

## Prof. Devrim YAZICI

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-5530-2020

Yoksis Researcher ID: 174418

### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1996 - 2000

Postgraduate, Yildiz Technical University, Fen Ve Edebiyat Fakültesi, Fizik, Turkey 1993 - 1996

Undergraduate, Yildiz Technical University, Fen Ve Edebiyat Fakültesi, Fizik, Turkey 1989 - 1993

### Dissertations

Doctorate, Çok bileşenli süper çözülebilir sistemlerin hamilton yapıları, Yildiz Technical University, Faculty of Arts & Science, Department of Physics, 2000

Postgraduate, İyonosferin iletkenliği ve manyetik alanların neden olduğu magneto-akustik gravite dalgalarının sönüme uğraması, Yildiz Technical University, Faculty of Arts & Science, Department of Physics, 1996

### Research Areas

Physics, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 2012 - Continues

Assistant Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 2002 - Continues

Research Assistant, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 1995 - 2002

### Academic and Administrative Experience

Yıldız Teknik Üniversitesi, Beden Eğitimi Bölümü, 2016 - 2018

Fakülte Akademik Kurul Üyesi, Yildiz Technical University, 2014 - 2017

### Courses

## Postgraduate

Teorik Klasik Mekanik, Postgraduate, 2019 - 2020

## Undergraduate

Fizik 1, Undergraduate, 2020 - 2021

Klasik Mekanik, Undergraduate, 2018 - 2019

Klasik Elektromanyetik Teori 1, Undergraduate, 2016 - 2017

Fizikte Diferansiyel Denklemler, Undergraduate, 2015 - 2016

## Supervised Theses

Yazıcı D., Evrimsel (2+1)-Boyutlu Hirota Tipi Denklemlerin İkili-Hamiltoniyen Yapıları, Postgraduate, D.KOCAMAN(Student), 2022

Yazıcı D., Asimetrik Heavenly denkleminin simetri indirgemesi ve bi-Homilton Yapısı, Postgraduate, H.Sert(Student), 2013

Yazıcı D., (3+1) Boyutta İntegre Edilebilir Sistemler ve bi-Hamiltoniyen Yapıları, Postgraduate, B.Memişoğlu(Student), 2009

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

- I. **Generalized fractional bi-Hamiltonian structure of Plebański's second heavenly equation in terms of conformable fractional derivatives**  
YAZICI D., Topuz S.  
Journal of Computational and Applied Mathematics, vol.452, 2024 (SCI-Expanded)
- II. **Recursion operators and bi-Hamiltonian representations of cubic evolutionary (2+1)-dimensional systems**  
Sheftel M. B., Yazici D.  
Communications in Nonlinear Science and Numerical Simulation, vol.112, 2022 (SCI-Expanded)
- III. **Symmetries, integrals and hierarchies of new (3+1)-dimensional bi-Hamiltonian systems of Monge-Ampère type**  
Sheftel M., Yazıcı D.  
Journal of Geometry and Physics, vol.146, 2019 (SCI-Expanded)
- IV. **Lax pairs, recursion operators and bi-Hamiltonian representations of (3+1)-dimensional Hirota type equations**  
Sheftel M. B., YAZICI D.  
JOURNAL OF GEOMETRY AND PHYSICS, vol.136, pp.207-227, 2019 (SCI-Expanded)
- V. **Evolutionary Hirota Type (2+1)-Dimensional Equations: Lax Pairs, Recursion Operators and Bi-Hamiltonian Structures**  
Sheftel M. B., YAZICI D.  
SYMMETRY INTEGRABILITY AND GEOMETRY-METHODS AND APPLICATIONS, vol.14, 2018 (SCI-Expanded)
- VI. **Recursion operators and bi-Hamiltonian structure of the general heavenly equation**  
Sheftel M. B., YAZICI D., MALYKH A. A.  
JOURNAL OF GEOMETRY AND PHYSICS, vol.116, pp.124-139, 2017 (SCI-Expanded)
- VII. **Generalization of bi-Hamiltonian systems in (3+1) dimension, possessing partner symmetries**  
YAZICI D.  
JOURNAL OF GEOMETRY AND PHYSICS, vol.101, pp.11-18, 2016 (SCI-Expanded)
- VIII. **Recursion Operators and Tri-Hamiltonian Structure of the First Heavenly Equation of Plebanski**  
Sheftel M. B., YAZICI D.  
SYMMETRY INTEGRABILITY AND GEOMETRY-METHODS AND APPLICATIONS, vol.12, 2016 (SCI-Expanded)
- IX. **Anti-self-dual gravitational metrics determined by the modified heavenly equation**  
Sheftel M. B., YAZICI D.

JOURNAL OF GEOMETRY AND PHYSICS, vol.85, pp.252-258, 2014 (SCI-Expanded)

- X. **Bi-Hamiltonian structure of an asymmetric heavenly equation**  
Yazici D.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.44, no.50, 2011 (SCI-Expanded)
- XI. **BI-HAMILTONIAN REPRESENTATION, SYMMETRIES AND INTEGRALS OF MIXED HEAVENLY AND HUSAIN SYSTEMS**  
Sheftel M. B., YAZICI D.  
JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS, vol.17, no.4, pp.453-484, 2010 (SCI-Expanded)
- XII. **MULTIPLE LOCAL LAGRANGIANS FOR n-COMPONENT SUPER-KORTEWEG DE VRIES-TYPE BI-HAMILTONIAN SYSTEMS**  
Oguz O., YAZICI D.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.25, no.5, pp.1069-1078, 2010 (SCI-Expanded)
- XIII. **Self-dual gravity is completely integrable**  
Nutku Y., Sheftel M. B., Kalayci J., YAZICI D.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND THEORETICAL, vol.41, no.39, 2008 (SCI-Expanded)
- XIV. **Symmetry Reductions of Second Heavenly Equation and 2+1-Dimensional Hamiltonian Integrable Systems**  
YAZICI D., Sheftel M. B.  
JOURNAL OF NONLINEAR MATHEMATICAL PHYSICS, vol.15, pp.417-425, 2008 (SCI-Expanded)
- XV. **Symmetries, integrals, and three-dimensional reductions of Plebanski's second heavenly equation**  
Neyzi F., Sheftel M. B., Yazici D.  
PHYSICS OF ATOMIC NUCLEI, vol.70, no.3, pp.584-592, 2007 (SCI-Expanded)
- XVI. **Dirac constraint analysis and symplectic structure of anti-self-dual Yang-Mills equations**  
Camci U., Can Z., Nutku Y., Sucu Y., Yazici D.  
PRAMANA-JOURNAL OF PHYSICS, vol.67, pp.1043-1053, 2006 (SCI-Expanded)
- XVII. **Hamiltonian structure of multi component integrable systems**  
Yazici D., Oguz O., Oguz O.  
CZECHOSLOVAK JOURNAL OF PHYSICS, vol.51, pp.1459-1463, 2001 (SCI-Expanded)
- XVIII. **Multi-component bi-super hamiltonian KdV systems**  
Yazici D., Oguz O., Oguz O.  
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.34, pp.7713-7718, 2001 (SCI-Expanded)

## Articles Published in Other Journals

- I. **(2+1)-dimensional new bi-hamiltonian integrable system: Symmetries, Noether's theorem and integrals of motion**  
Yaman S., YAZICI D.  
Sigma Journal of Engineering and Natural Sciences, vol.42, no.6, pp.1838-1846, 2024 (ESCI)
- II. **(2+1)-dimensional bi-Hamiltonian system obtained from symmetry reduction of (3+1)- dimensional Hirota type equation**  
Yazici D.  
AIP Conference Proceedings, pp.1-4, 2019 (Peer-Reviewed Journal)
- III. **Symmetry reduction of the first heavenly equation and 2**  
YAZICI D.  
TURKISH JOURNAL OF PHYSICS, vol.42, no.2, pp.183-190, 2018 (ESCI)
- IV. **Symmetry Reduction of Asymmetric Heavenly Equation and 2 1 Dimensional Bi Hamiltonian System**  
YAZICI D., SERT H.  
Jornal of Geometry and Symmetry in Physics, vol.34, no.34, pp.87-96, 2014 (Scopus)
- V. **A new 2 1 Dimesional Hamiltonian Integrable System**  
YAZICI D.

Sigma Mühendislik ve Fen Bilimleri Dergisi, vol.27, pp.118-128, 2009 (Peer-Reviewed Journal)

- VI. **Çok Bileşenli Lineer Olmayan Süper Çözülebilir Sistemler**  
Yazıcı D.  
Yıldız Teknik Üniversitesi Dergisi, vol.2001, no.1, pp.9-19, 2002 (Peer-Reviewed Journal)
- VII. **Orta Atmosferde Yatay Rüzgar Hızının Mevsimsel Değişimi ve Gravite Dalgaları Üzerindeki etkileri**  
Yazıcı D.  
İstanbul Ticaret Üniversitesi Dergisi, vol.1, pp.253-264, 2002 (Peer-Reviewed Journal)
- VIII. **İyonosferin İletkenliği ve Manyetik Alanların Neden Olduğu Magneto Akustik Gravite Dalgalarının Sönüme Uğraması**  
YAZICI D., OGUZ O.  
Yıldız Teknik Üniversitesi Dergisi, vol.3, no.4, pp.253-264, 1996 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **SYMMETRY REDUCTION OF MONGE AMPERE TYPE EQUATION AND (2+1)-DIMENSIONAL BI-HAMILTONIAN SYSTEM**  
Yazıcı D., Yaman S.  
TURKISH PHYSICAL SOCIETY 38 th INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2022, pp.239
- II. **TWO EXAMPLES FOR HOLONOMIC CONSTRAINED MECHANICAL SYSTEEMS WITH FRACTIONAL VARIATION**  
Yazıcı D., Topuz S.  
TURKISH PHYSICAL SOCIETY 38 th INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2022, pp.241
- III. **Bi-Hamiltonian Structure of (2+1)-dimensional Evolutinary Hirota Type Equation**  
Yazıcı D.  
TURKISH PYHSICAL SOCIETY 37th INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 1 - 05 September 2021, pp.167
- IV. **(2+1)-Dimensional Bi-Hamiltonian System Obtained from Symmetry Reduction of (3+1)-Dimensional Hirota Type Equation**  
Yazıcı D.  
Turkish Physical Society-35th International Physics Congress (TPS-35), Muğla, Turkey, 3 - 08 September 2019, pp.252
- V. **Recursion operators and tri Hamiltonian structure of the first heavenly equation of Plebanski**  
YAZICI D., Sheftel M. B.  
XXIV nd International Colloquium on Integrable Systems (ISQS-24), Prague, Czech Republic, 14 - 18 June 2016
- VI. **Two different bi-Hamiltonian structure of the First Heavenly Equation of Plebanski**  
Yazıcı D.  
XXIV International Conference on Integrable Sysetms and Quantum Symmetries, Praha, Czech Republic, 14 - 18 June 2016, pp.1-2
- VII. **Bi-Hamiltonian Structure of Modified Heavenly Equation**  
Yazıcı D.  
Turkish Physical Society, 31st International Physics Congress, Muğla, Turkey, 21 - 24 July 2014, pp.1
- VIII. **SYMMETRY REDUCTION OF ASYMMETRIC HEAVENLY EQUATION AND 2+1-DIMENSIONAL BI-HAMILTONIAN SYSTEM**  
YAZICI D., Sert H.  
15th International Conference on Geometry, Integrability and Quantization, Varna, Bulgaria, 7 - 12 June 2013, pp.309-317
- IX. **Dirac Constraint Analysis and Symplectic Structure of an Asymmetric Heavenly Equations**  
YAZICI D.

- Turkish Physical Society, 29th International Physics Conference, Muğla, Turkey, 5 - 08 September 2012
- X. **3 1 Dimensional Mullti Hamiltonian Integrable Systems**  
YAZICI D., MEMİŞOĞLU B.  
Turkish Physical Society, 26. International Physics Conference, Muğla, Turkey, 24 - 27 September 2009
- XI. **Mixed heavenly equation: a new integrable multi-Hamiltonian system**  
Yazıcı D.  
Eighth International conference Symetry in Nonlinear Mathematical Physics, Kyiv, Ukraine, 21 - 27 July 2009, pp.1-2
- XII. **Symmetry reductions of second heavenly equation and 2 1 dimensional Hamiltonian integrable systems**  
Yazıcı D., M B S.  
NEEDS 2007 Workshop, Barcelona, Spain, 17 - 23 June 2007
- XIII. **Multiple Lagrangians for n-component bi-Hamiltonian systems**  
Yazıcı D.  
Turk Physical Society 23rd International Physics Congress, Muğla, Turkey, 13 - 16 September 2005, pp.400-405
- XIV. **Gravity Waves Induced Ionization Lakers in The F Region Over İstanbul**  
Yazıcı D., Can Z., Aslan Z., Oğuz O.  
Geophysical Research Abstracts, Amsterdam, Netherlands, 07 July 1999, vol.1, no.3, pp.624
- XV. **Gezici İyonosfer Bozuklukları ve Es Tabakası**  
OĞUZ O., YAZICI D., CAN Z.  
Türk Fizik Derneği, 17.Fizik Kongresi, Alanya, Turkey, 27 - 31 October 1998
- XVI. **İyonosferin İletkenliği ve Manyetik Alanların Neden Olduğu Magneto Akustik Gravite Dalgalarının Sönüme Uğraması**  
YAZICI D., OĞUZ O.  
Türk Fizik Derneği 15.Fizik Kongresi, Turkey, 26 - 29 September 1994

## Supported Projects

- YAZICI D., TOPUZ S., Project Supported by Higher Education Institutions, KESİRLİ TÜREVLER VE İKİNCİ HEAVENLY DENKLEMİNİN UYUMLU KESİRLİ TÜREVLİ İKİLİ-HAMİLTONİYEN YAPISI, 2022 - 2024
- BOZKURT K., ÖZTÜRK O. F., GÜVEN H. Z., YAZICI D., Project Supported by Higher Education Institutions, Nötron Yıldızı Çekirdeğinde Kuark Madde Faz Geçişlerinin İncelenmesi, 2021 - 2023
- YAZICI D., SHEFTEL M., Project Supported by Higher Education Institutions, Heavenly tipi denklemlerin bi-Hamiltoniyen temsili simetriler ve korunum yasaları, 2021 - 2022
- YAZICI D., SHEFTEL M. B., Project Supported by Higher Education Institutions, Matematiksel fizikte lineer olmayan denklemlerin simetrileri korunum yasaları integre edilebilirlik ve biHamiltoniyen yapıları, 2018 - 2019
- Yazıcı D., Kaya R., Can Z., Project Supported by Higher Education Institutions, Kütle çekim Dalgaları, 2000 - 2004

## Metrics

- Publication: 42  
Citation (WoS): 73  
Citation (Scopus): 91  
H-Index (WoS): 4  
H-Index (Scopus): 5

## Awards

Yazıcı D., 2023 Yılı Türk Fizik Derneđi Onur Ödülü, Türk Fizik Derneđi, August 2023

### **Non Academic Experience**

GS ÜNİVERSİTESİ, MİSAFİR ÖĐRETİM ÜYESİ  
HAVA HARP OKULU, MİSAFİR ÖĐRETİM GÖREVLİSİ  
DOĐUŐ ÜNİVERSİTESİ, MİSAFİR ÖĐRETİM ÜYESİ  
BEYKENT ÜNİVERSİTESİ, MİSAFİR ÖĐRETİM ÜYESİ