

Europass Curriculum vitae



Personal informations

First name(s) / Surname(s)

ELISABETA-IRINA, GEANĂ

Adress(es)

No. 14, Aleea Olanesti Street, Rm. Valcea, Valcea, Romania, postcode 240092

Telephone(s)

0040350427019 Mobile: 0040745752559

Fax(es)

-

E-mail i

irina.geana@icsi.ro; irinabiraruti@yahoo.com

Nationality

Romanian

Date of birth

25, Nov., 1982

Gender

F

Work experience

Doctor in the field of chemistry/ Principal Scientific researcher, CS I

- 2008 present, Research and Development Department, National R&D Institute of Cryogenics and Isotopic Technologies ICSI, Rm. Valcea (2019 Principal Scientific Researcher, CS I; since 2015 Responsible of "Natural compounds investigations in foods and beverages" group, within the Research Department ICSI Analytics (http://erris.gov.ro/R&DTT-Laboratories); since 2010 Responsible of Laboratory of Liquid Chromatography; 2009 Scientific Researcher III, CS III; 2008 Asistant Scientific Researcher)
- 2007-2008: Chemist analyst, Quality Control Department, Sc Biofarm SA, Bucharest, Romania
- 2005-2007: Chemist, Organic Synthesis Laboratory, National Institute for Chemical Pharmaceutical Research and Development, Bucharest, Romania.

Education

- 2019-2021: Postdoctoral program, Polytechnic University of Bucharest, Faculty of Applied Chemistry and Materials Science
- 2008-2015: Ph.D., chemistry, Department of Analytical Chemistry, Faculty of Chemistry, University of Bucharest, Bucharest, Romania,
- **2005-2007**: M.S., Therapeutic Chemistry, Faculty of Chemistry, University of Bucharest, Bucharest, Romania,
- **2001-2005**: B.S., Chemist, Department of Organic Chemistry, Faculty of Chemistry, University of Bucharest, Bucharest, Romania

Training

- 28-29 June 2018, General requirements for the competence of testing and calibration laboratories according to SR EN ISO / IEC 17025: 2018, CERT IND Vocational Training Center, Bucharest
- March 2016, Scientific Seminar "Comprehensive two-dimensional gas chromatography coupled with mass spectrometry and its applications", LECOROM Analitica SRL, Romania
- 2011, 10-11 March, Certificate of participation "Training in Metrology in Chemistry", training course organised by Institute for Reference Materials and Measuremeants, Bucharest, Romania.

- 2007, 19-20 December, Certificate of participation "Principles and Application of Metrology in Chemistry", Training in Metrology in Chemistry (TrainMic), organised by Institute for Reference Materials and Measuremeants, JRC in collaboration with I.N.C.D.M.I Cantacuzino, Bucharest, Romania, SC Mecro Sistem SRL, Bucharest, Romania.
- 2007, 11-14 June, Certificate of participation "Monitoring of organic pollutants by chromatographic techniques", organised by Research Center for environment protection and waste recovery, University of Bucharest in collaboration with SC Mecro Sistem SRL, Bucharest, Romania.
- 2007, 01-03 June, Certificate GMP Training (Requirements for personnel, Personnel Hygiene, Environmental Monitoring, Quality Control), S.C. Biofarm SA, Bucharest.

Research interests

- developing analytical methods for quality control and food authentication (honey, wine, fruits, plants, organic products, functional foods based on bee products), by highlighting key biomarkers used in authentication and quality control
- characterization and identification of bioactive compounds (polyphenols, triterpenic acids, amino acids, organic acids, minerals) in different foods, plant matrices and by-products
- monitoring environmental contamination (water, air emissions and immissions, sediments and soils) investigating contaminants such as polycyclic aromatic hydrocarbons (PAHs), heavy metals and pesticides and their impact on the environment

Technical skills

• UHPLC-MS/MS, UHPLC-DAD, UHPLC-FL, UHPLC-ELSD, UV-Vis, ICP-MS, AAS, electrochemistry (sensors/biosensors), extraction techniques (MAE, ASE, Soxhlet).

Publications and projects

- 60 articles in ISI journals, for the specific research domains (chemistry multidisciplinary, food science technology, chemistry analytical, chemistry applied, engineering chemical, environmental science); 6 articles indexed in international databases; 23 articles in BDI journals; more than 40 participations at prestigious international conferences and more than 50 participation at national conferences.
- Project leader/responsible for 6 national projects and key person in 29 national and 2 international projects

Citation Metrics

- ISI Web of Science citations: 879 (without self-citations);
- Google Scholar citations: 1212
- Hindex: 20/18/18) (Google Scholar/Scopus/WoS)
- Scopus Author ID: 52363434400; ORCID: http://orcid.org/0000-0003-4909-8574; Brainmap ID: U-1700-036V-7065

Society Memberships

- Romanian Society of Chemistry.
- Romanian Society of Physics
- Asociatia pentru energia hidrogenului din Romania

Edithorial member

- Topic edithor of Antioxidants (IF: 7.0) and Separations MDPI (IF: 2,777)
- member in the editorial board for two intenational BDI journals: Recent Advancement in Food Science and Nutrition Research and CPQ Nutrition (CPQNN)
- Review Editor on the Editorial Board of Agro-Food Safety (specialty section of Frontiers in Sustainable Food Systems), https://loop.frontiersin.org/people/159751/overview

Reviewer for ISI journals

■ Food Chemistry, Journal of Food Analysisi and Composition, Applied Science, Frontiers in Sustainable Food Systems, Frontiers in Bioengineering and Biotechnology, Journal of the Science of Food and Agriculture, Sustainability, Food Bioscience, Molecules, Separations, Phytochemical analysis, Food Analytical Methods, Analytical Letters, Food Technology and Biotechnology, Biological Trace Element Research, Science of the Total Environment, Environmental Engineering and Management Journal, European Food Research and Technology, Sky Journal of Food Science.

Awords

- 24 CNCSIS Awards of the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), Romania for the articles published in journals ranking in Web of Knowledge in the top 25% (Q1) and top 50% journals (Q2).
- 10 Awards for Best oral presentation or poster presented at international conferences

Personal and	skill
competences	
Mother ton	gue(s

Mother tongue(s) Romanian

Other language(s) • English (good knowledge of spoken and written)

French (good knowledge of spoken and written)

Social skills and Good communication and inter-personal skills and ability to work in a team. competences

Computer skills and competences

MS Office (Word, Excel, PowerPoint), XLSTAT – Statistical Software for Excel, Origin, Internet

Driving licence

B category (\leq 3500kg, 1+8 Seats)

Additional informations

Projects

- 1. PN-IV PN 23 15 04. 01 "The cascade valorization of agro-industrial waste of the vegetable biomass type in bioproducts with added value in the circular bioeconomy system, BioVal", project manager
- 2. ADER 6.5.2 "Evaluation of the agrobiological characteristics and oenological capacity of varieties with high nutraceutical value in order to increase the added value of viticultural products and by-products", project responsible
- 3. ADER 17.1.2 "Research on the development of sustainable technologies for obtaining and capitalizing on innovative ingredients and food products for the nutritional balance of the modern consumer's diet", Key person
- **4.** ADER 6.3.7 "Applicability measures regarding the investigation of the distribution of organochlorine and organophosphorus contaminants on the soil-plant-vegetable/fruit-finished product chain, following different types of varieties from various areas", Key person
- **5.** PN-IV PN 23 15 03 01 "The implementation of integrated isotopic-chemical-nuclear analytical methodologies for the authentication of traditional Romanian food products", Key person
- **6.** PNRR-III-C9-2022 I5, Componenta C9. Support for the Private Sector, Research, Development and Innovation, I5. Establishment and operationalization of Competence Centers"- Project "Improving soil conservation and resilience by boosting biodiversity and the functional safety of organic food products", Key person technical expert
- 7. PN-III-P2-2.1-PED2021-3279, ctr. 704PED/2022 "Development of sensitive and selective sensors for detection of glyphosate in water samples using the technique of molecular printing integrated with the surface acoustic waves technology", project responsible from P1
- **8.** PN-III-P2-2.1-PED2021-4281, ctr. 584PED/2022 "New eco-nano-technologies for the elimination of halogenated organic compounds from wastewater using advanced oxidation and reduction processes and anaerobic biodegradation processes" Key person
- **9.** POIM Large Infrastructure Operational Program, Cod My SMIS 139703 "Improving the National Air Quality Assessment and Monitoring System", contract 385/13.10.2020, Ministry of the Environment –technical expert
- **10.**PN-III-P4-ID-PCE2020-0923, New biosensors and intelligent tools for the ultra-sensitive detection of counterfeiting of olive oils Key person
- **11.**POCU 51668/09.07.2019 Work-based learning systems through entrepreneurial scholarships for doctoral and post-doctoral students Key person
- **12.**NUCLEU Program, project PN 19 11 03 03/2019 "Advanced techniques for identifying sources of contamination and biochemical reactions in aquatic ecosystems" Key person
- **13.**NUCLEU Program, project PN 19 11 03 02/2019 "Research on the variation trends specific to stable isotopes in different tree species: deepening of the fractionation mechanisms and of the chemical processes interconnected on the soil-water-plant chain" Key person
- **14.**PN-III-P1-1.1-PD-2016-0518, ctr. 45PD/2018, Innovative strategies based on screening techniques coupled with multivariate statistical analysis used for wines authenticity assessment, SCREEN-WINE project manager
- **15.**NUCLEU Program, project PN 18120302/2018: "Research on the development of advanced analytical methods for investigating organic food products of plant or animal origin" Key person

- **16.**NUCLEU Program, project PN 18120303/2018 "Assessment of the impact of wastewater discharges in the middle and lower basin of the Olt river on the Danube water quality, based on the physico-chemical and multi-isotopic imprints (O, H, N, Li, B, Sr)" Key person
- **17.**PN-III-P2-2.1-PED-2016-1656, ctr. 194PED/2017, Alternative analytical approaches for detecting adulteration of honey with emphasis on its biologically active compounds, SAFE-HONEY project manager
- **18.**COST intergovernmental framework for European Cooperation in Science and Technology COST 1403-POSITIVe./2016
- **19.**NUCLEU Program, project PN 16 36 04 01 / 2016 "Assessing the impact of different ecosystems on stable isotopes and multi-element composition of plants Research on geo-seasonal variability" Key person
- **20.**NUCLEU Program, project PN 16 36 04 02 / 2016 "Advanced research regarding the authentication of the origin of food products for the implementation of innovative methodologies Case study: fruit based products" Key person
- **21.**Inter Academy Exchange 2015, Romania Republic of Moldova, The Institute of Chemistry of the Academy of Sciences of Moldova with the subject "Identification and characterization of biologic active compounds from different fruits and medicinal plants" project responsible
- 22. Inter Academy Exchange 2015, Romania Slovakia, Institute of Forest Ecology, Slovak Academy of Sciences, Dpt. of Molecular Apidology, with the subject "Characterization and authentication of bee products using modern analytical techniques" project responsible
- 23.NUCLEU Program, project PN 09 19 01 09 / 2015: "Research on the development of advanced analytical methods for investigating the biologically active compounds from natural products used for the development of functional foods and cosmetics" project manager
- **24.** Inter Academy Exchange 2015, Romania Republic of Moldova, The Institute of Chemistry of the Academy of Sciences of Moldova with the subject "Evaluation of ursolic and oleanolic acids content in vegetable sources by modern analytical techniques" project responsible
- **25.**NUCLEU Program, project PN 09 19 02 08 / 2014: "Research regarding the development of new analytical methods to control contaminants and additives in food" member of research team
- **26.** NUCLEU Program, project PN 09 19 02 07 / 2013: "Research regarding the development of advanced analytical methods for investigating compositional profile of products with complex matrix" member of research team
- **27.**NUCLEU Program, project PN 09 19 02 06 / 2013, grant No. 19N/2009 Add. No. 1/2013 from the Romanian Ministry of Education: "Support researchs on the application of multi-lisotopic investigations to establish of markers to trace the origin of food" member of research team
- **28.**NUCLEU Program, project PN 09 19 02 05 / 2012: "Research on natural products characterization and authentication based on evaluation of their protein profile" member of research team
- **29.**NUCLEU Program, project PN 09 19 02 04 / 2012: "Research on the development of new methods of extraction and separation of anthocyanis and anthocyanidins compounds from vegetables, for use as natural dyes in food" member of research team
- **30.**NUCLEU Program, project PN 09 19 02 01 / 2009: "Research on application of multi-isotopic and multi-element methods in order to define authenticity and geographical classification of Romanian wines" member of research team
- **31.**NUCLEU Program, project PN 09 19 02 03 / 2009: "Assessing human impact on the environment by investigations of pollutants in air, water, soil and comparison with a protected National Park" member of research team
- **32.**NUCLEU Program, project PN 06 13 03 01 / 2008: "Developing a complex system of air quality monitoring by determining the levels of oxides of carbon, nitrogen and sulfur" member of research team
- **33.**PNCD II 32-127 / 2008: "The determination of the mechanism of the penetration of organic and iorganic pollutants in the water destined to the great urban agglomerations in Cluj and Salaj countries" member of research team
- **34.**PNCD II 52-162 / 2008: "Defining the aromatic profile of wines from indigenous varieties by gas chromatography and isotopic techniques, as authentication element of these products on the European market" member of research team
- **35.** Sectorial Project 5.2.5 / 2008: "Establishing methods for the determination of counterfeit products in the wine industry" member of research team
- **36.**NUCLEU Program, project PN 06 06 / 2005 : "Synthesis and natural product for health" member of research team
- **37.**CEEX 36/2005: "Use of radiolabelled compounds in molecular biology, pharmacology and toxicology studies" member of research team

Books/book chapters

 Elisabeta-Irina Geană, Teodora Emilia Coldea*, Alexandra-Costina Avîrvarei, Elena Mudura, Carmen Rodica Pop, Oana Lelia Pop, Călina Ciont (Nagy), Liana Claudia Salanță, Anamaria Călugăr, Mihaela Mihai, Corina Teodora Ciucure, Cosmin Pompei Dărab, Fruit pomaces as valuable by-products of wine and cider industries, Agricultural Waste: Environmental Impact, Useful Metabolites and Energy Production, Springer Singapore, ISSN 2352-474X, E-ISSN 2352-4758, 18 February 2023, https://link.springer.com/book/9789811987731

Patents

1. Irina Gheorghe, Viorica Maria Corbu, Sorin Avramescu, Ioana Cristina Marinas, **Elisabeta Irina Geană**, Mariana Carmen Chifiriuc, A new ecological solution based on allium sativum extract to combat the biodeteriogenic agents of cultural heritage objects from Romania, patent application A/00163 from 08.04.2021.

Articles

Scientific papers published in ISI:

- 1. Ioana C. Marinasa, Gratiela Gradisteanu Pircalabioru, Eliza Oprea*, Elisabeta-Irina Geana, Irina Zgura, Cosmin Romanitan, Elena Matei, Marian Angheloiu, Anca C. Nicoara, Mihaela Georgescu, Mariana C. Chifiriuc, Physicochemical and Pro-wound Healing Properties of Microporous Cellulosic Sponge from Gleditsia triacanthos Pods Functionalized with Phytolacca americana Fruit Extract, Cellulose, accepted.
- 2. Elisabeta-Irina Geana*, Corina Teodora Ciucure, Radu Tamaian*, Ioana Cristina Marinas*, Diana Mădălina Gaboreanu, Miruna Stan and Carmen Lidia Chitescu, Antioxidant and Wound Healing Bioactive Potential of Extracts Obtained from Bark and Needles of Softwood Species, Antioxidants 2023, 12, 1383. https://doi.org/10.3390/antiox12071383
- **3.** Corina Teodora Ciucure, **Elisabeta-Irina Geana***, Maxim Arseni, Roxana Elena Ionete, Status of different anthropogenic organic pollutants accumulated in sediments from Olt River Basin, Romania: From distribution and sources to risk assessment, Science of The Total Environment, Volume 886, 15 August 2023, 163967, https://doi.org/10.1016/j.scitotenv.2023.163967
- **4.** Petronela Anca Onache, Alina Florea, **Elisabeta-Irina Geana***, Corina Teodora Ciucure, Roxana Elena Ionete, Dorin Ioan Sumedrea and Ovidiu Tita, Assessment of Bioactive Phenolic Compounds in Musts and the Corresponding Wines of White and Red Grape Varieties, Appl. Sci. 2023, 13, 5722. https://doi.org/10.3390/app13095722
- 5. Elisabeta-Irina Geana, Corina Teodora Ciucure, Irina Mirela Apetrei, Maria Lisa Clodoveo, Constantin Apetrei, Discrimination of olive oil and extra-virgin olive oil from other vegetable oils by targeted and untargeted HRMS profiling of phenolic and triterpenic compounds combined with chemometrics, International Journal of Molecular Sciences, 2023, 24(6), 5292; https://doi.org/10.3390/ijms24065292, MDPI, IF: 6.208, Q1
- **6.** Victoria Artem, Arina Oana Antoce, **Elisabeta Irina Geana**, Aurora Ranca, Effect of foliar treatment with chitosan on phenolic composition of 'Fetească neagră' grapes and wines, Notulae Botanicae Horti Agrobotanici Cluj-Napoca, 51(1):12920, IF: 1,249, Q3
- 7. Lidia Lungu, Svetlana Blaja, Caleria Cucicova, Alexandru Ciocarlan, Alic Barba, Veaceslav Kulciţki, Sergiu Shova, Nicoleta Vornicu, Elisabeta-Irina Geana, Ionel I. Mangalagiu and Aculina Aricu, Synthesis and Antimicrobial Activity Evaluation of Homodrimane Sesquiterpenoids with a Benzimidazole Unit, Molecules 2023, 28, 933. https://doi.org/10.3390/molecules28030933, IF: 4,927, Q2
- 8. Mădălina Maria Nichitoi, Ana Maria Josceanu, Raluca Daniela Isopescu, Gabriela Olimpia Isopencu, Elisabeta-Irina Geana, Corina Teodora Ciucure, Vasile Lavric, Do ultrasonic field effects upon the polyphenolics profile of propolis extracts improve their antioxidant and antimicrobial activity?, Ultrasonics Sonochemistry, Volume 92, January 2023, 106274, IF: 9.336, Top Q1
- 9. Corina Teodora Ciucure, Elisabeta-Irina Geană*, Carmen Lidia Chitescu, Silviu Laurentiu Badea, Roxana Elena Ionete, Distribution, sources and ecological risk assessment of polycyclic aromatic hydrocarbons in waters and sediments from Olt River dam reservoirs in Romania, Chemosphere, Volume 311, Part 2, January 2023, 137024, https://doi.org/10.1016/j.chemosphere.2022.137024
- 10. Marilena-Viorica Hovanet,, Emma Adriana Ozon, Elena Moros, Oana Cristina Seremet, Eliza Oprea, Elisabeta-Irina Geană, Adriana Iuliana Anghel, Carmellina Bădiceanu, Ligia Elena Dutu, Cristina Silvia Stoicescu, Eugenia Nagoda, Robert Ancuceanu, Wound Healing and Anti-Inflammatory Effects of a Newly Developed Ointment Containing Jujube Leaves Extract, Life 2022, 12(12), 1947; pag. 1-21, https://doi.org/10.3390/life12121947
- 11. Petronela Anca Oneche, Elisabeta-Irina Geană*, Corina Teodora Ciucure, Alina Florea*, Dorin Ioan Sumedrea, Roxana Elena Ionete, Ovidiu Tiţa, Bioactive phytochemical composition of grape pomace resulted from different white and red grape cultivars, Separations 2022, accepted
- **12.** Viorica Maria Corbu, Irina Gheorghe-Barbu, Ioana Cristina Marinas, Sorin Marius Avramescu, Ionut Pecete ,Elisabeta Irina Geană and Mariana Carmen Chifiriuc, Eco-Friendly Solution Based on Rosmarinus officinalis Hydro-Alcoholic Extract to Prevent Biodeterioration of Cultural Heritage Objects and Buildings, Int. J. Mol. Sci. 2022, 23(19), 11463; https://doi.org/10.3390/ijms231911463

- **13.** Alina Perisoara, Ioana Cristina Marinas, Elisabeta Irina Geana, Mariana Constantin, Marian Angheloiu, Lucia Pirvu and Stelica Cristea, Phytostimulation and Synergistic Antipathogenic Effect of Tagetes erecta Extract in Presence of Rhizobacteria, Horticulturae 2022, 8(9), 779; https://doi.org/10.3390/horticulturae8090779
- **14.**Lidia Lungu, Caleria Cucicova, Svetlana Blaja, Alexandru Ciocarlan, Ion Dragalin, Alic Barba, Nicoleta Vornicu, Elisabeta-Irina Geana, Ionel I. Mangalagiu and Aculina Aricu, Synthesis of Homodrimane Sesquiterpenoids Bearing 1,3-Benzothiazole Unit and Their Antimicrobial Activity Evaluation, Molecules 2022, 27(16), 5082; https://doi.org/10.3390/molecules27165082
- **15.**Cornelia-Ioana Ilie, Eliza Oprea, Elisabeta-Irina Geana, Angela Spoiala, Mihaela Buleandra, Gratiela Gradisteanu Pircalabioru, Irinel Adriana Badea, Denisa Ficai, Ecaterina Andronescu, Anton Ficai and Lia-Mara Ditu, Bee Pollen Extracts: Chemical Composition, Antioxidant Properties, and Effect on the Growth of Selected Probiotic and Pathogenic Bacteria, Antioxidants 2022, 11(5), 959; https://doi.org/10.3390/antiox11050959
- **16.**Corina Teodora Ciucure, Elisabeta-Irina Geana*, Claudia Sandru, Ovidiu Tita and Mihai Botu, Phytochemical and Nutritional Profile Composition in Fruits of Different Sweet Chestnut (Castanea sativa Mill.) Cultivars Grown in Romania, Separations 2022, 9(3), 66; https://doi.org/10.3390/separations9030066
- 17. Mădălina Maria Nichitoi, Ana Maria Josceanu, Raluca Daniela Isopescu, Gabriela Olimpia Isopencu, Elisabeta-IrinaGeana, CorinaTeodora Ciucure, Vasile Lavric, Polyphenolics profile effects upon the antioxidant and antimicrobial activity of propolis extracts, Scientifc Reports (2021) 11:20113, https://www.nature.com/articles/s41598-021-97130-9.
- **18.** Alexandru Ciocarlan, Lucian Lupascu, Aculina Aricu, Ion Dragalin, Violeta Popescu, Elisabeta-Irina Geana, Roxana Elena Ionete, Nicoleta Vornicu, Octavian G. Duliu, Gergana Hristozova, Inga Zinicovscaia, Chemical Composition and Assessment of Antimicrobial Activity of Lavender Essential Oil and Some By-Products, Plants 2021, 10(9), 1829; https://doi.org/10.3390/plants10091829
- 19. Viorica Maria Corbu , Irina Gheorghe, Ioana Cristina Marinaș, Elisabeta Irina Geană , Maria Iasmina Moza, Ortansa Csutak, Mariana Carmen Chifiriuc, Demonstration of Allium sativum Extract Inhibitory Effect on Biodeteriogenic Microbial Strain Growth, Biofilm Development, and Enzymatic and Organic Acid Production, Molecules 2021, 26(23), 7195; https://doi.org/10.3390/molecules26237195
- **20.**Carmen Lidia Chiţescu, Antoaneta Ene, Elisabeta-Irina Geana, Aida Mihaela Vasile, Corina Teodora Ciucure, Emerging and Persistent Pollutants in the Aquatic Ecosystems of the Lower Danube Basin and North West Black Sea Region—A Review, Appl. Sci. 2021, 11(20), 9721; https://doi.org/10.3390/app11209721
- **21.**Ioana Cristina Marinaș, Eliza Oprea, Elisabeta-Irina Geană, Cristina Mihaela Luntraru, Cerasela Elena Gîrd, Mariana-Carmen Chifiriuc, Chemical composition, antimicrobial and antioxidant activity of Phytolacca Americana L. fruits and leaves extracts, FARMACIA, 2021, Vol. 69, 5, 883-889,
- **22.** Victoria Artem, Arina Oana Antoce, Elisabeta-Irina Geana, Roxana Elena Ionete, Study of the impact of vine cultivation technology on the Feteasca Neagra wine phenolic composition and antioxidant properties, J. Food Sci. Technol., https://doi.org/10.1007/s13197-021-05182-6
- **23.** Victoria Artem, Arina O. Antoce, Elisabeta I. Geana, Aurora Ranca, Effect of grape yield and maceration time on phenolic composition of Feteasca Neagra organic wine, Notulae Botanicae Horti Agrobotanici Cluj-Napoca, volume 49, Issue 2, Article number 12345, DOI: 10.15835/nbha49212345,
- **24.**Elena Roxana Chiriac, Carmen Lidia Chiţescu*, Elisabeta-Irina Geană, Cerasela Elena Gird, Radu Petre Socoteanu and Rica Boscencu, Advanced Analytical Approaches for the Analysis of Polyphenols in Plants Matrices—A Review, Separations 2021, 8(5), 65; https://doi.org/10.3390/separations8050065
- **25.** Elisabeta-Irina Geană, Corina Teodora Ciucure, Roxana Elena Ionete, Alexandru Ciocârlan, Aculina Aricu, Anton Ficai and Ecaterina Andronescu, Profiling of Phenolic Compounds and Triterpene Acids of Twelve Apple (Malus domestica Borkh.) Cultivars, Foods 2021, 10, 267. https://doi.org/10.3390/foods10020267
- **26.**Ioana Cristina Marinas, Eliza Oprea, Elisabeta-Irina Geana, Oana Tutunaru, Gratiela Gradisteanu Pircalabioru, Irina Zgura and Mariana Carmen Chifiriuc, Valorization of Gleditsia triacanthos Invasive Plant Cellulose Microfibers and Phenolic Compounds for Obtaining Multi-Functional Wound Dressings with Antimicrobial and Antioxidant Properties, Int. J. Mol. Sci. 2021, 22, 33. https://dx.doi.org/10.3390/ijms22010033
- **27.** Elisabeta-Irina Geană, Victoria Artem, Constantin Apetrei, Discrimination and classification of wines based on polypyrrole modified screen-printed carbon electrodes coupled with multivariate data analysis, Journal of Food Composition and Analysis Volume 96, March 2021, 103704
- **28.** Elena Roxana Chiriac, Carmen Lidia Chitescu, Claudia Sandru, Elisabeta-Irina Geană, Mariana Lupoae, Michaela Dobre, Daniela Borda, Cerasela Elena Gird and Rica Boscencu, Comparative Study of the Bioactive Properties and Elemental Composition of Red Clover (Trifolium pratense) and Alfalfa (Medicago sativa) Sprouts during Germination, Appl. Sci. 2020, 10, 7249; doi:10.3390/app10207249
- 29. Elisabeta-Irina Geană, Corina Teodora Ciucure, Victoria Artem, Constantin Apetrei, Wine varietal discrimination and classification using a voltammetric sensor array based on modified screen-printed electrodes in conjunction with chemometric analysis, Microchemical Journal, Volume 159, December 2020, 105451

- **30.** Elisabeta-Irina Geană, Corina Teodora Ciucure, Constantin Apetrei, Electrochemical Sensors Coupled with Multivariate Statistical Analysis as Screening Tools for Wine Authentication Issues: A Review, Chemosensors 2020, 8, 59; doi:10.3390/chemosensors8030059
- **31.**Silviu-Laurentiu Badea, Irina Geana, Violeta Niculescu, Ionete Roxana, Recent progresses in analytical GC and LC mass spectrometric based-methods for the detection of emerging chlorinated and brominated contaminants and their transformation products in aquatic environment, Science of The Total Environment Volume 722, 20 June 2020, 137914, DOI: 10.1016/j.scitotenv.2020.137914
- **32.**Elena Roxana Chiriac, Chitescu Carmen Lidia, Daniela Borda, Rica Boscencu, Geana Irina, Comparison of the Polyphenolic Profile of Medicago sativa L. and Trifolium pratense L. Sprouts in Different Germination Stages Using the UHPLC-Q Exactive Hybrid Quadrupole Orbitrap High-Resolution Mass Spectrometry, May 2020Molecules 25(10):2321, DOI: 10.3390/molecules 25102321
- **33.**Irina Geana, Corina Ciucure, Constantin Apetrei, Artem Victoria, Application of Spectroscopic UV-Vis and FT-IR Screening Techniques Coupled with Multivariate Statistical Analysis for Red Wine Authentication: Varietal and Vintage Year Discrimination, November 2019Molecules 24(22):4166, DOI: 10.3390/molecules24224166
- **34.** Elisabeta-Irina Geana, Corina Teodora Ciucure, Establishing authenticity of honey via comprehensive Romanian honey analysis, FFood Chemistry, Volume 306, 15 February 2020, 125595, https://doi.org/10.1016/j.foodchem.2019.125595
- **35.** Elisabeta-Irina Geana, Corina Teodora Ciucure, Diana Costinel, Roxana Elena Ionete, Evaluation of honey in terms of quality and authenticity based on the general physicochemical pattern, major sugar composition and δ13C signature, Food Control Volume 109, March 2020, 106919, https://doi.org/10.1016/j.foodcont.2019.106919
- **36.**Corina Teodora Ciucure, Elisabeta-Irina Geana*, Phenolic compounds profile and biochemical properties of honeys in relationship to the honey floral sources, Phytochemical Analysis 2019, 30: 481-492.
- 37. Roxana Elena Ionete, Diana Ionela Stegarus*, Elisabeta Irina Geana, Oana Romina Botoran, Claudia Sandru, Marius Miricioiu, Characterization and classification of Romanian wines by origin: a chemometric approach based on some metals and phenolic composition, Revista de Chimie; acceptata in vol. 70, nr. 10-11/2019
- **38.** Violeta-Carolina Niculescu, Marius Miricioiu, Elisabeta-Irina Geana, Roxana-Elena Ionete, Nadia Paun, Viorica Parvulescu, Silica Mesoporous Materials -an Efficient Sorbent for Wine Polyphenols Separation, REV.CHIM.(Bucharest), 70, No. 5, 2019, 1513-1517.
- **39.**Raluca Popescu, Roxana Elena Ionete, Oana Romina Botoran, Diana Costinel, Felicia Bucura, Elisabeta Irina Geana, Yazan Falah Jadee 'Alabedallat, Mihai Botu, 1H-NMR profiling and carbon isotope discrimination as tool for the comparative assessment of walnut (Juglans regia L.) cultivars with various geographical and genetic origins, Molecules 2019, 24, 1378; doi:10.3390/molecules24071378.
- **40.**Mihai Botu, Yazan F.J. Alabedallat, Felicia Bucura, Elisabeta Irina Geana, Marius VLADU, The Productive Capacity and Quality of Several Walnut Cultivars (Juglans regia L.) Grown in North Oltenia, Romania, Not Bot Horti Agrobo, 2019, 47(3):xxx-xxx. DOI:10.15835/nbha47311475
- **41.**Diana Costinel, Roxana Elena Ionete, Oana Romina Botoran, Raluca Popescu, Irina Elisabeta Geana, Stable isotopes (O–H–C)–Optimum markers in protecting designation of origin (PDO) and geographical indication (PGI) of Romanian wines, Abstracts/ Journal of Biotechnology 256S, 30.08.2017, S44-S116
- **42.**I.C. Marinaş, M. Dinu, R. Ancuceanu, M.V. Hovaneţ, E. Oprea, E.I. Geană, V. Lazăr, The phenols content and phytotoxic capacity of various invasive plants, Romanian Biotechnological Letters 2019, 23(4):13887-13899
- **43.**Botoran, O. R., Ionete, R.E., Costinel, D., Popescu, R., Geana, E.I., Miricioiu, G.M., Influence of climate and origin on the isotopic and elemental profile of fruits, Journal of Biotechnology Volume: 231 Supplement: S Pages: S77-S78 Published: AUG 10 2016 IF/2015/2016: 2.667
- **44.**Geană, E.I., Sandru, C., Stanciu, V., Ionete, R.E., Elemental Profile and 87Sr/86Sr Isotope Ratio as Fingerprints for Geographical Traceability of Wines: an Approach on Romanian Wines, Food Anal. Methods (2017) 10:63–73, DOI 10.1007/s12161-016-0550-2
- **45.**Dinca, O.R., Ionete R.E., Costinel, D., Geana, E.I., Popescu, R., Stefanescu, I., Radu G.L., Regional and Vintage Discrimination of Romanian Wines Based on Elemental and Isotopic Fingerprinting, Food Analytical Methods · February 2016, DOI: 10.1007/s12161-016-0404-y, Volume 9, Issue 8, pp 2406–2417.
- **46.**Geana, E.I., Popescu, R., Costinel, D., Dinca, O.R., Stefanescu, I., Ionete, R.E., Bala, C., Verifying the red wines adulteration through isotopic and chromatographic investigations coupled with multivariate statistic interpretation of the data, Food Control 62, 2016, 1-9
- **47.**Geană, E.I., Popescu, R., Costinel, D., Dinca, O.R., Ionete, R.E., Stefanescu, I., Artem, V., Bala, C, Classification of red wines using suitable markers coupled with multivariate statystic analysis, Food Chemistry 192, 2016, 1015-1024.
- **48.**Popescu Raluca, Geană, E.I., Dincă, O.R., Sandru, C., Costinel, D., Ionete, R.E., Characterization and botanical classification of Romanian honey Popescu, R., Analytical Letters, on-line 24 iulie 2015, DOI:10.1080/00032719.2015.1057830.
- **49.**Geană, E.I., Dinca, O.R., Ionete, R.E., Artem, V., Niculescu, V., Monitoring trans-resveratrol in grape berry skins during ripening and in corresponding wines by HPLC, Food Technology and Biotechnology, 53 (1), 2015, 73-80.

- **50.**Geană, E.I., Marinescu, A., Iordache, A.M., Sandru, C., Ionete, R.E., Bala, C., Differentiation of Romanian Wines on Geographical Origin and Wine Variety by Elemental Composition and Phenolic Components, Food Analytical Methods (Springer), 7 (10), 2014, 2064-2074.
- **51.**Geană, E.I., Costinel, D., Marinescu, A., Ionete, R.E., Bala, C., Characterization of wines by trans-resveratrol concentration: a case study of Romanian varieties, Analytical Letters (Taylor & Francis Inc), 47 (10), 2014, 1737-1746.
- **52.** Marinas, I.C., Oprea, E., Geană, E.I., Chifiriuc, C., Lazar, V., Antimicrobial and antioxidant activity of the vegetative and reproductive organs of Robinia pseudoacacia, J. Serb. Chem. Soc. 79 (11), 2014, 1363–1378.
- **53.**Iosub, I., Kajzar, F., Meghea, A., Mircea, M.L., Geană E.I., Rau, I., Spectro-Electrochemical Properties of Pelargonidin-3-O-Glucoside, Molecular Crystals and Liquid Crystals, 603 (1), 2014, 136-145.
- **54.**Geană, E.I., Iordache, A.M., Ionete, R.E., Marinescu A., Ranca A., Culea M., Geographical origin identification of Romanian wines by ICP-MS elemental analysis, Food Chemistry (Elsevier), 138 (2-3), 2013, 1125-1134.
- **55.**Geană, E.I., Iordache, A.M., Ionete, R.E., Ochratoxin A Occurrence in Romanian Wines, Revista de Chimie, 63 (9), 2012, 883-886.
- **56.** Voica, C., Dehelean, A., Iordache, A., Geană, E.I., Method validation for determination of metals in soils by ICP-MS, Romanian Reports in Physics, 64 (1), 2012, 221-231
- **57.**Zamfir, L.G., Geană, E.I., Bourigua, S., Rotariu, L., Bala, C., Errachid, A., Jaffrezic-Renault, N., Highly sensitive label-free immunosensor for ochratoxin A based on functionalised magnetic nanoparticles and EIS/SPR detection, Sensors and Actuators B: Chemical, 159, 2011, 178-184.
- **58.**Geană, E.I., Ionete, R.E., Tudorache, A., Paşa, R., Postolache, E., Ranca, A., Phenolic composition of Romanian wines with different geographical origins, Asian Journal of Chemistry, 23 (12), 2011, 5197-5201.
- **59.**Geană, E.I., Iordache, A.M., Voica, C., Dehelean, A., Ionete, R.E., Comparison of three digestion methods for heavy metals determination in soils and sediments materials by ICP-MS technique, Asian Journal of Chemistry, 23 (12), 2011, 5213-5216.
- **60.** Florentina-Diana Yudin, Ionete Roxana Ionete Roxana, Sandru C, Geana Irina, Saros G, Optimal measurements of surface water pollution case study on Southern- East part of Romania, Asian Journal of Chemistry 23(12):5209-5212, 2011

Scientific papers indexed in international databases:

- 1 Gabriela Georgiana Ciungulete, Ileana Rau, Ion Iosub, Elisabeta-Irina Geana, Violeta Niculescu, Grape Ivy (Parthenocissus Tricuspidata) Extracts With Bioactive Compounds, UPB Scientific Bulletin Series B, Chemistry and Materials Science, Vol. 83, Iss. 3, 2021
- 2 Corina Teodora Ciucure, Elisabeta-Irina Geană *, Diana Ionela Popescu, Alin Chitu, Andreea-Maria Rădulescu and Roxana Elena Ionete, Occurrence and Distribution of Some Organic Contaminants in Sediments from Olt River, Romania, Proceedings 2020, 57, 27; doi:10.3390/proceedings2020057027
- 3 Elisabeta-Irina Geana, Corina Teodora Ciucure, Constantin Apetrei, Victoria Artem, Characterization and Classification of Wines Based on Spectrophotometric Determination of Wine Bioactive Properties, CPQ Nutrition (2019) 3:6, 12 pag.
- 4 Investigating the Therapeutic Potential of Some Medicinal Plant and Wild Fruits Based on Terpenic Ursolic and Oleanolic Acids, Alexandru Ciocarlan, Aculina Aricu1 & Elisabeta-Irina Geană*, CPQ Nutrition (2019) 3:5, 01-12.
- 5 Ioana-Cristina Marinaş, Geană, E.I., Oprea, E., Chifiriuc, C., Lazăr, V., Antimicrobial and antipathogenic activity of Fallopia japonica leaves alcoholic extract, Biointerface Research in Applied Chemistry, ISSN 2069-5837, Volume 4, Issue 4, 2014, 798-803.
- 6 Electronic Structure, Optical and Electrochemical Properties of MalvidinMolecule Extracted From Grapes, Iosub, I., Kajzar, F., Makowska-Janusik, M., Meghea, A., Geană, E.I., Rau, I., Display and Imaging, Vol. 1, 2014, 175–193.

Scientific papers published in national journals:

- 1. Corina Teodora; Geana, Elisabeta-Irina, Assessment of PAHs levels in sediments and fish collected from artificial lakes on the course of Olt river, omania: optimisation and validation of the extraction methods, Progress of Cryogenics & Isotopes Separation . 2019, Vol. 22 Issue 2, p43-54
- 2. Changes in polyphenolic content of berry skins from different red grapes cultivars during ripening, Geană, E.I., Ionete, R.E., Niculescu, V., Artem, V., Ranca, A., Progress of Cryogenics and Isotopes Separation Volume 19, issue 2/2016, 95-104.
- **3.** Macro- and microelements as possible markers of quality and authenticity for fruits and derived products, Roxana Elena Ionete, Oana Romina Dinca, Elisabeta Irina Geana, Diana Costinel, Progress of Cryogenics and Isotopes Separation, Volume 19, issue 1/2016, pg. 55-74.

- **4.** IRMS Methods for Assessing the Quality and origin of Honey Using δ13C and δ14N Isotopic Fingerprints, Costinel, D., Ionete, R.E., Dinca, O-R, Popescu, R., Geană, E.I., Progress of Cryogenics and Isotopes Separation, Volume 17, issue 2/2014, pp. 25-34.
- 5. HPLC determination of oleanolic and ursolic acids in apples and by-products, Geană, E.I., Ionete, R.E., Ciocarlan, A., Aricu, A., Fulga, A., Ungur, N., Podogova, M., Nikolaeva, D., Progress of Cryogenics and Isotopes Separation, Volume 17, issue 2/2014, pp. 53-62.
- **6.** Study of phenolic compounds in red grapes and wines from Murfatlar wine center, Artem, V., Geană, E.I., Antoce, A.O., Ovidius University Annals of Chemistry, 25 (1), 2014, 47-52.
- 7. Solvatochromic Parameters of Some Anthocyanin Derivatives Concentrated from Selective Natural Extracts, Iosub, S.D., Meghea, A., Geană, E.I., U.P.B. Sci. Bull., Series B, Vol. 76, Iss. 1, ISSN 1454 2331, pp. 25-34, 2014.
- **8.** Ionete, R.E., Dinca, O.R., Tamaian, R., Geană, E.I., Exploring apis mellifera venom compounds using highly efficient methods, Progress of Cryogenics and Isotopes Separation, Volume 16, issue 2/2013, pp. 89-100.
- **9.** Optimized Method for Analyzing the Mineral Content of Honey, Geană, E.I., Sandru, C., Ionete, R.E., Progress of Cryogenics and Isotopes Separation, Volume 16, issue 2/2013, pp. 125-132.
- **10.** An Overview of Analytical Techniques for Petroleum Hydrocarbons Chemical Fingerprinting, Elisabeta Irina Geana, Oana Dinca, Diana Costinel, Roxana Elena Ionete, Raluca Popescu, , Revista "Progress of Cryogenics and Isotopes Separation", ISSN: 1582-2575, Volume 15, issue 2/2012, pp. 19-24
- 11. Compound-specific carbon isotope analysis of polycyclic aromatic hydrocarbons using gas chromatography combustion isotope ratio mass spectrometry GC/C-IRMS, Diana Costinel, Geana Irina, Ionete Roxana, Dinca Oana, Revista "Progress of Cryogenics and Isotopes Separation", ISSN: 1582-2575, Volume 15, issue 2/2012, pp. 9-18.
- **12.**Simultaneous determination of artificial sweeteners in possible counterfeited wines, using, high performance liquid chromatography with DAD detection, Geană, E.I., Iordache, A.M., Ionete, R.E., Ovidius University Annals of Chemistry (categoria B+), 23 (1), 2012, 77-81
- **13.** Analysis and quantification of trans-resveratrol in wine from Muntenia and Oltenia region, Romania, Geană, E.I., Iordache, A.M., Ionete, R.E., Proceedings of the 4th International Symposium "New Researchers in Biotechnology" SimpBTH 2011, 176-183.
- **14.** Assessing The Wine Anthocyanin Profile For Red Grape Varieties Identification, Geană, E.I., Iordache, A.M., Ionete, R.E., Progress of Cryogenics and Isotopes Separation, 14 (1), 2011, 127-133.
- **15.**Practical Analytical Tools For Assessing The Addition Of Synthetic Dyes In Wines, Ranca, A., Artem, V., Galip, A., Ionete, R.E., Geană, E.I., Savin, C., Paşa, R., Vasile, A., Progress of Cryogenics and Isotopes Separation, 14 (2), 2011, 155-170.
- **16.**Low-Levels Specification Of Elements In Drinking Waters Using ICP-MS, Andreea IORDACHE, Diana FLORESCU, Elisabeta-Irina GEANA, Roxana IONETE, Monica CULEA, Progress of Cryogenics and Isotopes Separation, Volume 14, issue 2/2011, ISSN: 1582-2575
- **17.** The optimization of the method for metals content determination in Romanian wines by ICP-MS after microwave mineralization, Iordache, A.M., Geană, E.I., Ionete, R.E., Culea, M., Progress of Cryogenics and Isotopes Separation, 13 (1), 2010, 137-145.
- **18.**Determination Of Some Polycyclic Aromatic Hydrocarbons In Surface Water Of Valcea County, Elisabeta-Irina GEANA, Andreea-Maria IORDACHE, Gili SAROS, Roxana-Elena IONETE, Progress of Cryogenics and Isotopes Separation, Volume 14, issue 2/2011, 87-94, ISSN: 1582-2575
- 19. Evaluating heavy metal contents in soils using microwave digestion method and ICP-MS technique, I. Geana, A. Iordache, R. Ionete, "Proceedings of Nuclear 2010, The third Annual International Conference on Sustainable Development trough Nuclear Research and Education, 26-28 May, Pitesti Romania, pag 613-617, ISSN 2066-2955, 2010
- **20.** Determination of trace elements in ambient particulate matter by inductively coupled plasma-mass spectrometry, Geana Elisabeta-Irina, Iordache Andreea-Maria, Progress of Cryogenics and Isotopes Separation, Vol 12, editia 23-24, p.137-143, 2009
- **21.**Metal Concentrations in Sediment and Fish from Topalu Area, Andreea IORDACH, Claudia SANDRU, Irina GEANA, Levente BARA, Roxana IONETE, Monica CULEA, Bulletin USAMV Animal Science and Biotechnologies, 67(1-2)/2010 Print ISSN 1843-5262; Electronic ISSN 1843-536X
- 22. Evaluating heavy metal contents in soils using microwave digestion method and ICP-MS technique, I. Geana, A. Iordache, R. Ionete, Proceedings of Nuclear 2010, The third Annual International Conference on Sustainable Development trough Nuclear Research and Education, 26-28 May, Pitesti Romania, pag 613-617, ISSN 2066-2955, 2010
- 23. Determination of trace elements in ambient particulate matter by inductively coupled plasma-mass spectrometry, Geana Elisabeta-Irina, Iordache Andreea-Maria, Progress of Cryogenics and Isotopes Separation, Vol 12, editia 23-24, p.137-143, 2009

International Conferences

- 1. Elisabeta-Irina Geană, Corina Teodora Ciucure, Ioana Cristina Marinas, Gratiela Gradisteanu Pircalabioru, Violeta Niculescu, Bioactive compounds in apple pomace residue and extract stabilisation for potential practical applications, Book of abstracts XXXI International Conference on Polyphenols, Nantes, Franta, 3-6 iulie 2023, P.6.29
- 2. Corina Teodora Ciucure, Elisabeta-Irina Geană, Oana Romina Botoran, Roxana Elena Ionete, Polyphenolic bioactive potential of softwood forest waste biomass (bark and needels), Book of abstracts XXXI International Conference on Polyphenols, Nantes, Franta, 3-6 iulie 2023, P.6.21
- **3.** Livia Dinu, Angela Baracu, Sevinc Kurbanoglu, Marius Stoian, Cristina Pachiu, Oana Brincoveanu, **Irina Geana**, Dual enhanced peroxidase-like activity of Fe₂O₃ supported on sulfur-doped graphene for electrochemical detection of polyphenolic class of pollutants from waste waters, 33rd Anniversary World Congress on Biosensors, June 5-8, Busan, South Korea.
- **4.** L.A. Dinu, **I. Geana**, A. Baracu, M. Stoian, O. Brincoveanu, C. Pachiu, Gold-Decorated Graphene Hybrid Nanomaterial Integrated with A Sensing Device for Agricultural Applications The 20th International Conference on Nanosciences & Nanotechnologies (NN23), July 3-8, Thessaloniki, Greece.
- 5. Constantin Apetrei, Andreea Loredana Comănescu, Andrei Daniel Geman, Irina Georgiana Munteanu, Alexandra Virginia Bounegru, Irina Mirela Apetrei, Elisabeta Irina Geană, Electrochemical (bio)sensor array coupled with multivariate data analysis for the assessment of virgin olive oil quality, International Symposium PRIORITIES OF CHEMISTRY FOR A SUSTAINABLE DEVELOPMENT", PRIOCHEM XVIII, 26-28 october 2022, Bucharest
- 6. Elisabeta-Irina Geana, Corina Teodora Ciucure, Constantin Apetrei, Authentication and detection of adulteration of extra virgin olive oil based on the composition of phenolic compounds, International Symposium PRIORITIES OF CHEMISTRY FOR A SUSTAINABLE DEVELOPMENT", PRIOCHEM XVIII, 26-28 october 2022, Bucharest
- 7. Corina Teodora Ciucure, Petronela Anca Onache, Elisabeta-Irina Geană, Alina Florea, Dorin Ioan Sumedrea, Roxana Elena Ionete, Ovidiu Tiţa, Grape pomace as potential source of bioactive phytochemicals, International Symposium PRIORITIES OF CHEMISTRY FOR A SUSTAINABLE DEVELOPMENT", PRIOCHEM XVIII, 26-28 october 2022, Bucharest
- **8.** Constantin Apetrei, Elisabeta-Irina Geană, Irina Mirela Apetrei, Electroanalytical method coupled with chemometry for detection of virgin olive oil adulteration, BOOK OF ABSTRACTS, New Trends on Sensing-Monitoring- Telediagnosis for Life Sciences, NT SMT-LS 2022 Sept. 8-10, 2022, Braşov Romania, p. 43, http://www.healthfoodenviron.unitbv.ro/2018/NT-SMT-LS-2018-book-of-abstracts.pdf
- 9. Elisabeta-Irina Geana, Corina Teodora Ciucure, Livia Alexandra Dinu, Angela Mihaela Baracu, Analytical methods for the determination of glyphosate in water samples: a brief revew, "Book of Abstracts" (ISSN 2392 6937), 21st International Conference "Life Sciences for Sustainable Development", 15-17 sept. 2022, Cluj Napoca, Romania
- 10. Elisabeta-Irina Geana, Corina Teodora Ciucure, Claudia Sandru, Oana Romina Botoran, Roxana Elena Ionete, Coniferous bark, needles and cones as bioindicators of air pollution in urban areas with intense road traffic, "Book of Abstracts" (ISSN 2392 6937), 21st International Conference "Life Sciences for Sustainable Development", 15-17 sept. 2022, Cluj Napoca, Romania
- 11. V.-C. Niculescu, S.L. Badea, I. Geana, Fe-BTC, metal-organic framework used for photocatalytic oxidation of phenol from aqueous solutions", autori: Book of Abstracts, 13th International Symposium of the Romanian Catalysis Society, RomCat 2022, 22-24 iunie 20222, Baile Govora, p. 135-136
- 12. Elisabeta-Irina Geană, Corina Teodora Ciucure, Ecological status and sources of different anthropogenic organic contaminants in the middle and lower Olt River basin, Romania, WORKSHOP ANIVERSAR, Abordări moderne ale feedbackului între procese de mediu şi schimbările climatice GALAŢI, 6-9 iulie 2022, p. 3, https://rexdan.ugal.ro/images/2022/07/Carte%20rezumate%20workshop%20Galati%206-9%20iul.pdf
- 13. Ioana Marinas, Irina Geana, Gratiela Gradisteanu, Mariana Chifiriuc, Fabrication of biocompatible novel collagen scaffold reinforced with Cannabis sativa bioactive compounds for wound healing applications, 15th World Congress on Polyphenols Applications, Valencia, Spain
- **14.** Bees and bee products bio-indicators of environmental pollution, autori: Geană Elisabeta-Irina, Ciucure Corina Teodora, International Congress on Bee Sciences, online, 16-18 june 2022, Book of abstracts
- 15. Biodegradation of Pentachlorophenol by Sphingobium Chlorophenolicum DSM 7098 and Detection of ITS Metabolites by UHPLC-Q-Orbitrap HRMS, Silviu-Laurentiu Badea, Elisabeta-Irina Geana, Corina Ciucure, Violeta-Carolina Niculescu, Radu Tamaian, Roxana-Elena-Ionete, XXIIIrd International Conference New Cryogenic and Isotope Technologies for Energy and Environment, online, 26–29 October 2021, online, BOOK OF ABSTRACTS, ISSN: 2810-3203
- 16. Pollutants in the Aquatic Ecosystems of the Lower Danube and North Western Black Sea Basins, Carmen Lidia Chiţescu, Antoaneta Ene, Irina Elisabeta Geană, Aida Mihaela Vasile, Corina Teodora Ciucure, XXIIIrd

- International Conference New Cryogenic and Isotope Technologies for Energy and Environment, online, 26–29 October 2021, online, BOOK OF ABSTRACTS, ISSN: 2810-3203, pg. 239-242
- 17. Multiclass Organic Contaminants Residues in Fish Muscle Tissue of Different Species Collected from Middle and Lower Course of the Olt River, Romania, Corina Teodora Ciucure, Carmen Lidia Chiţescu, Elisabeta-Irina Geană, XXIIIrd International Conference New Cryogenic and Isotope Technologies for Energy and Environment, online, 26–29 October 2021, online, BOOK OF ABSTRACTS, ISSN: 2810-3203, pg. 296-300
- 18. The Distribution of Persistent Organic Pollutants (Pops) in the Environment-Plant Chain Baia Sprie and Copşa Mica Case Study, Elisabeta-Irina Geană, Corina Teodora Ciucure, Constantin Nechita, XXIIIrd International Conference New Cryogenic and Isotope Technologies for Energy and Environment, online, 26–29 October 2021, online, BOOK OF ABSTRACTS, ISSN: 2810-3203, pg. 265-269
- 19. Electrochemical Detection of Glyphosate Based on Molecularly Imprinted Polypyrrole-Modified Gold Electrode and Dispersed Gold Nanoparticles on Reduced Graphene Oxide, Elisabeta-Irina Geana, Corina Teodora Ciucure, Amalia Soare, Stanica Enache, Livia Alexandra Dinu, XXIIIrd International Conference New Cryogenic and Isotope Technologies for Energy and Environment, online, 26–29 October 2021, online, BOOK OF ABSTRACTS, ISSN: 2810-3203, pg. 306-310
- **20.** UHPLC-MS/MS fingerprinting of wine characteristic compounds profiles combined with multivariate analysis for wine authentication approaches, Elisabeta-Irina Geană, Corina Teodora Ciucure, Victoria Artem, Constantin Apetrei, 2nd Food Chemistry Conference, 17-19 Septembrie 2019, Sevilia, Spania
- 21. The influence of honey adulteration with sugar syrups on the honey bioactive properties, Elisabeta-Irina Geană*, Corina Teodora Ciucure, Raluca Popescu, Diana Costinel, Roxana Elena Ionete, IV International Conference on Food Chemistry and Technology at Berlin, Germany during November 5-7, 2018 (FCT-2018), oral presentation
- 22. NMR profiles and UHPLC-ESI/MS analysis of phenolic compounds coupled with chemometric approach for botanical origin classification of Romanian honey, Raluca Popescu, Corina Teodora Ciucure, Elisabeta-Irina Geană, IV International Conference on Food Chemistry and Technology at Berlin, Germany during November 5-7, 2018 (FCT-2018), poster
- 23. Differentiation between pure honey and honey adulterated with sugar syrups based on physicochemical investigations", Ciucure Corina Teodora, Costinel Diana, Geana Elisabeta-Irina, Apiquality & Apimedica 2018, poster
- **24.** Influence of sugar syrup adulterants on bioactive properties and phenolic content of different honey types", Geana Elisabeta-Irina, Ciucure Corina Teodora, Costinel Diana, Apiquality & Apimedica 2018, poster
- **25.** Prediction of adulteration in honey using stable isotope methodology coupled with basic physicochemical investigations, Geana Elisabeta-Irina, Ciucure Corina Teodora, Costinel Diana, 4th International Conference on Analytical Chemistry: Analytical Chemistry for a Better Life, RO-ICAC'2018, 01-03 september 2018, Bucharest, Romania.
- **26.** Comparison of sugar composition between pure and adulterated honeys with different sugar syrups, Corina Teodora Ciucure, Elisabeta-Irina Geană, 4th International Conference on Analytical Chemistry: Analytical Chemistry for a Better Life, RO-ICAC'2018, 01-03 september 2018, Bucharest, Romania.
- 27. UV-Vis spectroscopy used for classification of Romanian wines, Elisabeta-Irina Geană, Constantin Apetrei, 4th International Conference on Analytical Chemistry: Analytical Chemistry for a Better Life, RO-ICAC'2018, 01-03 september 2018, Bucharest, Romania.
- 28. Characterization of different chestnut varieties based on phenolic compounds profile and bioactive properties coupled with sugar and elemental composition, Corina Teodora Ciucure, Elisabeta-Irina Geana*, Claudia Sandru, Mihai Botu, Anca Scutelnicu, Ovidiu Tita, 9th Central European Congress on Food, CEFood 2018, 24-26 mai 2018, Sibiu, Romania
- **29.** Honey authentication based on physicochemical properties, sugar content and δ13C isotopic signature, Geana Elisabeta-Irina, Ciucure Corina Teodora, Costinel Diana, 9th Central European Congress on Food, CEFood 2018, 24-26 mai 2018, Sibiu, Romania
- **30.** Determination of phenolic acids and flavonoids in honey by UHPLC-DAD-ESI/MS, Geana Elisabeta-Irina, Ciucure Corina Teodora, 9th Central European Congress on Food, CEFood 2018, 24-26 mai 2018, Sibiu, Romania
- **31.** Multi-compound isotope profiling an approach to differentiate the varietal origin and harvest year of wines, Botoran Oana-Romina, Costinel Diana, Popescu Raluca, Geana Irina-Elisabeta, Ionete Roxana-Elena, 3rd European Food Safety and Standards Conference, 24-25 octombrie 2016, Valencia, Spania, Best poster award
- **32.** Assessment of fruit juice authenticity A chemometric approach based on sugars and organic acids fingerprints, Geana Elisabeta-Irina, Botoran Oana-Romina, Ionete Roxana-Elena, 3rd European Food Safety and Standards Conference, 24-25 octombrie 2016, Valencia, Spania, prezentare orala premiul Best Presentation Award
- **33.** Elemental profile and Sr isotope ratio as fingerprints for geographical traceability of Romanian Wines, Geană, E.I., Sandru, C., Dincă, O.R., Miricioiu, M., Ionete, R.E., Internațional Conference Food Safety and Regulatory Measures, Food Safety 2015, 17-19 August 2015, Birmingham, United Kingdom oral presentation, p. 78.

- **34.** Analysis of the phenolic compounds, anthocyanins and organic acids as chemical markers for varietal authentication of red wines, Geană, E.I., Artem, V., Ranca, A., Ionete, R.E., "In Vino Analytica Scientia Symposium", IVAS 2015, 14-17 July 2015, Trento, Trentino Alto Adige, Italy, poster, p. 212.
- 35. Study of the influence of vine cultivation technology on the phenolic composition of the red wines produced from Feteasca neagra and Cabernet Sauvignon cultivars in Murfatlar wine region of Romania, Artem, V., Antoce, A.O., Geană, E.I., Ionete, R.E., Ranca, A., "In Vino Analytica Scientia Symposium", IVAS 2015, 14-17 July 2015, Trento, Trentino Alto Adige, Italy, poster, p. 219.
- **36.** Verifying the red wines adulteration throught isotopic and chromatographyc investigations coupled with multivariate statistic interpretation of the data, Geană, E.I., Costinel, D., Dinca, O.R., Ionete, R.E., 3rd North and East European NEEFOOD Congress on Food, 20-24 May 2015, Braşov, Romania, poster, p. 150.
- **37.** Differentiation of Romanian wines according to geographical origin, wine variety and vintage using multivariate analysis of natural chemical composition data, Geană, E.I., Popescu, R., Costinel, D., Dinca, O.R., Ionete, R.E., The 20th National Conference with International Participation Progress in Cryogenics and Isotopes Separation", 23-24 October 2014, Calimănesti-Căciulata, Romania, oral presentation, p. 79.
- **38.** Characterization and classification of Romanian wines based on elemental and organic fingerprints coupled with chemometrics, Geană, E.I., Iordache, A.M., Ionete, R.E., Bala, C., The 13th International Simposium "Prospects for the 3rd Millenium Agriculture", 25-27 September 2014, Cluj Napoca, România, oral presentation, p. 200.
- **39.** Authenticity approaches of red wines using suitable markers and chemometric analysis, Geană, E.I., Popescu, R., Costinel, D., Artem, V., Ranca, A., Ionete, R.E., 2nd International Conference on Analytical Chemistry-RO-ICAC 2014, 17-21 September 2014, Târgoviște, Romania, oral presentation, p. 55.
- **40.** Multi-element and multi-isotope ratio analysis of wine for counterfeiting detection and their classification according to Geographical Origin using Multivariate Statistics, Diana, C., Dincă,O.R., Geană. E.I., Ionete, R.E., Popescu, R., ICANMBES 2014, 13-15 June 2014, Brasov, Romania, poster, p. 106.
- **41.** Evolution and analysis of trans-resveratrol in grape berry skins extracts and wine by HPLC, Geană, E.I., Dincă, O.R., Ionete, R.E., Artem, V., Niculescu, V.C., 6th International Symposium on Recent Advances in Food Analysis, 5-8 November 2013, Praga, Cehia, poster, p. 219.
- **42.** A survey on trans-resveratrol content of Romanian wines, Geană, E.I., Costinel, D., Iordache, A.M., Ionete, R.E., Ranca, A., Iliescu, M., 2nd Symposium on Horticulture in Europe, 1-5 July 2012, Angers, Franta, poster, p. 116.
- **43.** ICP-MS multi-element analysis of certain Romanian wines and their provenance soils for geographical origin determination, Iordache, A.M., Geană, E.I., Ionete, R.E., Marinescu, A., Ranca, A., Culea, M., 30th Informal Meeting on Mass Spectrometry, 29 april-3 May 2012, Olomouc, Czech Republic, poster, p. 82.
- **44.** Comparison of three digestion methods for elemental determinations in soils and sediments materials by ICP techniques, Geană, E.I., Iordache, A.M., Voica, C., Dehelean, A., Ionete, R.E., 37th International Conference of Slovak Society of Chemical Engineering, 24-28 Mai 2010, Slovacia, poster, p. 96.
- **45.** Comparison of three digestion methods for elemental determinations in soils and sediments materials by ICP techniques, Geană, E.I., Iordache, A.M., Voica, C., Dehelean, A., Ionete, R.E., 37th International Conference of Slovak Society of Chemical Engineering, 24-28 Mai 2010, Slovacia, poster, p. 96

Awords

CNCSIS awords

- 1. PN-III-P1-1.1-PRECISI-2021-63975, "Wine varietal discrimination and classification using a voltammetric sensor array based on modified screen-printed electrodes in conjunction with chemometric analysis", Microchemical Journal, Volume 159, December 2020, 105451
- 2. PN-III-P1-1.1-PRECISI-2021- 63980, "Discrimination and classification of wines based on polypyrrole modified screen-printed carbon electrodes coupled with multivariate data analysis", Journal of Food Composition and Analysis, Volume 96, March 2021, 103704
- **3.** PN-III-P1-1.1-PRECISI-2021-64287, "Profiling of Phenolic Compounds and Triterpene Acids of Twelve Apple (Malus domestica Borkh.) Cultivars", Foods 2021, 10, 267. https://doi.org/10.3390/foods10020267
- **4.** PN-III-P1-1.1-PRECISI-2021-64572, "Comparative Study of the Bioactive Properties and Elemental Composition of Red Clover (Trifolium pratense) and Alfalfa (Medicago sativa) Sprouts during Germination", Appl. Sci. 2020, 10(20), 7249; https://doi.org/10.3390/app10207249
- 5. PN-III-P1-1.1-PRECISI2021-66751, "Study of the impact of vine cultivation technology on the Feteasca Neagra wine phenolic composition and antioxidant properties", J. Food Sci. Technol., https://doi.org/10.1007/s13197-021-05182-6
- **6.** PN-III-P1-1.1-PRECISI2021-67374, " Emerging and Persistent Pollutants in the Aquatic Ecosystems of the Lower Danube Basin and North West Black Sea Region—A Review, Appl. Sci. 2021, 11(20), 9721; https://doi.org/10.3390/app11209721

- 7. PN-III-P1-1.1-PRECISI2021-65805, "Chemical Composition and Assessment of Antimicrobial Activity of Lavender Essential Oil and Some By-Products", Plants 2021, 10(9), 1829; https://doi.org/10.3390/plants10091829,
- **8.** PN-III-P1-1.1-PRECISI2021-65928, "Polyphenolics profile effects upon the antioxidant and antimicrobial activity of propolis extracts", Scientifc Reports (2021) 11:20113, https://www.nature.com/articles/s41598-021-97130-9
- 9. PN-III-P1-1.1-PRECISI-2021-66744, "Valorization of Gleditsia triacanthos Invasive Plant Cellulose Microfibers and Phenolic Compounds for Obtaining Multi-Functional Wound Dressings with Antimicrobial and Antioxidant Properties", International Journal of Molecular Science 2021, 22(1), 33, DOI: https://doi.org/10.3390/ijms22010033
- 10. PN-III-P1-1.1-PRECISI-2020- 51022, Elisabeta-Irina Geană, Corina Teodora Ciucure, Constantin Apetrei, "Electrochemical Sensors Coupled with Multivariate Statistical Analysis as Screening Tools for Wine Authentication Issues: A Review", Chemosensors 2020, 8, 59; doi:10.3390/chemosensors8030059
- **11.** PN-III-P1-1.1-PRECISI-2020- 51621, Elisabeta-Irina Geana, Corina Teodora Ciucure, "Establishing authenticity of honey via comprehensive Romanian honey analysis", Food Chemistry, Volume 306, 15 February 2020, 125595, https://doi.org/10.1016/j.foodchem.2019.125595
- 12. PN-III-P1-1.1-PRECISI-2020- 51622, Elisabeta-Irina Geana, Corina Teodora Ciucure, Diana Costinel, Roxana Elena Ionete, "Evaluation of honey in terms of quality and authenticity based on the general physicochemical pattern, major sugar composition and delta C-13 signature", Food Control Volume 109, March 2020, 106919, https://doi.org/10.1016/j.foodcont.2019.106919
- 13. PN-III-P1-1.1-PRECISI-2020- 43424, Silviu-Laurentiu Badea, Irina Geana, Violeta Niculescu, Ionete Roxana, Recent progresses in analytical GC and LC mass spectrometric based-methods for the detection of emerging chlorinated and brominated contaminants and their transformation products in aquatic environment, Science of The Total Environment Volume 722, 20 June 2020, 137914, DOI: 10.1016/j.scitotenv.2020.137914
- **14.** PN-III-P1-1.1-PRECISI-2020- 41999, Irina Geana, Corina Ciucure, Constantin Apetrei, Artem Victoria, "Application of Spectroscopic UV-Vis and FT-IR Screening Techniques Coupled with Multivariate Statistical Analysis for Red Wine Authentication: Varietal and Vintage Year Discrimination", November 2019 Molecules 24(22):4166, DOI: 10.3390/molecules24224166
- 15. PN-III-P1-1.1- PRECISI-2020-48472, Elena Roxana Chiriac, Chitescu Carmen Lidia, Daniela Borda, Rica Boscencu, Geana Irina, "Comparison of the Polyphenolic Profile of Medicago sativa l. and Trifolium pratense l. Sprouts in Different Germination Stages Using the UHPLC-Q Exactive Hybrid Quadrupole Orbitrap High-Resolution Mass Spectrometry", May 2020, Molecules 25(10):2321, DOI: 10.3390/molecules25102321
- **16.** PN-III-P1-1.1-PRECISI-2019-57660, Corina Teodora Ciucure, Elisabeta-Irina Geana*, "Phenolic compounds profile and biochemical properties of honeys in relationship to the honey floral sources", Phytochemical Analysis 2019, 30: 481-492.
- 17. PN-III-P1-1.1-PRECISI-2019-57587, Raluca Popescu, Roxana Elena Ionete, Oana Romina Botoran, Diana Costinel, Felicia Bucura, Elisabeta Irina Geana, Yazan Falah Jadee 'Alabedallat, Mihai Botu, "1H-NMR profiling and carbon isotope discrimination as tool for the comparative assessment of walnut (Juglans regia L.) cultivars with various geographical and genetic origins", Molecules 2019, 24, 1378; doi:10.3390/molecules24071378.
- **18.** PN-III-P1-1.1-PRECISI2017-17798, Elisabeta-Irina Geană, Claudia Sandru, Vasile Stanciu1 & Roxana Elena Ionete, "Elemental profile and 87Sr/86Sr isotope ratio as fingerprints for geographical traceability of wines: an approach on Romanian wines, Food Anal. Methods (2017) 10:63–73, DOI 10.1007/s12161-016-0550-2
- 19. PN-III-P1-1.1-PRECISI-2016-xxxx, Oana Romina Dinca, Roxana Elena Ionete, Diana Costinel, Irina Elisabeta Geana, Raluca Popescu, Ioan Stefanescu, Gabriel Lucian Radu, "Regional and Vintage Discrimination of Romanian Wines Based on Elemental and Isotopic Fingerprinting", publicata in Food Analytical Methods (2016), vol. 9, pp. 2406-2417.
- 20. PN-III-P1-1.1-PRECISI-2016-11838, Geană Elisabeta Irina, Popescu Raluca, Costinel Diana, Dincă Oana-Romina, Stefanescu Ioan, Ionete Roxana-Elena, Bala Camelia, "Verifying the red wines adulteration through isotopic and chromatographic investigations coupled with multivariate statistic interpretation of the data", Food Control, 04/2016, vol. 62, pag. 1-9
- 21. PN-III-P1-1.1-PRECISI-2016-11837, Geană Elisabeta Irina, Popescu Raluca, Costinel Diana, Dincă Oana-Romina, Ionete Roxana-Elena, Stefanescu Ioan, Artem Victoria, Bala Camelia, "Classification of red wines using suitable markers coupled with multivariate statistical analysis", Food Chemistry, 2016, vol. 192, pp 1015-1024
- **22.** PN-III-P1-1.1-PRECISI-2016-11802, Geană, E.I., Dinca, O.R., Ionete, R.E., Artem, V., Niculescu, V., "Monitoring trans-resveratrol in grape berry skins during ripening and in corresponding wines by HPLC", Food Technology and Biotechnology, 53 (1), 2015, 73-80

- 23. PN-II-RU-PRECISI-2014-5760, Geană, E.I., Marinescu, A., Iordache, A.M., Sandru, C., Ionete, R.E., Bala, C., "Differentiation of Romanian Wines on Geographical Origin and Wine Variety by Elemental Composition and Phenolic Components", Food Analytical Methods (Springer), 7 (10), 2014, 2064-2074.
- **24.** PN-II-RU-PRECISI-2013-7-3710, Geană, E.I., Iordache, A.M., Ionete, R.E., Marinescu A., Ranca A., Culea M., "Geographical origin identification of Romanian wines by ICP-MS elemental analysisFood Chemistry, 138 (2-3), 2013, 1125-1134.

Best presentation/poster award

01.09.2023

- 1. "Voltammetric sensors in the analysis of wine redox-active compounds", Elisabeta-Irina Geană*, Constantin Apetrei, 7th Edition of Scientific Conference of Doctoral Schools, SCDS-UDJG, Perspectives and challenges in doctoral research, 13-14 iunie 2019, Universitatea "Dunarea de Jos", Galati, oral presentation
- 2. "Electrochemical biosensing of phenolic compounds from wines", Elisabeta-Irina Geana, Corina Teodora Ciucure, Constantin Apetrei, Victoria Artem, 18th International Conference "Life sciences for sustainable development", 26-28.09.2019, Cluj Napoca, Romania, poster
- **3.** "Comparison of sugar composition between pure and adulterated honeys with different sugar syrups", autori: Corina Teodora Ciucure, Elisabeta-Irina Geană*, 4th International Conference on Analytical Chemistry: Analytical Chemistry for a Better Life, RO-ICAC'2018, 01-03 septembrie 2018.
- **4.** "Isotopes used in comparing indigenous and international walnut (Juglans regia L.) varieties", autori, R. Popescu, D. Costinel, I. Geana, O. Botoran, R.E. Ionete, Y.F.J. 'Alabedallat, M. Botu prezentata la conferinta ICAEFBS 2016 "18th International Conference on Agricultural Engineering, Food and Beverage Systems", 01-02 Decembrie 2016, Amsterdam, Olanda
- 5. "Assessment of fruit juice authenticity A chemometric approach based on sugars and organic acids fingerprints ", autori: Geana Elisabeta-Irina, Botoran Oana-Romina, Ionete Roxana-Elena, 3rd European Food Safety and Standards Conference, 24-25 octombrie 2016, Valencia, Spania, pentru lucrarea
- 6. "Characterization and classification of apple cultivars based on triterpenoids acids, phenolic constituents and bioactive properties", autori: Geana Elisabeta-Irina, Alexandru Ciocarlan, Food Technology 2016, 27-29 octombrie 2016, Rome, Italy.
- 7. "Multi-compound isotope profiling an approach to differentiate the varietal origin and harvest year of wines", autori: Botoran Oana-Romina, Costinel Diana, Popescu Raluca, Geana Irina-Elisabeta, Ionete Roxana-Elena prezentata la 3rdEuropean Food Safety and Standards Conference, Valencia, Spania, 24 25 Octombrie 2016
- 8. "The use of isotopic and multi-element pattern in the soil-plant system as tool for fruit juices authentication in terms of geographical origin", autori Oana-Romina Dinca, Roxana Elena Ionete, Diana Costinel, Raluca Popescu, Geana Elisabeta-Irina, Gabriel-Lucian Radu, prezentata la A 43-a Annual Meeting of the European Society for New Methods in Agricultural Research, 03-06.09.2014, Bolzano, Italia
- 9. "Physicochemical investigation of some Romanian honey varieties and classification of their floral origin", autori Popescu R., Geana I., Dinca O., Sandru C., Costinel D., Ionete R., la Conferintei internationala IC-ANMBES 2014, Brasov, 13-15.06.2014
- 10. "Simultaneous determination of artificial sweeteners in possible counterfeited wines, using high performance liquid chromatography with DAD detection", autori: Geana Elisabeta-Irina, Andreea Iordache, Roxana Ionete, Conferinta CHIMIA 2012, 24-27 mai 2012, Constanta

Date:	Signature
	P