

List of publications:

1. Katerina Makarova*, Katarzyna Zawada, Dorota Wagner, Justyna Skowyrza, „Optimization of antioxidant properties of creams with berry extracts by artificial neural networks”, accepted for publication in *Acta Physica Polonica A*
2. Joanna J. Sajkowska-Kozielewicz*, Krystian Gulik, Katerina Makarova, Katarzyna Paradowska, “ANTIOXIDANT PROPERTIES AND STABILITY OF GEISSOSPERMUM RETICULATUM TINCTURES: LAG PHASE ESR AND CHEMOMETRIC ANALYSIS” accepted for publication in *Acta Physica Polonica A*
3. Katarzyna Zawada*, Katerina Makarova, Dorota Kowalska, Iwona Wawer, „The Optimization of Antioxidant Properties of Herbal Bathing Salts” accepted for publication in *Acta Physica Polonica A*
4. Sajkowska-Kozielewicz, J. J., Kozielewicz, P., Makarova, K., Wawer, I., & Paradowska, K. (2016). Analysis of impact of cytotoxic and antioxidant activities of the Jerusalem Balsams using chemometric methods. *Planta Medica*, 81(S 01), P1088.
5. Makarova, Katerina, Pawel Siudem, Katarzyna Zawada, and Justyna Kurkowiak. "Screening of toxic effects of bisphenol A and products of its degradation: zebrafish (*Danio rerio*) embryo test and molecular docking." *Zebrafish* 13, no. 5 (2016): 466-474.
6. Łaszczycza, Dominika, Katarzyna Paradowska, and Katerina Makarova* "Zanieczyszczenie środowiska bisfenolem A." *Biuletyn Wydziału Farmaceutycznego Warszawskiego Uniwersytetu Medycznego, Warszawa* (2015).
7. Makarova, Katerina*, Kinga Drażkowska, Beata Suska, Katarzyna Zawada, and Iwona Wawer. "Spin trapping studies of essential oils in lipid systems." *Nukleonika* 60, no. 3 (2015): 461-468.
8. Adamowicz, M., K. Makarova, and K. Paradowska. "Wpływ atrazyny i jej produktów rozpadu na środowisko oraz organizm ludzki." *Ekologia i Technika* 23 (2015).
9. Makarova, Katerina, Katarzyna Łastawska, Dorota Wagner, and Iwona Wawer. "ESR study of spin trapping in Fenton media in the presence of taxifolin." *Journal of Molecular Structure* 1067 (2014): 27-36.
10. Jamróz, Marta K., Katarzyna Paradowska, Katarzyna Zawada, Katerina Makarova, Sławomir Kaźmierski, and Iwona Wawer. "1H and 13C NMR-based sugar profiling with chemometric analysis and antioxidant activity of herbhoneys and honeys." *Journal of the Science of Food and Agriculture* 94, no. 2 (2014): 246-255.
11. Rokhina, Ekaterina V., Katerina Makarova, Manu Lahtinen, Elena A. Golovina, Henk Van As, and Jurate Virkutyte. "Ultrasound-assisted MnO₂ catalyzed homolysis of peracetic acid for phenol degradation: The assessment of process chemistry and kinetics." *Chemical engineering journal* 221 (2013): 476-486.
12. Makarova, Katerina, Ekaterina V. Rokhina, Elena A. Golovina, Henk Van As, and Jurate Virkutyte. "Combination of neural networks and DFT calculations for the comprehensive analysis of FDMPO radical adducts from fast isotropic electron spin resonance spectra." *The Journal of Physical Chemistry A* 116, no. 1 (2011): 443-451.
13. Rokhina, Ekaterina V., Manu Lahtinen, Katerina Makarova, Veeriah Jegatheesan, and Jurate Virkutyte. "Theoretical and practical aspects of chemical functionalization of carbon

- nanofibers (CNFs): DFT calculations and adsorption study." *Bioresource technology* 113 (2012): 127-131.
14. Rokhina, Ekaterina V., Katerina Makarova, Elena A. Golovina, Henk Van As, and Jurate Virkute. "Free radical reaction pathway, thermochemistry of peracetic acid homolysis, and its application for phenol degradation: spectroscopic study and quantum chemistry calculations." *Environmental science & technology* 44, no. 17 (2010): 6815-6821.
 15. Makarova, Katerina*, Katarzyna Łastawska, Katarzyna Zawada, and Iwona Wawer. "Spin trapping study of the influence of taxifolin on Fenton reaction in ethanol and methanol." *Current Topics in Biophysics* 33, no. suppl A (2010): 153-156.
 16. Makarova, K., M.* Stachowicz, V. Glukhanyuk, A. Kozanecki, C. Ugolini, J. Y. Lin, H. X. Jiang, and J. Zawada. "Spectroscopic studies of Er-centers in MOCVD grown GaN layers highly doped with Er." *Materials Science and Engineering: B* 146, no. 1 (2008): 193-195.