

## List of selected publications of Prof. Dr. Svitlana Prylutska

### Monographs

1. S.V. Prylutska, I.I. Grynyuk, O.P. Matyshevskaya, A.A. Golub, A.P. Burlaka, Yu.I. Prylutskiy, U. Ritter, P. Scharff. **Chapter 6.** Effect of photoexcited fullerene C<sub>60</sub>-composites in normal and transformed cells. In “**Medicinal Chemistry and Pharmacological Potential of Fullerenes and Carbon Nanotubes**” (Editors: F. Cataldo, T. Da Ros), Springer Netherlands, 2008, P. 123-137.
2. V. Hurmach, M. Platonov, S. Prylutska, Z. Klestova, V. Cherepanov, Yu. Prylutskiy, U. Ritter. **Chapter 10.** Anticoronavirus activity of water-soluble pristine C<sub>60</sub> fullerenes: *in vitro* and *in silico* screenings. In “**Coronavirus Therapeutics – Volume I. Advances in Experimental Medicine and Biology**” (Editors: A.A.A. Asea, P. Kaur), Springer, Cham, 2021, V. 1352, P. 159-172.
3. Yu. Prylutskiy, O. Matyshevskaya, S. Prylutska, A. Grebinyk, M. Evstigneev, S. Grebinyk, L. Skivka, V. Cherepanov, A. Senenko, R. Stoika, U. Ritter, P. Scharff, T. Dandekar, M. Frohme. **Chapter 2.** A novel water-soluble C<sub>60</sub> fullerene-based nano-platform enhances efficiency of anticancer chemotherapy. In “**Biomedical Nanomaterials: From Design and Synthesis to Imaging, Application, and Environmental Impact**” (Editor: R.S. Stoika), Springer, Cham, 2022, P. 59-93.
4. A. Grebinyk, S. Prylutska, S. Grebinyk, Yu. Prylutskiy, U. Ritter, O. Matyshevskaya, T. Dandekar, M. Frohme. **Chapter 17.** Towards photodynamic cancer chemotherapy with C<sub>60</sub>-Doxorubicin nanocomplexes. In “**Nanomaterials for photodynamic therapy**” (Editor: P. Kesharwani), Elsevier Science Publishing Co Inc, 2023, P. 489-522.

### Original papers

1. P. Scharff, L. Carta-Abelmann, C. Siegmund, O.P. Matyshevskaya, S.V. Prylutska, T.V. Koval, A.A. Golub, V.M. Yashchuk, K.M. Kushnir, Yu.I. Prylutskiy. Effect of X-ray and UV irradiation of the C<sub>60</sub> fullerene aqueous solution on biological samples. **Carbon**, 2004, 42(5-6), 1199-1201.
2. A.P. Burlaka, E.P. Sidorik, S.V. Prylutska, O.P. Matyshevskaya, A.A. Golub, Yu.I. Prylutskiy, P. Scharff. Catalytic system of the reactive oxygen species on the C<sub>60</sub> fullerene basis. **Exp. Oncol.**, 2004, 26(4), 326-327.
3. S.V. Prylutska, O.P. Matyshevskaya, I.I. Grynyuk, Yu.I. Prylutskiy, U. Ritter, P. Scharff. Biological effects of C<sub>60</sub> fullerenes *in vitro* and in a model system. **Mol. Cryst. Liq. Cryst.**, 2007, 468, 265-274.
4. S.V. Prylutska, O.P. Matyshevskaya, A.A. Golub, Yu.I. Prylutskiy, G.P. Potebnya, U. Ritter, P. Scharff. Study of C<sub>60</sub> fullerenes and C<sub>60</sub>-containing composites cytotoxicity *in vitro*. **Mater. Sci. Engineer. C**, 2007, 27(5-8), 1121-1124.
5. P. Scharff, U. Ritter, O.P. Matyshevskaya, S.V. Prylutska, I.I. Grynyuk, A.A. Golub, Yu.I. Prylutskiy, A.P. Burlaka. Therapeutic reactive oxygen generation. **Tumori**, 2008, 94(2), 278-283.
6. S.V. Prylutska, I.I. Grynyuk, O.P. Matyshevskaya, Yu.I. Prylutskiy, U. Ritter, P. Scharff. Anti-oxidant properties of C<sub>60</sub> fullerenes *in vitro*. **Fullerenes, Nanotubes, Carbon Nanostruct.**, 2008, 16(5-6), 698-705.
7. S.V. Prylutska, I.I. Grynyuk, O.P. Matyshevskaya, V.M. Yashchuk, Yu.I. Prylutskiy, U. Ritter, P. Scharff. Estimation of multi-walled carbon nanotubes toxicity *in vitro*. **Physica E**, 2008, 40(7), 2565-2569.
8. S.V. Prylutska, I.I. Grynyuk, S.M. Grebinyk, O.P. Matyshevskaya, Yu.I. Prylutskiy, U. Ritter, C. Siegmund, P. Scharff. Comparative study of biological action of fullerenes C<sub>60</sub> and carbon nanotubes in thymus cells. **Mat.-wiss. u. Werkstofftech.**, 2009, 40(4), 238-241.
9. A. Burlaka, S. Lukin, S. Prylutska, O. Remeniak, Yu. Prylutskiy, M. Shuba, S. Maksimenko, U. Ritter, P. Scharff. Hyperthermic effect of multi-walled carbon nanotubes stimulated with near

- infrared irradiation for anticancer therapy: *in vitro* studies. **Exp. Oncol.**, 2010, 32(1), 48-50.
10. C. Schuetze, U. Ritter, P. Scharff, A. Bychko, **S. Prylutska**, V. Rybalchenko, Yu. Prylutsky. Interaction of N-fluorescein-5-isothiocyanate pyrrolidine- $C_{60}$  compound with a model bimolecular lipid membrane. **Mater. Sci. Engineer. C**, 2011, 31(5), 1148-1150.
11. **S.V. Prylutska**, A.P. Burlaka, P.P. Klymenko, I.I. Grynyuk, Yu.I. Prylutsky, Ch. Schuetze, U. Ritter. Using water-soluble  $C_{60}$  fullerenes in anticancer therapy. **Cancer Nanotechnol.**, 2011, 2(1), 105-110.
12. **S. Prylutska**, R. Bilyy, M. Overchuk, A. Bychko, K. Andreichenko, R. Stoika, V. Rybalchenko, Yu. Prylutsky, N.G. Tsierkezos, U. Ritter. Water-soluble pristine fullerenes  $C_{60}$  increase the specific conductivity and capacity of lipid model membrane and form the channels in cellular plasma membrane. **J. Biomed. Nanotechnol.**, 2012, 8(3), 522-527.
13. **S. Prylutska**, R. Bilyy, T. Schkandina, A. Bychko, V. Cherepanov, K. Andreichenko, R. Stoika, V. Rybalchenko, Yu. Prylutsky, P. Scharff, U. Ritter. Effect of iron-doped multi-walled carbon nanotubes on lipid model and cellular plasma membranes. **Mater. Sci. Engineer. C**, 2012, 32(6), 1486-1489.
14. **S. Prylutska**, R. Bilyy, T. Shkandina, D. Rotko, A. Bychko, V. Cherepanov, R. Stoika, V. Rybalchenko, Yu. Prylutsky, N. Tsierkezos, U. Ritter. Comparative study of membranotropic action of single- and multi-walled carbon nanotubes. **J. Biosci. Bioengineer.**, 2013, 115(6), 674-679.
15. G. Didenko, **S. Prylutska**, Y. Kichmarenko, G. Potebnya, Y. Prylutsky, N. Slobodyanik, U. Ritter, P. Scharff. Evaluation of the antitumor immune response to  $C_{60}$  fullerene. **Mat.-wiss. u. Werkstofftech.**, 2013, 44(2-3), 124-128.
16. G.B. Skamrova, I.V. Laponogov, A.S. Buchelnikov, Y.G. Shckorbatov, **S.V. Prylutska**, U. Ritter, Y.I. Prylutsky, M.P. Evstigneev. Interceptor effect of  $C_{60}$  fullerene on the *in vitro* action of aromatic drug molecules. **Eur. Biophys. J.**, 2014, 43(6-7), 265-276.
17. **S. Prylutska**, I. Grynyuk, O. Matyshevska, Yu. Prylutsky, M. Evstigneev, P. Scharff, U. Ritter.  $C_{60}$  fullerene as synergistic agent in tumor-inhibitory doxorubicin treatment. **Drugs R D**, 2014, 14(4), 333-340.
18. R.R. Panchuk, **S.V. Prylutska**, V.V. Chumak, N.R. Skorokhyd, L.V. Lehka, M.P. Evstigneev, Yu.I. Prylutsky, W. Berger, P. Heffeter, P. Scharff, U. Ritter, R.S. Stoika. Application of  $C_{60}$  fullerene-doxorubicin complex for tumor cell treatment *in vitro* and *in vivo*. **J. Biomed. Nanotechnol.**, 2015, 11(7), 1139-1152.
19. **S. Prylutska**, L. Skivka, G. Didenko, Yu. Prylutsky, M. Evstigneev, G. Potebnya, R. Panchuk, R. Stoika, U. Ritter, P. Scharff. Complex of  $C_{60}$  fullerene with doxorubicin as a promising agent in antitumor therapy. **Nanoscale Res. Lett.**, 2015, 10: 499.
20. Yu. Prylutsky, A. Bychko, V. Sokolova, **S. Prylutska**, M. Evstigneev, V. Rybalchenko, M. Epple, P. Scharff. Interaction of  $C_{60}$  fullerene complexed to doxorubicin with model bilipid membranes and its uptake by HeLa cells. **Mater. Sci. Engineer. C**, 2016, 59, 398-403.
21. L.M. Shapoval, **S.V. Prylutska**, A.V. Kotsyuruba, O.V. Dmitrenko, Yu.I. Prylutsky, V.F. Sagach, U. Ritter. Single-walled carbon nanotubes modulate cardiovascular control in rats. **Mat.-wiss. u. Werkstofftech.**, 2016, 47(2-3), 208-215.
22. **S. Prylutska**, R. Panchuk, G. Gołuński, L. Skivka, Yu. Prylutsky, V. Hurmach, N. Skorokhyd, A. Borowik, A. Woziwodzka, J. Piosik, O. Kyzyma, V. Garamus, L. Bulavin, M. Evstigneev, A. Buchelnikov, R. Stoika, W. Berger, U. Ritter, P. Scharff.  $C_{60}$  fullerene enhances cisplatin anticancer activity and overcomes tumor cells drug resistance. **Nano Res.**, 2017, 10(2), 652-671.
23. **S. Prylutska**, I. Grynyuk, A. Grebinyk, V. Hurmach, Iu. Shatrava, T. Sliva, V. Amirkhanov, Yu. Prylutsky, O. Matyshevska, M. Slobodyanik, M. Frohme, U. Ritter. Cytotoxic effects of dimorfolido-N-trichloroacetylphosphorylamide and dimorfolido-N-benzoylphosphorylamide in

- combination with C<sub>60</sub> fullerene on leukemic cells and docking study of their interaction with DNA. **Nanoscale Res. Lett.**, 2017, 12:124.
24. **S.V. Prylutska**, S.V. Politenkova, K.S. Afanasieva, V.F. Korolovych, K.I. Bogutska, A.V. Sivolob, L.M. Skivka, M.P. Evstigneev, V.V. Kostjukov, Yu.I. Prylutsky, U. Ritter. A nanocomplex of C<sub>60</sub> fullerene with cisplatin: design, characterization and toxicity. **Beilstein J. Nanotechnol.**, 2017, 8, 1494-1501.
25. O.H. Minchenko, D.O. Tsymbal, D.O. Minchenko, **S.V. Prylutska**, O.S. Hnatiuk, Yu.I. Prylutsky, N. Tsierkezos, U. Ritter. Single-walled carbon nanotubes affect the expression of genes associated with immune response in normal human astrocytes. **Toxicol. in Vitro**, 2018, 52, 122-130.
26. L.M. Skivka, **S.V. Prylutska**, M.P. Rudyk, N.M. Khranovska, I.V. Opeida, V.V. Hurmach, Yu.I. Prylutsky, L.F. Sukhodub, U. Ritter. C<sub>60</sub> fullerene and its nanocomplexes with anticancer drugs modulate circulating phagocyte functions and dramatically increase ROS generation in transformed monocytes. **Cancer Nanotechnol.**, 2018, 9: 8.
27. A. Grebinyk, S. Grebinyk, **S. Prylutska**, U. Ritter, O. Matyshevskaya, T. Dandekar, M. Frohme. C<sub>60</sub> fullerene accumulation in human leukemic cells and perspectives of LED-mediated photodynamic therapy. **Free Radic. Biol. Med.**, 2018, 124, 319–327.
28. A. Grebinyk, **S. Prylutska**, I. Grynyuk, B. Kolp, V. Hurmach, T. Sliva, V. Amir Khanov, V. Trush, O. Matyshevskaya, M. Slobodyanik, Yu. Prylutsky, M. Frohme, U. Ritter. C<sub>60</sub> fullerene effects on diphenyl-N-(trichloroacetyl)-amidophosphate interaction with DNA *in silico* and its cytotoxic activity against human leukemic cell line *in vitro*. **Nanoscale Res. Lett.**, 2018, 13: 81.
29. T. Matvienko, V. Sokolova, **S. Prylutska**, Yu. Harahuts, N. Kutsevol, V. Kostjukov, M. Evstigneev, Yu. Prylutsky, M. Epple, U. Ritter. *In vitro* study of the anticancer activity of various doxorubicin-containing dispersions. **BioImpacts**, 2019, 9, 57-63.
30. V. Bilobrov, V. Sokolova, **S. Prylutska**, R. Panchuk, O. Litsis, V. Osetskiy, M. Evstigneev, Yu. Prylutsky, M. Epple, U. Ritter. A novel nanoconjugate of Landomycin A with C<sub>60</sub> fullerene for cancer targeted therapy: *in vitro* studies. **Cell. Mol. Bioengineer.**, 2019, 12, 41-51.
31. A. Grebinyk, **S. Prylutska**, S. Grebinyk, Yu. Prylutsky, U. Ritter, O. Matyshevskaya, T. Dandekar, M. Frohme. Complexation with C<sub>60</sub> fullerene increases doxorubicin efficiency against leukemic cells *in vitro*. **Nanoscale Res. Lett.**, 2019, 14: 61.
32. **S.V. Prylutska**, I.I. Grynyuk, T.D. Skaterna, I.R. Horak, A.G. Grebinyk, L.B. Drobot, O.P. Matyshevskaya, A.I. Senenko, Yu.I. Prylutsky, A.G. Naumovets, U. Ritter, M. Frohme. Toxicity of C<sub>60</sub> fullerene-cisplatin nanocomplex against Lewis lung carcinoma cells. **Arch. Toxicol.**, 2019, 93, 1213-1226.
33. L.B. Sukhodub, L.F. Sukhodub, M.O. Kumeda, **S.V. Prylutska**, V. Deineka, Yu.I. Prylutsky, U. Ritter. C<sub>60</sub> fullerene loaded hydroxyapatite-chitosan beads as a promising system for prolonged drug release. **Carbohydrate Polym.**, 2019, 223: 115067.
34. **S.V. Prylutska**, A.G. Grebinyk, O.V. Lynchak, I.V. Byelinska, V.V. Cherepanov, E. Tauscher, O.P. Matyshevskaya, Yu.I. Prylutsky, V.K. Rybalchenko, U. Ritter, M. Frohme. *In vitro* and *in vivo* toxicity of pristine C<sub>60</sub> fullerene aqueous colloid solution. **Fullerenes, Nanotubes, Carbon Nanostruct.**, 2019, 27, 715-728.
35. A. Grebinyk, **S. Prylutska**, O. Chepurna, S. Grebinyk, Yu. Prylutsky, U. Ritter, T.Y. Ohulchanskyy, O. Matyshevskaya, T. Dandekar, M. Frohme. Synergy of chemo- and photodynamic therapies with C<sub>60</sub> fullerene-doxorubicin nanocomplex. **Nanomater.**, 2019, 9(11): 1540.
36. A. Grebinyk, **S. Prylutska**, A. Buchelnikov, N. Tverdokhle, S. Grebinyk, M. Evstigneev, O. Matyshevskaya, V. Cherepanov, Yu. Prylutsky, V. Yashchuk, A. Naumovets, U. Ritter, T. Dandekar, M. Frohme. C<sub>60</sub> fullerene as effective nanoplatfom of alkaloid berberine delivery into leukemic cells. **Pharmaceutics**, 2019, 11(11): 586.

37. S.V. Prylutska, O.V. Lynchak, V.V. Kostjukov, M.P. Evstigneev, O.V. Remeniak, V.K. Rybalchenko, Yu.I. Prylutsky, U. Ritter, P. Scharff. Antitumor effects and hematotoxicity of C<sub>60</sub>-Cis-Pt nanocomplex in mice with Lewis lung carcinoma. **Exp. Oncol.**, 2019, 41(2), 106-111.
38. A. Yurchenko, N. Nikitina, V. Sokolova, S. Prylutska, Yu. Kuziv, P. Virych, V. Chumachenko, N. Kutsevol, S. Ponomarenko, Yu. Prylutsky, M. Eppe. A novel branched copolymer - containing anticancer drug for targeted therapy: *in vitro* research. **BioNanoSci.**, 2020, 10(1), 249-259.
39. Ye.V. Hurmach, M.P. Rudyk, S.V. Prylutska, V.V. Hurmach, Yu.I. Prylutsky, L.M. Skivka, U. Ritter, P. Scharff. C<sub>60</sub> fullerene governs doxorubicin effect on metabolic profile of rat microglial cells *in vitro*. **Mol. Pharmaceutics**, 2020, 17, 3622-3632.
40. N. Strutynska, O. Livitska, S. Prylutska, Yu. Yumyna, P. Zelena, L. Skivka, A. Malysenko, L. Vovchenko, V. Strelchuk, Yu. Prylutsky, N. Slobodyanik, U. Ritter. New nanostructured apatite-type (Na<sup>+</sup>, Zn<sup>2+</sup>, CO<sub>3</sub><sup>2-</sup>)-doped calcium phosphates: preparation, mechanical properties and antibacterial activity. **J. Mol. Struct.**, 2020, 1222: 128932.
41. L.M. Shapoval, O.V. Dmytrenko, V.F. Sagach, S.V. Prylutska, S.V. Khrapaty, D.O. Zavodovskyi, Yu.I. Prylutsky, N. Tsierkezos, U. Ritter. Systemic administrations of water dispersible single-walled carbon nanotubes: activation of NOS in spontaneously hypertensive rats. **Neurophysiol.**, 2020, 52(2), 101-109.
42. M. Chernykh, D. Zavalny, V. Sokolova, S. Ponomarenko, S. Prylutska, Yu. Kuziv, V. Chumachenko, A. Marynin, N. Kutsevol, M. Eppe, U. Ritter, J. Piosik, Yu. Prylutsky. A new water-soluble thermosensitive star-like copolymer as a promising carrier of the chemotherapeutic drug doxorubicin. **Mater.**, 2021, 14(13): 3517.
43. D. Nozdrenko, O. Abramchuk, S. Prylutska, O. Vygovska, V. Soroca, K. Bogutska, S. Khrapatyi, Yu. Prylutsky, P. Scharff, U. Ritter. Analysis of biomechanical parameters of *muscle soleus* contraction and blood biochemical parameters in rat with chronic glyphosate intoxication and therapeutic use of C<sub>60</sub> fullerene. **Int. J. Mol. Sci.**, 2021, 22(9): 4977.
44. A. Grebinyk, S. Prylutska, S. Grebinyk, M. Evstigneev, I. Krysiuk, T. Skaterna, I. Horak, Y. Sun, L. Drobot, O. Matyshevska, Yu. Prylutsky, U. Ritter, M. Frohme. Antitumor efficiency of the natural alkaloid Berberine complexed with C<sub>60</sub> fullerene in Lewis lung carcinoma *in vitro* and *in vivo*. **Cancer Nanotechnol.**, 2021, 12: 24.
45. V.V. Hurmach, M.O. Platonov, S.V. Prylutska, P. Scharff, Yu.I. Prylutsky, U. Ritter. C<sub>60</sub> fullerene against SARS-CoV-2 coronavirus: an *in silico* insight. **Sci. Reports**, 2021, 11: 17748.
46. I. Horak, S. Prylutska, I. Krysiuk, S. Luhovskyi, O. Hrabovsky, N. Tverdokhle, D. Franskevych, D. Rumiantsev, A. Senenko, M. Evstigneev, L. Drobot, O. Matyshevska, U. Ritter, J. Piosik, Yu. Prylutsky. Nanocomplex of Berberine with C<sub>60</sub> fullerene is a potent suppressor of Lewis lung carcinoma cells invasion *in vitro* and metastatic activity *in vivo*. **Mater.**, 2021, 14(20): 6114.
47. D. Nozdrenko, S. Prylutska, K. Bogutska, N. Nurishchenko, O. Abramchuk, O. Motuziuk, Yu. Prylutsky, P. Scharff, U. Ritter. Effect of C<sub>60</sub> fullerene on recovery of *muscle soleus* in rats after atrophy induced by achillotenotomy. **Life**, 2022, 12(3): 332.
48. O. Lynchak, I. Byelinska, N. Dziubenko, H. Kuznietsova, O. Abramchuk, S. Prylutska. Acute toxicity of C<sub>60</sub>-Cis-Pt nanocomplex *in vivo*. **Appl. Nanosci.**, 2022, 12, 439-447.
49. D. Nozdrenko, S. Prylutska, K. Bogutska, V. Cherepanov, A. Senenko, O. Vygovska, S. Khrapatyi, U. Ritter, Yu. Prylutsky, J. Piosik. Analysis of biomechanical and biochemical markers of rat *muscle soleus* fatigue processes development during long-term use of C<sub>60</sub> fullerene and N-acetylcysteine. **Nanomater.**, 2022, 12(9): 1552.
50. N.Y. Strutynska, I.I. Grynyuk, O.M. Vasyliuk, S.V. Prylutska, L.L. Vovchenko, I.A. Kraievska, N.S. Slobodyanik, U. Ritter, Yu.I. Prylutsky. Novel Whitlockite/Alginate/C<sub>60</sub> Fullerene composites: Synthesis, Characterization and Properties for Medical Application. **Arab. J. Sci. Engineer.**, 2022, 47(6), 7093-7104.

51. **S.V. Prylutska**, D.V. Franskevych, A.I. Yemets. Cellular biological and molecular genetic effects of carbon nanomaterials in plants. **Cytol. Genet.**, 2022, 56(4), 351–360.
52. A. Grebinyk, **S. Prylutska**, S. Grebinyk, S. Ponomarenko, P. Virych, V. Chumachenko, N. Kutsevol, Yu. Prylutsky, U. Ritter, M. Frohme. Drug delivery with pH-sensitive star-like dextran-graft polyacrylamide copolymer. **Nanoscale Adv.**, 2022, 4(23), 5077-5088.
53. Yu. Prylutsky, D. Nozdrenko, O. Gonchar, **S. Prylutska**, K. Bogutska, D. Franskevych, B. Hromovyk, P. Scharff, U. Ritter. C<sub>60</sub> fullerene attenuates muscle force reduction in a rat during fatigue development. **Heliyon**, 2022, 8(12): e12449.
54. Yu. Prylutsky, D. Nozdrenko, O. Gonchar, **S. Prylutska**, K. Bogutska, E. Täuscher, P. Scharff, U. Ritter. The residual effect of C<sub>60</sub> fullerene on biomechanical and biochemical markers of the *muscle soleus* fatigue development in rats. **J. Nanomater.**, 2023, Article ID 2237574.
55. A. Radivoievych, B. Kolp, S. Grebinyk, **S. Prylutska**, U. Ritter, O. Zolk, J. Gloker, M. Frohme, A. Grebinyk. Silent death by sound: C<sub>60</sub> fullerene sonodynamic treatment of cancer cells. **Int. J. Mol. Sci.**, 2023, 24(2): 1020.
56. O. Motuziuk, D. Nozdrenko, **S. Prylutska**, I. Vareniuk, K. Bogutska, S. Braniuk, O. Korotkyi, Yu. Prylutsky, U. Ritter, J. Piosik. The effect of C<sub>60</sub> fullerene on the mechanokinetics of *muscle gastrocnemius* contraction in chronically alcoholized rats. **Heliyon**, 2023, 9(8): e18745.
57. O. Motuziuk, D. Nozdrenko, **S. Prylutska**, K. Bogutska, I. Mishchenko, O. Abramchuk, S. Khrapatyi, U. Ritter, Yu. Prylutsky. C<sub>60</sub> fullerene reduces the level of fluctuations in the force response of *muscle gastrocnemius* in chronically alcoholized rats. **Appl. Nanosci.**, 2023, 13(10), 7057-7067.
58. O. Omelchuk, **S. Prylutska**, D. Nozdrenko, O. Motuziuk, I. Vareniuk, K. Bogutska, O. Vygovska, A. Zholos, Yu. Prylutsky. C<sub>60</sub> fullerene attenuates the signs of acute renal failure in rats under rhabdomyolysis due to inhibition of oxidative stress. **Ukr. Biochem. J.**, 2023, 95(5), 61-75.
59. A. Radivoievych, **S. Prylutska**, O. Zolk, U. Ritter, M. Frohme, A. Grebinyk. Comparison of Sonodynamic Treatment Set-Ups for Cancer Cells with Organic Sonosensitizers and Nanosonosensitizers. **Pharmaceutics**, 2023, 15(11): 2616.
60. I. Horak, T. Scaterna, S. Lugovskyi, I. Krysiuk, A. Tykhomyrov, **S. Prylutska**, N. Tverdokhle, A. Senenko, V. Cherepanov, L. Drobot, O. Matyshevska, U. Ritter, Yu. Prylutsky. Antimetastatic lung cancer therapy using alkaloid Piperlongumine noncovalently bound to C<sub>60</sub> fullerene. **J. Drug Delivery Sci. Technol.**, 2024, 92: 105275.

## Patents

1. **Prylutska S.V.**, Burlaka A.P., Prylutsky Yu.I. (2012): Application of pristine C<sub>60</sub> fullerenes as antitumor agents in the therapy of malignant neoplasms. UA Patent (Patent No 98076).
2. Rud Yu.P., **Prylutska S.V.**, Buchatsky L.P., Prylutsky Yu.I. (2012): Application of C<sub>60</sub> fullerenes for photodynamic inactivation of *mosquito* iridovirus. UA Patent (Patent No 97316).
3. **Prylutska S.V.** (2013): Method for the treatment of malignant tumors by the combination of pristine C<sub>60</sub> fullerenes and doxorubicin. UA Patent (Patent No 102139).
4. Nozdrenko D.M., **Prylutska S.V.**, Bogutska K.I., Prylutsky Yu.I. (2021): Means for correcting skeletal muscle myopathy during chronic glyphosate intoxication. UA Patent (Patent No a202101734).