

Prof. İLHAN YAVUZ

Personal Information

Email: ilhan.yavuz@marmara.edu.tr

Web: <http://abys.marmara.edu.tr/ilhan.yavuz/>

Address: Marmara Üniversitesi Göztepe Kampüsü 34722 Ziverbey, Kadıköy, İstanbul

Education Information

Doctorate, Marmara University, Faculty Of Arts And Sciences, Physics, Turkey 2006 - 2012

Postgraduate, Marmara University, Faculty Of Arts And Sciences, Physics, Turkey 2003 - 2006

Undergraduate, Trakya University, Fen Fakültesi, Fizik Bölümü, Turkey 1999 - 2003

Foreign Languages

English, C1 Advanced

German, B1 Intermediate

Dissertations

Doctorate, Atomik hedeflerden yüksek-mertebeli harmonik üretimde verim artırılması: iki renk sürümü, gürültü ve uyarılma etkileri, karboksil asit dimerlerinin ayrışma reaksiyon dinamikleri, Marmara Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2012

Postgraduate, (n1l1)q1 (n2l2)q2 ve (n1l1)q1 (n2l2)q2 (n3l3)q3 şeklinde uyarılmış elektron konfigürasyonlarına sahip atomların oto-iyonlaşma oranlarının açısal integrallerinin açısal momentum grafikleri yardımıyla hesaplanması ve radyal denklemlerin elde edilmesi., Marmara University, Fen - Edebiyat Fakültesi, Fizik Bölümü, 2006

Research Areas

Atomic and Molecular Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties

Academic Titles / Tasks

Associate Professor, Marmara University, Faculty Of Arts And Sciences, Physics, 2016 - Continues

Research Assistant, Marmara University, Faculty Of Arts And Sciences, Physics, 2007 - 2016

Academic and Administrative Experience

Head of Department, Marmara University, Faculty of Arts and Sciences, Physics, 2019 - 2019

Courses

Calculus I, Undergraduate, 2018 - 2019
Elektrik ve Manyetizma II, Undergraduate, 2018 - 2019
Physics II, Undergraduate, 2018 - 2019
Physics I, Undergraduate, 2018 - 2019
Computer Simulations in Physics and Chemistry, Doctorate, 2018 - 2019
Linear Algebra, Undergraduate, 2018 - 2019
Elektrik ve Manyetizma, Undergraduate, 2018 - 2019
Dijital Elektronik Laboratuvarı, Undergraduate, 2014 - 2015

Advising Theses

Yavuz İ., Directional dissociation of molecules by spatially and temporally modified laser fields, Doctorate, S.ARİFE(Student), 2020
Yavuz İ., Investigation Of The Molecular Ordering And Charge Transport Of Circular Oligomer / Fullerene Complexes For Solar Cell Applications, Postgraduate, O.KOÇAK(Student), 2019
Yavuz İ., Current-driven generation and stabilization of magnetic skyrmions, Doctorate, C.DEĞER(Student), 2019
Yavuz İ., Organik yarı iletkenlerin polaron-bağlanma ve reorganizasyon enerjilerinin yüksek duyarlılıkla tahmin edilmesi, Postgraduate, C.GÜLERYÜZ(Student), 2017

Jury Memberships

Post Graduate, Post Graduate, Gebze Teknik Üniversitesi, June, 2019
Doctoral Examination, Doctoral Examination, Trakya Üniversitesi, October, 2018
Post Graduate, Post Graduate, Gebze Teknik Üniversitesi, June, 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Rational selection of the polymeric structure for interface engineering of perovskite solar cells**
Wang M., Zhao Y., Jiang X., Yin Y., YAVUZ İ., Zhu P., Zhang A., Han G. S. , Jung H. S. , Zhou Y., et al.
JOULE, vol.6, no.5, pp.1032-1048, 2022 (Journal Indexed in SCI)
- II. **Lattice strain suppresses point defect formation in halide perovskites**
Deger C., Tan S., Houk K. N. , Yang Y., YAVUZ İ.
NANO RESEARCH, 2022 (Journal Indexed in SCI)
- III. **Stability-limiting heterointerfaces of perovskite photovoltaics**
Tan S., Huang T., YAVUZ İ., Wang R., Yoon T. W. , Xu M., Xing Q., Park K., Lee D., Chen C., et al.
NATURE, 2022 (Journal Indexed in SCI)
- IV. **Surface Defect Formation and Passivation in Formamidinium Lead Triiodide (FAPbI₃) Perovskite Solar Cell Absorbers**
Oner S. M. , Sezen E., Yordanli M. S. , Karakoc E., Deger C., Yavuz I.
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, pp.324-330, 2022 (Journal Indexed in SCI)
- V. **Wide-Gap Perovskite via Synergetic Surface Passivation and Its Application toward Efficient Stacked Tandem Photovoltaics**
Huang T., Wang R., Nuryyeva S., Tan S., Xue J., Zhao Y., Wu Q., Weber M. H. , Cheng P., Meng D., et al.
SMALL, 2021 (Journal Indexed in SCI)
- VI. **Performance-limiting formation dynamics in mixed-halide perovskites**
Huang T., Tan S., Nuryyeva S., YAVUZ İ., Babbe F., Zhao Y., Abdelsamie M., Weber M. H. , Wang R., Houk K. N. , et al.
SCIENCE ADVANCES, vol.7, no.46, 2021 (Journal Indexed in SCI)
- VII. **Surface Reconstruction of Halide Perovskites During Post-treatment**

- Tan S., Huang T., YAVUZ İ., Wang R., Weber M. H. , Zhao Y., Abdelsamie M., Liao M. E. , Wang H., Huynh K., et al.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.143, no.18, pp.6781-6786, 2021 (Journal Indexed in SCI)
- VIII. **Shallow Iodine Defects Accelerate the Degradation of alpha-Phase Formamidinium Perovskite**
Tan S., YAVUZ İ., Weber M. H. , Huang T., Chen C., Wang R., Wang H., Ko J. H. , Nuryyeva S., Xue J., et al.
JOULE, vol.4, no.11, pp.2426-2442, 2020 (Journal Indexed in SCI)
- IX. **Structural order and charge transfer in highly strained carbon nanobelts**
Aydin G., Kocak O., Guleryuz C., YAVUZ İ.
NEW JOURNAL OF CHEMISTRY, vol.44, no.36, pp.15769-15775, 2020 (Journal Indexed in SCI)
- X. **Noncovalent pi-stacked robust topological organic framework**
Meng D., Yang J. L. , Xiao C., Wang R., Xing X., Kocak O., Aydin G., YAVUZ İ., Nuryyeva S., Zhang L., et al.
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.117, no.34, pp.20397-20403, 2020 (Journal Indexed in SCI)
- XI. **Strain-promoted perpendicular magnetic anisotropy in Co-Rh alloys**
Aksu P., Deger C., Yavuz I., Yildiz F.
APPLIED PHYSICS LETTERS, vol.116, no.21, 2020 (Journal Indexed in SCI)
- XII. **Steric Impediment of Ion Migration Contributes to Improved Operational Stability of Perovskite Solar Cells**
Tan S., YAVUZ İ., De Marco N., Huang T., Lee S., Choi C. S. , Wang M., Nuryyeva S., Wang R., Zhao Y., et al.
ADVANCED MATERIALS, vol.32, no.11, 2020 (Journal Indexed in SCI)
- XIII. **Carrier-envelope-phase-controlled molecular dissociation by ultrashort chirped laser pulses**
Bozpolat S. A. , Rosenberger P., Ciappina M. F. , Kling M. F. , YAVUZ İ.
PHYSICAL REVIEW A, vol.100, no.6, 2019 (Journal Indexed in SCI)
- XIV. **Constructive molecular configurations for surface-defect passivation of perovskite photovoltaics**
Wang R., Xue J., Wang K., Wang Z., Luo Y., Fenning D., Xu G., Nuryyeva S., Huang T., Zhao Y., et al.
SCIENCE, vol.366, no.6472, pp.1509-1541, 2019 (Journal Indexed in SCI)
- XV. **Impact of interlayer coupling on magnetic skyrmion size**
DEĞER C., YAVUZ İ., Yildiz F.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.489, 2019 (Journal Indexed in SCI)
- XVI. **Crystalline Liquid-like Behavior: Surface-Induced Secondary Grain Growth of Photovoltaic Perovskite Thin Film.**
Xue J., Wang R., Wang K., Wang Z., Yavuz İ., Wang Y., Yang Y., Gao X., Huang T., Nuryyeva S., et al.
Journal of the American Chemical Society, vol.141, pp.13948-13953, 2019 (Journal Indexed in SCI)
- XVII. **Current-driven coherent skyrmion generation**
Deger C., Yavuz I., Yildiz F.
SCIENTIFIC REPORTS, vol.9, 2019 (Journal Indexed in SCI)
- XVIII. **Charge Transfer and Interface Effects in Co-Assembled Circular Donor/Acceptor Complexes for Organic Photovoltaics**
Koçak O., DURU İ. P. , YAVUZ İ.
Advanced Theory and Simulations, pp.1, 2019 (Journal Indexed in SCI Expanded)
- XIX. **Solid-State Order and Charge Mobility in [5]- to [12]Cycloparaphenylenes**
Lin J. B. , Darzi E. R. , Jasti R., Yavuz I., Houk K. N.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.141, no.2, pp.952-960, 2019 (Journal Indexed in SCI)
- XX. **Impact of morphology, side-chains, and crystallinity on charge-transport properties of -extended double helicenes**
YAVUZ İ., Lin J. B. , Houk K. N.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.21, no.2, pp.901-914, 2019 (Journal Indexed in SCI)
- XXI. **Control of molecular dissociation by spatially inhomogeneous near fields**
Yavuz I., Schoetz J., Ciappina M. F. , Rosenberger P., Altun Z., Lewenstein M., Kling M. F.
PHYSICAL REVIEW A, vol.98, no.4, 2018 (Journal Indexed in SCI)
- XXII. **Intrinsic charge-mobility in benzothieno[3,2-b][1]benzothiophene (BTBT) organic semiconductors is enhanced with long alkyl side-chains**

- Alkan M., Yavuz I.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.20, no.23, pp.15970-15979, 2018 (Journal Indexed in SCI)
- XXIII. **Understanding the Impact of Thiophene/Furan Substitution on Intrinsic Charge-Carrier Mobility**
Turan H. T. , YAVUZ İ., AVİYENTE V.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.121, no.46, pp.25682-25690, 2017 (Journal Indexed in SCI)
- XXIV. **Dichotomy between the band and hopping transport in organic crystals: insights from experiments**
Yavuz I.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.19, no.38, pp.25819-25828, 2017 (Journal Indexed in SCI)
- XXV. **The effect of hexyl side chains on molecular conformations, crystal packing, and charge transport of oligothiophenes**
Cherniawski B. P. , Lopez S. A. , Burnett E. K. , YAVUZ İ., Zhang L., Parkin S. R. , Houk K. N. , Briseno A. L.
JOURNAL OF MATERIALS CHEMISTRY C, vol.5, no.3, pp.582-588, 2017 (Journal Indexed in SCI)
- XXVI. **Mesoscale Ordering and Charge-Transport of Crystalline Spiro-OMeTAD Organic Semiconductors**
YAVUZ İ., Houk K. N.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.121, no.2, pp.993-999, 2017 (Journal Indexed in SCI)
- XXVII. **Understanding dispersive charge-transport in crystalline organic-semiconductors**
YAVUZ İ., Lopez S. A.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, vol.19, no.1, pp.231-236, 2017 (Journal Indexed in SCI)
- XXVIII. **Below-threshold harmonic generation from strong non-uniform fields**
Yavuz I.
JOURNAL OF MODERN OPTICS, vol.64, no.19, pp.2043-2050, 2017 (Journal Indexed in SCI)
- XXIX. **Quantitative prediction of morphology and electron transport in crystal and disordered organic semiconductors**
YAVUZ İ., Lopez S. A. , Lin J. B. , Houk K. N.
JOURNAL OF MATERIALS CHEMISTRY C, vol.4, no.47, pp.11238-11243, 2016 (Journal Indexed in SCI)
- XXX. **Controlling electron localization in H-2(+) by intense plasmon-enhanced laser fields**
Yavuz I., Ciappina M. F. , Chacon A., Altun Z., Kling M. F. , Lewenstein M.
PHYSICAL REVIEW A, vol.93, no.3, 2016 (Journal Indexed in SCI)
- XXXI. **High-order-harmonic generation from Rydberg atoms driven by plasmon-enhanced laser fields**
Tikman Y., Yavuz I., Ciappina M. F. , Chacon A., Altun Z., Lewenstein M.
PHYSICAL REVIEW A, vol.93, no.2, 2016 (Journal Indexed in SCI)
- XXXII. **High-order-harmonic generation from H-2(+) molecular ions near plasmon-enhanced laser fields**
YAVUZ İ., Tikman Y., ALTUN Z.
PHYSICAL REVIEW A, vol.92, no.2, 2015 (Journal Indexed in SCI)
- XXXIII. **A Solid-State Effect Responsible for an Organic Quintet State at Room Temperature and Ambient Pressure**
Zheng Y., Miao M., Dantelle G., Eisenmenger N. D. , Wu G., YAVUZ İ., Chabinye M. L. , Houk K. N. , Wudl F.
ADVANCED MATERIALS, vol.27, no.10, pp.1718-1724, 2015 (Journal Indexed in SCI)
- XXXIV. **Theoretical Study of the Molecular Ordering, Paracrystallinity, And Charge Mobilities of Oligomers in Different Crystalline Phases**
YAVUZ İ., Martin B. N. , Park J., Houk K. N.
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol.137, no.8, pp.2856-2866, 2015 (Journal Indexed in SCI)
- XXXV. **Simulations of Molecular Ordering and Charge-Transport of Oligo-Didodecylquaterthiophenes (DDQT)**
YAVUZ İ., Zhang L., Briseno A. L. , Houk K. N.
JOURNAL OF PHYSICAL CHEMISTRY C, vol.119, no.1, pp.158-165, 2015 (Journal Indexed in SCI)
- XXXVI. **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 (Journal Indexed in SCI)
- XXXVII. **Phase dependent interference fringes in the wavelength scaling of harmonic efficiency**
ALTUN Z., BLEDA E. A. , YAVUZ İ., TOPCU T.

- Physical Review X, vol.89, pp.55801, 2014 (Journal Indexed in SCI Expanded)
- XXXVIII. **High-order-harmonic generation from Rydberg states at fixed Keldysh parameter**
Bleda E. A. , Yavuz I., Altun Z., Topcu T.
PHYSICAL REVIEW A, vol.88, no.4, 2013 (Journal Indexed in SCI)
- XXXIX. **Gas population effects in harmonic emission by plasmonic fields**
Yavuz I.
PHYSICAL REVIEW A, vol.87, no.5, 2013 (Journal Indexed in SCI)
- XL. **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 (Journal Indexed in SCI)
- XLII. **Wavelength scaling of high-order-harmonic-generation efficiency by few-cycle laser pulses: Influence of carrier-envelope phase**
Yavuz I., Altun Z., Topcu T.
PHYSICAL REVIEW A, vol.86, no.4, 2012 (Journal Indexed in SCI)
- XLIII. **Generation of a broadband xuv continuum in high-order-harmonic generation by spatially inhomogeneous fields**
Yavuz I., Bleda E. A. , Altun Z., Topcu T.
PHYSICAL REVIEW A, vol.85, no.1, 2012 (Journal Indexed in SCI)
- XLIII. **DFT characterization of the first step of methyl acrylate polymerization: Performance of modern functionals in the complete basis limit**
YAVUZ İ., ÇİFTÇİOĞLU G. A.
COMPUTATIONAL AND THEORETICAL CHEMISTRY, vol.978, pp.88-97, 2011 (Journal Indexed in SCI)
- XLIV. **Enhancement of high-order harmonic generation in the presence of noise**
Yavuz I., Altun Z., Topcu T.
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, vol.44, no.13, 2011 (Journal Indexed in SCI)
- XLV. **Two small thermodynamically stable organic dications**
YUMAK YAŞI A., YAVUZ İ., ALTUN Z., Trindle C.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, vol.940, pp.6-12, 2010 (Journal Indexed in SCI)
- XLVI. **Focal point analysis of torsional isomers of acrylic acid**
ÇİFTÇİOĞLU G. A. , Trindle C., YAVUZ İ.
MOLECULAR PHYSICS, vol.108, pp.2601-2609, 2010 (Journal Indexed in SCI)
- XLVII. **Structure, binding energies, and IR-spectral fingerprinting of formic acid dimers**
YAVUZ İ., Trindle C.
JOURNAL OF CHEMICAL THEORY AND COMPUTATION, vol.4, no.3, pp.533-541, 2008 (Journal Indexed in SCI)
- XLVIII. **Dielectronic recombination data for dynamic finite-density plasmas - XIII. The magnesium isoelectronic sequence**
Altun Z., Yumak A., Yavuz I., Badnell N. R. , Loch S. D. , Pindzola M. S.
ASTRONOMY & ASTROPHYSICS, vol.474, no.3, pp.1051-1059, 2007 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Isotope Effect on Molecular Dissociation by Intense Laser Fields in The Vicinity of Metallic Nanotip**
Karakas S. A. , Öner M., Yavuz İ.
Turkish Physical Society 35th International Physics Congress (TPS35), Muğla, Turkey, 4 - 08 September 2019
- II. **Controlling Electron Localization in the Dissociation of H₂ and HD**
Öner M., Karakas S. A. , Yavuz İ.
Turkish Physical Society 35th International Physics Congress (TPS35), Muğla, Turkey, 4 - 08 September 2019
- III. **ORGANİK YARI İLETKENLERİN POLARON-BAĞLANMA VE REORGANİZASYON ENERJİLERİNİN DFT YÖNTEMLERİYLE BULUNMASI**
Güleryüz C., YAVUZ İ.

- IV. **Chirp effect on molecular dissociation**
KARAKAŞ S. A. , Rosenberger P., Ciappina M., Kling M., YAVUZ İ.
ECAMP13, 8 - 12 April 2019
- V. **Current-driven coherent skyrmion generation**
DEĞER C., YAVUZ İ., YILDIZ F.
APS March Meeting 2019, 4 - 08 March 2019
- VI. **Impact of interlayer coupling on magnetic skyrmion size**
DEĞER C., YAVUZ İ., YILDIZ F.
APS March Meeting, 4 - 08 March 2019
- VII. **MORPHOLOGY AND CHARGE-MOBILITY OF LONG ALKYL SIDE-CHAINED BTBTS**
Alkan M., YAVUZ İ.
OEMT2018, 20 - 22 September 2018, vol.3, pp.40
- VIII. **Investigation of the Molecular Ordering and Charge Transport of Circular-Oligomer/Fullerene Complexes for Solar-Cells**
Koçak O., DURU İ. P. , YAVUZ İ.
OEMT2018, 20 - 22 September 2018, vol.3, pp.76
- IX. **Morphology and Charge-Mobility of Long Alkyl Side-Chained BTBTS**
Yavuz İ.
OEMT, Kırklareli, Turkey, 20 - 22 September 2018, pp.40
- X. **Investigation of the Molecular Ordering and Charge Transport of Circular-Oligomer/Fullerene Complexes for Solar-Cell**
Yavuz İ.
OEMT2018, Kırklareli, Turkey, 20 - 22 September 2018, pp.76
- XI. **Understanding the impact of thiophene/furansubstitution to intrinsic charge-carrier mobility**
Turan H. T. , YAVUZ İ., Aviyente V.
International Symposium on Chemistry Via Computation Applications on Molecular Nanoscience, 30 October 2017
- XII. **Dynamical origin of room-temperature charge-transport in organic crystal**
YAVUZ İ.
International Symposium on Chemistry Via Computation Applications on Molecular Nanoscience, 30 October 2017
- XIII. **BELOW-THRESHOLD HARMONIC GENERATION FROM STRONG NON-UNIFORM FIELDS**
YAVUZ İ.
TFD - 33 Turkish Physical Society Conference, 6 September - 10 October 2017
- XIV. **Magnetic Properties of Co Doped Graphene: a Monte-Carlo Study**
KALAYCI T., DURU İ. P. , DEĞER C., YAVUZ İ.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 10 October 2017
- XV. **ORIGIN OF MAGNETISM IN CR3 DOPED GRAPHENE**
DEĞER C., DURU İ. P. , KALAYCI T., YAVUZ İ.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 10 October 2017
- XVI. **ACCURATE PREDICTION OF POLARON-BINDING AND REORGANIZATION ENERGIES OF ORGANIC SEMICONDUCTORS.**
Güleryüz C., YAVUZ İ.
TFD 33 - Turkish Physical Society Int. Conference, 6 - 10 September 2017
- XVII. **DICHOTOMY BETWEEN THE BAND AND HOPPING TRANSPORT IN ORGANIC CRYSTALS: INSIGHTS FROM THE EXPERIMENTS**
YAVUZ İ.
TFD33 - Turkish Physical Society Int. Conference, 6 September - 10 October 2017
- XVIII. **Influence of odd/even alkyl side-chain substitution on the morphology and charge-transport of benzothieno-benzothiophenes (BTBT)**
Alkan M., YAVUZ İ.
TFD33 - Turkish Physical Society Int. Conference, 27 August - 01 September 2017

- XIX. FERROMAGNETISM IN METAL ION DOPED DNA: A MONTECARLO STUDY**
DEĞER C., KALAYCI T., DURU İ. P., ELDEM V., YAVUZ İ.
International Congress on Fundamental and Applied Sciences 2017, Saraybosna, Bosnia And Herzegovina, 21 - 25 August 2017
- XX. FIRST PRINCIPLES STUDY OF REGIOSELECTIVITY OF METALION DOPING TO DNA BASE PAIRS**
DEĞER C., KALAYCI T., DURU İ. P., ELDEM V., YAVUZ İ.
International Congress on Fundamental and Applied Sciences 2017, Saraybosna, Bosnia And Herzegovina, 21 - 25 August 2017
- XXI. Dissociation of H₂ in strong inhomogeneous near-fields**
YAVUZ İ., Ciappina M. F., Chacon A., ALTUN Z., Lewenstein M., Kling M. F.
INTERNATIONAL CONFERENCE ON PHOTONIC ELECTRONIC AND ATOMIC COLLISIONS, 26 July - 01 August 2017
- XXII. Atomistic Morphologies and Charge transport of 5 12 cycloparaphenylenes**
YAVUZ İ., Lopez S. A., Lin J. B., Darzi E., Jasti R., Houk K. N.
UCLA Reception Research Showcase at ACS National Meeting, San Diego, 13 - 17 March 2016
- XXIII. Predicting atomistic morphologies and charge transport of 5 12 cycloparaphenylene**
YAVUZ İ., Lopez S., Lin J., Darzi E., Jasti R., Houk K.
ACS Conference Exposition, 13 - 17 March 2016
- XXIV. Harmonic-emission from Rydberg states in the vicinity of metallic nanostructures**
Yavuz I., Tikman Y., Altun Z.
29th International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC), Toledo, Philippines, 22 - 28 July 2015, vol.635
- XXV. Stochastic Enhancement of High order Harmonic Generation**
YAVUZ İ.
XXVII INTERNATIONAL CONFERENCE ON PHOTONIC, ELECTRONIC AND ATOMIC COLLISIONS (ICPEAC 2011), PTS 1-15, Belfast, K. Irlanda, United Kingdom, 01 November 2012, vol.388, pp.32023
- XXVI. 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
- XXVII. Exploring the high order harmonic generation from Rydberg states with at fixed Keldysh parameter**
BLEDA E. A., YAVUZ İ., ALTUN Z., Topçu T.
DAMOP12 Meeting of the APS, Orange County, United States Of America, 1 - 03 November 2012
- XXVIII. Dielectronic Recombination in He like Li like and Be like Bismuth and KLM Resonances**
YAVUZ İ.
XXVII INTERNATIONAL CONFERENCE ON PHOTONIC, ELECTRONIC AND ATOMIC COLLISIONS (ICPEAC 2011), PTS 1-15, Belfast, K. Irlanda, United Kingdom, 1 - 03 November 2012, vol.388, pp.62039
- XXIX. 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
- XXX. 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
- XXXI. 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, MIUĞLA, Turkey, 6 - 09 September 2011
- XXXII. 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

- XXXIII. **Control of quantum in high harmonic generation via chaotic light**
YAVUZ İ., BLEDA E. A. , ALTUN Z.
28th International Physics Congress, Mugla, Bodrum, Turkey, 1 - 03 November 2011
- XXXIV. **Dielectronic recombination rate coefficients of B like C**
YUMAK YAŞI A., YAVUZ İ., BLEDA E. A. , Karakaş V., ALTUN Z.
28th International Physics Congress, Mugla, Bodrum, Turkey, 1 - 03 November 2011, pp.114
- XXXV. **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
- XXXVI. **ELECTRON IMPACT IONIZATION of Li LIKE SILICON Ref 722**
ALTUN Z., YUMAK YAŞI A., YAVUZ İ., BLEDA E. A.
10th European Conference on Atoms Molecules and Photons (ECAMP 10), Salamanca, Mexico, 4 - 09 July 2010
- XXXVII. **Recombination Rate Coefficients of Li Like Sulfur**
YAVUZ İ., YUMAK A., BLEDA E. A. , ALTUN Z.
ECamp10, 10th European Conference on Atoms Molecules and Photons, Salamanca, Mexico, 4 - 09 July 2010, pp.50
- XXXVIII. **RECOMBINATION RATE COEFFICIENTS of Li LIKE SULFUR Ref 227**
YAVUZ İ., YUMAK YAŞI A., BLEDA E. A. , ALTUN Z.
10th European Conference on Atoms Molecules and Photons (ECAMP 10), Salamanca, Mexico, 4 - 09 July 2010
- XXXIX. **Level resolved distorted wave cross sections of electron impact ionization of Ar5**
YAVUZ İ., YUMAK YAŞI A., ALTUN Z.
XXVI International Conference on Photonic, Electronic and Atomic Collisions, Kalamazoo, United States Of America, 1 - 03 November 2009, vol.194, pp.62016
- XL. **Electron-Impact Ionization of Atomic Ions: Theoretical Results**
Loch S. D. , Burgos J. M. M. , Ballance C. P. , Ludlow J., Lee T. - , Fogle M., Pindzola M. S. , Griffin D. C. , Yumak A., Yavuz I., et al.
26th International Conference on Photonic, Electronic and Atomic Collisions, Michigan, United States Of America, 22 - 28 July 2009, vol.194
- XLI. **Issues in the computational estimation of free radical polymerization rates the case of methyl acrylate**
YAVUZ İ., ÇİFTÇİOĞLU G. A. , ALTUN Z.
13th ICQC, Helsinki, Finland, 1 - 03 November 2009, pp.39
- XLII. **Resonances in rate coefficients of Na like Sulphur**
YAVUZ İ., YUMAK A., ALTUN Z.
X08, 21st INTERNATIONAL CONFERENCE ON X-RAY AND INNER-SHELL PROCESSES, Paris, France, 22 - 27 June 2008, pp.59
- XLIII. **Excitation Ionization Cross Section Na Like Tin**
YUMAK A., Gölçek U., YAVUZ İ., ALTUN Z.
ECAMP IX European Conference on Atoms Molecules and Photons, Heraklion, Greece, 6 - 11 May 2007, pp.1
- XLIV. **Resonances in The Velocity Averaged Dielectronic Recombination Cross Section for Mg like Fe**
YUMAK A., ÇİFTÇİOĞLU G. A. , YAVUZ İ., ALTUN Z.
IWP International Workshop on Photoionization 2005, Campinas, Brazil, 27 - 31 July 2005

Other Publications

- I. **CEP-Controlled Molecular Dissociation by Ultrashort Chirped Laser Pulses**
Yavuz İ.
Technical Report, pp.1-6, 2019

Supported Projects

Yavuz İ., TUBITAK Project, Hibrid Perovskite Güneş Pillerinde İçsel Kusurların Atomik Seviyede Belirlenmesi Ve Pasifleştirilmesi, 2020 - 2022

Karakaş S. A. , Yavuz İ., TUBITAK Project, Isotope and Mass Asymmetry Effect on CEP-Controlled Molecular Dissociation near Metallic Nanotip, 2020 - 2021

Yavuz İ., Other Supported Projects, Skyrmion Bazlı Magnonik Kristallerin Manyetik Özelliklerinin ve Soğurma Spektrumlarının İncelenmesi, 2018 - 2019

Yavuz İ., Project Supported by Higher Education Institutions, Simetrik ve asimetrik alkil-eklenmiş benzotiyeno-benzotiyofen (BTBT) organik yarıiletkenlerin moleküler düzen ve yük-taşımlarının tahmin edilmesi, 2017 - 2019

Yavuz İ., TUBITAK Project, Heteroeklem-Tabanlı Organik Fotovoltaik Uygulamalar İçin Dairesel-Oligomer/Fullerene Komplekslerinin Yapısal Düzen ve Yük-Taşımlarının İncelenmesi, 2017 - 2018

Yavuz İ., Project Supported by Other Official Institutions, Antiferromanyetik İyon Katkılı DNA Nanotellerin Elektronik ve Manyetik Özelliklerinin Belirlenmesi, 2016 - 2018

Yavuz İ., Project Supported by Public Organizations in Other Countries, DMREF: Iterative Theoretical Morphology Prediction Synthesis and Characterization of Novel Donor Oligomers for Accelerated Materials Discovery, 2013 - 2018

Yavuz İ., Project Supported by Higher Education Institutions, Tek/çift alkil zincir eklenmesinin benzo-thieno-benzothiophenelerin (BTBT) morfoloji ve yük-taşımları üzerine etkisi, 2017 - 2017

Yavuz İ., Project Supported by Higher Education Institutions, 5 12 Sikloparafenilenlerin atomistik morfolojileri ve yük taşımlarının tahmin edilmesi, 2016 - 2017

Yavuz İ., Project Supported by Higher Education Institutions, Atomik Hedeflerden Yüksek Mertebeli Harmonik Üretimde Verim Artırılması, 2006 - 2012

Scientific Refereeing

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Marmara University, Turkey, July 2019

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Marmara University, Turkey, July 2019

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Marmara University, Turkey, June 2019

ADVANCED ENERGY MATERIALS, SCI Journal, May 2019

JOURNAL OF PHYSICAL CHEMISTRY, SCI Journal, November 2018

ADVANCED FUNCTIONAL MATERIALS, SCI Journal, September 2018

ZEITSCHRIFT FÜR PHYSIK, SCI Journal, June 2018

JOURNAL OF PHYSICAL CHEMISTRY, SCI Journal, July 2017

OPTICS EXPRESS, SCI Journal, August 2016

JOURNAL OF PHYSICAL CHEMISTRY, SCI Journal, July 2016

INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Journal, May 2016

SCIENTIFIC REPORTS, SCI Journal, April 2016

ACCOUNTS OF CHEMICAL RESEARCH, SCI Journal, January 2014

CHEMICAL PHYSICS, SCI Journal, October 2012

Tasks In Event Organizations

Yavuz İ., M-BIO2017, Scientific Congress, Kocaeli, Turkey, Eylül 2017

Edit Congress and Symposium Activities

Chemistry ViA Computation, Working Group, İstanbul, Turkey, 2017
33th International Physics Congress, Working Group, Muğla, Turkey, 2017
11th WATOC, Working Group, Munich, Germany, 2017
251th ACS National Meeting, Working Group, California, United States Of America, 2016
247th ACS National Meeting, Working Group, Texas, United States Of America, 2014
XXVII ICPEAC, Working Group, Belfast, United Kingdom, 2012
28th International Physics Congress, Working Group, Muğla, Turkey, 2011
ECAMP 10, Working Group, Salamanca, Spain, 2010

Citations

Total Citations (WOS):1132

h-index (WOS):16

Invited Talks

Öğrenci Semineri, Seminar, Koç Üniversitesi, Turkey, June 2012

Awards

Yavuz İ., Proje Ödülü, Marmara Üniversitesi Fen-Edebiyat Fakültesi, June 2019