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Kişisel Bilgiler

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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. **Strain regulates the photovoltaic performance of thick-film perovskites**
Shi P., Xu J., YAVUZ İ., Huang T., Tan S., Zhao K., Zhang X., Tian Y., Wang S., Fan W., et al.
Nature Communications, cilt.15, sa.1, 2024 (SCI-Expanded)
- II. **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.
Nature Communications, cilt.15, sa.1, 2024 (SCI-Expanded)
- III. **Surficial Homogenic Effect Enables Highly Stable Deep-Blue Perovskite Light-Emitting Diodes**
Li Y., Xia Y., Chen C., Jin R., Nar A., Chen J., Li N., Wang K., YAVUZ İ., Wang Z.
Angewandte Chemie - International Edition, cilt.63, sa.46, 2024 (SCI-Expanded)
- IV. **Cation reactivity inhibits perovskite degradation in efficient and stable solar modules**
Ding Y., Ding B., Shi P., Romano-deGea J., Li Y., Turnell-Ritson R. C., Syzgantseva O. A., YAVUZ İ., Xia M., Yu R., et al.
Science (New York, N.Y.), cilt.386, sa.6721, ss.531-538, 2024 (SCI-Expanded)
- V. **Mitigating Buried-Interface Energy Losses through Multifunctional Ligands in n-i-p Perovskite/Silicon Tandem Solar Cells**
Zhang S., Wang J., Kalasariya N., Dally P., DEĞER C., YAVUZ İ., Razzaq A., Vishal B., Prasetio A., Utomo D. S., et al.
ACS Energy Letters, cilt.9, sa.9, ss.4633-4644, 2024 (SCI-Expanded)
- VI. **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.

Journal of the American Chemical Society, cilt.146, sa.33, ss.22970-22981, 2024 (SCI-Expanded)

- VII. **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.
Science Bulletin, cilt.69, sa.15, ss.2332-2336, 2024 (SCI-Expanded)
- VIII. **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)
- IX. **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)
- X. **Ferroelastic Control of the Multicolor Emission from a Triply Doped Organic Crystal**
Commins 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)
- XI. **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.
ACS Sustainable Chemistry and Engineering, cilt.12, sa.23, ss.8923-8929, 2024 (SCI-Expanded)
- XII. **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)
- XIII. **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)
- XIV. **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)
- XV. **Incorporation Mechanism of Potassium in FAPbI₃ 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)
- XVI. **Magnetic-biased chiral molecules enabling highly oriented photovoltaic perovskites**
Chen J., DEĞER C., Su Z., Wang K., Zhu G., Wu J., He B., Chen C., Wang T., Gao X., et al.
National Science Review, cilt.11, sa.2, 2024 (SCI-Expanded)
- XVII. **π - π stacking constructing efficient charge channels for perovskite photovoltaics**
Chen C., Hu F., Wang K., Chen J., Teng T., Shi Y., Xia Y., Su Z., Gao X., YAVUZ İ., et al.
Science Bulletin, cilt.69, sa.1, ss.26-29, 2024 (SCI-Expanded)
- XVIII. **Tailoring the π -conjugation in self-assembled hole-selective molecules for perovskite photovoltaics**
Zhao K., Yao L., Liu C., YAVUZ İ., Shen J., Shi P., Zhang X., Luo Y., Jin D., Tian Y., et al.
Science China Materials, 2024 (SCI-Expanded)
- XIX. **Resolving Scaling Issues in Self-Assembled Monolayer-Based Perovskite Solar Modules via Additive Engineering**
Pininti A. R., Subbiah A. S., DEĞER C., YAVUZ İ., Prasetyo A., Dally P., Hnapovskiy V., Said A. A., Torres Merino L. V., Mannar S., et al.
Advanced Energy Materials, 2024 (SCI-Expanded)
- XX. **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)
- XXI. **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)

- XXII. **Design of an amorphous ZnWSe₂ 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.
Materials Chemistry Frontiers, cilt.7, sa.18, ss.4120-4131, 2023 (SCI-Expanded)
- XXIII. **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.
Nature Sustainability, cilt.6, sa.5, ss.539-548, 2023 (SCI-Expanded)
- XXIV. **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.
NATURE MATERIALS, cilt.21, sa.12, ss.1396-1402, 2022 (SCI-Expanded)
- XXV. **Accelerated discovery of defect tolerant organo-halide perovskites**
İşleyen N., Corcor A., Çakirefe S., Ormanlı N., Kanat E., YAVUZ İ.
Journal of Materials Chemistry C, cilt.10, sa.48, ss.18385-18392, 2022 (SCI-Expanded)
- XXVI. **Defect Pair Formation in FAPbI₃ 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)
- XXVII. **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)
- XXVIII. **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, cilt.605, ss.268-273, 2022 (SCI-Expanded)
- XXIX. **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)
- XXX. **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, cilt.18, 2022 (SCI-Expanded)
- XXXI. **Surface Defect Formation and Passivation in Formamidinium Lead Triiodide (FAPbI₃) Perovskite Solar Cell Absorbers**
Oner S. M., Sezen E., Yordanlı M. S., Karakoc E., Deger C., Yavuz I.
JOURNAL OF PHYSICAL CHEMISTRY LETTERS, cilt.13, ss.324-330, 2022 (SCI-Expanded)
- XXXII. **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, cilt.7, sa.46, 2021 (SCI-Expanded)
- XXXIII. **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, cilt.143, sa.18, ss.6781-6786, 2021 (SCI-Expanded)
- XXXIV. **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, cilt.4, sa.11, ss.2426-2442, 2020 (SCI-Expanded)
- XXXV. **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)
- XXXVI. **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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- XXXVII. **Strain-promoted perpendicular magnetic anisotropy in Co-Rh alloys**
Aksu P., Deger C., Yavuz I., Yildiz F.
APPLIED PHYSICS LETTERS, cilt.116, sa.21, 2020 (SCI-Expanded)
- XXXVIII. **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, cilt.32, sa.11, 2020 (SCI-Expanded)
- XXXIX. **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, cilt.100, sa.6, 2019 (SCI-Expanded)
- XL. **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, cilt.366, sa.6472, ss.1509-1541, 2019 (SCI-Expanded)
- XLI. **Impact of interlayer coupling on magnetic skyrmion size**
DEĞER C., YAVUZ İ., Yildiz F.
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, cilt.489, 2019 (SCI-Expanded)
- XLII. **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, cilt.141, ss.13948-13953, 2019 (SCI-Expanded)
- XLIII. **Current-driven coherent skyrmion generation**
Deger C., Yavuz I., Yildiz F.
SCIENTIFIC REPORTS, cilt.9, 2019 (SCI-Expanded)
- XLIV. **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)
- XLV. **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)
- XLVI. **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)
- XLVII. **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)
- XLVIII. **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, cilt.20, sa.23, ss.15970-15979, 2018 (SCI-Expanded)
- XLIX. **Understanding the Impact of Thiophene/Furan Substitution on Intrinsic Charge-Carrier Mobility**
Turan H. T., YAVUZ İ., AVİYENTE V.
JOURNAL OF PHYSICAL CHEMISTRY C, cilt.121, sa.46, ss.25682-25690, 2017 (SCI-Expanded)
- L. **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)
- LI. **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)

- LII. **Mesoscale Ordering and Charge-Transport of Crystalline Spiro-OMeTAD Organic Semiconductors**
YAVUZ İ., Houk K. N.
JOURNAL OF PHYSICAL CHEMISTRY C, cilt.121, sa.2, ss.993-999, 2017 (SCI-Expanded)
- LIII. **Understanding dispersive charge-transport in crystalline organic-semiconductors**
YAVUZ İ., Lopez S. A.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, cilt.19, sa.1, ss.231-236, 2017 (SCI-Expanded)
- LIV. **Below-threshold harmonic generation from strong non-uniform fields**
Yavuz I.
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- LV. **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, cilt.4, sa.47, ss.11238-11243, 2016 (SCI-Expanded)
- LVI. **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, cilt.93, sa.3, 2016 (SCI-Expanded)
- LVII. **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.
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- LVIII. **High-order-harmonic generation from H-2(+) molecular ions near plasmon-enhanced laser fields**
YAVUZ İ., Tikman Y., ALTUN Z.
PHYSICAL REVIEW A, cilt.92, sa.2, 2015 (SCI-Expanded)
- LIX. **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, cilt.27, sa.10, ss.1718-1724, 2015 (SCI-Expanded)
- LX. **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, cilt.137, sa.8, ss.2856-2866, 2015 (SCI-Expanded)
- LXI. **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, cilt.119, sa.1, ss.158-165, 2015 (SCI-Expanded)
- LXII. **Phase-dependent interference fringes in the wavelength scaling of harmonic efficiency**
Yavuz I., Bleda E. A., Altun Z., Topcu T.
PHYSICAL REVIEW A, cilt.89, sa.5, 2014 (SCI-Expanded)
- LXIII. **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)
- LXIV. **High-order-harmonic generation from Rydberg states at fixed Keldysh parameter**
Bleda E. A., Yavuz I., Altun Z., Topcu T.
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- LXV. **High-order-harmonic generation from Rydberg states at fixed Keldysh parameter**
ALTUN Z., BLEDA E. A., YAVUZ İ., TURKER T.
PHYSICAL REVIEW A, cilt.88, sa.4, 2013 (SCI-Expanded)
- LXVI. **Gas population effects in harmonic emission by plasmonic fields**
Yavuz I.
PHYSICAL REVIEW A, cilt.87, sa.5, 2013 (SCI-Expanded)
- LXVII. **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)
- LXVIII. **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)
- LXIX. **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, cilt.85, sa.1, 2012 (SCI-Expanded)
- LXX. **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)
- LXXI. **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)
- LXXII. **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, cilt.44, sa.13, 2011 (SCI-Expanded)
- LXXIII. **Two small thermodynamically stable organic dications**
YUMAK YAŞI A., YAVUZ İ., ALTUN Z., Trindle C.
JOURNAL OF MOLECULAR STRUCTURE-THEOCHEM, cilt.940, ss.6-12, 2010 (SCI-Expanded)
- LXXIV. **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)
- LXXV. **Structure, binding energies, and IR-spectral fingerprinting of formic acid dimers**
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- III. **ORGANİK YARI İLETKENLERİN POLARON-BAĞLANMA VE REORGANİZASYON ENERJİLERİNİN DFT YÖNTEMLERİYLE BULUNMASI**
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- IV. **Chirp effect on molecular dissociation**
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- V. **Current-driven coherent skyrmion generation**

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- VI. **Impact of interlayer coupling on magnetic skyrmion size**
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- VII. **MORPHOLOGY AND CHARGE-MOBILITY OF LONG ALKYL SIDE-CHAINED BTBTS**
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- XI. **Understanding the impact of thiophene/furansubstitution to intrinsic charge-carrier mobility**
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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.**
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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)**
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- XIX. **FERROMAGNETISM IN METAL ION DOPED DNA: A MONTECARLO STUDY**
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- XX. **FIRST PRINCIPLES STUDY OF REGIOSELECTIVITY OF METAL ION DOPING TO DNA BASE PAIRS**

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- XXII. **Atomistic Morphologies and Charge transport of 5 12 cycloparaphenylenes**
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- XXV. **Stochastic Enhancement of High order Harmonic Generation**
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- XXVII. **Exploring the high order harmonic generation from Rydberg states with at fixed Keldysh parameter**
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- 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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- XL. **Electron-Impact Ionization of Atomic Ions: Theoretical Results**
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- 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 asimetric 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
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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: 122

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 Konuşmalar

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