, I. Fierascu, A. Paunescu, The application of essential oils as a next-generation of pesticides: recent developments and future perspectives, 2020, *Zeitschrift Für Naturforschung C*, 75(7-8):183-204
3. R.C. Fierascu, I. Fierascu, S. M. Avramescu, E. Sieniawska, Recovery of Natural Antioxidants from Agro-Industrial Side Streams through Advanced Extraction Techniques, , *Molecules* 2019, 24(23), 4212
4. R.C. Fierascu, A. Ortan, S. M.Avramescu, I. Fierascu, Phyto-Nanocatalysts: Green Synthesis, Characterization, and Applications, , *Molecules* 2019, 24(19), 3418
5. I. Fierascu, I. C. Fierascu, C. E. Dinu-Pirvu , R. C. Fierascu , V. Anuta, B. S.Velescu , M. Jinga, V. Jinga, A Short Overview of Recent Developments on Antimicrobial Coatings Based on Phytosynthesized Metal Nanoparticles, 2019, *Coatings* , 9 (12)
6. I. Fierascu, R. C. Fierascu, A.Stirban, D.M. Panaitescu, C. A. Nicolae, V.Raditoiu, M.S. Zgarciu, A. C. Leahu, Chemical and mineral characterization of Romanian book paper materials (XVII–XIXth century), *Microchemical Journal*, 2020, 152, 104307
7. R. C. Fierascu, G. Temocico, I. Fierascu, A. Ortan, N. Elena Babeanu, *Fragaria* Genus: Chemical Composition and Biological Activities *Molecules* 2020, 25, 498
8. I. Fierascu, I. C. Fierascu, R. I. Brazdis, A. M. Baroi, T. Fistos, R. C. Fierascu, Phytosynthesized Metallic Nanoparticles—between Nanomedicine and Toxicology. A Brief Review of 2019's Findings, *Materials*, 2020, 13(3):574.
9. R. C. Fierascu, I. Fierascu, A. Ortan, M. I. Georgiev, E. Sieniawska, Innovative Approaches for Recovery of Phytoconstituents from Medicinal/Aromatic Plants and Biotechnological Production, *Molecules* 2020, 25(2), 309;
10. R. C. Fierascu, M. Doni, I. Fierascu, Selected Aspects Regarding the Restoration/Conservation of Traditional Wood and Masonry Building Materials: A Short Overview of the Last Decade Findings, *Applied Sciences*, 2020, 10(3), 1164
11. A. Paunescu, C.M. Ponopal, M.C. Zagardan, C.F. Plesa, R.M. Nemes, C. Nicolae, A. Bisoc, M. Diaconu, I. Fierascu, R.C.Fierascu, M.M Tantu, C.L. Soare, Evaluation of histophysiological alterations associated with ketoprofen administration in albino NMRI mice, *Naunyn-Schmiedeberg's Archives of Pharmacology*, 2020, 393(6):1033-1039
12. R.C. Fierascu, I. Fierascu, A.M. Baroi, R.I. Brazdis, T. Fistos, C.A. Nicolae, V. Raditoiu, I.C. Inel, V. Sava, Characterization of historical ceramics: a case study, *Romanian Reports in Physics*, 2020, 72, 801
13. I. Fierascu, R.C. Fierascu, D.A. Mirea, P. Fotea, R.F. Andrei, A. Ortan, Archaeometallurgical evaluation of finery using nondestructive methods, *Romanian Reports in Physics*, 2019, 71, 803
14. R.C. Fierascu, I. Fierascu, A. Ortan, I.C. Fierascu, V. Anuta, B.S. Velescu, S.M. Pituru, C.E. Dinu-Pirvu, *Leonurus cardiaca* L. as a Source of Bioactive Compounds: An Update of the European Medicines Agency Assessment Report (2010), *BioMed Research International*, 2019, 4303215
15. I. Fierascu, C.E. Dinu-Pirvu, R.C. Fierascu, B.S. Velescu, V. Anuta, A. Ortan, V. Jinga Phytochemical profile and biological activities of *Satureja hortensis* L.: a review of the last decade, *Molecules*, 2018 Sep 25;23(10). pii: E2458. doi: 10.3390/molecules23102458,
16. R.C. Fierascu, A. Ortan, I. C. Fierascu, I. Fierascu In vitro and in vivo evaluation of antioxidant properties of wild-growing plants. A short review, *Current Opinion in Food Science*, 24, 1-8 (2018),

17. N.A. Sutan, D.S. Manolescu, I. Fierascu, A. M. Neblea, C. Sutan, C. Ducu, L.C. Soare, D.Negrea, S.M. Avramescu, R. C. Fierascu Phytosynthesis of gold and silver nanoparticles enhance in vitro antioxidant and mitostimulatory activity of *Aconitum toxicum* Reichenb. rhizomes alcoholic extracts, *Materials Science and Engineering: C*, 93, 746-758 (2018),
18. O.A. Drăghiceanu, L.C. Soare, I. Fierăscu, R.C. Fierăscu, M. Popescu, Lead-Induced Physiological, Biochemical and Enzymatic Changes in *Asplenium scolopendrium* L., *Bulletin of Environmental Contamination and Toxicology*, 100(3), 438-443 (2018),
19. I. Fierascu, C. Ungureanu, S.M. Avramescu, C. Cimpeanu, M. I.Georgescu, R.C. Fierascu, A. Ortan, A. N. Sutan, V. Anuta, A. Zanfirescu, C.E. Dinu-Pirvu, B. S. Velescu Genoprotective, antioxidant, antifungal and anti-inflammatory evaluation of hydroalcoholic extract of wild-growing *Juniperus communis* L. (Cupressaceae) native to Romanian southern sub-Carpathian hills, *BMC Complementary and Alternative Medicine* 18:3(2018)
20. R.C. Fierascu, M.I. Georgiev, I. Fierascu, C. Ungureanu, S.M. Avramescu, A. Ortan, M. I. Georgescu, A. N. Sutan, A. Zanfirescu, C. E. Dinu-Pirvu, B.S. Velescu, V.Anuta Mitodepressive, antioxidant, antifungal and anti-inflammatory effects of wild-growing Romanian native *Arctium lappa* L. (Asteraceae) and *Veronica persica* Poiret (Plantaginaceae), *Food and Chemical Toxicology* 111, 44–52 (2018),
21. I. Fierascu, R.C. Fierascu, R. Somoghi, R.M. Ion, A. Moanta, S.M. Avramescu, C.M. Damian, L.M. Ditu Tuned apatitic materials: synthesis, characterization and potential antimicrobial applications, *Applied Surface Science*, 438, 127-135 (2018),
22. Fierascu R.C., Ion R.M., Fierascu I. Antifungal effect of natural extracts on environmental biodeteriogens affecting the artifacts, *Environmental Engineering and Management Journal*, 15 (11), 2435-2442 (2017),
23. I. Fierascu, M.I. Georgiev, A. Ortan, R. C. Fierascu, S. M. Avramescu, D. Ionescu, A. Sutan, A. Brinzan, L.M. Ditu Phyto-mediated metallic nanoarchitectures via *Melissa officinalis* L.: synthesis, characterization and biological properties, *Scientific Reports*, 7: 12428 (2017),
24. M.L. Popescu, T. Costea, C.E. Gird, I. Fierascu, T.D. Balaci, R.C. Fierascu Antioxidant activity of Romanian *Agaricus blazei* Murrill. and *Agaricus bisporus* J. E. Lange mushrooms, *Farmacia*, Vol. 65, 3, 329-335 (2017),
25. R.C. Fierascu, I. Fierascu, A. Ortan, F. Constantin, D.A. Mirea, M. Statescu Complex archaeometallurgical investigation of silver coins from the XVIth-XVIIIth century, *Nuclear Inst. and Methods in Physics Research*, B, 401, 18–24 (2017), doi: 10.1016/j.nimb.2017.04.030,
26. I. Fierascu, S.M. Avramescu, R.C. Fierascu, A.Ortan, G. Vasilevici, C. Cimpeanu, L.M. Ditu Micro-analytical and microbiological investigation of selected book papers from the nineteenth century, *Journal of Thermal Analysis and Calorimetry*, 129(3), 1377-1387 (2017),
27. N.A. Sutan, I. Fierascu, R.C. Fierascu, D.S. Manolescu, L.C. Soare, Comparative analytical characterization and in vitro citogenotoxic activity evaluation of *Asplenium scolopendrium* L. leaves and rhizome extracts prior to and after Ag nanoparticles phytosynthesis, *Industrial Crops and Products*, 83C, 379-386 (2106),
28. Fierascu R.C., Avramescu S.M., Vasilevici G., Fierascu I., Paunescu A. Thermal and spectroscopic investigation of Romanian historical documents from the nineteenth and twentieth century, *Journal of Thermal Analysis and Calorimetry*, 123 (2), 1309-1318 (2016).

Selectie lucrari ISI in domeniul protectiei mediului

1. Fierascu R.C., Dinu-Pirvu C.E., Fierascu I., Tarmure V., Stanica N., Nicolae C.A., Somoghi R., Trica B., Anuta V., Inorganic/organic core-shell magnetic materials for removal of endocrine disrupting pharmaceuticals from water, *Farmacia*, (2018), 66, 2, 316-322
2. Paunescu, L.C. Soare, R.C. Fierascu, I. Fierascu, M.C. Ponepal The influence of six pesticides on physiological indices of *Pelophylax ridibundus* (Pallas, 1771), *Bulletin of Environmental Contamination and Toxicology*, 100(3), 376-383 (2018)
3. Fierascu I., Avramescu S. M., Petreanu I., Marinoiu A., Soare A., Nica A., Fierascu R.C., Efficient removal of phenol from aqueous solutions using hydroxyapatite and substituted hydroxyapatites, *Reaction Kinetics, Mechanisms and Catalysis*, (2017), 122:155-175
4. Elekes C.C., Dumitriu I., Busuioc G., Iliescu N.S., The appreciation of mineral element accumulation level in some herbaceous plants species by ICP-AES method, *Environmental Science and Pollution Research*, (2010), 17(6), 1230-1236
5. Dumitriu I., Fierascu R.C., Bunghez I.R., Ion R.M., Application of inductively coupled plasma - Atomic emission spectroscopy (ICP-AES) based analysis for water quality control, *Environmental Engineering and Management Journal*, (2009), 8(2), 347-351

6. Dumitriu I., Fierascu R.C., Ion R.M., New materials for water ozonization, *Environmental Engineering and Management Journal*, (2009), 8(4), 733-736
7. Fierascu I, Fierascu R.C., Popa O., Babeanu N., Synthesized materials for decontamination of heavy metals polluted aqueous solutions, *Romanian Biotechnological Letters*, (2014), 19(2), 9196-9202

Carti / capitole carti

- [1]. Elwira Sieniawska, Alina Ortan, Irina Fierascu, Radu Fierascu, Procyanidins in Food. In: Xiao J., Sarker S., Asakawa Y. (eds) *Handbook of Dietary Phytochemicals*. Springer, Singapore, 2020
- [2]. Irina Fierascu, Radu Claudiu Fierascu, Application of natural products for the preservation of cultural heritage artifacts. General considerations and short literature survey, *GAIANA book & art studio*, Ruse, 2019, ISBN 978-619-7354-75-1
- [3]. Alina Ortan, Irina Fierascu, Radu Claudiu Fierascu, Elements of biophysics. Second edition, Revised, Expanded and Updated., ID Print Sofia, 2019, ISBN 978-619-90977-6-2
- [4]. Radu Claudiu Fierascu, Irina Fierascu, Alina Ortan, Sorin Marius Avramescu, Cristina Elena Dinu-Pirvu and Daniela Ionescu (2017). *Romanian Aromatic and Medicinal Plants: From Tradition to Science, Aromatic and Medicinal Plants*, Hany A. El-Shemy, IntechOpen, DOI: 10.5772/66513
- [5]. Rodica-Mariana Ion, Radu-Claudiu Fierăscu, Sofia Teodorescu, Irina Fierăscu, Ioana-Raluca Bunghez, Daniela Țurcanu-Caruțiu and Mihaela-Lucia Ion, *Ceramic Materials Based on Clay Minerals in Cultural Heritage Study in Clays, Clay Minerals and Ceramic Materials Based on Clay Minerals*, Ed: Gustavo Morari do Nascimento, chapter 7, InTech, Rijeka, Croatia, 2016, ISBN 978-953-51-2259-3
- [6]. R-M Ion, R-C Fierascu, I Fierascu, RM Senin, M-L Ion, M Leahu, D Turcanu-Carutiu, Influence of Fântânița Lake (Chalk Lake) Water on the Degradation of Basarabi–Murfatlar Churches in: *Engineering Geology for Society and Territory - Volume 8, Preservation of Cultural Heritage* (Giorgio Lollino, Daniele Giordan, Cristian Marunteanu, Basiles Christaras, Iwasaki Yoshinori, Claudio Margottini, eds.), pp 543-546, Springer, 2015, ISBN: 978-3-319-09407-6
- [7]. Doina Dimonie, Marius Petrache, Sanda Maria Doncea, Raluca Gabor, Eugeniu Vasile, Anisoara Campean, Radu Claudiu Fierascu, Cristian Nicolae, Sorina Dinescu, Inna Trandafir, Liliana Anton, Irina Fierascu, Bianca Galateanu, New approaches to develop 3D layered shaped scaffolds for soft tissue engineering, In *Advanced biocompatible structures for prospective bioengineering : concepts and strategies* Ed: Marieta Costache, Maya Simionescu, cap. 3, Editura Academiei Romane, Bucuresti, 2013, ISBN: 978-973-27-2317-3
- [8]. Doina Dimonie, Radu Socoteanu, Simona Pop, Irina Fierascu, Radu Fierascu, Celina Petrea, Catalin Zaharia, Marius Petrache, Overview on Mechanical Recycling by Chain Extension of POSTC-PET Bottles, In *Material Recycling – Trends and Perspectives*, Ed: Dimitris S. Achilias, cap. 3, InTech, Rijeka, Croatia, 2012, ISBN: 978-953-51-0327-1
- [9]. Irina Dumitriu, Rodica Mariana Ion, Radu Claudiu Fierăscu, *Arheometria materialelor suport*, Transversal, Târgoviște, 2011, ISBN: 978-606-8042-86-2
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Carti editate

- [1]. Valorization of cultural heritage through archaeometry studies using nuclear techniques and other scientific methods. General considerations and short literature survey, R. C. Fierăscu, I. Fierascu, M. Doni (eds.) ISBN: 978-973-0-27114-0, 2018, Bucuresti
- [2]. Practical examples regarding the valorization of cultural heritage through archaeometry studies using nuclear techniques and other scientific methods, R. C. Fierăscu, I. Fierascu, M. Doni (eds.), Ed. Printech, București, 2018, ISBN: 978-606-23-0888-6
- [3]. Archaeometrical study of selected objectives from Golesti Museum of Viticulture and Pomiculture, R. C. Fierăscu, I. Fierascu, M. Doni (eds.), Russe Press, 2020, ISBN: 978-619-91466-1-3

Premii (selectie)

Premii nationale (selectie)

1. Premiul articolului, UEFISCDI, 2013 - A new approach for the remediation of biodeteriorated mobile and immobile cultural artefacts
2. Premiul articolului – zona rosie, UEFISCDI, 2016, Comparative analytical characterization and in vitro cytogenotoxic activity evaluation of *Asplenium scolopendrium* L. leaves and rhizome extracts prior to and after Ag nanoparticles phytosynthesis"
3. Premiul articolului – zona rosie, UEFISCDI, 2016, Innovative phytosynthesized silver nanoarchitectures with enhanced antifungal and antioxidant properties"
4. Premiul articolului – zona galbena, UEFISCDI, 2017, Micro-analytical and microbiological investigation of selected book papers from the nineteenth century
5. Premiul articolului – zona rosie, UEFISCDI, 2017, Phyto-mediated metallic nanoarchitectures via *Melissa officinalis* L.: synthesis, characterization and biological properties
6. Premiul articolului – zona rosie TOP 1, UEFISCDI, 2018, Tuned apatitic materials: synthesis, characterization and potential antimicrobial applications
7. Premiul articolului – zona rosie UEFISCDI, 2018, Mitodepressive, antioxidant, antifungal and anti-inflammatory effects of wild-growing Romanian native *Arctium lappa* L. (Asteraceae) and *Veronica persica* Poiret (Plantaginaceae)"
8. Premiul articolului – zona rosie, UEFISCDI, 2018, Genoprotective, antioxidant, antifungal and anti-inflammatory evaluation of hydroalcoholic extract of wild-growing *Juniperus communis* L. (Cupressaceae) native to Romanian southern sub-Carpathian hills
9. Premiul articolului – zona rosie, UEFISCDI, 2018, Phytosynthesis of gold and silver nanoparticles enhance in vitro antioxidant and mitostimulatory activity of *Aconitum toxicum* Reichenb. rhizomes alcoholic extracts"
10. Premiul articolului – zona galbena UEFISCDI, 2017, Complex archaeometallurgical investigation of silver coins from the XVIth-XVIIIth century
11. Medalie aur, INVENTICA 2017, Iasi, Romania, 2017, Proiect 121 PED, RC Fierascu, I Fierascu, A Moanta
12. Medalie aur, Proinvent 2018, Cluj, 2018, Antimicrobial pulverisable solution for treatment, consolidation and protection of inorganic surfaces of buildings and/or historical monuments. Radu Claudiu Fierăscu, Irina Fierăscu, Adriana Moanță, Ionela Petre
13. Medalie aur, Euroinvent 2018, Iasi 2018, Mortar with antimicrobial properties, designed for the protection of buildings and / or historical monuments, Moanță Adriana, Fierăscu Radu Claudiu, Petre Ionela, Mohanu Ileana, Paceagiu Jenica, Fierăscu Irina
14. Medalie bronz, Euroinvent 2018, Iasi, 2018, For the project Development of vegetal extracts and innovative phytosynthesized nanostructured mixtures with phytotherapeutic applications to reduce biocenotic stress in horticultural crops, Radu Claudiu Fierascu, Irina Fierascu, Liliana Cristina Soare, Mirela Florina Calinescu, Diana Elena Vizitiu, Camelia Ungureanu
15. Medalie argint, Euroinvent 2018, Iasi, 2018, For project Nanotechnology – an innovative approach with development of materials and techniques for safeguarding the cultural heritage, Irina Fierascu, Radu Claudiu Fierascu, Ioana Popitiu, Gabriel Rustoiu, Alina Ortan
16. Medalie bronz, Euroinvent 2018, Iasi, 2018, Innovative ferrite/beta-cyclodextrin core-shell nanocomposites for removal of inorganic and organic pollutants from aqueous effluents, Sorin Marius Avramescu, Irina Fierascu, Radu Claudiu Fierascu, Angel Vasile Nica, Alina Elena Olaru
17. Medalie aur, Inventica, 2018 Iasi, 2018, Mortar with antimicrobial properties, designed for the protection of buildings and / or historical monuments, Moanță Adriana, Fierăscu Radu Claudiu, Petre Ionela, Mohanu Ileana, Paceagiu Jenica, Fierăscu Irina

Premii internationale (selectie)

1. Diploma de excelenta, State University of Medicine and Pharmacy Nicolae Testemiteanu, Republica Moldova, 2017, Inventica 2017, Iasi, Proiect 121 PED RC Fierascu, I Fierascu, A Moanta
2. Diploma de excelenta, State University of Medicine and Pharmacy Nicolae Testemiteanu, Republica Moldova, 2018, Proinvent 2018, Cluj, Antimicrobial pulverisable solution for treatment, consolidation and protection of inorganic surfaces of buildings and/or historical monuments, Radu Claudiu Fierăscu, Irina Fierăscu, Adriana Moanță, Ionela Petre

3. Diploma de excelenta, Middle Technical University Baghdad, 2018, Euroinvent 2018, Iasi, Antimicrobial pulverisable solution for treatment, consolidation and protection of inorganic surfaces of buildings and/or historical monuments, Radu Claudiu Fierăscu, Irina Fierăscu, Adriana Moanță, Ionela Petre
4. Diploma de excelenta, State University of Medicine and Pharmacy Nicolae Testemiteanu, Republica Moldova, 2018, Euroinvent 2018, Iasi, pentru proiectul Nanotechnology – an innovative approach with development of materials and techniques for safeguarding the cultural heritage, Irina Fierascu, Radu Claudiu Fierascu, Ioana Popitiu, Gabriel Rustoiu, Alina Ortan
5. Diploma de excelenta, State University of Medicine and Pharmacy Nicolae Testemiteanu, Republic of Moldova, 2018, Inventica 2018, Iasi, Mortar with antimicrobial properties, designed for the protection of buildings and / or historical monuments, Moanță Adriana, Fierăscu Radu Claudiu, Petre Ionela, Mohanu Ileana, Paceagiu Jenica, Fierăscu Irina
6. Premiul special, Kuia, Korea University Invention Association, INFOINVENT 2019, Chisinau, Ecological antifungal composition for controlling phytopathogenic strains affecting the grapevine and the method of obtaining it, Irina Fierascu, Radu Claudiu Fierascu, Toma Fistos, Cristina Liliana Soare, Camelia Ungureanu, Diana Vizitiu, Oana Alexandra Draghiceanu, Alina Paunescu
7. Certificate for Contribution to Innovation, Association of Portuguese Inventor's Innovator's & Creatives, INFOINVENT 2019, Chisinau, Antimicrobial gluing agent for the restoration of paper based artefacts belonging to the cultural heritage and the method of obtaining it, Alexandru Stirban, Radu Claudiu Fierascu, Irina Fierascu, Petronela Fotea, Alina-Ruxandra-Eugenia Ortan, Maria-Similia Zgarciu, Ioan Constantin Inel
8. Medalia de aur, INFOINVENT 2019, Chisinau, Antimicrobial gluing agent for the restoration of paper based artefacts belonging to the cultural heritage and the method of obtaining it, Alexandru Stirban, Radu Claudiu Fierascu, Irina Fierascu, Petronela Fotea, Alina-Ruxandra-Eugenia Ortan, Maria-Similia Zgarciu, Ioan Constantin Inel
9. Diploma cu premiu special, National Agency for Public Health, Ministry of Health and Social Protection of the Republic of Moldova, Infoinvent 2019 Chisinau, Adsorbent with magnetic properties based on apatitic materials for the treatment of impurified waters with organic and anorganic compounds and the method of obtaining it, Radu Claudiu Fierascu, Irina Fierascu, Valentin Raditoiu
10. Medalia de aur, Infoinvent 2019 Chisinau, Antimicrobial pulverisable solution for treatment, consolidation and protection of inorganic surfaces of buildings and historical monuments, Radu Claudiu Fierascu, Irina Fierascu, Adriana Moanta, Ionela Petre
11. Medalia de aur, INFOINVENT 2019, Chisinau, Adhesive material with antimicrobial properties for the restoration of ceramic artefacts belonging to the cultural heritage and method of obtaining it, Radu Claudiu Fierascu, Irina Fierascu, Petronela Fotea, Alina Ortan, Ioana Popitiu, Mihaela Beceanu
12. Medalia de bronz, Infoinvent 2019 Chisinau, Ecological antifungal solution for controlling phytopathogenic strains affecting the apple crops and the method of obtaining it, Cristina Liliana Soare, Irina Fierascu, Radu Claudiu Fierascu, Camelia Ungureanu, Mirela Florina Calinescu, Codruta Mihaela Dobrescu, Anca Nicoleta Sutan
13. Medalia de bronz, Infoinvent 2019, Chisinau, Ecological antifungal composition for controlling phytopathogenic strains affecting the grapevine and the method of obtaining it, Irina Fierascu, Radu Claudiu Fierascu, Toma Fistos, Cristina Liliana Soare, Camelia Ungureanu, Diana Vizitiu, Oana Alexandra Draghiceanu, Alina Paunescu
14. Premiu pentru cea mai buna inventie straina Intarg® 2020, premiu oferit de Ministerul Dezvoltării și Politicii Regionale, INTARG 2020, Poland, Antimicrobial coating and with protective role for the natural stone surfaces with cultural value and method of obtaining it, Radu Claudiu Fierascu, Irina Fierascu, Roxana-Ioana Brazdis, Anda Maria Baroi, Alina Ortan

Dr. Habil. Irina Fierascu

