## Списък на научните трудове на

## гл. ас. д-р Светла Петкова Гатева, представени във връзка с участието в конкурс за академичната длъжност „доцент” по професионално направление 4.3. Биологически науки, научна специалност "Генетика"

## Показател А

1. **Дисертационен труд за присъждане на образователна и научна степен „доктор“**

   Светла Гатева (2003). „Цитогенетични проучвания на мутагеното въздействие на комбинация от пестициди и тежки метали в лимфоцитна тестова система”, София, Централна лаборатория по обща екология, БАН, за получаване на научната и образователна степен „Доктор”, Научна специалност: 01.06.06 Генетика, с. 37.

**Публикации, свързани с дисертацията - не влиза в справката за покриване на минималните наукометрични изисквания**

1. **Gateva S.,** Jovtchev G., Ljiakopulu M., Varadinova E., Gencheva-Kondakova E. (2001). Complex estimation of the genotoxical effect of pesticides by three cytogenetical test-systems. Journal of environmental protection and ecology, 2, (3), 684-693, ISSN 1311-5065.
2. **Gateva S.,** Varadinova E., Georgieva V. (2001). Genotoxic activity of the pesticide devrinol in human lymphocytes *in vitro*. Comp. Rend. Acad. Sci. 54, (2), 81-84, ISSN: 0861-1459.
3. **Gateva S.,** E. Varadinova, V. Georgieva (2001-2002). Genotoxical activity of pesticides lontrel and devrinol in human lymphocyte cells *in vitro*. GENETICS AND BREEDING. 31, (1-2),17-25. ISSN: 1310-4292.
4. **Gateva S. P.,** Jovtchev G., Stergios M., Georgieva V. (2003). Cytogenetic studies of combined treatment with cadmium chloride and lontrel in human lymphocytes *in vitro*. Praemedicus since 1925. 1, (5), 14-22. ISSN:1312-5001.

## Показател В

**4. Хабилитационен труд – научни публикации в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus)**

1. Jovtchev G., **Gateva, S.,** Stergios, M., Kulekova, S. (2010). Cytotoxic and genotoxic effects of paraquat in *Hordeum vulgare* and human lymphocytes *in vitro*.

Evironmental Toxicology 25 (3), 294-303, DOI: 10.1002/tox.20503, ISSN: 1520-4081 (print) ISSN 1522-7278, Wiley **(IF2010=1.83), Q2(WoS), Scopus**

2. **Gateva S,** Jovtchev G, Stergios M, Yonova P (2012). The potential of synthetic thiourea compound to reduce the cytotoxic and genotoxic effects of paraquat in *Hordeum vulgare* and cultured human lymphocytes. Environmental Toxicology, 27, (4), 220-228. DOI:10.1002/tox.20633, ISSN 1520-4081 (print), ISSN 1522-7278 (online), Wiley **(IF2012= 2.410), Q2(WoS), Scopus**
3. **Gateva, S.,** Jovtchev G., Stergios M. (2013). Cytotoxic and clastogenic activity of $CdCl_2$ in human lymphocytes from different donors. Environmental Toxicology an Pharmacology 36 (1), 223-230, ISSN: 1382-6689, https://doi.org/10.1016/j.etap.2013.03.021 Elsevier, **(IF2013= 2.244), Q2(WoS), Scopus**
4. Jovtchev G, **Gateva SP,** Stankov AP. (2016). Lilium compounds kaempferol and jatropham can modulate cytotoxic and genotoxic effects of radiomimetic zeocin in plants and human lymphocytes *in vitro*. Environmental Toxicology, DOI:10.1002/tox.22088, 31, 6, 751–764, ISSN: 1522-7278, Wiley, (**IF 2016= 2.602**), **Q2(WoS), Scopus**
5. **Gateva, S.,** Jovtchev, G., Stankov, A., Georgieva, A., Dobreva, A., Mileva, M. (2019). The potential of geraniol to reduce cytotoxic and genotoxic effects of MNNG in plant and human lymphocyte test-systems. South African Journal of Botany, 123, 170-179, Elsevier, ISSN:0254-6299, DOI:10.1016/j.sajb.2019.03.005, ISI Elsevier, (**IF2019= 1.846**), **Q2(Scimago), Scopus**

## Показател Г

**7. Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus), извън хабилитационния труд**

6. Chankova S.G.,Yonova P.A., **Gateva S.P.,** Jovtchev G., Stergios M.L., Mehandjiev A.D., Shevchenko V.A. (2006). The potential of 1,1'-hexamethylenebis [3-(3,5-Dichloro-4-Pyridil] Urea to modify genotoxic action of chemical mutagens in various test-systems" Radiation Biology. Radioecology, (Radiatsionnaya Biologiya. Radioekologiya) 46, 4, 410-414, ISSN: 0869-8031, НАУКА, ISI, (**SJR2006=0,117), Scopus** https://www.scimagojr.com/journalsearch.php?q=17841&tip=sid
7. **Gateva S. P.,** P. A.Yonova, G. Jovtchev, M. L. Stergios, S. S. Kulekova (2006). The protective effect of newly synthesized compounds against the action of UV-C irradiation on human lymphocytes *in vitro*. Radiation biology. Radioecology. (Radiatsionnaya Biologiya. Radioekologiya) 46, (4), 415-419, ISSN: 0869-8031, НАУКА, ISI, (**SJR2006=0,117), Scopus** https://www.scimagojr.com/journalsearch.php?q=17841&tip=sid
8. **Gateva S.,** Kulekova S. (2008). Chromosome aberrations and apoptosis induced by paraquat corresponding with cell cycle delay in human lymphocytes *in vitro*. J. Envir.

Prot. and Ecol. 9, (3), 627-633, https://scibulcom.net/en/article/aqoCeHfulBfX4TTjpOt8, ISSN: 1311-5065, ISI, **(SJR2009= 0,113), Scopus**

9. **Gateva S.,** Jovtchev G., Mitrovska Z., Stergios M., Chankova St. (2012). Green algae can modulate genotoxic action of cadmium in human lymphocytes. Biotechnology & Biotechnological Equipment, 26, 1, 2737-2742, DOI: 10.5504/bbeq.2011.0149, ISSN: 1310-2818, Taylor & Francis Group (**IF2012= 0.415**), **Q4(WoS), Scopus**

10. **Gateva** S, Jovtchev G, Stankov A, Gregan F. (2014). Antigenotoxic capacity of *Papaver rhoeas* L. extract. International Journal of Pharmacy and Pharmaceutical Sciences, 6, 1, 717-723, ISSN:0975 – 1491, **(SJR 2014=0.316), Scopus.** https://innovareacademics.in/journal/ijpps/Vol6Issue1/8353.pdf

11. **Gateva S.,** Angelova O., Chankova S. (2015). Double strand breaks detection in human lymphocytes by constant field gel electrophoresis. Compt. Rend Acad. Bulg. Sci. 68, (4), 469-474, Prof. Marin Drinov Publishing House (**IF2015= 0.278**), **Q3(Scimago), Scopus**
12. **Gateva S.,** Jovtchev G., Stankov A., Dobreva A., Mileva M. (2019). Geraniol inhibits the genotoxic effect of MNNG in plant and human lymphocyte test-systems. Compt. Rend. Acad Bulg. Sci., 72, 9, 1213-1220, ISSN:2367–5535, DOI:10.7546/CRABS.2019.09.08, Prof. Marin Drinov Publishing House ISI **(IF2019= 0.402), Q3(Scimago), Scopus**
13. Jovtchev G., Stankov A., Ravnachka I., **Gateva S.,** Dimitrov D., Tyutyundzhiev N., Nikolova N., Angelov Ch. (2019). How can the natural radiation background affect DNA integrity in angiosperm plant species at different altitudes in Rila Mountain (Southwest Bulgaria)? Environ. Sci. Pollut. Res. 26, 13, 13592-13601. https://doi.org/10.1007/s11356-019-04872-1. Online ISSN: 1614-7499. Springer, (**IF2019= 3.167**), **Q2(WoS), Scopus**

14. **Gateva S.,** Jovtchev G., Chanev C., Georgieva A., Stankov A., Dobreva A., Mileva M. (2020). Assessment of anti-cytotoxic, anti-genotoxic and antioxidant potential of Bulgarian *Rosa alba* L. essential oil. Caryologia: International Journal of Cytology, Cytosystematics and Cytogenetics, 73, 3, 71-88, Firenze University Press, ISSN:2165-5391, DOI:10.13128/caryologia-260, SJR 0.319, **(IF2020=0.968), Q4(WoS), Scopus**

15. **Gateva S.,** Jovtchev G., Stankov A. (2020). Direct treatment with roundup vs. treatment with plant extract previously influenced by roundup: Does the genotoxic effect differ? Compt. Rend Acad. Bulg. Sci. 73, 7, 978-984, ISSN:2367–5535, DOI:10.7546/CRABS.2020.07.11, Prof. Marin Drinov Publishing House (**IF2020= 0.402**), **Q3(Scimago), Scopus**
16. Angelova Ts., Tyutyundzhiev N., Angelov C., **Gateva S.,** Jovtchev G. (2020). Induction of micronuclei after prolonged UV irradiation of Poaceae species cultivated

in laboratory conditions and wild –growing in Rila Mountain. RAD Conference Proceedings, 4, 39–44, ISSN: 2466-4626 (online), doi: 10.21175/RadProc.2020.08, **(SJR2021=0,11), Scopus,** file:///C:/Users/ACER/Downloads/RadProc.2020.08%20(1).pdf

17. Angelova Ts., Angelov C., Tyutyundzhiev N., **Gateva S.,** Jovtchev G. (2021). Does altitude have an effect on pigment content of wild growing plants in Rila Mountain? RAD-ninth international conference on radiation in various fields of research, RAD Conference Proceedings, 5, 15–20, 2021 ISSN: 2466-4626 (online), DOI: 10.21175/RadProc.2021.03, **(SJR2021=0,11), Scopus** https://www.rad-proceedings.org/papers/RadProc.2021.03.pdf
18. **Gateva S.,** Jovtchev G., Angelova T., Nonova T, Tyutyundzhiev N., Geleva E., Katrandzhiev K., Nikolova N., Dimitrov D., Angelov Ch. (2021). Effect of UV radiation and other abiotic stress factors on DNA of different wild plant species grown in three successive seasons in alpine and subalpine regions. Phyton-International Journal of Experimental Botany. 91, 2, 293-313. DOI: 10.32604/phyton.2022.016397, Tech Science Press, **(IF= 1.407), Q3(WoS), Web of Science**
19. Mileva M., Ilieva Y., Jovtchev G., **Gateva S.,** Zaharieva M., Georgieva A., Dimitrova L., Dobreva A., Angelova Ts., Vilhelmova – Ilieva N., Valcheva V., Najdenski H. (2021). Rose flowers - a delicate perfume or a natural healer? Biomolecules. 11, (1), 127. https://doi.org/10.3390/biom11010127, ISSN:2218-273X, MDPI, (**IF2020= 6.064**), **Q2(WoS), Scopus**
20. **Gateva S.,** Jovtchev G., Angelova Ts., Dobreva A., Mileva M. (2022). The anti-genotoxic activity of wastewaters produced after water - steam distillation of Bulgarian *Rosa damascena* Mill. and *Rosa alba* L. essential oils. Life. 12, 455 https://doi.org/10.3390/life12030455, ISSN:2075-1729, MPDI, **(IF=3.817), Q2(WoS), Scopus**

**8. Публикувана глава от книга или колективна монография**

21. **Gateva S. P.,** Chankova S. (2017). Constant Field Gel Electrophoresis: Sensitive Method for DSBs Detection. Chapter four. In: Gel Electrophoresis: Types, Applications and Research (Ed. Gilbert H. Mitchell). Nova Science Publishers. New York, 189-255, ISBN: 978-1-53612-153-7. https://novapublishers.com/shop/gel-electrophoresis-types-applications-and-research/

22. Yonova P. A., **Gateva S. P.,** Jovtchev G. (2021). Biological activity of novel ureas and thioureas containing bioactive heterocycles. In: Heterocyclic Compounds and Biological Applications. (ed. Dr. M.R. Jayapal). Science Publishing Group. Science Publishing Group. 548 Fashion Avenue New York, NY 10018, U.S.A. 1-45. ISBN:978-1-940366-76-0. file:///C:/Users/ACER/Downloads/978-1-940366-76-0_Chapter01%20(4).pdf

**Други публикации в списания и в сборници от конференции - не влизат в справката за покриване на минималните наукометрични изисквания**

1. Nicolova T., **Petkova S.** (1993). Heat shock Protection Against Induction of Chromatid Aberrations by Triethylenemelamine in Cultured Human Lumphocytes as Affected by Novobiocin and Caffeine. Biol. Zent. 112, (4), 373 – 378, ISSN: 0006-3304 ISI**,** https://eurekamag.com/research/009/865/009865928.php

2. Nikolova T., **Gateva S.**, Georgieva V. (1999). Effects of heat shock and heavy metal salts pre-treatments on the frequency of TEM-induced chromatid aberrations in human peripheral blood lumphocytes *in vitro*. Compt. Rend Acad. Bulg. Sci. 52, (3-4), 107 – 110, ISSN: 0861-1459.

3. Chankova S.G., Jovtchev G., **Gateva S.P**., Yonova P.A., Mehandjiev A.D., Shevchenko V.A. (2001). Protecting effect of newly synthesized urea and thiourea derivatives on different test-systems. J. Envir. Prot. and Ecol. 2 (3), 694-703, BENA, ISSN: 1311-5065.

4. **Gateva S.P**., D. Azmanov, G. Jovtchev, M.Stergios, T. Arsov, V. Georgieva. (2004). Apoptosis can be induced by Lontrel. Comp. Rend. Acad. Bulg. Sci. 57, (9), 51 – 56, ISSN: 1310-1331, (**SJR2004=0,121).**

5. **Gateva S.P**., Azmanov D., Jovtchev G., Stergios M., Arsov T., Georgieva V. (2006). Induction of apoptosis by herbicide devrinol. J. Envir. Prot. and Ecol. 7, (2), 340-346, ISSN:1311-5065, **http://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=DaisyOneClickSearch&qid=5&SID=E6TiSXBoDhXz1xQIVRK&page=3&doc=21**

6. **Gateva S.,** Kulekova S., Mitrovska Z., Chankova S. (2007). Green algae extract can influence genotoxical actions of cadmium in human lymphocytes. Congress of Ecologists of Macedonia, Macedonian Ecological Society, 132-133, ISBN:ISBN 978-9989-648-11-3,

7. Yonova, P., **Gateva, S.,** Mincheva, N., Jovtchev, G., Stergios, M., Kapchina-Toteva, V. (2009). Improvement of tolerance to paraquat in barley (*Hordeum vulgare* L.) by synthetic thiourea compound: effects on growth and biochemical responses. General

and Applied Plant Physiology, 35, (3-4), 162-171, Published by the Institute of Plant Physiology - Bulgarian Academy of Sciences, ISSN:1312-8221;/31.03.2010.

8. **Gateva S**., Jovtchev G., Mitrovska Z., Stergios M., Chankova S. (2014). *Chlamydomonas reinhardtii* modulates and decreases cytotoxic and genotoxic effects of $CuSO_4$. International journal of environmental sciences. 5, (3), 634- 648, до 2014 с ISSN:0976-4399, от 2015 с нов ISSN: 0976 – 4402, Integrated Publishing Association, DOI:10.6088/ijes.2014050100056.

9. **Gateva S.,** Jovtchev G., Stankov A., Gregan F. (2015). Salvia extract can decrease DNA damage induced by zeocin. International Journal of Pharma Medicine and Biological Sciences. 4, (1), 1-10, ISSN: 2278-5221. **(SJR2015=0.123),** http://www.ijpmbs.com/uploadfile/2015/0428/20150428094308587.pdf

10. **Gateva S.,** Angelova O., Chankova S. (2015). Adaptation of CFGE for assessment of DNA susceptibility of human lymphocytes to zeocin. Proceedings of Seminar of Ecology – 2014 with international participation dedicated to 70 years USB, 24-25 April 2014, Sofia (2014), 89-92. ISBN: 979-853-476-132-4.

11. **Gateva** S., Jovtchev G., Stergios M. (2015). Investigation on cytotoxic and genotoxic effects of $CuSO_4$ on human lymphocytes. 19th International Eco-conference, Environmental Protection of Urban and Suburban Settlements – Novi Sad, Serbia, 23st - 25th September 2015. Proceedings, p. 249-257. ISBN: 978-86-83177-49-3.

12. Jovtchev G., Stankov A., **Gateva S.,** Georgieva A., Dobreva A., Dimiskovska B. Mileva M. (2016). Does the essential oil from *Rosa alba* L. hide cytotoxic and genotoxic potential? $20^{th}$ International Eco-conference. $9^{th}$ Eco-conference on Safe Food. Novi Sad, Serbia, 28th - 30th September 2016, Novi Sad, Serbia, Proceedings, p. 209-216, ISBN: 978-86-83177-51-6.

13. Jovtchev J., **Gateva S**., Stankov A., Todorova N., Kitanova M., Topashka-Ancheva M. (2017). Roundup - the best protection or the creeping danger? 21st International Eco-Conference, $12^{th}$ Eco-Conference on Environmental protection of urban and suburban settlements. 27 - 29 September 2017, Novi Sad, Serbia, Proceedings, 2017. Ecological Movement of Novi Sad 21000 Novi Sad, Vojvodjanskih brigada 17/I, 2017, ISBN:978-86-83177-52-3, p. 203-212, DOI:COBISS.SR-ID 317216519.

14. **Gateva S.,** Stankov A., Angelova T., Todorova N., Rangelov M., Zlateva B., Jovtchev G. (2019). Evaluation of toxic and genotoxic effects of roundup after direct and indirect treatment. International Journal of Ecosystems and Ecology Science, 9, 3, 409-416, https://doi.org/10.31407/ijees9301, (**WoS).**

15. Gerasimova, Ts., Topashka-Ancheva, M., **Gateva, S.**, Jovtchev, G. (2019). Genotoxicity induced by treated with Roundup plant extracts of *Hordeum vulgare* in

ICR strain laboratory mice. 23rd International Eco-conference. 13th Eco-conference on Environmental protection of urban and suburban settlements. Proceedings, Novi Sad, Serbia, 25th - 27th September 2019.COBISS.SR-ID 330693895, 2019, p. 171-178, ISBN:978-86-83177-55-4,

16. Angelova Ts., Stankov A., Tyutyundzhiev N., Ivanov C., **Gateva S.,** Jovtchev G. (2019). Does prolonged UV irradiation induce genotoxic effect on *Hordeum vulgare*? 23rd International Eco-conference. 13th Eco-conference on Environmental protection of urban and suburban settlements. Proceedings, Novi Sad, Serbia, 25th - 27th September 2019, COBISS.SR-ID 330693895, 2019, p. 137-143, ISBN:978-86-83177-55-4,

17. Beltcheva M., Alexieva I., Metcheva R., Jovtchev G., **Gateva S.,** Dimitrov D. (2019). Small mammalian species diversity and population structure driven by habitat heterogeneity in Rila Mauntain, Bulgaria. Silva Balcanica, 20, 2, 5-12. ISSN: 13118706, https://silvabalcanica.files.wordpress.com/2019/11/sb_202_2019_1-1.pdf (**SJR2017=0,114)**.

18. Jovtchev G., **Gateva S.**, Angelova Ts., Katrandzhiev K., Nikolova N., Dimitrov D., Angelov Ch. (2020). Impact of UV radiation on the DNA of plants at different altitudes in Rila Mountain, Bulgaria- a three years study - a three years study. XXIV International Eco-conference, XI Safe food. 23-25 септември 2020, Proceedings, Novi Sad, Serbia, p. 59-67, ISBN:978-86-831 17-56-1.

19. **Gateva S.,** Jovtchev G., Angelova T., Dobreva A., Mileva M. (2021). Does the waste water produced by the water steam distilation of rose oil from *Rosa alba* L. and *Rosa damascena* Mill. have genotoxic potential?. International Journal of Ecosystems and Ecology Science (IJEES), 11, 4, 679-684, ISSN:2224-4980, DOI:https://doi.org/10.31407/ijees11.402, 679-684, **(WoS)**