

CURRICULUM VITAE



Dr. Mohammad Mirzazadeh

Associate Professor

Department of Engineering Science, Faculty of Technology and Engineering, University of Guilan, Rasht, Iran

Research Interests: Theory of Solitons, Partial Differential Equations, Nonlinear Optics, Conservation Laws, Lie Groups

E-mail: mirzazadehs2@guilan.ac.ir, mirzazadehs2@gmail.com

Google Scholar:

<https://scholar.google.com/citations?user=gVa9TwoAAAAJ&hl=en>

Scopus:

<https://www.scopus.com/authid/detail.uri?authorId=36450796300>

Publons:

<https://publons.com/wos-op/awards/highly-cited/2020/>

ORCID:

<https://orcid.org/0000-0002-3635-7090>

EDUCATIONAL BACKGROUND

M.Sc., Pure Mathematics, University of Guilan, Iran

Ph.D., Pure Mathematics, University of Guilan, Iran

EDITORIAL BOARD MEMBER

Contemporary Mathematics (ISI)

Applications and Applied Mathematics: An International Journal (ISI)

Computational Sciences and Engineering (University of Guilan, Iran)

ACADEMIC AWARD

Highly Cited Researcher in the field of Cross-Field and Engineering
from Clarivate Analytics

PUBLICATIONS (SELECTED)

Selected papers, 2025

M Mirzazadeh, MS Hashemi, A Akbulu, H Ur Rehman, I Iqbal, M Eslami, Dynamics of optical solitons in the extended $(3+1)$ -dimensional nonlinear conformable Kudryashov equation with generalized anti-cubic nonlinearity, Mathematical Methods in the Applied Sciences, 2025.

HA Eldidamony, AH Arnous, **M Mirzazadeh**, MS Hashemi, M Bayram, Comparative approaches to solving the $(2+1)$ -dimensional generalized coupled nonlinear Schrödinger equations with four-wave mixing, Nonlinear Analysis: Modelling and Control 30, 1-25, 2025.

Selected papers, 2024

WB Rabie, TA Khalil, N Badra, HM Ahmed, M Mirzazadeh, MS Hashemi, Soliton Solutions and Other Solutions to the $(4+1)$ -Dimensional Davey–Stewartson–Kadomtsev–Petviashvili Equation using Modified Extended Mapping Method, Qualitative Theory of Dynamical Systems 23 (2), 87, 2024.

WB Rabie, HM Ahmed, MS Hashemi, **M Mirzazadeh**, M Bayram, Generating optical solitons in the extended $(3+1)$ -dimensional nonlinear Kudryashov's equation using the extended F-expansion method, Optical and Quantum Electronics 56 (5), 894, 2024.

I Samir, AH Arnous, AM Elsherbeny, **M Mirzazadeh**, MS Hashemi, Solitary waves with two new nonlocal Boussinesq types equations using a couple of integration schemes, Computational Methods for Differential Equations, 2024.

HU Rehman, I Iqbal, **M Mirzazadeh**, S Haque, N Mlaiki, W Shatanawi, Dynamical behavior of perturbed Gerdjikov–Ivanov equation through different techniques, Boundary Value Problems 2023 (1), 105, 2024.

MS Hashemi, **M Mirzazadeh**, Exact solutions of nonlinear stochastic Newell-Whitehead-Segel equation by a reduction technique, The European Physical Journal Plus 138 (11), 1016, 2024.

HT Liu, FY Liu, **M Mirzazadeh**, Q Zhou, Oscillating multi-node solitons in spin-orbit coupled spin-1 Bose–Einstein condensates, The European Physical Journal Plus 139 (7), 652, 2024.

MF Shehab, MMA El-Sheikh, HM Ahmed, AAG Mabrouk, **M Mirzazadeh**, Solitons and other nonlinear waves for stochastic Schrödinger-Hirota model using improved modified extended tanh-function approach, Mathematical Methods in the Applied Sciences, 2024.

KK Ahmed, NM Badra, HM Ahmed, WB Rabie, **M Mirzazadeh**, M Eslami, Investigation of solitons in magneto-optic waveguides with Kudryashov's law nonlinear refractive index for coupled system of generalized nonlinear Schrödinger's equations using modified extended mapping method, Nonlinear Analysis: Modelling and Control 29 (2), 205-223, 2024.

KK Ahmed, H Ahmed, NM Badra, **M Mirzazadeh**, WB Rabie, M Eslami, Diverse exact solutions to Davey–Stewartson model using modified extended mapping method, Nonlinear Analysis: Modelling and Control 29 (5), 983-1002, 2024.

Y Sun, Z Hu, H Triki, **M Mirzazadeh**, W Liu, A Biswas, Q Zhou, Analytical study of three-soliton interactions with different phases in nonlinear optics, Nonlinear Dynamics 111 (19), 18391-18400, 2024.

Selected papers, 2023

A. Akbulut, **M. Mirzazadeh**, M.S. Hashemi, K. Hosseini, S. Salahshour, C. Park, Triki–Biswas model: Its symmetry reduction, Nucci's reduction and conservation laws, International Journal of Modern Physics B 37 (07), 2350063, 2023.

AH Arnous, **M Mirzazadeh**, MS Hashemi, NA Shah, JD Chung, Three different integration schemes for finding soliton solutions in the $(1+1)$ -dimensional Van der Waals gas system, Results in Physics 55, 107178, 2023.

I Samir, HM Ahmed, **M Mirzazadeh**, H Triki, Derivation new solitons and other solutions for higher order Sasa–Satsuma equation by using the improved modified extended tanh scheme, Optik 274, 170592, 2023.

WB Rabie, HM Ahmed, **M Mirzazadeh**, MS Hashemi, M Bayram, Retrieval solitons and other wave solutions to kudryashov's equation with generalized anti-cubic nonlinearity and local fractional derivative using an efficient technique, Journal of Optics, 1-9, 2023.

C Ding, Q Zhou, S Xu, H Triki, **M Mirzazadeh**, W Liu, Nonautonomous breather and rogue wave in spinor Bose–Einstein condensates with space-time modulated potentials, Chinese Physics Letters 40 (4), 040501, 2023.

SW Yao, N Ullah, HU Rehman, MS Hashemi, **M Mirzazadeh**, M Inc, Dynamics on novel wave structures of non-linear Schrödinger equation via extended hyperbolic function method, Results in Physics 48, 106448, 2023.

H Triki, **M Mirzazadeh**, HM Ahmed, I Samir, MS Hashemi, Higher-order Sasa–Satsuma equation: Nucci's reduction and soliton solutions, The European Physical Journal Plus 138 (5), 1-10, 2023.

M Mirzazadeh, A Sharif, MS Hashemi, A Akgül, SM El Din, Optical solitons with an extended $(3+1)$ -dimensional nonlinear conformable Schrödinger equation including cubic–quintic nonlinearity, Results in Physics 49, 106521, 2023.

I Iqbal, HU Rehman, **M Mirzazadeh**, MS Hashemi, Retrieval of optical solitons for nonlinear models with Kudryashov's quintuple power law and dual-form nonlocal nonlinearity, Optical and Quantum Electronics 55 (7), 588, 2023.

M Partohaghighi, MS Hashemi, **M Mirzazadeh**, SM El Din, Numerical method for fractional Advection–Dispersion equation using shifted Vieta–Lucas polynomials, Results in Physics 52, 106756, 2023.

MS Hashemi, **M Mirzazadeh**, H Ahmad, A reduction technique to solve the $(2+1)$ -dimensional KdV equations with time local fractional derivatives, Optical and Quantum Electronics 55 (8), 721, 2023.

WB Rabie, HM Ahmed, **M Mirzazadeh**, A Akbulut, MS Hashemi, Investigation of solitons and conservation laws in an inhomogeneous optical fiber through a generalized derivative nonlinear Schrödinger equation with quintic nonlinearity, Optical and Quantum Electronics 55 (9), 825, 2023.

AH Arnous, **M. Mirzazadeh**, A Biswas, Y Yıldırım, H Triki, A Asiri, A wide spectrum of optical solitons for the dispersive concatenation model, *Journal of Optics*, 1-27, 2023.

MS Hashemi, **M. Mirzazadeh**, M Bayram, SM El Din, Numerical approximation of the Cauchy non-homogeneous time-fractional diffusion-wave equation with Caputo derivative using shifted Chebyshev polynomials, *Alexandria Engineering Journal* 81, 118-129, 2023.

MS Hashemi, M Mirzazadeh, D Baleanu, Innovative Method for Computing Approximate Solutions of Non-Homogeneous Wave Equations with Generalized Fractional Derivatives, *Contemporary Mathematics*, 1026-1047, 2023.

Selected papers, 2022

K. Hosseini, K. Sadri, F. Rabiei, **M. Mirzazadeh**, The $(2+1)$ -dimensional potential Kadomtsev–Petviashvili equation: Its solitons and complexiton, *Partial Differential Equations in Applied Mathematics*, 5, 100316, 2022.

K. Hosseini, K. Sadri, **M. Mirzazadeh**, S. Salahshour, C. Park, J.R. Lee, The guava model involving the conformable derivative and its mathematical analysis, *Fractals*, Accepted.

A.H. Arnous, **M. Mirzazadeh**, A. Akbulut, L. Akinyemi, Optical solutions and conservation laws of the Chen–Lee–Liu equation with Kudryashov’s refractive index via two integrable techniques, *Waves in Random and Complex Media*, Accepted.

L. Akinyemi, **M. Mirzazadeh**, K. Hosseini, Solitons and other solutions of perturbed nonlinear Biswas–Milovic equation with Kudryashov’s law of refractive index, *Nonlinear Analysis; Modelling and Control*, 1-17, 5, 2022.

A.H. Arnous, **M. Mirzazadeh**, L. Akinyemi, A. Akbulut, New solitary waves and exact solutions for the fifth-order nonlinear wave equation using two integration techniques, *Journal of Ocean Engineering and Science*, Accepted.

L. Akinyemi, **M. Mirzazadeh**, S. Amin Badri, K. Hosseini, Dynamical solitons for the perturbed Biswas–Milovic equation with Kudryashov’s law of refractive index using the first integral method, *Journal of Modern Optics* 69 (3), 172-182, 2022.

K. Hosseini, M. Matinfar, **M. Mirzazadeh**, Optical solitons and other solutions of the $(2+1)$ -dimensional Kundu–Mukherjee–Naskar equation, *Journal of New Researches in Mathematics* 7 (33), 59-68, 2022.

Selected papers, 2021

S.W. Yao, L. Akinyemi, **M. Mirzazadeh**, M. Inc, K. Hosseini, M. Şenol, Dynamics of optical solitons in higher-order Sasa–Satsuma equation, *Results in Physics* 30, 104825, 2021.

A Yusuf, TA Sulaiman, **M. Mirzazadeh**, K Hosseini, M-truncated optical solitons to a nonlinear Schrödinger equation describing the pulse propagation through a two-mode optical fiber, *Optical and Quantum Electronics*, 53 (10), 1-17, 2021.

A. Zafar, M. Raheel, M. Asif, K. Hosseini, **M. Mirzazadeh**, L. Akinyemi, Some novel integration techniques to explore the conformable M-fractional Schrödinger-Hirota equation, *Journal of Ocean Engineering and Science*, Accepted.

K. Hosseini, M. Ilie, **M. Mirzazadeh**, A. Yusuf, T.A. Sulaiman, D. Baleanu, An effective computational method to deal with a time-fractional nonlinear water wave equation in the Caputo sense, *Mathematics and Computers in Simulation* 187, 248-260, 2021.

M. Mirzazadeh, L. Akinyemi, M. Şenol, K. Hosseini, A variety of solitons to the sixth-order dispersive $(3+1)$ -dimensional nonlinear time-fractional Schrödinger equation with cubic-quintic-septic nonlinearities, *Optik*, 241, 166318, 2021.

K. Sadri, K. Hosseini, **M. Mirzazadeh**, A. Ahmadian, S. Salahshour, J. Singh, Bivariate Jacobi polynomials for solving Volterra partial integro-differential equations with the weakly singular kernel, *Mathematical Methods in the Applied Sciences*, 1-22, 2021.

K. Hosseini, **M. Mirzazadeh**, D. Baleanu, N. Raza, C. Park, A. Ahmadian, The generalized complex Ginzburg–Landau model and its dark and bright soliton solutions, *The European Physical Journal Plus* 136 (7), 1-12, 2021.

B. Fathi-Vajargah, M. Mirzazadeh, S. Ghasemalipour, An efficient Monte Carlo simulation for new uncertain Heston–CIR hybrid model, *Soft Computing* 25 (13), 8539-8547, 2021.

K. Hosseini, K. Sadri, **M. Mirzazadeh**, A. Ahmadian, Y.M. Chu, S. Salahshour, Reliable methods to look for analytical and numerical solutions of a nonlinear differential equation arising in heat transfer with the conformable derivative, *Mathematical Methods in the Applied Sciences*, Accepted.

K. Hosseini, M. Ilie, **M. Mirzazadeh**, D. Baleanu, An analytic study on the approximate solution of a nonlinear time-fractional Cauchy reaction–diffusion equation with the Mittag–Leffler law, *Mathematical Methods in the Applied Sciences* 44 (8), 6247-6258, 2021.

K. Hosseini, K. Sadri, **M. Mirzazadeh**, Y.M. Chu, A. Ahmadian, B.A. Pansera, A high-order nonlinear Schrödinger equation with the weak non-local nonlinearity and its optical solitons, *Results in Physics* 23, 104035, 2021.

S.A. Badri, A. Daghibandan, Z. Aghabeiginiyay Fatalaki, **M. Mirzazadeh**, Flow shop scheduling under Time-Of-Use electricity tariffs using fuzzy multi-objective linear programming approach, *Journal of Mathematical Modeling* 9 (2), 215-227, 2021.

K. Hosseini, S. Salahshour, **M. Mirzazadeh**, A. Ahmadian, D. Baleanu, The $(2+1)$ -dimensional Heisenberg ferromagnetic spin chain equation: its solitons and Jacobi elliptic function solutions, *The European Physical Journal Plus* 136 (2), 1-9, 2021.

K. Hosseini, M. Matinfar, **M. Mirzazadeh**, Soliton solutions of high-order nonlinear Schrödinger equations with different laws of nonlinearities, *Regular and Chaotic Dynamics* 26 (1), 105-112, 2021.

Selected papers, 2020

K. Hosseini, **M. Mirzazadeh**, Soliton and other solutions to the $(1+2)$ -dimensional chiral nonlinear Schrödinger equation, *Communications in Theoretical Physics*, 72 (12), 125008, 2020.

K. Hosseini, **M. Mirzazadeh**, J.F. Gómez-Aguilar, Soliton solutions of the Sasa–Satsuma equation in the monomode optical fibers including the beta-derivatives, *Optik*, 224, 165425, 2020.

K Hosseini, M Ilie, **M. Mirzazadeh**, D Baleanu, A detailed study on a new $(2+1)$ -dimensional mKdV equation involving the Caputo–Fabrizio time-fractional derivative, *Advances in Difference Equations*, 2020 (1), 1-13, 2020.

K. Hosseini, A.R. Seadawy, **M. Mirzazadeh**, M. Eslami, S. Radmehr, Multiwave, multicomplexiton, and positive multicomplexiton solutions to a $(3+1)$ -dimensional generalized breaking soliton equation, *Alexandria Engineering Journal*, 59 (5), 3473-3479, 2020.

K. Hosseini, **M. Mirzazadeh**, M Ilie, JF Gómez-Aguilar, Biswas–Arshed equation with the beta time derivative: optical solitons and other solutions, *Optik*, 217, 164801, 2020.

K. Hosseini, M. Samavat, **M. Mirzazadeh**, W.X. Ma, Z. Hammouch, A New -dimensional Hirota Bilinear Equation: Its Bäcklund Transformation and Rational-type Solutions, *Regular and Chaotic Dynamics*, 25 (4), 383-391, 2020

K. Hosseini, W.X. Ma, R. Ansari, **M. Mirzazadeh**, R. Pouyanmehr, F. Samadani, Evolutionary behavior of rational wave solutions to the $(4+1)$ -dimensional Boiti–Leon–Manna–Pempinelli equation, *Physica Scripta*, 95 (6), 065208, 2020.

K. Hosseini, **M. Mirzazadeh**, J. Vahidi, R. Asghari, Optical wave structures to the Fokas–Lenells equation, *Optik*, 207, 164450, 2020.

Y. Yıldırım, **M. Mirzazadeh**, Optical pulses with Kundu-Mukherjee-Naskar model in fiber communication systems, *Chinese Journal of Physics*, 64, 183-193, 2020.

K. Hosseini, **M. Mirzazadeh**, M. Ilie, S. Radmehr, Dynamics of optical solitons in the perturbed Gerdjikov–Ivanov equation, *Optik*, 206, 164350, 2020.

M.S. Osman, D. Baleanu, A.R. Adem, K. Hosseini, **M. Mirzazadeh**, M. Eslami, Double-wave solutions and Lie symmetry analysis to the $(2+1)$ -dimensional coupled Burgers equations, *Chinese Journal of Physics*, 63, 122-129, 2020.

K. Hosseini, **M. Mirzazadeh**, M. Aligoli, M. Eslami, J.G. Liu, Rational wave solutions to a generalized $(2+1)$ -dimensional Hirota bilinear equation, *Mathematical Modelling of Natural Phenomena*, 15, 61, 2020.

Selected papers, 2019

K. Hosseini, M. Aligoli, **M. Mirzazadeh**, M. Eslami, J.F. Gómez-Aguilar, Dynamics of rational solutions in a new generalized Kadomtsev–Petviashvili equation, *Modern Physics Letters B*, 33 (35), 1950437, 2019.

M. Kaucic, M. Moradi, **M. Mirzazadeh**, Portfolio optimization by improved NSGA-II and SPEA 2 based on different risk measures, *Financial Innovation*, 5 (1), 1-28, 2019.

K. Hosseini, **M. Mirzazadeh**, Q. Zhou, Y. Liu, M. Moradi, Analytic study on chirped optical solitons in nonlinear metamaterials with higher order effects, *Laser Physics*, 29 (9), 095402, 2019.

K. Hosseini, R. Ansari, F. Samadani, A. Zabihi, A. Shafaroodi, **M. Mirzazadeh**, High-order dispersive cubic-quintic Schrödinger equation and its exact solutions, *Acta Phys. Pol. A*, 136 (1), 203-207, 2019.

A.R. Adem, **M. Mirzazadeh**, Q. Zhou, K. Hosseini, Multiple soliton solutions of the Sawada-Kotera equation with a nonvanishing boundary condition and the perturbed Korteweg de Vries equation by using the multiple exp-function method, *Advances in Mathematical Physics*, 2019, 2019.

W. Liu, Y. Zhang, Z. Luan, Q. Zhou, **M. Mirzazadeh**, M. Ekici, A. Biswas, Dromion-like soliton interactions for nonlinear Schrödinger equation with variable coefficients in inhomogeneous optical fibers, *Nonlinear Dynamics*, 96 (1), 729-736, 2019.

B. Li, J. Zhao, A. Pan, **M. Mirzazadeh**, M. Ekici, Q. Zhou, W. Liu, Stable propagation of optical solitons in fiber lasers by using symbolic computation, *Optik*, 178, 142-145, 2019.

C. Yang, Q. Zhou, H. Triki, **M. Mirzazadeh**, M. Ekici, W.J. Liu, A. Biswas, Bright soliton interactions in a $(2+1)$ -dimensional fourth-order variable-coefficient nonlinear Schrödinger equation for the Heisenberg ferromagnetic spin chain, *Nonlinear Dynamics*, 95 (2), 983-994, 2019.

J.G. Liu, M. Eslami, H. Rezazadeh, **M. Mirzazadeh**, Rational solutions and lump solutions to a non-isospectral and generalized variable-coefficient Kadomtsev–Petviashvili equation, *Nonlinear Dynamics*, 95 (2), 1027-1033, 2019.

W. Liu, Y. Zhang, H. Triki, **M. Mirzazadeh**, M. Ekici, Q. Zhou, A. Biswas, M. Belic, Interaction properties of solitonics in inhomogeneous optical fibers, *Nonlinear Dynamics*, 95 (1), 557-563, 2019.

S. Wang, G. Ma, X. Zhang, **M. Mirzazadeh**, M. Ekici, Q. Zhou, W. Liu, Study on periodic interactions of optical solitons in dispersive optical fibers, *Romanian Reports in Physics*, 71, 402, 2019.

X. Liu, H. Triki, Q. Zhou, **M. Mirzazadeh**, W. Liu, A. Biswas, M. Belic, Generation and control of multiple solitons under the influence of parameters, *Nonlinear Dynamics*, 95 (1), 143-150, 2019.

W. Yu, Q. Zhou, **M. Mirzazadeh**, W. Liu, A. Biswas, Phase shift, amplification, oscillation and attenuation of solitons in nonlinear optics, *Journal of advanced research*, 15, 69-76, 2019.

Selected papers, 2018

Q. Zhou, D. Kumar, **M. Mirzazadeh**, M. Eslami, H. Rezazadeh, Optical soliton in nonlocal nonlinear medium with cubic-quintic nonlinearities and spatio-temporal dispersion, *Acta Phys. Pol. A*, 134, 1204-1210, 2018.

H. Rezazadeh, H. Tariq, M. Eslami, **M. Mirzazadeh**, Q. Zhou, New exact solutions of nonlinear conformable time-fractional Φ -4 equation, *Chinese Journal of Physics* 56 (6), 2805-2816, 2018.

Y. Zhang, C. Yang, W. Yu, **M. Mirzazadeh**, Q. Zhou, W. Liu, Interactions of vector anti-dark solitons for the coupled nonlinear Schrödinger equation in inhomogeneous fibers, *Nonlinear Dynamics*, 94 (2), 1351-1360, 2018.

M.S. Osman, A. Korkmaz, H. Rezazadeh, **M. Mirzazadeh**, M. Eslami, Q. Zhou, The unified method for conformable time fractional Schrödinger equation with perturbation terms, *Chinese Journal of Physics*, 56 (5), 2500-2506, 2018.

Q. Zhou, A. Pan, S.M. Mirhosseini-Alizamini, **M. Mirzazadeh**, W. Liu, A. Biswas, Group analysis and exact soliton solutions to a new $(3+1)$ -dimensional generalized Kadomtsev-Petviashvili equation in fluid mechanics, *Acta Phys Polon A*, 134, 564-569, 2018.

A. Bansal, A. Biswas, M.F. Mahmood, Q. Zhou, **M. Mirzazadeh**, Optical soliton perturbation with Radhakrishnan–Kundu–Lakshmanan equation by Lie group analysis, *Optik*, 163, 137-141, 2018.

A. Biswas, **M. Mirzazadeh**, H. Triki, Q. Zhou, M.Z. Ullah, S.P. Moshokoa, Perturbed resonant 1-soliton solution with anti-cubic nonlinearity by Riccati-Bernoulli sub-ODE method, *Optik*, 156, 346-350, 2018.

M. Mirzazadeh, Y. Yıldırım, E. Yaşar, H. Triki, Q. Zhou, S.P. Moshokoa, Optical solitons and conservation law of Kundu–Eckhaus equation, *Optik*, 154, 551-557, 2018.

M.S. Osman, H. Rezazadeh, M. Eslami, A. Neirameh, **M. Mirzazadeh**, Analytical study of solitons to benjamin-bona-mahony-peregrine equation with power law nonlinearity by using three methods, *University Politehnica of Bucharest Scientific Bulletin-Series A-Applied*, 80, 267-278, 2018.

Q. Zhou, A.H. Arnous, S.P. Moshokoa, M.Z. Ullah, M. Ekici, **M. Mirzazadeh**, Optical solitons in DWDM system with modified simple equation method, *J. Optoelectron. Adv. Mater.* 20 (1–2), 46-51, 2018.

Selected papers, 2017

M.I. Mustafayev, **M. Mirzazadeh**, M. Ekici, On Boundary Control Problem of Distributed Parameter Systems, *International Journal of Applied and Computational Mathematics*, 3 (1), 961-969, 2017.

Q. Zhou, A. Sonmezoglu, M. Ekici, **M. Mirzazadeh**, Optical solitons of some fractional differential equations in nonlinear optics, *Journal of Modern Optics*, 64 (21), 2345-2349, 2017.

Q. Zhou, M. Ekici, **M. Mirzazadeh**, A. Sonmezoglu, The investigation of soliton solutions of the coupled sine-Gordon equation in nonlinear optics, *Journal of Modern Optics*, 64 (16), 1677-1682, 2017.

M. Mirzazadeh, R.T. Alqahtani, A. Biswas, Optical soliton perturbation with quadratic-cubic nonlinearity by Riccati-Bernoulli sub-ODE method and Kudryashov's scheme, *Optik*, 145, 74-78, 2017.

M. Mirzazadeh, M. Ekici, A. Sonmezoglu, On the solutions of the space and time fractional Benjamin–Bona–Mahony equation, *Iranian Journal of Science and Technology, Transactions A: Science*, 41 ,819-836, 2017.

M. Mirzazadeh, M. Ekici, M. Eslami, E.V. Krishnan, S. Kumar, A. Biswas, Solitons and other solutions to Wu–Zhang system, *Nonlinear Analysis: Modelling and Control*, 22 (4), 441-458, 2017.

H. Triki, T. Ak, M. Ekici, A. Sonmezoglu, **M. Mirzazadeh**, A.H. Kara, T. Aydemir, Some new exact wave solutions and conservation laws of potential Korteweg–de Vries equation, *Nonlinear Dynamics*, 89 (1), 501-508, 2017.

A.H. Arnous, M.Z. Ullah, M. Asma, S.P. Moshokoa, **M. Mirzazadeh**, A. Biswas, Nematicons in liquid crystals by modified simple equation method, *Nonlinear Dynamics*, 88 (4), 2863-2872, 2017.

A.J.M. Jawad, **M. Mirzazadeh**, Q. Zhou, A. Biswas, Optical solitons with anti-cubic nonlinearity using three integration schemes, *Superlattices and Microstructures*, 105, 1-10, 2017.

A. Sonmezoglu, M. Yao, M. Ekici, **M. Mirzazadeh**, Q. Zhou, Explicit solitons in the parabolic law nonlinear negative-index materials, *Nonlinear Dynamics* 88 (1), 595-607, 2017.

Z. Ayati, K. Hosseini, M. Mirzazadeh, Application of Kudryashov and functional variable methods to the strain wave equation in microstructured solids, *Nonlinear Engineering*, 6 (1), 25-29, 2017.

N. Taghizadeh, Q. Zhou, M. Ekici, **M. Mirzazadeh**, Soliton solutions for Davydov solitons in α -helix proteins, *Superlattices and Microstructures*, 102, 323-341, 2017.

M. Mirzazadeh, M. Ekici, Q. Zhou, A. Sonmezoglu, Analytical study of solitons in the fiber waveguide with power law nonlinearity, *Superlattices and Microstructures*, 101, 493-506, 2017.

Selected papers, 2016

Q. Zhou, M. Ekici, A. Sonmezoglu, **M. Mirzazadeh**, M. Eslami, Analytical study of solitons to Biswas–Milovic model in nonlinear optics, *Journal of modern optics*, 63 (21), 2131-2137, 2016.

A.H. Arnous, **M. Mirzazadeh**, Application of the generalized Kudryashov method to the Eckhaus equation, *Nonlinear Analysis: Modelling and Control*, 21 (5), 577-586, 2016.

M. Ekici, **M. Mirzazadeh**, A. Sonmezoglu, Q. Zhou, S.P. Moshokoa, A. Biswas, Dark and singular optical solitons with Kundu–Eckhaus equation by extended trial equation method and extended G'/G-expansion scheme, *Optik*, 127 (22), 10490-10497, 2016.

M. Mirzazadeh, M. Ekici, A. Sonmezoglu, M. Eslami, Q. Zhou, A.H. Kara, Optical solitons with complex Ginzburg–Landau equation, *Nonlinear Dynamics*, 85 (3), 1979-2016, 2016.

M. Mirzazadeh, Z. Ayati, New homotopy perturbation method for system of Burgers equations, *Alexandria Engineering Journal* 55 (2), 1619-1624, 2016.

Q. Zhou, M. Ekici, A. Sonmezoglu, **M. Mirzazadeh**, M. Eslami, Optical solitons with Biswas–Milovic equation by extended trial equation method, *Nonlinear Dynamics*, 84 (4), 1883-1900, 2016.

Q. Zhou, **M. Mirzazadeh**, E. Zerrad, A. Biswas, M. Belic, Bright, dark, and singular solitons in optical fibers with spatio-temporal dispersion and spatially dependent coefficients, *Journal of Modern optics*, 63 (10), 950-954, 2016.

Q. Zhou, Y. Zhong, **M. Mirzazadeh**, A.H. Bhrawy, E. Zerrad, A. Biswas, Thirring combo-solitons with cubic nonlinearity and spatio-temporal dispersion, *Waves in random and complex media* 26 (2), 204-210, 2016.