A N E X A 4 . 1

Nume Prenume: ZVÎNCU Neculai-Daniel
Gradul didactic: Doctor inginer

Instituția: Academia Tehnică Militară "Ferdinand I"

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L I S T A
lucrărilor ştiinţifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

„Cercetări privind metodele şi procedurile de identificare şi evaluare a riscurilor asociate tragerilor cu armamentul în poligon", 2021.

B. Cărţi si capitole în cărţi publicate

C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

1. Haller, L.; **Zvîncu, N.-D.**; Dobrin, G.; Simion, A.-C., Nidelea, M., Impact of Gaseous Reaction Products Resulting from Small Arms Fire on Human Operators, International Conference on e-Health and Bioengineering EHB 2025 - 13-th Edition, SpringerLink Database
2. Dîrloman, F.-M.; Rotariu, A.-N.; Rotariu, T.; Noja, G.-F.; Ginghină, R.-E.; **Zvîncu, N.-D.**; *Ballistic and thermal characterisation of greener composite solid propellants based on phase stabilized ammonium nitrate*, Case Studies in Thermal Engineering, Volume 54, February 2024, 103987, https://doi.org/10.1016/j.csite.2024.103987, Impact Factor: 6.4
3. **Zvîncu, N.-D.**; Sandrin, P.; Ungureanu, M.-I.; Berechet, D.-C.; Dîrloman, F.-M.; Podaru, I.-A.; Simion, A.-C.; Munteanu, A.; Moldoveanu, C.-E., *Numerical Determinations of Hazardous Angles for Pistol Shootings in Firing Ranges*, Journal of Military Technology Vol. 7, No. 2, Dec. 2024, DOI 10.32754/JMT.2024.2.01
4. **Zvîncu, N.-D.**; Garnier, A.; Moldoveanu, C.-E.; Dîrloman, F.-M.; Ungureanu, M.-I.; Berechet, D.-C.; Simion, A.-C., *Ballistic Assessment for Shooting Range Validation in Case of Direct Fire*, Journal of Military Technology Vol. 7, No. 1, Jun. 2024, DOI 10.32754/JMT.2024.1.01
5. Rotariu, T.; Pulpea, B.; Dîrloman, F.; Diacon, A.;Rusen, E.; Toader, G.; **Zvîncu, N. D**.; Iordache T.; Botiș, R, *The Influence of Potassium Salts Phase Stabilizers and Binder Matrix on the Properties of Novel Composite Rocket Propellants Based on Ammonium Nitrate*, Materials 2022, 15, 8960, doi: https://doi.org/10.3390/ma15248960, Impact Factor: Current 3.748, 5-year 4.042
6. **Zvîncu, N. D**.; Moldoveanu, C. E.; Mandache-Dodoiu, A. D., Dîrloman, F. M.; Vedinaș, I., *Research on small caliber weapons firing ranges security enhancement considering the projectile-obstacle impact*, Modern Technologies in Industrial Engineering (ModTech 2021), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 1182 (2021) 012086, doi:10.1088/1757-899X/1182/1/012086
7. Dîrloman, F. M.; Matache, L. C.; Țigănescu, T. V.; Rotariu, T; **Zvîncu N. D.**; Ungureanu, M. I., *Computational fluid dynamics simulations for composite rocket propellant optimization*, Modern Technologies in Industrial Engineering (ModTech 2021), IOP

Publishing, IOP Conf. Series: Materials Science and Engineering 1182 (2021) 012017. doi:10.1088/1757-899X/1182/1/012017

8. **Zvincu, N. D.**; et al, *Acoustic pressure and flame generation determinations in case of mechanical and gas-dynamic processes for small caliber weapons*, Modern Technologies in Industrial Engineering VII, (ModTech2019), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 591, DOI: 10.1088/1757-899X/591/1/012073
9. Nistoran, G. D.; Sava, A. C.; Mandache-Dodoiu, A D; **Zvincu N. D.**, *Kinematic analysis of small arms systems with the help of high-speed camera*, Modern Technologies in Industrial Engineering VI, (ModTech2018), IOP Publishing, IOP Conf. Series: Materials Science and Engineering 400, DOI:10.1088/1757-899X/400/5/052008
10. **Zvîncu, N. D.**; Haller, L.; Nistoran, G. D.; Vedinaș, I., *Determinations of some Firing Effects of Small Caliber Weapons*, MTA Review Vol. XXVII, No. 2, 2017, ISSN 1843-3391
11. **Zvîncu, N. D.**; Druță, N. N.; Bocea, L. V., *Emulsion explosives detonation velocity determinations using time detectors*, SCIENTIFIC RESEARCH AND EDUCATION IN THE AIR FORCE - AFASES 2016, DOI: 10.19062/2247-3173.2016.18.1.14, ISSN 2247-3173
12. Haller, L.; Pulpea, G. B.; **Zvîncu, N. D.**; Mandache-Dodoiu, A. D., *Specific Regulations for Urban Military Operations*, MTA Review Vol. XXVI, No. 2, 2016, ISSN 1843-3391

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

- Reviste

- Selecție cu maximum 20 lucrări în volume de conferințe

1. **Zvîncu, N.-D.**; Bardac, Ș.-M.; Șomoiag, P.; Dîrloman, F.-M.; Ungureanu, M.; Berechet, D.C., *THEORETICAL ASSESSMENT OF FACTORS INFLUENCING ARTILLERY FIRE ACCURACY*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2023, Faculty of Artillery, Air Defense and Communication and Information Systems, Shumen, BULGARIA
2. **Zvîncu, N.-D.**; Antofie, B.-G.; Moldoveanu, C.-E.; Dîrloman, F.-M.; Ungureanu, M.; Berechet, D.C., *TECHNICAL CONSIDERATIONS REGARDING PERFORMANCE ENHANCEMENTS FOR UNGUIDED MULTIPLE LAUNCH ROCKET SYSTEM*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2023, Faculty of Artillery, Air Defense and Communication and Information Systems, Shumen, BULGARIA
3. **Zvîncu, N.-D.**; Chiojdoiu, T.; Moldoveanu, C.-E.; Dîrloman, F.-M.; Ungureanu, M.; Berechet, D.C., *AERODYNAMICS AND BALLISTICS OF SMALL CALIBRE WEAPONS FIRING*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2023, Faculty of Artillery, Air Defense and Communication and Information Systems, Shumen, BULGARIA
4. **Zvîncu, N.-D.**; Moldoveanu, C.-E.; Ungureanu, M.-I.; Berechet, D.C.; Dîrloman, F.-M., *FIRING PHENOMENON OPTIMIZATION FOR MULTIPLE UNGUIDED ROCKETS LAUNCHINGS FROM LAROM PLATFORM*, World Conference on Mechanical Engineering 2022, Berlin, GERMANIA
5. Dîrloman, F.-M.; Rotariu, T.; Toader, G.; Pulpea, B.-G.; Ungureanu, M.-I.; **Zvîncu, N.-D.,** *Development and Characterization of Energetic Formulations Incorporating Polyurea/Polyurethane Binders*, World Conference on Mechanical Engineering 2022, Berlin, GERMANIA
6. Ungureanu, M.-I. ; Dîrloman, F.-M.; Rotariu, A.-N.; Matache, L.-C.; Berechet, D.C.; **Zvîncu, N.-D.**, *ASSESMENT OF HEA PLATES BEHAVIOR AT IMPACT WITH HARD*

PENETRATORS, World Conference on Mechanical Engineering 2022, Berlin, GERMANIA

7. Dîrloman, F. M.; Rotariu, T.; Rotariu, A.; Noja, G.; **Zvîncu, N. D**.; Dan, A., *BURNING CHARACTERIZATION OF HETEROGENEOUS PROPELLANT AT HIGH PRESSURES*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2022, Faculty of Artillery, Air Defense and Communication and Information Systems, Shumen, BULGARIA
8. **Zvîncu, N. D**.; Șomoiag, P.; Moldoveanu, C. E.; Dîrloman, F. M.; Berechet, C., *THEORETICAL ASSESMENT OF OPTIMAL MULTIPLE ROCKETS LAUNCHING FOR LAROM PLATFORM*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2022, Faculty of Artillery, Air Defense and Communication and Information Systems, Shumen, BULGARIA
9. **Zvîncu, N. D**.; Moldoveanu, C. E.; Sava, A. C.; Mandache-Dodoiu, A. D.; Dîrloman, F. M., *DETERMINING THE OPTIMAL TIME BETWEEN LAUNCHINGS WHEN FIRING MULTIPLE UNGUIDED MISSILES FROM LAROM PLATFORMS*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2021, "Vasil Levski" National Military University - Artillery, Air Defense and CIS Faculty, Shumen, Bulgaria, 2021
10. **Zvîncu, N. D**.; Moldoveanu, C. E.; Vedinaș, I., *MATERIAL DEFLECTION AND BULLET RICOCHET DETERMINATIONS FOR DIFFERENT ANGLES OF FIRING ON A CONCRETE PLATE*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2020, "Vasil Levski" National Military University - Artillery, Air Defense and CIS Faculty, Shumen, Bulgaria, 2020, ISSN 2367-7902,
11. Moldoveanu, C. E.; **Zvîncu, N. D.**; Olar-Pop, A. M.; Gaden, T., *RESEARCH CONCERNING THE SECURITY IMPROVEMENT IN THE INFANTRY SHOOTING RANGE*, Proceedings of International Scientific Conference "Defense Technologies" DefTech 2020, "Vasil Levski" National Military University - Artillery, Air Defense and CIS Faculty, Shumen, Bulgaria, 2020, ISSN 2367-7902, http://www.aadcf.nvu.bg/scientific_events/papers/dtf2020.pdf
12. **Zvîncu, N. D.**; Haller, L.; Vedinaș, I, *Considerații privind fenomenul de ricoșeu la impactul proiectil-țintă pentru armamentul de calibru mic*, A V-a editie a Conferintei Nationale Multidisciplinare „Profesorul Ion D. Lazarescu, fondatorul scolii romanesti de teoria aschierii", 8 septembrie 2017, Cugir, România

E. Brevete obţinute în întreaga activitate

Data: 02.03.2026 **Semnătura:**

