

## LISTA DE LUCRĂRI

Prof. Univ. Dr. Ing. Adrian-Nicolae ROTARIU

### A. Listă de lucrări reprezentative

1. **Adrian Rotariu** , Eugen Trana, Liviu Matache , Marius-Valeriu Cirmaci-Matei, Simona Sandu, Cristian-Emil Moldoveanu, Florina Bucur, Experimental Study on the Dynamic Response of Polyurethane/fly Ash Ceramic Foam, Mater. Plast., 58 (1), 2021, 106-112
2. **Rotariu, A.-N.**, Matache, L., Bucur, F., Cirmaci-Matei, M.V., Mărmureanu, M., Trană, E., Implementation of a Gumbel distribution function in interior ballistic calculations for deterred propellants, UPB Scientific Bulletin, Series B: Chemistry and Materials Science, ISSN 1454-2331, Volume 82, Issue 1, pp 167-178, 2020
3. **Rotariu A.N.**, Bucur F., Cirmaci-Matei M.V., Matache L.C. and Trana E., Development of the analytic relations for the propellant grain geometrical characteristics required for a maximum pressure plateau feature, IOP Conference Series Journal of Physics 1507:022025, 2020, doi:10.1088/1742-6596/1507/2/022025,
4. Eugen TRANĂ, **Adrian N. ROTARIU**, Traian ROTARIU, Bogdan Gh. PULPEA, Cristian E. MOLDOVEANU , Florina BUCUR , Liviu C. MATACHE, Michael GOZIN, Experimental study on aluminum foils use in blast enhancement application, Proceedings of the Romanian Academy, Series A, ISSN 1454-9069, vol.20, no.3, pp.275-282, 2019
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7. Gabriela Toader, Edina Rusen, Mircea Teodorescu, Aurel Diacon, Paul O. Stanescu, Celina Damian, Traian Rotariu, **Adrian Rotariu**, New polyurea MWCNTs nanocomposite films with enhanced mechanical properties, Journal of Applied Polymer Science, ISSN 0021-8995, eISSN: 1097-4628, vol.134, nr. 28, 2017
8. **Rotariu Adrian**, Trană Eugen, Dima Cornel, Enache Constantin, Timplaru Florin, Matache Liviu, Uninstrumented measurement method for granular porous media blast mitigation assessment, Experimental Techniques, ISSN 0732-8818 (Online ISSN: 1747-1567), vol.40, issue 3, pp. 993-1003, 2016
9. **Adrian ROTARIU**, Florina BUCUR, Gabriela TOADER, Marin LUPOAE, Alin SAVA, Pamfil ȘOMOIAG, Marius CIRMACHI-MATEI, Experimental Study on Polyurea Coating Effects on Deformation of Metallic Plates Subjected to Air Blast Loads, Materiale Plastice, ISSN 0025-5289 (On-line ISSN 2668-8220), vol. 53, no. 4, pp 670-674, 2016
10. Eugen TRANĂ, **Adrian-Nicolae Rotariu**, Paul Lixandru, Liviu-Cristian Matache, Constantin Enache, Teodora Zecheru, Experimental and numerical investigation on 6082 0 temper aluminium alloy cartridge tubes drawing, Journal of Materials Processing Technology, ISSN 0924-0136, vol. 216, pp. 59-70, 2015

### B. Teza de doctorat

DETERMINAREA EXPERIMENTALĂ A PROPRIETĂȚILOR MECANICE ALE MATERIALELOR ÎN REGIM DINAMIC, Academia Tehnică Militară, 2007

### C. Cărți publicate în edituri naționale recunoscute

1. Florina Bucur, Cristian Emil Moldoveanu, **Adrian-Nicolae Rotariu**, Modelarea și simularea fenomenelor aerodinamice cu aplicații în domeniul sistemelor de armament, Editura Academiei Tehnice Militare Ferdinand I, 2020, ISBN 978-973-640-324-8
2. Eugen Trană, **Adrian-Nicolae Rotariu**, Bogdan Pulpea, „Calculul și construcția munițiilor. Îndrumar de laborator”, Editura Academiei Tehnice Militare, 2019, ISBN 978-973-640-302-6
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4. **Adrian-Nicolae Rotariu**, Liviu-Cristian Matache, Metode de calcul în balistica interioară, Ed. Academiei Tehnice Militare, 2017, ISBN 978-973-640-241-8
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### D. Articole publicate în reviste din fluxul științific internațional principal

11. **Adrian Rotariu** , Eugen Trana, Liviu Matache , Marius-Valeriu Cirmaci-Matei, Simona Sandu, Cristian-Emil Moldoveanu, Florina Bucur, Experimental Study on the Dynamic Response of Polyurethane/fly Ash Ceramic Foam, Mater. Plast., 58 (1), 2021, 106-112
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14. Bucur F., **Rotariu A.**, Matache L., Baciuc F., Jiga G., Trană E., Experimental and Numerical Study on the Behavior of HB26 Dyneema Composite in Compression, Materiale Plastice, ISSN 0025-5289 (On-line ISSN 2668-8220), vol.57 (2, pp. 113-122), 2020,
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34. Liviu-Cristian Matache, Teodora Zecheru, **Adrian Rotariu**, Tudor Cherecheș, Experimental determination of blast waves parameters generated by firing of large-caliber gun systems, International Journal of Modern Manufacturing Technologies, Vol. 2, Nr. 1, pp 49-54, 2010
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#### **E. Publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate**

1. **Rotariu Adrian-Nicolae**, Matache Liviu-Cristian, Trana Eugen, Bucur Florina, Cirmaci-Matei Marius-Valeriu, Mitrică Dumitru, Geantă Victor, Determination of the compression strength of HEA in high strain rates tests, Defense Technology Forum 2020, Bulgaria, Shumen, 2020
2. **Rotariu A.N.**, Bucur F., Cirmaci-Matei M.V., Matache L.C. and Trana E., Development of the analytic relations for the propellant grain geometrical characteristics required for a maximum pressure plateau feature, 2020 International Conference on Defence Technology, China, (on-line)
3. Florina Bucur, **Adrian Rotariu**, Gabriel Jiga, Florin Baciuc, Eugen Trană, On the experimental testing procedures for ultra-high molecular weight polyethylene (UHMWPE) behaviour evaluation in static and dynamic regime, The 6th International Scientific Conference SEA-CONF 2020, Constanța, România, 2020 (on-line)
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5. **Rotariu Adrian-Nicolae**, Matache Liviu, Bucur Florina, Marius Cirmaci, Marmureanu Marius, Trana Eugen, Implementation of a gumbel distribution function in interior ballistic calculations for deterred propellants, 31st International Symposium on Ballistics, India, Hyderabad, 2019
6. Liviu-Cristian Matache, P. Lixandru, T. Cherecheș, A. Mazuru, D. Cherecheș, V. Geantă, I. Voiculescu, E. Trană, **A.N. Rotariu**, Determination of material constants for high strain rate constitutive model of high entropy alloys, ModTech 2019 International Conference, România, Iași, 2019
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9. **Rotariu Adrian**, Trana Eugen, Marmureanu Marius, On the implementation of a nonlinear continuous deterred/undeterred transition profile for an interior ballistic model, Workshop GSEBS 2018, Brest, Franta, 2018
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#### **F. Alte lucrări**

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