Prof. HANDAN OLĞAR

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: AAF-8466-2020
ScopusID: 36165094800
Yoksis Researcher ID: 34817

Biography

She completed her undergraduate studies in 1997, her master's degree in 2000 and her doctorate in 2003 at Hacettepe University, Department of Physics Engineering. Prof. Olgar, who started her academic career as a research assistant at Hacettepe University Physics Engineering Department between 1998-2007, continued her associate professorship between 2008-2011 at Ankara University, Engineering Faculty, Physics Engineering Department and has working as a Professor in the same department since 2011. Prof. Dr. Handan Olgar won the Alexander von Humboldt Experienced Researcher Fellowship in 2010 and worked as a visiting researcher at the University of Leipzig, Germany between 2011-2013 and 2017. She was also awarded the Loreal Young Scientist Award by LOREAL-UNESCO in 2005, the outstanding young scientist award TUBA-GEBIP in 2006, she was deemed worthy of the Humboldt Alumni Award, given to distinguished scientists from all over the world, on behalf of Turkey.

Prof. Dr. Handan Olgar has been the Humboldt Ambassador Scientist for Turkey on behalf of the Alexander von Humboldt Foundation, Germany, since 2020. She is also the President of the Ankara Humboldt Fellows Association.

She is married and a mother of two children.

Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), Turkey 2000 - 2003
Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Yl) (Tezli), Turkey 1997 - 2000
Undergraduate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1992 - 1997

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Multikanonik simülasyon yöntemi ile biyomoleküllerin incelenmesi, Hacettepe University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), 2003
Postgraduate, Zayıf birinci derece faz geçişlerinde faz ayrılmasının incelenmesi, Hacettepe University, Fen Bilimleri

Enstitüsü, Fizik Mühendisliği (Yl) (Tezli), 2000

Research Areas

Biophysics, Physics, Interdisciplinary Physics and Related Science and Technology Areas, General Physics, Natural Sciences

Academic Titles / Tasks

Professor, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2011 - Continues
Associate Professor, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2008 - 2011
Research Assistant, Hacettepe University, Mühendislik Fakültesi, 1998 - 2007

Academic and Administrative Experience

Head of Department, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2020 - 2023
Head of Department, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2020 - 2023

Courses

İLERİ KUANTUM MEKANİĞİ I, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014
QUANTUM MECHANICS, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021
MECHANICS LABORATORY, Undergraduate, 2023 - 2024, 2022 - 2023
COMPUTATIONAL METHODS FOR BIOMATERIAL MODELLING, Undergraduate, 2022 - 2023, 2021 - 2022
Fizik Mühendisliği Araştırma Teknikleri II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
ADVANCED QUANTUM MECHANICS I, Undergraduate, 2022 - 2023, 2021 - 2022, 2019 - 2020
İLERİ KUANTUM MEKANİĞİ II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
ADVANCED QUANTUM MECHANICS II, Undergraduate, 2022 - 2023
COMPUTATIONAL METHODS FOR BIOMATERIAL MODELLING, Undergraduate, 2022 - 2023, 2021 - 2022
Fizik Mühendisliğinde Araştırma Teknikleri, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Araştırma Yöntemleri, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
RESEARCH PROJECT, Undergraduate, 2022 - 2023, 2021 - 2022
UYGULAMALI KUANTUM MEKANİĞİNE GİRİS, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Fizikte Güncel Konular, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
FİZİK I, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
FİZİK II, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017
FİZİKTE BİLGİSAYAR UYGULAMALARİ II, Undergraduate, 2017 - 2018
Uygulamalı Kuantum Mekaniği I, Postgraduate, 2017 - 2018
İSTATİSTİK FİZİKTE NUMERİK YÖNTEMLER, Postgraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2010 - 2011, 2009 - 2010, 2008 - 2009
Kuantum Fiziği, Undergraduate, 2010 - 2011, 2009 - 2010, 2008 - 2009
Fizikte Bilgisayar Uygulamalari, Undergraduate, 2009 - 2010

Advising Theses

Olğar H., Biyolojik Moleküllerin Arsenik Fosforen üzerine adsorpsiyonu, Postgraduate, O.Tercan(Student), 2023
Olğar H., Nörotransmitter moleküllerin algılanması için bor karbür tek katmanlı hegzagonal yüzeyin fonksiyonel hale getirilmesi, Postgraduate, N.SHUKUROV(Student), 2022
OLĞAR H., Hidrofobik-polar model protenlerin konformasyon uzaylarının incelenmesi, Postgraduate, B.TAŞDİZEN(Student), 2013
OLĞAR H., Hidrofobik-polar model proteinlerin farklı yüzeylere adsorpsiyonunun incelenmesi, Postgraduate, H.ALABOZ(Student), 2010
OLĞAR H., Elastin kökenli peptit zincirlerinin yapısal geçişlerinin incelenmesi, Postgraduate, M.BİLSEL(Student), 2009

Jury Memberships

Competition, Falling Walls Lab Türkiye, November, 2021

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Exploring the adsorption mechanisms of neurotransmitter and amino acid on Ti3C2-MXene monolayer: Insights from DFT calculations**
Ozdemir I., OLĞAR H., Milošević M. V., Barth J. V., Aktürk E.
Surfaces and Interfaces, vol.46, 2024 (SCI-Expanded)

II. **A DFT investigation for the Dopamine adsorption on the pristine and defected blue arsenic-phosphorus monolayers**
Kaya P., Tercan O., KADEROĞLU ABAZARI Ç., Aktürk E., OLĞAR H.
Surfaces and Interfaces, vol.46, 2024 (SCI-Expanded)

III. **Investigation of the conformational space of hydrophobic-polar heteropolymers by gyration tensor based parameters**
Ozyurt B. T., Arkin H.
Chemical Physics, vol.552, 2022 (SCI-Expanded)

IV. **Influence of doping with selected organic molecules on the magnetic and electronic properties of bare, surface terminated and defect patterned Ti2C MXene monolayers**
Gorkan T., Arkin H., Akturk E.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.24, no.4, pp.2465-2475, 2022 (SCI-Expanded)

V. **High uptake and fixation ability of BC monolayer for CO and NO toxic gases: a computational analysis**
KADEROĞLU Ç., AKTÜRK E., Arkin H.
JOURNAL OF MATERIALS SCIENCE, vol.56, no.33, pp.18566-18580, 2021 (SCI-Expanded)

VI. **Adsorption of small molecules on a Pmma CO monolayer**
Ozdemir I., Arkin H., AKTÜRK E.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.139, 2020 (SCI-Expanded)

VII. **Effect of point defects on electronic and magnetic properties of single-layer SiO**
Ozdemir I., Arkin H., AKTÜRK E.
PHILOSOPHICAL MAGAZINE, vol.99, no.18, pp.2340-2353, 2019 (SCI-Expanded)

VIII. **Functionalization of monolayer AsP phases by adatoms: a first-principles study**
Ozdemir I., Ozaydin H. D., Arkin H., Akturk E.
MATERIALS RESEARCH EXPRESS, vol.6, no.6, 2019 (SCI-Expanded)

IX. **Tuning electronic and magnetic properties of single-layer PN phases by point defects**
Benam Z. H., Arkin H., Akturk E.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.125, pp.80-89, 2019 (SCI-Expanded)

X. **Point defects in buckled and asymmetric washboard phases of arsenic phosphorus: A first principles study**
Benam Z. H., Arkin H., Akturk E.
COMPUTATIONAL MATERIALS SCIENCE, vol.140, pp.290-298, 2017 (SCI-Expanded)

XI. **Polymer adsorption on curved surfaces**
Arkin H., Janke W.
PHYSICAL REVIEW E, vol.96, no.6, 2017 (SCI-Expanded)

XII. **The effect of vacancies and the substitution of p-block atoms on single-layer buckled germanium selenide**
Ersan F., Arkin H., Akturk E.
RSC ADVANCES, vol.7, no.60, pp.37815-37822, 2017 (SCI-Expanded)

XIII. **Investigation of adatom adsorption on single layer buckled germanium selenide**
Arkin H., Akturk E.
APPLIED SURFACE SCIENCE, vol.390, pp.185-189, 2016 (SCI-Expanded)

XIV. **Gyration tensor based analysis of the shapes of polymer chains in an attractive spherical cage**
Arkin H., Janke W.
JOURNAL OF CHEMICAL PHYSICS, vol.138, no.5, 2013 (SCI-Expanded)

XV. **Polymer-attractive spherical cage system**
Arkin H., Janke W.
EUROPEAN PHYSICAL JOURNAL-SPECIAL TOPICS, vol.216, no.1, pp.181-190, 2013 (SCI-Expanded)

XVI. **Ground-State Properties of a Polymer Chain in an Attractive Sphere**
Arkin H., Janke W.
JOURNAL OF PHYSICAL CHEMISTRY B, vol.116, no.34, pp.10379-10386, 2012 (SCI-Expanded)

XVII. **Structural behavior of a polymer chain inside an attractive sphere**
ArkIn H., Janke W.
PHYSICAL REVIEW E, vol.85, no.5, 2012 (SCI-Expanded)

XVIII. **Simple flexible polymers in a spherical cage**
Marenz M., Zierenberg J., Arkin H., Janke W.
CONDENSED MATTER PHYSICS, vol.15, no.4, 2012 (SCI-Expanded)

XIX. **Residue length and solvation model dependency of elastinlike polypeptides**
Bilsel M., Arkin H.
PHYSICAL REVIEW E, vol.81, no.5, 2010 (SCI-Expanded)

XX. **Comparison of the Parallel Tempering Algorithm and Multicanonical Method as Applied to Coarse-Grained Off-lattice Models for Folding Heteropolymers**
Arkin H.
JOURNAL OF STATISTICAL PHYSICS, vol.139, no.2, pp.326-332, 2010 (SCI-Expanded)

XXI. **How conformational transition depends on hydrophobicity of elastin-like polypeptides**
Arkin H., Bilsel M.
EUROPEAN PHYSICAL JOURNAL E, vol.31, no.3, pp.327-332, 2010 (SCI-Expanded)

XXII. **DIPEPTIDE ADSORPTION ON Si(100)-2 x 1 ASYMMETRIC SURFACE BY FIRST PRINCIPLES**
Aktürk E., Gülseren O., Arkin H., Çelik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.21, no.1, pp.97-106, 2010 (SCI-Expanded)

XXIII. **Conformational properties of surfactant-like peptides with variable glycine tails**
Arkin H.
PHYSICA A-STATISTICAL MECHANICS AND ITS APPLICATIONS, vol.389, no.2, pp.265-272, 2010 (SCI-Expanded)

XXIV. **Adsorption of a hydrophobic-polar-model heteropolymer in an attractive nanotube**
Arkin H.
PHYSICAL REVIEW E, vol.80, no.4, 2009 (SCI-Expanded)

XXV. **Determination of the structure of the energy landscape for coarse-grained off-lattice models of folding heteropolymers**
Arkin H.

PHYSICAL REVIEW E, vol.78, no.4, 2008 (SCI-Expanded)

XXVI. **The structure of the free energy surface of coarse-grained off-lattice protein models**
Akturk E., OLĞAR H., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.18, no.1, pp.99-106, 2007 (SCI-Expanded)

XXVII. **Study of elastin sequences with solvent induced force field**
OLĞAR H.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.16, no.9, pp.1339-1346, 2005 (SCI-Expanded)

XXVIII. **Solvation effects on free energy surface of polyalanine**
Gokoglu G., OLĞAR H., Akturk E., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.16, no.9, pp.1489-1496, 2005 (SCI-Expanded)

XXIX. **Conformational analysis of polyalanyl chains**
Gokoglu G., OLĞAR H., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.16, no.3, pp.455-463, 2005 (SCI-Expanded)

XXX. **Multicanonical study of coarse-grained off-lattice models for folding heteropolymers**
Bachmann M., OLĞAR H., Janke W.
PHYSICAL REVIEW E, vol.71, no.3, 2005 (SCI-Expanded)

XXXI. **A combination of replica exchange Monte Carlo and energy landscape paving algorithms to increase the effectiveness of conformational sampling**
OLĞAR H.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.15, no.7, pp.933-937, 2004 (SCI-Expanded)

XXXII. **Simulations of peptide models in a solvent**
OLĞAR H.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.15, no.2, pp.223-231, 2004 (SCI-Expanded)

XXXIII. **Searching low-energy conformations of two elastin sequences**
OLĞAR H.
EUROPEAN PHYSICAL JOURNAL B, vol.37, no.2, pp.223-228, 2004 (SCI-Expanded)

XXXIV. **A fast and effective conformational search method for peptides**
OLĞAR H., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.14, no.7, pp.985-991, 2003 (SCI-Expanded)

XXXV. **Determination of conformational transitions of peptides from energy landscape**
OLĞAR H., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.14, no.5, pp.567-574, 2003 (SCI-Expanded)

XXXVI. **Structure of energy landscape of short peptides**
OLĞAR H., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.14, no.1, pp.113-120, 2003 (SCI-Expanded)

XXXVII. **Comparison of the ELP and multicanonical methods in simulation of the heptapeptide deltorphin**
OLĞAR H., Celik T.
EUROPEAN PHYSICAL JOURNAL B, vol.30, no.4, pp.577-580, 2002 (SCI-Expanded)

XXXVIII. **Efficiency of the multicanonical simulation method as applied to peptides of increasing size: The heptapeptide deltorphin**
Yasar F., OLĞAR H., Celik T., Berg B., Meirovitch H.
JOURNAL OF COMPUTATIONAL CHEMISTRY, vol.23, no.12, pp.1127-1134, 2002 (SCI-Expanded)

XXXIX. **Multicanonical simulations of some peptides**
OLĞAR H., Yasar F., Celik T., Berg B., Meirovitch H.
COMPUTER PHYSICS COMMUNICATIONS, vol.147, no.1-2, pp.600-603, 2002 (SCI-Expanded)

XL. **Spinodal decomposition in 3 d q=3 potts model**
OLĞAR H., Celik T.
NUCLEAR PHYSICS B-PROCEEDINGS SUPPLEMENTS, vol.106, pp.926-928, 2002 (SCI-Expanded)

XLI. **Molecular modeling of two hexapeptide repeat motifs of HMW glutenin subunits**
OLĞAR H., Yasar F., Celik T., Celik S., Koksel H.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.12, no.2, pp.281-292, 2001 (SCI-Expanded)

XLII. **Multicanonical simulations of five tetrapeptide sequences in the central domain of HMW glutenin**
OLĞAR H., Yasar F., Celik T., Celik S., Koksel H.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.11, no.8, pp.1595-1606, 2000 (SCI-Expanded)

XLIII. **Study of phase conversion in three-dimensional q=3 Potts model**
OLĞAR H., Celik T.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.11, no.7, pp.1313-1320, 2000 (SCI-Expanded)

XLIV. **Phase separation in a weak first-order phase transition**
OLĞAR H., Celik T., Berg B., Meyer-Ortmanns H.
PHYSICA A, vol.274, no.1-2, pp.320-324, 1999 (SCI-Expanded)

XLV. **Study of phase separation in a first-order phase transition: Nucleation versus spinodal decomposition**
OLĞAR H., Celik T., Berg B., Meyer-Ortmanns H.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.10, no.7, pp.1261-1269, 1999 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Adsorption of dopamine on the b-AsP surface based on first principles**
Kaya P., Tercan O., Kaderoğlu Ç., Aktürk E., Olğar H.
COMPHYS22- 23rd International NTZ-Workshop on New Developments in Computational Physics, Leipzig, Germany, 24 - 26 November 2022, pp.1

II. **Functionalization of Boron-Carbide monolayer for the adsorption of organic molecules**
Shukurov N., Kaderoğlu C., Aktürk E., Olğar H.
22nd International NTZ-Workshop on New Developments in Computational Physics, Leipzig, Germany, 25 - 27 November 2021, pp.5

III. **EXAMINATION OF INTERACTIONS BETWEEN SOME GRAPHENELIKE TWO-DIMENSIONAL MXENE MATERIALS WITH NEUROTRANSMITTER MOLECULES AND AMINO ACIDS**
Ilgaz Aysan I., Olğar H., Akturk E.
TÜRK FİZİK DERNEĞİ 37. ULUSLARARASI FİZİK KONGRESİ, Muğla, Turkey, 1 - 05 September 2021, pp.113

IV. **ADSORPTION OF GLYCINE ON THE ASP MONOLAYER SURFACE**
Tercan O., Kaya P., Kaderoğlu Ç., Aktürk E., Olğar H.
ADSORPTION OF GLYCINE ON THE ASP MONOLAYER SURFACE, Muğla, Turkey, 1 - 05 September 2021, pp.238

V. **PERFORMANCE OF INTRINSIC BC NANOLAYER FOR THE ADSORPTION OF DOPAMINE AND 5-FLUOROACIL(5FU): A DFT STUDY**
Shukurov N., Kaderoğlu Ç., Aktürk E., Olğar H.
TÜRK FİZİK DERNEĞİ 37. ULUSLARARASI FİZİK KONGRESİ,, Muğla, Turkey, 1 - 05 September 2021, pp.238

VI. **Investigation of the Conformational Space of Hydrophobic-Polar Model Proteins**
Taşdizen Özyurt B., Olğar H.
Humboldt Kolleg Ankara, Ankara, Turkey, 11 - 13 June 2014, pp.1

VII. **Simple Polymer in a Spherical Cage**
Marenz M., Zierenberg J., Olğar H., Janke W.
Humboldt Kolleg Ankara, Ankara, Turkey, 11 - 13 June 2014, pp.1

VIII. **Polymer adsorption in an attractive sphere**
Olğar H., Janke W.
MECO38, Trieste, Italy, 25 - 27 March 2013, pp.1

IX. **Polymers in a Spherical Cage**
Marenz M., Zierenberg J., Olğar H., Janke W.
Comphys12, Leipzig, Germany, 29 November - 01 December 2012, pp.2

X. **Thermodynamics of a polymer chain in a spherical cage**
Olğar H., Janke W.
Comphys12, Leipzig, Germany, 29 November - 01 December 2012, pp.1

XI. **Comformational Behavior of a polymer chain in an Attractive Spherical Cage**
Olğar H., Janke W.
SFB/TR102 Fall Meeting Miniworkshop Brehna, Halle, Germany, 19 October 2012, pp.1

XII. **Polymer Chain in an Attractive Spherical Confinement**
Olğar H., Janke W.
StatMech Meeting, Mainz, Germany, 19 - 21 September 2012, pp.1

XIII. **Polymer Chain inside Confinement**
Olğar H., Janke W.
Alexander von Humboldt Foundation, Network Meeting, Kiel, Germany, 8 - 10 February 2012, pp.1

XIV. **Simulations of elastin like proteins Elastin türü proteinlerin simülasyonu**
Olgar H., Bilsel M.
2010 15th National Biomedical Engineering Meeting, BIYOMUT2010, Antalya, Turkey, 21 - 24 April 2010

XV. **Determination of the Adsorption of Hydrophobic-Polar Models Proteins on Different Surfaces**
Olğar H., Alaboz H.
16. Statistical Physics Days, İstanbul, Turkey, 25 - 27 June 2009, pp.1

XVI. **Molecular Modeling of Elastinlike Polypeptides**
Bilsel M., Olğar H.
16. Statistical Physics Days, İstanbul, Turkey, 25 - 27 June 2009, pp.1

XVII. **Structural Transitions Mechanism in Protein Models**
Olğar H.
L'oreal Young Women Scientist Meeting, İstanbul, Turkey, 16 May 2009, pp.1

XVIII. **Study of the conformational changes of hydrophobic – polar polymer chain near a hydrophobic chain**
Olğar H., Alaboz H.
MECO34: 34rd Conference of the Middle European Cooperation in Statistical Physics , Leipzig, Germany, 29 April - 02 May 2009, pp.1

XIX. **Conformational Transition in Elastin Polypeptide with Different Residue Length**
Arkin H., Bilsel M.
7th International Conference of the Balkan-Physical-Union, Alexandroupoli, Greece, 9 - 13 September 2009, vol.1203, pp.1211-1216

XX. **The energy landscape of Hydrophobic-Polar Protein Model**
Olğar H.
Conference on Knots and Other Entaglements in Biopolymers: Topological and Geometrical Aspects of DNA, RNA and Protein Structures, Trieste, Italy, 15 - 19 September 2008, pp.1

XXI. **First Principles Investigation of Amino Acid adsorption on a Surface**
Aktürk E., Olğar H., Gülseren O., Çelik T.
MECO33: 33rd Conference of the Middle European Cooperation in Statistical Physics, Wels, Austria, 14 - 16 April 2008, pp.1

XXII. **Generalized Ensemble Simulations of off-lattice Protein Models,**
Olğar H.
Turkish Academy of Sciences Outstanding Young Scientist Annual Meeting, Erzurum, Turkey, 01 September 2007, pp.1

XXIII. **First Principles Investigation of Amino Acid Adsorption on Si(100)-2x1 Asymetric Surface,**
Aktürk E., Gülseren O., Olğar H., Çelik T.
13. Statistical Physics Days, İstanbul, Turkey, 06 July 2006 - 08 July 2007, pp.1

XXIV. **Simulations of Biological Molecules by Generalized-Ensemble Algorithms.**
Olğar H.
12. Statistical Physics Days, İstanbul, Turkey, 30 June - 02 July 2005, pp.1

XXV. **Multicanonical Simulations of AB model**
Olğar H., Bachmann M., Janke W.
Conference on Computational Physics, Genoa, Italy, 31 August - 04 September 2004, pp.1

XXVI. **Conformational Search Algorithms for All-Atom Protein Models**
Olğar H.
Workshop of Structure and Function of Biomolecules, Poznan, Poland, 12 - 15 May 2004, pp.2

XXVII. **Multicanonical Simulations of Short Polyalanine Chains**
Gökoğlu G., Olğar H., Çelik T.
Workshop of Structure and Function of Biomolecules, Poznan, Poland, 12 - 15 May 2004, pp.1

XXVIII. **Multicanonical Study of Effective Off-Lattice Models for Heteropolymers**
Bachmann M., Olğar H., Janke W.
29th Conference of the Middle European Cooperation in Statistical Physics, Bratislava, Slovakia, 1 - 03 March 2004, pp.1

XXIX. **Statistical Properties of Off-Lattice Heteropolymers**
Bachmann M., Olğar H., Janke W.
Deutsche Physikalische Gesellschaft, Physik Tagungen, Regensburg, Germany, 01 January 2004, pp.1

XXX. **Phase Separation in 3D Three State Potts Model**
Olğar H., Çelik T.
Nuclear Physics A Procedings of the International Symposium on Statistical QCD, Bielefeld, Germany, 01 January 2002, pp.5-6

XXXI. **Multicanonical Simulations of Five Tetrapeptide Sequences in The Central Domain of HMW Glutenin**
Olğar H., Yasar F., Köksel H., Çelik S., Çelik T.
AACC Annual Meeting,, North Carolina, United States Of America, 01 February 2001, pp.1

XXXII. **Study of Phase Separation in a First-Order Phase Transition**
Olğar H., Çelik T., Berg B. A., Meyer-Ortmans H.
Monte Carlo and Structure Optimization Methods for Biology, Chemistry and Physics, Florida, United States Of America, 03 February 1999, pp.1

XXXIII. **Nucleation vs. Spinodal Decomposition in a First-Order Phase Transition**
Olğar H., Aydın M., Gündüç Y., Çelik T.
5. Statistical Physics Days, İstanbul, Turkey, 16 - 18 July 1998, pp.1

Supported Projects

Olğar H., Kaya P., TUBITAK Project, Yeni Nesil İki Boyutlu Yeşil Fosforen Tabakasının Porfin Molekülü ile etkileşmesinin ve Biyolojik Uygulamalar için Fonksiyonelleştirilmesinin Değerlendirilmesi , 2023 - 2024

Olğar H., Kaderoğlu Ç., TUBITAK Project, Biyolojik Moleküllerin Arsenik Fosforen Tek Katmanlı Hegzagonal Yüzey Üzerine Adsorpsiyonunun İncelenmesi, 2022 - 2023

Olğar H., Aktürk E., TUBITAK Project, Grafen Benzeri Iki Boyutlu Mxene Malzemelerin Neurotransmitter Moleküller Ve Amino Asitler Ile Etkileşmelerinin Incelenmesi, 2019 - 2022

Olğar H., Janke W., Weigel M., Hansmann U., Project Supported by Public Organizations in Other Countries, Stable knotted phases in semiflexible polymers, 2016 - 2020

Olğar H., Aktürk E., TUBITAK Project, Yoğunluk Fonksiyoneli Teorisi Hesabı ile Siyah ve Mavi Arsenik Fosforen Tek Katmanlı Yapıların Farklı Atomlarla Adsorpsiyonunun, Katkılanmasının ve Boşluk Kusurlarının Yapısal ve Elektronik Özellikleri Üzerine Etkisinin İncelenmesi, 2017 - 2019

OLĞAR H., Project Supported by Higher Education Institutions, Germanyum Selenide (GeSe) tek katmanlı yapıların p-blok elementleri ile katkılanmasının yapı, elektronik ve magnetik özellikler üzerine etkilerinin incelenmesi, 2017 - 2018

Olğar H., Weigel M., H2020 Project, Dynamics of and in complex systems, 2014 - 2018

OLĞAR H., Project Supported by Higher Education Institutions, Arsenen Tabanlı Tek Katmanlı Yapıların Farklı Atomlarla Katkılanarak Yapılarının ve Elektronik Özelliklerinin İncelenmesi, 2016 - 2017

Olğar H., Project Supported by Public Organizations in Other Countries, The Effects of Polymer Stiffness on the adsorption Transition, 2013 - 2014

Olğar H., TUBITAK Project, Hapis Ortamlarında Proteinlerin Katlanma Mekanizmasının İncelenmesi, 2009 - 2012

Olğar H., TUBITAK Project, İstatistik Fizikte Biyolojik Kökenli Problemlerin İncelenmesi Makromoleküler Modelleme,

2004 - 2009
Olğar H., Project Supported by Higher Education Institutions, Multicanonical Simulations of Some Peptides, 2003 - 2004

Memberships / Tasks in Scientific Organizations

Ankara Humboldt Bursiyerleri Derneği, Chairman, 2020 - Continues, Turkey
Ankara Humboldt Bursiyerleri Derneği, Member, 2012 - Continues, Turkey
Türk Fizik Derneği, Member, 2008 - Continues, Turkey
Ankara Humboldt Bursiyerleri Derneği, Executive Board Member, 2013 - 2015, Turkey

Tasks In Event Organizations

Olğar H., Kaderoğlu Ç., Kaya P., Tercan O., HUMBOLDT KOLLEG 2023 ANKARA Recent Advances in Material Science: Perspectives from Physics, Chemistry and Biology, Scientific Congress, Ankara, Turkey, Nisan 2023
Olğar H., Ünal M. A., Kaderoğlu Ç., HUMBOLDT KOLLEG 2014 ANKARA German -Turkish Cooperation in Physics: New Challenges in Science, Scientific Congress, Ankara, Turkey, Haziran 2014

Metrics

Publication: 84
Citation (WoS): 392
Citation (Scopus): 426
H-Index (WoS): 10
H-Index (Scopus): 11

Invited Talks

Simulations of Biological Molecules, Workshop, Leipzig University, Germany, June 2011
Simulations of Biological Molecules by Generalized-Ensemble Algorithms, Conference, İstanbul Teknik Üniversitesi, Turkey, June 2005
Generalized-Ensemble Simulations of Peptides and Proteins, Seminar, Leipzig University, Germany, October 2004
Structure of Energy Landscape of Peptides and Proteins, Seminar, Leipzig University, Germany, June 2003

Scholarships

Alexander von Humboldt Reneewed Research Stay, Humboldt Program, 2024 - 2024
Humboldt Fellowship Renewed, Humboldt Program, 2022 - 2022
Humboldt Fellowship Renewed, Humboldt Program, 2017 - 2017
Humboldt Return Fellowship, Humboldt Program, 2013 - 2014
Humboldt Fellowship for Experienced Researcher, Humboldt Program, 2011 - 2012
Yurtiçi Doktora Sonrası Burs Programı, TUBITAK, 2007 - 2008
DFG -TÜBİTAK Ortak İşbirliği Programı, TUBITAK, 2004 - 2004
DFG- TÜBİTAK işbirliği Programı, TUBITAK, 2003 - 2003
Doktora Burs Programı, TUBITAK, 2000 - 2003
Yüksek Lisans Burs Programı, TUBITAK, 1998 - 2000

Awards

Olğar H., Humboldt Ambassador Scientist for Turkey, Alexander Von Humboldt Foundation, May 2020
Olğar H., Humboldt Alumni Award, Alexander Von Humboldt Foundation, June 2017
Olğar H., TÜBA GEBİP Seçkin Genç Bilim İnsanı Ödülü, Türkiye Bilimler Akademisi, September 2006
Olğar H., LOREAL UNESCO Genç Bilim Kadını Ödülü, Loreal Türkiye, March 2005