

L I S T A
lucrărilor științifice
GAVRILAŞ Simona

A. Teza de doctorat

Studii privind aplicarea tratamentelor enzimatiche pentru îmbunătățirea calității sucurilor de fructe. *Polihidroxifenoli-conținut și compoziție*, Universitatea „Politehnica” din București, 2014.

B. Cărți și captole publicate

B1. **Simona Gavrilaş**, Ryszard M. Kozlowski, Chapter 7 „*Natural Lignocellulosic Raw Material As A Source Of Nanocellulosic Fibres*”, pp. 135-147, in *Natural Fibres: Properties, Mechanical behavior, Functionalization and Application*, Editors: Ryszard Michal Kozlowski, Małgorzata Muzychek, Nova Science Publishrs, Inc., New York, **2017**, ISBN: 978-1-53612-071-4.

B2. **Simona Gavrilaş**, Michaela Dina Stănescu, „*Polihidroxifenoli alimentari: structuri, surse, proprietăți, influența tratamentelor enzimatiche*”, Editura Universității „Aurel Vlaicu” Arad, **2015**, ISBN 978-973-752-688-5.

B3. Michaela Dina Stănescu, Sergiu Erich PALCU, **Simona Gavrilaş**, „*Biochimie analitică. Aplicații și probleme Ediție adăugită și revizuită*”, Editura Universității „Aurel Vlaicu” Arad, **2012**, ISBN 978-973-752-638-0, (*îndrumător de laborator*).

C. Lucrări indexate ISI/BDI publicate

Reviste ISI:

C1. Dorina-Rodica CHAMBRE, **Simona GAVRILAS**, Michaela Dina STANESCU, Crisan POPESCU, Thermal analysis for depiction of a laccase-PVA biocomposite. **2018**, *Rev. Roum. Chim.*, 63(9), 855-860. F.I. 0,37

C2. Mihaela Dochia, Monica Pustianu, Cristian Moisă, Dorina Chambre, **Simona Gavrilaş**, Sodium citrate as an eco-friendly complexing agent for the bioscouring treatment of the cellulosic/lignocellulosic fabrics, **2018**, *Chem. Pap.*, 72(8), 1881-1888. F.I. 0,963

C3. Mihaela Dochia, Dorina Chambre, **Simona Gavrilaş**, Cristian Moisă, Characterization of the complexing agents' influence on bioscouring cotton fabrics by FT-IR and TG/DTG/DTA analysis. *J. Therm. Anal. Calorim.*, **2018**, 132(3), 1489-1498. F.I.=2,209

C4. **Simona GAVRILAŞ**, Michaela Dina STĂNESCU, Improving the antioxidant properties of wild raspberry juice by enzymatic treatments. *Rev. Chim.-Bucharest*, **2016**, 67, 219-222. F.I.=1,412

C5. Michaela Dina Stănescu, **Simona Gavrilaş**, Roland Ludwig, Dietmar Haltrich, Vladimir I. Lozinsky, Preparation of immobilized *Trametes pubescens* laccase on a cryogel-type polymeric carrier and application of the biocatalyst to apple juice phenolic compounds oxidation. *Eur. Food Res. Technol.*, **2012**, 234, 655-662. F.I.=1,919

C6. Michaela Dina Stănescu, Magdalena Fogorasi, Boris. L. Shaskolskiy, **Simona Gavrilas**, Vladimir. I. Lozinsky, New Potential Biocatalysts by Laccase Immobilization in PVA Cryogel Type Carrier, *Appl. Biochem. Biotechnol.*, **2010**, *160*, 1947-1954. F.I.= 1,797

C7. Maria-Raluca Szabo, Dana Radu, **Simona Gavrilas**, Dorina Chambre, Cornelia Iditoiu, Antioxidant and antimicrobial properties of selected spice extracts. *Int. J. Food Prop.*, **2010**, *13*, 535-545. F.I.=1,845

ISI Proceedings:

C8. Eugenia Țigan, **Simona Gavrilaș**, Oana Brînzan, Monica Lungu, Anda Ioana Milin, Promoting sustainable development through eco-labelled products, study case for some consumer products. *18th International Multidisciplinary Scientific Geoconference SGEM 2018, Energy and Clean Technologies, Conference Proceedings*, **2018**, *17*, Issue 4.3, ISBN 978-619-7408-70-6, doi.org/10.5593sgem2018/4.3, 87-95, trimisă spre indexare.

C9. **Gavrilaș Simona**, Meșter Mihaela-Georgina, Marty Jean-Louis, Munteanu Florentina-Daniela, Immunological and chemical assay made on traditional dairy. *18th International Multidisciplinary Scientific Geoconference SGEM 2018, Nano, Bio, Green and Space-Technologies for a Sustainable Future, Conference Proceedings*, **2018**, *18*, Issue 6.2, ISBN 978-619-7408-51-5, ISSN 1314-2704, doi.org/10.5593sgem2018/6.2, 237-244, trimisă spre indexare.

C10. Dochia Mihaela, Pustianu Monica, **Gavrilaș Simona**, Tomescu Daniel, Copolovici Dana Maria, Study of the ultrasound efficiency on bioscouring treatment of hemp-cotton fabrics. *17th International Multidisciplinary Scientific Geoconference SGEM 2017, Micro and Nano Technologies Advanced in Biotechnology, Conference Proceedings*, Volume 17, Issue 61, **2017**, ISBN 978-619-7408-12-6, ISSN 1314-2704, DOI 10.5593sgem2017/61, 1015-1023, trimisă spre indexare.

C11. Pustianu Monica, Dochia Mihaela, **Gavrilaș Simona**, Tomescu Daniel, Study of the efficiency of bioscouring by determination of the residual Ca²⁺ from flax-cotton fabrics. *17th International Multidisciplinary Scientific Geoconference SGEM 2017, Micro and Nano Technologies Advanced in Biotechnology, Conference Proceedings*, Volume 17, Issue 61, **2017**, ISBN 978-619-7408-12-6, ISSN 1314-2704, DOI 10.5593sgem2017/61, 1007-1014, trimisă spre indexare.

C12. Dochia Mihaela, **Gavrilaș Simona**, Pustianu Monica, Tomescu Daniel, Copolovici Dana Maria, Comparative study regarding the influence of the complexing agents EDTA and sodium citrate on the 50% flax-50% cotton fabrics during the bioscouring treatment. *16th International Multidisciplinary Scientific Geoconference SGEM 2016, Book 6, Nano, Bio and Green-Technologies for a Sustainable Future, Conference Proceedings*, Volume III, **2016**, ISBN 978-619-7105-79-7, ISSN 1314-2704, DOI 10.5593sgem2016HB63, 223-230.

C13. Monica Pustianu, Mihaela Dochia, Cecilia Sîrghie, **Simona Gavrilaș**, Daniel Tomescu, Treatment optimization for bioscouring in ultrasound of cotton/cottonised hemp blended fabrics. *Proceedings of the 7th International Workshop on Soft Computing Applications (SOFA 2016)*, Volume 2, Advances in Intelligent Systems and Computing 634, Springer Publishing, Editors: Valentina Emilia Balăș, Lakhmi C. Jain. Marius Mircea Bălaș, pp. 595-604. DOI: 10.1007/978-3-319-62524-9_44.

C14. Bălaș Marius, Sîrghie Cecilia, Pustianu Monica, Dochia Mihaela, **Gavrilaș Simona**, Tomescu Daniel, Fuzzy method applied on the control of textiles biotechnologies. *Proceedings of the 7th International Workshop on Soft Computing Applications (SOFA 2016)*, Volume 2, Advances in Intelligent Systems and Computing 634, Springer Publishing, Editors: Valentina Emilia Balăș, Lakhmi C. Jain. Marius Mircea Bălaș, pp. 605-611. DOI: 10.1007/978-3-319-62524-9_45.

Reviste indexate în BDI:

C15. Dochia Mihaela, **Gavrilaș Simona**, Pustianu Monica, Moisă Cristian, Chambre Dorina, Waste water analysis from a new green pretreatment of cotton fabrics. *Annals of the University of Oradea Fascicle of textiles, leatherwork*, **2018**, XIX, No. 2, ISSN 1843 – 813X, 37-42.

C16. Pustianu Monica, Dochia Mihaela, **Gavrilaș Simona**, Moisă Cristian, Biotreatment optimization for a cellulosic/lignocellulosic blended fabric. *Annals of the University of Oradea Fascicle of textiles, leatherwork*, **2018**, XIX, No. 1, ISSN 1843-813X, 83-88.

C17. Monica Pustianu, Mihaela Dochia, Simona Gavrilaș, Daniel Tomescu, Comparative study on treatment bioscouring optimization with and without ultrasound for 50 % of cotton + 50 % of flax materials. *Adv. Eng. Forum.*, **2018**, 27, 111-117.

C18. Dochia Mihaela, Pustianu Monica, **Gavrilaș Simona**, Tomescu Daniel, Copolovici Dana Maria, Study on the influence of ultrasound in bioscouring treatment of 50 % of flax + 50 % of cotton fabrics. *Annals of the University of Oradea, Fascicle of textiles, leatherwork*, Volume XVIII, **2017**, No. 1, ISSN 1843-813X, pp. 27-32.

C19. Pustianu Monica, Dochia Mihaela, **Gavrilaș Simona**, Tomescu Daniel, Copolovici Dana Maria, Study on the bioscouring treatment of 50 % of hemp + 50 % of cotton fabrics. *Annals of the University of Oradea, Fascicle of textiles, leatherwork*, Volume XVIII, **2017**, No. 2, ISSN 1843-813X, pp. 29-34.

C20. **Simona Gavrilaș**, Florina Dumitru, Michaela Dina Stănescu, Commercial laccase oxidation of phenolic compounds. *U.P.B. Sci. Bull., Series B: Chemistry and Material Sciences*, **2012**, 74, Iss. 4, 3-10.

D. Lucrări publicate în reviste și volume de conferințe cu referenți (neindexate)

D.1 **Simona Gavrilaș**, Florentina-Daniela Munteanu, Determination of ascorbic acid in fruit juices. *Scien. Tech. Bull.-Chem. Food Sci. Eng.*, Vol. 14(XV), **2017**, 33-37.

D.2 **Simona Gavrilaș**, Mirela Gornic, Eleonora Bundiș, Creativity in pedagogical research. Annual Training Conference papers „*Research and practice in modern teaching*“, Alba Iulia, **2013**, ISSN 2344-4142, 142-145.

D.3 Michaela Dina Stănescu, Dorina Rodica Chambre, **Simona Gavrilaș**, Adina-Maria Bodescu, Thermal degradation of free and immobilized laccase. *Scien. and Techn. Bull. Chemistry, Food Sciences & Engineering*, **2010**, 14, 18-21.

D.4 Radu Dana Gina, **Gavrilaș Simona**, Stănescu Michaela Dina, Pectinases for improving raspberry and blackberry juice production. *Scien. and Techn. Bull. Chemistry, Food Sciences & Engineering*, **2008**, 13, 121-124.

D.5 Chambre Dorina, Szabo Maria-Raluca, **Gavrilaș Simona**, Idițoiu Cornelia, Enzymatic analysis of glucose, fructose and saccharose mixtures in food stuffs. *Scien. and Techn. Bull. Chemistry, Food Sciences & Engineering*, **2007**, 12, 40-44.

E. Brevete obținute în întreaga activitate

F. Contracte de cercetare în întreaga activitate

Director de proiecte naționale:

F1 29.06-10.07.2018, PN-III-P1-1.1-MC-2018-0469.

F2 31.01-02.03.2018, PN-III-P1-1.1-MC-2017-2337.

Granturi de mobilitate și cercetare

F3 26-28 November 2012, *Travel grant* pentru **FP7 FCUB-ERA-Belgrade Food International Conference**, Belgrad, Serbia.

F4 7-10.09.2011, “*Travel grant for students and researchers from Central and Eastern Europe at CEEC-TAC1 by CEEC-TAC*” (1st Central and Eastern European Conference on Thermal Analysis and Calorimetry), Craiova, Romania.

F5 31.08-03.09.2011, *ESF Student Grant* oferit de European Science Foundation at 4ECCLS (4th European Conference on Chemistry for Life Sciences), Budapest, Hungary.

F6 23-25 September 2009, *Travel grant* pentru 3rd Annual workshop and Management Committee meeting of COST Action 928, University of Agriculture Congress Centre, Krakow, Poland.

F7 15.03-15.05.2009, **COST-STSM-928-04562 Grant** *Utilisation of different types of laccase for improving food quality*, Viena, Austria.

Membru în echipa proiectelor internaționale:

F8 2015, *Biodiversitatea speciilor cu înaltă valoare funcțională și nutraceutică*, Consiglio Nazionale delle Ricerche-Istituto di Bioscienze e Bioresorse-(IBBR-CNR) Basilicata-Italy.

Membru în echipa proiectelor naționale:

F9 2018-2020, *Închiderea lanțurilor de valoare din bioeconomie prin obținerea de bioproduse inovative cerute de piață*, PN-III-P1-1.2-PCCDI-2017-0569.

F10 2017-2018, *Valorificarea sub-produselor de vinificație-aplicații pentru tratamentul apelor reziduale*, PN-III-P3-3.1-PMRO-FR-2016-0030.

F11 01.03.-30.11.2016, 01.05.-31.08.2017, *Tehnologii ecologice de tratare a materialelor textile celulozice, lignocelulozice și amestecuri ale acestora*, Proiect PN-II-RU-TE-2014-4-1370.

F12 2008-2009, *New Biomaterials by Enzyme Immobilization in/on Cryogel-Based Macroporous Carriers (#07-03-91682 RA_a)*.

F13 2007, *Procedeu îmbunătățit de obținere a fructozei, un îndulcitor natural de calitate superioară pentru persoanele diabetice și obeze*. **Grant C.N.C.S.I.S.**, cod 244.

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