

## **Prof. Dr. SUAT PAT**

### **Kişisel Bilgiler**

**E-posta:** suatpat@ogu.edu.tr

**Web:** <https://avesis.ogu.edu.tr/suatpat>

### **Uluslararası Araştırmacı ID'leri**

ORCID: 0000-0001-9301-8880

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ScopusID: 9274843500

Yoksis Araştırmacı ID: 171546

### **Eğitim Bilgileri**

Doktora, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (Dr), Türkiye 2001 - 2007

Yüksek Lisans, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (YL) (Tezli), Türkiye 1998 - 2001

Lisans, Eskişehir Osmangazi Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Türkiye 1994 - 1998

### **Yaptığı Tezler**

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### **Araştırma Alanları**

Fizik

### **Akademik Unvanlar / Görevler**

Prof. Dr., Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 2017 - Devam Ediyor

Doç. Dr., Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 2012 - 2017

Yrd. Doç. Dr., Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 2008 - 2012

Araştırma Görevlisi, Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 1998 - 2008

### **Akademik İdari Deneyim**

Merkez Müdürü, Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 2021 - Devam Ediyor

Anabilim/Bilim Dalı Başkanı, Eskişehir Osmangazi Üniversitesi, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik, 2017 - 2021

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Bölüm Başkan Yardımcısı, Eskişehir Osmangazi Üniversitesi, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 2009 - 2010

## **Yönetilen Tezler**

- PAT S., Yoğunluk Fonksiyonel Teorisi ile İki Boyutlu Malzemelerin Fiziksel Özelliklerinin İncelenmes, Doktora, M.ÖZGÜR(Öğrenci), 2020
- PAT S., Daha Fazla Korozyon Koruması İçin Çelik Üzerine Nano Katmanlı PVD Kaplamaların Geliştirilmesi, Doktora, H.HAKAN(Öğrenci), 2020
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- PAT S., Elektrokromik Nano Sensör, Yüksek Lisans, O.THAER(Öğrenci), 2020
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- PAT S., Termiyonik vakum ark yöntemi ile bazı iki boyutlu hezagonal yapıların üretilmesi, Yüksek Lisans, C.MUSAOĞLU(Öğrenci), 2019
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## **SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler**

- I. **Optical and electrical properties of annealed graphene oxide doped Al<sub>2</sub>O<sub>3</sub>:ZnO thin film**  
Aydemir İ., PAT S.  
Surfaces and Interfaces, cilt.53, 2024 (SCI-Expanded)
- II. **Investigating magnetic properties and Curie temperatures of FeX<sub>2</sub> (X=S, Se, Te) monolayers**  
ÖZGÜR M., PAT S., KORKMAZ Ş.  
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- III. **Narrow-band n-GaN/n-Si isotype heterojunction photodiode: A simplified approach for photodiode development**  
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- IV. **Investigation of Optical and Electric Properties of Post-Annealed Graphene: In<sub>2</sub>O<sub>3</sub>:ZnO Thin Film**  
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- V. **Investigation of isothermal entropy change, relative cooling power, and refrigerant capacity of GdCoAl nanocomposite thin film by changing the Al ratio at low magnetic fields of 100 Oe and 1000 Oe**  
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- VII. **Investigation on the optical and electrochromic characteristics of thin films of WO<sub>3</sub> doped with graphene and MXene (Ti<sub>2</sub>AlC)**

- Öztetik B., PAT S., KORKMAZ \$.  
Ceramics International, cilt.50, sa.8, ss.13113-13124, 2024 (SCI-Expanded)
- VIII. **Osteogenic Differentiation Capacity of Dental Pulp Stem Cells on 3D Printed Polyurethane/Boric Acid Scaffold**  
Çelebi-Saltik B., Babadag S., BALLIKAYA E., PAT S., ÖTEYAKA M. Ö.  
Biological Trace Element Research, cilt.202, sa.4, ss.1446-1456, 2024 (SCI-Expanded)
- IX. **Optical properties of Se-doped ZnO nanocrystalline thin films deposition by thermionic vacuum arc system**  
PAT S., Mohammadigharehbagh R., AKKURT ÖZGÜR N., KORKMAZ \$.  
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- X. **Optical and electric characteristics of CuO nanoparticle-doped ZnO thin films using thermionic vacuum arc deposition system**  
Ozer Z. N., Ozkan M., PAT S.  
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- XI. **Structural, optical and magnetic properties of Fe, Co and Co[sbnd]Fe doped SnO<sub>2</sub> thin films deposited by a thermionic vacuum arc deposition system**  
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- XII. **Electrochemical investigation of ZnO effect of amorphous V<sub>2</sub>O<sub>5</sub>-P<sub>2</sub>O<sub>5</sub> glassy electrodes**  
Mohammadigharehbagh R., İLİK E., KILIÇ G., Öztetik B., PAT S., KORKMAZ \$.  
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- XIII. **Sensitive determination of Leishmania spp. in human serum samples through a Nb<sub>2</sub>O<sub>5</sub>:Graphene/ITO genosensing electrode platform**  
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- XIV. **Comparison of thermal and surface properties of silver and silver-graphene thin film heaters**  
Ziftci M. A., PAT S., Akirtin A., Oztetik B., KORKMAZ \$.  
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- XV. **Could Helium Plasma Treatment be a Novel Approach to Prevent the Biofilm Formation of <i>Candida albicans</i>?**  
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- XVI. **Flexural Strength and Vickers Microhardness of Graphene-Doped SnO<sub>2</sub> Thin-Film-Coated Polymethylmethacrylate after Thermocycling**  
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- XVII. **Evaluation of magnetocaloric behavior and refrigeration performance of Gd<sub>3</sub>Co<sub>10</sub>Al<sub>87</sub> nanostructured thin film alloy with multiple Curie temperatures**  
BAYER Ö., Oskouei S. B., PAT S.  
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- XVIII. **Influence of oxygen effect in coating layer on tensile bond strength of PMMA**  
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- XIX. **Corrosion behavior of graphene coated Ti-6Al-4 V alloy by anodic plasma coating method**  
PAT S., ÇAKIR F. H., ÖTEYAKA M. Ö.  
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- XX. **Investigation of pH measurement of drinking water by disposable, high accuracy, and semi-transparent BN/Ag nanocomposite thin film sensors**  
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- XXI. **Investigation of substrate effect on Co-doped ZnO thin films prepared by thermionic vacuum arc technique**  
Özkan M., Sadık Erdem S., Mohammadigharehbagh R., Kurtaran S., Pat S.  
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- XXII. **Optical and surface properties of Gd-doped ZnO thin films deposited by thermionic vacuum arc deposition technology**  
Roknidoust Foumani I., PAT S.  
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- XXIII. **Deep understanding in physical and electrochemical performance of WO<sub>3</sub>-TiO<sub>2</sub> nanocomposite thin films deposited onto ITO and FTO coated glass substrates using a thermionic vacuum arc deposition system**  
PAT S., Mohammadigharehbagh R., Ozgur N. A., Oztetik B., KORKMAZ Ş.  
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- XXIV. **Substrate effect on electrochromic properties of Nb<sub>2</sub>O<sub>5</sub>:TiO<sub>2</sub> nanocomposite thin films deposited by thermionic vacuum arc**  
Özgür N. A., PAT S., Mohammadigharehbagh R., KORKMAZ Ş.  
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- XXV. **Improved Corrosion Protection of Stainless Steel by Two Dimensional BN Nanomaterial Coating**  
Duran B., Pat S.  
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- XXVI. **Optical properties of Nb<sub>2</sub>O<sub>5</sub> doped ZnO nanocomposite thin film deposited by thermionic vacuum arc**  
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- XXVII. **The effect of Cu doping on optical and surface properties of ZnO thin films fabricated by thermionic vacuum arc (TVA) deposition**  
ÖZKAN M., Erdem S. S., Mohammadigharehbagh R., PAT S.  
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- XXVIII. **Evaluation Flexural Strength of PMMA Resins with the Addition of Nanoparticles**  
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- XXIX. **Evaluation of Helium Plasma Surface Modification on Tensile Bond Strength of Denture Base Materials: A Scanning Electron Microscope Study**  
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- XXX. **Energy storage and semiconducting properties of polyaniline/graphene oxide hybrid electrodes synthesized by one-pot electrochemical method**  
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- XXXI. **Studies on the surface and optical properties of Ta-doped ZnO thin films deposited by thermionic vacuum arc**  
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- XXXII. **Optical and Nanomechanical Properties of C Coated BN Thin Film Deposited by Thermionic Vacuum Arc Technique**  
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- XXXIII. **The Effect of Annealing Process on Some Physical Properties of GaN Thin Films with Gr Doping**  
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- XXXIV. **The Substrate Effect on the Optical, Surface, and Electrical Properties of WO<sub>3</sub>: ZnO Nanocomposite**

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- XXXV. Enhanced cycle performance and stability for an electrochromic application; Detailed surface and electrochromic analysis of MXene (Ti<sub>2</sub>AlC)-doped Nb<sub>2</sub>O<sub>5</sub>cathodic coloration layer**  
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- XXXVI. Studies on the morphological, structural, optical and electrical properties of Fe-doped ZnO magnetic nano-crystal thin films**  
Mohammadigharehbagh R., PAT S., Akkurt N., KORKMAZ Ş.  
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- XXXVII. Si-based photodiode and material characterization of TiO<sub>2</sub> thin film**  
Kaplan H. K., Olkun A., AKAY S. K., PAT S.  
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- XXXVIII. Investigation of the structural, magnetic, and cooling performance of AlFe thin film and AlFeGd nanometric giant magnetocaloric thin films**  
PAT S., BAYER Ö., AKAY S. K., Mohammadigharehbagh R., Kaya M.  
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- XXXIX. Effect of argon plasma on the shear bond strength of Y-TZP zirconia ceramic resin interface**  
KARAKİŞ D., AKAY C., PAT S.  
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- XL. Investigation of Al-doped CuO thin film deposition by the thermionic vacuum arc technique**  
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- XLI. p-Type transparent Cu<sub>2</sub>S thin film grown by Thermionic Vacuum Arc for optoelectronic applications**  
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- XLII. Electrochromic Properties of Graphene Doped Nb<sub>2</sub>O<sub>5</sub>Thin Film**  
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- XLIII. Detailed transmittance analysis of high-performance SnO<sub>2</sub>-doped WO(3)thin films in UV-Vis region for electrochromic devices**  
Olkun A., Pat S., Akkurt N., Mohammadigharehbagh R., Demirkol U., Özgür M., Korkmaz Ş.  
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- XLIV. Flexible poly(styrene-ethylene-butadiene-styrene) hybrid nanofibers for bioengineering and water filtration applications**  
Avcı H., Akkulak E., Gergeroglu H., Ghorbanpoor H., Uysal O., Eker Sarıboyacı A., Demir B., Soykan M. N., Pat S., Mohammadigharehbagh R., et al.  
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- XLV. Investigation of TiO<sub>2</sub> thin films as a cathodic material for electrochromic display devices**  
Akkurt N., PAT S., Mohammadigharehbagh R., ÖZGÜR M., DEMİRKOL U., Olkun A., KORKMAZ Ş.  
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- XLVI. Two-dimensional BN-doped ZnO thin-film deposition by a thermionic vacuum arc system**  
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- XLVII. Electrochromic Properties of Graphene Doped TiO<sub>2</sub>Layer Deposited by Thermionic Vacuum Arc**  
Pat S., Akkurt N., Mohammadigharehbagh R., Olkun A., Demirkol U., Özgür M., Korkmaz Ş.  
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- XLVIII. Electrochromic properties of UV-colored WO<sub>3</sub> thin film deposited by thermionic vacuum arc**

- Akkurt N., PAT S., Elmas S., KORKMAZ \$.  
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- LIX. **Determination of the structural, morphological and optical properties of graphene doped SnO thin films deposited by using thermionic vacuum arc technique**  
DEMİRKOL U., PAT S., Mohammadigharehbagh R., Musaoglu C., ÖZGÜR M., Elmas S., Ozen S., KORKMAZ \$.  
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- L. **Investigation of physical properties and surface free energy of produced ITO thin films by TVA technique**  
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- LI. **The Thermionic Vacuum Arc Method for Rapid Deposition of Cu/CuO/Cu<sub>2</sub>O Thin Film**  
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- LII. **Optical, surface and magnetic properties of the Ti-doped GaN nanosheets on glass and PET substrates by thermionic vacuum arc (TVA) method**  
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- LIII. **Investigation of the microstructural, surface and optical properties of nano-layer Mo<sub>x</sub>Si<sub>y</sub> thin film deposited by thermionic vacuum arc**  
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- LIV. **Determination of physical properties of graphene doped ZnO (ZnO:Gr) nanocomposite thin films deposited by a thermionic vacuum arc technique**  
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- LV. **Sn doped ZnO thin film deposition using thermionic vacuum arc technique**  
ÖZGÜR M., PAT S., Mohammadigharehbagh R., Musaoglu C., DEMİRKOL U., Elmas S., Ozen S., KORKMAZ \$.  
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- LVI. **Al doped ZnO thin film deposition by thermionic vacuum arc**  
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- LVII. **The microstructural, surface, optical and electrochemical impedance spectroscopic study of the semitransparent all-solid-state thin film battery**  
PAT S., Yudar H. H., KORKMAZ \$., Ozen S., Mohammadigharehbagh R., Pat Z.  
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- LVIII. **Investigation of the optical properties of the Cr doped Cu<sub>x</sub>O thin film deposited by thermionic vacuum arc plasma**  
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- LIX. **LiFePO<sub>4</sub> thin film deposition onto Ag coated glass by RF magnetron sputtering**  
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- LX. **Cubic BN thin film deposition by a RF magnetron sputtering**  
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- LXI. **Investigation of the substrate effect for Zr doped ZnO thin film deposition by thermionic vacuum arc technique**  
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- LXII. **Characterization of Pb-Doped GaN Thin Films Grown by Thermionic Vacuum Arc**

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- LXIII. **An investigation on the half-cell production for transparent secondary type solid-state batteries**  
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## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Termiyonik Vakum Ark Plazma Uygulanan Polimetilmekrilit Yüzeylerde Biyofilm Oluşumunun Değerlendirilmesi: Pilot Çalışma**  
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- V. **TVA Sistemi Kullanılarak Donatıların Korozyon Potansiyellerinin İyileştirilmesi**  
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- VI. **Termiyonik Vakum Ark Uygulamasının Kaide Materyalleri Üzerine Bağlantı Dayanımının Değerlendirilmesi**  
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- VII. **Helyum Plazma Yüzey Modifikasyonunun Akrilik Kaide Çekme Bağlantı Dayanımına Etkisinin Değerlendirilmesi**  
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- XIII. **Effect of cold atmospheric plasma on collagen membrane surface**  
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- XXVI. **Radyon frekans (RF) saçtırma methodu kullanılarak elde edilen ZnO ince filmlere oksijen konsantrasyonunun etkisi**  
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- XXVII. **Rf saçtırma tekniğiyle üretilen GaAsN ince filmlerin bazı optik özelliklerinin incelenmesi**  
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- XXVIII. **Rf saçtırma yöntemi kullanılarak elde edilen ZnO ince filmlerinin bazı optik özelliklerinin oksijen konsantrasyonuna göre incelenmesi**  
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## Metrikler

Yayın: 280

Atıf (WoS): 1101

Atıf (Scopus): 1247

H-İndeks (WoS): 18

H-İndeks (Scopus): 18

## Akademi Dışı Deneyim

Pst nano teknoloji