Agenţia Română de Asigurare a Calităţii în Învăţământul Superior

A N E X A 4 . 1

Universitatea: ***Academia Tehnică Militară „Ferdinand I”***
Facultatea: Facultatea de Sisteme Informatice şi Securitate Cibernetică
Departament: Informatică Aplicată
Conf. univ.dr. MARZAVAN Silvia

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

A. Teza de doctorat Doctor în ştiinţe din data de 15.10.2007, domeniul: MATEMATICĂ, Titlul tezei: *Metode topologice pentru ecuaţii neliniare şi aplicaţii*, Universitatea “Ovidius” Constanţa, Facultatea de Matematică şi Informatică, Conducător ştiinţific: Prof.univ.dr. Dan Dumitru PASCALI

B. Cărţi si capitole în cărţi publicate

1. Dana Simona Bereanu, Anca Ileana Lupaş, **Silvia Marzavan**, Simona Roateşi, Bogdan Sebacher, Iuliana Sprinţu, *Matematică. Culegere de probleme de tip grilă pentru admiterea în învâţământul superior*, Editua Academiei Tehnice Militare, ISBN 978-973-640-354-5, Bucureşti, 2025.
2. Vasile Năstăsescu, **Silvia Marzavan,** *The Equivalent Material Concept in Functionally Graded Plates Calculus*, In: Theory and Applications of Engineering Research Vol. 1. B P International, pp. 38-63. ISBN 978-81-967636-2-6, 2023. Official URL: https://doi.org/10.9734/bpi/taer/v1/6878C
3. Dana Simona Bereanu, Anca Ileana Lupaş, **Silvia Marzavan**, Simona Roateşi, Bogdan Sebacher, Iuliana Sprinţu, *Matematică. Culegere de probleme de tip grilă pentru admiterea în învâţământul superior*, Editua Academiei Tehnice Militare, ISBN 978-973-640-260-9, Bucureşti, 2017.
4. **Silvia Marzavan**, *Analiză matematică. Calcul Integral*, Editura Academiei Tehnice Militare, ISBN 978-973-640-246-3, Bucureşti 2016.

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

1. Ionescu, M.G.; Sebacher, B.; **Marzavan, S.**, *Unified Deep Learning Framework for Image Degradation Removal in Military Applications*, Journal of Military Technology, Vol. 8, No. 2, pp. 13-20, Dec. 2025, Digital Object Identifier 10.32754/JMT.2025.2.02

2. Vasile Năstăsescu, **Silvia Marzavan**, *Functionally graded thick-walled tubes analysis by numerical methods*, Volume 10, Issue 5, Heliyon, 2024.
3. **Silvia Marzavan**, Vasile Nastasescu, *Free vibration analysis of a functionally graded plate by finite element method*, Ain Shams Engineering Journal, Volume 14, Issue 8, Pages 102024, 2023. https://doi.org/10.1016/j.asej.2022.102024

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4. Alina Adetu, Vasile Nastasescu, Catalin Adetu, **Silvia Marzavan**, *Numerical Analysis of Plastic Perforated Panel for Acoustic Protection*, Materiale Plastice, Volume 60, Issue 2, pp 10-21, 2023.
5. **Silvia Marzavan**, *EFG method in numerical analysis of foam materials*, Mechanics of Time-Dependent Materials, Volume 26, Issue 2, pp 409-429, 2022. DOI: 10.1007/s11043-021-09494-0.
6. **Silvia Marzavan**, Vasile Nastasescu, *Displacement calculus of the functionally graded plates by finite element method*, Alexandria Engineering Journal 61 (12), 12075-12090, 2022. https://doi.org/10.1016/j.aej.2022.06.004
7. Vasile Năstăsescu, Ghiţă Bârsan, **Silvia Marzavan**, *On the Calculus of Functionally Graded Plates*, International conference KNOWLEDGE-BASED ORGANIZATION 28 (3), 71-85, 2022.
8. Vasile Năstăsescu, **Silvia Marzavan,** *An overview of functionally graded material models*, Proceedings of the Romanian Academy, Series A, Volume 23, pp. 257–265, Number 3/2022. https://academiaromana.ro/sectii2002/proceedings/doc2022-3/05-Nastasescu.pdf
9. Vasile Năstăsescu, **Silvia Marzavan,** *Using the Equivalent Plate Concept to Calculate Functionally Graded Plates by Numerical Method*, IOP Conference Series: Materials Science and Engineering, Volume 1262, Issue 1, pp 012056, 2022. https://iopscience.iop.org/article/10.1088/1757-899X/1262/1/012056/meta
10. **Silvia Marzavan**, *On the Choice of the Weight Function and its Parameters in the Element Free Galerkin Method*, Journal of Military Technology Volume 5, Issue 1, 2022. https://jmiltechnol.mta.ro/9/2_Marzavan-min.pdf
11. **Silvia Marzavan**, Bogdan Sebacher, *A new methodology based on finite element method (FEM) for generation of the probability field of rock types from subsurface*, Arabian Journal of Geosciences, 14(10), May 2021. DOI: 10.1007/s12517-021-07114-2
12. Vasile Năstăsescu, Ghiţă Bârsan, **Silvia Marzavan**, *The Influence of the Weight Function on the Results Accuracy in Structural Analysis by EFG Method*, International conference KNOWLEDGE-BASED ORGANIZATION 27(3):60-69, June 2021. DOI: 10.2478/kbo-2021-0090, License: CC BY-NC-ND 4.0
13. Amado-George Ştefan, Lucian Ştefăniţă Grogore, **Silvia Marzavan**, Iustin Priescu, Holban Oncioiu Monica, *Theoretical and Experimental Aspects Regarding the Forced Mounting of a Cylinder Containing the Electronics of a Mini Submarine*, Journal of Marine Science and Engineering, 9 (8): 855, August 2021. DOI: 10.3390/jmse9080855,License: CC BY 4.0
14. Vasile Năstăsescu, Gh. Bârsan, **Silvia Marzavan**, *EFG Method Used in Deep Drawing Numerical Simulation*, International conference KNOWLEDGE-BASED ORGANIZATION 26(3):136-143, June 2020, https://content.sciendo.com, ISSN: 2451-3113 DOI: 10.2478/kbo-2020-0128, License: CC BY-NC-ND 4.0
15. Vasile Năstăsescu, Nicolae Iliescu, **Silvia Marzavan**, *Element-free Galerkin Method and Finite Element Method. Which is better?*, Journal of Engineering Sciences and Innovation Volume 5, Issue 4 / 2020, p. 287 – 298, A. Mechanical Engineering, https://jesi.astr.ro/wp-content/uploads/2020/12/1_Nastasescu-Vasile.pdf
16. Vasile Năstăsescu, **Silvia Marzavan**, *Numerical Model for Analysis of Acoustic wave propagation in an exhaust drum*, ICMS 2019 & COMEC 2019, Braşov, România, 21-22 November 2019.
17. B. Sebacher, R.G Hanea and **S. Marzavan**, "Conditioning the Probability Field of Facies to Facies Observations Using a Regularized Element-free Galerkin (EFG) Method", Petroleum Geostatistics Florence, September 2-6, 2019 (indexata Scopus)
18. Vasile Năstăsescu, Gh. Bârsan, **Silvia Marzavan**, *Numerical Models for the Analysis of Acoustic Wave Propagation*, The 24th International Conference KBO2019, The Knowledge-Based Organization, Sibiu, 13-15 June 2019, Conference Proceedings 3, Applied Technical

Sciences and Advanced Military Technologies, pg. 136-143, ISBN: 978-973-153-357-5, ISSN: 1843-682X.

19. Vasile Năstăsescu, **Silvia Marzavan**, *Element-Free Galerkin Method Applied on Calculus of the Stress Concentration Factor*, The 24th National Symposium of Fracture Mechanics UPG PLOIEŞTI, 15-16.11.2018, Petroleum-Gas University Bulletin.
20. Vasile Năstăsescu, **Silvia Marzavan**, *On Functionally Graded Beam Concept (Second part: Numerical Simulations)*, International Conferences, Celebrating Technical Higher Education into „Vasile Alecsandri" University of Bacău, June, 27-29 2018.
21. Vasile Năstăsescu, **Silvia Marzavan**, *On Functionally Graded Beam Concept (First part: Fundamentals)*, International Conferences, Celebrating Technical Higher Education into „Vasile Alecsandri" University of Bacău, June, 27-29 2018.
22. **Silvia Marzavan**, Madlena Nen, *Multivalued (alpha) operators with generalized variational inequalitie aplied to management of migration equilibrium*, U.P.B. Sci. Bull. Series A, vol. 79. Iss. 2, 2017, ISSN 1223-7027.
23. Vasile Năstăsescu, **Silvia Marzavan**, *Upon Impact Numerical Modeling of Foam Materials*, Materiale Plastice, 54, No. 2, pp. 195-202, 2017, ISSN 0025/5289 http://www.revmaterialeplastice.ro
24. Vasile Năstăsescu, **Silvia Marzavan**, *Numerical Simulation of an underwater explosion by SPH method*, Romanian Journal of Tehnical Sciences APPLIED MECHANICS, vol. 61, no. 1, January-April, 2016, Bucharest, pp. 88-106, ISSN: 0035-4074, http://www.imsar.ro/RJTS-AM_2016_61_1_a0_Contents.pdf, (http://www.imsar.ro/RJTS-AM_2016_1/RJTS-AM_2016_61_1_a6_Nastasescu.pdf)
25. Vasile Năstăsescu, **Silvia Marzavan**, *A Model with Free Particles Used for Numerical Simulation of Charpy Impact Test of Plastic Materials*, Materiale Plastice, pp. 222-226, 53, No. 2, 2016, http://www.revmaterialeplastice.ro (http://www.revmaterialeplastice.ro/archive.asp)

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

- Reviste

1. Autori, *Titlu*, Revista, An publicare, pp zzz.

- Selecție cu maximum 20 lucrări în volume de conferințe

1. Autori, *Titlu*, Conferința, An publicare, pp zzz.

E. Brevete obținute în întreaga activitate

1.

Data:
06.04.2026

Semnătura:

