

## Asst. Prof. FATMA NUR TUZLUCA YEŞİLBAĞ

### Personal Information

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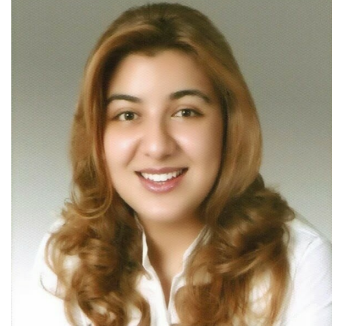
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### International Researcher IDs

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### Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik

Anabilim Dalı, Turkey 2008 - 2013

Postgraduate, Kahramanmaraş Sutcu Imam University, Institute Of Science, Fizik / Atom Ve

Molekül Fiziği, Turkey 2004 - 2007

Undergraduate, Kahramanmaraş Sutcu Imam University, Fen Edebiyat Fakültesi, Fizik, Turkey

2000 - 2004

### Certificates, Courses and Trainings

Vocational Training, Eğiticilerin Eğitimi, Erzincan Binali Yıldırım Üniversitesi, 2022

Education Management and Planning, 3.Elektrokimyasal Empedans Spektroskopisi Çalıştayı, Bilkent Üniversitesi, 2017

Education Management and Planning, 'Bilimsel Araştırma Yöntemleri ve Akademik Yazma Eğitimi Programı' TÜBİTAK,

Erzincan Üniversitesi, 2016

Education Management and Planning, 'Projemi Yazıyorum' TÜBİTAK 2237 Proje Etkinliği, Atatürk Üniversitesi

Mühendislik Fakültesi, 2015

Other, Scanning Electron Microscope Training Certificate, Anatek Analitik ve Araştırma Cihazları Ltd. Şti., 2014

Education Management and Planning, Nanoelektronik ve Nanofotonik Kış Okulu, Bilkent Üniversitesi, 2009

Education Management and Planning, Certificate of Leadership and Career Management, International Turk

Management, 2008

Education Management and Planning, Workshop on Atomic Force Microscopy, NanoMagnetics Instruments, 2008

Education Management and Planning, Fotonik Malzemeler ve Aygıtlar Lisansüstü Yaz Okulu, Cumhuriyet Üniversitesi,

2008

### Dissertations

Doctorate, VLS Tekniđi ile In2O3 Nanoyapıların Üretilmesi ve Karakterizasyonu, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik / Nanomalzeme, 2013

Postgraduate, Bazı Elementlerin L Tabakasından M ve N Tabakasına Boşluk Geçiş İhtimallerinin Ölçülmesi, Kahramanmaraş Sütçü İmam Üniversitesi, Fen Bilimleri Enstitüsü, Fizik / Atom Ve Molekül Fiziđi, 2007

## Research Areas

Direct Energy Conversion and Energy Storage, Chemical and Electrochemical Properties, Plating, Material Characterization, Nanomaterials, Materials Science

## Academic Titles / Tasks

Assistant Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2018 - Continues

Assistant Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2014 - 2018

Research Assistant PhD, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2013 - 2014

Research Assistant, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2007 - 2013

## Courses

### Doctorate

Nanoteknoloji İçin Radyasyon Teknikleri, Doctorate, 2021 - 2022

Vakum Kaplama Teknolojileri, Doctorate, 2022 - 2023

### Postgraduate

Nanoteknolojide Spektroskopi Teknikleri, Postgraduate, 2021 - 2022

Sensör Teknolojileri ve Uygulamaları, Postgraduate, 2022 - 2023

### Undergraduate

Fizik 2, Undergraduate, 2021 - 2022

Fizik 1, Undergraduate, 2022 - 2023

## Supervised Theses

Tuzluca Yeşilbağ F. N., Synthesis and characterization of Grafen@VA-BCN-NT@WS2 composite electrode for supercapacitor , Postgraduate, A.HÜSEYİN(Student), 2021

Tuzluca Yeşilbağ F. N., Synthesis and characterization of boron nanowires with chemical vapor deposition method, Postgraduate, B.ŞAHİN(Student), 2018

## Jury Memberships

Post Graduate, Post Graduate, Atatürk Üniversitesi, December, 2023

Post Graduate, Post Graduate, Atatürk Üniversitesi, September, 2023

Doctoral Examination, Doctoral Examination, Atatürk Üniversitesi, December, 2022

Post Graduate, Post Graduate, Atatürk Üniversitesi, January, 2022

Post Graduate, Post Graduate, Erzincan Binali Yıldırım Üniversitesi, January, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, June, 2021

Doctorate, Doctorate, Atatürk Üniversitesi, June, 2021

Doctoral Examination, Doctoral Examination, Atatürk Üniversitesi, May, 2021

Doctorate, Doctorate, Atatürk Üniversitesi, November, 2020

Doctorate, Doctorate, Atatürk Üniversitesi, December, 2019

Post Graduate, Yüksek Lisans, Ümmügülsüm SOYKAN, 'Y3Fe5O12 (YIG) Bileşiğinin Darbeli Lazer Biriktirme (PLD) Tekniğiyle İnce Film Olarak Büyütülmesi', Atatürk Üniversitesi, April, 2019

Post Graduate, Yüksek Lisans, Asena CERHAN, 'SnS İnce Filmlerin SILAR Yöntemiyle Büyütülmesi ve Karakterizasyonu', Erzincan Üniversitesi, July, 2015

Doctoral Examination, Sina ROUHI, 'Kuantum Kademeli Lazerlerde Nanometre İnce Film Metal-Metal Birleştirilmesinin Terahertz Işımaya Etkisi', Atatürk Üniversitesi, July, 2015

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

- I. **Photo-supercapacitors based on zinc oxide/MXene paper dual acting electrodes**  
Colak T. O., Altaf C. T., TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Yildirim I. D., Erdem E., Misirlioglu F. B., Sankir N. D., Sankir M.  
Journal of Energy Storage, vol.86, 2024 (SCI-Expanded)
- II. **Self-Powered Quasi-Solid-State Photoelectrochemical Photodetectors Based on MXene Paper Modified by ZnO Nanostructured Architecture**  
Karagoz E., Tuc Altaf C., TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Erdem E., Bakan Misirlioglu F., Demirci Sankir N., Sankir M.  
ACS Applied Nano Materials, vol.7, no.7, pp.7709-7719, 2024 (SCI-Expanded)
- III. **Rational design of MXene/Boron Carbon Nitride nanotube composite electrode for supercapacitors with improved electrochemical properties**  
Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Huseyin A., Salih Salih A. J., Ertuğrul M.  
JOURNAL OF ENERGY STORAGE, vol.72, no.108446, pp.1-11, 2023 (SCI-Expanded)
- IV. **Enhancing radar absorption performance of Sr-hexaferrite by hybridization with coiled carbon nanotubes via chemical vapour deposition method**  
Muhammad Zulkimi M. M., Azis R. S., Ismail I., Mokhtar N., Ertuğrul M., Hamidon M. N., Hasan I. H., Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Öztürk G., et al.  
DIAMOND AND RELATED MATERIALS, no.110118, pp.1-40, 2023 (SCI-Expanded)
- V. **All-in-one supercapacitors with high performance enabled by Mn/Cu doped ZnO and MXene**  
Uddin Ammar A., Bakan Mısırlıoğlu F., Aleinawi M. H., Franzo G., Condorelli G. G., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Mirabella S., Erdem E.  
MATERIALS RESEARCH BULLETIN, vol.165, no.112334, pp.1-14, 2023 (SCI-Expanded)
- VI. **MnO<sub>2</sub> nanosheets synthesized on nitrogen-doped vertically aligned carbon nanotubes as a supercapacitor electrode material**  
Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Huseyin A., Salih A. J. S., Ertuğrul M.  
Journal of Alloys and Compounds, vol.925, 2022 (SCI-Expanded)
- VII. **The hierarchical synthesis of tungsten disulfide coated vertically aligned boron carbon nitride nanotubes composite electrodes for supercapacitors**  
YEŞİLBAĞ Y. Ö., TUZLUCA YEŞİLBAĞ F. N., Huseyin A., ERTUĞRUL M.  
Journal of Energy Storage, vol.52, 2022 (SCI-Expanded)
- VIII. **Effect of Mn and Zn doping on natural resonance frequency of strontium U-type hexaferrite and its performance as electromagnetic wave absorbers**  
Ismail I., Muhammad Zulkimi M. M., Azis R. S., Mustaffa M. S., Hamidon M. N., Ertugrul M., Yesilbag Y. O., Tuzluca F. N., Hasan I. h., Ozturk G., et al.  
Journal of Alloys and Compounds, vol.898, 2022 (SCI-Expanded)
- IX. **Effects of MWCNTs/graphene nanoflakes/MXene addition to TiO<sub>2</sub> thick film on hydrogen gas sensing**  
Chachuli S. A. M., Hamidon M. N., ERTUĞRUL M., Mamat M. S., ÇOBAN Ö., Tuzluca F. N., YEŞİLBAĞ Y. Ö., Shamsudin N.  
Journal of Alloys and Compounds, vol.882, 2021 (SCI-Expanded)
- X. **Synthesis and characterization of graphene/carbon nanotube hybrid: effects of Ni catalyst thickness and H<sub>2</sub> flow rate on growth and morphological structure**

Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Huseyin A., Tuzluca M., Ismail I., Ertuğrul M.

Journal of Materials Science: Materials in Electronics, vol.32, no.6, pp.7943-7955, 2021 (SCI-Expanded)

- XI. **Synthesis of ultra-long boron nanowires as supercapacitor electrode material**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., ERTUĞRUL M.  
APPLIED SURFACE SCIENCE, vol.493, pp.787-794, 2019 (SCI-Expanded)
- XII. **The use of -MnOOH nanosheets as battery-type electrode for supercapacitor applications**  
YEŞİLBAĞ Y. Ö., TUZLUCA YEŞİLBAĞ F. N., ERTUĞRUL M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.9, pp.8201-8209, 2019 (SCI-Expanded)
- XIII. **Synthesis of In<sub>2</sub>O<sub>3</sub> nanostructures with different morphologies as potential supercapacitor electrode materials**  
Tuzluca F. N., YEŞİLBAĞ Y. Ö., ERTUĞRUL M.  
APPLIED SURFACE SCIENCE, vol.427, pp.956-964, 2018 (SCI-Expanded)
- XIV. **Investigation of temperature, catalyst thickness and substrate effects in In<sub>2</sub>O<sub>3</sub> nanostructures**  
Tuzluca F. N., YEŞİLBAĞ Y. Ö., ERTUĞRUL M.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.111, pp.439-446, 2017 (SCI-Expanded)
- XV. **Effects of graphite on the synthesis of 1-D single crystal In<sub>2</sub>O<sub>3</sub> nanostructures at high temperature**  
Tuzluca F. N., YEŞİLBAĞ Y. Ö., AKKUŞ T., ERTUĞRUL M.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.66, pp.62-68, 2017 (SCI-Expanded)
- XVI. **The K-beta/K-alpha intensity ratios of some elements at different azimuthal scattering angles at 59.54 keV**  
Akkus T., Sahin Y., Yılmaz D., Tuzluca F. N.  
CANADIAN JOURNAL OF PHYSICS, vol.95, no.3, pp.220-224, 2017 (SCI-Expanded)
- XVII. **ZnS Thin Film Prepared by Using Chemical Spray Pyrolysis Method**  
Karadeniz S., EKİNCİ A. E., Tuzluca F. N., ERTUĞRUL M.  
ASIAN JOURNAL OF CHEMISTRY, vol.24, no.1, pp.220-222, 2012 (SCI-Expanded)
- XVIII. **Properties of NiO thin films prepared by chemical spray pyrolysis using NiSO<sub>4</sub> precursor solution**  
Morkoç Karadeniz S., Ekinci A. E., Tuzluca F. N., Ertuğrul M.  
Asian Journal of Chemistry, vol.24, no.4, pp.1765-1768, 2012 (SCI-Expanded)
- XIX. **Measurements of radiative vacancy transfer probabilities from L-3 subshells to M, N and O shells and subshells in the atomic range  $72 \leq Z \leq 92$**   
Tuzluca F. N., Söğüt Ö., Büyükkasap E., Durdu B. G., Küçükönder A.  
RADIATION PHYSICS AND CHEMISTRY, vol.77, no.9, pp.996-1001, 2008 (SCI-Expanded)

## Articles Published in Other Journals

- I. **The Effect of the Aluminum (Al) Ratio on the Synthesis of the Laminated Mn<sub>2</sub>AlB<sub>2</sub> MAB Phase**  
Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Huseyin A., Salih A. J. S.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.17, no.3, pp.598-606, 2024 (Peer-Reviewed Journal)
- II. **Synthesis of Tungsten Disulfide on B-N-Doped Carbon Nanotubes to Enhance the Electrochemical Performance of Supercapacitors**  
Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Huseyin A., Salih A. J. S.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.17, no.2, pp.563-572, 2024 (Peer-Reviewed Journal)
- III. **Large-area synthesis of vertically aligned carbon nanotubes growth on the aluminum foil via FCCVD method**  
Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Hüseyin A., Salih A. J. S., Demirez E. N.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.15, no.1, pp.296-303, 2022 (Peer-Reviewed Journal)
- IV. **Investigation of Flower-like ZnCo<sub>2</sub>O<sub>4</sub> Nanowire Arrays Growth on 3D-Ni Foam as Supercapacitor Electrode Material**  
Tuzluca Yeşilbağ F. N.

Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.3, pp.1235-1241, 2020 (Peer-Reviewed Journal)

- V. **XRD and AFM Results of Iron Oxide Thin Film Prepared by Using Chemical Spray Pyrolysis Method**  
Tuzluca Yeşilbağ F. N., Morkoç Karadeniz S., Ekinci A. E., Ertuğrul M., Yeşilbağ Y. Ö.  
Azerbaijan Journal of Physics, Fizika, vol.16, no.2, pp.142-144, 2010 (Peer-Reviewed Journal)
- VI. **XRD and UV VIS Results of Tungsten Oxide Thin Films Prepared by Chemical Bath Deposition**  
Morkoç Karadeniz S., Tuzluca Yeşilbağ F. N., Ekinci A. E., Ertuğrul M., Kılınc T.  
Azerbaijan Journal of Physics, Fizika, vol.16, no.2, pp.266-268, 2010 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **Synthesis of Transition Metal Fe<sub>2</sub>AlB<sub>2</sub> MAB Phase via High-Temperature Sintering Method**  
Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Coşkun Ş., Yüksel R., Ertuğrul M.  
NANOTR-16, Ankara, Turkey, 5 - 08 September 2022, vol.16, pp.279
- II. **Synthesis of Double Transition Metal (Ti<sub>2</sub>Nb)AlC<sub>2</sub> MAX Phase and Its Derivative (Ti<sub>2</sub>Nb)C<sub>2</sub>T<sub>x</sub> MXene**  
Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Coşkun Ş., Yüksel R., Ertuğrul M.  
NANOTR-16, Ankara, Turkey, 5 - 08 September 2022, vol.16, pp.87
- III. **Synthesis and characterization of BCN nanotubes by floating catalyst CVD method**  
Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Huseyin A., Tuzluca M., Ertuğrul M.  
4th International Symposium on Advanced Materials and Nanotechnology 2020, Kuala-Lumpur, Malaysia, 1 - 03 December 2020, pp.282-287
- IV. **Two Dimensional Ti<sub>3</sub>C<sub>2</sub>T<sub>x</sub> MXene Electrode For Supercapacitor Application**  
Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Shafiee F. N., Hamidon M. N., Ertuğrul M.  
2019 IEEE Regional Symposium on Micro and Nanoelectronics (RSM), Putrajaya, Kuala-Lumpur, Malaysia, 21 - 23 August 2019, pp.27-29
- V. **Hierarchical CuO@CuS core/shell nanowires for supercapacitor electrode materials**  
Yeşilbağ Y. Ö., Tuzluca F. N., Ertuğrul M.  
International Symposium on Applied Sciences and Engineering (ISASE2018), Erzurum, Turkey, 26 - 28 November 2018, pp.131-133
- VI. **Enhancement of energy and power density of batteries and supercapacitors:electrode hybridization**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
International Symposium on Applied Sciences and Engineering (ISASE2018), Erzurum, Turkey, 26 - 28 November 2018, pp.234-239
- VII. **Hydrothermal synthesis of ZnCo<sub>2</sub>O<sub>4</sub> electrode material for supercapacitor applications**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
3rd International Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018, pp.148
- VIII. **Synthesis of MnCo<sub>2</sub>O<sub>4</sub> nanowires on flexible carbon fiber cloth for high-performance supercapacitors**  
Yeşilbağ Y. Ö., Tuzluca F. N., Ertuğrul M.  
3rd International Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018, pp.149-155
- IX. **Mesoporous NiCo<sub>2</sub>S<sub>4</sub> nanostructures grown on 3D graphene-nickel foam for supercapacitor applications**  
Yeşilbağ Y. Ö., Tuzluca F. N., Ertuğrul M.  
3rd International Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018, pp.151
- X. **Synthesis and Characterization of Ultra-Long Boron Nanowires with Chemical Vapor Deposition Method**  
Tuzluca F. N., Yeşilbağ Y. Ö., Şahin B., Ertuğrul M.  
3rd International Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 -

21 September 2018, pp.70

- XI. **Synthesis and Comparison of Various Metal Oxide Electrode Materials for Supercapacitors**  
Yeşilbağ Y. Ö., Tuzluca F. N., Ertuğrul M.  
International Symposium on Advanced Materials and Nanotechnology (i-SAMN 2018), Putrajaya, Malaysia, 15 - 16 August 2018, pp.40-41
- XII. **Facile synthesis of Co<sub>3</sub>O<sub>4</sub> nanowires on nickel foam for supercapacitor electrodes**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
International Symposium on Advanced Materials and Nanotechnology (i-SAMN 2018), Putrajaya, Malaysia, 15 - 16 August 2018, pp.42-43
- XIII. **H<sub>2</sub> Gas Sensing Properties of CuO Nanowires Grown on Copper Foam**  
Yeşilbağ Y. Ö., Aktürk Önalaban E., Tuzluca F. N., Özmen A., Ertuğrul M.  
13th Nanoscience and Nanotechnology Conference (NANOTR-13), Antalya, Turkey, 22 - 25 October 2017, vol.13, pp.354
- XIV. **Effect of Temperature on Growth of CuO Nanowires by Thermal Oxidation Method**  
Aktürk Önalaban E., Tuzluca F. N., Yeşilbağ Y. Ö., Sevim F., Ertuğrul M.  
13th Nanoscience and Nanotechnology Conference (NANOTR-13), Antalya, Turkey, 22 - 25 October 2017, vol.13, pp.408
- XV. **One-dimensional CoMn<sub>2</sub>O<sub>4</sub> nanowire arrays for supercapacitor applications**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
2nd International Symposium on Materials for Energy Storage and Conversion (mESC-IS 2017), Nevşehir, Turkey, 26 - 28 September 2017, vol.2, pp.27
- XVI. **Co<sub>3</sub>O<sub>4</sub> nanostructures with high supercapacitive performance**  
Yeşilbağ Y. Ö., Tuzluca F. N., Ertuğrul M.  
2nd International Symposium on Materials for Energy Storage and Conversion (mESC-IS 2017), Nevşehir, Turkey, 26 - 28 September 2017, vol.2, pp.29
- XVII. **Structural and optical properties of boron-doped ZnO thin films synthesis by spray pyrolysis method**  
Ertuğral B., Yeşilbağ Y. Ö., Harmanşah Ö., Tuzluca F. N., Ertuğrul M.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, vol.33, pp.340
- XVIII. **Hydrothermal synthesis of MnOOH nanosheet arrays on nickel foam for supercapacitor applications**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, vol.33, pp.373
- XIX. **CuO nanowires synthesized through thermal oxidation of copper foam for supercapacitor applications**  
Yeşilbağ Y. Ö., Tuzluca F. N., Ertuğrul M.  
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, vol.33, pp.367
- XX. **High Temperature Synthesis of Single Crystalline In<sub>2</sub>O<sub>3</sub> Nanocrystals**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
11th Nanoscience and Nanotechnology Conference (NANOTR-11), Ankara, Turkey, 22 - 25 June 2015, vol.11
- XXI. **Synthesis of Manganese Oxide Nanosheets for Supercapacitors Using by RF Sputtering**  
Yeşilbağ Y. Ö., Tuzluca F. N., Doğan S., Ertuğrul M.  
11th Nanoscience and Nanotechnology Conference (NANOTR-11), Ankara, Turkey, 22 - 25 June 2015, vol.11
- XXII. **Au Nanoparticles Effect on Diameter Controlled Growth of Single Crystalline In<sub>2</sub>O<sub>3</sub> Nanowires**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
11th Nanoscience and Nanotechnology Conference (NANOTR-11), Ankara, Turkey, 22 - 25 June 2015, vol.11
- XXIII. **Preparation and Characterization of PDMS Superhydrophobic Surface by Using Microwave Plasma Coating**  
Jafarpour S., Ertuğrul M., Farhangmehr M., Tuzluca F. N., Yeşilbağ Y. Ö., Rouhi S.

- 11th Nanoscience and Nanotechnology Conference (NANOTR-11), Ankara, Turkey, 22 - 24 June 2015, vol.11
- XXIV. **In2O3 Nanotowers and Nanochains**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ekinci A. E., Ertuğrul M.  
9th Nanoscience and Nanotechnology Conference (NANOTR-9), Erzurum, Turkey, 24 - 28 June 2013, vol.9, pp.237
- XXV. **In2O3 Nanobouquets**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ekinci A. E., Ertuğrul M.  
9th Nanoscience and Nanotechnology Conference (NANOTR-9), Erzurum, Turkey, 24 - 28 June 2013, vol.9, pp.236
- XXVI. **Synthesis of In2O3 Nanotrees Using VLS Technique**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ekinci A. E., Ertuğrul M.  
9th Nanoscience and Nanotechnology Conference (NANOTR-9), Erzurum, Turkey, 24 - 28 June 2013, vol.9, pp.235
- XXVII. **H2S Gas Sensors Using In2O3 Nanowires**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
International Conference on Science for Defense Security (ICSDS 2012), İzmir, Turkey, 2 - 05 September 2012, vol.1, pp.25
- XXVIII. **In2O3 Nanoneedles Using VLS Technique for Gas Sensors**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M.  
International Conference on Science for Defense Security (ICSDS 2012), İzmir, Turkey, 2 - 05 September 2012, vol.1, pp.26
- XXIX. **A Route to Au Catalyzed Growth of the Semiconducting In2O3 Nanowires**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ekinci A. E., Ertuğrul M.  
8th Nanoscience and Nanotechnology Congress (NANOTR VIII), Ankara, Turkey, 25 - 29 June 2012, vol.8, pp.290-291
- XXX. **Catalytic Growth of In2O3 Nanoneedles by Vapor Transport**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ekinci A. E., Ertuğrul M.  
8th Nanoscience and Nanotechnology Congress (NANOTR VIII), Ankara, Turkey, 25 - 29 June 2012, vol.8, pp.289
- XXXI. **Investigation of MnO2 Thin Films for Optoelectronic Applications**  
Tuzluca F. N., Yeşilbağ Y. Ö., Ertuğrul M., Ekinci A. E.  
Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 6 - 09 September 2011, vol.28, pp.633
- XXXII. **Effects of Different Molarity and Temperature on Spray Deposited MnO2 Thin Films**  
Yeşilbağ Y. Ö., Ekinci A. E., Doğan S., Ertuğrul M., Tuzluca F. N.  
Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 6 - 09 September 2011, vol.28, pp.636
- XXXIII. **CdO Thin Film Prepared By Using Chemical Bath Deposition**  
Morkoç Karadeniz S., Tuzluca F. N., Ekinci A. E., Ertuğrul M., Kılınç T.  
Turkish Physical Society 27th International Physics Congress, İstanbul, Turkey, 14 - 17 September 2010, vol.27, pp.549
- XXXIV. **Surface Properties Of Mn3O4 Thin Films Prepared By Chemical Spray Pyrolysis Technique**  
Tuzluca F. N., Morkoç Karadeniz S., Ekinci A. E., Ertuğrul M.  
Turkish Physical Society 27th International Physics Congress, İstanbul, Turkey, 14 - 17 September 2010, vol.27, pp.562
- XXXV. **Preparation CdS Thin Films for Optoelectronic Applications**  
Morkoç Karadeniz S., Tuzluca F. N., Ekinci A. E., Büyükkasap E., Ertuğrul M.  
6th Nanoscience and Nanotechnology Conference (NANOTR-VI), İzmir, Turkey, 15 - 18 June 2010, vol.6, pp.380
- XXXVI. **Chemical Spray Pyrolysis Metodu ile FeSO4.7H2O ve FeCl3.6H2O Solüsyonları Kullanılarak Hazırlanan Fe2O3 İnce Filmlerin Özelliklerinin İncelenmesi**  
Tuzluca F. N., Büyükkasap E., Morkoç Karadeniz S., Ekinci A. E., Ertuğrul M.  
Turkish Physical Society 26th International Physics Congress, Muğla, Turkey, 24 - 27 September 2009, vol.26, pp.392
- XXXVII. **Structure and Surface Properties of ZnS Thin Film Deposited by Using Chemical Spray Pyrolysis Method**  
Morkoç Karadeniz S., Ekinci A. E., Tuzluca F. N., Büyükkasap E., Ertuğrul M.  
International Conference on Nanomaterials and Nanosystems (NanoMats2009), İstanbul, Turkey, 10 - 13 August



2009, vol.1, pp.133

- XXXVIII. **Chemical Spray Pyrolysis Yöntemi İle Büyütülen ZnS İnce Filmlerin Yapısı Ve Yüzey Özellikleri**  
Morkoç Karadeniz S., Ekinci A. E., Büyükkasap E., Tuzluca F. N., Sönmez E., Ertuğrul M.  
I. Ulusal Metal, Yarıiletken Ve Oksit Materyallerin Üretiminde Kullanılan Sistemler Ve Analiz Teknikleri Kongresi (MYOMAT 2009), Eskişehir, Turkey, 15 - 16 June 2009, vol.1, pp.90
- XXXIX. **Photoluminescence Properties of Zinc Oxide Single Crystal Thin Films Grown on Silicon by the Pulsed Laser Deposition**  
Sönmez E., Yurtcan M. T., Aydın S., Morkoç Karadeniz S., Tuzluca F. N., Ertuğrul M.  
5. Ulusal Nanobilim ve Nanoteknoloji Konferansı (NANOTR-V), Eskişehir, Turkey, 8 - 12 June 2009, vol.5, pp.271
- XL. **Properties of CdS Thin Film Deposited by Chemical Spray Pyrolysis**  
Morkoç Karadeniz S., Ekinci A. E., Tuzluca F. N., Büyükkasap E., Sönmez E., Ertuğrul M.  
5. Ulusal Nanobilim ve Nanoteknoloji Konferansı (NANOTR-V), Eskişehir, Turkey, 8 - 12 June 2009, vol.5, pp.97
- XLI. **Properties Of NiO Thin Films Prepared By Chemical Spray Pyrolysis Using NiSO4 And NiCl2 Precursor Solutions**  
Morkoç Karadeniz S., Ekinci A. E., Büyükkasap E., Sönmez E., Tuzluca F. N., Sağsöz M. E., Ertuğrul M.  
Turkish Physical Society 25th International Physics Congress, Muğla, Turkey, 25 - 29 August 2008, vol.25, pp.405
- XLII. **Bazı Elementlerin L Tabakasından M ve N Tabakasına Boşluk Geçiş İhtimallerinin Ölçülmesi**  
Tuzluca F. N., Söğüt Ö., Bütün H., Büyükkasap E., Küçükönder A., Durdu B. G.  
Turkish Physical Society 24th International Physics Congress, Malatya, Turkey, 28 - 31 August 2007, vol.24, pp.240

## Other Publications

- I. **Fizik Laboratuvarı (Elektrik ve Manyetizma) II Deney Klavuzu**  
DURDAĞI S., ÇIRAK Ç., MERMERKAYA H., KÖRÖZLÜ N., MORKOÇ KARADENİZ S., TUZLUCA F. N., YEŞİLBAĞ Y. Ö., KILINÇ T.  
Experiment, pp.60, 2010
- II. **Fizik Laboratuvarı (Mekanik, Elektrik ve Manyetizma) Deney Klavuzu**  
DURDAĞI S., ÇIRAK Ç., MORKOÇ KARADENİZ S., TUZLUCA F. N., KILINÇ T., YEŞİLBAĞ Y. Ö.  
Experiment, pp.75, 2009
- III. **Fizik (Mekanik) Laboratuvarı I Deney Klavuzu**  
DURDAĞI S., ÇIRAK Ç., MORKOÇ KARADENİZ S., TUZLUCA F. N., KILINÇ T., YEŞİLBAĞ Y. Ö.  
Experiment, pp.52, 2009

## Supported Projects

Ertuğrul M., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Keleş S., TUBITAK Project, HB11 Füzyonu için Yakıt Elemanı Olarak Bor Nanotellerin MS-PECVD Tekniği ile Büyütülmesi, 2024 - 2027

Tuzluca Yeşilbağ F. N., Ertuğrul M., Wei L., Yeşilbağ Y. Ö., Yılmaz O., Karacalı T., Çuvalcı H., Gür E., Çoban Ö., TUBITAK Project, Fotovoltaik Temelli Yüksek Verimli Perovskit Nükleer-Voltaik Pili, 2024 - 2027

Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Ertuğrul M., TUBITAK Project, İki boyutlu heteroyapılı hibrit esnek elektrotların oluşturulması ve süperkapasitör özelliklerinin araştırılması, 2024 - 2026

Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Ertuğrul M., Hasar U. C., Çoban Ö., TÜBİTAK International Bilateral Joint Cooperation Program Project, Darbeli elektrodepozisyon tekniği ve yüksek frekanslı AC voltajının kombinasyonu ile yüksek akım taşıma kapasite ve elektriksel iletkenliğe sahip Cu ve Al ultrailletkenlerin üretimi, 2023 - 2025

Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Ertuğrul M., Coşkun Ş., Yüksel R., TUBITAK Project, (Ti2Nb)C2 sequential phase MXene and Fe2B2, Mn2B2 MBene structures and investigation of hybrid SC-LIB applications, 2021 - 2024

Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Ertuğrul M., Hasar U. C., Öztürk G., Hamidon M. N., İsmail İ., TUBITAK Project, Fabrication and analysis of a new ultra-wideband hybrid microwave absorber for reducing radar cross-section, 2019 - 2022



Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Eruğrul M., TUBITAK Project, Synthesis and characterization of Grafen@BCN-NT@WS2 composite electrode for supercapacitor, 2018 - 2021  
YEŞİLBAĞ Y. Ö., TUZLUCA F. N., ERTUĞRUL M., Project Supported by Higher Education Institutions, Bazı üçlü geçiş metali sülfür süperkapasitör elektrot malzemelerinin üretimi ve karakterizasyonu, 2017 - 2019  
TUZLUCA YEŞİLBAĞ F. N., ERTUĞRUL M., YEŞİLBAĞ Y. Ö., ŞAHİN B., AKKUŞ T., Project Supported by Higher Education Institutions, Kimyasal Buhar Biriktirme Yöntemi ile Bor Nanotellerin Üretimi ve Karakterizasyonu, 2016 - 2017  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Şahin B., ERTUĞRUL M., Project Supported by Higher Education Institutions, Sıçratma Tekniği İle Süperkapasitör Malzemelerin Üretimi ve Karakterizasyonu, 2014 - 2016  
Tuzluca Yeşilbağ F. N., Yurtcan M. T., İskenderoğlu D., Mavi A., Turgut G., Şimşek Ö., Ekinci A. E., Morkoç Karadeniz S., Yılmaz M., Sönmez E., et al., Project Supported by Higher Education Institutions, Synthesis and characterization of indium oxide (In<sub>2</sub>O<sub>3</sub>) - metal oxide nanostructures as gas sensors, 2010 - 2012  
Tuzluca Yeşilbağ F. N., Ekinci A. E., Karadeniz S. M., Kılınç T., Project Supported by Higher Education Institutions, Deposition of tungsten oxide thin films in micro and nano structure using various deposition techniques, 2009 - 2010  
Tuzluca Yeşilbağ F. N., Söğüt Ö., Project Supported by Higher Education Institutions, Radon Gas Measurement and Radioactive Substance Detection in Natural Sources and Spas in Kahramanmaraş Province, 2006 - 2008

## Patent

Ertuğrul M., Hasar U. C., Hamidon M. N., Ismail I., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Öztürk G., Özmen A., RADAR GÖRÜNMEZLİĞİ SAĞLAMAK ÜZERE GELİŞTİRİLEN HİBRİT BİR SOĞURUCU, Patent, CHAPTER H Electricity, The Invention Recourse Number: 2020/21638 , Standard Registration, 2020

## Peer Reviews in Scientific Publications

RADIATION PHYSICS AND CHEMISTRY, SCI Journal, January 2023  
POLYMER BULLETIN, SCI Journal, January 2023  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, April 2021  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, February 2021  
RESULTS IN PHYSICS, SCI Journal, February 2021  
SPECTROSCOPY LETTERS, SCI Journal, December 2020  
JOURNAL OF CLUSTER SCIENCE, SCI Journal, October 2020  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, April 2020  
Journal of Investigations on Engineering and Technology, National Scientific Refreed Journal, December 2019  
Journal of Investigations on Engineering and Technology, National Scientific Refreed Journal, August 2019  
Journal of Investigations on Engineering & Technology, National Scientific Refreed Journal, June 2018  
Ordu Üniversitesi Bilim ve Teknoloji Dergisi, National Scientific Refreed Journal, October 2015  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, September 2015

## Scientific Project Refereeing

TUBITAK Project, 1071-Uluslararası Araştırma Fonlarından Yararlanma Kapasitesinin ve Uluslararası Ar-Ge İşbirliklerine Katılımın Arttırılmasına Yönelik Destek Programı , June 2023  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, June 2023  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, December 2022  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, June 2022  
TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, June 2021  
Project Supported by Higher Education Institutions, BAP Research Project, June 2020  
Project Supported by Higher Education Institutions, BAP Research Project, November 2018

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, December 2015  
TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, December 2015  
Project Supported by Higher Education Institutions, BAP Research Project, January 2015

## Scientific Consultations

TÜBİTAK, 2210/C-ÖNCELİKLİ ALANLARA YÖNELİK YÜKSEK LISANS BURS PROGRAMI, Project Consultancy, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey, 2022 - 2022

TÜBİTAK, 1002-HIZLI DESTEK, Project Consultancy, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey, 2022 - 2022

TÜBİTAK, 1002-HIZLI DESTEK, Project Consultancy, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey, 2021 - 2021

TÜBİTAK, 3501-KARİYER GELİŞTİRME, Project Consultancy, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey, 2021 - 2021

## Tasks In Event Organizations

Ertuğrul M., Cansız A., Hasar U. C., Çolak M., Koşunalp S., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Öztürk G., Kaya Y., Yıldırım Ü., et al, TÜBİTAK 2237-A BİLİMSEL EĞİTİM ETKİNLİKLERİ DESTEĞİ PROGRAMI – BAYBURT ÜNİVERSİTESİ'NDE LİSANSÜSTÜ ÖĞRENCİLER-ARAŞTIRMACILAR ARAŞTIRMA BECERİLERİNİ GELİŞTİRİYOR, Science / Art Camp or Summer School Organization, Bayburt, Turkey, Eylül 2022

Hasar U. C., Ertuğrul M., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Çarpınhoğlu M., Delihacıoğlu K., Göğüş F., Koşunalp S., Bayram K. S., Çelik H. İ., et al, TÜBİTAK 2237-A Grant Program for Scientific Training - Development of Research Skills in Postgraduate Education, Science / Art Camp or Summer School Organization, Gaziantep, Turkey, Eylül 2021

Özbek İ. Y., Hamidon M. N., Ertuğrul M., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., 2nd INTERNATIONAL SYMPOSIUM ON APPLIED SCIENCE AND ENGINEERING, Scientific Congress, Erzurum, Turkey, Nisan 2021

## Metrics

Publication: 71

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H-Index (WoS): 8

H-Index (Scopus): 9

## Congress and Symposium Activities

Aspilsan 7. Pil Teknolojileri Çalıştayı, Audience, Kayseri, Turkey, 2022

16th Nanoscience & Nanotechnology Conference (NANOTR-16), Attendee, Ankara, Turkey, 2022

Aspilsan 6. Pil Teknolojileri Çalıştayı, Audience, Kayseri, Turkey, 2021

International Symposium on Advanced Materials and Nanotechnology (i-SAMN 2020), Attendee, Kuala-Lumpur, Malaysia, 2020

IEEE Regional Symposium on Micro and Nanoelectronics (RSM), Attendee, Kuala-Lumpur, Malaysia, 2019

International Symposium on Applied Sciences and Engineering (ISASE2018), Attendee, Erzurum, Turkey, 2018

3rd International Science and Applications of Thin Films, Conference & Exhibition (SATF 2018), Attendee, İzmir, Turkey, 2018

International Symposium on Advanced Materials and Nanotechnology (i-SAMN 2018), Attendee, Kuala-Lumpur, Malaysia, 2018

13th Nanoscience and Nanotechnology Conference (NANOTR-13), Attendee, Antalya, Turkey, 2017  
Turkish Physical Society 33rd International Physics Congress, Session Moderator, Muğla, Turkey, 2017  
2nd International Symposium on Materials for Energy Storage and Conversion (mESC-IS 2017), Attendee, Nevşehir, Turkey, 2017  
Turkish Physical Society 33rd International Physics Congress, Attendee, Muğla, Turkey, 2017  
11th Nanoscience and Nanotechnology Conference (NANOTR-11), Attendee, Ankara, Turkey, 2015  
9th Nanoscience and Nanotechnology Conference (NANOTR-9), Attendee, Erzurum, Turkey, 2013  
International Conference on Science for Defense & Security (ICSDS-2012), Attendee, İzmir, Turkey, 2012  
8th Nanoscience and Nanotechnology Congress (NANOTR VIII), Attendee, Ankara, Turkey, 2012  
Turkish Physical Society 28th International Physics Congress, Attendee, Muğla, Turkey, 2011  
Turkish Physical Society 27th International Physics Congress, Attendee, İstanbul, Turkey, 2010  
International Conference 'Physics 2010', Attendee, Baku, Azerbaijan, 2010  
6th Nanoscience and Nanotechnology Conference (NANOTR-VI), Attendee, İzmir, Turkey, 2010  
Turkish Physical Society 26th International Physics Congress, Attendee, Muğla, Turkey, 2009  
International Conference on Nanomaterials and Nanosystems (NanoMats2009), Attendee, İstanbul, Turkey, 2009  
5. Ulusal Nanobilim ve Nanoteknoloji Konferansı (NANOTR-V), Attendee, Eskişehir, Turkey, 2009  
I. Ulusal Metal, Yarıiletken Ve Oksit Materyallerin Üretiminde Kullanılan Sistemler ve Analiz Teknikleri Kongresi (MYOMAT 2009), Attendee, Eskişehir, Turkey, 2009  
Turkish Physical Society 25th International Physics Congress, Attendee, Muğla, Turkey, 2008  
4. Nanobilim ve Nanoteknoloji Konferansı (NANOTR IV), Attendee, İstanbul, Turkey, 2008  
Turkish Physical Society 24th International Physics Congress, Attendee, Malatya, Turkey, 2007

## Awards

Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Hüseyin A., Ertuğrul M., Bilimsel Yayın Teşvik Ödülü, Tübitak, February 2023  
Ismail I., Muhammad Zulkimi M. M., Azis R. S., Mustaffa M. S., Hamidon M. N., Ertuğrul M., Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Hasan I. H., Öztürk G., et al., Bilimsel Yayın Teşvik Ödülü, Tübitak, August 2022  
Yeşilbağ Y. Ö., Tuzluca Yeşilbağ F. N., Bilimsel Yayın Teşvik Ödülü, Tübitak, March 2022  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Bilimsel Yayın Teşvik Ödülü, TÜBİTAK, December 2019  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Bilimsel Yayın Teşvik Ödülü, TÜBİTAK, July 2018

## Representation and Promotion Activities

Institutional Representation, Cumhurbaşkanlığı Savunma Sanayii Başkanlığı (SSB), Turkey, Ankara, 2020 - 2022