



LISTĂ DE LUCRĂRI ȘI CĂRȚI

Alina Claudia PETRESCU-NIȚĂ

ARTICOLE / STUDII IN EXTENSO PUBLICATE

1. A Petrescu-Nita , A. Mateescu, D C Popescu, I Stefan, Ivlasceanu, I Sacala, I Dumitrache *Machine Learning Control for Assistive Humanoid Robots Using Blackbox Optimization of PID Loops Through Digital Twins*, Romanian Journal Of Information Science And Technology, Vol 28, Pg 63-76, WOS :001450629400006, **2025 Q1**
2. Petrescu-Nita; F. Pop; M. Mihaiu; B. Mocanu; C. Negru *Resource Allocation Optimization Model for Computing Continuum* Mathematics WOS 001418557600001 **2025 Q1**
3. A Petrescu-Nita; G. Calianu; E. Carcadea; C. Lupu *Creating An Adaptive Data Collecting System Based On Iot Devices* Scientific Bulletin Series C , WOS 001510901300005 **2025**
4. A Petrescu-Nita; B Balaban; I Sacala *TriagE-NLU: A Natural Language Understanding System for Clinical Triage and Intervention in Multilingual Emergency Dialogues* Future Internet WOS 001553292500001 **2025 Q2**
5. A Petrescu-Nita; D Bejan; C Stan *Magneto-Absorption Spectra of Laser-Dressed Coupled Quantum Dot–Double Quantum Ring* Nanomaterials **Q2** WOS:001505837700001 2025
6. Petrescu-Niță, SC. Colbu, DM. Bancila, D Popescu, SC. Olteanu *A Comparative Study Of Support Vector Machine And Risk Deterministic Approach On A Photovoltaic System – 2024* University Politehnica Of Bucharest Scientific Bulletin-Series C, Vol 86, Pag 67-80 WOS:001301345300006
7. A Petrescu-Niță, B.C Firuți, R.S Păduraru, C. Negru, O. Bădescu, F. Pop *Road risk-index analysis using satellite products – 2023* **Sensors, Vol 23, MDPI**, pg 2751 WOS:000946966500001 Q2
8. Petrescu-Niță, S. Colbu, D. Popescu, D. Bancila, M. Mona *Stochastic Optimization and Risk Problems for Engineering Applications - 2022* 8th International Conference on Control, Decision and Information Technologies, **2022-5-17** WOS:000846862800130

9. Petrescu-Niță, B. Balan, I. Sacala, R. Nita *Simen Security issues in MCPS when using Wireless Sensor Networks* - IEEE 2022 E-Health and Bioengineering Conference (EHB), Iasi, Romania **2022**
10. Petrescu-Niță, C.Stan, D. Bejan *Magnetic Properties Of Pseudo-Elliptic Quantum Rings: Influence Of Impurity Position And Electron Spin* 2022-84-1, 163-174, University Politehnica Of Bucharest Scientific Bulletin-Series A **2022** WOS 000779521900016 Q4
11. Petrescu-Niță, C.Stan, D. Bejan, *Electronic Properties Of Pseudo-Elliptic Quantum Rings: Influence Of Impurity Position And Electron Spin*, 2021-11-11, 253-262, WOS:000731398600023 **2021**
12. Petrescu-Nita, B. Balaban, I. Sacala, F. Pop, A. Udrea, *A Cyber-Physical Systems Approach for Health Care Prediction*, 2021 International Conference on e-Health and Bioengineering (EHB),**2021** WOS 000802227900127
13. Petrescu-Nita, C. Cânepa, C. Serbanescu, *Modeling And Calibrating Banks'demand Deposits Vs. Assets*, University Politehnica Of Bucharest Scientific Bulletin-Series A- Applied Mathematics And Physics, Volumul 82, Nr 4, Pg 17-28, WOS:000596090300003 **2020**
14. Petrescu-Nita, D. Popescu, C. Dimon, *Stochastic Optimization And Risk Problems*, Scientific Bulletin, Series A, Applied Mathematics and Physics, Vol 31, Iss 3, Pag 185-196, , ISSN 1223-7027, WOS:000477968300017, **2019**
15. Petrescu-Niță, M. Staic: *Automorphisms of the k -algebra $k[X_1, \dots, X_m]$* , Journal of Algebra and Its Applications, Vol 18, No 03, DOI : 10.1142, ISSN : 0219-4988, **2019** WOS:000616665300000
16. M. Varga, A. Petrescu-Niță, F. Pop: *Deadline scheduling algorithm for sustainable computing in Hadoop environment*, Computers& Security, Vol 76, Pag 354-366, DOI: 10.1016, ISSN: 0167-4048 (**2018**), WOS: 000437967300021
17. A Petrescu-Niță, *On the Rayleigh-Ritz quotient*, U.P.B Scientific Bulletin, Series A: Applied Mathematics and Physics Vol 80, Iss 1, Pag 155-160, **2018**, ISSN 1223-7027, WOS: 000427816900016
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19. Petrescu-Niță, C. Georgescu, E Simion, A Toma, *A View On NIST Randomness Tests (In)Dependence*, Proceedings of the 9th international conference on electronics,

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24. Petrescu-Niță, MD. Staic *Symmetry group of two special types of carbon nanotori*, Acta Crystallographica A- Fondation and Advances, Vol 69, Pag 435-439, DOI: 10.1107, ISSN: 2053-2733 dar in **2014** are ISSN: 0108-7673), 2013, WOS: 000320604100008 (Q1)
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- I. A. Petrescu-Niță, B. Balan, I. Sacala, R. Nita *Integrating Blockchain Technology in a Cyber Physical System to Secure Data*, 24th International Conference on Control Systems and Computer Science (CSCS)- IEEE **2023**
 - II. A. Petrescu-Niță, S. Colbu, D. Popescu, D.M. Bancila, S.Olteanu *Stochastic Optimization Problem Solved Usin SVM Based Prediction for Photovoltaic Plants* 27th International Conference on System Theory, Control and Computing (ICSTCC) IEEE **2023**
 - III. A. Petrescu-Niță, S.Treantă *Results Of Existence Of Solutions For Some Variational Control Inequalities* Ann. Acad. Rom. Sci. Ser. Math. Appl Nr1-2 **2023**
 - IV. A. Petrescu-Nita., I Sacala, B. Balaban, F. Pop, *Cyber-Physical Systems-A New Approach For Keyless Entry Systems*,Proceedings - 2021 23rd International Conference on Control Systems and Computer Science Technologies, CSCS 2021, 260-266, **2021**
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- VI. A. (Petrescu)Niță *On the Jackson networks*, Journal of Advanced Mathematical Studies Vol 2, Number 2, September **2009**
- VII. C. Georgescu, E Simion, A Toma, *Nist Randomness Tests (In)Dependence - Cryptology ePrint Archive: Report 2017/336*

TEZA DE DOCTORAT (T)

Titlul tezei: *Inversa generalizată a unei matrice cu aplicații la optimizarea unor sisteme*
(2004) Universitatea din București Conducător științific: Prof. Dr.Univ. Vasile PREDA

CĂRȚI PUBLICATE (C)

- (C1) A.Petrescu-Niță *Algebră liniară aplicativă*, Politehnica Press 2021, ISBN 978-606-515-958-7
- (C2) A.Petrescu-Niță *Analiză matematică II*, Editura Printech 2014 ISBN 978-606-23-0195-8
- (C3) A.Petrescu-Niță *Matematici 2 Exerciții și Probleme*, Editura Printech 2013 ISBN 978-606-23-0115-6
- (C4) A.Petrescu-Niță, A Niță, S.Balea, R. Ursianu *Matematici 2*, Editura Printech 2012 ISBN 978-606-521-919-9
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- (C6) A.(Petrescu)Niță, A Niță *Probleme de matematici 2*, Editura Printech 2008 ISBN 978-606-521-128-5
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- (C8) A.(Petrescu)Niță, A Niță, R. Dumitrache *Probleme de algebră și geometrie*, Editura Printech 2007. ISBN 978-973-718-837-3
- (C9) A.(Petrescu)Niță, L.Costache, R. Dumitrache *Matematici speciale.Noțiuni teoretice. Aplicații*, Editura Printech, 2007. ISBN 978-973-718-704-8
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- (C12) A.(Petrescu)Niță, A Niță, *Probleme de ecuații diferențiale*, Editura Printech București 2005. ISBN 973-718-201-4
- (C13) A.(Petrescu)Niță, A Niță, R. Vidican *Probleme de algebra,geometrie,ecuții diferențiale*, Editura Printech, Bucuresti 2005. ISBN 973-718-360-6
- (C14) A.(Petrescu)Niță, A Niță *300 exerciții de ecuații diferențiale*, Editura Printech, București 2004. ISBN 973-652-935-5

(C15) A.(Petrescu)Niță, A Niță , S.Balea, R. Ursianu *Algebră liniară și geometrie* , Editura Printech, București 2003. ISBN 973-652-843-x

(C16) A.(Petrescu)Niță, A Niță , S.Balea, R. Ursianu *Lecții de algebră și geometrie* , Editura Printech, București 2002. ISBN 973-652-667-4

(C17) A.(Petrescu)Niță, A Niță *Exerciții de ecuații diferențiale* ,Editura Printech, București 2001. ISBN 973-652-349-7

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(C19) A. (Petrescu)Niță, A Niță.*Ecuații și sisteme diferențiale*, Editura Matrix Rom. București 2000. ISBN 973-685-091-9

CONTRACTE DE CERCETARE și DE FORMARE PROFESIONALĂ- director de proiect

(CC1) *Îmbunătățirea elementului decizional al testelor statistice utilizate în aplicațiile criptografice*, Granturi interne de cercetare Nr 22/ 26.09.2016 **(director de proiect)**

(CFP1) *Centrul de Învățare, dezvoltare, îndrumare și sprijin pentru viitori ingineri – ITO1LAB*, nr. 295/SGU/NC/III din 18.12.2019, **(director de grand)**

(CFP2) *Sprijin profesionalizat pentru studenți în vederea creșterii ratei de promovabilitate (SPPS-PRO)*, 385 / SGCU / SS / III / 15.09.2020 **(director de grand)**