

## Assoc. Prof. Alev ER

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAD-5057-2020

Yoksis Researcher ID: 104064

### Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Fizik, Turkey 2006 - 2010

Postgraduate, Istanbul University, Institute of Graduate Studies In Sciences, Fizik, Turkey 2004 - 2006

Undergraduate, Istanbul University, Faculty Of Science, Fizik, Turkey 2000 - 2004

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Nb I Elementinin Aşırı İnce Yapısının İncelenmesi, Istanbul University, Faculty of Science, Fizik, 2010

Postgraduate, Lantan I Elementinin İnce ve Aşırı İnce Yapısının İncelenmesi, Istanbul University, Faculty of Science, Fizik, 2006

### Research Areas

Physics, Atomic and Molecular Physics, Atomic Spectra and Photon Interactions, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty of Science, Department of Physics, 2017 - Continues

Assistant Professor, Istanbul University, Faculty of Science, Department of Physics, 2014 - 2018

Research Assistant PhD, Istanbul University, Faculty of Science, Department of Physics, 2011 - 2014

Research Assistant, Istanbul University, Faculty of Science, Department of Physics, 2006 - 2011

### Academic and Administrative Experience

## Courses

ADVANCED PHYSICS APPLICATIONS I (Fizik Bölümü), Undergraduate, 2020 - 2021  
Physics II (Matematik Bölümü), Undergraduate, 2019 - 2020  
Atomic Spectroscopy, Postgraduate, 2019 - 2020  
Physics I (Matematik Bölümü), Undergraduate, 2020 - 2021  
Physics (Eczacılık Fakültesi), Undergraduate, 2019 - 2020  
Physics I (Matematik Bölümü), Undergraduate, 2019 - 2020  
Physics II (Matematik Bölümü), Undergraduate, 2018 - 2019  
Fizik II (Ast.veUzay Bil. Bölümü), Undergraduate, 2017 - 2018, 2013 - 2014  
Physics I (Matematik Bölümü), Undergraduate, 2018 - 2019  
Fizik I (Ast.veUzay Bil. Bölümü)-Ortak, Undergraduate, 2017 - 2018  
Fizik II (Mat-Ast.veUzay Bil. Bölümleri ortak), Undergraduate, 2016 - 2017  
Atomik Spektroskopi (Fizik Anabilim Dalı, Atom ve Molekül Fiziği Programı), Postgraduate, 2016 - 2017  
Analiz III (Fizik Bölümü)-Ortak, Undergraduate, 2017 - 2018  
Atomik Spektroskopi (Fizik Anabilim Dalı, Atom ve Molekül Fiziği Programı), Postgraduate, 2015 - 2016  
Seminer, Postgraduate, 2016 - 2017  
Termodinamik ve İstatistik Mekanik Laboratuvarı (Fizik Bölümü-Örgün Öğretim), Undergraduate, 2015 - 2016  
Termodinamik ve İstatistik Mekanik Laboratuvarı (Fizik Bölümü-İkinci Öğretim), Undergraduate, 2015 - 2016  
Fizik (Eczacılık Fakültesi), Undergraduate, 2015 - 2016, 2014 - 2015  
Genel Fizik (Su ürünleri Fakültesi), Undergraduate, 2015 - 2016  
Matematik I (Mühendislik Fak., Endüstri Müh.), Undergraduate, 2011 - 2012  
Matematik I (Mühendislik Fak., Makine Müh.), Undergraduate, 2011 - 2012  
Matematik I (Mühendislik Fakültesi, Deniz Ulaşım Müh.), Undergraduate, 2011 - 2012  
Matematik I (Mühendislik Fak., Metalurji ve Malz.Müh.), Undergraduate, 2011 - 2012

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

- I. **Hyperfine structure measurements of neutral vanadium by laser-induced fluorescence spectroscopy in the wavelength range from 750 nm to 860 nm**  
Basar G., Guzelcimen F., Ozturk I. K., Er A., Bingol D., Kroeger S., Basar G.  
JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER, vol.202, pp.193-199, 2017 (SCI-Expanded)
- II. **Line Identification of Atomic and Ionic Spectra of Holmium in the Near-UV. II. Spectra of HoII and HoIII**  
Başar G., Al-Labady N., Ozdalğic B., Güzelçimen F., Er A., Ozturk İ., Ak T., Bilir S., Tamanis M., Ferber R., et al.  
ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES, vol.228, 2017 (SCI-Expanded)
- III. **Line Identification of Atomic and Ionic Spectra of Holmium in the Near-UV. Part I. Spectrum of HoI**  
Al-Labady N., Ozdalğic B., Er A., Guzelcimen F., Ozturk I. K., Kroeger S., Kruzins A., Tamanis M., Ferber R., Basar G.  
ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES, vol.228, no.2, 2017 (SCI-Expanded)
- IV. **HIGH-RESOLUTION FOURIER TRANSFORM SPECTROSCOPY OF Nb I IN THE NEAR-INFRARED**  
Er A., Guzelcimen F., Basar G., Ozturk İ., Tamanis M., Ferber R., Kroeger S.  
ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES, vol.221, no.1, 2015 (SCI-Expanded)
- V. **Investigation of the hyperfine structure of weak atomic Vanadium lines by means of Fourier transform spectroscopy**  
Guzelcimen F., Er A., Öztürk İ., Başar G., KROEGER S., TAMANIS M., FERBER R.  
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, vol.48, no.11, 2015 (SCI-Expanded)
- VI. **New energy levels of atomic niobium by laser induced fluorescence spectroscopy in the near**

## **infrared**

Ozturk İ., Basar G., Er A., Guzelcimen F., Basar G., Kroger S.

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, vol.48, no.1, 2015 (SCI-Expanded)

### **VII. Parametric study of the fine and hyperfine structure for the even parity configurations of atomic niobium**

Dembczynski J., Elantkowska M., Ruczkowski J., Öztürk İ., Er A., Güzelçimen F., Başar G., Kroger S.

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, vol.48, 2015 (SCI-Expanded)

### **VIII. Transition probabilities of neutral scandium**

Öztürk İ., Celik G., Gokce Y., ATALAY B., Guzelcimen F., Er A., Başar G., Kröger S.

CANADIAN JOURNAL OF PHYSICS, vol.92, no.11, pp.1425-1429, 2014 (SCI-Expanded)

### **IX. HYPERFINE STRUCTURE CONSTANTS OF ENERGETICALLY HIGH-LYING LEVELS OF ODD PARITY OF ATOMIC VANADIUM**

Güzelçimen F., Yapici B., Demir G., Er A., Ozturk İ., Başar G., Kroeger S., Tamanis M., Ferber R., Docenko D., et al.

ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES, vol.214, 2014 (SCI-Expanded)

### **X. Hyperfine structure investigations of atomic niobium with optogalvanic and laser-induced fluorescence spectroscopy in the near-infrared wavelength range**

BAŞAR G., Başar G., Ozturk İ., ER A., GÜZELÇİMEN F., Kroeger S.

ASTRONOMY & ASTROPHYSICS, vol.556, 2013 (SCI-Expanded)

### **XI. Hyperfine structure study of atomic niobium with enhanced sensitivity of Fourier transform spectroscopy**

Er A., Öztürk İ., Başar G., Kroeger S., Jarmola A., Ferber R., Tamanis M.

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, vol.44, 2011 (SCI-Expanded)

### **XII. Hyperfine structure measurements of neutral niobium with Fourier transform spectroscopy**

Kroeger S., ER A., Ozturk İ., BAŞAR G., Jarmola A., Ferber R., Tamanis M., Zacs L.

ASTRONOMY & ASTROPHYSICS, vol.516, 2010 (SCI-Expanded)

### **XIII. Experimental hyperfine structure investigation of atomic La**

Basar G., Basar G., Er A., Kroeger S.

PHYSICA SCRIPTA, vol.75, no.4, pp.572-576, 2007 (SCI-Expanded)

## **Books & Book Chapters**

### **I. Foods Including Polycyclic Aromatic Hydrocarbons (PAHs) and Spectroscopic Identifications of PAHs**

Er A., Çakır E., Çelik S., Özel A., Akyüz S.

in: Interdisciplinary Cancer Research, Nima Rezaei, Editor, Springer Nature, Dubendorf, pp.1-20, 2024

### **II. Foods Including Polycyclic Aromatic Hydrocarbons (PAHs) and Spectroscopic Identifications of PAHs**

Er A., Çakır E., Çelik S., Özel A., Akyüz S.

in: Cancer Research: An Interdisciplinary Approach, Nima Rezaei, Editor, Springer Nature, Stockholm, pp.1-20, 2024

### **III. FONKSİYONEL GIDA ZEYTİNYAĞININ ÖNEMİ, SAĞLIK ÜZERİNDEKİ ETKİLERİ VE SPEKTROSKOPİK ANALİZİ**

Çelik S., Çakır E., Er A., Özel A., Akyüz S.

in: MÜHENDİSLİK ALANINDA YENİLİKÇİ ÇALIŞMALAR - I, Gökhan ÇAYLI, Editor, Artikel Akademi, İstanbul, pp.49-65, 2023

### **IV. Bioactive Properties and Food Applications of Cannabis sativa and Applications of Its Molecular Modeling**

Çelik S., Çakır E., Er A.

in: Cannabis sativa Cultivation, Production, and Applications in Pharmaceuticals and Cosmetics, Rafiq Lone, Aabid Hussain Mir, Javid Manzoor, Editor, IGI Global, New York, pp.101-114, 2023

- V. **The Uses of Cannabinoids in Medicine and Their Spectroscopic Applications**  
Er A., Çelik S.  
in: Medical Cannabis and the Effects of Cannabinoids on Fighting Cancer, Multiple Sclerosis, Epilepsy, Parkinson's, and Other Neurodegenerative Diseases, Rana R. Zeine, Brian W. Teasdale, Editor, IGI Global, New York, pp.236-258, 2023
- VI. **OMEGA-3, OMEGA-6 YAĞ ASİTLERİ VE SPEKTROSKOPİ UYGULAMALARI**  
Çelik S., Çakır E., Er A.  
in: YENİLENEBİLİR KAYNAKLARDAN ELDE EDİLEN MALZEMELER VE UYGULAMALARI-I, Gökhan ÇAYLI, Editor, Artikel Akademi, İstanbul, pp.131-145, 2022
- VII. **YOSUNLAR VE TİTREŞİM SPEKTROSKOPİSİ UYGULAMALARI**  
Er A., Çelik S.  
in: YENİLENEBİLİR KAYNAKLARDAN ELDE EDİLEN MALZEMELER VE UYGULAMALARI-I, Gökhan ÇAYLI, Editor, Artikel Akademi, İstanbul, pp.117-130, 2022
- VIII. **SÜRDÜRÜLEBİLİR GIDA KAYNAĞI OLARAK BİTKİSEL PROTEİNLER VE TİTREŞİM SPEKTROSKOPİSİ UYGULAMALARI**  
Çelik S., Çakır E., Er A.  
in: Sürdürülebilirlik alanında akademik çalışmalar - V, Gökhan Çaylı, Mustafa Güler, Editor, artikel akademi, İstanbul, pp.57-72, 2022

### Refereed Congress / Symposium Publications in Proceedings

- I. **CONFORMATIONAL ANALYSIS OF THE BLEOMYCIN**  
Er A., Basakal Z., Çelik S., Özel A., Akyüz S.  
Turkish Physical Society 39 th International Physics Congress, Muğla, Turkey, 31 August - 04 September 2023, pp.299
- II. **MOLECULAR DOCKING STUDIES ON LIGAND D4476: A POTENT INHIBITOR OF CASEIN KINASE**  
Er A., Basakal Z., Çelik S., Özel A., Akyüz S.  
Turkish Physical Society 39 th International Physics Congress, Muğla, Turkey, 31 August - 04 September 2023, pp.300
- III. **Transition Parameters for Neutral Silicon**  
Er A., Arıkan M.  
International Online Conferences on Engineering and Natural Sciences (IOCENS21), Gümüşhane, Turkey, 5 - 07 July 2021, pp.1
- IV. **Transition Parameters for Neutral Magnesium**  
Er A., Arıkan M.  
International Online Conferences on Engineering and Natural Sciences (IOCENS21), Gümüşhane, Turkey, 5 - 07 July 2021, pp.1
- V. **Fine Structure Parameters Determination of the Configuration 3d64p of Fe II**  
Er A., Şengül Y.  
Turkish Physical Society 35th International Physics Congress, Muğla, Turkey, 4 - 08 September 2019, pp.330
- VI. **Fine Structure Of Nb II Odd Parity Configurations**  
ER A., Şengül Y.  
Turkish Physical Society 34th International Physics Congress, Muğla, Turkey, 5 - 09 September 2018, pp.1
- VII. **Fine Structure Parameters of 4d4 and 4d25s2 Configurations of Nb II**  
Duymuş E., ER A.  
Turkish Physical Society 34th International Physics Congress, Muğla, Turkey, 5 - 09 September 2018, pp.1
- VIII. **Nb II'nin Çift Pariteli Konfigürasyonlarının İnce Yapı Analizi**  
ER A., Duymuş E., Şengül Y.  
ADIM FİZİK GÜNLERİ VII, Aydın, Turkey, 23 - 25 May 2018, pp.91
- IX. **Landé g Factors Calculation of the Configurations 3d54s, 3d44s2, 3d55s and 3d6 of Atomic**

## **Chromium**

ER A., Şengül Y.

Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.563

- X. **Fine Structure Investigation of the Configuration 3d94s4p of Neutral Copper**  
Taşkın G., ER A.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.557
- XI. **"Line Classification of Ho II and Ho III by means of Fourier Transform Spectroscopy from 317 to 400 nm**  
BAŞAR G., Al-Labady N., GÜZELÇİMEN F., OZTURK I. K., ER A., Özdalğıç B., AK T., BİLİR S., Kröger S., Tamanis M., et al.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.565
- XII. **Line Classification of Atomic Holmium by means of Fourier Transform Spectroscopy from 317 to 400 nm**  
BAŞAR G., Al-Labady N., GÜZELÇİMEN F., OZTURK I. K., ER A., Özdalğıç B., AK T., BİLİR S., Kröger S., Tamanis M., et al.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.565
- XIII. **Laser Spectroscopic Measurements of Atomic Vanadium in the Red Wavelength Range**  
Başar G., Başar G., GÜZELÇİMEN F., KANAT ÖZTÜRK İ., ER A., BİNGÖL D., Kröger S.  
TFD33, Muğla, Turkey, 6 - 10 September 2017, pp.1
- XIV. **Line Classification of Ho II and Ho III by means of Fourier Transform Spectroscopy from 317 to 400 nm**  
Başar G., Al-Labady N., GÜZELÇİMEN F., KANAT ÖZTÜRK İ., ER A., Özdalğıç B., AK T., BİLİR S., Kröger S., Tamanis M., et al.  
TFD33, Muğla, Turkey, 6 - 10 September 2017, pp.1
- XV. **Fine Structure Parameters Determination of the Configurations 3d64s and 3d7 of Fe II**  
Şengül Y., ER A.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.557
- XVI. **Laser Spectroscopic Measurements of Atomic Vanadium in the Red Wavelength Range**  
Başar G., BAŞAR G., GÜZELÇİMEN F., KANAT ÖZTÜRK İ., ER A., Bingöl D., Kröger S.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.563
- XVII. **Bakır (Cu II) Elementinin 3d94p, 3d84s4p, 3d95p, 3d96p, 3d97p Konfigürasyonlarının İnce Yapısının İncelenmesi**  
Şengül Y., Taşkın G., ER A.  
ADIM FİZİK GÜNLERİ VI, Balıkesir, Turkey, 19 - 21 July 2017, pp.140
- XVIII. **Investigation of Hyperfine Structure of Atomic Holmium**  
BAŞAR G., Al-Labady N., Yapıcı B., GÜZELÇİMEN F., ER A., KANAT ÖZTÜRK İ., Kröger S., Kruzins A., Tamanis M., Ferber R.  
12th European Conference on Atoms Molecules and Photons (ECAMP12), Frankfurt, Germany, 5 - 09 September 2016, pp.59
- XIX. **Laser Induced Fluorescence Spectroscopy of Atomic Vanadium in the Wavelength Range of 760 nm to 840 nm**  
BAŞAR G., BAŞAR G., KANAT ÖZTÜRK İ., GÜZELÇİMEN F., ER A., Kröger S.  
12th European Conference on Atoms Molecules and Photons (ECAMP12), Frankfurt, Germany, 5 - 09 September 2016, pp.321
- XX. **New Even-Parity Energy Levels of Atomic Lanthanum**  
GÜZELÇİMEN F., ER A., KANAT ÖZTÜRK İ., BAŞAR G., Kröger S., Siddiqui İ., Windholz L.  
9th International Physics Conference of the Balkan Physical Union, İstanbul, Turkey, 24 - 27 August 2015, pp.368
- XXI. **Experimental Hyperfine Structure Analysis of Atomic Niobium Using Laser Induced Fluorescence Spectroscopy**  
ER A., GÜZELÇİMEN F., KANAT ÖZTÜRK İ., Siddiqui İ., Windholz L., Kröger S., BAŞAR G.  
9th International Physics Conference of the Balkan Physical Union, İstanbul, Turkey, 24 - 27 August 2015, pp.362
- XXII. **New Energy Levels of Atomic Niobium**  
BAŞAR G., Kröger S., KANAT ÖZTÜRK İ., ER A., GÜZELÇİMEN F., Başar G.

International Conference on Atomic and Molecular Data and Their Applications ICAMDATA, Jena, Germany, 21 - 25 September 2014, pp.1

- XXIII. **Theoretical Investigation of Fine Structure of Neutral Lanthanum**  
KANAT ÖZTÜRK İ., ER A., GÜZELÇİMEN F., BAŞAR G.  
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 - 24 July 2014, pp.1
- XXIV. **Extension Of The Data For Magnetic Dipole Hyperfine Structure Constants Of Vanadium I Levels**  
GÜZELÇİMEN F., BAŞAR G., KANAT ÖZTÜRK İ., ER A., Kröger S., Tamanis M., Ferber R.  
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 - 24 July 2014, pp.1
- XXV. **Determination of New Transitions of Atomic Niobium in the Near-Infrared**  
ER A., BAŞAR G., KANAT ÖZTÜRK İ., GÜZELÇİMEN F., Tamanis M., Ferber R., Kröger S.  
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 - 24 July 2014, pp.1
- XXVI. **Confirmation of New Even-parity Energy Levels of La I by Laser-Induced Fluorescence Spectroscopy**  
BAŞAR G., BAŞAR G., KANAT ÖZTÜRK İ., GÜZELÇİMEN F., ER A., Kröger S., Windholz L.  
46th Conference Of The European Group On Atomic Systems (EGAS 46), Lille, France, 1 - 04 July 2014, pp.74
- XXVII. **Theoretical oscillator strengths for the Sc I**  
KANAT ÖZTÜRK İ., Atalay B., Çelik G., GÜZELÇİMEN F., ER A., BAŞAR G., Kröger S.  
46th Conference Of The European Group On Atomic Systems (EGAS 46), Lille, France, 1 - 04 July 2014, pp.83
- XXVIII. **Investigation of the Hyperfine Structure of Atomic Vanadium for Energetically High-lying levels up to 45000 cm<sup>-1</sup>**  
GÜZELÇİMEN F., Al-Labady N., BAŞAR G., KANAT ÖZTÜRK İ., ER A., Kröger S., Tamanis M., Ferber R.  
46th Conference Of The European Group On Atomic Systems (EGAS 46), Lille, France, 1 - 04 July 2014, pp.82
- XXIX. **Investigation of Fourier Transform Spectrum of Niobium in Argon Discharge in the near-infrared**  
ER A., BAŞAR G., KANAT ÖZTÜRK İ., GÜZELÇİMEN F., Tamanis M., Ferber R., Kröger S.  
46th Conference Of The European Group On Atomic Systems (EGAS 46), Lille, France, 1 - 04 July 2014, pp.81
- XXX. **Fourier Transform Spectroscopy of Niobium in the Infrared Region**  
ER A., ÖZTÜRK İ., BAŞAR G., Kröger S., Ferber R., Tamanis M.  
Turkish Physical Society 30th International Physics Conference, İstanbul, Turkey, 2 - 05 September 2013
- XXXI. **Experimental Hyperfine Structure Investigation of Atomic Nb**  
ÖZTÜRK İ., BAŞAR G., Başar G., ER A., GÜZELÇİMEN F., Kröger S.  
Turkish Physical Society 30th International Physics Conference, İstanbul, Turkey, 2 - 05 September 2013
- XXXII. **Hyperfine Structure Investigation of Nb I with Optogalvanic Spectroscopy**  
BAŞAR G., Başar G., ÖZTÜRK İ., ER A., GÜZELÇİMEN F., Kröger S.  
11th EUROPEAN CONFERENCE ON ATOMS, MOLECULES AND PHOTONS (ECAMP11), Denmark, 1 - 04 June 2013
- XXXIII. **Investigation of Nb I spectrum in the IR wavelength range**  
ER A., ÖZTÜRK İ., BAŞAR G., Kröger S., Ferber R., Tamanis M.  
11th EUROPEAN CONFERENCE ON ATOMS, MOLECULES AND PHOTONS (ECAMP11), Denmark, 1 - 04 June 2013
- XXXIV. **Fabry-Perot İnterferometresinin Kalibrasyonu**  
Bingöl D., Başar G., ÖZTÜRK İ., ER A., GÜZELÇİMEN F., BAŞAR G.  
Turkish Physical Society 29th International Physics Conference, Turkey, 1 - 04 September 2012, pp.374
- XXXV. **Classifications of Niobium Spectral Lines by Using Hyperfine Structure Pattern**  
ER A., ÖZTÜRK İ., BAŞAR G., Kröger S., Jarmola A., Ferber R., Tamanis M.  
Turkish Physical Society 29th International Physics Conference, Turkey, 1 - 04 September 2012, pp.386
- XXXVI. **Hyperfine Structure Investigations and Classifications of New Transitions in 93Nb by Fourier Transform Spectroscopy**  
ER A., ÖZTÜRK İ., BAŞAR G., Kröger S., Jarmola A., Ferber R., Tamanis M.  
Turkish Physical Society 29th International Physics Conference, Turkey, 1 - 04 September 2012, pp.385
- XXXVII. **New classifications of unclassified lines in Niobium Fourier transform spectra**  
ER A., ÖZTÜRK İ., BAŞAR G., Kröger S., Jarmola A., Ferber R., Tamanis M.  
44th EGAS Conference, Sweden, 1 - 04 July 2012, pp.137
- XXXVIII. **Parametric Studies of the Fine Structure in the Even Parity Configurations of Sc I**  
ÖZTÜRK İ., BAŞAR G., ER A., GÜZELÇİMEN F., Acar F. G., Kröger S.

- Turkish Physical Society 28th International Physics Conference, Turkey, 1 - 04 September 2011, pp.481
- XXXIX. **Experimental Hyperfine Structure Investigations with High Resolution Spectroscopy and Classifications of Atomic Niobium Spectral Lines**  
ER A., ÖZTÜRK İ., GÜZELÇİMEN F., BAŞAR G., Siddiqui I., Windholz L., Kröger S.  
Turkish Physical Society 28th International Physics Conference, Turkey, 1 - 04 September 2011, pp.454
- XL. **Laser Induced Fluorescence Spectroscopy of Atomic Niobium in the Wavelength Range of 560 nm to 620 nm**  
ER A., ÖZTÜRK İ., GÜZELÇİMEN F., BAŞAR G., Siddiqui İ., Windholz L., Kröger S.  
43rd Conference of The European Group on Atomic Systems (EGAS), Switzerland, 1 - 04 July 2011, pp.168
- XLI. **Laser induced fluorescence spectroscopy of atomic niobium in the wavelength range of 560 nm to 620 nm**  
ER A., ÖZTÜRK İ., GÜZELÇİMEN F., BAŞAR G., Siddiqui I., Windholz L., Kröger S.  
43th EGAS Conference, Switzerland, 1 - 04 June 2011, pp.168
- XLII. **Hyperfine Structure Investigation in Neutral Lanthanum Lines Using Laser-Induced Fluorescence Spectroscopy**  
GÜZELÇİMEN F., ER A., BAŞAR G., Kröger S., Raith M., Siddiqui I., Windholz L.  
Turkish Physical Society 27th International Physics Congress, Turkey, 1 - 04 September 2010, pp.451
- XLIII. **Experimental Hyperfine Structure Investigations of <sup>93</sup>Nb by Laser-Induced Fluorescence Spectroscopy**  
ER A., GÜZELÇİMEN F., ÖZTÜRK İ., BAŞAR G., Kröger S., Siddiqui I., Windholz L.  
Turkish Physical Society 27th International Physics Congress, Turkey, 1 - 04 September 2010, pp.441
- XLIV. **Hyperfine Structure Investigation in Neutral Lanthanum Lines Using Laser-Induced Fluorescence Spectroscopy**  
GÜZELÇİMEN F., ER A., BAŞAR G., Kröger S., Raith M., Siddiqui İ., Windholz L.  
Turkish Physical Society 27th International Physics Congress, Turkey, 1 - 04 September 2010, pp.451
- XLV. **The Hyperfine Structure Analysis of Lanthanum I Lines in the Spectral Range of 595-635 nm**  
GÜZELÇİMEN F., ER A., BAŞAR G., Kröger S., Raith M., Siddiqui İ., Windholz L.  
10th European Conference on Atoms, Molecules and Photons (ECAMP X), Spain, 1 - 04 July 2010, pp.107
- XLVI. **Hyperfine Structure of Niobium I Using Laser-Induced Fluorescence Spectroscopy**  
ER A., GÜZELÇİMEN F., ÖZTÜRK İ., BAŞAR G., Kröger S., Siddiqui İ., Windholz L.  
10th European Conference on Atoms, Molecules and Photons (ECAMP X), Spain, 1 - 04 July 2010, pp.106
- XLVII. **The Hyperfine Structure Analysis of Lanthanum I Lines in The Spectral Range of 595-635 nm**  
GÜZELÇİMEN F., ER A., BAŞAR G., Kröger S., Raith M., Siddiqui I., Windholz L.  
10th European Conference on Atoms Molecules and Photons ECAMP X, Spain, 1 - 04 July 2010, pp.0-107
- XLVIII. **Hyperfine Structure of Niobium I Using Laser-Induced Fluorescence Spectroscopy**  
ER A., GÜZELÇİMEN F., ÖZTÜRK İ., BAŞAR G., Kröger S., Siddiqui I., Windholz L.  
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- LII. **Experimental hyperfine structure investigation of atomic La**  
Başar G., BAŞAR G., ER A., Kröger S.  
38th EGAS Conference, European Group for Atomic Spectroscopy, Italy, 1 - 04 June 2006, pp.67
- LIII. **Experimental Hyperfinestructure Investigation in Cobalt I**  
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#### LIV. Experimental Hyperfine Structure Investigation in Cobalt I

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### Supported Projects

ER A., ŞENGÜL Y., Project Supported by Higher Education Institutions, Landé g Factors Calculation of the Configurations 3d54s, 3d44s2, 3d55s and 3d6 of Atomic Chromium, 2017 - 2019

BAŞAR G., KANAT ÖZTÜRK İ., GÜZELÇİMEN F., ER A., AL-LABADY N. J. M., BİNDER T., KRÖGER S., ÖZDALGIÇ B., BİNGÖL D., GAMPER B., et al., Project Supported by Higher Education Institutions, Niobium elementinin laser uyarılmış floresans spektroskopisi metodu ile çift ve tek pariteli enerji seviyelerinin bulunması, 2017 - 2018

BAŞAR G., ER A., GÜZELÇİMEN F., KANAT ÖZTÜRK İ., KRÖGER S., FERBER R., TAMARİS M., Project Supported by Higher Education Institutions, Vanadyum Elementinin aşırı ince yapısının laserle uyarılmış floresans metodu ile incelenmesi, 2016 - 2017

GÜZELÇİMEN F., BAŞAR G., BAŞAR G., KRÖGER S., ER A., KANAT ÖZTÜRK İ., Project Supported by Higher Education Institutions, Holmiyum Elementinin Kırmızı Spektral Bölgedeki Aşırı İnce Yapısının İncelenmesi, 2015 - 2017

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ER A., Project Supported by Higher Education Institutions, Experimental Hyperfine Structure Analysis of Atomic Niobium Using Laser Induced Fluorescence Spectroscopy, 2015 - 2015

ER A., Other International Funding Programs, Investigation of Fourier Transform Spectrum of Niobium in Argon Discharge in the Near-Infrared, 2014 - 2014

ER A., Project Supported by Higher Education Institutions, Investigation of Nb I spectrum in the IR wavelength range, 2013 - 2014

Er A., Başar G., Project Supported by Higher Education Institutions, Laser Spektroskopik Metodlarla Atomların Aşırı İnce Yapısının İncelenmesi, 2010 - 2013

Er A., Kanat Öztürk İ., Project Supported by Higher Education Institutions, Kobalt (Co) Elementinin Aşırı İnce Yapısının Laser Uyarılmış Floresans Spektroskopisi Metodu ile İncelenmesi, 2010 - 2013

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ER A., Project Supported by Higher Education Institutions, Laser induced fluorescence spectroscopy of atomic niobium in the wavelength range of 560 nm to 620nm, 2011 - 2011

Er A., Project Supported by Higher Education Institutions, Investigation of Hyperfine Structure of Nb I Element, 2009 - 2010

Er A., Kanat Öztürk İ., Project Supported by Higher Education Institutions, Nb I Elementinin Aşırı İnce Yapısının Laser Uyarılmış Floresans Spektroskopisi ile İncelenmesi, 2009 - 2009

Er A., Project Supported by Higher Education Institutions, Investigation of Hyperfine Structure of Lantan Element, 2005 - 2006

### Memberships / Tasks in Scientific Organizations

Türk Fizik Derneği, Member, 2012 - Continues

### Scientific Refereeing

Project Supported by Higher Education Institutions, BAP PhD, Ataturk University, Turkey, September 2019

Project Supported by Higher Education Institutions, BAP PhD, Ataturk University, Turkey, April 2019  
IGI Global, Scientific / Professional Book Published by Renowned Publishing Houses, November 2018  
IGI Global, Scientific / Professional Book Published by Renowned Publishing Houses, November 2018  
Canadian Journal of Physics, SCI Journal, January 2018  
Canadian Journal of Physics, SCI Journal, November 2017  
Turkish Journal of Physics , Other Indexed Journal, June 2017  
Turkish Journal of Physics , SCI Journal, June 2016

## Metrics

Publication: 75  
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H-Index (WoS): 8  
H-Index (Scopus): 9

## Congress and Symposium Activities

Turkish Physical Society 35th International Physics Congress, Attendee, Muğla, Turkey, 2019  
Turkish Physical Society 34th International Physics Congress, Attendee, Muğla, Turkey, 2018  
ADIM FİZİK GÜNLERİ VII, Adnan Menderes Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Attendee, Aydın, Turkey, 2018  
Turkish Physical Society 33rd International Physics Congress, Attendee, Muğla, Turkey, 2017  
ADIM FİZİK GÜNLERİ VI, Balıkesir Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Attendee, Balıkesir, Turkey, 2017  
9th International Physics Conference of the Balkan Physical Union, Attendee, İstanbul, Turkey, 2015  
46th EGAS Conference, Attendee, Lille, France, 2014  
Turkish Physical Society 31th International Physics Conference, Attendee, Muğla, Turkey, 2014  
Turkish Physical Society 30th International Physics Conference, Attendee, İstanbul, Turkey, 2013  
11th EUROPEAN CONFERENCE ON ATOMS, MOLECULES AND PHOTONS (ECAMP11), Attendee, Aarhus, Denmark, 2013  
Turkish Physical Society 29th International Physics Conference, Attendee, Bodrum/Muğla, Turkey, 2012  
44th EGAS Conference, Attendee, Göteborg, Sweden, 2012  
Turkish Physical Society 28th International Physics Conference, Attendee, Bodrum/Muğla, Turkey, 2011  
43th EGAS Conference, Attendee, Fribourg, Switzerland, 2011  
Turkish Physical Society 27th International Physics Conference, Attendee, İstanbul, Turkey, 2010  
10th European Conference on Atoms Molecules and Photons ECAMP X, Attendee, Salamanca, Spain, 2010  
Doktora Tez Çalışmaları-Graz Teknik Üniversitesi, Attendee, Graz, Austria, 2009  
9th European Conference on Atoms Molecules and Photons (ECAMP), Attendee, Girit, Greece, 2007  
IX. Ulusal Sıvihal Fiziği Sempozyumu, Attendee, İstanbul, Turkey, 2005  
Yüksek Lisans Tez Çalışmaları-Berlin Teknik Üniversitesi, Attendee, Berlin, Germany, 2005  
37th EGAS Conference, European Group for Atomic Spectroscopy, Attendee, Dublin, Ireland, 2005  
VIII.Ulusal Sıvihal Fiziği Sempozyumu, Attendee, İstanbul, Turkey, 2004