

**L I S T**  
**of the scientific papers**  
**GAVRILAȘ Simona**

**A. Thesis**

Studies on the application of enzymatic treatments to improve the quality of fruit juice. *Phenols-content and composition*. University "Politehnica" of Bucharest, 2014.

**B. Books and chapters published**

**B1. Simona Gavrițaș**, Ryszard M. Kozłowski, 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 Kozłowski, Malgorzata Muzyczek, Nova Science Publishrs, Inc., New York, **2017**, ISBN: 978-1-53612-071-4.

**B2. Simona Gavrițaș**, Michaela Dina Stănescu, „Polihidroksifenoli alimentari: structuri, surse, proprietăți, influența tratamentelor enzimatică”/“Polyhydroxy food phenols: structure, sources, properties, influence of the enzymatic treatments”, Aurel Vlaicu University Publisher, Arad, **2015**, ISBN 978-973-752-688-5.

**B3.** Michaela Dina Stănescu, Sergiu Erich PALCU, **Simona Gavrițaș**, „Biochimie analitică. Aplicații și probleme Ediție adăugită și revizuită”/“Analytical Biochemistry. Applications and problems. Revised and enlarged edition“, Aurel Vlaicu University Publisher, Arad, **2010**, ISBN 978-973-752-498-0 (*laboratory guide*).

**C. Published ISI/IDB papers**

**ISI journals:**

**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. I.F. 0.37

**C2. C2.** Mihaela Dochia, Monica Pustianu, Cristian Moisă, Dorina Chambre, **Simona Gavrițaș**, Sodium citrate as an eco-friendly complexing agent for the bioscouring treatment of the cellulosic/lignocellulosic fabrics, **2018**, *Chem. Pap.*, 72(8), 1881-1888. I.F. 0.963

**C3.** Mihaela Dochia, Dorina Chambre, **Simona Gavrițaș**, 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. I.F. =2.209.

**C4. Simona GAVRILAȘ**, Michaela Dina STĂNESCU, Improving the antioxidant properties of wild raspberry juice by enzymatic treatments. *Rev. Chim.-Bucharest*, **2016**, 67, 219-222. I.F. =1.412

**C5.** Michaela Dina Stănescu, **Simona Gavrițaș**, 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. I.F. =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. I.F. = 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. I. F. =1.845

#### **ISI Proceedings:**

**C8.** Eugenia Țigan, **Simona Gavrilas**, Oana Brînzan, Monica Lungu, Anda Ioana Milin, Promoting sustainable development through eco-labelled products, study case for some consumer products. *18<sup>th</sup> 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, *sent for indexation*.

**C9.** **Gavrilas Simona**, Meșter Mihaela-Georgina, Marty Jean-Louis, Munteanu Florentina-Daniela, Immunological and chemical assay made on traditional dairy. *18<sup>th</sup> 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/10.5593/sgem2018/6.2, 237-244, *sent for indexation*.

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

**C11.** Pustianu Monica, Dochia Mihaela, **Gavrilas Simona**, Tomescu Daniel, Study of the efficiency of bioscouring by determination of the residual Ca<sup>2+</sup> from flax-cotton fabrics. *17<sup>th</sup> International Multidisciplinary Scientific Geoconference SGEM 2017, Micro and Nano Technologies Advanced in Biotechnology, Conference Proceedings*, **2017**, 17, Issue 61, ISBN 978-619-7408-12-6, ISSN 1314-2704, DOI 10.5593/sgem2017/61, 1007-1014, *sent for indexation*.

**C12.** Dochia Mihaela, **Gavrilas 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. *16<sup>th</sup> International Multidisciplinary Scientific Geoconference SGEM 2016, Book 6, Nano, Bio and Green-Technologies for a Sustainable Future, Conference Proceedings*, **2016**, III, ISBN 978-619-7105-79-7, ISSN 1314-2704, DOI 10.5593/sgem2016HB63, 223-230.

**C13.** Monica Pustianu, Mihaela Dochia, Cecilia Sîrghie, **Simona Gavrilas**, Daniel Tomescu, Treatment optimization for bioscouring in ultrasound of cotton/cottonised hemp blended fabrics. *Proceedings of the 7<sup>th</sup> 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 Bălăș, DOI: 10.1007/978-3-319-62524-9\_44, 595-604.

**C14.** Bălăș Marius, Sîrghie Cecilia, Pustianu Monica, Dochia Mihaela, **Gavrilaș Simona**, Tomescu Daniel, Fuzzy method applied on the control of textiles biotechnologies. *Proceedings of the 7<sup>th</sup> 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 Bălăș, DOI: 10.1007/978-3-319-62524-9\_45, 605-611.

#### **IDB journals:**

**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*, **2017**, XVIII, No. 1, ISSN 1843-813X, 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*, **2017**, XVIII, No. 2, ISSN 1843-813X, 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. Papers published in journals and conference volumes reviewers (unindexed)**

**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. Patents**

## **F. Research contracts**

### **National Projects Director:**

**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**.

### **Mobility and research grants:**

**F3** 26-28 November **2012**, *Travel grant* at **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” (1<sup>st</sup> 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 (4<sup>th</sup> European Conference on Chemistry for Life Sciences), Budapest, Hungary.

**F6** 23-25 September **2009**, *Travel grant* at 3<sup>rd</sup> 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.

### **Member of the international project team:**

**F8** **2015**, *Biodiversity and species with high functional nutraceutical value*, Consiglio Nazionale delle Ricerche-Istituto di Bioscienze e Bioresorse-(IBBR-CNR) Basilicata-Italy, **team member**.

### **Member of the national project team:**

**F9** **2018-2020**, *Closing the bioeconomy value chains by manufacturing market demanded innovative bioproduct*, **PN-III-P1-1.2-PCCDI-2017-0569**.

**F10** **2017-2018**, *Winemaking by-products applications for wastewater treatment*, **PN-III-P3-3.1-PMRO-FR-2016-0030**.

**F11** 01.03.-30.11.2016, 01.05.-31.08.2017, *Environment-friendly technologies for the treatment of cellulosic, lignocellulosic and mixture of those materials*, 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**, *New process for obtaining fructose, a natural sweetener with high quality for obese and diabetics.* **Grant C.N.C.S.I.S.**, cod 244.

**20.02.2019**

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A handwritten signature in blue ink, appearing to read 'Simona', is positioned below the printed name.