

Personal information

Name and surname: STĂNCIUC (SAVA) N. NICOLETA

Date and place of birth: January the 25th 1977, Galati

Present academic position: Associate Professor, „Dunărea de Jos” University of Galati, Faculty of Food Science and Engineering

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Education

2000-2005: PhD, „Dunarea de Jos” University of Galati

1995-2000: BS in Applied Biotechnology, Faculty of Food Science and Engineering, „Dunarea de Jos” University of Galati

1991-1995: Bacalaureate, Tudor Vladimirescu High School, Galati

Professional experience

since 2012: Associate Professor, „Dunarea de Jos” University of Galati

2007-2012: Lecturer, „Dunarea de Jos” University of Galati

2005-2007: Teaching Assistant, „Dunarea de Jos” University of Galati

Research interests

Assessment the process-structure-function relationship of some biologically active compounds. Intrinsic indicators to quantitatively evaluate the impact of physical preservation/processing techniques in terms of food safety and functionality. Valorisation of highly nutritional and functional by-products from dairy industry.

Selected publications

- 1) Turturică, M., **Stănciuc, N.**, Bahrim, G., Râpeanu, G. **2016**. Effect of thermal treatment on phenolic compounds from plum (*prunus domestica*) extracts – A kinetic study. *Journal of Food Engineering*, 171, 200-207.
- 2) Dumitrașcu, L., **Stănciuc, N.**, Bahrim, G.E., Ciumac, A., Aprodu, I. **2015**. pH and heat-dependent behaviour of glucose oxidase down to single molecule level by combined fluorescence spectroscopy and molecular modeling, *Journal of the Science of Food and Agriculture*, 52: 8095-8103;
- 3) Simion-Ciuciu, A.M., Aprodu, I., Dumitrașcu, L., Bahrim, G.E., Alexe, P., **Stănciuc, N.*** **2015**. Probing thermal stability of the β -lactoglobulin-oleic acid complex by fluorescence spectroscopy and molecular modeling. *Journal of Molecular Structure*, 1095:26-33.
- 4) Simion-Ciuciu, A.M., Aprodu, I., Dumitrașcu, L., Bahrim, G.E., Alexe, P., **Stănciuc, N.*** **2015**. Exploring the heat-induced structural changes of β -lactoglobulin-linoleic acid complex by fluorescence spectroscopy and molecular modeling techniques. *Journal of Food*

Science and Technology, 52:8095-8103.

- 5) Stănciuc N., Aprodu, A., Ioniță, E., Bahrim G., Râpeanu, G. **2015**. Exploring the structure-function relationship of peroxidase from *Amoracia rusticana* through investigation of pH- and heat induced conformational changes. *Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy* 147:43-50,
- 6) Dumitrascu, L., **Stănciuc, N.***, Aprodu, I., Ciuciu, A-M., Alexe, P., Bahrim, G. **2015**. Monitoring the heat-induced structural changes of alkaline phosphatase by molecular modeling, fluorescence spectroscopy and inactivation kinetics investigations, *Journal of Food Science and Technology*, 52: 6290-6300.
- 7) Nistor O-V., **Stănciuc N.***, Andronoiu D-G., Mocanu M-G., Botez, E. **2015**. Ohmic treatment on apples purees (Golden Delicious variety) in relation to some quality aspects. *Food Science and Biotechnology*, 24, 51-59.
- 8) Dumitrascu L., **Stănciuc N.**, Stanciu, S., Râpeanu, G. **2014**. Inactivation kinetics of alkaline phosphatase from different species of milk using quinolyl phosphate as a substrate, *Food Science and Biotechnology*, 23(6), 1773-1778.
- 9) Aprodu I., **Stănciuc, N.**, Dumitrascu, L., Răpeanu, G., Stanciu S., **2014**. Investigations towards understanding the thermal denaturation of lactoperoxidase. *International Dairy Journal*, 38(1), 47-54.
- 10) Nistor O-V., **Stănciuc N.**, Aprodu I., Botez E. **2014**. New insights into heat induced structural changes of pectin methylesterase on fluorescence spectroscopy and molecular modeling basis. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*. 128, 15-21.
- 11) Ioniță E., **Stănciuc N.**, Aprodu I., Râpeanu G., Bahrim G. **2014**. pH-induced structural changes of tyrosinase from *Agaricus bisporus* using fluorescence and *in silico* methods. *Journal of the Science of Food and Agriculture*, 94(11), 2338-44.
- 12) Ioniță E., Aprodu I., **Stănciuc N.**, Râpeanu G., Bahrim G. **2014**. Advances in structure-function relationships of tyrosinase from *Agaricus bisporus* – Investigation on heat-induced conformational changes. *Food Chemistry*, 156, 129–136.
- 13) **Stănciuc N.**, Aprodu I., Râpeanu G., Van der Placken I., Bahrim G., Hendrickx M. **2013**, Analysis of the thermally induced structural changes of bovine lactoferrin, *Journal of Agricultural and Food Chemistry*, 61 (9), 2234–2243.
- 14) Aprodu I., **Stănciuc N.**, Banu I., Bahrim G. **2013**. Probing thermal behaviour of microbial transglutaminase with fluorescence and *in silico* methods, *Journal of the Science of Food and Agriculture*, 93, 794–802.
- 15) Bichescu C., Bahrim G., **Stănciuc N.**, Râpeanu G., **2013**, Effect of maceration on the making of Fetească neagra wines, *International Journal of Food, Agriculture and Environment*, 11(1), 273-277.
- 16) **Stănciuc N.**, Aprodu I., Râpeanu G., Bahrim G. **2013**. pH- and heat-induced structural changes of bovine α -lactalbumin in response to oleic acid binding, *European Food Research and Technology*, 236(2), 257-266.

- 17) Dumitrașcu L., Moschopoulou E., Aprodu I., Stanciu S., **Stănciuc N.**, 2013, Assessing the heat induced changes in major cow and non-cow whey proteins conformation on kinetic and thermodynamic basis, *Small Ruminant Research*, 111(1), 129-138.
- 18) Dumitrașcu L., **Stănciuc N.**, Stanciu S. 2013. The effect of heat treatment on γ -glutamyl transferase activity in non-bovine and bovine milk – A comparative kinetic and thermodynamic investigation. *LWT - Food Science and Technology* 5, 325–330.
- 19) Dumitrascu L., **Stănciuc N.**, Stanciu S., Râpeanu G. 2012. Thermal inactivation of lactoperoxidase in goat, sheep and bovine milk – A comparative kinetic and thermodynamic study, *Journal of Food Engineering*, 113, 47-52.
- 20) **Stănciuc N.**, Dumitrascu L., Ardelean, A., Stanciu S., Râpeanu G. 2012. A kinetic study on the heat induced changes of whey proteins concentrate at two pH values, *Food and Bioprocess Technology*, 54(6), 2160-2171.
- 21) **Stănciuc N.**, Aprodu I., Râpeanu G., Bahrim G. 2012. Fluorescence spectroscopy and molecular modeling investigations on the thermally induced structural changes of bovine β -lactoglobulin, *Innovative Food Science and Emerging Technologies*, 15, 50-56.
- 22) **Stănciuc N.**, Râpeanu G., Bahrim G., Aprodu I. 2012, pH and Heat-induced structural changes of bovine apo- α -lactalbumin, *Food Chemistry*, 131, 956-963.
- 23) **Stănciuc N.**, Ardelean A., Diaconu V., Râpeanu G., Stanciu S., Nicolau, A. 2011, Kinetic and thermodynamic parameters of alkaline phosphatase and γ – glutamyl transferase inactivation in bovine milk, *Dairy Science & Technology (formerly Le Lait)*, 91, 701–717.
- 24) **Stănciuc N.**, Dumitrascu L., Stanciu S., Râpeanu G. 2011. γ -glutamyl transferase inactivation in milk and cream: a comparative kinetic study, *Innovative Food Science and Emerging Technologies*, 12, 56–61.
- 25) **Stănciuc N.**, Râpeanu G., Stanciu, S., 2010. Quantitative evaluation on Maillard reactions in model systems: a kinetic study, *Romanian Biotechnological Letters*, 15(3), 5329-5339.
- 26) **Stănciuc N.**, van der Plancken, I., Rotaru G., Hendrickx M. 2008, Denaturation impact in susceptibility of β -lactoglobulin to enzymatic hydrolysis: a kinetic study, *Revue Roumaine de Chimie*, 53 (10).
- 27) **Sava N.**, van der Plancken, I., Claeys W., Hendrickx M. 2005, The kinetics of heat-induced structural changes of β -lactoglobulin, *Journal of Dairy Science*, 88, 1646-1653.
- 28) Simion, A.M.C., Aprodu, I., Alexe, P., **Stănciuc, N.** 2015. Studies on interaction between polyunsaturated fatty acids and beta-lactoglobulin by fluorescence methods. Conference: European Biotechnology Congress Location: Bucharest, ROMANIA Date: MAY 07-09, 2015. *Journal of Biotechnology*, 208, S69-S69.
- 29) Aprodu, I. Răpeanu, G., **Stănciuc, N.**, 2015. Spectroscopic and molecular modeling investigations on structural changes of food grade proteins. Conference European Biotechnology Congress Location: Bucharest, ROMANIA Date: MAY 07-09, 2015, *Journal of Biotechnology*, Volume: 208, Supplement: S, Pages: S8-S8.
- 30) Ionita, E., Răpeanu, G., **Stănciuc, N.**, Dalmadi, I, Aprodu, I., Bahrim, G., 2015. Thermal and high pressure stability of peroxidase extracted from plums. Conference European

Biotechnology Congress Location: Bucharest, ROMANIA Date: MAY 07-09, 2015, Journal of Biotechnology Pages: S65-S65.

- 31) Turturica, M., Rapeanu, G., **Stănciuc, N.**, Bahrim, G., **2015**. Fluorescence spectroscopy investigation on pH and heat changes of cherries anthocyanin extracts. Conference European Biotechnology Congress Location: Bucharest, ROMANIA Date: MAY 07-09, 2015, Journal of Biotechnology, Volume: 208, Supplement: S, Pages: S8-S8., Pages S68-S68.
- 32) Ursache, F.M., **Stănciuc, N.**, Botez, E., Nistor, O.V. **2015**. Evaluation of anthocyanins thermal degradation in Prunus spinosa on fluorescence spectroscopy basis, Conference European Biotechnology Congress Location: Bucharest, ROMANIA Date: MAY 07-09, 2015, Journal of Biotechnology, Volume: 208, Supplement: S, Pages: S8-S8., Pages S70-S70.
- 33) Rotaru, G., Borda, D; Stanciu, S; **Sava, N.** **2004**. Integrated quality management systems for Romanian food industry organizations. Edited by: Marghitas, LA Conference: Symposium on Prospects of the 3rd Millennium Agriculture Location: Cluj Napoca, ROMANIA Date: OCT 20-23, 2004. Sponsor(s): Univ Agr Sci & Vet Med. Bulletin of the University of Agricultural Sciences and Veterinary Medicine, Vol 60: AGRICULTURE Book Series: BULETINUL UNIVERSITATII DE STIINTE AGRICOLE SI MEDICINA VETERINARIA CLUJ-NAPOCA SER AGRICULTURA SERIES Volume: 60, Pages: 492-492,
- 34) **Sava, N.**; Van der Plancken, I.; Claeys, W.; Hendrickx, M., **2004**. Heat-induced changes in thiol availability of beta-lactoglobulin. Communications in agricultural and applied biological sciences, Volume 69 Issue 2 Pages: 243-6 Published: 2004

Selected research grants

Functional composites based on whey protein and vegetable extracts for food applications, PNII-RU-TE-2014-4-0115, Project manager

Analytical systems for the traceability of Romanian milk and dairy products in order to align to the European food safety requirements, PN II-PCE-IDEI, 517/2009, Project manager.