

OVERVIEW OF PUBLISHED RESULTS

Publications in impact journals:

Červenák J., Lebeda O., *New cross-section data for proton-induced reactions on ^{nat}Ti and ^{nat}Cu with special regard to the beam monitoring*, Submitted into: Nucl. Instrum. Methods Phys. Res. B, submitted manuscript NIMB-S-20-00521

Lebeda O., Červenák J., *Revised cross-sections for formation of theranostic ^{197m,g}Hg in proton- and deuteron-induced reactions on ¹⁹⁷Au*. Nuclear Instruments and Methods in Physics Research B 478 (2020), 85–91. doi: 10.1016/j.nimb.2020.05.014

Lebeda O., Kondev F. G., Červenák J., *Branching ratio and γ -ray emission probabilities in the decay of the $J^\pi=13/2^+$ isomer in ¹⁹⁷Hg*, Nucl. Instrum. Methods Phys. Res. A 959 (2020) <https://doi.org/10.1016/j.nima.2020.163481>

Lebeda O., Červenák J., *Measurement of deuteron-induced nuclear reactions cross-sections on ¹⁹⁷Au and on ^{nat}Cu focused on the theranostic ^{197m,g}Hg*, Nucl. Instrum. Methods Phys. Res. B 461 (2019) 105-113 <https://doi.org/10.1016/j.nimb.2019.09.034>

Červenák J., Lebeda O., *Measurement of cross-sections of proton-induced nuclear reactions on ¹⁹⁷Au focused on the production of the theranostic pair ^{197m,g}Hg*, Nucl. Instrum. Methods Phys. Res. B 458 (2019) 118-125 <https://doi.org/10.1016/j.nimb.2019.08.006>

Můčka V., Červenák J., Reimitz D., Čuba V., Bláha P., Neužilová B., *Effects of irradiation conditions on the radiation sensitivity of microorganisms in the presence of OH radical scavengers*, Int. J. Rad. Bio. 94 (2018) 1142-1150 <https://doi.org/10.1080/09553002.2018.1532610>

Červenák J., Lebeda O., *Experimental cross-sections for proton-induced nuclear reactions on ^{nat}Mo*, Nucl. Instrum. Methods Phys. Res. B 380 (2016) 32-49 <http://dx.doi.org/10.1016/j.nimb.2016.05.006>

Můčka V., Červenák J., Čuba V., Bláha P., *Determination of the survival of yeast and bacteria under the influence of gamma or UV radiation in the presence of some scavengers of OH radicals*, J. Radioanal. Nucl. Chem. 304 (2015) 237-244 <https://doi.org/10.1007/s10967-014-3696-7>

Můčka V., Bláha P., Čuba V., Červenák J., *Influence of various scavengers of OH radicals on the radiation sensitivity of yeast and bacteria*, Int. J. Rad. Bio. 89 (2013) 1045-1052 <https://doi.org/10.3109/09553002.2013.817702>

[List of impact journals and their ranking \(Web of Science, cited on 7th July 2020\):](#)

International Journal of Radiation Biology

Impact Factor: 2.368 (2019); 2.100 (5 years)

Category	Rank in Category	Quartile in Category
BIOLOGY	37 of 93	Q2
NUCLEAR SCIENCE AND TECHNOLOGY	3 of 34	Q1
RADIOLOGY, NUCLEAR MEDICINE, MEDICAL IMAGING	66 of 133	Q2

Nuclear Instruments and Methods in Physics Research Section A – Accelerators, Spectrometers, Detectors and Associated Equipment

Impact Factor: 1.265 (2019); 1.309 (5 years)

Category	Rank in Category	Quartile in Category
INSTRUMENTS AND INSTRUMENTATION	49 of 64	Q4
NUCLEAR SCIENCE AND TECHNOLOGY	18 of 34	Q3
PHYSICS, NUCLEAR	16 of 19	Q4
PHYSICS, PARTICLES AND FIELDS	25 of 29	Q4

Nuclear Instruments and Methods in Physics Research Section B – Beam Interactions with Materials and Atoms

Impact Factor: 1.270 (2019); 1.299 (5 years)

Category	Rank in Category	Quartile in Category
INSTRUMENTS AND INSTRUMENTATION	48 of 64	Q3
NUCLEAR SCIENCE AND TECHNOLOGY	16 of 34	Q2
PHYSICS, NUCLEAR	15 of 19	Q4
PHYSICS, ATOMIC, MOLECULAR, CHEMICAL	30 of 37	Q4

Journal of Radioanalytical and Nuclear Chemistry

Impact Factor: 1.137 (2019); 1.059 (5 years)

Category	Rank in Category	Quartile in Category
CHEMISTRY, ANALYTICAL	73 of 86	Q4
CHEMISTRY, INORGANIC AND NUCLEAR	35 of 45	Q4
NUCLEAR SCIENCE AND TECHNOLOGY	21 of 34	Q3

Publications in peer-reviewed journals:

Suchánková P., Červenák J., Kozempel J., Vlk M., *Cílená alfa terapie a její místo v moderní nukleární medicíně*, Nukleární medicína 7 (2018) 7-13, ISSN: 1805-1146

Conference contributions:

Červenák J., Čepa A., Ráliš J., Tomeš M., Lebeda O., Chytil P., Pola R., Etrych T., Hermann P., Ehn M., *Targeting polymer carriers conjugated with chelators and monoclonal antibodies labelled with copper isotopes*, World Molecular Imaging Congress 2019, Montréal, Canada, published in booklet of abstracts p. 134 (poster)

Červenák J., Lebeda O., *Measurement of excitation functions of proton-induced nuclear reactions on gold*, International symposium on trends in radiopharmaceuticals, IAEA Vienna 2019, abstract published in booklet of abstracts, online on <https://media.superevent.com/documents/20191027/d11acc994711668f9d098243c37efdb8/istr-2019-programme-and-abstracts.pdf> (poster)

Červenák J., Čepa A., Ráliš J., Tomeš M., Kontrová K., Vlk M., Lebeda O., *Studies of stability of radiolabelled VAP-PI peptide in human serum* (poster) 12th Congress of the World Federation of Nuclear Medicine and Biology 2018, Melbourne, Australia

Červenák J., Čepa A., Ráliš J., Tomeš M., Kontrová K., Vlk M., Lebeda O., *Conjugation, radiolabelling and in vitro studies of VAP-PI, a vascular adhesion protein-1 targeting peptide*, 18th Radiochemical Conference 2018, Mariánské Lázně, published in booklet of abstracts available online on <https://indico.fjfi.cvut.cz/event/82/contributions/2003/contribution.pdf> (poster)

Červenák J., Lebeda O., *Monitorovanie energie a prúdu protónového zväzku aktiváciou titánových a medených fólií*, Zjazd chemikov, Vysoké Tatry, abstract published in Czech Chemical Society Symposium Series 2017; page 112 (lecture)

Červenák J., Čepa A., Ráliš J., Tomeš M., Kozempel J., Vlk M., Seifert D., Lebeda O., *Značení peptidů pomocí radionuklidů ⁶⁸Ga a ⁶⁴Cu*, Dny nukleární medicíny, Špindlerův Mlýn, abstract published in Nukleární medicína 2017, page 11 (lecture)

Červenák J., Čepa A., Moša M., Mičolová P., Lebeda O., *Možné farmakodynamické a toxické efekty radiofarmak*, XXXVIII. Pracovní dny Radiofarmaceutické sekce ČSNM; abstract published in Čes. Slov. Far. 2016; page 113 (lecture)

Červenák J., Lebeda O., *Meranie excitačných funkcií jadrových reakcií protónov na ^{nat}Mo*, 68. Sjezd chemických společností; abstract published in Czech Chemical Society Symposium Series 2016; page 218 (lecture)

Červenák J., Čepa A., Terš J., Mičolová P., *In vivo generátory se zaměřením na generátor ²²⁵Ac/²¹³Bi*, 53. Dny nukleární medicíny; abstract published in Nukleární medicína 2016; page 12 (lecture)

Červenák J., Čepa A., *Príprava rádionuklidov s využitím v nukleárnej medicíne, jej súčasný stav a vyhliadky*, Čes. Slov. Far. 2015; 64, page 105 (lecture)

Mičolová P., **Červenák J.**, *Cílená alfa terapie a její místo v moderní nukleární medicíně*, 52.
Dny nukleární medicíny, 2015 (poster)