

**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 Publishers, Inc., New York, **2017**, ISBN: 978-1-53612-071-4.

**B2. Simona Gavrițaș**, Michaela Dina Stănescu, „Polihidroxifenoli 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. Simona GAVRILAȘ**, Michaela Dina STĂNESCU, Improving the antioxidant properties of wild raspberry juice by enzymatic treatments. *Rev. Chim.-Bucharest*, **2016**, 67, 219-222. F.I. (2014/2015)=0,810

**C2.** 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. F.I.=1,436

**C3.** 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.= 1,879

**C4.** 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.=0,947

**ISI Proceedings:**

**C5.** Dochia Mihaela, Pustianu Monica, **Gavrițaș 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*, Volume 17, Issue 61, **2017**, ISBN 978-619-7408-12-6, ISSN 1314-2704, DOI 10.5593/sgem2017/61, 1015-1023, sent for indexation.

**C6.** Pustianu Monica, Dochia Mihaela, **Gavrilaş 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*, Volume 17, Issue 61, **2017**, ISBN 978-619-7408-12-6, ISSN 1314-2704, DOI 10.5593/sgem2017/61, 1007-1014, sent for indexation.

**C7.** Dochia Mihaela, **Gavrilaş 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*, Volume III, **2016**, ISBN 978-619-7105-79-7, ISSN 1314-2704, DOI 10.5593/sgem2016HB63, 223-230.

**C8.** Monica Pustianu, Mihaela Dochia, Cecilia Sîrghie, **Simona Gavrilaş**, 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 Balăş, Lakhmi C. Jain. Marius Mircea Bălaş, pp. 595. DOI: 10.1007/978-3-319-62524-9\_44.

**C9.** Bălaş Marius, Sîrghie Cecilia, Pustianu Monica, Dochia Mihaela, **Gavrilaş 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 Balăş, Lakhmi C. Jain. Marius Mircea Bălaş, pp. 605. DOI: 10.1007/978-3-319-62524-9\_45.

#### **IDB journals:**

**C10.** DOCHIA Mihaela, PUSTIANU Monica, **GAVRILAŞ 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.

**C11.** PUSTIANU Monica, DOCHIA Mihaela, **GAVRILAŞ 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.

**C12.** **Simona Gavrilaş**, 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 Gavrilaş**, 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 Gavrilaş**, Mirela Gornic, Eleonora Bundiş, 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 Gavrilaş**, 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, **Gavrilaş 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, **Gavrilaş 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**

**F1 Director of the project: PN-III-P1-1.1-MC-2017-2337**, Biosensor design, 31.01.-02.03.2018.

**F2 Winemaking by-products applications for wastewater treatment (Project 86 BM/04.04.2017)**, team member, 2017-2018.

**F3 Environment-friendly technologies for the treatment of cellulosic, lignocellulosic and mixture of those materials**, Project **PN-II-RU-TE-2014-4-1370**, team member, 01.03.-30.11.2016, 01.05.-31.08.2017.

**F4 Biodiversity and species with high functional nutraceutical value**, Consiglio Nazionale delle Ricerche-Istituto di Bioscienze e Bioresorse-(IBBR-CNR) Basilicata-Italy, team member, 2015.

**F5 Director of the project: Utilisation of different types of laccase for improving food quality; COST-STSM-928-04562 Grant**, 15.03-15.05.2009, Viena, Austria.

**F6 New Biomaterials by Enzyme Immobilization in/on Cryogel-Based Macroporous Carriers (#07-03-91682 RA\_a)**, team member, 2008-2009.

**F7 New process for obtaining fructose, a natural sweetener with high quality for obese and diabetics. C.N.C.S.I.S. Grant, cod 244**, team member, 2007.

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