

Curriculum Vitae

Principal researcher CSI dr. eng. Raluca Ianchiș

	<p>PhD in Material Engineering (2009); Principal Researcher 1st degree; 19 years of activity in the synthesis and characterization of macromolecular compounds and polymer nanocomposite materials. e-mail: raluca.ianchis@icechim-pd.ro; raluca.ianchis@icechim.ro; ralumoc@yahoo.com phone: 021.316.30.93 (132)</p> <p>Web pages: www.icechim.ro; https://www.icechim-pd.ro/ro/syst_heter/sisteme_heterogene.html SCOPUS profile: Scopus Author ID: 23995646600 ORCID profile: https://orcid.org/0000-0002-5540-2774 BrainMap: https://www.brainmap.ro/raluca-ianchis</p>
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EDUCATION:

2005-2009 PhD in Material Engineering; "Politehnica" University of Bucharest, Faculty of Industrial Chemistry; „Nanocomposites obtained in disperse systems”

2004-2005 M.Sc. in Technology of Macromolecular Compounds "Politehnica" University of Bucharest, Faculty of Applied Chemistry and Materials Science

2005 – 2009 B.Sc. Chemical Engineer in Polymer Science and Engineering ; "Politehnica" University of Bucharest, Faculty of Applied Chemistry and Materials

2012-2013 Postgraduate psycho pedagogical studies; "Politehnica" University of Bucharest, Faculty of Applied Chemistry and Materials

PROFESSIONAL EXPERIENCE:

Institution	Period	Position
National Research and Development Institute for Chemistry and Petrochemistry-ICECHIM, Bucharest	1.10.2015-present	Scientific researcher I
National Research and Development Institute for Chemistry and Petrochemistry-ICECHIM, Bucharest	01.01.2014-30.09.2015	Scientific researcher II
National Research and Development Institute for Chemistry and Petrochemistry-ICECHIM, Bucharest	12.06.2010-31.12.2013	Scientific researcher III
National Research and Development Institute for Chemistry and Petrochemistry-ICECHIM, Bucharest	18.02.2008-14.02.2010	Scientific researcher
National Research and Development Institute for Chemistry and Petrochemistry-ICECHIM, Bucharest	08.10.2004-18.02.2008	Research Assistant

SPECIALIZATIONS AND QUALIFICATIONS:

TRAINING STAGES

- Training stage at Center for Composite, Concordia University, Montreal, Canada (July-August 2011 and 2012)

- Training stage at Department of Chemistry and Chemical Engineering, Technical University of Eindhoven, Netherland (April-May 2007)
- Training stage at Department of Polymerization Reactions and Chromatography, Institute of Polymers at the Academy of Sciences in Bratislava, Slovakia (March 2006)
- Course - Thermal Analysis Specialization DSC, TGA and DMA - TA Instruments, Zellik, Belgium (November 2011)

Courses

- Course- Summer School Courses of Electron Microscopy-SME 2005 – Bucharest (September 2005)
- Course- Innovation manager accredited course- COR-242106, december 2016
- Course- Innovation manager accredited course- COR-242106, december 2016

PRIZES:

Excellence award and silver medal at the EuroInvent 2023 Iasi, for the work entitled: Compositions and process for obtaining composite hydrogels based on natural polysaccharides and their application in the three-dimensional printing process, *Raluca Ianchiș, Minodora Maria-Marin, Rebeca Leu Alexa, Cătălina Ioana Gîfu, Claudia Mihaela Ninciuleanu, Elvira Alexandrescu, Cristina Scomoroscenco, Sabina Georgiana Burlacu, Cătălin Ionuț Mihăescu, Cristina Lavinia Nistor, Cristian Petcu, Horia Iovu, Patent application No. A2022-00127/16.03.2022*

Excellence award and gold medal at the Pro Invent 2022 Salon, Cluj-Napoca for the work entitled: Compositions and process for obtaining composite hydrogels based on natural polysaccharides and their application in the three-dimensional printing process, *Raluca Ianchiș, Minodora Maria-Marin, Rebeca Leu Alexa, Cătălina Ioana Gîfu, Claudia Mihaela Ninciuleanu, Elvira Alexandrescu, Cristina Scomoroscenco, Sabina Georgiana Burlacu, Cătălin Ionuț Mihăescu, Cristina Lavinia Nistor, Cristian Petcu, Horia Iovu, Patent application No. A2022-00127/16.03.2022*

Award of the Romanian Society of Chemistry at the conference Priorities of Chemistry for a Sustainable Development - PRIOCHEM XVI ed., Bucharest, Romania, October 28-30 (2020) for the paper "Innovative Hydrogel Based Inks with Application in Tissue Engineering", R. Leu-Alexa , H. Iovu, I.C. Radu, G. Vlasceanu, C.M. Ninciuleanu, E. Alexandrescu, C. Mihaescu, C. Scomoroscenco, C. Nistor, C. Petcu, R. Ianchiș*

Special prize at the 4th International Conference on Emerging Technologies in Materials Engineering EmergeMAT, Bucharest, Romania, November 4-5, (2021) with the paper "Synthesis and Characterization of Green Crosslinked Hydrogels", M.M. Marin, I.C. Gifu, C. Ninciuleanu, E. Alexandrescu, C. Scomoroscenco, S. Burlacu, C.L. Nistor, C. Petcu, H. Iovu, R.L. Alexa, R. Ianchis*

International Award for Young PhD Students at NanoBioeurope 2008, International Congress and Exhibition, Barcelona, Spain, 2008.

RESEARCH ACTIVITIES:

Areas of interest:

- Materials science and engineering;
- Polymers and nanostructured composites;
- Hybrids, colloids, emulsions
- 3D printing for personalized medicine

Expertise in 1) **Synthesis** of nanocomposite hydrogels; Biopolymers; Biomaterials with applications in medicine; Formulations used in additive manufacturing/3D printing; Encapsulation of hydrophilic/hydrophobic substances, Hydrophobic hybrid coatings, Composite membranes for wastewater treatment, Synthesis of nanomaterials obtained in dispersed medium by emulsion,

miniemulsion, microemulsion, surfactant-free emulsion polymerization with/without inorganic nanoparticles; polymer-inorganic nanocomposites; Functionalization/modification of inorganic particles;

2) **Characterization** methods and techniques including: nanoparticle dimensional analysis (DLS); Zeta potential determination; FTIR Spectrometry, UV-VIS Spectrophotometry, thermomechanical analyzes (TGA, DSC, DMA), Electron Microscopy (SEM)

Other scientific activities:

- Member of the REXCD- Body of Experts for the certification of research and development activity
- Secretary of the Scientific Council of INCDCP-ICECHIM Bucharest (2015-2019)
- Author of 56 ISI papers, over 100 scientific communications and 9 patent applications, of which 3 patents were granted (1 international), H-index SCOPUS=16.
- Member of the Romanian Society of Chemistry
- **Guest Editor** for special volumes of the International Journal of Molecular Sciences and Materials.
- reviewer for Wiley Interscience, Elsevier, Springer, MDPI, Royal Society of Chemistry-RSC Advances

Managerial activities:

- **Project manager:**

Project	Funcția	Perioada
PN-III-CERC-CO-PED-2019-1896 Innovative 3D printed nanocomposite constructions obtained from marine resources (alginate, salecan) and natural clay with specific applications in bone regeneration	Project manager	2020-2022
PN-III-CERC-CO-PED-2016-1896 Optimization and validation of an advanced material and technology default based on modified biopolymer-clay as a doxorubicin vehicles for controlled release in the gastrointestinal tract	Project manager	2017-2018
Postdoc Grant RU-PD-206-Polymeric Nanocomposites Obtained Through Polymerization in Aqueous Medium in The Presence Of Superhydrophobic Layered Silicates SILFOB,	Project manager	2010-2012
RU-TD-310 Nanocomposites Obtained In Disperse Medium	Project manager	2007-2008

- **Key person - international projects:** FP6 "ENPONA"; FP7 "HARCANA"; ERANET.RUS PLUS "SNIFF"; ERANET COFUND-MANUNET III "DEMETRE"; ERANET ERA-IB2 "CONVERT- SI"; ERANET COFOUND – WATER WORKS "ProWspere"; ERANET – MANUNET II "TOX-HAZ-ASSESS"; ERANET-INCOMERA „BENDIS”

- **Key person in more than 30 national projects (seletion)**

1. Advanced nanoparticle-based materials with synergistic effect on neuronal oxidative stress and beta-amyloid fibrillation for preventive treatment in Alzheimer's disease (Nanonerves), PN III – P2 - 2.1 – PED, 2020-2022, 318 PED/2020, - ICECHIM București;
2. New Intelligent Anti-Corrosion Coatings for Active Protection of Metallic Surfaces, Enhanced with Stimuli - Responsive Mesoporous Silica Nanocontainers Loaded with Organic Inhibitors (CorrAPEL), PN III-P1-1.1-TE, 2020-2022, TE 85/2020, - ICECHIM București;
3. Advanced material based on push-pull extended π -conjugated azo-chromophores in functional matrices with enhanced NLO properties (SMART-NLO), PN III – P2 - 2.1 – PED, 2020-2022, - ICECHIM București;

4. Innovative technologies based on polymers for the obtaining of new advanced materials (NAPOLI 19), PN-III-P1-1.2-PCCDI, 2018-2020, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest;
5. Contingency of CBRN hazards and improvement of national security resources (SECURE-NET), PN-III-P1-1.2-PCCDI, 2018-2020, - ICECHIM Bucharest ;
6. Emerging technologies for the industrial capitalization of 2D structures (graphene and nongraphenic) (EMERG2Ind), PN-III-P1-1.2-PCCDI, 2018-2020, - ICECHIM Bucharest
7. Contributions to enhancing the Sanimed SRL's competitiveness by the knowledge assimilation and potential production implementation of some 3D collagen-polymer hybrid matrices intended to tissue repair (3D-COLL-POL), 2016-2018, PNIII 118 BG / 2016, University of Bucharest
8. Development and optimization of manufacturing technology for porous ceramics used in horticulture (CERAM F), 2016-2018, PNIII 19 BG / 2016, University Babes Bolyai, Cluj
9. Innovative green technologies for valorisation of lignocellulose (INTELIGRENCE), 2018-2020, PN-III-P1-1.1-TE-2016-2518, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest
10. A next generation plant biostimulants product (NEXUS), PN-III-P2-2.1-PED-2016-0253, 17/08/2017-30/12/20, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest, Romania.
11. Novel anti-corrosion and anti-icing ZnO nanostructured materials obtained by ecofriendly methods (NOCORIC), PN-III-P2-2.1-PED-2016-1332, 03/01/2017-03/07/2018, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest, Romania.
12. Optimization and validation of an advanced material and technology default based on biopolymer-modified clay as carriers for controlled release of doxorubicin in gastrointestinal tract (DOXACLAY), PN-III-P2-2.1-PED-2016-1896, 03/01/2017-02/07/2018, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest, Romania
13. New nanosized cellulose fillers for fully biodegradable packaging solutions (FULLBIOPACK), 2015-2017, PNII-RU-TE, - ICECHIM Bucharest -- persoană cheie; <http://icechim-rezultate.ro/project.php?id=23>
14. Multifunctional and innovative products for safe and bioenhanced functional food from newly cultivated plants in Romania (MAIA), 2014-2017, PN II Collaborative 160/2014, - ICECHIM Bucharest <http://produsemultifunctionale.icechim.ro/> ;
15. Biocompatible innovative systems used as carriers for the controlled release of essential oils (NUCLEU), PN.16.31.03.04, 2015-2017, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest.
16. Solutions to obtain automotive parts with icephobic and dirtphobic properties made of polypropylene and polycarbonate (FOBICE), 2013-2015, POS-CCE, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest
17. Eco-friendly food packaging from last generation multifunctional bioplastics, 2012-2016, PN-II-PT-PCCA, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest;
18. Thermosensitive energy saving systems with tailored solar reflecting/absorbing properties for construction structures (THERMOSOLAR), 2012-2016, PN-II-PT-PCCA, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest, <http://www.thermosolar.roit.ro/> ;
19. Eco-efficient solutions for plastic waste management using degradative potential of biological systems, 2008-2011, PN II, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest;
20. Construction elements of nanocomposites based on phase-change materials (PCM)-epoxy to store solar and waste energy used in buildings with low energy consumption (NANOSTOC), 2007-2010, PN II, Institute of Physical Chemistry I.G. Murgulescu Bucharest;

21. Medical device for articular diseases treatment based on nanomaterials and magnetic field effects, (ARTROMAG), 2008-2011, PN II, Colentina Clinic Hospital– Institute of Medicine and Neuroscience N. Gh. Lupu Bucuresti;
22. Bioactive organic nanocomposites for food packaging (NABIECO), 2007-2009, PN II, National Research & Development Institute for Chemistry and Petrochemistry - ICECHIM Bucharest;
23. New Nanostructured Materials with Controlled Properties and Biomedical Applications (BIONANOMAT), 2005-2008, CEEX, INCDSB – Bucharest;
24. Nanocomposites with electric and magnetic properties for high selective separative processes; (NEMSEPSEL), PN II, 2007-2010, University Politehnica of Bucharest;
25. Micro- and nanoparticles based on polyether polyols, 2006-2008, CEEX ET, University Politehnica of Bucharest;
26. Radiolabeled micro and nanospheres for cancer therapy, 2006-2008, CEEX, Horia Hulubei National Institute of Physics and Nuclear Engineering, Romania;
27. Integrated Research Network for the Design of Knowledge-based Multifunctional Polymeric Materials, 2005-2008, CEEX, Institute of Macromolecular Chemistry Petru Poni Iasi, Romania;
28. Multi-functional advanced materials with silver nano-powders addition (NACOLAG), 2005-2008, CEEX, National Institute for R&D in Electrical Engineering ICPE-CA, Romania;
29. Surface phenomena and organization in disperse systems with anisotropic fluids, 2005-2008, CEEX, National Institute for Laser, Plasma and Radiation Physics, Romania.

PUBLICATION LIST

Articles (main author, chronological order)

1. R. Ianchis, M.M. Marin*, R. Alexa Leu*, I.C. Gifu, E. Alexandrescu, G. Gradisteanu Pircalabioru, G.M. Vlasceanu, G.M. Teodorescu, A. Serafim, S. Preda, C. L. Nistor, C. Petcu Nanoclay reinforced alginate/salecan composite inks for 3D printing applications, International Journal of Bioprinting, 2023, accepted for publication
2. M.M. Marin, I.C. Gifu, G.G. Pircalabioru, M. Albu Kaya, R.R. Constantinescu, R.L. Alexa, B. Trica, E. Alexandrescu, C.L. Nistor, C. Petcu, R. Ianchis*, Microbial polysaccharide-based formulation with silica nano-particles. A New Hydrogel Nanocomposite for 3D Printing, Gels, 2023, 9, 425, <https://doi.org/10.3390/gels9050425>
3. I.C. Gifu, R. Ianchis*, C.L. Nistor, C. Petcu, I. Fierascu, R. Radu, *Polyelectrolyte Coatings—A Viable Approach for Cultural Heritage Protection*, Materials, 2023, 16, <https://www.mdpi.com/1996-1944/16/7/2873>
4. M.M. Marin, M.G.A. Kaya, D.A. Kaya, R. Constantinescu, B. Trica, I.C. Gifu, E. Alexandrescu, C.L. Nistor, R. Leu Alexa, R. Ianchis*, *Novel Nanocomposite Hydrogels Based on Crosslinked Microbial Polysaccharide as Potential Bioactive Wound Dressings*, Materials, 2023, 16, 3, <https://www.mdpi.com/1996-1944/16/3/982>
5. R. Ianchis, R.L. Alexa, I.C. Gifu, M.M. Marin, E. Alexandrescu, R. Constantinescu, A. Serafim, C.L. Nistor, C. Petcu, *Novel Green Crosslinked Salecan Hydrogels and Preliminary Investigation of Their Use in 3D Printing*, Pharmaceutics, 2023, 15, 2, <https://www.mdpi.com/1999-4923/15/2/373>
6. M.M. Marin, R. Ianchis*, R. Leu Alexa, I.C. Gifu, M.G.A. Kaya, D.I. Savu, R.C. Popescu, E. Alexandrescu, C.M. Ninculeanu, S. Preda, M. Ignat, R. Constantinescu, H. Iovu*, „*Development of New Collagen/Clay Composite Biomaterials*”, Int. J. Mol. Sci. 2022, 23, 401. <https://doi.org/10.3390/ijms23010401>
7. R.L Alexa, R. Ianchis*, D. Savu, M. Temelie, B. Trica, A. Serafim, G.M. Vlasceanu, E. Alexandrescu, S. Preda, H. Iovu, "3D Printing of Alginate-Natural Clay Hydrogel-Based Nanocomposites", Gels, 2021, 7(4), 211; <https://www.mdpi.com/2310-2861/7/4/211>
8. R.L Alexa, H. Iovu*, B. Trica, C. Zaharia, A. Serafim, E. Alexandrescu, I-C Radu, Vlasceanu, S. Preda, C.M. Ninculeanu, R. Ianchis*, *Assessment of Naturally Sourced Mineral Clays for the 3D Printing of Biopolymer-Based Nanocomposite Inks*. *Nanomaterials* 2021, 11, 703; <https://www.mdpi.com/2079-4991/11/3/703>
9. P.E. Florian, M. Icriverzi, C.M. Ninculeanu, E. Alexandrescu, B. Trica, S. Preda, R. Ianchis*, A. Roseanu*, *Salecan-Clay Based Polymer Nanocomposites for Chemotherapeutic Drug Delivery Systems; Characterization and In Vitro Biocompatibility Studies*. *Materials* 2020, 13, 5389; <https://www.mdpi.com/1996-1944/13/23/5389>
10. R. Ianchis, C.M.* Ninculeanu, I.C. Gifu, E. Alexandrescu, C.L. Nistor, S. Nitu, C. Petcu, *Hydrogel-clay nanocomposites as carriers for controlled release*, Bentham Science, *Current Medicinal Chemistry*, doi: 10.2174/0929867325666180831151055, 2020; <https://www.ncbi.nlm.nih.gov/pubmed/30182847>
11. R. Ianchis, C.M.* Ninculeanu, I.C. Gifu, E. Alexandrescu, R. Somoghi, A.R. Gabor, S. Preda, C.L. Nistor, S. Nitu, C. Petcu, M. Icriverzi, P.E. Florian, A.M. Roseanu, *Novel Hydrogel-Advanced Modified Clay Nanocomposites as Possible Vehicles for Drug Delivery and Controlled Release*, *Nanomaterials*, 7 (12) 2017; <https://www.mdpi.com/2079-4991/7/12/443>
12. S. Caprarescu, R. Ianchis*, A.L. Radu, A. Sarbu, R. Somoghi, B. Trica, E. Alexandrescu, C.I. Spataru, R.C. Fierascu, D. Ion-Ebrasu, S. Preda, L.I. Atanase, D. Donescu, "Synthesis, characterization and efficiency of new organically modified montmorillonite polyethersulfone membranes for removal of zinc ions from wastewasters", *Applied Clay Science*, 2016, 137, 135–142; <https://www.sciencedirect.com/science/article/pii/S0169131716305488>
13. C. Petcu, V. Purcar, R. Ianchis*, C.I. Spataru, M. Ghiurea, C.A. Nicolae, H. Stroescu, L.I.

- Atanase, A.N. Frone, B. Trica, D. Donescu, *Synthesis and characterization of polymer-silica hybrid latexes and sol-gel-derived films*, *Applied Surface Science*, 666–672, 2016; <https://www.sciencedirect.com/science/article/pii/S0169433216315124>
14. C.L. Nistor, **R. Ianchis***, M. Ghiurea, C.A. Nicolae, C.I. Spataru, D.C. Culita, J.P. Cusu, V. Fruth, F. Oancea, D. Donescu, Aqueous Dispersions of Silica Stabilized with Oleic Acid Obtained by Green Chemistry, *Nanomaterials*, 6, 9, 2016; <https://doi.org/10.3390/nano6010009>
15. **R. Ianchis**, I.D. Rosca, M. Ghiurea, C.I. Spataru, C.A. Nicolae, R. Gabor, V. Raditoiu, S. Preda, R.C. Fierascu, D. Donescu, *Synthesis and properties of new epoxy-organolayered silicates nanocomposites*, *Applied Clay Science*, 103, 28–33, 2015; <https://www.sciencedirect.com/science/article/pii/S0169131714004153>
16. **Raluca Ianchis**, Dan Donescu, Ludmila Otilia Cintea, Violeta Purcar, Cristina Lavinia Nistor, Cristian Petcu, Cristian Andi Nicolae, Raluca Gabor, Silviu Preda, *Polymer-clay nanocomposites obtained by solution polymerization of vinyl benzyl triammonium chloride in the presence of advanced functionalized clay*, *Journal of Chemical Science* Vol. 126, No. 3, May 2014, pp. 609–616; <https://link.springer.com/article/10.1007/s12039-014-0621-0>
17. Mihai Cosmin Corobeia, Ignac Capek, **Raluca Ianchis***, Dan Donescu, Raluca Somoghi, Marius Ghiurea, Cristina Lavinia Nistor, Violeta Purcar, Ludmila Otilia Cintea, Constantin Radovici, Gabriel Prodan, *Silica nanowires obtained on clay mineral layers and their influence on mini-emulsion polymerisation*- *Applied Clay Science*, 95 (2014) 232–242; <https://www.sciencedirect.com/science/article/pii/S016913171400132X>
18. **R. Ianchis**, V. Raditoiu, L. Wagner, M. Ghiurea, R. Somoghi, C.-I. Spataru, V. Purcar, L. C. Nistor, D. Donescu, *Polymer dispersions containing thermochromic system*-*Optoelectronics and Advanced Materials – Rapid Communications* vol. 8, iss. 7-8/2014; [http://www.academia.edu/16837725/Polymer dispersions containing thermochromic s ystem](http://www.academia.edu/16837725/Polymer%20dispersions%20containing%20thermochromic%20system)
19. **R. Ianchis**, D. Donescu, R. Somoghi, M.C. Corobeia, L.C. Nistor, M. Ghiurea, C. Petcu, C.A. Nicolae, R. Gabor, I. Atkinson, *Miniemulsion polymerization of styrene in the presence of different commercial clays*, *Journal of Optoelectronics and Advanced Materials*, 15, 5- 6, 578-582, 2013; https://www.researchgate.net/profile/Cristina_Nistor2/publication/260261679_Miniemulsion%20polymerization%20of%20styrene%20in%20the%20presence%20of%20different%20commercial%20clays/links/573ef28f08ae298602e8e4d0.pdf
20. R. Somoghi, **R. Ianchis***, M. Ghiurea, V. Purcar, D. Donescu, *New nanostructures derived from magnetic polymer hybrids and functional silanes*, *Journal of Optoelectronics and Advanced Materials*, 15, 5-6, 2013, 583-588; <https://www.scopus.com/record/display.uri?eid=2-s2.0-84881268711&origin=resultslist&sort=plf-f&src=s&sid=4c81d662ae0253090659d013a4fa4af8&sot=autdocs&sdt=autdocs&sl=18&s=AU-ID%2823995646600%29&relpos=15&citeCnt=2&searchTerm=>
21. D. Donescu, **R. Ianchis***, C. Petcu, V. Purcar, C. L. Nistor, C. Radovici, R. Somoghi, S. F. Pop, A. Perichaud, *Study of the solvents influence on the layered silicates - cation polymer hybrids properties*, *Digest Journal of Nanomaterials and Biostructures*, 8, 4, 2407 – 2416, October – December 2013; http://www.chalcogen.ro/1751_Donescu.pdf
22. **R. Ianchis**, M. C. Corobeia, D. Donescu, I. D. Rosca, L. O. Cintea, L. C. Nistor, E. Vasile, A. Marin, S. Preda, *Advanced functionalization of organoclay nanoparticles by silylation and their polystyrene nanocomposites obtained by miniemulsion polymerization*, *Journal of Nanoparticle Research*, 14:1233-1236, 2012; <https://link.springer.com/article/10.1007/s11051-012-1233-6>
23. **R. Ianchis**, L.O. Cintea, D. Donescu, C. Petcu, M.C. Corobeia, M. Ghiurea, R. Somoghi, C. Spataru- *Implications of silylated montmorillonite on montmorillonite polyacrylate-nanocomposites*, *Applied Clay Sci.*, 52, 96–103, 2011;

- <https://www.sciencedirect.com/science/article/pii/S0169131711000585>
24. **R. Ianchis**, D. Donescu, C. Petcu, M.C. Corobeia, C.L. Nistor R. Somoghi, R. D. Fierascu – *Synthesis of superhydrophobic montmorillonite by edge covalent bonding with monofunctional alkoxy silane*, OAMRC, 5, 12, 1352 – 1355, 2011; https://www.researchgate.net/publication/259579170_Synthesis_of_superhydrophobic_montmorillonite_by_edge_covalent_bonding_with_monofunctional_alkoxysilane
25. **R. Ianchis**, L.O. Cinteza, D. Donescu, C. Petcu, M.C. Corobeia, M. Ghiurea, R. Somoghi, C. Spataru- *Implications of silylated montmorillonite on montmorillonite polyacrylate-nanocomposites*, Applied Clay Science, 52, 96–103, 2011; <https://www.sciencedirect.com/science/article/pii/S0169131711000585>
26. **R. Ianchis**, D. Donescu, M. C. Corobeia, C. Petcu, M. Ghiurea, S. Serban, C. Radovici, *Synthesis of polystyrene/polybutylacrylate/layered silicate nanocomposites in aqueous medium*, Colloid and Polymer Science, 288, 1215-1224, 2010 <https://link.springer.com/article/10.1007/s00396-010-2251-5>
27. **R. Ianchis**, D. Donescu, M. Ghiurea, C. Petcu, A. Marcu, D. F. Anghel, G. Stanga, *Surfactant-free emulsion polymerization of styrene in the presence of silylated montmorillonite*, Applied Clay Sci, 45, 3, 164-170, 2009; <https://www.sciencedirect.com/science/article/pii/S0169131709001021>
28. **R. Ianchis**, D. Donescu, V. Purcar, R. C. Fierascu, C. Petcu, V. Raditoiu, *Organic-Inorganic Hybrid Latexes Colored with Azoic Dyes*, OAM-RC, 3, 1, 77-82, 2009; <https://www.scopus.com/record/display.uri?eid=2-s2.0-77952004100&origin=resultslist&sort=plf-f&src=s&sid=4c81d662ae0253090659d013a4fa4af8&sot=autdocs&sdt=autdocs&sl=18&s=AU-ID%2823995646600%29&relpos=4&citeCnt=10&searchTerm=>
29. **R. Ianchis**, D. Donescu, C. Petcu, *Influence of layered silicate on microemulsion polymerization kinetics of butylacrylate with alkoxy silane*, Materiale Plastice, 45, 3, 265-268, 2008; <http://www.revistadechimie.ro/pdf/IANCHIS%20R.pdf>
30. **R. Ianchis**, D. Donescu, C. Petcu, M. Ghiurea, R. Somoghi, S. Serban, *Nanodispersed systems obtained in the presence of alkoxy silane and layered silicates*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 70 (2), 45-54, 2008; https://www.scientificbulletin.upb.ro/?page=revistaonline&a=2&arh_an=2008&arh_ser=B&arh_nr=2
31. D. Donescu, R. Somoghi, C. Petcu, M.C. Corobeia, **R. Ianchis***, C.L. Nistor, *Silica hybrid particles synthesized through sol-gel processes*, UPB Scientific Bulletin, Series B: Chemistry and Materials Science 70 (2), 39-44, 2008; https://www.scientificbulletin.upb.ro/SeriaB_Chimie_si_Stiinta_Materialelor.php?page=revistaonline&a=2&arh_an=2008&arh_ser=B&arh_nr=2

Articles (co-autor, chronological order)

1. *3D Printed Composite Scaffolds of GelMA and Hydroxyapatite Nanopowders Doped with Mg/Zn Ions to Evaluate the Expression of Genes and Proteins of Osteogenic Markers*, R.L. Alexa, A. Cucuruz, C.D. Ghitulică, G. Voicu, L.R. Stamat (Balahura), S. Dinescu, G. M. Vlasceanu, H. Iovu, A. Serafim, **R. Ianchis**, L.T. Ciocan, M. Costache, *Nanomaterials*, 2022, 12(19), 3420.
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