

LISTA
lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Lucrări indexate ISI/BDI publicate

Lucrări în reviste cotate ISI și Proceeding-uri ISI

1. *On a new lattice Volterra system*
Autor: N. C. Babalic
Rom. Journ. Phys., Vol. 58, Nos. 5-6, Bucharest (2013) 408–413.
2. *On various integrable discretizations of a general two component Volterra system*
Autori: Corina N. Babalic, A. S. Carstea
J. Phys. A: Math. Theor. vol. 46, no.14, 5205 (2013).
3. *On Tzitzeica equation and spectral properties of related Lax operators*
Autori : N. C. Babalic, Radu Constantinescu and Vladimir S. Gerdjikov
Balkan Journal of Geometry and Its Applications, Vol. 19, No. 2, 11-22 (2014).
4. *On some new forms of lattice integrable equations*
Autori: N. C. Babalic, A. S. Carstea
Central European Journal of Physics 12(5):341-347 (2014).
5. *On the soliton solutions of a family of Tzitzeica equations*
Autori: Corina N. Babalic, Radu Constantinescu and Vladimir S. Gerdjikov,
Journal of Geometry and Symmetry in Physics 37, 1-24, (2015).
6. *Bilinear approach to supersymmetric Gardner equation*
Autori: C. N. Babalic, A. S. Carstea
Theoretical and Mathematical Physics Vol. 188 No. 2, 1172–1180, (2016).
7. *Coupled Ablowitz-Ladik equations with branched dispersion*
Autori: Corina N. Babalic, A. S. Carstea
Journal of Physics A: Mathematical and Theoretical, Vol. 50, No. 41, (2017).
8. *Integrable discretisation of coupled Ablowitz-Ladik equations with branched dispersion*
Autor: Corina N. Babalic
Romanian Journal of Physics 63, 114 (2018).

9. *Bilinear approach to Kuperschmidt super-KdV type equations*
 Autori: N. C. Babalic, A. S. Carstea
 Journal of Physics A: Mathematical and Theoretical, 51, 225204, (2018).
10. *Bilinear approach to supersymmetric AKNS system; multiple dressing of fermionic amplitudes*
 Autori: Corina N. Babalic, A. S. Carstea
 Modern Physics Letters A, 2050143, (2020).
11. *The soliton solutions for semidiscrete complex mKdV equation*
 Autor: Corina N. Babalic,
 ITM Web of Conferences, Vol. 34, 03002, (2020).
12. *Complete integrability and complex solitons for generalized Volterra system with branched dispersion*
 Autor: Corina N. Babalic,
 International Journal of Modern Physics B, 34 (29) 2050274, (2020).
13. *Integrable discretisations of Volterra system with multiple branches of dispersion*
 Autor: Corina N. Babalic,
 Modern Physics Letters B, Vol: 3, Issue: 5, No: 2150097, (2021).
14. *The Functional Expansion Approach for Solving NPDEs as a Generalization of the Kudryashov and G'/G Methods*
 Autori: Carmen Ionescu, Corina N. Babalic, Radu Constantinescu, Raluca Efrem
 SYMMETRY-BASEL, Vol. 14 Issue: 4 No: 827 (2022).
15. *Overview on the generalized Volterra System, solutions and integrability*
 Autor: Corina N. Babalic
 Journal of Physics: Conference Series, Vol. 2719, 1st Workshop on Soliton Theory, Nonlinear Dynamics and Machine Learning 12/08/2023 - 17/08/2023
 Hybrid. J. Phys.: Conf. Ser. 2719 012001 (2024)

Lucrări în reviste indexate BDI

16. *Alternative integrable discretization of Korteweg de Vries equation*
 Autori: Corina Babalic, A. S. Carstea
 Annals of the University of Craiova, Physics AUC 21, 95-100, (2011).
17. *Two Soliton solution of Tzitzeica equation*
 Autori : Corina N. Babalic, R. Constantinescu
 Annals of the University of Craiova, Physics AUC 23, 36-51, (2014).
18. *Fermionic extensions of KdV equation*
 Autor : Corina N. Babalic
 Annals of the University of Craiova, Physics AUC, 28, (2018).

19. *Hirota bilinear method for constructing integrable discretizations of semidiscrete solitonic equations*
 Autor : Corina N. Babalic
 Annals of the University of Craiova, Physics AUC, vol. 30 (part II), 166-174 (2020).
20. *The generalized semidiscrete cmKdV system and the periodic reduction*
International Conference on Applied Mathematics and Numerical Methods
 (ICAMNM 2022) – fourth edition
 Location: Craiova, Romania, June 29-July 2, 2022
 Autor: Corina N. Babalic
 Book Series: ITM Web of Conferences, Vol. 49 (2022), Published online: 16 November 2022
21. *Auxiliary equations for solving nonlinear evolutionary equations*
 Proceedings of the 2nd CONFERENCE ON NONLINEARITY
 Location: October 18 – 22, 2021, Belgrade, Serbia
 Autori: Corina N. Babalic, R. Constantinescu
 Serbian Academy of Nonlinear Sciences [(SANS)], Belgrade
 ISBN 978-86-905633-7-1 (2022)
22. *Coupled discrete solitonic equations of additive Bogoyavlensky and the periodic reduction*
 Autor: Corina N. Babalic
 Volume 427 - 11th International Conference of the Balkan Physical Union (BPU11) - S09-TMCP Theoretical, Mathematical and Computational Physics, POS PROCEEDINGS OF SCIENCE, ISBN 9788670259508, (2023).

B. Teza de doctorat

Sisteme dinamice integrabile și fenomenologie solitonică, 2014
 Autor: Nicoleta-Corina BĂBĂLÎC

C. Cărți și capitole de cărți publicate

1. *Fizica atomului și moleculei. Lucrări practice*
 Autori: Nicoleta-Corina Băbălîc, Ion Pălărie
 Editura Universitaria, Craiova, 2018, ISBN: 978-606-14-1285-3, 2017, 171 pagini

2. *Sisteme neliniare integrabile și fenomenologie solitonică*
 Autor: Nicoleta Corina Babalic,
 Editura Universitaria, Craiova, 2018, ISBN 978-606-14-1452-9, 148 pagini.

Data :

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