

LISTA DE LUCRĂRI

Prof. dr. ing. Liviu Cristian MATACHE

Listă de lucrări reprezentative

1. Rotariu, A.N., Trana, E., **Matache, L.C.**, Homutescu, T., „*A HiLo interior ballistic model based on the hypothesis of gases adiabatic transformation in the high pressure chamber*”, CASE STUDIES IN THERMAL ENGINEERING Volume 45, Article Number 102928, DOI 10.1016/j.csite.2023.102928, ISSN: 2214-157X.
2. Rotariu, AN, Trana, E, **Matache, L**, „*Young's Modulus Calculus Using Split Hopkinson Bar Tests on Long and Thin Material Samples*”, MATERIALS Volume 15, Issue 9, Article Number: 3058, DOI: 10.3390/ma15093058, ISSN: 1996-1944.
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4. **Matache, LC**, Lixandru, P, Chereches, T, Mazuru, A, Chereches, D, Geanta, V, Voiculescu, I, Trana, E, Rotariu, AN, „*Determination of material constants for high strain rate constitutive model of high entropy alloys*”, IOP Conf. Series: Materials Science and Engineering Volum 591, Articol număr 012057, DOI: 10.1088/1757-899X/591/1/012057, ISSN 1757-8981.
5. Petre, R, Zecheru, T, Petrea, N, Ginghina, R, Sandu, S, Muresan, M, **Matache, LC**, Sava, AC, Neatu, F, „*Synthesis and Mechanical Properties of Polyurea-Based Hybrid Composites for Ballistic Individual Protection*”, Materiale Plastice, Volume 55 Issue 5, Pages: 315-319, 2018, ISSN 2668-8220, ISSN 0025-5289.
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9. Geanta, V; Chereches, T; Lixandru, P.; Voiculescu, I.; Stăfănoiu, R.; Dragnea, D.; Zecheru, T.; **Matache, L.**, „*Virtual testing of composite structures made of high entropy alloys and steel*”, METALS Volume: 7 Issue: 11 Article Number: 496 DOI: 10.3390/met7110496, 2017, ISSN: 2075-4701
10. Waldemar A. Trzcinski, Qi-Long Yan, Stanislaw Cudzilo, Eugen Trană, **Liviu Matache**, Traian Rotariu, Robert Matyas, Svatopluk Zeman, Michael Gozin, „*Thermobaric effects formed by aluminium foils enveloping cylindrical charges*”, Combustion and Flame, ISSN 0010-2180, vol. 166, pp 148-157, 2016, DOI 10.1016/j.combustflame.2016.01.010

Teza de doctorat

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1. Rotariu, A.N., Trana, E., **Matache, L.C.**, Homutescu, T., „*A HiLo interior ballistic model based on the hypothesis of gases adiabatic transformation in the high pressure chamber*”, CASE STUDIES IN THERMAL ENGINEERING Volume 45, Article Number 102928, DOI 10.1016/j.csite.2023.102928, ISSN: 2214-157X.
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2. Adrian ROTARIU, **Liviu MATACHE**, Florina BUCUR, Florin DIRLOMAN, „*The influence of the elastic modulus on the simulation results of the polyurethane foam samples dynamic crush*” 4th International Conference on Material and Structural Mechanics 2023, Marrakech, 24 – 26 mai 2023.
3. Ioana Alexandra Dan, **Liviu Cristian Matache**, Florin Marian Dîrloman, Adrian Nicolae Rotariu, Razvan Marian Mircioaga, „*Design of solid composite propellants through modeling and numerical simulation*”, 25th International Seminar New trends in research of energetic materials, Pardubice, Czech Republic, 19 – 21 Aprilie, 2023.
4. Adrian Nicolae Rotariu, Octavian Chiriac, **Liviu Cristian Matache**, Florina Bucur, „*2D numerical simulation of two metallic concentric tubes explosively-driven*”, 25th International Seminar New trends in research of energetic materials, Pardubice, Czech Republic, 19 – 21 Aprilie, 2023.
5. **Liviu C. Matache**, Andrada M. Runceanu, Adrian N. Rotariu, Florin M. Dirloman, Răzvan M. Mircioagă, Cristian Moldoveanu, Pamfil Șomoiaș, „*Assesment of a new thermomeric solid composition used in EFP-TB tandem ammunition*”, Defense Technology Forum 2020, Bulgaria, Shumen, 2022.

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9. A. Rotariu, **L. Matache**, F. Bucur, F. Firloman, P. Turtoi, C. Enescu and E. Trană, „Assesment of the non-newtonian liquid filled cell potential to mitigate the impact force”, 19th International Conference on Experimental Mechanics, Cracovia, Polonia, 17-21 Iulie, 2022.
10. **Matache Liviu-Cristian**, Rotariu Adrian-Nicolae, Dîrloman Florin-Marian, Pană Florina-Iuliana, „Numerical simulation of EFP impact on armored steel plate”, 23rd European Conference on Fracture, Funchal, Madeira, Portugalia 27 iunie – 1 iulie, 2022.
11. 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”, 23rd European Conference on Fracture, Funchal, Madeira, Portugalia 27 iunie – 1 iulie, 2022.
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