

## Assoc. Prof. Beyhan TATAR

### Personal Information

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### Education Information

Doctorate, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, Turkey 2003 - 2008

Postgraduate, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, Turkey 2000 - 2003

Undergraduate, Firat University, Faculty Of Science, Department Of Physics, Turkey 1994 - 1998

### Research Areas

Natural Sciences, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty Of Science, Department Of Physics, 2021 - Continues

Associate Professor, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, 2019 - 2021

Assistant Professor, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, 2009 - 2019

Research Assistant, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 2000 - 2009

Research Assistant, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 1999 - 2000

### Academic and Administrative Experience

Deputy Head of Department, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, 2016 - 2021

Meslek Yüksekokulu Yönetim Kurulu Üyesi, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, 2014 - 2019

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

- I. **Improvement in electrical and photovoltaic properties of a-Si/c-Si heterojunction with slanted nano-columnar amorphous silicon thin films for photovoltaic applications**  
Tatar B., Demiroglu D., Kazmanli K., Ürgen M. K.  
CURRENT APPLIED PHYSICS, vol.15, no.4, pp.511-519, 2015 (Journal Indexed in SCI)
- II. **Electrical properties of FePc organic semiconductor thin films obtained by CSP technique for photovoltaic applications**  
Tatar B., Demiroglu D.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.31, pp.644-650, 2015 (Journal Indexed in SCI)
- III. **Investigation of structural and electrical properties of p-CuPc/c-Si and p-CuPc/a-Si/c-Si hybrid photodiodes prepared by CSP technique**  
Tatar B., Demiroglu D., Ürgen M. K.  
MICROELECTRONIC ENGINEERING, vol.126, pp.184-190, 2014 (Journal Indexed in SCI)
- IV. **The influence of Er<sup>3+</sup> doping on the structural and optical properties of CeO<sub>2</sub> thin films grown by**

## PED

Tatar B., Gokdemir F. P. , Pehlivan E., Ürgen M. K.

APPLIED SURFACE SCIENCE, vol.285, pp.409-416, 2013 (Journal Indexed in SCI)

- V. **Structure and photovoltaic properties of Ag/p-CuPc/a-Si/c-Si/Ag organic-inorganic hybrid heterojunction fabricated by chemical spray pyrolysis technique**  
Tatar B., Demiroglu D., Ürgen M. K.  
MICROELECTRONIC ENGINEERING, vol.108, pp.150-157, 2013 (Journal Indexed in SCI)
- VI. **Transport and storage properties of CrSi<sub>2</sub>/Si junctions made using the CAPVD technique**  
Menda U. D. , ÖZDEMİR O., Tatar B., Ürgen M. K. , KUTLU K.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.13, no.4, pp.257-266, 2010 (Journal Indexed in SCI)
- VII. **Excess Capacitance Due to Minority Carrier Injection in CrSi<sub>2</sub>/p-Type Crystalline Si Isotype Junction**  
ÖZDEMİR O., Yilmazer U. D. , Tatar B., Ürgen M. K. , KUTLU K.  
JAPANESE JOURNAL OF APPLIED PHYSICS, vol.49, no.9, 2010 (Journal Indexed in SCI)
- VIII. **Correlation of DC and AC electrical properties of Al/p-Si structure by I-V-T and C(G/omega)-V-T measurements**  
ÖZDEMİR O., Tatar B., Yilmazer D., CHOI F. P. , KUTLU K.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.12, no.4-5, pp.133-141, 2009 (Journal Indexed in SCI)
- IX. **Electrical and photovoltaic properties of Cr/Si Schottky diodes**  
Tatar B., BULGURCUOĞLU A. E. , CHOI F. P. , Aydoğan P., Yilmazer D., ÖZDEMİR O., KUTLU K.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.12, pp.5208-5212, 2009 (Journal Indexed in SCI)
- X. **Conduction mechanism analysis in beta-FeSi<sub>2</sub>/n-Si heterojunction through J-V-T measurement**  
ÖZDEMİR O., Tatar B., Yilmazer D., CHOI F. P. , KUTLU K.  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.23, no.9, 2008 (Journal Indexed in SCI)
- XI. **Synthesis and optical properties of CeO<sub>2</sub> nanocrystalline films grown by pulsed electron beam deposition**  
Tatar B., Sam E. D. , KUTLU K., Uergen M.  
JOURNAL OF MATERIALS SCIENCE, vol.43, no.15, pp.5102-5108, 2008 (Journal Indexed in SCI)
- XII. **Synthesis of beta-FeSi<sub>2</sub>/Si heterojunctions for photovoltaic applications by unbalanced magnetron sputtering**  
Tatar B., Kutlu K., Uergen M.  
THIN SOLID FILMS, vol.516, no.1, pp.13-16, 2007 (Journal Indexed in SCI)
- XIII. **Effect of ion beam modifications on the surface and structural properties of beta-FeSi<sub>2</sub> thin films**  
Tatar B., Kutlu K., Ruergen M.  
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.40, no.19, pp.5995-5999, 2007 (Journal Indexed in SCI)
- XIV. **Surface characterization of beta-FeSi<sub>2</sub>/Si heterojunctions prepared by magnetron sputtering**  
Tatar B., Kutlu K., Uergen M.  
SURFACE & COATINGS TECHNOLOGY, vol.201, no.19-20, pp.8373-8376, 2007 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Spectroscopic Studies of the Effect of Sputter Etching on beta-FeSi<sub>2</sub> Film Growth**  
Tatar B., Kutlu K., Ürgen M. K.  
Balkan Physics Letter, vol.18, no.1, pp.79-88, 2010 (International Refereed University Journal)
- II. **Electrical Properties of Cr/p-type Si Schottky Diodes at room Temperature**  
Tatar B.  
BALKAN PHYSICS LETTERS, no.24 th INTERNATIONAL PHYSICS CONGRESS, pp.448-450, 2008 (International Refereed University Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Structural and Electrical Properties of Flat a-Si/c-Si Heterostructure Fabricated by EBPVD Technique**  
Demiroglu D., Tatar B., Kazmanli K., Ürgen M. K.  
3rd International Congress on Advances in Applied Physics and Materials Science, Antalya, Turkey, 24 - 28 April 2013, vol.1569, pp.158-161
- II. **Structural and Photovoltaic Properties of a-Si (SNC)/c-Si Heterojunction Fabricated by EBPVD Technique**  
Demiroglu D., Tatar B., Kazmanli K., Ürgen M. K.  
3rd International Congress on Advances in Applied Physics and Materials Science, Antalya, Turkey, 24 - 28 April 2013, vol.1569, pp.154-157
- III. **Alternative Approach for Determination of Energy Band Gap of Semiconductors Through Electrical Analysis**  
ÖZDEMİR O., Tatar B., Yilmazer D., CHOI F. P. , Ürgen M. K. , KUTLU K.  
7th International Conference of the Balkan-Physical-Union, Alexandroupoli, Greece, 9 - 13 September 2009, vol.1203, pp.875-877
- IV. **Optical properties of beta-FeSi<sub>2</sub> Thin films grown by magnetron sputtering**  
Tatar B., KUTLU K.  
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.661

## Supported Projects

Tatar B., Project Supported by Higher Education Institutions, Synthesis and determination of electrical properties of FePc and CuPc organic semiconductor films produced by chemical spray pyrolysis technique, 2013 - 2016

Tatar B., Ürgen M. K. , TUBITAK Project, The Design of Shaped Thin Films Used for the Organic Semiconductors Bases Photovoltaic Devices and Investigation of the Effects of These Substrates, 2012 - 2015

## Citations

Total Citations (WOS):188

h-index (WOS):8