

Universitatea: *Academia Tehnică Militară „Ferdinand I”*

Facultatea: Facultatea de Sisteme Integrate de Armament, Geniu și Mecatronică

Departament: Departamentul de Construcții, Inginerie Genistica și Mecatronica

Șef lucrări dr. ing. NICA George-Bogdan

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Titlul tezei: **Studiul efectelor exploziilor la structuri din beton armat.** (Profil : Inginerie civilă; Specializare: Mecanica Structurilor) Universitatea Tehnică de Construcții București, 2016, conducător științific Prof. dr. ing Crețu Dan-Ilie.

B. Cărți și capitole în cărți publicate

1. Mihai Iancovici, George Nica , Dynamics of Structures: Applications for the Master Degree Course on Structural Engineering, 2nd edition, 2018, Conspress, 978-973-100-480-8, 90 pagini.

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

1. **George-Bogdan Nica**, Florin Pavel, Gabriel Hojda, A fast nonlinear dynamic analysis automated approach to produce fragility curves for 3D RC frames, Engineering Structures, Volume 281, 2023, 115695, ISSN 0141-0296, <https://doi.org/10.1016/j.engstruct.2023.115695>.
2. **George Bogdan Nica**, Ruben Iacob Munteanu, Vasile Calofir, Mihail Iancovici, Modelling nonlinear behavior of 3D frames using the Force Analogy Method, Structures, Volume 35, 2022, Pages 1162-1174, ISSN 2352-0124, <https://doi.org/10.1016/j.istruc.2021.08.097> .
3. Mihail Iancovici, Georgiana Ionică, Florin Pavel, Florin Moța, **George Bogdan Nica**, Nonlinear dynamic response analysis of buildings for wind loads. A new frontier in the structural wind engineering, Journal of Building Engineering, Volume 47, 2022, 103708, ISSN 2352-7102, <https://doi.org/10.1016/j.jobbe.2021.103708> .
4. Calofir Vasile, **Nica Bogdan George**, Pavel Florin, A Nonlinear Model to Analyze the Structures Pounding Forces During Earthquakes, Arabian Journal for Science and Engineering, 2020, 2191-4281, <https://doi.org/10.1007/s13369-020-04633-0>
5. Pavel Florin, **Nica George-Bogdan**. The Seismic Evaluation of Existing Buildings for Energy Renovation—A Case Study for the Residential Building Stock in Bucharest (Romania). *Buildings*. 2024; 14(6):1742. <https://doi.org/10.3390/buildings14061742>
6. Iancovici Mihai, Nica George-Bogdan. Time-Domain Structural Damage and Loss Estimates for Wind Loads: Road to Resilience-Targeted and Smart Buildings Design. *Buildings*. 2023; 13(3):734. <https://doi.org/10.3390/buildings13030734>

7. Baci, Catalin, Marin Lupoae, **George Bogdan Nica**, and Daniel Constantin. "Experimental and Numerical Studies of the Progressive Collapse of a Reinforced Concrete-framed Structure Using Capacity Curves". *Arabian Journal for Science and Engineering* (online) 44, no. 10 (October 2019): p. 8805–8818. <https://doi.org/10.1007/s13369-019-03964-x>.
8. **Nica George Bogdan**, Lupoae Marin, Pavel Florin, Baci Catalin, Numerical Analysis of RC Column Failure Due to Blast and Collapse Scenarios for an Irregular RC-Framed Structure , *International Journal of Civil Engineering*, 2018, 2383-3874, <https://doi.org/10.1007/s40999-017-0265-9>
9. Pavel Florin , **Nica George-Bogdan**, Influence of Rotating Strong Ground Motions on the Response of Doubly Symmetrical RC Wall Structures in Romania and Its Implication on Code Provisions, *International Journal of Civil Engineering*, 2019, 2383-3874 , <https://doi.org/10.1007/s40999-018-0346-4>
10. Pavel, Florin , Pricopie, Andrei , **Nica George-Bogdan**, Collapse Assessment for a RC Frame Structure in Bucharest (Romania), *International Journal of Civil Engineering* , 2019, 2383-3874 <https://doi.org/10.1007/s40999-019-00398-2>
11. Pavel Florin, Nica George-Bogdan. Ground Motion Duration Patterns for Vrancea (Romania) Intermediate-Depth Earthquakes. *Geosciences*. 2023; 13(10):288. <https://doi.org/10.3390/geosciences13100288>
12. Ruben Iacob Munteanu, Vasile Calofir, Mihai Iancovici, **George Bogdan Nica** and Sergiu Stelian Iliescu, "Modelling of Structural Damage Caused by Seismic Pounding of Multi-Degree of Freedom Inelastic Structures," *2020 24th International Conference on System Theory, Control and Computing (ICSTCC)*, Sinaia, Romania, 2020, pp. 608-613, doi: 10.1109/ICSTCC50638.2020.9259756.
13. Vasile Calofir, **George Bogdan Nica**, Grigore Stamatescu and Nicoleta Arghira, "Dynamic Nonlinear Modelling of Building Structure Using the Force Analogy Method," *2019 10th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS)*, Metz, France, 2019, pp. 1068-1073, doi: 10.1109/IDAACS.2019.8924408.
14. Ruben Iacob Munteanu, Iulia Stamatescu, Vasile Calofir, **George Bogdan Nica** and Sergiu Stelian Iliescu, "Structural damage mitigation using a fuzzy controller," *2021 23rd International Conference on Control Systems and Computer Science (CSCS)*, Bucharest, Romania, 2021, pp. 393-400, doi: 10.1109/CSCS52396.2021.00071.
15. Pavel Florin, **Nica George-Bogdan**, Noroozinejad Farsangi Ehsanm, Seismic reliability assessment of existing RC chimneys in Romania, *Journal of Building Pathology and Rehabilitation*, 2023, 2365-3167, <https://doi.org/10.1007/s41024-023-00333-y>

Agencia Română de Asigurare a Calității în Învățământul Superior

16. Ruben Iacob Munteanu, **George Bogdan Nica**, Vasile Calofir, Sergiu Stelian Iliescu and Octavian Tiberiu Sîrbu, "Building seismic behavior improvement using an optimal control algorithm," *2020 IEEE International Conference on Automation, Quality and Testing, Robotics (AQTR)*, Cluj-Napoca, Romania, 2020, pp. 1-6, doi: 10.1109/AQTR49680.2020.9130005.
17. **George Bogdan Nica**, Vasile Calofir, Ioan Cezar Corăci. A State Space Formulation for the Evaluation of the Pounding Forces During Earthquake. *Modelling in Civil Environmental Engineering* Technical University of Civil Engineering of Bucharest, 14, no. 2 (2018): 37-49. <https://doi.org/10.2478/mmce-2018-0006>
18. **George Bogdan Nica** and Andrei Gheorghe Pricopie. Evaluation of the pounding forces during earthquake using explicit dynamic time integration method. *Modelling in Civil Environmental Engineering* Technical University of Civil Engineering of Bucharest, 13, no. 3 (2017): 21-39. <https://doi.org/10.1515/mmce-2017-0009>

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

- Reviste

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- Selecție cu maximum 20 lucrări în volume de conferințe

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E. Brevete obținute în întreaga activitate

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Data: 20.04.2026

Semnătura: