

## Prof. Dr. İLHAN YAVUZ

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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### Eğitim Bilgileri

Doktora, Marmara Üniversitesi, Fen - Edebiyat Fakültesi, Fizik Bölümü, Türkiye 2006 - 2012

Yüksek Lisans, Marmara Üniversitesi, Fen - Edebiyat Fakültesi, Fizik Bölümü, Türkiye 2003 - 2006

Lisans, Trakya Üniversitesi, Fen Fakültesi, Fizik Bölümü, Türkiye 1999 - 2003

### Yabancı Diller

İngilizce, C1 İleri

Almanca, B1 Orta

### Yaptığı Tezler

Doktora, 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

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

### Araştırma Alanları

Atom ve Molekül Fiziği, Yoğun Madde 2:Elektronik Yapı, Elektrik, Manyetik ve Optik Özellikler

### Akademik Unvanlar / Görevler

Doç. Dr., Marmara Üniversitesi, Fen - Edebiyat Fakültesi, Fizik Bölümü, 2016 - Devam Ediyor

Araştırma Görevlisi, Marmara Üniversitesi, Fen - Edebiyat Fakültesi, Fizik Bölümü, 2007 - 2016

### Akademik İdari Deneyim

## Verdiği Dersler

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

## Yönetilen Tezler

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

## Jüri Üyelikleri

Tez Savunma (Yüksek Lisans), Tez Savunma (Yüksek Lisans), Gebze Teknik Üniversitesi, Haziran, 2019  
Doktora Yeterlik Sınavı, Doktora Yeterlik Sınavı, Trakya Üniversitesi, Ekim, 2018  
Tez Savunma (Yüksek Lisans), Tez Savunma (Yüksek Lisans), Gebze Teknik Üniversitesi, Haziran, 2018

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Sublimed C60 for efficient and repeatable perovskite-based solar cells**  
Said A. A., Aydin E., Ugur E., Xu Z., DEĞER C., Vishal B., Vlk A., Dally P., Yildirim B. K., Azmi R., et al.  
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- II. **Strain regulates the photovoltaic performance of thick-film perovskites**  
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- III. **Chelation strategy induced blue-shift for efficient deep-blue perovskite light-emitting diodes**  
Xia Y., Zhang Z., Zhou Y., Li Y., Wang B., Wang K., Chen C., Chen J., YAVUZ İ., Xing G., et al.  
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- IV. **peri-Fused polyaromatic molecular contacts for perovskite solar cells**  
Zhao K., Liu Q., Yao L., DEĞER C., Shen J., Zhang X., Shi P., Tian Y., Luo Y., Xu J., et al.  
Nature, cilt.632, sa.8024, ss.301-306, 2024 (SCI-Expanded)
- V. **Lead Isolation and Capture in Perovskite Photovoltaics toward Eco-Friendly Commercialization**  
Chen C., Cheng S., Hu F., Su Z., Wang K., Cheng L., Chen J., Shi Y., Xia Y., Teng T., et al.  
Advanced Materials, cilt.36, sa.31, 2024 (SCI-Expanded)
- VI. **Ferroelastic Control of the Multicolor Emission from a Triply Doped Organic Crystal**  
Commings P., Al-Handawi M. B., DEĞER C., Polavaram S., YAVUZ İ., Rezgui R., Li L., Houk K., Naumov P.

Journal of the American Chemical Society, cilt.146, sa.24, ss.16540-16548, 2024 (SCI-Expanded)

- VII. **Manipulating the Interfacial Dipole Toward High-Performance Perovskite Solar Cells via Conjugated Organic Ammonium**  
Liu C., Shi P., Li C., Huang W., Yang X., YAVUZ İ., Xue J., Liu R., Wang R.  
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- VIII. **Oscillatory behavior of interlayer Dzyaloshinskii-Moriya interaction by spacer thickness variation**  
Demiroglu E., Hancioglu K., YAVUZ İ., Avci C., DEĞER C.  
Physical Review B, cilt.109, sa.14, 2024 (SCI-Expanded)
- IX. **Constructing Charge Bridge Path for High-Performance Tin Perovskite Photovoltaics**  
Hu F., Chen C., Teng T., Shi Y., Wang B., Xue D., Xia Y., Chen J., Wang K., Huang L., et al.  
Advanced Energy Materials, cilt.14, sa.10, 2024 (SCI-Expanded)
- X. **Ion-Migration Inhibitor for Spiro-OMeTAD/Perovskite Contact toward Stable Perovskite Solar Cells**  
Xu J., Shi P., Zhao K., Yao L., DEĞER C., Wang S., Zhang X., Zhang S., Tian Y., Wang X., et al.  
ACS Energy Letters, cilt.9, sa.3, ss.1073-1081, 2024 (SCI-Expanded)
- XI. **Incorporation Mechanism of Potassium in FAPbI<sub>3</sub> Perovskite Solar Cell Materials**  
ALEVLİ M., Gungor N., KAVAK P., ŞAHİN N., Corcor A., Topal I., ESMER K., ÇAKMAKÇI E., DEĞER C., YAVUZ İ.  
Journal of Physical Chemistry C, cilt.128, sa.7, ss.2759-2766, 2024 (SCI-Expanded)
- XII. **Magnetic-biased chiral molecules enabling highly oriented photovoltaic perovskites**  
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National Science Review, cilt.11, sa.2, 2024 (SCI-Expanded)
- XIII.  **$\pi$ - $\pi$  stacking constructing efficient charge channels for perovskite photovoltaics**  
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- XIV. **Triiodide Formation Governs Oxidation Mechanism of Tin-Lead Perovskite Solar Cells via A-Site Choice**  
Alsulami A., Lanzetta L., Huerta Hernandez L., Rosas Villalva D., Sharma A., Gonzalez Lopez S. P., Emwas A., Yazmaciyan A., Laquai F., YAVUZ İ., et al.  
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- XV. **Phase segregation affects electron-phonon coupling in perovskite solar cell materials**  
YAVUZ İ.  
Journal of Materials Chemistry C, cilt.11, sa.44, ss.15482-15488, 2023 (SCI-Expanded)
- XVI. **Oriented nucleation in formamidinium perovskite for photovoltaics**  
Shi P., Ding Y., Ding B., Xing Q., Kodalle T., Sutter-Fella C. M., YAVUZ İ., Yao C., Fan W., Xu J., et al.  
Nature, cilt.620, sa.7973, ss.323-327, 2023 (SCI-Expanded)
- XVII. **Design of an amorphous ZnWSe<sub>2</sub> alloy-based counter electrode for highly efficient dye-sensitized solar cells**  
Ari D., Sezgin A., Unal M., Akman E., YAVUZ İ., Liang F., Yilmaz M., Akin S.  
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- XVIII. **Achieving sustainability of greenhouses by integrating stable semi-transparent organic photovoltaics**  
Zhao Y., Li Z., DEĞER C., Wang M., Peric M., Yin Y., Meng D., Yang W., Wang X., Xing Q., et al.  
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- XIX. **Suppressing ion migration in metal halide perovskite via interstitial doping with a trace amount of multivalent cations**  
Zhao Y., YAVUZ İ., Wang M., Weber M. H., Xu M., Lee J., Tan S., Huang T., Meng D., Wang R., et al.  
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- XX. **Accelerated discovery of defect tolerant organo-halide perovskites**  
İşleyen N., Corcor A., Çakirefe S., Ormanlı N., Kanat E., YAVUZ İ.  
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- XXI. **Defect Pair Formation in FAPbI<sub>3</sub> Perovskite Solar Cell Absorbers**  
Sezen E., Oner S. M., DEĞER C., YAVUZ İ.  
Journal of Physical Chemistry Letters, cilt.13, sa.41, ss.9718-9724, 2022 (SCI-Expanded)

- XXII. **Lattice strain suppresses point defect formation in halide perovskites**  
Deger C., Tan S., Houk K. N., Yang Y., YAVUZ İ.  
NANO RESEARCH, cilt.15, sa.6, ss.5746-5751, 2022 (SCI-Expanded)
- XXIII. **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.  
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- XXIV. **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, cilt.6, sa.5, ss.1032-1048, 2022 (SCI-Expanded)
- XXV. **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.  
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- XXVI. **Surface Defect Formation and Passivation in Formamidinium Lead Triiodide (FAPbI<sub>3</sub>) Perovskite Solar Cell Absorbers**  
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- XXVII. **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.  
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- XXVIII. **Surface Reconstruction of Halide Perovskites During Post-treatment**  
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- XXIX. **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.  
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- XXX. **Structural order and charge transfer in highly strained carbon nanobelts**  
Aydin G., Kocak O., Guleryuz C., YAVUZ İ.  
NEW JOURNAL OF CHEMISTRY, cilt.44, sa.36, ss.15769-15775, 2020 (SCI-Expanded)
- XXXI. **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.  
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- XXXII. **Strain-promoted perpendicular magnetic anisotropy in Co-Rh alloys**  
Aksu P., Deger C., Yavuz I., Yildiz F.  
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- XXXIII. **Steric Impediment of Ion Migration Contributes to Improved Operational Stability of Perovskite Solar Cells**  
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- XXXIV. **Carrier-envelope-phase-controlled molecular dissociation by ultrashort chirped laser pulses**  
Bozpolat S. A., Rosenberger P., Ciappina M. F., Kling M. F., YAVUZ İ.  
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- XXXV. **Constructive molecular configurations for surface-defect passivation of perovskite photovoltaics**  
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- XXXVI. **Impact of interlayer coupling on magnetic skyrmion size**  
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- XXXVII. **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.  
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- XXXVIII. **Current-driven coherent skyrmion generation**  
Deger C., Yavuz I., Yildiz F.  
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- XXXIX. **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, ss.1, 2019 (SCI-Expanded)
- XL. **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, cilt.141, sa.2, ss.952-960, 2019 (SCI-Expanded)
- XLI. **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, cilt.21, sa.2, ss.901-914, 2019 (SCI-Expanded)
- XLII. **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, cilt.98, sa.4, 2018 (SCI-Expanded)
- XLIII. **Intrinsic charge-mobility in benzothieno[3,2-b][1]benzothiophene (BTBT) organic semiconductors is enhanced with long alkyl side-chains**  
Alkan M., Yavuz I.  
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- XLIV. **Understanding the Impact of Thiophene/Furan Substitution on Intrinsic Charge-Carrier Mobility**  
Turan H. T., YAVUZ İ., AVIYENTE V.  
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- XLV. **Dichotomy between the band and hopping transport in organic crystals: insights from experiments**  
Yavuz I.  
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, cilt.19, sa.38, ss.25819-25828, 2017 (SCI-Expanded)
- XLVI. **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, cilt.5, sa.3, ss.582-588, 2017 (SCI-Expanded)
- XLVII. **Mesoscale Ordering and Charge-Transport of Crystalline Spiro-OMeTAD Organic Semiconductors**  
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- XLVIII. **Understanding dispersive charge-transport in crystalline organic-semiconductors**  
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- XLIX. **Below-threshold harmonic generation from strong non-uniform fields**  
Yavuz I.  
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- L. **Quantitative prediction of morphology and electron transport in crystal and disordered organic semiconductors**  
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- LI. **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.  
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- LII. **High-order-harmonic generation from Rydberg atoms driven by plasmon-enhanced laser fields**  
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- LIII. **High-order-harmonic generation from H-2(+) molecular ions near plasmon-enhanced laser fields**  
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- LIV. **A Solid-State Effect Responsible for an Organic Quintet State at Room Temperature and Ambient Pressure**  
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ADVANCED MATERIALS, cilt.27, sa.10, ss.1718-1724, 2015 (SCI-Expanded)
- LIV. **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.  
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- LVI. **Simulations of Molecular Ordering and Charge-Transport of Oligo-Didodecylquaterthiophenes (DDQT)**  
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JOURNAL OF PHYSICAL CHEMISTRY C, cilt.119, sa.1, ss.158-165, 2015 (SCI-Expanded)
- LVII. **Phase-dependent interference fringes in the wavelength scaling of harmonic efficiency**  
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- LVIII. **Phase dependent interference fringes in the wavelength scaling of harmonic efficiency**  
ALTUN Z., BLEDA E. A., YAVUZ İ., TOPCU T.  
Physical Review X, cilt.89, ss.55801, 2014 (SCI-Expanded)
- LIX. **High-order-harmonic generation from Rydberg states at fixed Keldysh parameter**  
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- LX. **High-order-harmonic generation from Rydberg states at fixed Keldysh parameter**  
ALTUN Z., BLEDA E. A., YAVUZ İ., TURKER T.  
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- LXI. **Gas population effects in harmonic emission by plasmonic fields**  
Yavuz I.  
PHYSICAL REVIEW A, cilt.87, sa.5, 2013 (SCI-Expanded)
- LXII. **Computational thermochemistry of glycolaldehyde**  
BLEDA E. A., YAVUZ İ., ALTUN Z., Trindle C.  
INTERNATIONAL JOURNAL OF QUANTUM CHEMISTRY, cilt.113, sa.8, ss.1147-1154, 2013 (SCI-Expanded)
- LXIII. **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, cilt.86, sa.4, 2012 (SCI-Expanded)
- LXIV. **Generation of a broadband xuv continuum in high-order-harmonic generation by spatially inhomogeneous fields**  
Yavuz I., Bleda E. A., Altun Z., Topcu T.  
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- LXV. **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, cilt.85, sa.1, 2012 (SCI-Expanded)
- LXVI. **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, cilt.978, ss.88-97, 2011 (SCI-Expanded)
- LXVII. **Enhancement of high-order harmonic generation in the presence of noise**

- Yavuz I., Altun Z., Topcu T.  
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- LXVIII. **Two small thermodynamically stable organic dications**  
YUMAK YAHŞI A., YAVUZ İ., ALTUN Z., Trindle C.  
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.940, ss.6-12, 2010 (SCI-Expanded)
- LXIX. **Focal point analysis of torsional isomers of acrylic acid**  
ÇİFTÇİOĞLU G. A., Trindle C., YAVUZ İ.  
MOLECULAR PHYSICS, cilt.108, ss.2601-2609, 2010 (SCI-Expanded)
- LXX. **Structure, binding energies, and IR-spectral fingerprinting of formic acid dimers**  
YAVUZ İ., Trindle C.  
JOURNAL OF CHEMICAL THEORY AND COMPUTATION, cilt.4, sa.3, ss.533-541, 2008 (SCI-Expanded)
- LXXI. **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.  
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## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Isotope Effect on Molecular Dissociation by Intense Laser Fields in The Vicinity of Metallic Nanotip**  
Karakaş S. A., Öner M., Yavuz İ.  
Turkish Physical Society 35th International Physics Congress (TPS35), Muğla, Türkiye, 4 - 08 Eylül 2019
- II. **Controlling Electron Localization in the Dissociation of H<sub>2</sub> and HD**  
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- VII. **MORPHOLOGY AND CHARGE-MOBILITY OF LONG ALKYL SIDE-CHAINED BTBTS**  
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- XII. **Dynamical origin of room-temperature charge-transport in organic crystal**  
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- XIII. **BELOW-THRESHOLD HARMONIC GENERATION FROM STRONG NON-UNIFORM FIELDS**  
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- XIV. **Magnetic Properties of Co Doped Graphene: a Monte-Carlo Study**  
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- XV. **ORIGIN OF MAGNETISM IN CR3 DOPED GRAPHENE**  
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- XVI. **ACCURATE PREDICTION OF POLARON-BINDING AND REORGANIZATION ENERGIES OF ORGANIC SEMICONDUCTORS.**  
Güleryüz C., YAVUZ İ.  
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- XVII. **DICHOTOMY BETWEEN THE BAND AND HOPPING TRANSPORT IN ORGANIC CRYSTALS: INSIGHTS FROM THE EXPERIMENTS**  
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- XVIII. **Influence of odd/even alkyl side-chain substitution on the morphology and charge-transport of benzothieno-benzothiophenes (BTBT)**  
Alkan M., YAVUZ İ.  
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- XIX. **FERROMAGNETISM IN METAL ION DOPED DNA: A MONTECARLO STUDY**  
DEĞER C., KALAYCI T., DURU İ. P., ELDEM V., YAVUZ İ.  
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- XX. **FIRST PRINCIPLES STUDY OF REGIOSELECTIVITY OF METAL ION DOPING TO DNA BASE PAIRS**  
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International Congress on Fundamental and Applied Sciences 2017, Saraybosna, Bosna-Hersek, 21 - 25 Ağustos 2017
- XXI. **Dissociation of H<sub>2</sub> in strong inhomogeneous near-fields**  
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INTERNATIONAL CONFERENCE ON PHOTONIC ELECTRONIC AND ATOMIC COLLISIONS, 26 Temmuz - 01 Ağustos 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.  
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- XXIII. **Predicting atomistic morphologies and charge transport of 5 12 cycloparaphenylene**  
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- XXIV. **Harmonic-emission from Rydberg states in the vicinity of metallic nanostructures**  
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29th International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC), Toledo, Filipinler, 22 - 28 Temmuz 2015, cilt.635
- XXV. **Stochastic Enhancement of High order Harmonic Generation**



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XXVII INTERNATIONAL CONFERENCE ON PHOTONIC, ELECTRONIC AND ATOMIC COLLISIONS (ICPEAC 2011), PTS  
1-15, Belfast, K. İrlanda, Birleşik Krallık, 01 Kasım 2012, cilt.388, ss.32023
- XXVI. **Dielectronic Recombination in He like Li like and Be like Iodine and KLM Resonances**  
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- XXVII. **Exploring the high order harmonic generation from Rydberg states with at fixed Keldysh parameter**  
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- XXVIII. **Dielectronic Recombination in He like Li like and Be like Bismuth and KLM Resonances**  
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XXVII INTERNATIONAL CONFERENCE ON PHOTONIC, ELECTRONIC AND ATOMIC COLLISIONS (ICPEAC 2011), PTS  
1-15, Belfast, K. İrlanda, Birleşik Krallık, 1 - 03 Kasım 2012, cilt.388, ss.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), Amerika Birleşik  
Devletleri, 4 - 08 Haziran 2012
- XXX. **Dielectric Recombination Rate Coefficients of B-Like C (OTURUM NO: 01\_OP67)**  
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- XXXI. **Control of Quantum Path High Order Harmonic Generation via Chaotic Light (OTURUM NO: 01\_OP62)**  
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Turkish Physical Society 28th International Physics Congress, MUĞLA, Türkiye, 6 - 09 Eylül 2011
- XXXII. **Dielectronic Recombination in He like Li like and Be like Bismuth and KLM Resonances**  
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XXVII International Conference on Photonic, Electronic and Atomic Collisions, Belfast, Birleşik Krallık, 27 Temmuz -  
02 Ağustos 2011
- XXXIII. **Control of quantum in high harmonic generation via chaotic light**  
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28th International Physics Congress, Mugla, Bodrum, Türkiye, 1 - 03 Kasım 2011
- XXXIV. **Dielectronic recombination rate coefficients of B like C**  
YUMAK YAŞI A., YAVUZ İ., BLEDA E. A., Karakaş V., ALTUN Z.  
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ALTUN Z., YUMAK YAŞI A., YAVUZ İ., BLEDA E. A.  
10th European Conference on Atoms Molecules and Photons (ECAMP 10), Salamanca, Meksika, 4 - 09 Temmuz  
2010
- XXXVII. **Recombination Rate Coefficients of Li Like Sulfur**  
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ECamp10, 10th European Conference on Atoms Molecules and Photons, Salamanca, Meksika, 4 - 09 Temmuz 2010,  
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10th European Conference on Atoms Molecules and Photons (ECAMP 10), Salamanca, Meksika, 4 - 09 Temmuz  
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- XXXIX. **Level resolved distorted wave cross sections of electron impact ionization of Ar5**  
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- XL. **Electron-Impact Ionization of Atomic Ions: Theoretical Results**  
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26th International Conference on Photonic, Electronic and Atomic Collisions, Michigan, Amerika Birleşik Devletleri, 22 - 28 Temmuz 2009, cilt.194
- XLI. **Issues in the computational estimation of free radical polymerization rates the case of methyl acrylate**  
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13th ICQC, Helsinki, Finlandiya, 1 - 03 Kasım 2009, ss.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, Fransa, 22 - 27 Haziran 2008, ss.59
- XLIII. **Excitation Ionization Cross Section Na Like Tin**  
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- XLIV. **Resonances in The Velocity Averaged Dielectronic Recombination Cross Section for Mg like Fe**  
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IWP International Workshop on Photoionization 2005, Campinas, Brezilya, 27 - 31 Temmuz 2005

## Diğer Yayınlar

- I. **CEP-Controlled Molecular Dissociation by Ultrashort Chirped Laser Pulses**  
Yavuz İ.  
Teknik Rapor, ss.1-6, 2019

## Desteklenen Projeler

- Yavuz İ., TÜBİTAK Projesi, Hibrid Perovskite Güneş Pillerinde İçsel Kusurların Atomik Seviyede Belirlenmesi Ve Pasifleştirilmesi, 2020 - 2022
- Karakaş S. A., Yavuz İ., TÜBİTAK Projesi, Metalik Nanotip Civarında CEP-Kontrollü Moleküler Ayrışma Üzerine İzotop ve Kütleli Asimetri Etkisi, 2020 - 2021
- Yavuz İ., Diğer Uluslararası Fon Programları, Skyrmion Bazlı Magnonik Kristallerin Manyetik Özelliklerinin ve Soğurma Spektrumlarının İncelenmesi, 2018 - 2019
- Yavuz İ., Yükseköğretim Kurumları Destekli Proje, Simetrik ve asimetrik alkil-eklenmiş benzotiyeno-benzotiyofen (BTBT) organik yarıiletkenlerin moleküler düzen ve yük-taşımlarının tahmin edilmesi, 2017 - 2019
- Yavuz İ., TÜBİTAK Projesi, Heteroeklem-Tabanlı Organik Fotovoltaik Uygulamalar İçin Dairesel-Oligomer/Fullerene Komplekslerinin Yapısal Düzen ve Yük-Taşımlarının İncelenmesi, 2017 - 2018
- Yavuz İ., Diğer Resmi Kurumlarca Desteklenen Proje, Antiferromanyetik İyon Katkılı DNA Nanotellerin Elektronik ve Manyetik Özelliklerinin Belirlenmesi, 2016 - 2018
- Yavuz İ., Diğer Ülkelerdeki Kamu Kurumları Tarafından Desteklenmiş Proje, DMREF: Iterative Theoretical Morphology Prediction Synthesis and Characterization of Novel Donor Oligomers for Accelerated Materials Discovery, 2013 - 2018
- Yavuz İ., Yükseköğretim Kurumları Destekli Proje, Tek/çift alkil zincir eklenmesinin benzothieno-benzothiophenelerin (BTBT) morfoloji ve yük-taşımları üzerine etkisi, 2017 - 2017
- Yavuz İ., Yükseköğretim Kurumları Destekli Proje, 5 12 Sikloparafenilenlerin atomistik morfolojileri ve yük taşımlarının

tahmin edilmesi, 2016 - 2017

Yavuz İ., Yükseköğretim Kurumları Destekli Proje, Atomik Hedeflerden Yüksek Mertebeli Harmonik Üretimde Verim Artırılması, 2006 - 2012

## **Bilimsel Hakemlikler**

TÜBİTAK Projesi, 1001 - Bilimsel ve Teknolojik Araştırma Projelerini Destekleme Programı, Marmara Üniversitesi, Türkiye, Temmuz 2019

TÜBİTAK Projesi, 1001 - Bilimsel ve Teknolojik Araştırma Projelerini Destekleme Programı, Marmara Üniversitesi, Türkiye, Temmuz 2019

TÜBİTAK Projesi, 1001 - Bilimsel ve Teknolojik Araştırma Projelerini Destekleme Programı, Marmara Üniversitesi, Türkiye, Haziran 2019

ADVANCED ENERGY MATERIALS, SCI Kapsamındaki Dergi, Mayıs 2019

JOURNAL OF PHYSICAL CHEMISTRY, SCI Kapsamındaki Dergi, Kasım 2018

ADVANCED FUNCTIONAL MATERIALS, SCI Kapsamındaki Dergi, Eylül 2018

ZEITSCHRIFT FÜR PHYSIK, SCI Kapsamındaki Dergi, Haziran 2018

JOURNAL OF PHYSICAL CHEMISTRY, SCI Kapsamındaki Dergi, Temmuz 2017

OPTICS EXPRESS, SCI Kapsamındaki Dergi, Ağustos 2016

JOURNAL OF PHYSICAL CHEMISTRY, SCI Kapsamındaki Dergi, Temmuz 2016

INTERNATIONAL JOURNAL OF MODERN PHYSICS B, SCI Kapsamındaki Dergi, Mayıs 2016

SCIENTIFIC REPORTS, SCI Kapsamındaki Dergi, Nisan 2016

ACCOUNTS OF CHEMICAL RESEARCH, SCI Kapsamındaki Dergi, Ocak 2014

CHEMICAL PHYSICS, SCI Kapsamındaki Dergi, Ekim 2012

## **Etkinlik Organizasyonlarındaki Görevler**

Yavuz İ., M-BIO2017, Bilimsel Kongre / Sempozyum Organizasyonu, Kocaeli, Türkiye, Eylül 2017

## **Metrikler**

Yayın: 117

Atıf (WoS): 1265

Atıf (Scopus): 1130

H-İndeks (WoS): 17

H-İndeks (Scopus): 14

## **Kongre ve Sempozyum Katılımı Faaliyetleri**

Chemistry Via Computation, Çalışma Grubu, İstanbul, Türkiye, 2017

33th International Physics Congress, Çalışma Grubu, Muğla, Türkiye, 2017

11th WATOC, Çalışma Grubu, Munich, Almanya, 2017

251th ACS National Meeting, Çalışma Grubu, California, Amerika Birleşik Devletleri, 2016

247th ACS National Meeting, Çalışma Grubu, Texas, Amerika Birleşik Devletleri, 2014

XXVII ICPEAC, Çalışma Grubu, Belfast, Birleşik Krallık, 2012

28th International Physics Congress, Çalışma Grubu, Muğla, Türkiye, 2011

ECAMP 10, Çalışma Grubu, Salamanca, İspanya, 2010

## **Davetli Konuřmalar**

Öğrenci Semineri, Seminer, Koç Üniversitesi, Türkiye, Haziran 2012

## **Ödüller**

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

## **Akademi Dışı Deneyim**

Los Angeles, Kaliforniya Üniversitesi

Auburn Üniversitesi

Virginia Üniversitesi

Virginia Üniversitesi

Virginia Üniversitesi

Virginia Üniversitesi

Marmara Üniversitesi