

# Prof. ABDULLAH SÖNMEZOĞLU

## Personal Information

**Email:** [abdullah.sonmezoglu@bozok.edu.tr](mailto:abdullah.sonmezoglu@bozok.edu.tr)

**Web:** <https://avesis.bozok.edu.tr/abdullah.sonmezoglu>

## International Researcher IDs

ORCID: 0000-0002-8973-6414

ScopusID: 54795960100

Yoksis Researcher ID: 106561

## Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Matematik (Dr), Turkey 1996 - 2005

Postgraduate, Tokat Gaziosmanpaşa University, Graduate School Of Natural And Applied Sciences, Matematik (YI) (Tezli), Turkey 1993 - 1996

Undergraduate, Ondokuz Mayıs University, Faculty Of Arts And Sciences, Department Of Mathematics, Turkey 1989 - 1993

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, Fourier serileri ile bu serilerin conjugate serilerinin mutlak genelleştirilmiş nörlund toplanabilirliği, Erciyes University, Fen Bilimleri Enstitüsü, Matematik (Dr), 2005

Postgraduate, Fourier serilerin mutlak nörlund toplanabilirliği, Tokat Gaziosmanpaşa University, Fen Bilimleri Enstitüsü, Matematik (YI) (Tezli), 1996

## Research Areas

Mathematics, Differential Equations

## Academic Titles / Tasks

Professor, Yozgat Bozok University, Fen-Edebiyat Fakültesi, Matematik, 2023 - Continues

Associate Professor, Yozgat Bozok University, Fen-Edebiyat Fakültesi, Matematik, 2018 - 2023

Assistant Professor, Yozgat Bozok University, Fen-Edebiyat Fakültesi, Matematik, 2007 - 2018

Lecturer, Erciyes University, Yozgat Fen-Edebiyat Fakültesi, Matematik Pr., 2000 - 2007

Research Assistant, Erciyes University, Yozgat Fen-Edebiyat Fakültesi, Matematik Pr., 1996 - 2000

Research Assistant, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 1994 - 1995

## Academic and Administrative Experience

Yozgat Bozok University, 2008 - Continues

Deputy Head of Department, Yozgat Bozok University, 2017 - 2022

Yozgat Bozok University, 2016 - 2017

Yozgat Bozok University, 2008 - 2016

## Courses

Kompleks Fonksiyonlar Teorisi II, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015, 2013 - 2014

Olasılık ve İstatistik II, Undergraduate, 2020 - 2021, 2015 - 2016, 2014 - 2015, 2013 - 2014

Analiz 4, Undergraduate, 2020 - 2021

Uzmanlık Alan Dersi I, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2015 - 2016, 2014 - 2015, 2013 - 2014

İstatistik grafik ifade metotları, Undergraduate, 2020 - 2021, 2017 - 2018, 2016 - 2017

Tez Çalışması I, Postgraduate, 2020 - 2021, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Olasılık ve İstatistik I, Undergraduate, 2020 - 2021, 2015 - 2016, 2014 - 2015, 2013 - 2014

İleri Analiz I, Postgraduate, 2020 - 2021, 2016 - 2017, 2014 - 2015, 2013 - 2014

Analiz III, Undergraduate, 2020 - 2021, 2018 - 2019, 2013 - 2014

İleri Analiz II, Postgraduate, 2020 - 2021, 2019 - 2020, 2016 - 2017, 2014 - 2015, 2013 - 2014

Tez Çalışması II, Postgraduate, 2020 - 2021, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Uzmanlık Alan Dersi II, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015

Kompleks Fonksiyonlar Teorisi I, Undergraduate, 2020 - 2021, 2019 - 2020, 2017 - 2018, 2014 - 2015, 2013 - 2014

Analiz II, Undergraduate, 2019 - 2020

MAT 597 TEZ ÇALIŞMASI, Postgraduate, 2019 - 2020

KOMPLEKS ANALİZ I, Postgraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016

İSTATİSTİK GRAFİK VE İFADE METOTLARI, Undergraduate, 2019 - 2020, 2018 - 2019

MAT 598 Tez Çalışması, Postgraduate, 2019 - 2020

ANALİZ I, Undergraduate, 2019 - 2020

Genel Matematik II, Undergraduate, 2019 - 2020, 2017 - 2018

Seminer, Postgraduate, 2019 - 2020

Mühendislik Matematiği I, Undergraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016, 2014 - 2015

Kompleks Analiz II, Postgraduate, 2018 - 2019, 2017 - 2018, 2015 - 2016

Analiz IV, Undergraduate, 2018 - 2019, 2017 - 2018, 2013 - 2014

Tez Çalışması II, Doctorate, 2017 - 2018, 2016 - 2017

Tez Çalışması, Doctorate, 2017 - 2018

Uzmanlık Alan Dersi, Doctorate, 2017 - 2018, 2016 - 2017

Genel Matematik I, Undergraduate, 2017 - 2018, 2014 - 2015

Uzmanlık Alan Dersi, Postgraduate, 2017 - 2018, 2016 - 2017

Mühendislik Matematiği II, Undergraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015

Tez Çalışması, Postgraduate, 2017 - 2018

Uzmanlık Alan Dersi II, Doctorate, 2017 - 2018

Diferansiyel Denklemler, Undergraduate, 2016 - 2017

Bitirme Tezi I, Undergraduate, 2016 - 2017, 2014 - 2015

Matematik II, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015

Matematik I, Undergraduate, 2016 - 2017, 2014 - 2015

Yüksek Matematik I, Undergraduate, 2016 - 2017

Tez Çalışması I, Doctorate, 2016 - 2017

Bilimsel Araştırma İlkeleri, Postgraduate, 2016 - 2017

Bitirme Tezi II, Undergraduate, 2016 - 2017, 2014 - 2015

İSTATİSTİK GRAFİK İFADE ETME METOTLARI, Undergraduate, 2015 - 2016, 2014 - 2015

MÜHENDİSLİK İÇİN OLASILIK TEORİSİ, Undergraduate, 2014 - 2015, 2013 - 2014

ANALİZ III(2.ÖĞRETİM), Undergraduate, 2013 - 2014  
KOMPLEKS FONKSİYONLAR TEORİSİ I(2.ÖĞRETİM), Undergraduate, 2013 - 2014  
KOMPLEKS FONKSİYONLAR TEORİSİ II(2.ÖĞRETİM), Undergraduate, 2013 - 2014  
OLASILIK VE İSTATİSTİK II(2.ÖĞRETİM), Undergraduate, 2013 - 2014  
OLASILIK VE İSTATİSTİK I(2.ÖĞRETİM), Undergraduate, 2013 - 2014  
ANALİZ IV(2.ÖĞRETİM), Undergraduate, 2013 - 2014

## Advising Theses

Sönmezoğlu A., Cauchy and goursat problems for second-order partial differential equations and the solution of these problems, Postgraduate, M.CEYLAN(Student), 2022  
Sönmezoğlu A., Yüksek mertebeden dispersif optik solitonların analitik çalışması, Postgraduate, O.NAZLI(Student), 2022  
Sönmezoğlu A., Üstel açılım metoduyla pertürbe edilmiş lineer olmayan schrödinger denkleminin tam çözümlerinin araştırılması, Postgraduate, A.KARAOĞLAN(Student), 2022  
Sönmezoğlu A.,  $(g'/g)$ -açılım yöntemleri ile  $(2+1)$  boyutlu kırılma soliton denklemlerinin soliton ve diğer çözümleri, Postgraduate, A.PAKSOY(Student), 2021  
SÖNMEZOĞLU A., Katlı Fourier Serilerinin Nörlund Toplanabilmesi, Postgraduate, M.UÇAR(Student), 2020  
SÖNMEZOĞLU A., Ortogonal Serilerin Mutlak Genelleştirilmiş Hausdorff Toplanabilmesi Üzerine, Postgraduate, İ.AKGÜN(Student), 2018  
SÖNMEZOĞLU A., On the absolute Euler summability of Fourier series, Postgraduate, B.ELTURAN(Student), 2018  
SÖNMEZOĞLU A., Olasılık ve Fourier serilerinin  $(C,r)$  toplanabilmesi, Postgraduate, S.KARAKOÇ(Student), 2018  
SÖNMEZOĞLU A., Esnek matrisler kullanılarak elde edilen bazı karar verme metotları ve uygulamaları, Doctorate, H.KAMACI(Student), 2018  
SÖNMEZOĞLU A., Jacobi eliptik fonksiyon metodu ile lineer olmayan bazı lineer olmayan dalga denklemlerinin çözümü, Postgraduate, M.FATİH(Student), 2016  
SÖNMEZOĞLU A., Fourier serilerinin mutlak Hausdorff toplanabilmesi üzerine, Postgraduate, H.ÖZARSLAN(Student), 2016  
SÖNMEZOĞLU A., Fourier serilerinin Hausdorff toplanabilmesi, Postgraduate, N.AĞCA(Student), 2016  
SÖNMEZOĞLU A., Genelleştirilmiş Quasi-Nörlund toplanabilme üzerine, Postgraduate, K.BAŞAR(Student), 2015  
SÖNMEZOĞLU A., Hausdorff toplanabilme metodu, Postgraduate, H.ÖZTÜRK(Student), 2013  
SÖNMEZOĞLU A., Genelleştirilmiş nörlund toplanabilme metodu, Postgraduate, E.SERİN(Student), 2012  
SÖNMEZOĞLU A., Nörlund toplanabilme metodu, Postgraduate, T.COŞKUN(Student), 2012

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Sequel to "stationary optical solitons with Kudryashov's laws of refractive index" (generalized temporal evolution)**  
Biswas A., SÖNMEZOĞLU A., EKİCİ M.  
Journal of Nonlinear Optical Physics and Materials, vol.32, no.1, 2023 (SCI-Expanded)
- II. **Optical solitons for Kudryashov's model: undetermined coefficients with Jacobi's elliptic functions**  
SÖNMEZOĞLU A., EKİCİ M., Biswas A.  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.16, no.5-6, pp.243-247, 2022 (SCI-Expanded)
- III. **Stationary optical solitons having Kudryashov's quintuple power law nonlinearity by extended G '/G-expansion**  
SÖNMEZOĞLU A.  
OPTİK, vol.253, 2022 (SCI-Expanded)
- IV. **Stationary optical solitons with Kudryashov's quintuple power-law of refractive index having nonlinear chromatic dispersion**

Biswas A, EKİCİ M., SÖNMEZOĞLU A.

PHYSICS LETTERS A, vol.426, 2022 (SCI-Expanded)

- V. **Cubic-Quartic Optical Solitons and Conservation Laws with Kudryashov's Law of Refractive Index by Extended Trial Function**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Kara A. H., Alzahrani A. K., Belic M. R.  
Computational Mathematics and Mathematical Physics, vol.61, no.12, pp.1995-2003, 2021 (SCI-Expanded)
- VI. **Stationary optical solitons with Kudryashov's laws of refractive index**  
EKİCİ M., SÖNMEZOĞLU A., Biswas A.  
CHAOS SOLITONS & FRACTALS, vol.151, 2021 (SCI-Expanded)
- VII. **Stationary optical solitons with cubic-quartic law of refractive index and nonlinear chromatic dispersion**  
SÖNMEZOĞLU A, EKİCİ M., Biswas A.  
PHYSICS LETTERS A, vol.410, 2021 (SCI-Expanded)
- VIII. **Cubic-Quartic Optical Solitons with Differential Group Delay for Kudryashov's Model by Extended Trial Function**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Alzahrani A. K., Belic M. R.  
JOURNAL OF COMMUNICATIONS TECHNOLOGY AND ELECTRONICS, vol.65, no.12, pp.1384-1398, 2020 (SCI-Expanded)
- IX. **Optical solitons in birefringent fibers with four-wave mixing by extended trial equation method**  
Biswas A, Ekici M., Sonmezoglu A., Zhou Q., Moshokoa S. P., Belic M.  
Scientia Iranica, vol.27, no.6 D, pp.3035-3052, 2020 (SCI-Expanded)
- X. **Optical solitons with Kudryashov's equation by extended trial function**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Alshomrani A. S., Belic M. R.  
OPTIK, vol.202, 2020 (SCI-Expanded)
- XI. **Optical solitons with Kudryashov's equation by F-expansion**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Alshomrani A. S., Belic M. R.  
OPTIK, vol.199, 2019 (SCI-Expanded)
- XII. **Optical solitons in fiber Bragg gratings with dispersive reflectivity for parabolic-nonlocal combo nonlinearity by extended trial function**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Alshomrani A. S., Belic M. R.  
OPTIK, vol.195, 2019 (SCI-Expanded)
- XIII. **Optical solitons in fiber Bragg gratings with dispersive reflectivity for cubic-quintic-septic nonlinearity by extended trial function**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Alshomrani A. S., Belic M. R.  
OPTIK, vol.194, 2019 (SCI-Expanded)
- XIV. **Highly dispersive singular optical solitons with Kerr law nonlinearity by Jacobi's elliptic ds function expansion**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Alshomrani A. S., Belic M. R.  
OPTIK, vol.192, 2019 (SCI-Expanded)
- XV. **Highly dispersive singular optical solitons having Kerr law nonlinearity by Jacobi's elliptic cs function expansion**  
Biswas A, SÖNMEZOĞLU A, EKİCİ M., Alshomrani A. S.  
OPTIK, vol.192, 2019 (SCI-Expanded)
- XVI. **Highly dispersive optical solitons in absence of self-phase modulation by F-expansion**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Alshomrani A. S.  
OPTIK, vol.187, pp.258-271, 2019 (SCI-Expanded)
- XVII. **Solitons in optical fiber Bragg gratings with dispersive reflectivity by extended trial function method**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.182, pp.88-94, 2019 (SCI-Expanded)
- XVIII. **Highly dispersive optical solitons with quadratic-cubic law by F-expansion**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Belic M. R.

- OPTIK, vol.182, pp.930-943, 2019 (SCI-Expanded)
- XIX. Highly dispersive optical solitons with cubic-quintic-septic law by F-expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.182, pp.897-906, 2019 (SCI-Expanded)
- XX. Optical solitons in (2+1)-Dimensions with Kundu-Mukherjee-Naskar equation by extended trial function scheme**  
EKİCİ M., SÖNMEZOĞLU A., Biswas A., Belic M. R.  
CHINESE JOURNAL OF PHYSICS, vol.57, pp.72-77, 2019 (SCI-Expanded)
- XXI. Highly dispersive optical solitons with Kerr law nonlinearity by F-expansion**  
Biswas A., Ekicid M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.181, pp.1028-1038, 2019 (SCI-Expanded)
- XXII. Optical solitons in birefringent fibers haying anti-cubic nonlinearity with exp-function**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.186, pp.363-368, 2019 (SCI-Expanded)
- XXIII. Optical solitons in birefringent fibers having anti-cubic nonlinearity with extended trial function**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.185, pp.456-463, 2019 (SCI-Expanded)
- XXIV. Highly dispersive optical solitons with non-local nonlinearity by F-expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.183, pp.1140-1150, 2019 (SCI-Expanded)
- XXV. Highly dispersive optical solitons with non-local nonlinearity by extended Jacobi's elliptic function expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.184, pp.277-286, 2019 (SCI-Expanded)
- XXVI. Highly dispersive optical solitons with cubic-quintic-septic law by It Check for exp-expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.186, pp.321-325, 2019 (SCI-Expanded)
- XXVII. Highly dispersive optical solitons with cubic-quintic-septic law by extended Jacobi's elliptic function expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.183, pp.571-578, 2019 (SCI-Expanded)
- XXVIII. Optical solitons in birefringent fibers with four-wave mixing for quadratic-cubic nonlinearity by F-expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Alfiras M.  
OPTIK, vol.178, pp.178-189, 2019 (SCI-Expanded)
- XXIX. Exact chirped singular soliton solutions of Triki-Biswas equation**  
Zhou Q., EKİCİ M., SÖNMEZOĞLU A.  
OPTIK, vol.181, pp.338-342, 2019 (SCI-Expanded)
- XXX. Optical solitons in birefringent fibers with quadratic-cubic nonlinearity by extended  $G'/G$ -expansion scheme**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M.  
OPTIK, vol.178, pp.59-65, 2019 (SCI-Expanded)
- XXXI. Highly dispersive optical solitons with Kerr law nonlinearity by exp-function**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.185, pp.121-125, 2019 (SCI-Expanded)
- XXXII. Optical solitons in birefringent fibers with quadratic-cubic nonlinearity by extended Jacobi's elliptic function expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M.  
OPTIK, vol.178, pp.117-121, 2019 (SCI-Expanded)
- XXXIII. Soliton solutions and conservation laws of a (3+1)-dimensional nonlinear evolution equation**  
Ekici M., Sonmezoglu A., Adem A. R., Zhou Q., Luan Z., Liu S., Mirzazadeh M., Liu W.

Acta Physica Polonica A, vol.135, no.3, pp.539-545, 2019 (SCI-Expanded)

- XXXIV. **Highly dispersive optical solitons in absence of self-phase modulation by Jacobi's elliptic function expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.189, pp.109-120, 2019 (SCI-Expanded)
- XXXV. **Optical solitons with Biswas-Arshed equation by extended trial function method**  
EKİCİ M., SÖNMEZOĞLU A.  
OPTIK, vol.177, pp.13-20, 2019 (SCI-Expanded)
- XXXVI. **Optical solitons and conservation law in birefringent fibers with Kundu-Eckhaus equation by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Kara A. H.  
OPTIK, vol.179, pp.471-478, 2019 (SCI-Expanded)
- XXXVII. **Highly dispersive optical solitons with quadratic-cubic law by exp-function**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.186, pp.431-435, 2019 (SCI-Expanded)
- XXXVIII. **Highly dispersive optical solitons with kerr law nonlinearity by extended Jacobi's elliptic function expansion**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.183, pp.395-400, 2019 (SCI-Expanded)
- XXXIX. **Highly dispersive optical solitons in absence of self-phase modulation by exp-function**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.186, pp.436-442, 2019 (SCI-Expanded)
- XL. **Optical solitons in fiber Bragg gratings with dispersive reflectivity for parabolic law nonlinearity by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.183, pp.595-601, 2019 (SCI-Expanded)
- XLI. **Chirped and chirp-free optical solitons with generalized anti-cubic nonlinearity by extended trial function scheme**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M.  
OPTIK, vol.178, pp.636-644, 2019 (SCI-Expanded)
- XLII. **Highly dispersive optical solitons with non-local nonlinearity by exp-function**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.186, pp.288-292, 2019 (SCI-Expanded)
- XLIII. **Optical solitons in birefringent fibers with quadratic-cubic nonlinearity by extended trial function scheme**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M.  
OPTIK, vol.176, pp.542-548, 2019 (SCI-Expanded)
- XLIV. **Optical solitons in fiber Bragg gratings with dispersive reflectivity for quadratic cubic nonlinearity by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Belic M. R.  
OPTIK, vol.185, pp.50-56, 2019 (SCI-Expanded)
- XLV. **Optical soliton perturbation with full nonlinearity by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Arshed S., Belic M.  
OPTICAL AND QUANTUM ELECTRONICS, vol.50, no.12, 2018 (SCI-Expanded)
- XLVI. **Solitons in optical metamaterials with anti-cubic nonlinearity**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Alshomrani A. S., Moshokoa S. P., Belic M.  
EUROPEAN PHYSICAL JOURNAL PLUS, vol.133, no.5, 2018 (SCI-Expanded)
- XLVII. **Analysis of optical solitons in nonlinear negative-indexed materials with anti-cubic nonlinearity**  
EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Moshokoa S. P., Ullah M. Z., Arnous A. H., Biswas A., Belic M.  
OPTICAL AND QUANTUM ELECTRONICS, vol.50, no.2, 2018 (SCI-Expanded)
- XLVIII. **Optical solitons with Radhakrishnan-Kundu-Lakshmanan equation by extended trial function scheme**

Biswas A, EKİCİ M., SÖNMEZOĞLU A., Alshomrani A. S.

OPTIK, vol.160, pp.415-427, 2018 (SCI-Expanded)

- XLIX. **Optical soliton perturbation with fractional temporal evolution by generalized Kudryashov's method**  
Biswas A, SÖNMEZOĞLU A., EKİCİ M., Mirzazadeh M., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.164, pp.303-310, 2018 (SCI-Expanded)
- L. **Dispersive optical solitons with differential group delay by extended trial equation method**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Triki H., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.158, pp.790-798, 2018 (SCI-Expanded)
- LI. **Gaussian solitary waves to Boussinesq equation with dual dispersion and logarithmic nonlinearity**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A.  
NONLINEAR ANALYSIS-MODELLING AND CONTROL, vol.23, no.6, pp.942-950, 2018 (SCI-Expanded)
- LII. **Sequel to stationary optical solitons with nonlinear group velocity dispersion by extended trial function scheme**  
EKİCİ M., SÖNMEZOĞLU A., Biswas A., Belic M.  
OPTIK, vol.172, pp.636-650, 2018 (SCI-Expanded)
- LIII. **Optical soliton perturbation with full nonlinearity for Fokas-Lenells equation**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Alqahtani R. T.  
OPTIK, vol.165, pp.29-34, 2018 (SCI-Expanded)
- LIV. **Optical solitons with differential group delay for coupled Fokas-Lenells equation by extended trial function scheme**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Alqahtani R. T.  
OPTIK, vol.165, pp.102-110, 2018 (SCI-Expanded)
- LV. **Dispersive optical solitons with differential group delay and parabolic law nonlinearity by extended trial function method**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Babatin M. M.  
OPTIK, vol.169, pp.403-415, 2018 (SCI-Expanded)
- LVI. **Resonant optical soliton perturbation with anti-cubic nonlinearity by extended trial function method**  
Biswas A, Ekici M., Triki H., SÖNMEZOĞLU A., Mirzazadeh M., Zhou Q., Mahmood M. F., Ullah M. Z., Moshokoa S. P., Belic M.  
OPTIK, vol.156, pp.784-790, 2018 (SCI-Expanded)
- LVII. **Optical solitons in parabolic law medium with weak non-local nonlinearity by extended trial function method**  
Biswa A, EKİCİ M., SÖNMEZOĞLU A., Mirzazadeh M., Zhou Q., Alshomrani A. S., Moshokoa S. P., Belic M.  
OPTIK, vol.163, pp.56-61, 2018 (SCI-Expanded)
- LVIII. **Optical network topology with DWDM technology for log law medium**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Alshomrani A. S., Moshokoa S. P., Belic M.  
OPTIK, vol.160, pp.353-360, 2018 (SCI-Expanded)
- LIX. **Optical solitons with differential group delay and dual-dispersion for Lakshmanan-Porsezian-Daniel model by extended trial function method**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Babatin M. M.  
OPTIK, vol.170, pp.512-519, 2018 (SCI-Expanded)
- LX. **Optical solitons with Lakshmanan-Porsezian-Daniel model using a couple of integration schemes**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Triki H., Majid F. B., Zhou Q., Moshokoa S. P., Mirzazadeh M., Belic M.  
OPTIK, vol.158, pp.705-711, 2018 (SCI-Expanded)
- LXI. **Row-products of soft matrices with applications in multiple-disjoint decision making**  
KAMACI H., Atagun A. O., SÖNMEZOĞLU A.  
APPLIED SOFT COMPUTING, vol.62, pp.892-914, 2018 (SCI-Expanded)
- LXII. **Stationary optical solitons with nonlinear group velocity dispersion by extended trial function scheme**  
Biswas A, EKİCİ M., SÖNMEZOĞLU A., Belic M.  
OPTIK, vol.171, pp.529-542, 2018 (SCI-Expanded)

- LXIII. **Chirped solitons in optical metamaterials with parabolic law nonlinearity by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.160, pp.92-99, 2018 (SCI-Expanded)
- LXIV. **Optical solitons for Gerdjikov-Ivanov model by extended trial equation scheme**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Triki H., Alshomrani A. S., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.157, pp.1241-1248, 2018 (SCI-Expanded)
- LXV. **Embedded solitons with  $\chi^{(2)}$  and  $\chi^{(3)}$  nonlinear susceptibilities by extended trial equation method**  
SÖNMEZOĞLU A., EKİCİ M., Arnous A. H., Zhou Q., Triki H., Moshokoa S. P., Ullah M. Z., Biswas A., Belic M.  
OPTIK, vol.154, pp.1-9, 2018 (SCI-Expanded)
- LXVI. **Mitigating Internet bottleneck with fractional temporal evolution of optical solitons having quadratic-cubic nonlinearity**  
Rezazadeh H., Osman M. S., Eslami M., EKİCİ M., SÖNMEZOĞLU A., Asma M., Othman W. A. M., Wong B. R., Mirzazadeh M., Zhou Q., et al.  
OPTIK, vol.164, pp.84-92, 2018 (SCI-Expanded)
- LXVII. **Optical solitons with differential group delay and weak non-local nonlinearity by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Alqahtani R. T.  
OPTIK, vol.166, pp.31-38, 2018 (SCI-Expanded)
- LXVIII. **Sub-pico-second chirped optical solitons in mono-mode fibers with Kaup-Newell equation by extended trial function method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Alqahtani R. T.  
OPTIK, vol.168, pp.208-216, 2018 (SCI-Expanded)
- LXIX. **Optical soliton perturbation with full nonlinearity for Kundu-Eckhaus equation by extended trial function scheme**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.160, pp.17-23, 2018 (SCI-Expanded)
- LXX. **Optical soliton perturbation for Gerdjikov-Ivanov equation by extended trial equation method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Majid F. B., Triki H., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.158, pp.747-752, 2018 (SCI-Expanded)
- LXXI. **Optical soliton perturbation with fractional temporal evolution by extended  $G'/G$ -expansion method**  
Biswas A., SÖNMEZOĞLU A., EKİCİ M., Mirzazadeh M., Zhou Q., Alshomrani A. S., Moshokoa S. P., Belic M.  
OPTIK, vol.161, pp.301-320, 2018 (SCI-Expanded)
- LXXII. **Optical solitons in birefringent fibers with weak non-local nonlinearity and four-wave mixing by extended trial equation method**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Babatin M. M.  
OPTIK, vol.166, pp.285-293, 2018 (SCI-Expanded)
- LXXIII. **Chirped optical solitons of Chen-Lee-Liu equation by extended trial equation scheme**  
Biswas A., EKİCİ M., SÖNMEZOĞLU A., Alshomrani A. S., Zhou Q., Moshokoa S. P., Belic M.  
OPTIK, vol.156, pp.999-1006, 2018 (SCI-Expanded)
- LXXIV. **The investigation of soliton solutions of the coupled sine-Gordon equation in nonlinear optics**  
Zhou Q., Ekici M., Mirzazadeh M., Sonmezoglu A.  
Journal of Modern Optics, vol.64, no.16, pp.1677-1682, 2017 (SCI-Expanded)
- LXXV. **On the Solutions of the Space and Time Fractional Benjamin-Bona-Mahony Equation**  
Mirzazadeh M., EKİCİ M., Sonmezoglu A.  
Iranian Journal of Science and Technology, Transaction A: Science, vol.41, no.3, pp.819-836, 2017 (SCI-Expanded)
- LXXVI. **Optical solitons in nonlinear negative-index materials with quadratic-cubic nonlinearity**  
EKİCİ M., Zhou Q., SÖNMEZOĞLU A., Moshokoa S. P., Ullah M. Z., Triki H., Biswas A., Belic M.  
SUPERLATTICES AND MICROSTRUCTURES, vol.109, pp.176-182, 2017 (SCI-Expanded)
- LXXVII. **Solitons in magneto-optic waveguides by extended trial function scheme**



- EKİCİ M., Zhou Q., SÖNMEZOĞLU A., Moshokoa S. P., Ullah M. Z., Biswas A., Belic M.  
SUPERLATTICES AND MICROSTRUCTURES, vol.107, pp.197-218, 2017 (SCI-Expanded)
- LXXVIII. **Optical solitons with DWDM technology and four-wave mixing**  
EKİCİ M., Zhou Q., SÖNMEZOĞLU A., Moshokoa S. P., Ullah M. Z., Biswas A., Belic M.  
SUPERLATTICES AND MICROSTRUCTURES, vol.107, pp.254-266, 2017 (SCI-Expanded)
- LXXIX. **Some new exact wave solutions and conservation laws of potential Korteweg-de Vries equation**  
Triki H., AK T., EKİCİ M., SÖNMEZOĞLU A., Mirzazadeh M., Kara A. H., Aydemir T.  
NONLINEAR DYNAMICS, vol.89, no.1, pp.501-508, 2017 (SCI-Expanded)
- LXXX. **Explicit solitons in the parabolic law nonlinear negative-index materials**  
SÖNMEZOĞLU A., Yao M., EKİCİ M., Mirzazadeh M., Zhou Q.  
NONLINEAR DYNAMICS, vol.88, no.1, pp.595-607, 2017 (SCI-Expanded)
- LXXXI. **Nematicons in liquid crystals by extended trial equation method**  
EKİCİ M., Mirzazadeh M., SÖNMEZOĞLU A., Ullah M. Z., Zhou Q., Moshokoa S. P., Biswas A., Belic M.  
JOURNAL OF NONLINEAR OPTICAL PHYSICS & MATERIALS, vol.26, no.1, 2017 (SCI-Expanded)
- LXXXII. **Exact solitary wave solutions to the new (3+1)-dimensional generalized Kadomtsev-Petviashvili equation**  
SÖNMEZOĞLU A., EKİCİ M., Moradi M., Mirzazadeh M., Zhou Q.  
OPTIK, vol.128, pp.77-82, 2017 (SCI-Expanded)
- LXXXIII. **Parallel propagation of dispersive optical solitons by extended trial equation method**  
SÖNMEZOĞLU A., EKİCİ M., Arnous A. H., Zhou Q., Moshokoa S. P., Ullah M. Z., Biswas A., Betic M.  
OPTIK, vol.144, pp.565-572, 2017 (SCI-Expanded)
- LXXXIV. **Exact solitons of the coupled sine-Gordon equation in nonlinear system**  
Ekici M., Zhou Q., Sonmezoglu A., Mirzazadeh M.  
OPTIK, vol.136, pp.435-444, 2017 (SCI-Expanded)
- LXXXV. **Optical solitons in birefringent fibers with Kerr nonlinearity by exp-function method**  
EKİCİ M., Mirzazadeh M., SÖNMEZOĞLU A., Zhou Q., Triki H., Ullah M. Z., Moshokoa S. P., Biswas A.  
OPTIK, vol.131, pp.964-976, 2017 (SCI-Expanded)
- LXXXVI. **Analytical study of solitons in the fiber waveguide with power law nonlinearity**  
Mirzazadeh M., EKİCİ M., Zhou Q., SÖNMEZOĞLU A.  
SUPERLATTICES AND MICROSTRUCTURES, vol.101, pp.493-506, 2017 (SCI-Expanded)
- LXXXVII. **Optical solitons with anti-cubic nonlinearity by extended trial equation method**  
EKİCİ M., Mirzazadeh M., SÖNMEZOĞLU A., Ullah M. Z., Zhou Q., Triki H., Moshokoa S. P., Biswas A.  
OPTIK, vol.136, pp.368-373, 2017 (SCI-Expanded)
- LXXXVIII. **Optical solitons in DWDM system by extended trial equation method**  
EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Biswas A., Ullah M. Z., Asma M., Moshokoa S. P., Belic M.  
OPTIK, vol.141, pp.157-167, 2017 (SCI-Expanded)
- LXXXIX. **Dispersive optical solitons with Schrodinger-Hirota equation by extended trial equation method**  
EKİCİ M., Mirzazadeh M., SÖNMEZOĞLU A., Ullah M. Z., Asma M., Zhou Q., Moshokoa S. P., Biswas A., Belic M.  
OPTIK, vol.136, pp.451-461, 2017 (SCI-Expanded)
- XC. **Optical solitons of some fractional differential equations in nonlinear optics**  
Zhou Q., SÖNMEZOĞLU A., EKİCİ M., Mirzazadeh M.  
JOURNAL OF MODERN OPTICS, vol.64, no.21, pp.2345-2349, 2017 (SCI-Expanded)
- XCI. **The analytical study of solitons to the nonlinear Schrodinger equation with resonant nonlinearity**  
EKİCİ M., Zhou Q., SÖNMEZOĞLU A., Manafian J., Mirzazadeh M.  
OPTIK, vol.130, pp.378-382, 2017 (SCI-Expanded)
- XCII. **Analytical study of solitons to Biswas–Milovic model in nonlinear optics**  
Zhou Q., Ekici M., Sonmezoglu A., Mirzazadeh M., Eslami M.  
Journal of Modern Optics, vol.63, no.21, pp.2131-2137, 2016 (SCI-Expanded)
- XCIII. **Optical solitons with resonant nonlinear Schrodinger's equation using three integration schemes**  
Tchier F., Kilic B., Inc M., Ekici M., Sonmezoglu A., Mirzazadeh M., Triki H., Milovic D., Zhou Q., Moshokoa S. P., et al.  
Journal of Optoelectronics and Advanced Materials, vol.18, no.11-12, pp.950-973, 2016 (SCI-Expanded)

- XCIV. Analytical study of solitons in non-Kerr nonlinear negative-index materials**  
 Zhou Q, Mirzazadeh M., Ekici M., Sonmezoglu A.  
 Nonlinear Dynamics, vol.86, no.1, pp.623-638, 2016 (SCI-Expanded)
- XCv. Optical solitons with complex Ginzburg-Landau equation**  
 Mirzazadeh M., EKİCİ M., SÖNMEZOĞLU A., Eslami M., Zhou Q., Kara A. H., Milovic D., Majid F. B., Biswas A., Belic M.  
 NONLINEAR DYNAMICS, vol.85, no.3, pp.1979-2016, 2016 (SCI-Expanded)
- XCVI. Optical solitons with Biswas-Milovic equation by extended trial equation method**  
 Zhou Q, Ekici M., Sonmezoglu A., Mirzazadeh M., Eslami M.  
 Nonlinear Dynamics, vol.84, no.4, pp.1883-1900, 2016 (SCI-Expanded)
- XCvII. Soliton solutions to a few fractional nonlinear evolution equations in shallow water wave dynamics**  
 Mirzazadeh M., EKİCİ M., SÖNMEZOĞLU A., Ortakaya S., Eslami M., Biswas A.  
 EUROPEAN PHYSICAL JOURNAL PLUS, vol.131, no.5, 2016 (SCI-Expanded)
- XCvIII. Exact solitary wave solutions to the generalized Fisher equation**  
 Zhou Q, Ekici M., Sonmezoglu A., Manafian J., Khaleghizadeh S., Mirzazadeh M.  
 OPTIK, vol.127, no.24, pp.12085-12092, 2016 (SCI-Expanded)
- XCIX. Optical solitons with Biswas-Milovic equation by extended  $G'/G$ -expansion method**  
 Zhou Q, Ekici M., Sonmezoglu A., Mirzazadeh M.  
 OPTIK, vol.127, no.16, pp.6277-6290, 2016 (SCI-Expanded)
- C. Dark and singular optical solitons with Kundu-Eckhaus equation by extended trial equation method and extended  $G'/G$ -expansion scheme**  
 EKİCİ M., Mirzazadeh M., SÖNMEZOĞLU A., Zhou Q., Moshokoa S. P., Biswas A., Belic M.  
 OPTIK, vol.127, no.22, pp.10490-10497, 2016 (SCI-Expanded)
- CI. Optical solitons in birefringent fibers by extended trial equation method**  
 Mirzazadeh M., EKİCİ M., SÖNMEZOĞLU A., Zhou Q., Triki H., Moshokoa S. P., Biswas A., Belic M.  
 OPTIK, vol.127, no.23, pp.11311-11325, 2016 (SCI-Expanded)
- CII. New Exact Solutions of the Davey-Stewartson Equation with Power-Law Nonlinearity**  
 Gurefe Y., Misirli E., Pandir Y., Sonmezoglu A., Ekici M.  
 Bulletin of the Malaysian Mathematical Sciences Society, vol.38, no.3, pp.1223-1234, 2015 (SCI-Expanded)
- CIII. A NEW APPROACH FOR SOLITON SOLUTIONS OF RLW EQUATION AND (1+2)-DIMENSIONAL NONLINEAR SCHRÖDINGER'S EQUATION**  
 Filiz A., Sönmezoğlu A., Ekici M., Duran D.  
 MATHEMATICAL REPORTS, vol.17, no.1, pp.43-56, 2015 (SCI-Expanded)
- CIV. Exact solutions for some fractional differential equations**  
 Sonmezoglu A.  
 Advances in Mathematical Physics, vol.2015, 2015 (SCI-Expanded)
- CV. Extended trial equation method and applications to some nonlinear problems**  
 Postolache M., Gurefe Y., Sonmezoglu A., Ekici M., Misirli E.  
 UPB Scientific Bulletin, Series A: Applied Mathematics and Physics, vol.76, no.2, pp.3-12, 2014 (SCI-Expanded)
- CVI. F-Expansion Method and New Exact Solutions of the Schrodinger-KdV Equation**  
 FİLİZ A., EKİCİ M., SÖNMEZOĞLU A.  
 SCIENTIFIC WORLD JOURNAL, 2014 (SCI-Expanded)
- CVII. Extended trial equation method to generalized nonlinear partial differential equations**  
 Gurefe Y., MISIRLI E., SÖNMEZOĞLU A., EKİCİ M.  
 APPLIED MATHEMATICS AND COMPUTATION, vol.219, no.10, pp.5253-5260, 2013 (SCI-Expanded)
- CVIII. Application of the trial equation method for solving some nonlinear evolution equations arising in mathematical physics**  
 Gurefe Y., SÖNMEZOĞLU A., MISIRLI E.  
 PRAMANA-JOURNAL OF PHYSICS, vol.77, no.6, pp.1023-1029, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Optical Solitons in Cascaded System by Extended Trial Function Method**  
SÖNMEZOĞLU A., EKİCİ M., MİRZAZADEH M., ZHOU Q., Mahmood M. F., Zerrad E., BİSWAS A., BELİC M.  
Journal Of Computational And Theoretical Nanoscience, vol.13, no.8, pp.5394-5398, 2016 (Scopus)
- II. **Optical Solitons in Nano Fibers with Fractional Temporal Evolution**  
Mirzazadeh M., SÖNMEZOĞLU A., EKİCİ M., Eslami M. E., ZHOU Q., Zerrad E., BİSWAS A., BELİC M.  
Journal Of Computational And Theoretical Nanoscience, vol.13, no.8, pp.5361-5374, 2016 (Scopus)
- III. **New Exact Solutions to the KdV and N 1 Dimensional Double Sinh Gordon Equation by the Extended Trial Equation Method**  
SÖNMEZOĞLU A., EKİCİ M., Elsayed M E Z.  
Mathematical Sciences Letters, vol.4, no.2, pp.157-163, 2015 (Peer-Reviewed Journal)
- IV. **Exact solutions of the ZK MEW equation and the Davey Stewartson equation**  
Elsayed E M Z., FİLİZ A., EKİCİ M., SÖNMEZOĞLU A., DURAN D.  
International Journal of Applied Mathematical Research, vol.3, no.2, pp.122-132, 2014 (Peer-Reviewed Journal)
- V. **A new fractional sub equation method for solving the space time fractional differential equations in mathematical physics**  
EKİCİ M., Zayed E. M. E., SÖNMEZOĞLU A.  
Computational Methods for Differential Equations, vol.2, no.3, pp.153-170, 2014 (ESCI)
- VI. **Constructing of exact solutions to the 2+1 dimensional breaking soliton equations by the multiple G'/ G expansion method**  
Ekici M., Duran D., Sönmezoğlu A.  
J.Adv.Math.Stud., vol.7, no.1, pp.27-44, 2014 (Peer-Reviewed Journal)
- VII. **Soliton Solutions of the Klein Gordon Zakharov Equation with Power Law Nonlinearity**  
EKİCİ M., DURAN D., SÖNMEZOĞLU A.  
ISRN Computational Mathematics, vol.2013, pp.1-7, 2013 (Peer-Reviewed Journal)
- VIII. **Application of an irrational trial equation method to high dimensional nonlinear evolution equations**  
GÜREFE Y., SÖNMEZOĞLU A., MISIRLI E.  
J.Adv.Math.Stud., vol.5, no.1, pp.41-47, 2012 (Peer-Reviewed Journal)
- IX. **FOURİER SERİLERİNİN MUTLAK GENELLEŞTİRİLMİŞ NÖRLUND TOPLANABİLİRLİĞİ**  
SÖNMEZOĞLU A., KAPLAN A. G.  
CELAL BAYAR ÜN FEN BİLİMLERİ ENS:FEN BİLİM:ENS:DERGİSİ, vol.6, no.2, pp.83-88, 2010 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **ANALYTICAL STUDY OF SOLITONS IN (3+1)-DIMENSIONS**  
EKİCİ M., SÖNMEZOĞLU A.  
II. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS (BILMES 2018), Nevşehir, Turkey, 5 - 08 July 2018, pp.173
- II. **ANALYSIS OF OPTICAL SOLITON SOLUTIONS OF A (2+1)-DIMENSIONAL MODEL**  
EKİCİ M., SÖNMEZOĞLU A.  
II. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS (BILMES 2018), Nevşehir, Turkey, 5 - 08 July 2018, pp.172
- III. **SOLITARY SOLUTIONS HAVING ANTI-CUBIC NONLINEARITY BY EXP-FUNCTION METHOD**  
SÖNMEZOĞLU A., EKİCİ M.  
II. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS (BILMES 2018), Nevşehir, Turkey, 5 - 08 July 2018, pp.174
- IV. **Improved Generalized F-expansion Method for the time Fractional Modified KdV(fmKdV) Equation**  
SÖNMEZOĞLU A.

International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 23 - 29 September 2015, vol.1738

V. **Exact Solutions of Nonlinear Schrodinger's Equation by using Generalized Kudryashov Method**

PANDIR Y., SÖNMEZOĞLU A., Duzgun H. H., Turhan N.

International Conference on Numerical Analysis and Applied Mathematics (ICNAAM), Rhodes, Greece, 22 - 28 September 2014, vol.1648

## **Metrics**

Publication: 124

Citation (WoS): 3902

Citation (Scopus): 4012

H-Index (WoS): 39

H-Index (Scopus): 40