

Curriculum Vitae

İsmail Aslan, Ph.D.

CONTACT INFORMATION

- Izmir Institute Of Technology
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EDUCATION

- Ph.D., Mathematics, Ege University (TR)
 - M.Sc., Mathematics, Ohio University (USA)
 - B.Sc., Mathematics, Ankara University (TR)
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WORK EXPERIENCE

- Professor Doctor, Izmir Institute Of Technology (TR), Mathematics Dept.
 - Associate Professor, Izmir Institute Of Technology (TR), Mathematics Dept.
 - Instructor, Izmir Institute Of Technology (TR), Mathematics Dept.
 - Teaching Assistant, Ohio University (USA), Mathematics Department
 - Research Assistant, Ankara University (TR), Mathematics Department
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RESEARCH INTEREST

- Differential Equations
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TEACHING EXPERIENCE

- Math121-Basic Mathematics I
- Math122-Basic Mathematics II
- Math141-Basic Calculus I
- Math142-Basic Calculus II
- Math144-Finite Mathematics

- Math145-Mathematics for Science and Engineering I
 - Math146-Mathematics for Science and Engineering II
 - Math255-Differential Equations
 - Math265-Basic Linear Algebra
 - Math414-Linear Integral Equations
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ACHIVEMENTS

- Undergraduate Scholarship (for education in TR), TÜBİTAK (TR)
 - Graduate Scholarship (for education in USA), MEB (TR)
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PUBLICATIONS

51. İsmail Aslan, *A supplement to the paper of Zayed et al. [Optik, 170 (2018) 339–341]*, **Optik**, 176, 160-161, 2019 (SCI)
50. Turgut Öziş and İsmail Aslan, *Similarity solutions to Burgers' equation in terms of special functions of mathematical physics*, **Acta Physica Polonica B**, 48, 1349-1369, 2017 (SCI)
49. İsmail Aslan, *Exact solutions for fractional DDEs via auxiliary equation method coupled with the fractional complex transform*, **Mathematical Methods in the Applied Sciences**, 39, 5619-5625, 2016 (SCI)
48. İsmail Aslan, *Exact solutions for a local fractional DDE associated with a nonlinear transmission line*, **Communications in Theoretical Physics**, 66, 315-320, 2016 (SCI)
47. İsmail Aslan, *Traveling waves of DDEs with rational nonlinearity*, **International Journal of Nonlinear Sciences and Numerical Simulation**, 17(5), 243-248, 2016 (SCI)
46. İsmail Aslan, *Traveling wave solutions for nonlinear differential-difference equations of rational types*, **Communications in Theoretical Physics**, 65, 39-45, 2016 (SCI)
45. İsmail Aslan, *An analytic approach to a class of fractional DDEs of rational type via symbolic computation*, **Mathematical Methods in the Applied Sciences**, 38, 27-36, 2015 (SCI)
44. İsmail Aslan, *Symbolic computation of exact solutions for fractional differential-difference equation models*, **Nonlinear Analysis: Modelling and Control**, 20, 132-144, 2015 (SCI)
43. İsmail Aslan, *Exact solutions of a fractional-type differential-difference equation related to the discrete MKdV equation*, **Communications in Theoretical Physics**, 61, 595-599, 2014 (SCI)

42. İsmail Aslan, *Analytic investigation of a reaction-diffusion Brusselator model with the time-space fractional derivative*, **International Journal of Nonlinear Sciences and Numerical Simulation**, 15, 149-155, 2014 (SCI)
41. İsmail Aslan, *Some Remarks on Exp-Function Method and Its Applications-A Supplement*, **Communications in Theoretical Physics**, 60, 521-525, 2013 (SCI)
40. İsmail Aslan, *Rational and multi-wave solutions to some nonlinear physical models*, **Romanian Journal of Physics**, 58, 893-903, 2013 (SCI)
39. İsmail Aslan, *Construction of exact solutions for fractional-type difference-differential equations via symbolic computation*, **Computers & Fluids (Comput. & Fluids)**, 86, 86-91, 2013 (SCI)
38. İsmail Aslan, *Application of the division theorem to nonlinear physical models for constructing traveling waves*, **Politehn. Univ. Bucharest Sci. Bull. Ser. A Appl. Math. Phys.**, 75, 13-24, 2013 (SCI)
37. İsmail Aslan, *Some exact and explicit solutions for nonlinear Schrödinger equations*, **Acta Physica Polonica A**, 123, 16-20, 2013 (SCI)
36. İsmail Aslan, *Exact and explicit solutions for the discrete Burgers equation by means of the Exp-function method*, **International Journal of Physical Sciences**, 7, 5991-5995, 2012
35. İsmail Aslan, *On the application of the Exp-function method to the KP equation for N-soliton solutions*, **Applied Mathematics and Computation**, 219, 2825-2828, 2012 (SCI)
34. İsmail Aslan, *Comment on: "The (G'/G)-expansion method for the nonlinear lattice equations" [Commun Nonlinear Sci Numer Simulat 17 (2012) 3490-3498]*, **Communications in Nonlinear Science and Numerical Simulation**, 17, 5286-5287, 2012 (SCI)
33. İsmail Aslan, *On the application of the Exp-function method to nonlinear differential-difference equations*, **Applied Mathematics and Computation**, 218, 9594-9595, 2012 (SCI)
32. İsmail Aslan, *The first integral method for constructing exact and explicit solutions to nonlinear evolution equations*, **Mathematical Methods in the Applied Sciences**, 35, 716-722, 2012 (SCI)
31. İsmail Aslan, *Some exact solutions for Toda type lattice differential equations using the improved (G'/G)-expansion method*, **Mathematical Methods in the Applied Sciences**, 35, 474-481, 2012 (SCI)
30. İsmail Aslan, *Rational and multi-wave solutions to nonlinear evolution equations by means of the Exp-function method*, **Politehn. Univ. Bucharest Sci. Bull. Ser. A Appl. Math. Phys.**, 74, 25-34, 2012 (SCI)
29. İsmail Aslan, *The discrete (G'/G)-expansion method applied to the differential-difference Burgers equation and the relativistic Toda lattice system*, **Numerical Methods for Partial Differential Equations**, 28, 127-137, 2012 (SCI)

28. İsmail Aslan, *Exact and explicit solutions to the discrete nonlinear Schrödinger equation with a saturable nonlinearity*, **Physics Letters A**, 375, 4214-4217, 2011 (SCI)
27. İsmail Aslan, Vangelis Marinakis, *Some remarks on the Exp-function method and its applications*, **Communications in Theoretical Physics**, 56, 397-403, 2011 (SCI)
26. İsmail Aslan, *Some exact and explicit solutions to a two-component discrete nonlinear Schrödinger model*, **Canadian Journal of Physics**, 89, 857-862, 2011 (SCI)
25. İsmail Aslan, *Application of the Exp-function method to nonlinear lattice differential equations for multi-wave and rational solutions*, **Mathematical Methods in the Applied Sciences**, 34, 1707-1710, 2011 (SCI)
24. İsmail Aslan, *Exact and explicit solutions to nonlinear evolution equations using the division theorem*, **Applied Mathematics and Computation**, 217, 8134-8139, 2011 (SCI)
23. İsmail Aslan, *Constructing rational and multi-wave solutions to higher order NEEs via the Exp-function method*, **Mathematical Methods in the Applied Sciences**, 34, 990-995, 2011 (SCI)
22. İsmail Aslan, *Traveling wave solutions to nonlinear physical models by means of the first integral method*, **Pramana-Journal of Physics**, 76, 533-542, 2011 (SCI)
21. İsmail Aslan, *Comment on: "Application of Exp-function method for $(3 + 1)$ -dimensional nonlinear evolution equations" [Comput. Math. Appl. 56 (2008) 1451-1456]*, **Computers & Mathematics with Applications**, 61, 1700-1703, 2011 (SCI)
20. İsmail Aslan, *Application of the Exp-function method to the $(2+1)$ -dimensional Boiti-Leon-Pempinelli equation using symbolic computation*, **International Journal of Computer Mathematics**, 88, 747-761, 2011 (SCI)
19. İsmail Aslan, *Analytic investigation of the $(2+1)$ -dimensional Schwarzian Korteweg-de Vries equation for traveling wave solutions*, **Applied Mathematics and Computation**, 217, 6013-6017, 2011 (SCI)
18. İsmail Aslan, *Remark on: "Exp-function method for the exact solutions of fifth order KdV equation and modified Burgers equation" [Appl. Math. Comput. (2009), doi:10.1016/j.amc.2009.07.009]*, **Applied Mathematics and Computation**, 217, 2912, 2010 (SCI)
17. İsmail Aslan, *Multi-wave and rational solutions for nonlinear evolution equations*, **International Journal of Nonlinear Sciences and Numerical Simulation**, 11, 619-623, 2010 (SCI)
16. İsmail Aslan, *Generalized solitary and periodic wave solutions to a $(2+1)$ -dimensional Zakharov-Kuznetsov equation*, **Applied Mathematics and Computation**, 217, 1421-1429, 2010 (SCI)

15. İsmail Aslan, *Analytic solutions to nonlinear differential-difference equations by means of the extended (G'/G)-expansion method*, **Journal of Physics A: Mathematical and Theoretical**, 43, 395207, 2010 (SCI)
14. İsmail Aslan, *A note on the (G'/G)-expansion method again*, **Applied Mathematics and Computation**, 217, 937-938, 2010 (SCI)
13. İsmail Aslan, *Comment on: "New exact solutions for the Kawahara equation using Exp-function method" [J. Comput. Appl. Math. 233 (2009) 97–102]*, **Journal of Computational and Applied Mathematics**, 234, 3213-3215, 2010 (SCI)
12. Turgut Öziş and İsmail Aslan, *Application of the (G'/G)-expansion method to Kawahara type equations using symbolic computation*, **Applied Mathematics and Computation**, 216, 2360-2365, 2010 (SCI)
11. İsmail Aslan, *The Ablowitz-Ladik lattice system by means of the extended (G'/G)-expansion method*, **Applied Mathematics and Computation**, 216, 2778-2782, 2010 (SCI)
10. İsmail Aslan, *A discrete generalization of the extended simplest equation method*, **Communications in Nonlinear Science and Numerical Simulation**, 15, 1967-1973, 2010 (SCI)
9. İsmail Aslan, *The Exp-function approach to the Schwarzian Korteweg-de Vries equation*, **Computers & Mathematics with Applications**, 59, 2896-2900, 2010 (SCI)
8. İsmail Aslan, *The extended discrete (G'/G)-expansion method and its application to the relativistic Toda lattice system*, **International Conference on Numerical Analysis and Applied Mathematics (Rethymno, Greece)**, **AIP Conference Proceedings**, 1168, 2009, 216-219 (SCI)
7. İsmail Aslan and Turgut Öziş, *Analytic study on two nonlinear evolution equations by using the (G'/G)-expansion method*, **Applied Mathematics and Computation**, 209, 425-429, 2009 (SCI)
6. Turgut Öziş and İsmail Aslan, *Symbolic computation and construction of new exact traveling wave solutions to Fitzhugh-Nagumo and Klein-Gordon equations*, **Zeitschrift für Naturforschung A**, 64a, 15-20, 2009 (SCI)
5. Turgut Öziş and İsmail Aslan, *Symbolic computations and exact and explicit solutions of some nonlinear evolution equations in mathematical physics*, **Communications in Theoretical Physics**, 51, 577-580, 2009 (SCI)
4. İsmail Aslan and Turgut Öziş, *On the validity and reliability of the (G'/G)-expansion method by using higher-order nonlinear equations*, **Applied Mathematics and Computation**, 211, 531-536, 2009 (SCI)
3. İsmail Aslan, *Exact and explicit solutions to some nonlinear evolution equations by utilizing the (G'/G)-expansion method*, **Applied Mathematics and Computation**, 215, 857-863, 2009 (SCI)

2. İsmail Aslan, *Discrete exact solutions to some nonlinear differential-difference equations via the (G'/G)-expansion method*, **Applied Mathematics and Computation**, 215, 3140-3147, 2009 (SCI)

1. Turgut Öziş and İsmail Aslan, *Exact and explicit solutions to the (3+1)-dimensional Jimbo-Miwa equation via the Exp-function method*, **Physics Letters A**, 372, 7011-7015, 2008 (SCI)

PUBLICATIONS ON POPULAR MATHEMATICS

- 1) İ. Aslan, Öklid Algoritmasının Bir uygulaması, *Matematik Dünyası*, 2001-I, 26-27.
 - 2) İ. Aslan, Sürekli Kesirler, *Matematik Dünyası*, 2001-II, 23-26.
 - 3) İ. Aslan, Descartes İşaret Kuralı, *Matematik Dünyası*, 2001-III, 23-27.
 - 4) Ü. Ufuktepe, İ. Aslan, Fraktal Geometri'den Bir Kesit, *Matematik Dünyası*, 2002-I, 14-19.
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BOOK TRANSLATION

Uygulamalı Lineer Cebir, Bölüm 7-Özdeğerler ve Özvektörler, 2010, Palme Yayıncılık
(Elementary Linear Algebra with Applications, 9e, B. Kolman & D. Hill, Pearson Education)
