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## LIST OF PUBLICATIONS

### Research articles

1. **Tsekovska R**, Kirilov K, Gatev E, Mironova R, Handzhyiski Y. Investigation of purine compounds for anti-glycation activity in vitro. *Journal of Chemical Technology and Metallurgy*. University of Chemical Technology and Metallurgy. 2022; 57(1): 19-24.
2. Engibarov S, **Tsekovska R**, Kirilov K, Gatev E, Ivanov I, Mironova R, Handzhyiski Y. Deoxyribonuclease activity of allenic acids. *Journal of chemical technology and Metallurgy*. University of Chemical Technology and Metallurgy. 2022; 57(2): 291–297.
3. Jimenez AS, Puelles R, Perez-Fernandez M, Barrietabena L, Jacobsen NR, Suarez-Merino B, Micheletti C, Manier N, Salieri B, Hischer R, **Tsekovska R**, Handzhyiski Y, Bouillard J, Oudart Y, Galea KS, Kelly S, Shandilya N, Goede H, Gomez-Cordon J, Jensen KA, van Tongeren M, Apostolova MD, Llopis IR. Safe(r) by design guidelines for the nanotechnology industry. *NanoImpact*. Volume 25, January 2022, 100385.
4. Boteva E, Doychev K, **Tsekovska R**, Handzhyiski Y, Ivanov I, Mironova R. Protein amidoriase activity of the *Escherichia coli* K-12 glycolytic enzyme phosphoglucose isomerase. *Comptes rendul de l'Academie bulgare des Sciences*, Prof. Marin Drinov Publishing House of Bulgarian Academy of Sciences, приета за печат: 2020.
5. Giusti A, Atluri R, **Tsekovska R**, Gajewicz A, Apostolova M, Battistelli Ch, Bleeker E, Bossa C, Bouillard J, Dusinska M, Gómez-Fernández P, Grafström R, Gromelski M, Handzhyiski Y, Jacobsen N, Jantunen P, Jensen K, Mech A, Navas J M, Nymark P, Oomen A, Puzyn T, Rasmussen K, Riebeling Ch, Rodriguez-Llopis I, Sabella S, Sintes J R, Suarez-Merino B, Tanasescu S, Wallin H, Haase A. Nanomaterial grouping: Existing approaches and future recommendations. *NanoImpact*. 2019; 16; 100182.
6. Mech A, Rasmussen K, Jantunen P, Aicher L, Alessandrelli M, Bernauer U, Bleeker E A J, Bouillard J, Prospero Fanghella P Di, Draisci R, Dusinska M, Encheva G, Flament G, Haase A, Handzhyiski Y, Herzberg F, Huwyler J, Jacobsen N R, Jeliaskov V, Jeliaskova N, Nymark P, Grafström R, Oomen A G, Polci M L, Riebeling C, Sandström J, Shivachev B, Stateva S, Tanasescu S, **Tsekovska R**, Wallin H, Wilks M F, Zellmer S, Apostolova M D. Insights into possibilities for grouping and read-across for nanomaterials in EU chemicals legislation. *Nanotoxicology*. 2019; 13(1):119-141.
7. **Dimitrova R**, Mironova R, Ivanov I. Glycation of proteins in *Escherichia coli*: Effect of nutrient broth ingredients on glycation. *Biotechnol Biotechnol Eq*. 2004;18(2):99-103.
8. **Dimitrova R**, Mironova R, Ivanov I. Glycation of proteins in *Escherichia coli*: Interference of strain diversity and growth conditions with glycation. *C Rend Bulg Acad Sci*. 2004 Sep;57(9):71-75.
9. Stoynev G, **Dimitrova R**, Srebrev L, Mironova R, Ivanov I. Glycation of proteins in *Escherichia coli*: Detection of glycating compounds using histone H1 as a substrate. *C Rend Bulg Acad Sci*. 2004;57(9):77-82.
10. Mironova R, Niwa T, **Dimitrova R**, Boyanova M, Ivanov I. Glycation and post-translational processing of human interferon-gamma expressed in *Escherichia coli*. *J Biol Chem*. 2003 Dec 19;278(51):51068-74.

11. Mironova R, Niwa T, Hayashi H, **Dimitrova R**, Ivanov I. Evidence for non-enzymatic glycosylation in *Escherichia coli*. *Mol Microbiol*. 2001Feb;39(4):1061-1068.

### Review articles and book contributions

12. **Tsekovska R**, Mironova R, Ivanov I. Protein glycosylation in bacteria. *C Rend Bulg Acad Sci*. 2021 Apr 27;74(4):467-487.
13. Handzhiyski Y, **Tsekovska R**, Kirilov K, Niwa, T, Ivanov I, Mironova R. Enhancing effect of L-lysine on glycation of histone H1 and bovine serum albumin in vitro. Chapter 3 in: *A Closer Look at Glycation: A Potential Hotspot for Age-related Complications and Diseases*, Nova Science Publishers, Inc, NY, USA (2021-March), pp. 79-98, ISBN: 978-1-53619-176-9.
14. Popova E, Zagorchev L, **Tsekovska R**, Mironova R, Odjakova M. Protective role of salinity against the accumulation of advanced glycation end products in embryogenic suspension cultures of *Dactylis glomerata* L. Chapter 5 in: *Advanced Glycation End-Products: Sources and Effects*, Nova Science Publishers, Inc, NY, USA (2020-April), Volume 21, pp. 105-126, ISBN:978-1-53617-555-4.
15. **Tsekovska R**, Handzhiyski Y, Boteva E, Kirilov K, Niwa, T, Ivanov I, Mironova R. Advanced glycation end products in *Escherichia coli*: A sign of aging. Chapter 5 in: *Advances in Medicine and Biology*, Nova Science Publishers, Inc. NY, USA (2017-January), Volume 118, pp. 51-81, ISBN: 978-1-53611-010-4.
16. **Tsekovska R.**, Sredovska-Bozhinov A., Niwa T., Ivanov I., Mironova R. Maillard reaction and immunogenicity of protein therapeutics. *World J Immunol*. 2016; 6(1): 19-38.
17. Sredovska Bozhinov A, **Tsekovska R**, Handzhiyski Y, Mironova R. Interferon-beta for treatment of relapsing-remitting multiple sclerosis: Problems and Perspectives. *Int J Recent Res Arts Sci*. 2015, 4:407-416.

### Articles in conference proceedings

18. **Tsekovska RG**, Boyanova MS, Mironova RS, Ivanov IG. Impact of glycation inhibitors on the biologic activity of recombinant human interferon-gamma. *Biotechnol Biotechnol Eq*. 2012 Apr;26(1)SE:170-174.
19. **Tsekovska RG**, Boyanova MS, Mironova RS, Ivanov IG. Effect of arginine on glycation and stability of recombinant human interferon-gamma *Biotechnol Biotechnol Eq*. 2009 Feb;23(1)SE: 1063-1067.
20. **Dimitrova R**, Mironova R, Ivanov I. Formation of 3-deoxyglucosone in *Escherichia coli*. In: *Proceedings (Human Medicine) of the Scientific Conference with International Participation*, Stara Zagora, June 3-4, 2004;4:96-100.
21. Mironova R, **Dimitrova R**, Boyanova M, Ivanov I. Non-enzymatic glycosylation of human interferon-gamma in *Escherichia coli*. In: *Proceedings (Human Medicine/Veterinary Medicine) of the Scientific Conference with International Participation*, Stara Zagora, June 5-6, 2003;3:74-78.
22. **Dimitrova R**, Kalpazanova M, Mironova R, Ivanaov I. Non-enzymatic glycosylation of total protein in *Escherichia coli*. In: *Proceedings (Human Medicine/Veterinary Medicine) of the Scientific Conference with International Participation*, Stara Zagora, June 5-6, 2003;3:79-84.

### Conference abstracts in journals with JCR impact factor

23. Mironova R, Niwa T, **Dimitrova R**, Boyanova M, Ivanov I. Non-enzymatic glycosylation of recombinant human interferon-gamma. *Turk J Biochem*. 2003;28(3):p81

## LIST OF PARTICIPATION IN SCIENTIFIC MEETINGS

The names of the presenting authors are underlined

1. Apostolova M, Encheva G, Tsekovska R. NanoReg2 Strategy for characterization toxicity and biological effects of TiO<sub>2</sub> nanoparticles. **Oral presentation**. International Scientific Conference „Clement Days“, November 8-9, 2018, Sofia, Bulgaria.
2. Vasileva B, Mironova R, Tsekovska R, Vasilev V, Kolarska J, Shurliiev V, Deliyiska B. Glycation end-products (CML and imidazolone) in diabetic and nondiabetic patients and pathogenesis of microangiopathic damage in different stages of chronic kidney disease. **Oral presentation**. National Conference on Nephrology, September 27-30, 2018, resort complex Albena, Bulgaria.
3. Giusti A, Tsekovska R, Ionita G, Pietraforte D, Barone F, Mariussen E, Rundén-Pran E, Dusinska M, Jacobsen N, Bahl A, Tanasescu S, Puzyn T, Apostolova M, Haase A. Grouping approaches for nanomaterials based on oxidative stress responses. **Poster**. 9<sup>th</sup> International Conference on Nanotoxicology, September 18-21, 2018, Neuss, Germany.
4. Apostolova M, Stateva S, Handzhiyski Y, Tsekovska R, Encheva G. Implementation of NanoReg2 grouping and Safe-by-Design approaches for different nanomaterials' applications. **Oral presentation**. 19<sup>th</sup> International Workshop on Nanoscience and Nanotechnology, November 24-25, 2017, Sofia, Bulgaria.
5. Vasileva B, Mironova R, Tsekovska R, Vasilev V, Kolarska J, Shurliiev V, Deliyiska B. Are serum concentrations of N-carboxymethyllysine (CML) and imidazolone associated with the onset and progression of microvascular complications in patients with diabetes mellitus? - preliminary results. **Poster**. National Conference on Nephrology, September 28 – October 01, 2017, resort complex Albena, Bulgaria.
6. Tsekovska R, Sredovska-Bozhinov A, Handzhiyski Y, Atanasova A, Mironova R. An attempt to deglycate human interferon-gamma with Escherichia coli FrlB amidoriase. **Poster**. 55 Years Anniversary Conference of the Roumen Tsanev Institute of Molecular Biology, October 5-6, 2015, Sofia, Bulgaria.
7. Tsekovska R, Boyanova M, Mironova R, Ivanov I. Impact of glycation inhibitors on the biologic activity of recombinant human interferon-gamma. **Poster**. Anniversary Molecular Biology Conference “50 Years Roumen Tsanev Institute of Molecular Biology”, October 6-7, 2011, Sofia, Bulgaria.
8. Tsekovska R, Boyanova M, Mironova R, Ivanov I. The effect of arginine on stability of recombinant human interferon-gamma. **Poster**. Scientific Session on Molecular Biology in Memoriam to Acad. Roumen Tsanev, October 6-7, 2008, Sofia, Bulgaria.
9. Dimitrova R, Mironova R, Ivanov I. Formation of 3-Deoxyglucosone in Escherichia coli. **Oral presentation**. National conference with international participation, June 3-4, 2004, Stara Zagora, Bulgaria.
10. Mironova R, Niwa T, Dimitrova R, Boyanova M, Ivanov I. Non-enzymatic glycosylation of recombinant human interferon-gamma. **Oral presentation**. 13<sup>th</sup> Balkan Biochemical Biophysical Days, October 12-15, 2003, Kusadasi, Turkey.
11. Mironova R, Dimitrova R, Boyanova M, Ivanov I. Non-enzymatic glycosylation of human interferon-gamma in Escherichia coli. **Oral presentation**. National conference with international participation, June 5-6, 2003, Stara Zagora, Bulgaria.
12. Dimitrova R, Kalpazanova M, Mironova R, Ivanaov I. Non-enzymatic glycosylation of total protein in Escherichia coli. **Oral presentation**. National conference with international participation, June 5-6, 2003, Stara Zagora, Bulgaria.
13. Mironova R, Niwa T, Hayashi H, Dimitrova R, Ivanov I. Evidence for glycation in bacteria. **Poster**. 11<sup>th</sup> International Congress on Nutrition and Metabolism in Renal Disease, March 29-31, 2002, Nagoya, Japan.
14. Mironova R, Niwa T, Hayashi H, Dimitrova R, Ivanov I. Non-enzymatic glycosylation in Escherichia coli. **Poster**. 12<sup>th</sup> Balkan Biochemical Biophysical Days, May 10-13, 2001, Bucharest, Romania.
15. Mironova R, Niwa T, Hayashi H, Dimitrova R, Ivanov I. Non-enzymatic glycosylation of proteins in Escherichia coli. **Oral presentation**. 5<sup>th</sup> National Congress on Biochemistry, Biophysics and Molecular Biology, March 29-31, 2001, Sofia, Bulgaria.