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PEERMANENT ADDRESS

Department of Mathematics, Faculty of Science,
Cairo University, 12613, Giza, Egypt.

PERSONAL DETAILS Gender: Male

Date of Birth: 17/3/1976

Marital Status: Married.

Nationality: Egyptian

EDUCATION

9/1993 – 6/1997	Undergraduate studies in Math Department, Faculty of Science, Cairo University, Egypt. Awarded the degree of B. Sc (General) In Mathematics– Pure Mathematics "very good"
1/1998-3/1999	Military service: Air defense surveillance officer
3/1999-10/2000	Pre-master of pure mathematics (very good), Math. Department, Faculty of Science, Cairo University. Courses (Topology, Differential Geometry, Numerical Analysis, Integral equations).
8/2006	M. Sc. Thesis Title: <i>Effects Of Current Variations On Wave Fronts Near Steady States In An Excitable Medium.</i> Department: Mathematic Department Institution: Cairo university-Faculty of Science
4/2014	Ph. D. Thesis Title: <i>An Extended Unified Method to Exact Solutions of Evolution Equations with Variable Coefficients and Applications.</i> Department: Mathematic Department Institution: Cairo university-Faculty of Science

MEMBERSHIP

- Member of the Egyptian Syndicate of Scientific Professions
- Member of the Egyptian Mathematical Society

PROFESSIONAL EXPERIENCE

1999-2006	Teaching Assistant, Mathematics Department, Faculty of Science, Cairo University Overview: Teaching <ul style="list-style-type: none"> • Calculus I, II, III and IV, • Differential equation, • Partial Differential equation, • Special Functions, • Linear Algebra, • Discrete Math, • Mechanics I, II, III, • Signals, • Probability, • Complex Analysis.
2006-2014	Assistant Lecturer, Department of Mathematics, Faculty of Science, Cairo University.
2014 -2018	Assistant Professor, Department of Mathematics, Faculty of Science, Cairo University, Egypt.
2020 till now	Associate Professor, Department of Mathematics, Faculty of Science, Cairo University, Egypt.
Adjunct Faculty	<ul style="list-style-type: none"> • Department of Mathematics (Basic Sciences). German University in Cairo (GUC). (2014-2018, 2019) • Department of Basic Sciences. Arab Academy for Science, Technology and Maritime Transport. (2014-2017) • Faculty of Pharmacy. Ahram Canadian University (ACU). (2014)

TRAINING AT (FLDC) FACULTY AND LEADERSHIP DEVELOPMENT CENTER

1. Research Ethics.
2. Student evaluation.
3. Communication skills.
4. The credit hour systems.
5. Managing research teams.
6. Effective presentation skills.
7. Quality standards in teaching.
8. Competing for research funds.
9. Use of technology in teaching.
10. Modern trends in teaching
11. Time and conference management.
12. International publishing of research papers.
13. Conference organization
14. Creative thinking
15. Meetings & Managing time
16. Strategic planning
17. The credit hour systems
18. Managing research teams

COMPUTER SKILLS Office, Latex, Lyx, Scientific and Mathematica

RESEARCH INTERESTS

Computational and Applied Mathematics – Applied and Theoretical Physic – Solitons–Nonlinear Optics– Partial differential equations – Nonlinear differential equations

M. SC. Students

2014-2018

Magdy Ahmed Mohamed Abd El Aziz El Mahdy

Towards a Unified Approach for Self-Similar Wave Solutions to Evolution Equations with Applications
Department of Mathematics, Faculty of Science, Cairo University, Egypt

LIST OF PUBLICATIONS

Scopus Author ID: 55646409100

Orcid number: 000-0002-5783-0940

- [1] FS Bayones, KS Nisar, KA Khan, N Raza, NS Hussien, MS Osman, KM Abualnaja, Magneto-hydrodynamics (MHD) flow analysis with mixed convection moves through a stretching surface, AIP Advances. 2021. doi: 10.1063/5.0047213
- [2] B Cuahutenango-Barro, MA Taneco-Hernández, JF Gómez-Aguilar, MS Osman, H Jahanshahi, AA Aly, Analytical solutions of fractional wave equation with memory effect using the fractional derivative with exponential kernel, Results in Physics (Accepted)
- [3] MA Chowdhury, MM Miah, HMS Ali, YM Chu, MS Osman, An investigation to the nonlinear (2+ 1)-dimensional soliton equation for discovering explicit and periodic wave solutions, Results in Physics, 23, 104013. 2021
- [4] S Malik, H Almusawa, S Kumar, AM Wazwaz, MS Osman, A (2+ 1)-dimensional Kadomtsev-Petviashvili equation with competing dispersion effect: Painlevé analysis, dynamical behavior and invariant solutions, Results in Physics, 23, 104043. 2021
- [5] HK Barman, MA Akbar, MS Osman, KS Nisar, M Zakarya, AH Abdel-Aty, H Eleuch, Solutions to the Konopelchenko-Dubrovsky equation and the Landau-Ginzburg-Higgs equation via the generalized Kudryashov technique, Results in Physics, 24, 104092. 2021
- [6] PR Kundu, H Almusawa, MRA Fahim, ME Islam, MA Akbar, MS Osman, Linear and nonlinear effects analysis on wave profiles in optics and quantum physics, Results in Physics, 23, 103995. 2021
- [7] S Dhawan, JAT Machado, DW Brzeziński, MS Osman, A Chebyshev Wavelet Collocation Method for Some Types of Differential Problems, Symmetry, 13 (4), 536. 2021
- [8] M Yang, MS Osman, JG Liu, Abundant lump-type solutions for the extended (3+ 1)-dimensional Jimbo–Miwa equation, Results in Physics, 23, 104009, 2021
- [9] S Kumar, B Kour, SW Yao, M Inc, MS Osman, Invariance Analysis, Exact Solution and Conservation Laws of (2+ 1) Dim Fractional Kadomtsev-Petviashvili (KP) System, Symmetry, 13 (3), 477. 2021
- [10] MN Alam, E Bonyah, M Fayz-Al-Asad, MS Osman, KM Abualnaja, Stable and functional solutions of the Klein-Fock-Gordon equation with nonlinear physical phenomena, Physica Scripta, 96 (5), 055207. 2021
- [11] WX Ma, MS Osman, S Arshed, N Raza, HM Srivastava, Different analytical approaches for finding novel optical solitons in the single-mode fibers, Chinese Journal of Physics. 2021. <https://doi.org/10.1016/j.cjph.2021.01.015>
- [12] HK Barman, R Roy, F Mahmud, MA Akbar, MS Osman, Harmonizing wave solutions to the Fokas-Lenells model through the generalized Kudryashov method, Optik, 229, 166294. 2021
- [13] Md Nur Alam, MS Osman, New structures for closed-form wave solutions for the dynamical equations model related to the ion sound and Langmuir waves, Communications in theoretical Physics, 73 (3), 035001. 2021
- [14] MS Osman, JAT Machado, D Baleanu, A Zafar, M Raheel, On distinctive solitons type solutions for some important nonlinear Schrödinger equations, Optical and Quantum Electronics, 35 (2), 70. 2021.
- [15] M Tahir, S Kumar, H Rehman, M Ramzan, A Hasan, MS Osman, Exact traveling wave solutions of Chaffee–Infante equation in (2+ 1)-dimensions and dimensionless Zakharov equation. Mathematical Methods in the Applied Sciences, 44 (2), 1500-1513. 2021

- [16] MA Kayum, S Ara, MS Osman, MA Akbar, KA Gepreel, Onset of the broad-ranging general stable soliton solutions of nonlinear equations in physics and gas dynamics. *Results in Physics*, 20, 103762. 2021
- [17] MA Akbar, MA Kayum, MS Osman, AH Abdel-Aty, H Eleuch, Analysis of voltage and current flow of electrical transmission lines through mZK equation. *Results in Physics*, 20, 103696. 2021
- [18] KS Nisar, OA İlhan, ST Abdulazeez, J Manafian, SA Mohammed, MS Osman, Novel multiple soliton solutions for some nonlinear PDEs via multiple Exp-function method. *Results in Physics*, 20, 103769. 2021
- [19] S Kumar, R Kumar, MS Osman, B Samet, A wavelet based numerical scheme for fractional order SEIR epidemic of measles by using Genocchi polynomials. *Numerical Methods for Partial Differential Equations*, 37 (2), 1250-1268. 2021
- [20] KK Ali, MS Osman, HM Baskonus, NS Elazab, E İlhan, Analytical and numerical study of the HIV-1 infection of CD4+ T-cells conformable fractional mathematical model that causes acquired immunodeficiency syndrome with the effect of antiviral drug therapy. *Mathematical Methods in the Applied Sciences*. 2020. <https://doi.org/10.1002/mma.7022>
- [21] M Abdul Kayum, M Ali Akbar, MS Osman, Stable soliton solutions to the shallow water waves and ion-acoustic waves in a plasma. *Waves in Random and Complex Media*, 2020. <https://doi.org/10.1080/17455030.2020.1831711>
- [22] C Park, RI Nuruddeen, KK Ali, L Muhammad, MS Osman, D Baleanu, Novel hyperbolic and exponential ansatz methods to the fractional fifth-order Korteweg–de Vries equations. *Advances in Difference Equations*, 2020, 627.2020
- [23] D Kumar, C Park, N Tamanna, GC Paul, MS Osman, Dynamics of two-mode Sawada-Kotera equation: Mathematical and graphical analysis of its dual-wave solutions. *Results in Physics*, 19, 103581. 2020
- [24] JG Liu, MS Osman, WH Zhu, L Zhou, D Baleanu, The general bilinear techniques for studying the propagation of mixed-type periodic and lump-type solutions in a homogenous-dispersive medium. *AIP Advances*, 10(10), 105325. 2020
- [25] S Kumar, A Kumar, B Samet, JF Gómez-Aguilar, MS Osman, A chaos study of tumor and effector cells in fractional tumor-immune model for cancer treatment. *Chaos, Solitons & Fractals*. 141, 110321. 2020
- [26] S Kumar, KK Ali, MA Abd El Salam, EMH Mohamed, B Samet, MS Osman, Numerical solution for generalized non-linear fractional integro-differential equations with linear functional arguments using Chebyshev series. *Advances in Difference Equations*. 2020, 494. 2020
- [27] N Raza, MS Osman, AH Abdel-Aty, S Abdel-Khalek, HR Besbes, Optical solitons of space-time fractional Fokas-Lenells equation with two versatile integration architectures, *Advances in Difference Equations*. 2020, 517. 2020
- [28] T Ak, MS Osman, AH Kara, Polynomial and rational wave solutions of Kudryashov-Sinelshchikov equation and numerical simulations for its dynamic motions. *Journal of Applied Analysis and Computation*. 10 (5), 2145-2162. 2020
- [29] MS Osman, KK Ali., JF Gómez-Aguilar, A variety of new optical soliton solutions related to the nonlinear Schrödinger equation with time-dependent coefficients. *Optik*, 222, 165389. 2020
- [30] HF Ismael, H Bulut, C Park, MS Osman, M-Lump, N-soliton solutions, and the collision phenomena for the (2+ 1)-dimensional Date-Jimbo-Kashiwara-Miwa equation. *Results in Physics*, 25, 103329. 2020
- [31] MS Osman, A Zafar, KK Ali, W Razzaq, Novel optical solitons to the Perturbed Gerdjikov-Ivanov equation with truncated M-fractional conformable derivative. *Optik* 222, 165418. 2020
- [32] KK Ali, C Cattani, JF Gómez-Aguilar, D Baleanu, MS Osman, Analytical and numerical study of the DNA dynamics arising in oscillator-chain of Peyrard-Bishop model. *Chaos, Solitons & Fractals*, 139, 110089. 2020
- [33] MS Osman, D Baleanu, KU Tariq, M Kaplan, M Younis, ST Rizvi, Different types of progressive wave solutions via the 2D-chiral nonlinear Schrödinger equation. *Frontiers in Physics*, 8, 215. 2020
- [34] MA Kayum, MA Akbar, MS Osman, Competent closed form soliton solutions to the nonlinear transmission and the low-pass electrical transmission lines. *The European Physical Journal Plus*, 135 (7), 575. 2020
- [35] K Hosseini, M Mirzazadeh, MS Osman, M Al Qurashi, D Baleanu, Solitons and Jacobi Elliptic Function Solutions to the Complex Ginzburg–Landau Equation. *Frontiers in Physics*, 8, 225. 2020
- [36] KK Ali, MS Osman, M Abdel-Aty, New optical solitary wave solutions of Fokas-Lenells equation in optical fiber via Sine-Gordon expansion method. *Alexandria Engineering Journal*, 59, 1191-1196. 2020

- [37] D Kumar, M Kaplan, M Haque, MS Osman, D Baleanu, A variety of novel exact solutions for different models with conformable derivative in shallow water. *Frontiers in Physics*, 8, 177. 2020
- [38] OA Arqub, MS Osman, AH Abdel-Aty, AB Mohamed, S Momani, A Numerical Algorithm for the Solutions of ABC Singular Lane–Emden Type Models Arising in Astrophysics Using Reproducing Kernel Discretization Method. *Mathematics*, 8 (6), 923. 2020
- [39] HM Srivastava, D Baleanu, JA Machado, MS Osman, H Rezazadeh, S Arshed, H Günerhan. Traveling wave solutions to nonlinear directional couplers by modified Kudryashov method. *Physica Scripta*, 95 (7), 075217. 2020
- [40] M Tahir, AU Awan, MS Osman, D Baleanu, MM Alqurashi, Abundant periodic wave solutions for fifth-order Sawada-Kotera equations. *Results in Physics*, 17, 103105. 2020
- [41] JG Liu, WH Zhu, MS Osman, WX Ma, An explicit plethora of different classes of interactive lump solutions for an extension form of 3D-Jimbo–Miwa model. *The European Physical Journal Plus*, 135 (6), 412. 2020
- [42] KK Ali, AM Wazwaz, MS Mehanna, MS Osman, On short-range pulse propagation described by $(2+ 1)$ -dimensional Schrödinger's hyperbolic equation in nonlinear optical fibers. *Physica Scripta*; 95 (7), 075203. 2020
- [43] MS Osman, KK Ali, Optical soliton solutions of perturbing time-fractional nonlinear Schrödinger equations. *Optik*, 209, 164589. 2020
- [44] D Baleanu, MS Osman, A Zubair, N Raza, OA Arqub, WX Ma, Soliton Solutions of a Nonlinear Fractional Sasa-Satsuma Equation in Monomode Optical Fibers. *Applied Mathematics & Information Sciences*, 14(3), 365-374. 2020
- [45] KK Ali, AM Wazwaz, MS Osman, Optical soliton solutions to the generalized nonautonomous nonlinear Schrödinger equations in optical fibers via the sine-Gordon expansion method. *Optik*, 208, 164132. 2020
- [46] C Yue, A Elmoasry, MM Khater, MS Osman, RA Attia, D Lu, NS Elazab, On complex wave structures related to the nonlinear long–short wave interaction system: Analytical and numerical techniques. *AIP Advances*.10 (4), 045212. 2020
- [47] K Hosseini, MS Osman, M Mirzazadeh, F Rabiei. Investigation of different wave structures to the generalized third-order nonlinear Schrödinger equation. *Optik*, 206, 164259. 2020
- [48] Bilge Inan, MS Osman, AK Turgut, Dumitru Baleanu, Analytical and numerical solutions of mathematical biology models: The Newell-Whitehead-Segel and Allen-Cahn equations. *Mathematical Methods in the Applied Sciences*, 43 (5), 2588-2600. 2020
- [49] MS Osman, Mustafa Inc, Jian-Guo Liu, Kamyar Hosseini, Abdullahi Yusuf, Different wave structures and stability analysis for the generalized $(2+1)$ -dimensional Camassa-Holm-Kadomtsev-Petviashvili equation. *Physica Scripta*, 95 (3), 035229. 2020
- [50] MS Osman, KU Tariq, Ahmet Bekir, A. Elmoasry, Nasser S. Elazab, M. Younis, Mahmoud Abdel-Aty, Investigation of soliton solutions with different wave structures to the $(2 + 1)$ -dimensional Heisenberg ferromagnetic spin chain equation. *Communications in theoretical Physics*, 72, 035002. 2020
- [51] MS Osman, D Baleanu, AR Adem, Kamyar 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
- [52] Dianchen Lu, MS Osman, Mostafa MA Khater, RAM Attia, D. Baleanu, Analytical and numerical simulations for the kinetics of phase separation in iron (Fe-Cr-X (X=Mo, Cu)) based on ternary alloys. *Physica A: Statistical Mechanics and its Applications*, 537, 122634. 2020
- [53] JG Liu, MS Osman, WH Zhu, L Zhou, GP Ai, Different complex wave structures described by the Hirota equation with variable coefficients in inhomogeneous optical fibers. *Applied Physics B*. 125, 175. 2019
- [54] V. Senthil Kumar, Hadi Rezazadeh , Mostafa Eslami, Franoosh Izadi, MS Osman, Jacobi Elliptic Function Expansion Method for Solving KdV Equation with Conformable Derivative and Dual-Power Law Nonlinearity. *International Journal of Applied and Computational Mathematics*. 5, 127. 2019
- [55] MS Osman, Dianchen Lu, Mostafa MA Khater, RAM Attia, Complex wave structures for abundant solutions related to the complex Ginzburg-Landau model. *Optik-International Journal for Light and Electron Optics*, 192, 162927. 2019
- [56] D. Lu, K. U. Tariq, MS Osman, D. Baleanu, M. Younis, S. T .R..Rizvi, M. M. A. Khater, New analytical wave structures for the $(3+ 1)$ -dimensional Kadomtsev-Petviashvili and the generalized Boussinesq models and their applications. *Results in Physics*, 14, 102491. 2019
- [57] MS Osman, Abdul-Majid Wazwaz, A general bilinear form to generate different wave structures of solitons for a $(3+1)$ -dimensional Boiti-Leon-Manna-Pempinelli equation. *Mathematical Methods in the Applied Sciences*, 42 (18), 6277-6283. 2019

- [58] MS Osman, New analytical study for water waves described by coupled fractional variant Boussinesq equation in fluid dynamics. *Pramana Journal of Physics*, 93 (2), 26:1-10. 2019
- [59] Behzad Ghanbari, MS Osman, Dumitru Baleanu, Generalized exponential rational function method for extended Zakharov-Kuznetsov equation with conformable derivative. *Modern Physics Letters A*, 34, 1950155. 2019
- [60] MS Osman, Hadi Rezazadeh, Mostafa Eslami, Traveling wave solutions for (3+1) dimensional conformable fractional Zakharov-Kuznetsov equation with power law nonlinearity. *Nonlinear Engineering*, 8(1), 559-567. 2019
- [61] Ahmad Javid, Nauman Raza, MS Osman, Multi-solitons of Thermophoretic Motion Equation Depicting the Wrinkle Propagation in Substrate-Supported Graphene Sheets. *Communications in Theoretical Physics*, 71, 4, 362-366. 2019
- [62] MS Osman, Dianchen Lu, Mostafa MA Khater, A study of optical wave propagation in the nonautonomous Schrödinger-Hirota equation with power-law nonlinearity. *Results in Physics*, 13, 10217. 2019
- [63] Yao Ding, MS Osman, Abdul-Majid Wazwaz, Abundant complex wave solutions for the nonautonomous Fokas-Lenells equation in presence of perturbation terms. *Optik-International Journal for Light and Electron Optics*, 181, 503-513. 2019
- [64] Jian-Guo Liu, MS Osman, Abdul-Majid Wazwaz, A variety of nonautonomous complex wave solutions for the (2+ 1)-dimensional nonlinear Schrödinger equation with variable coefficients in nonlinear optical fibers. *Optik-International Journal for Light and Electron Optics*, 180, 917-923. 2019
- [65] MS Osman, Behzad Ghanbari, J. A. T. Machado, New complex waves in nonlinear optics based on the complex Ginzburg-Landau equation with Kerr law nonlinearity. *The European Physical Journal Plus*, 134:20, 1-10. 2019
- [66] Hadi Rezazadeh, MS Osman et al., Hyperbolic rational solutions to a variety of conformable fractional Boussinesq-Like equations. *Nonlinear Engineering*, 8(1), 224-230. 2019
- [67] Muhammad Nasir Ali , MS Osman, Syed Muhammad Husnine, On the analytical solutions of conformable time-fractional extended Zakharov-Kuznetsov equation through (G'/G^2)-expansion method and the modified Kudryashov method. *SeMA Journal*, 76(1), 15-25. 2019
- [68] MS Osman, One-soliton shaping and inelastic collision between double solitons in the fifth-order variable-coefficient Sawada-Kotera equation. *Nonlinear Dynamics*, 96 (2), 1491-1496. 2019
- [69] MS Osman, et al., ANALYTICAL STUDY OF SOLITONS TO BENJAMIN-BONA-MAHONY-PEREGRINE EQUATION WITH POWER LAW NONLINEARITY BY USING THREE METHODS. *U.P.B. Sci. Bull., Series A*, 180(4), 267-27. 2018
- [70] Abdul-Majid Wazwaz, MS Osman, Analyzing the combined multi-waves polynomial solutions in a Two-Layer-Liquid medium. *Computers & Mathematics with Applications*, 76(1), 267-283. 2018
- [71] MS Osman, J. A. T. Machado, New nonautonomous combined multi-wave solutions for (2+1)-dimensional variable coefficients KdV equation. *Nonlinear Dynamics*, 93(2), 733-740. 2018
- [72] MS Osman et al., The Unified Method for Conformable Time Fractional Schrödinger Equation with Perturbation Terms. *Chinese Journal of Physics*, 56(5), 2500-2506. 2018
- [73] MS Osman, Behzad Ghanbari, New optical solitary wave solutions of Fokas-Lenells equation in presence of perturbation terms by a novel approach. *Optik-International Journal for Light and Electron Optics*, 75, 328-333. 2018
- [74] Kalim U. Tariq, Muhammad Younis, Hadi Rezazadeh, S. T. R. Rizvi, MS Osman, Optical solitons with quadratic-cubic nonlinearity and fractional temporal evolution. *Modern Physics Letters B*, 32, No. 26, 1850317. 2018
- [75] Hadi Rezazadeh, MS Osman et al., Mitigating Internet Bottleneck With Fractional Temporal Evolution Of Optical Solitons Having Quadratic-Cubic Nonlinearity. *Optik-International Journal for Light and Electron Optics*, 164, 84-92. 2018
- [76] MS Osman, JAT Machado, Dumitru Baleanu, On nonautonomous complex wave solutions described by the coupled Schrödinger – Boussinesq equation with variable-coefficients. *Optical and Quantum Electronics*, 50 (73), 1-11. 2018
- [77] MS Osman, JAT Machado, The dynamical behavior of mixed type soliton solutions described by (2+1)-dimensional Bogoyavlensky-Konopelchenko equation with variable coefficients. *Journal of Electromagnetic Waves and Applications*, 32(11), 1457-1464.2018
- [78] MS Osman, HI Abdel Gawad, M. A. ElMahdy, Two-layer-atmospheric blocking in a medium with high nonlinearity and lateral dispersion. *Results in Physics*, 8 (3), 1054-1060. 2018

- [79] MS Osman, Abdul-Majid Wazwaz, An efficient algorithm to construct multi-soliton rational solutions of the $(2+1)$ -dimensional KdV equation with variable coefficients. *Applied Mathematics and Computation*, 321, 282-289. 2018
- [80] MS Osman, On complex wave solutions governed by the 2D Ginzburg–Landau equation with variable coefficients. *Optik-International Journal for Light and Electron Optics*, 156, 169-174. 2018
- [81] MS Osman, On multi-soliton solutions for the $(2+1)$ -dimensional breaking soliton equation with variable coefficients in a graded-index waveguide. *Computers & Mathematics with Applications*, 75 (1), 1-6, 2018
- [82] MS Osman, Analytical study of rational and double-soliton rational solutions governed by the KdV–Sawada–Kotera–Ramani equation with variable coefficients. *Nonlinear Dynamics*, 89 (3), 2283-2289. 2017
- [83] MS Osman, Multiwave solutions of time-fractional $(2+1)$ -dimensional Nizhnik–Novikov–Veselov equations. *Pramana Journal of Physics*, 88 (4), 67:1-9. 2017
- [84] MS Osman, Nonlinear interaction of solitary waves described by multi-rational wave solutions of the $(2+1)$ -dimensional Kadomtsev–Petviashvili equation with variable coefficients. *Nonlinear Dynamics*, 87 (2), 1209-1216. 2017
- [85] MS Osman, Multi-soliton rational solutions for quantum Zakharov–Kuznetsov equation in quantum magnetoplasmas. *Waves in Random and Complex Media* 26 (4), 434-443. 2016
- [86] MS Osman, Multi-soliton rational solutions for some nonlinear evolution equations. *Open Physics* 14 (1), 26-36. 2016
- [87] HI Abdel-Gawad, M Tantawy, MS Osman, Dynamic of DNA's possible impact on its damage. *Mathematical Methods in the Applied Sciences* 39 (2), 168–176. 2016
- [88] MS Osman, HI Abdel-Gawad, Multi-wave solutions of the $(2+1)$ -dimensional Nizhnik–Novikov–Veselov equations with variable coefficients. *The European Physical Journal Plus* 130, 15215-1. 2015
- [89] HI Abdel-Gawad, MS Osman, On shallow water waves in a medium with time-dependent dispersion and nonlinearity coefficients. *Journal of Advanced Research* 6 (4), 593-599. 2015
- [90] MS Osman, HI Abdel-Gawad, Exact Solutions of Evolution Equations with Variable Coefficients LAP Lambert Academic Publishing. 2014
- [91] HI Abdel-Gawad, MS Osman, Exact solutions of the Korteweg–de Vries equation with space and time dependent coefficients by the extended unified method. *Indian Journal of Pure and Applied Mathematics* 45 (1), 1-12. 2014
- [92] HI Abdel-Gawad, MS Osman, On the Variational Approach for Analyzing the Stability of Solutions of Evolution Equations. *KYUNGPOOK Math. J.* 53 (4), 661-680. 2013
- [93] HI Abdel-Gawad, N S. Elazab, MS Osman, Exact solutions of space dependent korteweg–de vries equation by the extended unified method. *Journal of the Physical Society of Japan* 82 (4). 2013
- [94] HI Abdel-Gawad, MS Osman, NS Elazab, Exact Solutions Of Space and Time Dependent Burgers Equation by the Extended Unified Method. *International Journal of Basic & Applied Sciences IJBAS-IJENS* 13 (01), 65-68. 2013
- [95] HI Abdel-Gawad, MS Osman, NS Elazab, Exact Solutions of Space–Time Dependent Korteweg–de Vries Equation by The Extended Unified Method. *Life Sci J* 10 (2), 2598-2604. 2013
- [96] HI Abdel-Gawad, MS Osman, NS Elazab, Exact Solutions of Time Dependent Korteweg–de Vries Equation by The Extended Unified Method. *International Journal of Soft Computing and Engineering (IJSCE)* 3 (1), 59-63. 2013

SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=55646409100>

GOOGLE SCHOLAR: <http://scholar.google.com.eg/citations?user=CXZMkXkAAAAJ&hl=en>

ACADAMIC ACTIVITIES

Referee for the following scientific journals (more than 64 journals):

- Nonlinear Dynamics
- Applied Mathematics and Computations
- Applied Mathematical Modeling
- Communications in Nonlinear Science and Numerical Simulation
- Physics Letters A
- Applied Mathematics and Computations
- PLOS ONE
- The European Physical Journal Plus
- Computers & Mathematics with applications
- Waves in Random and Complex Media
- Fractals
- Wave Motion
- Physica A: Statistical Mechanics and its Applications
- Chaos, Solitons & Fractals
- Applied Physics B
- Physica Scripta
- Advances in Difference Equations
- Journal of Magnetism and Magnetic Materials
- Mathematical Methods in the Applied Sciences
- Chaos: An Interdisciplinary Journal of Nonlinear Science
- Optik
- Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences
- Numerical Methods for Partial Differential Equations
- International Journal of Computational Methods
- Brazilian Journal of Physics
- Analysis and Mathematical Physics
- Indian Journal of Physics
- Communications in Theoretical Physics
- Thermal Science
- Alexandria Engineering Journal
- Computational and Applied Mathematics
- Optical and Quantum Electronics
- AIP Advances
- International Journal of Nonlinear Sciences and Numerical Simulation
- Modern Physics Letter A.
- Modern Physics Letter B.
- International Journal of Modern Physics C
- Pramana-Journal of Physics
- International Journal of Modern Physics B
- Journal of Applied Analysis and Computation
- Scientia Iranica
- Journal of Advanced Research (JARE)
- Results in Physics
- Chinese Journal of Physics
- Optoelectronics and Advanced Materials – Rapid Communications (OAM-RC)
- Journal of Applied Nonlinear Dynamics
- Journal of Applied and Computational Mechanics
- Mathematics
- Open Physics
- AIMS Mathematics – Open Access Journals – AIMS Press
- Nonlinear Engineering. Modeling and Application

- International Journal of Applied and Computational Mathematics
- Applied Mathematics & Information Sciences
- New Trends in Mathematical Sciences
- Journal of Applied Mathematics and Computational Mechanics
- Journal of Physics Communications
- Journal of Ocean Engineering and Science
- Applied Mathematics and Nonlinear Sciences
- Journal of Taibah University for Science
- Ain Shams Engineering Journal
- Heliyon
- Applied Mathematics & Information Sciences Letters
- Advances in Science, Technology and Engineering Systems Journal (ASTESJ)
- Journal of Advanced Physics
- Sohag Journal of Mathematics
- Journal of Applied Mathematics and Physics
- Universal Journal of Mathematics and Applications

CONFERENCE CONTRIBUTED TALK

- International Workshop on Frontiers of Plasma Physics Science, 21 August – 1 September 2006, International Center for Theoretical Physics, Miramare, Trieste, Italy.
- The First International Conference on New Horizons in Basic and Applied Science" (ICNHBAS), September 2013, Hurghada, Egypt.

CONFERENCE ATTENDED

- One day conference on "Computational Methods for Linear and Nonlinear Systems (2)" Cairo, Cairo University. 29/4/2010
- One day conference on "Computational Methods for Linear and Nonlinear Systems (3)" Cairo, Cairo University. 23/6/2011
- One day conference on "Computational Methods for Linear and Nonlinear Systems (4)" Cairo, Cairo University. 28/6/2012
- One day conference on "Computational Methods for Linear and Nonlinear Systems (6)" Cairo, Cairo University. 31/5/2014
- One day conference on "Abstract Algebra and its Applications" Cairo, Cairo University. 23/5/2015
- One day conference on "Computational Methods for Linear and Nonlinear Systems (7)" Cairo, Cairo University. 11/6/2015

AWARDS

- Prof. Mohamed Morsy Ahmed Prize for the first class student of Pure Mathematics May 1997.
- Cairo University International Publications Awards May 2013
- Cairo University International Publications Awards May 2014
- Cairo University International Publications Awards May 2015
- Cairo University International Publications Awards May 2016

- Cairo University International Publications Awards May 2017
- Cairo University International Publications Awards December 2017
- Cairo University International Publications Awards September 2018
- Cairo University International Publications Awards November 2019
- Cairo University International Publication Awards for the best researcher who published more than 10 papers per year November 2019 (I have published 13 papers in 2018 with total Impact factor 21)
- Cairo University International Publications Awards November 2020
- Cairo University International Publication Awards for the best researcher who published more than 10 papers per year November 2020 (I have published 15 papers in 2019 with total Impact factor 24.398)