

CURRICULUM VITAE

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Area of research - RADIATION PHYSICS

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Born

06 May 1977, Kragujevac, Serbia

BC –diploma

University of Kragujevac, Faculty of Science, 2000.

Master thesis: *Factor recoil of ^{214}Pb*

University of Kragujevac, Faculty of Science, 2004.

PhD thesis: Calculation of stopping power considering projectile and target as a set of quantum mechanical oscillators

University of Kragujevac, Faculty of Science, 2007.

LECTURES

Bachelor academic studies

Electromagnetism 1

Electromagnetism 2

Optics

High course of programming language

Physical base of electrotherapy and electrodiagnostic

Radiation protection

PH. D. academic studies

Higher course of radiation physics

LIST OF PUBLICATIONS

Books

1. **Electromagnetism**, Faculty of Science, Kragujevac, 2024. (in Serbian)
2. N. Stevanovic, V. Markovic and D. Nikezic. **Behavior of radon, thoron and their progeny in a room**, LAP Lambert Academic Publishing - ISBN-13: 978-3-659-68290-2, 2015 **M11 10p**

Book chapters

1. V. Markovic, N. Stevanovic, D. Krstic and D. Nikezic. **Beta and gamma dose assessment due to radon short lived progeny. *Handbook of Radon: Properties, Applications and Health*, Nova Publishers- ISBN: 978-1-62100-177-5, 63-100, 2012. **M13 6p****
2. D. Nikezic, V.M. Markovic, N. Stevanovic, V. Urosevic, B. Milenkovic and J. Stajic. **Radon diffusion through the medium. *Handbook of Radon: Properties, Applications and Health*, Nova Publishers- ISBN: 978-1-62100-177-5, 311-334, 2012. **M14 4p****
3. N. Stevanovic, B. Milenkovic, D. Nikezic. **Software for Determination of Track Parameters in Nuclear Track Detectors Etched in Reverse Direction. *Horizons in Computer Science Research, Volume 3*. Nova Publishers ISBN: 978-1-61122-807-6, 89-108, 2011. **M14 4p****
4. N. Stevanovic, V.M. Markovic, D. Nikezic. **Influence of Ventilation Rate on Radon and Thoron Progeny Concentrations in a Room. *Ventilation: Types, Standards and Problems*, Nova Publishers - ISBN: 978-1-61324-424-1. 111-134 , 2011. **M14 4p****

1. Papers printed in International Journal on ISI list

1. Z. Cimbaljevic, R. Dragnic, S. Radonjic, V.M. Markovic, N. Stevanovic, D. Krstic ^a, H. Ruixue, **Methodology of integrated measurements with radon diffusion chamber.** Nuclear Instruments and Methods in Physics Research, Section A, 1068, 169741, 2024. ISSN 0168-9002, IF =1.5, M22, 5p
2. M. Milosevic, N. Stevanovic, V.M. Markovic, Z Cimbaljevic, **Finite difference time domain method of light propagation through inhomogeneous media,** Optica Applicata. 53, 523-538, 2023. ISSN 1899-7015 IF 0.6, M23, 3p
3. N. Stevanovic , V.M. Markovic, M. Milosevic, A. Djurdjevic, JM. Stajic, B Milenkovic, D. Nikezic, **Correlations between track parameters in a solid-state nuclear track detector and its diffraction pattern,** Radiation Physics and Chemistry. 193, 109986, 2022. ISSN 0969-806X IF 2.26, M21, 8p
4. V.M. Markovic, JM. Stajic, B Milenkovic, N. Stevanovic, **Alpha track distribution on lateral wall of cylindrical radon diffusion chamber,** Radiation Physics and Chemistry. 191, 109873, 2022. ISSN 0969-806X IF 2.26, M21, 8p
5. JM. Stajic, V.M. Markovic, B Milenkovic, N. Stevanovic, D. Nikezic. **Distribution of alpha particle tracks on CR-39 detector in radon diffusion chamber.** Radiation Physics and Chemistry. 181, 109340, 2021. ISSN 0969-806X IF 2.26, M21, 8p
6. Nikolić, S., Stevanović, N., Ivanović, M. **Optimizing parallel particle tracking in Brownian motion using machine learning.** International Journal of High Performance Computing Applications, 34(5), 532-546, 2020. ISSN 1094-3420, IF 2.365, M22 5p
7. V.M. Markovic, N. Stevanovic, D. Nikezic. **Monte Carlo investigation of electron specific energy distribution in a single cell model.** Radiation and Environmental Biophysics, 59, 161-171, 2020. ISSN 0301-634X, IF=1.527 M22 5p
8. V.M. Markovic, A.G. Markovic, N. Stevanovic, D. Nikezic. **Rn progeny diffusion, deposition and track distribution in diffusion chamber with permeable membrane.** Radiation Measurement, 124, 146-157, 2019. ISSN 1350-4487, IF=1.435 M21 8p
9. V.M. Markovic, N. Stevanovic, D. Nikezic **Propagation of light from dipole source and generalization of Fresnel-Kirchhoff integral.** Optik, 180, 447-454, 2019. ISSN 0030-4026, IF=1.914. M23 3p
10. N. Stevanovic V.M. Markovic, D. Nikezic **Simple method for numerical solving of schroedinger equation for hydrogen atom in electric field.** Nuclear Technology and Radiation Protection, 33(3), pp. 239-245, 2018. ISSN 1451-3994 , IF=0.614, M23 3p

11. N. Stevanovic V.M. Markovic, D. Nikezic **Time dependence of ^{222}Rn , ^{220}Rn and their progenies' distributions in a diffusion chamber.** Nuclear Instruments and Methods A, 873, 93-99, 2017. ISSN 0168-9002 **IF= 1.200 M21 8p**

12. V.M. Markovic, D. Nikezic, N. Stevanovic **^{222}Rn and ^{220}Rn diffusion in two mediums.** Nuclear Instruments and Methods A , 857,16-23, 2017. ISSN 0168-9002 **IF= 1.200 M21 8p**

13. N.Stevanovic, V.M. Markovic, D. Nikezic **New metod for determination of diffraction light pattern od arbitrary surfaces** Optics & Laser Technology. 90, 90-95 , 2017 . ISSN 0030-3992 **IF= 1.647 M22 5p**

14. N. Stevanovic, V.M. Markovic. **Diffraction pattern by rotated conical tracks in solid state nuclear track detectors** Optics & Laser Technology. 80, 204-208, 2016 ISSN 0030-3992 **IF= 1.647 M22 5p**

15. 1.8 A. V. Teodorović, D. M. Badjuk, N. Stevanović, R. Z. Pavlović, **Stabilization of long-chain intermediates in solution. Tridecyl radicals and cations,** Journal of Molecular Structure, 1083, 357-363, 2015. ISSN 0022-2860 **IF= 1.602 M23 3p**

16. 1.7. B. Milenkovic, N. Stevanovic, D. Krstic, D. Nikezic, **Neutron detection by a CR-39 detector and analysis of proton tracks etched in the same and opposite directions,** Radiation Protection Dosimetry 161 (1-4):108-111, 2014 ISSN: 1742-3406 **IF= 0.909 M22 5p**

17. B. Milenkovic, N. Stevanovic, D. Nikezic, D. Kosutic. **Determination of a CR-39 detector response to neutrons from an Am-Be source** Applied Radiation and Isotopes, 90, 225-228, 2014. ISSN 0969-8043 **IF= 1.179 M21 8p**

18. V.M. Markovic, N. Stevanovic, D. Nikezic, Dž. F. Pucic, V. Urosevic , **Specific energy distribution within cytoplasm and nucleoplasm of a typical mammalian cell due to various beta radionuclides.** Journal of Radioanalytical and Nuclear Chemistry, 299(3), 1723-1730, 2014, ISSN: 0236-5731, DOI 10.1007/s10967-013-2874-3 **IF=1.467 M21 8p**

19. V.M. Markovic, D. Krstic, N. Stevanovic, D. Nikezic. **Photon albedo for water, concrete and iron at normal incidence and dependence on the thickness of reflecting material.** Nucl. Techn. & Rad. Prot. 28(1), 36-44, 2013 **IF= 1 M22 5p**

20. A V. Teodorovic, D. M. Badjuk, N. Stevanovic, R. Z. Pavlovic. **Stabilization of long-chain intermediates in solution. Octyl radicals and cations.** Journal of Molecular Structure 1040, 19-24, 2013. **IF=1.634 M23 3p**

21. V.M. Markovic, D. Krstic, D. Nikezic, N. Stevanovic. **Doses from radon progeny as a source of external beta and gamma radiation.** Radiat Environ Biophys, 51(4), 391-397, 2012. **IF=1.696 M22 5p**
22. N. Stevanovic, V.M. Markovic, M. Arsenijevic, D. Nikezic. **Influence of electron motion in target atom on stopping power for low-energetic ions.** Nucl. Techn. & Rad. Prot. 27(2), 113-116, 2012 **IF= 1.159 M22 5p**
23. B. Jovanović, D. Nikezić, N. Stevanović. **Applied mathematical modeling for calculating the probability of the cell killing per hit in the human lung.** Journal of Radioanalytical and Nuclear Chemistry, 290 (3), 607-613, 2011. **IF=1.52 M21 8p**
24. V. Markovic, N. Stevanovic and D. Nikezic. **Doses from beta radiation in sensitive layers of human lung and dose conversion factors due to $^{222}\text{Rn}/^{220}\text{Rn}$ progeny.** Radiation and Environmental Biophysics.50(3), 431-440, 2011. **IF=1.635 M22 5p**
25. B. Milenkovic, N. Stevanovic, D. Nikezic and M. Ivanovic. **Computer program Neutron_CR-39 for simulation of neutrons from an Am-Be source and calculation of proton track profiles.** Computer Phys Commun 182, 1536-1542, 2011. **IF= 1.958 M21 8p**
26. B. Milenković, D. Nikezić, N. Stevanović. **A simulation of neutron interaction from Am-Be source with the CR-39 detector.** Radiation Measurements 45, 1338-1341, 2010. **F =0.973 M21 8p**
27. N. Stevanovic, V.M. Markovic, D. Nikezic. **Relationship between deposition and attachment rates in Jacobi room model.** Journal of Environmental Radioactivity, 101, 349–352, 2010. **IF =1.114 M23 3p**
28. N. Stevanovic V.M. Markovic, D. Nikezic. **Deposition rates of unattached and attached fractions in room at turbulent airflow and ventilation.** Journal of Environmental Radioactivity, 100, 585–589, 2009. **IF =1.114 M23 3p**
29. B. Milenković, N. Stevanović, D. Krstic, D. Nikezić. **Numerical solving of the track wall equation in LR115 detectors etched in direct and reverse directions.** Radiation Measurement, 44, 57–62, 2009. **IF=1.267, M21 8p**
30. N. Stevanovic V. Markovic, V. Urosevic and D. Nikezic. **Determination of parameters of Jacobi room model using the Brownian motion model.** Health Physics. 96(1): 48-54, 2009. **IF=0.902 M22 5p**
31. V. Markovic, N. Stevanovic and D. Nikezic. **Absorbed fractions for electrons and beta particles in sensitive regions of human respiratory tract.** Radiat. Environ. Biophys., 47, 139–145, 2008. **IF=1.787 M22 5p**

32. D. Nikezić, N. Stevanović, D. Kostić, S. Savović, K.C.C. Tse, K.N.Yu. **Solving the track wall equation by the finite difference method.** Radiation Measurement, 43, S76–S78, 2008. **IF=1.267, M21 8p**
33. D. Krstić, D. Nikezić, N. Stevanović, D. Vucic, **Radioactivity of some domestic and imported building materials from South Eastern Europe,** Radiation Measurements, 42 (10), 1731-1736, 2007. **IF=1.054, M21 8p**
34. D. Nikezić and N. Stevanović. **Behavior of ^{220}Rn progeny in diffusion chamber.** Nuclear Instruments and Methods A, 570, 182-186, 2007. **IF=1.224, M21 8p**
35. D. Krstić, N. Stevanović, J. Milivojević and D. Nikezić. **Transfer of ^{137}Cs from soil to plants.** Isotopes in Environmental Health Studies, 43(1), 1-9, 2007. **IF=1.500, M22 5p**
36. D. Nikezić and N. Stevanović. **Room model with three modal distributions of attached ^{220}Rn progeny. Dose conversion factor for ^{220}Rn progeny.** Radiation Protection Dosimetry, 123, 95-102, 2007. **IF=0.528, M23 3p**
37. N. Stevanović and D. Nikezić. **Calculation of stopping power for partially stripped ion by using oscillator model.** Eur. Phys. J. D 42, 397–406, 2007. **IF=1.988, M22 5p**
38. D. Nikezić, B.M.F. Lau, N. Stevanović and K.N.Yu. **Absorbed Dose in Target Cell Nuclei and Dose Conversion Coefficient of Radon Progeny in the Human Lung,** Journal of Environmental Radioactivity, 89, 18-29, 2006. **IF=1.243, M22 5p**
39. N. Stevanović and D. Nikezić. **Stopping power. Projectile and target modeled as oscillators.** Physics Letters A, 340 (1-4), 290-298, 2005. **IF=1.55, M22 5p**
40. D. Nikezić and N. Stevanović. **Radon progeny behavior in diffusion chamber.** Nuclear Instruments and Methods B, 239 (4), 399-406, 2005. **IF=1.181, M21 8p**
41. D. Krstić, D. Nikezić, N. Stevanović i M. Jelić. **Vertical distribution of ^{137}Cs in soil.** Applied Radiation and Isotopes., 61(6), 1487, 2004. **IF=1.000, M21 8p**
42. N. Stevanović, D. Nikezić. **Recoil factor of ^{214}Pb .** Journal of Aerosol Science., 35(8), 1041, 2004. **IF=1.861, R51 8p**
43. D. Nikezić, N. Stevanović. **Room model with three modal distribution of attached radon progeny.** Health Physics., 87(4), 405-409, 2004. **IF=0.796, R51 8p**

44. D. Nikezić and N. Stevanović. **Influence of variability of ^{214}Pb recoil factor on lung dose.** *Radiation Protection Dosimetry.*, 109, 197-199, 2004. **IF=0.680, R52 5p**

2. Papers on the international and national conferences

2.1. D. Krstić, D. Nikezić, V. Ljubenov i N. Stevanović. **Računanje efektivne doze u plućama i gonadama od ^{137}Cs u tlu.** *Zbornik radova, XXII Simpozijum Jugoslovenskog Društva za Zaštitu od Zračenja*, 2003. **M63**

2.2. D. Krstić, D. Nikezić, N. Stevanović i M. Jelić. **Vertikalna raspodela ^{137}Cs u tlu.** *Zbornik radova, XXII Simpozijum JDZZ*, 181-184. 2003. **M63**

2.3. N. Stevanović i D. Nikezić. **Zaustavna moć alfa čestica u CR-39 detektoru.** *Zbornik radova, XXII Simpozijum JDZZ*, 2003. **M63**

2.4. N. Stevanović, D. Nikezić, D. Krstić, D. Kostić, M.S.Kovačević. **Faktor uzmaca radonovih potomaka.** *Zbornik radova, XXIII Simpozijum DZZSCG*, 327-331, 2005. ISBN: 86-7306-075-3. **M63**

2.5. B. Milenkovic, N. Stevanovic, D. Krstic, D. Nikezic. **Numericko resavanje jednacine zida traga u LR115 detektoru nagrizanom u direktnom i suprotnom smeru.** *Zbornik radova ETRAN, 2008.* ISBN: 978-86-80509-63-1 **M63**

2.6. D. Krstić, D. Nikezić, N. Stevanović, D. Vučić. **Radioaktivnost nekih uvoznih gradjevinskih materijala.** *Zbornik radova, XXIII Simpozijum DZZSCG*, 309-311, 2005. ISBN: 86-7306-075-3. **M63**

2.7. B. Milenkovic, D. Nikezic, N. Stevanovic. **Simulacija odgovora CR-39 detektora na ozracivanje neutronima iz Am-Be izvora.** *Zbornik radova, XXV Simpozijum DZZSCG*, 274-278, 2009. ISBN: 978-86-7306-112-2. **M63**

2.8. N. Stevanović, V.M. Markovic, D. Nikezić. **Parametri Jakobijevog modela u prostoriji pri turbulentnom kretanju vazduha.** *Zbornik radova, XXV Simpozijum DZZSCG*, 345-349, 2009. ISBN: 978-86-7306-112-2. **M63**

2.9. B. Milenković, N. Stevanović, V Marković, D Nikezić. **Efikasnost detekcije protona nastalih u CR-39 detektoru ozračenom neutronima iz Am-Be izvora.** *ETRAN*, 2010. **M63**

2.10. N. Stevanovic, V. Markovic, D Nikezic, B. Milenkovic, J. Stajic. **Korekcija ljsuske za zaustavnu moc za niskoenergetske jone.** *Zbornik radova, XXVI Simpozijum DZZSCG*, 14-17, 2011. ISBN: 978-86-7306-105-4. **M63**

2.11. B. Milenkovic, D Nikezic, N. Stevanovic. **Korekcija ljsuske za zaustavnu moc za niskoenergetske jone.** *Zbornik radova, XXVI Simpozijum DZZSCG*, 306-310, 2011. ISBN: 978-86-7306-105-4. **M63**

2.12. V. Markovic, N. Stevanovic, D Nikezic. **Raspodela specificne energije beta zracenja unutar celije.** *Zbornik radova, XXVI Simpozijum DZZSCG*, 224-227, 2011. ISBN: 978-86-7306-105-4. **M63**

2.13. J. Zivkovic Radovanovic, N. Stevanovic V. M. Markovic, D. Nikezic, B. Milenkovic. **Simulacija niskoenergetskih protona kroz celije.** *Zbornik radova, XXVII Simpozijum Društva za Zaštitu od Zracenja Srbije i Crne Gore, Vrnjacka Banja, Srbija*, pp 263-266, ISBN: 978-86-7306-115-3, 2013. **M63**

2.14. D. Bogavac, N. Stevanovic, V.M. Markovic, D. Nikezic, J. Stajic. **Jonizacija i ekscitacija molekula vode u celijama usled prolaska alfa cestica.** *Zbornik radova, XXVII Simpozijum Društva za Zaštitu od Zracenja Srbije i Crne Gore, Vrnjacka Banja, Srbija*, pp 241-245, ISBN: 978-86-7306-115-3, 2013. **M63**

2.15. N. Stevanovic, V.M. Markovic, D. Spasic. **Difrakcione slike na konusnim i sfernim objektima.** *Zbornik radova, XXVIII Simpozijum Društva za Zaštitu od Zracenja Srbije i Crne Gore, Vrsac, Srbija*, pp 602-607, ISBN: 978-86-7306-135-1, 2015. **M63**