

LISTA DE LUCRĂRI

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

A. Listă de lucrări reprezentative

1. **Rotariu, Adrian-Nicolae**, Eugen Trană, and Liviu Matache. "Young's Modulus Calculus Using Split Hopkinson Bar Tests on Long and Thin Material Samples, *Materials*, 15, no. 9: 3058. <https://doi.org/10.3390/ma15093058>, 2022.
2. **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
3. **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
4. **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,
5. 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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8. 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
9. **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
10. **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

B. Teza de doctorat

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

C. Cărți/manuale/indrumare publicate în edituri naționale recunoscute

1. L.C. Matache, **A.N. Rotariu**, Simularea numerică a fenomenelor dinamice cu viteze mari de deformare. Aplicații de balistică terminală, București, Editura Academiei Tehnice Militare, 2021, ISBN 978-973-640-328-6. 138 p.
2. 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
3. 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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D. Articole publicate în reviste din fluxul științific internațional principal

1. **Rotariu, Adrian-Nicolae**, Eugen Trană, and Liviu Matache. "Young's Modulus Calculus Using Split Hopkinson Bar Tests on Long and Thin Material Samples, Materials, 15, no. 9: 3058. <https://doi.org/10.3390/ma15093058>, 2022.
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5. Bucur F., **Rotariu A.**, Trană E., Ștefan A., Experimental and numerical study on the mitigation capability of some special design structures, International Journal of Modern Manufacturing Technologies, ISSN 2067–3604, Vol. XII, No. 1/2020, pp 7-15,
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E. Publicații în extenso, apărute în lucrări ale principalelor conferințe internaționale de specialitate

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F. Alte lucrări

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2. **Rotariu Adrian**, Matache Liviu, Bucur Florina, Pulpea Bogdan, Dirloman Florin, Trană Eugen, Investigations on the delamination of pre-notched UHMWPE composite plates at the low impact velocity, European Conference on Fracture 2022, 25 iunie – 1 iulie, 2022. Funchal, Madeira, Portugalia
3. Florin M. Dîrloman, Traian Rotariu, Gabriela Toader, Bogdan G. Pulpea, Mihai I. Ungureanu, Neculai D. Zvincu, **Adrian N. Rotariu**, Liviu C. Matache, Solvent free polyurethanic binders for pyrotechnic compositions, 24th seminar „NEW TRENDS IN RESEARCH OF ENERGETIC MATERIALS”, April 6th – 8th, 2022 Pardubice, Republica Cehă
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