



## Prof. ERDİ ATA BLEDA

### Personal Information

**Email:** ata.bleda@marmara.edu.tr

**Web:** <https://avesis.marmara.edu.tr/ata.bleda>

#### International Researcher IDs

ScholarID: APRuiCkAAAAJ

ORCID: 0000-0002-2140-0244

ScopusID: 54980111900

Yoksis Researcher ID: 161538



### Education Information

2004 - 2008	Doctorate, Clemson University, Department of Physics and Astronomy, United States Of America
2002 - 2004	Postgraduate, Clemson University, Department of Physics and Astronomy, United States Of America
1997 - 2001	Undergraduate, Marmara University, Faculty of Arts and Sciences, Physics, Turkey

### Research Areas

Atomic and Molecular Physics, Physics of Plasmas

### Academic Titles / Tasks

2022 - Continues	Professor, Marmara University, Faculty of Arts and Sciences, Physics
2016 - 2022	Associate Professor, Marmara University, Faculty of Arts and Sciences, Physics
2014 - 2016	Assistant Professor, Marmara University, Faculty of Arts and Sciences, Physics
2013 - 2014	Assistant Professor, Istanbul Arel University, Faculty Of Arts And Sciences, Department Of Mathematics And Computer
2009 - 2012	Assistant Professor, Istanbul Arel University, Faculty Of Arts And Sciences, Department Of Mathematics And Computer

### Academic and Administrative Experience

2015 - Continues	Erasmus Program Institutional Coordinator, Marmara University, Faculty of Arts and Sciences, Physics
2017 - 2022	Bölüm Kalite Komisyonu Üyesi, Marmara University, Faculty of Arts and Sciences, Physics
2017 - 2022	Commission for Program Assessment and Exemption, Marmara University, Faculty of Arts and Sciences, Physics
2017 - 2020	Deputy Head of Department, Marmara University, Faculty of Arts and Sciences, Physics
2017 - 2020	Course and Examination Program Commission, Marmara University, Faculty of Arts and Sciences, Physics

2015 - 2019	Course Assignment and Organization Commission, Marmara University, Faculty of Arts and Sciences, Physics
2012 - 2014	BAP Scientific Commissioner, Istanbul Arel University, Faculty Of Science And Letters, Department Of Mathematics And Computer
2010 - 2011	Fakülte Kurulu Üyesi, Istanbul Arel University, Faculty Of Science And Letters, Department Of Mathematics And Computer
2009 - 2011	Deputy Head of Department, İstanbul Arel Üniversitesi, Fen-Edebiyat Fakültesi, Matematik-Bilgisayar Bölümü

## Courses

2022 - 2023, 2021 - 2022, 2020 - 2021	Electromagnetic Theory, Postgraduate
2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018	Differential Equations, Undergraduate
2022 - 2023, 2021 - 2022	Advanced Electromagnetic Theory, Doctorate
2022 - 2023, 2021 - 2022	Quantum Mechanics, Postgraduate
2021 - 2022	Classical Mechanics, Undergraduate
2019 - 2020	Introduction to Computational Programming, Undergraduate
2019 - 2020, 2018 - 2019, 2017 - 2018	Fizikte Sayısal Yöntemler, Undergraduate
2020 - 2021, 2019 - 2020, 2018 - 2019	İleri Programlama, Undergraduate
2020 - 2021, 2019 - 2020	Computer Applications in Mathematics and Physics, Undergraduate
2020 - 2021, 2019 - 2020, 2018 - 2019	Mechanics, Undergraduate
2018 - 2019, 2017 - 2018	Physics II, Undergraduate
2018 - 2019, 2017 - 2018	Physics II, Undergraduate
2018 - 2019, 2017 - 2018	Physics I, Undergraduate
2018 - 2019, 2017 - 2018	Physics I, Undergraduate
2017 - 2018	Physics III, Undergraduate

## Advising Theses

Continues	Bleda E. A., Doctorate, D.İçkecan(Student), Investigation of the Properties of 2D nanostructures using Machine Learning Methods
Continues	Bleda E. A., Doctorate, C.Gülyüz(Student), First Principle Investigation of Transport Properties in Nanostructures and Nanomaterials
2023	Bleda E. A., Postgraduate, S.MAHMOUDI(Student), Calculations of Hyperpolarizability and Two-Photon Absorption Cross Sections of Organic Charge-Transfer Compounds

2023	Bleda E. A., Postgraduate, G.İLHAN(Student), Investigation of the Parallelization of Green's Function Method for High-Order Harmonic Generation Simulations
2019	Bleda E. A., Postgraduate, O.OĞUZ(Student), Development of high-order harmonic generation code using CUDA

## Jury Memberships

November 2020	Doctorate, Doctorate, Marmara Üniversitesi
September 2020	Competition, Teknofest 2020, Marmara Üniversitesi
January 2020	Academic Staff Examination, Academic Staff Examination, Marmara Üniversitesi
June 2019	Post Graduate, Post Graduate, Marmara Üniversitesi
May 2019	Post Graduate, Post Graduate, Marmara Üniversitesi
December 2017	PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Marmara Üniversitesi
May 2015	Competition, ORTAOKUL AKTİF DENEY YARIŞMASI, AREL Koleji
April 2015	Competition, 7. Aktif Deney Yarışması, AREL Koleji
April 2014	Competition, Aktif Deney Yarışması, AREL Koleji
April 2013	Competition, Aktif Deney Yarışması, AREL Eğitim Kurumları
April 2011	Competition, Aktif Deney Yarışması, AREL Eğitim Kurumları

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

- I. **Dielectronic recombination data for dynamic finite-density plasmas. XVI. The phosphorus isoelectronic sequence**  
Bleda E. A., Altun Z., Badnell N.  
ASTRONOMY AND ASTROPHYSICS, vol.668, no.A72, pp.1-12, 2022 (SCI-Expanded)
- II. **Atoms in Highly Symmetric Environments: H in Rhodium and Cobalt Cages, H in an Octahedral Hole in MgO, and Metal Atoms Ca-Zn in C-20 Fullerenes**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
SYMMETRY-BASEL, vol.13, no.7, 2021 (SCI-Expanded)
- III. **Focal Point Evaluation of Energies for Tautomers and Isomers for 3-hydroxy-2-butenamide: Evaluation of Competing Internal Hydrogen Bonds of Types -OH horizontal ellipsis O=, -OH horizontal ellipsis N, -NH horizontal ellipsis O=, and CH horizontal ellipsis X (X=O and N)**  
Altun Z., Bleda E. A., Trindle C.  
MOLECULES, vol.26, no.9, 2021 (SCI-Expanded)
- IV. **Bonding Analysis of Compounds with Unusual Coordination of Carbon: Proposed Symmetric Systems with Six-Coordinate Carbon**  
Trindle C., ALTUN Z., BLEDA E. A.  
MOLECULES, vol.25, no.17, 2020 (SCI-Expanded)
- V. **Drastically enhanced high-order harmonic generation from endofullerenes**  
Topcu T., Bleda E. A., Altun Z.  
PHYSICAL REVIEW A, vol.100, no.6, 2019 (SCI-Expanded)
- VI. **Production of Carbamic Acid Dimer from Ammonia-Carbon Dioxide Ices: Matching Observed and Computed IR Spectra**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
LIFE-BASEL, vol.9, no.2, 2019 (SCI-Expanded)
- VII. **A case study of antiaromaticity: carbomethoxy cyclopropenyl anion**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
TURKISH JOURNAL OF CHEMISTRY, vol.43, no.2, pp.594-613, 2019 (SCI-Expanded)
- VIII. **Single metal catalysis: DFT and CAS modelling of species involved in the Fe cation assisted**

#### **transformation of acetylene to benzene**

ALTUN Z., Bleda E. A., Trindle C.

MOLECULAR PHYSICS, vol.115, pp.2185-2200, 2017 (SCI-Expanded)

- IX. **Computational characterization of isomeric C<sub>4</sub>H<sub>2</sub>O systems: Thermochemistry, vibrational frequencies, and optical spectra for butatrienone, ethynyl ketene, butadiynol, and triafulvenone**  
Sahin S., BLEDA E. A., ALTUN Z., Trindle C.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.116, no.6, pp.444-451, 2016 (SCI-Expanded)
- X. **Studies on spin state preferences in Fe(II) complexes**  
BLEDA E. A., Trindle C., ALTUN Z.  
COMPUTATIONAL AND THEORETICAL CHEMISTRY, vol.1073, pp.139-148, 2015 (SCI-Expanded)
- XI. **Thermochemistry of N-Heterocyclic Carbenes with 5-, 4-, 3-, and 2-Membered Rings**  
ALTUN Z., Bleda E. A., Trindle C., Wang J.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.114, no.10, pp.675-687, 2014 (SCI-Expanded)
- XII. **Phase-dependent interference fringes in the wavelength scaling of harmonic efficiency**  
Yavuz I., Bleda E. A., Altun Z., Topcu T.  
PHYSICAL REVIEW A, vol.89, no.5, 2014 (SCI-Expanded)
- XIII. **High-order-harmonic generation from Rydberg states at fixed Keldysh parameter**  
ALTUN Z., BLEDA E. A., YAVUZ İ., TURKER T.  
PHYSICAL REVIEW A, vol.88, no.4, 2013 (SCI-Expanded)
- XIV. **RECOMBINATION RATE COEFFICIENTS OF BORON-LIKE Ne**  
Saftar M., IstvanM O., S A., GLANS P., BLEDA E. A., ALTUN Z., SCHUCH R.  
ASTROPHYSICAL JOURNAL, vol.771, no.2, 2013 (SCI-Expanded)
- XV. **Structure and energetics of cyclopropane carboxaldehyde**  
Trindle C., BLEDA E. A., ALTUN Z.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.113, no.8, pp.1155-1161, 2013 (SCI-Expanded)
- XVI. **Computational thermochemistry of glycolaldehyde**  
BLEDA E. A., YAVUZ İ., ALTUN Z., Trindle C.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, vol.113, no.8, pp.1147-1154, 2013 (SCI-Expanded)
- XVII. **Generation of a broadband xuv continuum in high-order-harmonic generation by spatially inhomogeneous fields**  
YAVUZ İ., BLEDA E. A., ALTUN Z., Topcu T.  
PHYSICAL REVIEW A, vol.85, no.1, 2012 (SCI-Expanded)
- XVIII. **Calculations of diffusion in FCC binary alloys using on-the-fly kinetic Monte Carlo**  
BLEDA E. A., Gao X., Daw M. S.  
COMPUTATIONAL MATERIALS SCIENCE, vol.43, no.4, pp.608-615, 2008 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **CH Activation by a Heavy Metal Cation: Production of H<sub>2</sub> from the Reaction of Acetylene with C<sub>4</sub>H<sub>4</sub>-Os (+) in Gas phase**  
Altun Z., Bleda E. A., Trindle C.  
C Journal of Carbon Research, vol.7, no.4, pp.1-15, 2021 (ESCI)

## **Books & Book Chapters**

- I. **Focal Point Evaluation of Energies for Tautomers and Isomers for 3-hydroxy-2-butenamide: Evaluation of Competing Internal Hydrogen Bonds of Types -OH . . . O=, -OH . . . N, -NH . . . O=, and CH . . . X (X=O and N)**  
Altun Z., Bleda E. A., Trindle C.

## Refereed Congress / Symposium Publications in Proceedings

- I. **Probing the adsorption properties of sulfur monoxide on beta12 borophene**  
Güleryüz C., Bleda E. A.  
Turkish Physical Society 39th International Physics Congress, Muğla, Turkey, 31 August - 04 September 2023, pp.139
- II. **Probing the Phonon Spectrum of Twisted Bilayer Graphene with Machine Learning Methods (Session JJ07.00006)**  
İçkecan D., Bleda E. A., Erbahar D.  
APS March Meeting 2023, Nevada, United States Of America, 20 - 22 March 2023, pp.1
- III. **Investigation of Vibrational Properties of Twisted Bilayer Graphene (ID: 5 Graphene and 2D Materials)**  
İçkecan D., Bleda E. A., Erbahar D.  
16th Nanoscience and Nanotechnology Conference, Ankara, Turkey, 5 - 08 September 2022, pp.74
- IV. **One-photon and Two-photon Absorption in Small Organic Molecules (08PP6)**  
Mahmoudi S., Bleda E. A., Altun Z., Trindle C.  
Turkish Physical Society 38th International Physics Congress, İzmir, Turkey, 31 August - 04 September 2022, pp.349
- V. **Molecular Junction Conductance of Organic Molecules: from Naphthacene to Rubrene (03OP11)**  
Güleryüz C., Bleda E. A.  
Turkish Physical Society 38th International Physics Congress, İzmir, Turkey, 31 August - 04 September 2022, pp.143
- VI. **Green's Function Formalism of nth Order Time-Dependent Perturbation Theory with Improved Accuracy for High-order Harmonic Generation Simulations (01OP17)**  
İlhan G., Bleda E. A.  
Turkish Physical Society 38th International Physics Congress, İzmir, Turkey, 31 August - 04 September 2022, pp.69
- VII. **Prediction of Trajectories of 2-Body Problem Using Deep Learning (07OP17)**  
İLHAN G., BLEDA E. A.  
TPS 37th International Physics Congress, Bodrum, Turkey, 01 September 2021
- VIII. **Probing the Phonon Spectrum of Twisted Bilayer Graphene (03OP7)**  
İÇKECAN D., BLEDA E. A., ERBAHAR D.  
TPS 37th International Physics Congress, Bodrum, Turkey, 01 September 2021
- IX. **Development of a Parallel Green's Function Propagator Algorithm For High-Order Harmonic Generation Simulations (01OP12)**  
İLHAN G., BLEDA E. A.  
TPS 37th International Physics Congress, Bodrum, Turkey, 01 September 2021
- X. **High-order Harmonic Spectra in different gauges can disagree when there is confinement (H71.00270)**  
Topcu T., Bleda E. A., Altun Z.  
APS March Meeting, 15 - 19 March 2021, pp.1
- XI. **Enhancement of high-order harmonic generation from endohedrally confined atoms (Abstract No: J05.00008)**  
Topçu T., Bleda E. A., Altun Z.  
DAMOP 2020, 1 - 05 June 2020, vol.65, no.4
- XII. **PARALLEL HIGH-ORDER HARMONIC GENERATION FROM ONE ELECTRON ATOM CODE DESIGNED TO RUN ON NO-ECC FOR DOUBLE PRECISION GPUS BASED ON TRINARY MODULAR REDUNDANCY (TMR) USING CUDA (Session 03OP41)**  
OĞUZ O., ALTUN Z., BLEDA E. A.

Turkish Physical Society 35th International Physics Congress, Bodrum, Turkey, 4 - 08 September 2019

- XIII. **PERFORMANCE BENCHMARKS OF THREE DIFFERENT CUDA KERNEL FUNCTION IMPLEMENTATIONS FOR THE SIMULATION OF HIGH-ORDER HARMONIC GENERATION FROM ONE ELECTRON ATOM (Session 03OP42)**  
OĞUZ O., ALTUN Z., BLEDA E. A.  
Turkish Physical Society 35th International Physics Congress, Bodrum, Turkey, 04 September 2019
- XIV. **THE UNCERTAINTIES IN DIELECTRONIC RECOMBINATION RATES DUE TO THE AUTOIONIZATION LEVELS (03OP68)**  
OĞUZ O., BLEDA E. A., ALTUN Z.  
TFD 34, BODRUM, Turkey, 5 - 09 September 2018
- XV. **Comparing CPU based results with the results from CUDA GPUs and single-bit error analysis for HHG process (03OP9)**  
OĞUZ O., ALTUN Z., BLEDA E. A.  
TFD 34, Bodrum, Turkey, 5 - 09 September 2018
- XVI. **Hypervalency with First Row Elements (Oturum 03OP33)**  
Altun Z., Bleda E. A.  
Turkish Physical Society 34th International Physics Congress, Muğla, Turkey, 5 - 09 September 2018, pp.237
- XVII. **Three Views of H atom in unusual Environments: AIM, ELF and NCI analysis of proposed bifurcated H bonding in cobalt phthalate, pentacoordinate H in  $[H_2Rh_{13}(CO)_{24}]^{3-}$ , and multicoordinate H in defect sites of MgO and ZnO (Oturum A25)**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
The 16th International Congress of Quantum Chemistry, Menton, France, 18 - 23 June 2018
- XVIII. **Improving the Efficiency of HHG Code by Partial Parallelization of the Time Propagator (Session 03OP61)**  
BLEDA E. A., ALTUN Z.  
Turkish Physical Society 33. International Physics Congress, 6 - 10 September 2017, pp.244
- XIX. **The Interaction of the Ground and Excited States of H@C60 with Strong Laser Field (Session 03OP116)**  
BLEDA E. A., ALTUN Z.  
Turkish Physical Society 33. International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.271
- XX. **Computational Thermochemistry of Carbamic Acid and Related Compounds (Oturum Nu. PO-114)**  
ALTUN Z., BLEDA E. A., Trindle C.  
WATOC 2017, 27 August - 02 September 2017
- XXI. **DFT Study of CH bond activation of Os, Ir, Pt reacting with acetylene**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
WATOC 2017 (Oturum No: PO1-71), Munich, Germany, 27 August - 01 September 2017
- XXII. **Electron-impact ionization cross-sections and rate coefficients for the Si-like ions Se20 (OTURUM NO: FR-80)**  
ALTUN Z., BLEDA E. A.  
ICPEAC2017, Queensland, Australia, 26 July - 01 August 2017
- XXIII. **Dielectronic Recombination Rate Coefficient of Si-like ions Ni14 (Oturum: FR-79)**  
ALTUN Z., BLEDA E. A.  
ICPEAC2017, Queensland, Australia, 26 July - 01 August 2017
- XXIV. **Electron Impact Ionization and Rate Coefficients of Se20 and Se21**  
BLEDA E. A., ALTUN Z.  
Turkish Physical Society 32nd International Physics Congress, Bodrum, Turkey, 6 - 09 September 2016
- XXV. **SIMULATIONS OF HIGH ORDER HARMONIC GENERATION FROM CONFINED RYDBERG ATOMS**  
BLEDA E. A., ALTUN Z., Topcu T.  
Türk Fizik Derneği 32. Uluslararası Fizik Konferansı, 5 - 09 September 2016
- XXVI. **Electron Impact Ionization Cross Section and Rate Coefficient of Se18**  
BLEDA E. A., ALTUN Z.

ECAMP 2016, Frankfurt, Germany, 5 - 09 September 2016

- XXVII. **Modeling Circular Dichroism Spectra for Huperzine Variants Rapid and Nondestructive Analysis Guided by TDDFT Computations**  
ALTUN Z., BLEDA E. A., SHILLADY D. D., TRINDLE C.  
Theory and Applications of Computational Chemistry, 28 August - 02 September 2016
- XXVIII. **Modeling Ferrocene to Titanocene metal metal charge transfer spectra**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
The 8th Molecular Quantum Mechanics, Uppsala, Sweden, 26 June - 01 July 2016
- XXIX. **Modeling of gas phase Fe catalyzed transformation of acetylene to benzene**  
TIKMAN Y., BLEDA E. A., ALTUN Z.  
The 8th Molecular Quantum Mechanics, Uppsala, Sweden, 26 June - 01 July 2016
- XXX. **High-order harmonic generation from confined Rydberg atoms**  
ORAZYMBETOV K., BLEDA E. A., ALTUN Z., TOPCU T.  
29th International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC), Toledo, Philippines, 22 - 28 July 2015, vol.635
- XXXI. **Electron-Impact Ionization of Se<sup>16+</sup> and Ser(17+) Ions**  
BLEDA E. A., TIKMAN Y., ALTUN Z.  
29th International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC), Toledo, Philippines, 22 - 28 July 2015, vol.635
- XXXII. **Modeling a mechanochromic system pressure induced singlet-triplet passage**  
BLEDA E. A., ALTUN Z., TRINDLE C., CL F.  
15th international congress of quantum chemistry (ICQC), PEKİN, China, 8 - 13 June 2015
- XXXIII. **A case study on anti aromaticity Structure and energetics of the methylcarboxylate cyclopropenyl anion Poster A 3**  
ŞAHİN S., BLEDA E. A., ALTUN Z., TRINDLE C.  
The American Conference on Theoretical Chemistry, TELLURIDE, United States Of America, 20 - 25 July 2014
- XXXIV. **ŞİDDETLİ LAZER ALANI ALTINDA METALİK NANO PARÇACIK KAYNAKLI PLAZMON ETKİSİNİN YÜKSEK HARMONİK ÜRETİMİNE ETKİSİ Oturum 01 OP10**  
DEMİRCİ S., BLEDA E. A., ALTUN Z.  
Turkish Physical Society 31st International Physical Congress, Bodrum, Turkey, 21 - 24 July 2014
- XXXV. **Modeling Spin Crossover Complexes**  
ALTUN Z., BLEDA E. A., TRINDLE C.  
The VIIIth Congress of the International Society of Theoretical Chemical Physics (ISTCP VIII) (Session Poster II 2), Budapest, Hungary, 25 - 31 August 2013
- XXXVI. **Dielectronic Recombination in He like Li like and Be like Iodine and KLM Resonances**  
BLEDA E. A., YUMAK YAHŞI A., YAVUZ İ., ALTUN Z.  
XXVII INTERNATIONAL CONFERENCE ON PHOTONIC, ELECTRONIC AND ATOMIC COLLISIONS (ICPEAC 2011), PTS 1-15, Belfast, K. Irlanda, United Kingdom, 1 - 05 October 2012, vol.388, pp.62038
- XXXVII. **INTEGRATION OF TECHNOLOGY IN PHYSICS EDUCATION WITH MASTERINGPHYSICS Oturum 05 OP6**  
BLEDA E. A.  
Turkish Physical Society 29th International Physics Congress, Bodrum, Turkey, 5 - 08 September 2012
- XXXVIII. **Characterization of a Compact Analog to Arduengo Carbenes Poster session III 44**  
ALTUN Z., BLEDA E. A., TRINDLE C., WANG J.  
International Congress of Quantum Chemistry, Boulder, United States Of America, 25 - 30 June 2012
- XXXIX. **Exploring the high order harmonic generation from Rydberg states with a fixed Keldysh parameter Poster Q1 00030**  
BLEDA E. A., YAVUZ İ., ALTUN Z., TOPÇU T.  
43rd Annual Meeting of the APS Division of Atomic, Molecular and Optical Physics (DAMOP12), United States Of America, 4 - 08 June 2012
- XL. **Stochastic Enhancement of High-order Harmonic Generation**  
YAVUZ İ., BLEDA E. A., ALTUN Z.

ICPEAC, Belfast, United Kingdom, 27 July - 02 August 2011, vol.388, no.32023, pp.1

- XLII. **Dielectric Recombination Rate Coefficients of B-Like C (OTURUM NO: 01\_OP67)**  
YUMAK YAHŞI A., YAVUZ İ., BLEDA E. A., KARAKAŞ V., ALTUN Z.  
Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 6 - 09 September 2011
- XLIII. **Control of Quantum Path High Order Harmonic Generation via Chaotic Light (OTURUM NO: 01\_OP62)**  
YAVUZ İ., BLEDA E. A., ALTUN Z.  
Turkish Physical Society 28th International Physics Congress, MUĞLA, Turkey, 6 - 09 September 2011
- XLIV. **Dielectronic Recombination in He like Li like and Be like Bismuth and KLM Resonances**  
YAVUZ İ., YUMAK A., BLEDA E. A., ALTUN Z.  
XXVII International Conference on Photonic, Electronic and Atomic Collisions, Belfast, United Kingdom, 27 July - 02 August 2011
- XLV. **ELECTRON IMPACT IONIZATION of Li LIKE SILICON Ref 722**  
ALTUN Z., YUMAK YAHŞI A., YAVUZ İ., BLEDA E. A.  
10th European Conference on Atoms Molecules and Photons (ECAMP 10), Salamanca, Mexico, 4 - 09 July 2010
- XLVI. **RECOMBINATION RATE COEFFICIENTS of Li LIKE SULFUR Ref 227**  
YAVUZ İ., YUMAK YAHŞI A., BLEDA E. A., ALTUN Z.  
10th European Conference on Atoms Molecules and Photons (ECAMP 10), Salamanca, Mexico, 4 - 09 July 2010
- XLVII. **Recombination Rate Coefficients of Be Like Sulfur**  
YUMAK A., YAVUZ İ., BLEDA E. A., ALTUN Z.  
ECAMP10, 10th European Conference on Atoms Molecules and Photons, Salamanca, Mexico, 4 - 09 July 2010, pp.34
- XLVIII. **Diffusion Limited Processes Using Accelerated Molecular Dynamics (Session B27.00003)**  
BLEDA E. A., Gao X., Daw M. S.  
APS March Meeting, DENVER, United States Of America, 5 - 09 March 2007
- XLIX. **Electronic structures of MoS<sub>2</sub> nanotubes (Session P27.00010)**  
Xu L., Daw M. S., Gao X., BLEDA E. A.  
APS March Meeting 2007, DENVER, United States Of America, 5 - 09 March 2007

## Supported Projects

2024 - 2024	İki Boyutlu Nano Yapıların Özelliklerinin İncelenmesinde Makine Öğrenim Metotlarının Kullanılması, TUBITAK Project
2017 - 2018	Computational Thermochemistry of Carbamic Acid and Related Compounds, Project Supported by Higher Education Institutions
2016 - 2017	Modeling Ferrocene to Titanocene metal-metal charge transfer spectra, Project Supported by Higher Education Institutions
2015 - 2017	Development of a Hybrid Recommendation System for Financial Sector based on Quantum Mechanics, TUBITAK Project
2015 - 2017	High-order Harmonic Generation from Confined Rydberg Atoms, Project Supported by Higher Education Institutions
2003 - 2007	NSF ITR: Atomic Scale Simulation of Non Glide Processes for Dislocations in Intermetallic Alloys, National Research Fund Supported Project

## Patent

2023	Patent
2021	Patent
2020	Patent

## Memberships / Tasks in Scientific Organizations



2003 - Continues	Sigma Pi Sigma (American Honor Society in Physics), Member
2006 - 2007	American Physical Society (APS), Member

## Scientific Consultations

2021 - Continues	Scientific Consultancy, Pearson
2014 - 2021	Scientific Consultancy, invstr

## Tasks In Event Organizations

25 Mayıs 2022	Bleda E. A., 1st International Two-Dimensional Nanomaterials Conference, Scientific Congress, İstanbul, Turkey
---------------	----------------------------------------------------------------------------------------------------------------

## Mobility Activity

2013 - 2013	Erasmus Programme, Lecturing, Lodz Üniversitesi, Poland
-------------	---------------------------------------------------------

## Metrics

Publication: 68  
Citation (WoS): 174  
Citation (Scopus): 183  
H-Index (WoS): 4  
H-Index (Scopus): 5

## Invited Talks

March 2018	As World changes, where does higher education stand? Roadmap for change in higher education, Conference, 5th Educational Technologies Summit, Turkey
------------	------------------------------------------------------------------------------------------------------------------------------------------------------

## Scholarships

2005 - 2008	Research Assistantship, University
2002 - 2005	Teaching Assistantship, University
2002 - 2005	Yurtdışında lisansüstü eğitim amacıyla bulunmaya yönelik, Foundation
2001 - 2001	Yurtdışında araştırma amaçlı bulunmaya yönelik, Foundation

## Awards

April 2013	In recognition of my passion and dedication to improve student learning and engagement by using Pearson's MasteringPhysics, Pearson
March 1997	Fizik Alanında İkincilik, Mef Ulusal Proje Yarışması

## Non Academic Experience

2014 - 2020	Company, invstr, Server side / Data Science
2011 - 2011	En-Mer Production

